A POLICY ANALYSIS OF THE TRANSIT DEVELOPMENT PROGRAM IN CLEVELAND: THE GOALS ACHIEVEMENT MATRIX AS A TOOL FOR POLICY ANALYSIS

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ABSTRACT

A POLICY ANALYSIS OF THE TRANSIT DEVELOPMENT PROGRAM IN CLEVELAND: THE GOALS ACHIEVEMENT MATRIX AS A TOOL FOR POLICY ANALYSIS

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The goals achievement matrix was applied in this research to a policy analysis of the Ten Year Transit Development Program for Cleveland. The matrix is used to identify potential conflicts among federal, state, and local programs. The matrix, an alternative proposed by Morris Hill, uses locally derived criteria for evaluating proposed programs.

The Cleveland City Planning Commission transportation guidelines provided criteria for evaluating the Transit Development Program. The reader becomes familiar with the social, economic, and travel constraints of the transit dependent population in Cleveland. The Five County Transit Study recommendations illustrate the policy choices endorsed by the regional agency.

The matrix was useful in identifying the potential benefits of programs on various population segments. It

can be used in concert with other plan evaluation techniques and because its results are easily communicated to the public, it can satisfy the citizen participation requirements of most governmental programs.

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CHAPTER ONE

INTRODUCTION

A. Focus of Research

This research demonstrates a method for analyzing the policy implications of proposed development plans. The transportation issues of the City of Cleveland, the largest urban center in northeast Ohio, have been chosen as the focus for this research. The goals achievement matrix, originally proposed by Morris Hill as an alternative method for plan evaluation, will be used in a policy analysis of the transit improvement program proposed for the Cleveland region.[1] The policies articulated by the Cleveland City Planning Commission are the criteria against which the policy implications of these plans will be evaluated. Conflicts of interests among federal, state, and local bureaucracies, transit operators, and neighborhood groups helped create interest in developing an evaluative mechanism for governmental policies. Basic questions needed to be asked: who benefits and who suffers from the proposed program? And what are the benefits and costs to different economic groups in the region?

The transportation issues generated by the 1974 Urban Mass Transportation Assistance Act well illustrate the need for an evaluative framework to determine whether community objectives will be served by proposed governmental projects. The 1974 Urban Mass Transportation Assistance Act launched a new era for large metropolitan areas facing continuing deterioration of their urban transit facilities. For the first time, the Act provided financial assistance and grants for capital and for operating improvements. Urban areas became eligible for grants covering 80% of the capital investment costs and 50% of the operating expenses under the Act.[3] In addition, Section 110 of the legislation provided the option of using federal assistance for operating assistance in urban areas exclusively. In many instances, the funds stabilized and improved service in many metropolitan areas that were in danger of losing it. New hope was also generated for urban areas that found the opportunity to expand and construct rapid rail facilities through the provisions of the Act.

For the Cleveland region, the prospect of new funding sources guaranteed the resurrection of long-range proposals for expanding the area's rapid transit system, stabilizing fares, and reorganizing the delivery of transit services. But for the City of Cleveland, the declining quality of existing line-haul transit services in the City seriously impaired its low income residents'

access to the employment, educational, housing, cultural, recreational, and commercial opportunities in the region. For conscientious city officials, the 1974 Act presented an opportunity to develop innovative services which substantially improved the mobility of city residents, particularly low income residents in its older deteriorating neighborhoods.

The City of Cleveland Planning Commission chose to develop policy guidelines for responding to proposed transportation improvements, reflecting the position that the mobility of inner city residents must be substantially improved by any transportation improvement proposal. To aid in bargaining for improved benefit levels for inner city residents, the Commission authorized its staff to lobby, negotiate, and build political support to implement these policy objectives.

The policy concerns generated by this issue reflect the reorientation of the planning profession in the decision-making process and the need to develop new methods of influencing policy decisions. As the federal government moves toward the decategorization of urban aid (the switch from categorical grants-in-aid with stiff guidelines and matching provisions to unrestricted block grants and revenue sharing) the role of local planners as federal grant coordinators has been altered, and so has the leverage that planners gained by using federal requirements. The trends of decategorization have relocated the

fight for local subsidies to the regional councils or the municipal budgeting process. Local planners, who have traditionally been passive participants in the decision-making process, must equip themselves with powerful management tools and political bargaining strategies if they are to successfully focus these funds in needy areas. As planners become more closely involved in the budgeting process, they must rely on goal assessment, forecasting, and strategy building to be of influence.

B. Reasons for the Study

This research was designed to satisfy the following research needs encountered by planning professionals:

1. to promote sound policy research at the local level,
2. to illustrate a way of satisfying the basic requirements for citizen participation in plan evaluation, and
3. to present a helpful technique local agencies can use in policy planning.

The goals achievement matrix is proposed as a tool for policy analysis because if facilitates citizen input in setting goals, accomodates non-quantitative analysis, and can be used in concert with other tools of evaluation.

C. Methodology

The methodology for testing the value of the goals achievement matrix as a policy analysis consisted of the following steps: 1) select a community as a case study, 2) choose a plan for that community to evaluate using the goals achievement matrix, 3) select a set of agreed upon community goals, 4) convert community goals to a set of evaluative criteria, for the goals achievement matrix, and 5) determine the validity of using the goals achievement matrix in policy analysis.

Cleveland was selected as an appropriate setting for applying the goals achievement matrix because it represents the declining power of older cities to provide even minimal services for its residents. In a city where disinvestment has become the rule, decision-makers are faced with choosing who or what can be sacrificed in the attempt to preserve the integrity of the city.

The transportation policy issues facing Cleveland were selected for this research for several reasons. Providing an equitable level of transit services is a prime example of the growing crisis of maintaining a livable environment of older cities, such as Cleveland. Rising fares and declining services are major deterrents to travel for a major proportion of the city's households who are carless (31%) and for those who have incomes below

the poverty level, (including 42% of its black population, 25% of the elderly, and 11% of the handicapped).[4]

Insuring an equitable level of transportation services for city residents is a dominant focus of transportation planning in the city. This objective was brought to light when the regional agency, the Northeast Ohio Areawide Coordinating Agency began preparing an improvement plan for transit services. The Ten Year Transit Development Program, a short range improvement plan calling for the reorganizations of the delivery, fare, services, and capital development of transit services for the Cleveland SMSA, was selected to be evaluated in terms of its responsiveness in improving the quality of services for city residents.[5]

Selecting a set of agreed upon community goals, standards and values is central to developing a goals achievement matrix. To provide this input, the goals, objectives and policies of the Cleveland City Planning Commission were selected. The policy objectives of the Cleveland City Planning Commission on transportation were used. These transportation policies state as their highest priority, the improvement of transportation services to the transit-dependent population. Adopted by the Cleveland City Council, these policies will serve as a set of agreed upon community goals and aspirations for transportation.

Converting community values to a set of evaluative criteria for the goals achievement matrix is accomplished

by developing a list of standards and establishing a set of priorities. The Cleveland City Planning Commission policies on transportation provided a base for developing a set of operational and design standards which may implement a particular policy. In many instances local, state, and federal standards and regulations were used. In addition, the priority listing of the policies has been provided by the Cleveland City Planning Commission. The priority rankings of policies provided the matrix with a method for determining the relative importance of the evaluative criteria.

Finally, assessing the benefits of using the goals achievement matrix in policy analysis became a function of comparing and evaluating what policy analysis to accomplish, involving citizen participation in that process, and determining whether or not the results might have an influence on the budgetary process. The goals achievement matrix must satisfy the objectives of providing a method of identifying the intended and unintended impacts of a proposed policy, and to coordinate conflicting programs.

D. Study Format

The research begins with a description of the goals achievement matrix and outlines its potential use in local policy analysis. The environmental need for local policy analysis is discussed. Resource distribution

issues require local public management to use policy analysis as a means of organizing aid for needy population segments.

The transportation issues affecting the City of Cleveland are described in the third chapter, including: a) the policy objectives of the Cleveland City Planning Commission, b) the mobility problems of Cleveland's inner city residents, c) the stated purpose of the Five County Transit Study, and d) the recommendations for transit improvements contained in the Ten Year Transit Development Program. These issues provide the basis for analyzing the Ten Year Transit Development Program. To aid in the description of the transportation issues facing the City of Cleveland, a survey on the latent demand for transit services, prepared for the Five County Transit Study will be used. The major objective of this survey was identifying the travel constraints faced by inner city residents. This survey was used to design a special neighborhood system to better serve this group. The policy issues of improving the services of this group was the primary objective of the Cleveland City Planning Commission. In addition, the evaluation methodology used for the Transit Development Program will be discussed. The analysis used by the consultant preparing the package was influenced by policy choices promoted at the regional level, where promoting commuter-oriented rail transit

services was judged to be unproductive in assuring better service choices for inner city residents.

The fourth chapter will actually apply the goals achievement matrix in an evaluation of the Ten Year Transit Development Program. The objective of the policy analysis is to assess the level of benefits that might occur for Cleveland inner city residents if this plan is approved and funded by the Urban Mass Transportation Administration.

Based on the Case Study of Cleveland presented in the earlier chapters, the last chapter assesses the benefits of using the goals achievement matrix for policy analysis.

REFERENCES

1. Morris Hill. Planning for Multiple Objectives: An Application to the Evaluation of Transportation Plans. Monograph Series No. 5. Philadelphia: Regional Science Institute. 1974.

2. Cleveland Planning Commission. Transportation and Poverty: General Guidelines for the City of Cleveland Planning Commission. General Plan-Transportation Paper #2. July, 1971, Pages 2, 3.

3. Public Law 93-503, 93rd Congress, S. 386, November 26, 1974. Urban Mass Transportation Assistance Act of 1974.

4. United States Department of Census, Social and Economic Statistics Administration, Bureau of the Census, 1970 Census of Population and Housing: Census Tracts: Cleveland. PHC(1)-45.

5. Alan M. Voorhees & Associates. Five County Transit Study. The Ten Year Transit Development Program. 1974.

6. Transportation and Poverty General Guidelines for the City of Cleveland Planning Commission, op cit. Pages 2, 3.

CHAPTER TWO

THE GOALS ACHIEVEMENT MATRIX AS A TOOL FOR POLICY ANALYSIS

This chapter describes the goals achievement matrix; how it is used, its relationship to other planning activities, and why it is needed for policy analysis. The first section presents the need for the matrix in policy analysis. Local planners are beginning to recognize the need for insuring that proposed activities meet local objectives. The goals achievement matrix described in the second section, has several attributes for analyzing proposed programs; encouraging citizen participation in the process, using both quantitative and qualitative criteria, and providing information that is more easily understood by residents and politicians alike. The design of the matrix for this research is described in the third section.

A. The Need for Local Policy Research

Initiatives taken in the Great Society era, and controversial highway and urban renewal programs, have promoted a new interest in the role of local planning. Policy analysis, or the systematic review of policy impacts of governmental actions[1], is being advocated by many researchers as a method for local planners to improve

the quality of governmental decisionmaking. Many agencies are attempting to institutionalize this activity as a method of influencing the allocation of resources to more needy population segments in their cities. Policy analysis is becoming a major planning activity for many cities to help program managers and decisionmakers make better allocation decisions on plans and programs emanating from a variety of funding sources. And policy analysis is being implemented to control the divergent impacts of these activities. The emerging role of policy analysis in the local planning process is primarily a result of the changing political and economic environment that thrives on fragmentation.

On researcher, Larry Susskind, identifies two types of environment in which policy analysis must operate: competitive (agencies or settings working toward conflicting goals under multiple leadership) and fragmented (agencies or settings without clear goals or recognized leadership):[2]

> Competitive system--one in which municipal department heads have one set of objectives, members of the city council another, and contending neighborhood groups still a third and fourth, the planner must operate as a "broker". This requires special skills in the design, synthesis, implementation of policy options and strategies for mobilizing political support. In such situations the planner must help to specify alternatives, create additional "slack" in the system, spot unanticipated resources, build coalitions, engage in public education and media manipulation, referee endless negotiation and bargaining sessions, and carry out extra departmental activities.

> In a totally fragmented system, and I believe that this is the kind of setting in which many planners find themselves today, routine decision-making is relatively unimportant. To provoke action in a fragmented system, the planner must be able to mobilize resources and sustain sufficient energy to support change. This is true for planners operating in line agencies as well as central staff positions.[3]

The definition of policy analysis offered by Widalvsky, illustrates the role of policy analysis in the environments in which local planning agencies must operate:

> Policy analysis seeks knowledge and opportunities for coping with an uncertain future. Because policy analysis is not concerned with projecting the status quo, but with tracing the consequences of innovative ideas, it is a variant of planning. Complimenting the agency's decision-making process, policy analysis is a tool of social change.[4]

Essentially, policy analysis is used to 1) induce appropriate actions by local agencies, 2) provide better opportunities for citizens and agencies to participate in the decision-making process, and 3) coordinate private and public activities.

Policy analysis is considered a necessary activity in local planning practices to legitimize their participation in the decision-making process. Too often planners have been criticized for being ends-oriented, static, and uncompromising. One observer of early 1960's planning practices describes planning as follows:

> The field of planning has, in the past, tended to produce end-product plans, which are comprised of specific plans, which are composed of specific

> recommendations for the redesign of the environment. The plan recommendations were generally single use in nature, so that after they were implemented the community had little idea where to go next. Such plans did not set a course of action. ....Also, these plans said very little about how planning could be administered in the process of arriving at these prescribed end states. In other words, planning did not live up to its claim of being "a continuuous process." It was only continuing in the sense that new specific recommendations were made every now and then. These plans completed a decision-making process rather than inaugurating it. There were no guides for day to day decision-making, and the only decisions with which planners concerned themselves were those which were necessary to develop the plan.[5]

Unfortunately, observers of the planning profession today are still critical of the gap between plan making and plan implementation. A survey on the current practice of planning refers to the lack of progress in this area:

> In light of all that has occured in the planning field during these past twenty years, when we look at what the majority of contemporary planning agencies and planners are spending their time on, at the roles they are performing, and at the impacts they are having on public policy and decisions, one is reminded of the saying: "the more things change, the more things stay the same."[6]

However, the survey also found evidence of agencies seeking access to the decision-making process and displaying more interest in the implementation of governmental activities:

> ....we see a lot of institution building going on--providing services, furnishing advice, offering counsel, undertaking reviews, performing technical assistance, publishing informational

> reports, helping put out "brush fires". Much of this work is aimed at strengthening the planning function so that it survives, gains legitimacy, and ultimately thrives.[7]

Local planners are continuously being asked to identify the potential social, economic and psychological costs of major programs that threaten to disrupt urban neighborhoods, local economies, and housing markets. Local policy analysis is being implemented to assist planners in identifying the various "payoffs" of these activities. Particularly, local policy analysis is being used to offer advice in the municipal capital budgeting and programming processes.

In the future, many planners will have to learn to plan for stability and decline in their cities. Planners must be able to plan for reduced and declining tax bases and populations and to determine the consequences of these deficiencies on various segments of the city's populations.[8] In effect, planners will have more influence in determining the quality of life for many inner-city neighborhoods.

To summarize, planning agencies, especially at the local level, are encouraged by researchers, policy analysts and residents to perform some form of policy research for several reasons:

1. to provide a basis for coordinating governmental activities and guiding their distributional impacts.

2. to gain credibility or legitimacy in the governmental decision-making process.
3. to provide some guidance in maintaining an equitable level of governmental services in declining and static environments.

B. The Goals Achievement Matrix as a Tool for Policy Analysis

The increasing need for the analysis of policy impacts demonstrates the need for an evaluation method which can exist in a political environment. A local tool for policy analysis must satisfy the following requirements.

1. the ability to involve citizen and agency participation in the review of policy recommendations;
2. the ability to provide decision-makers with useful and comprehensible information in a timely manner;
3. the ability to have an impact on the budgetary process, public hearings, and management of programs; and finally,
4. the ability to identify the intended and unintended impacts of a proposed policy recommendation.

The goals achievement matrix is an alternative form of policy analysis which exhibits the qualities mentioned above. The primary characteristics of this tool are as follows:

1. Community goals and objectives provide a basis for defining the evaluative criteria for policy analysis;
2. Alternative scales for measuring the impacts of non quantifiable concerns may be accomodated by the matrix;
3. It can be designed for citizen groups and be understood by decision-makers; and
4. As a presentation format, it provides the decision-maker with access to the community's perception of the impact of proposed policy recommendations.

1. Description of the Matrix.

Morris Hill proposed the goals achievement matrix in response to the criticisms of traditional cost-benefit analysis. In his analysis of cost-benefit analysis, he notes that the traditional use of this method examined plans on the basis of cost efficiency. Although the technique requires that an accounting of the non-market or intangible effects of proposed plans be made, many cost-benefit studies did not equate these concerns with the same level of importance as economic criteria.

The goals achievement matrix evaluates the impact of proposed plans on community defined criteria. Statements depicting the community's goals and objectives are used as a guide for measuring the rate of progress or

retrogression of the plan's impacts on these concerns. Numerical weightings, usually emerging from a rating session of civic and community participants, are assigned to these statements to express the relative importance of each objective. The matrix could also be used to identify the distribution of the plan's effect on the various population segments of the city. The goals achievement matrix contains two basic characteristics.

A. Community priorities are listed as goals with relative weights assigned (the priorities of certain population segments and interest groups).

B. The costs and benefits of a proposed plan are expressed as monetary, physical, and other descriptive terms (a summary of identified costs and benefits in relation to their ability to satisfy the community's priorities).

Morris Hill contends that the goals achievement matrix can enable the decision-maker to arrive at more rational decisions because it identifies the effects of proposed plans on the various population segments of the community and is more expressive of the complexity of the consequences of urban development.[9] However, he also identified the limitations of this method. Essentially, the goals achievement matrix, as with other traditional plan evaluation methods, is limited in the following ways:

1. It better evaluates plans for a single functional sector rather than multi sector proposals.

2. It is time consuming and expensive to implement because of the staff time and effort in information gathering and citizen participation.

3. It is not useful if weights cannot be objectively determined or assumed.

4. The interdependence of objectives may not be registered on the matrix.

However, the overriding benefits in using the goals achievement matrix for policy analysis lie in its definition of community goals and objectives as evaluative criteria.

2. Defining Community Goals and Objectives for Evaluative Criteria.

Community values and aspirations form the basis for defining the evaluative criteria for the goals achievement matrix. Because of this design characteristic, the matrix invites citizen participation in the plan evaluation process, essential in view of the federal requirements for citizen participation as eligibility for federal grants. Because of this characteristic, the matrix will require an agency to commit staff resources in forming citizen groups or facilitating group discussions and conducting surveys as part of the evaluation process. In addition, it is also suggested that ranking exercises be conducted as part of an agency's citizen participation efforts to reflect the goal preferences among diverse interest groups, and neighborhood or ethnic groups. Another

alternative for gaining insight of the community's goal preferences would be a study of the community's spending patterns.

As a result of the citizen participation process, goal statements are prepared to provide a basis for developing evaluative criteria. Morris Hill describes the goals achievement matrix as a "yardstick for identifying the movement toward or regression from an ideal goal." He defines the "ideal goal" as the community's perception of an ideal state or situation. Hence goal statements are defined "as ends to which planned action is directed."[10]

For the purpose of the goals achievement matrix, "goals" are expressed as "objectives", or attainable goals having some qualitative value.[11] An example of how a goal is used in the matrix is "to provide housing accessible to all income groups." As an objective denoting specific standards leading to or contributing to the attainment of this goal, the objectives of providing rent subsidies to low income families or constructing 299 units of low income housing provide some measure for attaining this goal. For each goal statement, objectives are expressed in operational terms to illustrate a rate of progress or level of attainment.

3. Accommodating Quantitatively and Qualitatively Defined Criteria.

A major problem faced in plan evaluation is the ability to provide a common basis for measuring non-quantitative impacts that do not reflect some "market value." Researchers have approached this issue in a variety of ways, either by assigning a "proxy" of market value for these impacts as in cost-benefit analysis and balance sheet methods, or ranking these impacts by their relative levels of magnitudes. However, many researchers feel that concentrating on the presentation of these criteria is more important than trying to determine their market worth. Non-measurable impacts should be qualitatively defined and presented in a meaningful way so decision-makers are at least aware of the problem. Hatry speculates whether efforts to assign market worth to non-measurable criteria is worth the effort:

> Realistically, most governmental problems involve major objectives of a non-dollar value. Not only is it very difficult for analyst to assign dollar "values" to such non-dollar objectives, but it is questionable whether it would be desirable even if it could be done. ....Attempts to force the criteria into commensurability are in most cases not worth much effort. It should be left to the decision-makers to provide the value judgments needed to make the final program decision.[12]

Morris Hill approaches the question of measuring non-measurable criteria by suggesting that different

scales of measurement be used. He also stresses the importance in correctly identifying and using nominal, ordinal, interval, and ratio scales.

The following outline is a possible set of objectives that would be affected by the plan for a new housing development and a set of measures of these objectives. The objectives might be those of a particular neighborhood affected.

I. Objectives measurable on ordinal scale, with ranking entities. For example:

   Reduce community disruption. Surrogate measures are:

   a. property displacement, measured in numbers of buildings and homes.
   b. population displacement, measured in numbers of households.

II. Objectives measurable on interval scale, which provides equal intervals between entities and indicates the differences or distances of entities from some arbitrary origin. For example:

   reduce population density: measured in terms of population per net acre.

III. Objectives measurable on a ratio scale, which provides equal intervals between entities and indicates the differences or distances of entities from some non-arbitrary origin. For example:

   increase low income housing: measured in terms of the amount of public housing units to be constructed, or the number of units available within a certain rent range in the neighborhood.

4. Presentation Methods.

The importance of presenting research results in a meaningful way to decision-makers and the public has been stressed by many planners. If the planner cannot communicate his findings simply, the analysis is therefore useless when he is speaking to an audience unfamiliar with planning terms. Policy analysis must be presented as an educational device capable of being communicated to an audience of diverse cultural and educational backgrounds.

Morris Hill proposes two methods in which the matrix may be presented: as a goals achievement account, a listing of impacts and how they attain community goals; and as a weighted index, a summary of the impacts as an aggregated score.

Costs and benefits under the goals achievement matrix are related to their progress toward or regression from desired objectives. Because they are always defined in terms of goals achievement, a decision-maker is able to identify the relative worth in pursuing one set of policies over another. He will also be able to identify the distribution of the costs borne by particular population segments.

For example, a goals achievement account is prepared for a proposed downtown housing development (see Table 1, pg. 24). The table provides a listing of housing goals of the community. Each goal has a weight (1,2,3, etc.)

Table 1. The Goals Achievement Account for Proposed Downtown Housing Development

Goals Description: Expand the number of housing units for large, low income families (households with 5 persons or more)

Relative Weight: 3

Incidence	Relative Weight	Costs	Benefits
Central Neighborhood Organization	3	-	-
NAACP	1	-	-
City Planning Commission	2	-	-
Central Business District Association	4	-	-

Plan Characteristics	
Total Number of Housing Units:	240
Number of Units per Bedroom	
Efficiency	40
One Bedroom	80
Two Bedroom	80
Townhouses	
Three Bedroom	40
Number of Subsidized Units for Section 8	100
Market Rate Units	140

Evaluation Criteria
Expand housing for large, low income families.
Rating Criteria: Number of housing units in the community's housing assistance plan.
5 200 units
4 150 units
3 100 units
2 50 units
1 25 units
0 0 units

as previously determined by the various citizen organizations and the local planning commission. Evaluation criteria have been prepared using the defined goals and are used to determine the costs and benefits of the proposed plan. Costs and benefits of the proposed plan are ranked on an ordinal scale to provide a measure for goal attainment.

Costs and benefits are recorded for each objective according to the interest groups affected. A dash (-) in a cell implies that no cost or benefit related to that objective would accrue to that party if that plan were effectuated. A particular group may suffer because the plan will not serve their priority interests.

In this particular scenario the community has, as their third housing priority, the expansion of subsidized housing for low income, large families in their communities. As indicated on the table, this objective is a high priority for the NAACP, and a low priority for the Central Business District Association. The Planning Commission has rated this objective as a high priority because the community has a large demand for housing units with more than three bedrooms, but has only been successful in attracting housing subsidies for the elderly. Since the proposed housing development would provide no housing units to satisfy this particular housing need and proposed to use Section 8 rental assistance for 100 units, the proposal will subvert the community's attempt in

trying to serve this population segment. The example illustrates how the matrix can be used to identify the disparities created by a particular action and how it would be perceived by local interest groups.

When presented as guidelines for policy analysis, the goals achievement matrix can assist local decision makers in the following ways:

1. Coordinating available resources and targeting them to needy population segments,
2. Identifying the interests of various community groups,
3. Identifying the program impacts on a particular population segment, and
4. Providing the necessary information needed to negotiate changes in a proposed plan.

C. The Goals Achievement Matrix for this Research

The goals achievement matrix will be used as a policy analysis of the Ten Year Transit Development Program for the Cleveland Region for the following reasons:

1. To provide a consistent basis for analyzing the policy effects of proposed plans,
2. To utilize evaluative criteria that are responsive to community objectives,
3. To provide a meaningful form of communicating the results of policy analysis to the public, and,

4. To involve citizen groups in determining evaluative criteria.

To demonstrate the potential usefulness of the goals achievement matrix in local policy analysis, the evaluation criteria are to be derived from the transportation policies and priorities articulated by the Cleveland City Planning Commission. The commission established, as its highest priority for transit improvements, that transit subsidies should be used to upgrade the mobility of transit-dependent residents.[13] These policies will be used to develop criteria that are responsive to the community's objectives.

Attainment measurement used in this research will be expressed in terms of either operational or service-providing standards. Certain plan characteristics or activities will then be expressed in the form of planning procedures and locational or design preferences (or assurances). A set of standards was developed for each objective statement. In many cases, the criteria reflect the requirements mandated by the Urban Mass Transportation Administration or other local or state requirements (such as barrier free design).

Each set of standards will be rated according to an internal rating system for each activity objective. Ratings of 1 through 5 represent the degree of attainment of a particular objective, from the optimal level of

attainment to the least, arbitrarily providing a yardstick of goals achievement:

Internal Weighting System

5 goal achievement is assued for this objective.

4

3 minimum achievement is assured for this objective.

2

1 there will be no progress toward the achievement of this objective.

The internal rating system provides a tool for measuring the achievement of a set of objectives which ultimately represent how the Ten Year Transit Development Program will implement Cleveland City Planning Commission objectives.

The weighting system for this research is illustrated by charts outlining the objectives of each policy statement and its measurement standards. These charts are included in the appendix of this thesis. A table describing how each policy area and activity objective is accomplished provides an overall rating of achievement of the Ten Year Transit Development Program, the results of the policy analysis.

REFERENCES

1. John Friedmann. "Notes on Societal Action," Journal of the American Institute of Planners. Volume 36. July, 1969. Pages 311-318.

2. Lawrence E. Susskind. "The Future of the Planning Profession," in Planning in America: Learning from Turbulance, ed., by David R. Goldschalk: Washington: American Institute of Planners. 1974. Page 139.

3. Susskind. Ibid, pages 139-140.

4. Aaron Wildavsky. "Rescuing Policy Analysis from PBB," in Public Expenditures and Policy Analysis, ed., by Robert H. Haveman and Julius Margolis. Chicago: Markham Publishing Company, 1972. Pages 461, 462.

5. Stephen Nelson. The Policy Approach in Urban and Regional Planning. Unpublished thesis for the degree of Urban Planning and Landscape Architecture. Michigan State University. 1964. Pages 3, 4.

6. Jerome L. Kaufmann. "Contemporary Planning Practice: State of the Art," in Planning in America: Learning from Turbulance, ed., by David R. Goldschalk: Washington: American Institute of Planners. 1974. Page 117.

7. Jerome Kaufmann. Ibid, page 127.

8. Herbert Gans. "Planning for Declining and Poor Cities," Journal of the American Institute of Planners. Volume 41. No. 5, September, 1975. Page 307.

9. Morris Hill. "A Goals Achievement Matrix for Evaluating Alternative Plans," in Decision Making in Urban Planning, ed., Ira M. Robinson: Beverly Hills: Sage Publications. 1974. Page 203.

10. Morris Hill. Planning for Multiple Objectives: An Application to the Evaluation of Transportation Plan. Monograph Series No. 5. Philadelphia: Regional Science Research Institute. 1973. Page 24.

11. Morris Hill. Ibid, page 11.

12. Harry P. Hatry. "Criteria for Evaluation in Planning State and Local Programs," in Decision Making in Urban Planning, ed., Ira M. Robinson: Beverly Hills: Sage Publications. 1974. Page 216.

13. Cleveland Planning Commission. Transportation and Poverty: General Guidelines for the City of Cleveland Planning Commission. General Plan--Transportation Paper #2. July 1971. Pages 2, 3.

CHAPTER THREE

CLEVELAND TRANSPORTATION POLICY ISSUES

This chapter will present the transportation issues faced by the city of Cleveland, ranging from a massive reorganization of basic transportation services for the transit-dependent, to expanding commuter services. The different policies promoted by the Cleveland City Planning Commission and by the Urban Transportation Task Force, the subcommittee of the Northeast Ohio Areawide Coordinating Agency, each attempted to direct budget priorities for transportation improvements.

The Five County Transit Study was the region's first attempt to resolve policy conflicts between the city and the regional agency. The product of this study was the region's Ten Year Transit Development Program, a document defining the priorities for transit improvements for the region. The findings and recommendations of this massive effort are described in this chapter.

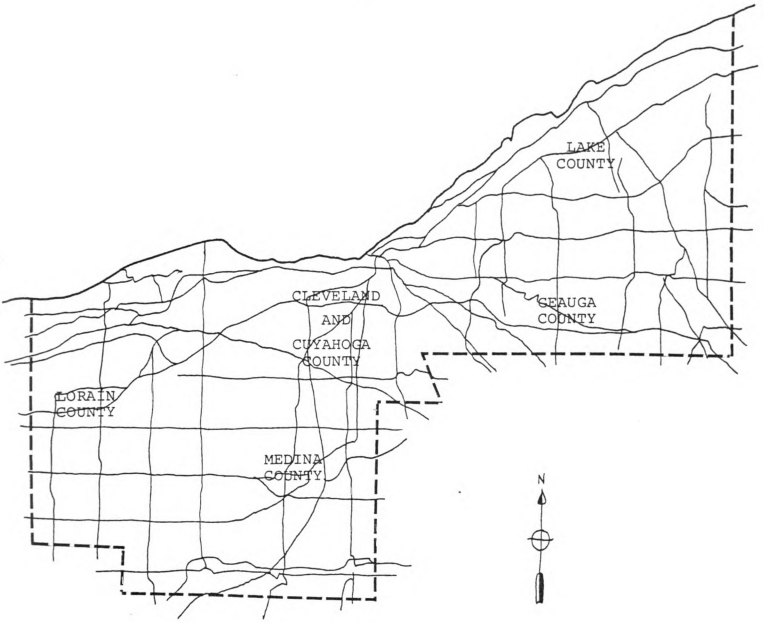
A. Socio-Economic Status of Cleveland Residents

The city of Cleveland, as of 1970, consisted of 750,903 persons and was the largest municipality in northeast Ohio.[1] The city's population has declined

consistently since its peak of 914,800 in 1950. The population is expected to decline 17% by 1985. As of 1975, the estimated population of the city was 689,854.[2]

The Cleveland Metropolitan Area, consisting of Cuyahoga, Medina, Geauga, Lake, and Lorain Counties (see Map 1), has a viable but slow growth economy, dominated by durable goods manufacturing. In the past 20 years, the economic trends of the region were accompanied by continued decentralization and relocation of heavy manufacturers and the growth of nonbasic or service industries throughout. During the past 29 years, manufacturing employment dropped significantly in the city of Cleveland. The reduction in manufacturing employment in the city and the region (2.03% in 1947 to 1.58% in 1967), and the growth in the services sector, has produced mixed results in improving the economic vitality of city residents.[3] Low skilled jobs eliminated through automation, specialization and business terminations and relocations have become unavailable for many city residents. Likewise, Cleveland residents have tended to have lower incomes than suburban residents and a lower participation rate in the region's labor force.[4]

The trends of economic and employment suburbanization further limit the labor force participation of city residents, particularly, the poor, female heads of households and minority groups.[5] The city's labor force contained a higher proportion of blacks, women, youth,



5-COUNTY TRANSIT
STUDY AREA

Map 1.

and elderly workers, population segments which have poor access to jobs because of deficiencies in education, training, and skills. The exodus of business and industry to suburban locations has contributed to the growing isolation of low income residents in the region's labor market. While the central city tended to offer more job opportunities for the high skilled or very low wages for unskilled workers, the traditional job market for this population has relocated in suburban areas poorly served by public transportation.

The main reasons which encouraged the undertaking of research in Cleveland are:

1. The high dependence level of city residents on public transportation,
2. The relatively high rate of carless households in the city,
3. The diversity of the needs and expectations of city residents for public transportation, and
4. The diversity of transportation issues in the region.

The complexity of these issues challenges the attempts to develop a major transportation plan for the region. The declining environment of the city, and the increasing dependence of the region on personal transportation further limits the city in providing the necessary transportation services to its residents.

B. Transportation Services and Facilities in the Region

1. Travel Characteristics of the Region.

In 1970, some 117,726 workers used some form of public transportation. Only 14% of all person trips in the Cleveland Region were made by public transportation. More than half of these trips were made during weekday peak periods and were to and from the Cleveland Central Business District. More than 40% of all the Cleveland CBD labor force travel to and from work via bus or rapid transit. At peak times, transit riders generated an estimated 299,000 hourly person miles of travel.[6]

2. Transportation Facilities.

Until 1975, the Cleveland Region was served by 21 separate transit operators of many sizes, the largest being the Cleveland Transit System (CTS). The Cleveland Transit System was a public agency of the city of Cleveland, providing 71% of the region's service to 82% of all transit users. All the other systems consisted of municipal and private operators. All together, the following nine major bus and rail services produced 31 million vehicle miles annually and served approximately 70 million passengers per year:

The Cleveland Transit System (public)
City of Maple Heights Transit System (public)
Cleveland Lorain Highway Coach
Lakefront Division
Brecksville Road Transit
City of Euclid Municipal Transit (public)
Garfield Heights Coach Lines, Inc.

North Olmsted Municipal Coach, Inc. (public)
City of Shaker Heights Department of
Transportation (public)*

The public transportation services in the region included four major types of technology:

1. conventional transit buses
2. low platform rapid transit or heavy rail (Shaker Heights Transit)
3. high platform rapid transit or light rail (CTS)
4. commuter rail (Erie Lackawanna)

Collectively, the nine major transit systems spent over $37 million dollars in operating costs annually. In 1974, only three transit systems were receiving annual operating subsidies from municipal general fund revenues: Euclid, Maple Heights, and North Olmsted. The remaining 18 systems were operating entirely on revenues received from the farebox, charters and transit advertising. Faced with declining ridership and the continuing need to serve the transit-using public, many of these systems, the Cleveland Transit System in particular, had little cash reserves for maintenance as well as service expansions. Managed by the City's Transit Board, the Cleveland Transit System was prohibited by city charter from using general

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*The other transportation systems in the region were the O.D. Anderson Bus Line, Grove Railway Company, Continental Trailways, Oberlin Cab Company, Greyhound Bus Lines, School Bus Service, Orwell-Cleveland Coachline, Ashland City Lines, Inc., University Circle Bus System, and the BIC Bus Line, Inc.

fund dollars to cover both operating and capital costs. During the last five years of its existence, the Cleveland Transit System was nearly bankrupt twice. Until 1972, the System had covered its losses by borrowing from its cash reserves and raising transit fares. The cash reserves were created from profits the system earned during the Depression and World War II. In 1972, it obtained a loan that was guaranteed by the city of Cleveland to continue to operate.

Needless to say, the quality of transit services for many city residents suffered as a result. Inner city residents were often faced with the threat of suspended services, reduced services, long waiting periods, multiple transfers, and fare increases. During the past 10 years, the bus fares for CTS doubled. Coupled with these inadequacies, city residents had to pay extra fare when using another system in the region to complete their trips, as there was no cooperative agreement or fare-sharing plan in existence. The other transit operators shared in similar financial difficulties as CTS in varying degrees.

In order to maintain existing transit ridership, attract new riders, and increase the region's eligibility for federal assistance under the Urban Mass Transportation Assistance Act of 1974, Cuyahoga residents approved the consolidation of transit systems in the form of a Regional Transit Authority and voted to support it through a piggy-back 1% sales tax on July 22, 1975. The

sales tax would be used to provide local matching funds to attract federal operating and capital assistance grants. However, the Greater Regional Transit Authority only came after more than 20 years of public appeal to consolidate for more efficient and coordinated transit services.

C. Cleveland Transportation Policies and Issues

The design of the goals achievement matrix for this research will be based on the policy standards established by the Cleveland City Planning Commission in July 1972.[7] The basic policy framework was set forth in the city's Cleveland Policy Report, a document outlining policies relating to income, housing, community development, and transportation. The particular policy framework in which transportation issues were treated is aimed at advocating the interests and needs of city residents who lack access to the transportation decision making arena. The following paragraph reflects the philosophical direction of these policies:

> The advice, recommendations, and information offered by the Cleveland City Planning Commission to policy makers are aimed at the accomplishment of a single goal. Equity requires that governmental institutions give priority attention to the goal of promoting a wider range of choices for those Cleveland residents who have few, if any choices.[8]

The policy process endorsed and advocated by the Commission is what is defined as policy planning. The Commission is using policy planning in a method described by John Friedman as the use of "policy announcements."

Friedman describes the purpose and use of "policy announcements as a method of inducing appropriate actions":[9]

> Policy announcements, inducements, and information have the primary purpose of restructuring the environment for decisions of relevant actors. Policies are, for instance, meant to make some allocative choices impossible while increasing the probability of other, more desirable ones.

These statements were designed to provide guidelines and criteria for endorsing plans and policy choices, providing material or tax incentives, and directing the staff in influencing policy positions. The Commission and its planners view the basic mode of policy implementation and the practice of policy planning as intervention and protracted lobbying:

> To influence public policy, an agency must have patience, persistence, and the ability to attack on a variety of fronts. It must try to intervene in all the small decisions that lead to the ultimate outcome. It must also seek out potential elements of the government bureacracy, and show them how their interests are affected. ...all this implies a type of a "planning process" that primarily consists of protracted lobbying for the positions the agency wishes to see implemented.[10]

Cleveland city planners, as well as other researchers and observers of the policy-making process, agree that this style of planning is particularly suited in a decentralized and diverse decision-making environment.

> Policies stand a greater chance of being implemented than comprehensive plans for resource allocation, because policies are usually responses to urgent political demands and are backed by political commitments.[11]

In response to the under-representation of the local transit user in the transportation planning and policy-making process, the Cleveland City Planning Commission has chosen to articulate these needs where their review and approval of all transportation projects is required to protect the interests of the city's residents. The Commission's policies place the highest priority on providing transportation assistance to those members of the city who depend upon public transportation as their only means of travel--the poor, the aged, the disabled, and the young. The Commission maintains that this policy direction is consistent with citywide objectives.

The Cleveland City Planning Commission outlined the following priorities which are aimed at improving the mobility of the transit-dependent population in Cleveland:

PRIORITY ONE

Improving and expanding transportation facilities, including demand-responsive systems which serve the needs of the transit-dependent population.

PRIORITY TWO

Developing systems which improve access by transit-dependent groups to employment, medical care, education, commercial, cultural and recreation facilities.

PRIORITY THREE

Locating transportation facilities which encourage or complement desired redevelopment within the city.

PRIORITY FOUR

Improving the urban design and safety in transportation facilities and the existing and potential land development adjacent to these facilities.

PRIORITY FIVE

Developing freeways which divert traffic around developed areas within the city where the local share is waived and the city is compensated for displaced housing and revenue base.[12]

These policies were formulated in response to the divergent interest groups and other personalities that have shaped and determined the transportation policy-making process in the Cleveland Region. In Cleveland, as in most cities, the more frequent response to declining transit services has been to attract middle income commuters. This commuter-oriented policy, reflected in the long range transportation plan for the region, A Framework for Action, combined with the lack of state and federal incentives for improving the conditions of transit services, have contributed to the reduction of essential transit services for those who must depend on them. The

Cleveland City Planning Commission, like other neighborhood organizations and interest groups, has continuously fought to preserve existing service. In addition, the Cleveland City Planning Commission has lobbied to redirect transportation policy in helping to preserve the tax base, neighborhoods, and an equitable level of services instead of promoting high service facilities, such as expressways and rapid transit facilities.

The Ten Year Transit Development Program Plan, in particular, was formulated to address the transit conditions and deficiencies throughout the region. Funded by the Urban Mass Transportation Administration, the Ten Year Transit Development Program Plan was required as a condition of Cleveland receiving assistance under the Urban Mass Transportation Assistance Act of 1974. The Act provided for local determination of spending priorities in the areas of capital and operating assistance. The major objective of these plans was to revitalize transit ridership, with an auxiliary objective of increasing the mobility of transit-dependent persons and groups.

Throughout the preparation of this document and the policy-making period that followed, the traditional policy issues and conflicts emerged. These consisted of the following:

1. Maintaining an equitable amount of transit services and subsidies in Cleveland's transit-dependent neighborhoods.

2. Upgrading the existing rapid transit facilities and expanding them to higher income suburbs.

3. Developing a downtown distribution system, consisting of a network of subways and pedestrianways.

4. Insuring that the city of Cleveland maintain and expand services for its residents under the proposed regional system.

5. Insuring that the city of Cleveland maintains the right of review and approval of transportation improvements.

6. Developing special transportation improvements for residents.

7. Insuring that bus services are not sacrificed to maintain rapid transit facilities.

8. Facilitating reverse commuter services for Cleveland residents for travel in suburban areas.

The Ten Year Transit Development Program Plan created a coalition of supporters who felt that extensive rapid transit services were needed to revive declining services. It is interesting to note that these interest groups have emerged in large cities throughout the nation as well as Cleveland. While these interest groups continuously advocated transit construction as a panacea for urban development ills, the Cleveland Planning staff had to ensure that city residents were not compromised too severely in the process. Andrew Marshall Hamer describes the typical coalition that appears in urban policy making on this issue:

> Seldom has the case for a cause been so fervently and unanimously championed as with rail rapid transit. There is in this country a coalition

> that includes the whole spectrum of interests from rabid environmentalists to downtown bankers. Central city-bound suburban commuters who favor sprawl unite with frsutrated urban planners anxious to recentralize the urban map. Inner city civic groups, central city mayor, and real estate investors are one with the news media and the roving band of rail-equipment producers and consultants. Such unity before what is a complex urban problem cannot but arouse suspicion. The claims made on behalf of a rail rapid transit system have all the subtlety of elixir promotions at a medicine show: rail rapid transit will reshape cities, end air pollution, revive the downtown, bring mobility to the disadvantaged, save neighborhoods, and raise taxes, and land values.[14]

D. The Five County Transit Study

In 1969, the Urban Mass Transportation Administration (UMTA) advised the City of Cleveland that a regional transit plan would be required in order to qualify the Cleveland Transit System for federally funded operational assistance. The federal incentives were instrumental in forming the Urban Transportation Task Force. Created by the former mayor Carl Stokes and Commissioner Corrigan of Cuyahoga County in 1970, the major objective of the task force was to develop an area wide public transportation development plan capable of serving existing and potential transit needs of the area for the next 10 years. One of the major questions to be addressed by the plan was the feasibility of unifying public transit operators in the region, as well as qualifying the systems for future federal transportation assistance grants. These issues

were generated in response to the financial instability of transit agencies and declining services in the area.

The Urban Transportation Task Force was originally organized as a City-County problem solving body and study organization. However, federal requirements to fund the study urged a more comprehensive regional decision-making approach. The Task Force became a special committee of NOACA in 1970. The Urban Transportation Task Force eventually consisted of 22 representatives of the city of Cleveland, Cuyahoga County and its suburbs, Lake County, Lorain County, Medina County, the Greater Cleveland Growth Association, and labor and interests groups.

With the aid of UMTA and the Greater Cleveland Growth Association, a study was launched in 1972 by the Northeast Ohio Areawide Coordinating Agency to investigate the issues raised by the task force. The focus of the Five County Transit Study and the Ten Year Transit Development Program was Cuyahoga, Geauga, Lake, Lorain, and Medina Counties, generally known as Northeast Ohio. Alan Voorhees was selected as the primary consultant, a selection actively pursued by the Cleveland City Planning Commission who felt the firm was responsive to the needs of the transit dependent population. Subcontracts were performed by G. A. Anderson & Company, Dalton-Dalton-Little & Newport, Development Research Associates, Environmental Control Corporation, William A. Gould Associates, and Systems Design Concepts, Inc.

The Urban Transportation Task Force, serving as the policy making and supervising body for the study, set forth the following objectives for the study.

1. To prepare a transit development program that incorporated improvements focused on increasing the mobility of transit-dependent persons and increasing the transit use differentially with respect to automobile travel for all persons-especially as it relates to the work trip.

2. To develop transit level of service standards and level of service criteria for the 5 county area taking into account needs, available financial resources (existing and future), and existing transit service conditions.

3. To prepare a transit development program that gives immediate priority to maintaining, rehabilitating, and increasing the accessibility of existing developed subareas within the 5 county area.

4. To improve the convenience, comfort, reliability, safety, and level of service of public transportation to, from, and within downtown Cleveland and to and from other established activity centers within the 5 county area.

5. To ascertain the existing and needed levels of transit service in the 5 county area.

6. To develop transit level of service standards and level of service criteria for the 5 county area taking into account needs.

7. To develop transit alternative evaluation criteria that will take into account community values; environmental, social, and institutional impacts; projected costs and revenues; and other factors obtained primarily from the community participation program to assist the Task Force in evaluating and selecting alternative transit improvements which will provide the highest levels of service at the least cost.

8. To determine the amount of public subsidy that will be required to implement and operate the various alternatives being considered

for inclusion in the transit development program. The actual selection of the funding mechanism required will be the responsibility of community leaders working in conjunction with the Urban Transportation Task Force.

9. To formulate a transit development program that will consist of an appropriate mix of operating and capital intensive projects arrayed in order of priority in accordance with overall cost guidelines and known financial resources (existing and future).

10. To provide information on needs, desired levels of service, costs, and alternative fare and operations policies that will assist the Task Force in formulating recommendations related to the achievement of a coordinated public transportation system for the 5 county area. The actual decision form of an areawide transit coordination entity, however, must be made by community leaders--primarily elected officials--after reviewing and evaluating the various alternatives.

11. To investigate the economic and institutional feasibility of including school bus service as part of an areawide transit organization.

12. To work continuously throughout the study period with the NOACA staff, the 2 County Transit Study in Akron, the staffs of regional and county planning commissions, county engineer offices, Ohio Department of Transportation, and applicable municipal planning staffs to ensure that the study recommendations are consistent with existing areawide planning efforts.

13. To utilize the total trip demand estimates for the 5 county area as forecast by the NOACA Seven County Transportation and Land Use Plan as the basis for the initial formulation of transit corridor alternatives related primarily to increasing transit use differentially with respect to automobile travel for all persons.

14. To provide a framework for the constructive interchange of concerns and ideas between citizens and the study team Task Force. This includes the establishment of community participation groups to aid the study staff in the formulation and evaluation of transit alternatives that have a direct impact on various subareas of the 5 county area.[16]

The Five County Transit Study and the Ten Year Transit Development Program Plan were developed to satisfy the funding requirements for the Urban Mass Transportation Assistance operating and capital grants. As part of the study methodology, several program alternatives were considered. The evaluation process of these alternatives involved several levels of input at the local and regional level from citizens, technicians, and policy-makers. The study process took the following form:

1. The establishment of community wide transit standards.
2. The assessment of the costs and benefits of transit to users and to community.
3. The assessment of the level of services currently provided by the existing system.
4. The establishment of costs and benefits which would derive from the various alternatives.

In addition, the latent demand survey, transit marketing survey, and citizen participation structure were utilized to evaluate the proposed alternatives.

E. The City's Transit-Dependent Population

The purpose of this section is to illustrate the extent of dependency on public transportation in the city of Cleveland. Upgrading the mobility of the carless, elderly, and the poor, was a major issue in the preparation of the Ten Year Transit Development Program.

Public transportation in the Cleveland Region has also faced the declining demand reflected in transit usage nationwide. In the past twenty years, transit usage has become particularly difficult for its remaining market, the transit-dependent population. The transit-dependent population consists of those persons who depend upon public transportation as their only means for travel because they do not own or operate a car. With the disappointing state of most public transportation systems nationwide, these groups are generally referred as "transit-disadvantaged" for the following reasons:

1. They take fewer trips because they have less money to spend on travel.
2. They are further constrained in areas requiring multiple fares to ride the transit systems.
3. Trips made for medical, shopping, or recreational purposes on the average involve longer travel time for the poor than the nonpoor.
4. The poor travel to less distant places when trips are made for shopping and medical purposes.

5. The poor have a reduced choice of opportunities for shopping, health care, recreation, and jobs.[16]

The 1972 National Transportation Report defines "transit disadvantaged" as the segment of the nation's population that most critically needs basic community services but tends to have the least physical access to these services.[17]

1. Population Characteristics.

According to the 1970 census, the Cleveland Region contained 118,000 carless households.[18] About 31.7% of the city of Cleveland's households were carless. This proportion has not changed dramatically since 1956 when 32% of all city households were carless. An additional 47.9% of all households had only one car in the Cleveland Region. The extent of carless households in the city and one car families demonstrate that the number of households depending upon some form of public transportation is not declining.

While the city of Cleveland contained only 35.1% of all families in the SMSA, 69% of the region's families with incomes below the poverty level lived within the city limits. Families with incomes below the poverty level made up 13% of all Cleveland families. About 64.4% of the male heads of poverty level households were in the labor force. The city's black population made up 27.2% of the

poverty level population. Female heads of households made up 19.3% of the city. The elderly poor made up 37% of total population living below the poverty level.

An increasing segment of Cleveland's transit-dependent population is elderly. The elderly comprised of 10% of the region's population in 1970. Roughly 10% of the region's elderly lived within the city of Cleveland. Within the city limits, 17.7% of the population was elderly in 1970. More than 25% of the city's elderly have incomes below the poverty level lived in ethnically or racially concentrated areas traditionally served by public transportation. Because they too lack sufficient income, the city's elderly are constrained in their access to housing, employment, medical care, and shopping and recreational services. In addition, a large proportion of the city's elderly have physical disabilities which further limit their use in making trips on public transportation facilities because of the design or physical and operational barriers associated with transit.

Although local statistics on the number of transit-related handicapped residing in the Cleveland Region is not complete, the 1970 Census identified 107,395 persons with labor-relevant handicap characteristics between the ages of 16-64. Current statistics on the national level indicate that at least 11% of this population segment cannot use public transportation because of both income and travel barriers.[19]

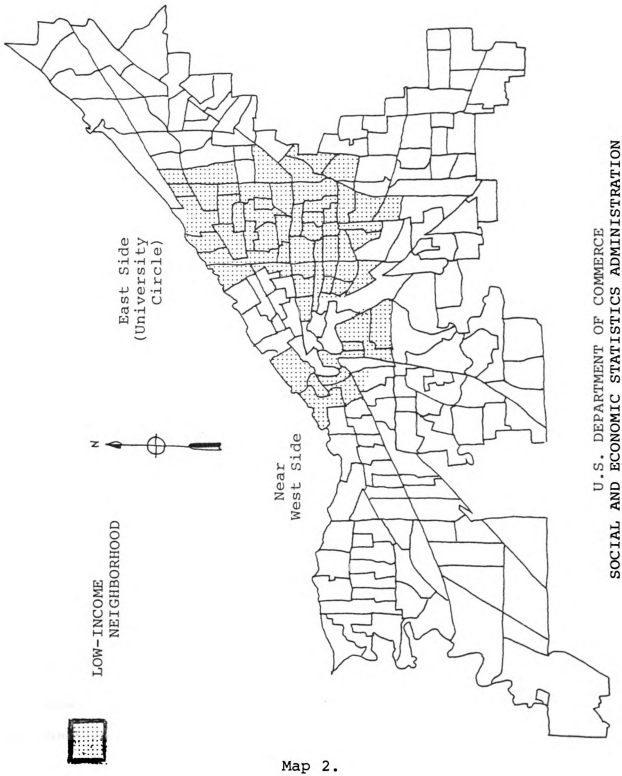
2. Geographic Distribution of Transit-Dependent Groups.

Within the city's older central city neighborhoods the economic constraints to travel are further compounded by the struggle to find decent housing and jobs. A special survey conducted by the U.S. Census Bureau indicated that 56% of the city's low income families were concentrated in several neighborhoods that are characterized by physical deterioration, joblessness, and carlessness (see Map 2). The city's black population was more likely to live in these areas than the white population.[20] Over 75% of the city's black population with incomes below the poverty level lived in these areas. Families within the low income areas were more likely to have female heads of households. In fact, 33% of the city's households with female heads lived in these nieghborhoods.

Joblessness was a major factor in determining the low socio-economic viability of residents in Cleveland's central city neighborhoods. The rate of unemployment was 9.9% in these areas in 1970 compared with 5.3% for the city as a whole.[21] In comparison with other low income areas, nationally, joblessness in Cleveland's Hough, Fairfax, and Near West Side neighborhoods averaged 15% of their residential population.

Although the city's elderly were dispersed throughout the city, a major proportion continued to live

CLEVELAND, OHIO
1970 LOW-INCOME NEIGHBORHOODS



Map 2.

in the city's older deteriorating neighborhoods adjacent to the city's central core. The geographic dispersion of the city's elderly presents a major problem in providing accessible transit services. Several agencies have initiated programs to provide transportation for basic purposes. The Cuyahoga County Metropolitan Housing Authority provides transportation services for shopping, banking, and medical trips for its 28 elderly housing estates. The American Red Cross, as well as various community health clinics and volunteer organizations provide special transportation services for their elderly handicapped clients. However, there is no central agency which coordinates and provides essential door-to-door service to elderly handicapped who are not enrolled in a special program. Non-recipients are left dependent upon the city's transportation facilities, taxi services, or friends or relatives.

The eroding economic opportunities, coupled with declining transportation services, have further isolated city residents from sharing in the region's growth and opportunities. Furthermore, city residents continue to be a large segment of the transit ridership in the region because they lack the income to own and operate a car. A large and growing segment, the elderly and handicapped are further constrained in their travel because they are unable to walk to bus stops, board and ride buses, and use transit facilities because of physical disabilities.

3. Travel Constraints of the Transit-Dependent Population.

As part of the Cleveland Five County Transit Study, a survey of latent demand for new and improved transit services was prepared for several east and west side neighborhoods (see Map 1).[21] The survey attempted to identify present and desired travel patterns of area residents, quantify latent demand needs for improved services, and measure the extent to which the transit needs of "transit-dependent individuals" differ from those of the general population. One-hundred seventy-five home interviews were conducted in each area constituting a .4% and a .2% sample for the west and east side communities, respectively. The survey involved two types of person-to-person interviews: a) home interviews from the general population, and b) interviews at non-residential locations where large numbers of assumed "transit-dependent persons" congregate or are likely to be found. To summarize, the survey estimated that 60-85,000 residents in low income neighborhoods on Cleveland's east and west sides were dependent upon public transportation for a major portion of their tripmaking.[22] The survey estimated that ridership in the west side neighborhoods would increase by 3500 trips and by day 8600 on the east side if fares were reduced to 25¢, and that without any improvement in the quality of service. In fact, the 1963 Cuyahoga County Trip Generation data prepared for the Seven County

Transportation and Land Use Study[23] demonstrates that west side and east side residents consistently made fewer trips on the average than the region as a whole. In 1963, the average number of trips made by the average Cleveland resident (region) was 2.25 per day, while west side and east side residents made only 1.12 and 1.35 trips respectively. If they had equal access to personal transportation and other social and economic benefits shared by the average household in the region, an additional 39,000 trips and 79,000 would be made on the west and east sides respectively.

The survey concludes that the existing fare structure was a significant barrier to travel for west and east side residents. Throughout the last 10 years, the Cleveland Transit System has been too expensive to use. Based on the statistics provided by the Cleveland Transit System, the fare of public transportation had doubled in the last decade (see Table 2).

Table 2. Single Fare Basic Rates 1960-1970

		Cash	Transfer	Weekly Pass
Local Service	1960	$.20	$.03	$3.00
	1970	.45	.05	7.00
Express Service	1960	.25	.03	3.00
	1970	.50	.05	7.00

SOURCE: Cleveland Transit System; Cleveland City Planning Commission. 1972.

The survey estimated over 1200 trips in low income areas were lost due to the high fare structure of public transportation. Based on the data from the 1963 Trip Generation Studies, residents of low income areas made 100,000 fewer trips because they lacked personal transportation.

The city's low income residents tended to live in areas poorly served by public transportation. The transportation system was designed to serve densely population transportation corridors of an early twentieth century city. Not only were services unresponsive to changing low-density development patterns in the suburbs, it failed to reorientate its routes to serve its markets in the inner city. The total route coverage of the public transportation system has been reduced significantly over the past 10 years.

The travel behavior of residents surveyed in low income neighborhoods identified many deficiencies to be overcome when using declining transit services: multiple transfers, lack of internal neighborhood coverage, long waiting and travel times, and longer distances to walk to bus stops.

In addition, public transportation failed to serve many of the region's employment, retail, and medical activity centers. While the bus system was oriented to serving the Central Business District, the opportunity for reverse commuting was limited. As identified by the survey, many

residents had a desire to travel to locations south of their neighborhoods to suburban shopping and employment centers. East and west siders expressed the need for improved services to the CBD. These improvements consisted of additional routes offering 24 hour services, reduced waiting time, and better coordination of cross-town and line-haul routes.

Although the elderly and handicapped are affected like the poor in their ability to use public transportation, transit-related physical handicaps and operational and design barriers further limit the ability of these groups to use conventional bus systems. Although the survey did not specifically identify the latent demand for special transportation services (services designed for wheelchair access and assistance to disabled riders), an estimated demand for 14,356 trips for the elderly and handicapped was identified. For those unable to use public transportation even at reduced-fare and improved service coverage, vehicular design barriers, the location of bus stops, and the design of transit stations prohibit the physically disabled from using these services effectively.

The survey sample for the handicapped was drawn from the city as a whole rather than the study areas exclusively. From a sample of 73 individuals, 60.2% indicated that the lack of bus transportation had kept them from going somewhere they would like to go, and 95%

expressed interest in a Dial-A-Bus system. The relatively low-demand elasticities with respect to fare which were computed from responses of the handicapped for a Dial-A-Bus system give strong support to this expressed interest. If the city-wide per capita demand of the handicapped for Dial-A-Bus at 25¢ (.148) is applied to the handicapped population aged 16-64 in the Near West Side (3166) and the East Side (7,529), about 114 and 469 trips per day would be generated from these areas respectively. There trips consisted of almost one-eighth of the total trips generated from each study area for the same service, or slightly less than the proportion of handicapped in the two study areas.

A major deficiency of the survey was the lack of attention paid to the design barriers of the transit system that would limit the tripmaking by the handicapped and the elderly. The survey completely ignored the entire area of special transportation needs and barrier-free design considerations. These considerations involved the provision of wheel chair lifts, lower bus steps, wider aisles and seats and accessible rapid transit stations, in addition to lower fares on either regular-sized buses or small buses. The special transportation services that could provide these services were ignored by the survey. Therefore, the responses to the survey may not reflect the additional tripmaking that could occur.

Over 75% of the city's black population lived in these older central city neighborhoods. Coupled with residential segregation and decentralizing employment opportunities, black families are severely affected by poor transportation services. According to the Cleveland City Planning Commission, at least 6,000 jobs have been lost to the black community because of residential segregation.[23] Black families have traditionally had poor access to jobs and housing.

The survey identified a preference for demand-responsive services at reduced fares in low income neighborhoods. Based on the survey responses, these services will be needed in addition to improved line-haul services. The survey also provided evidence that rapid transit services offer few benefits for low income residents because they are often poorly located in their communities, provide little service to the region's outlying activity centers, involve high fares, and lack design flexibility for access to the handicapped and the elderly.

4. Transportation Alternatives for the Transit-Dependent.

The study explored several service alternatives to correct the deficiencies in the low income neighborhoods surveyed.

a. community system offering demand-responsive services,

b. community system offering fixed-route services,

c. areawide system offering demand-responsive services for special transit-dependent groups (elderly and handicapped, etc.),

d. areawide system offering fixed route services to special transportation groups.[24]

The community-oriented system would be designed to serve several neighborhoods within a community, and would offer a reduced fare of 20¢, door-to-door service and innovative neighborhood routing, facilitating shorter internal trips within the neighborhood. The system would require a strong community organization to assist in its planning and implementation. The community-oriented service offering fixed route services would offer similar advantages. A major disadvantage of this alternative would be the lack of service to residents who are physically unable to walk to bus stops, or who cannot ride conventional buses or vans due to vehicular-design constraints.

The areawide system would operate from a central location offering special transportation services exclusively to transit-dependent residents. Conceivably, the vans would feature special wheelchair lifts and incorporate barrier-free design, and would provide door-to-door service. The areawide system would serve several communities, but would involve longer travel and waiting times, serve widely dispersed households, and reach limited

destinations. A fixed-route service would have similar disadvantages as the community-oriented demand-responsive service.

It was concluded that the community-oriented service alternative offered a higher quality of service to transit-dependent residents as well as other residents poorly serviced by conventional line-haul bus routing. The system could be designed to provide door-to-door service, prescheduled at a fare of 20¢, and could operate with one-half hour headways. The community-oriented system would also eliminate or reduce the need for transferring within short internal trips. It would decrease travel time, improve security and increase ridership.

5. Summary of Transportation Issues.

The survey on latent demand, prepared for the Five County Transit Study further substantiates the policies formulated by the Cleveland City Planning Commission. To summarize the mobility problems to be addressed by these policies, Cleveland inner-city residents were more likely to be severely limited in travel because of the following reasons:

1. Over 35% of the city's inner city residents lacked adequate income to own and operate a car.
2. 57% of the population resided in areas poorly served by public transportation.

3. The existing system was not responsive to reverse commuter needs of inner city residents.
4. The lack of non-CBD oriented services severely limited inner city residents in having access to suburban housing, employment, medical, and shopping opportunities.
5. A significant proportion of the city's elderly and disabled population were not able to use the existing conventional transit services because of design and travel barriers.
6. The multiple fare structure, as well as the high fares, had become a major barrier to travel for inner city residents.

However, the objectives of improving the transit dependent had to be pursued in concert with the following issues raised in the Five County Transit Study:

1. the proposed acquisition of the Cleveland Transit System which served 90% of the region,
2. the lack of assurances that services to the transit dependent will not be severely reduced by the regional organization,
3. the lack of assurances that federal subsidies would be used to provide additional services to the transit dependent, and
4. the lack of leadership on the City Council in assuring that the interests of the transit dependent will be protected.

A major obstacle in finding support for the Commission's policies was its belief that major service improvement was more essential in upgrading the mobility of inner city residents than capital investments to expand the city's rail system. The political environment of the region was more inclined to cater to the suburban market than to remove the obstacles faced by city residents in sharing the employment and housing opportunities of the region.

F. The Ten Year Transit Development Program

The 1974 Urban Mass Transportation Assistance Act required that a Transit Development Program Plan be prepared by regions receiving federal assistance. The Transit Development Program (TDP) represents a short-range planning tool describing the short-range improvements to be implemented in conformance with the region's long-range transportation and land-use plan. In addition to describing the characteristics of the existing public transportation services, management, and facility deficiencies, it must demonstrate the region's attempt to upgrade the mobility of its transit-dependent populations. The document must be updated and revised annually to insure that the program is implementing the long and short-range regional objectives, as well as, adapting to the changing travel patterns of the region (see Figure 1).

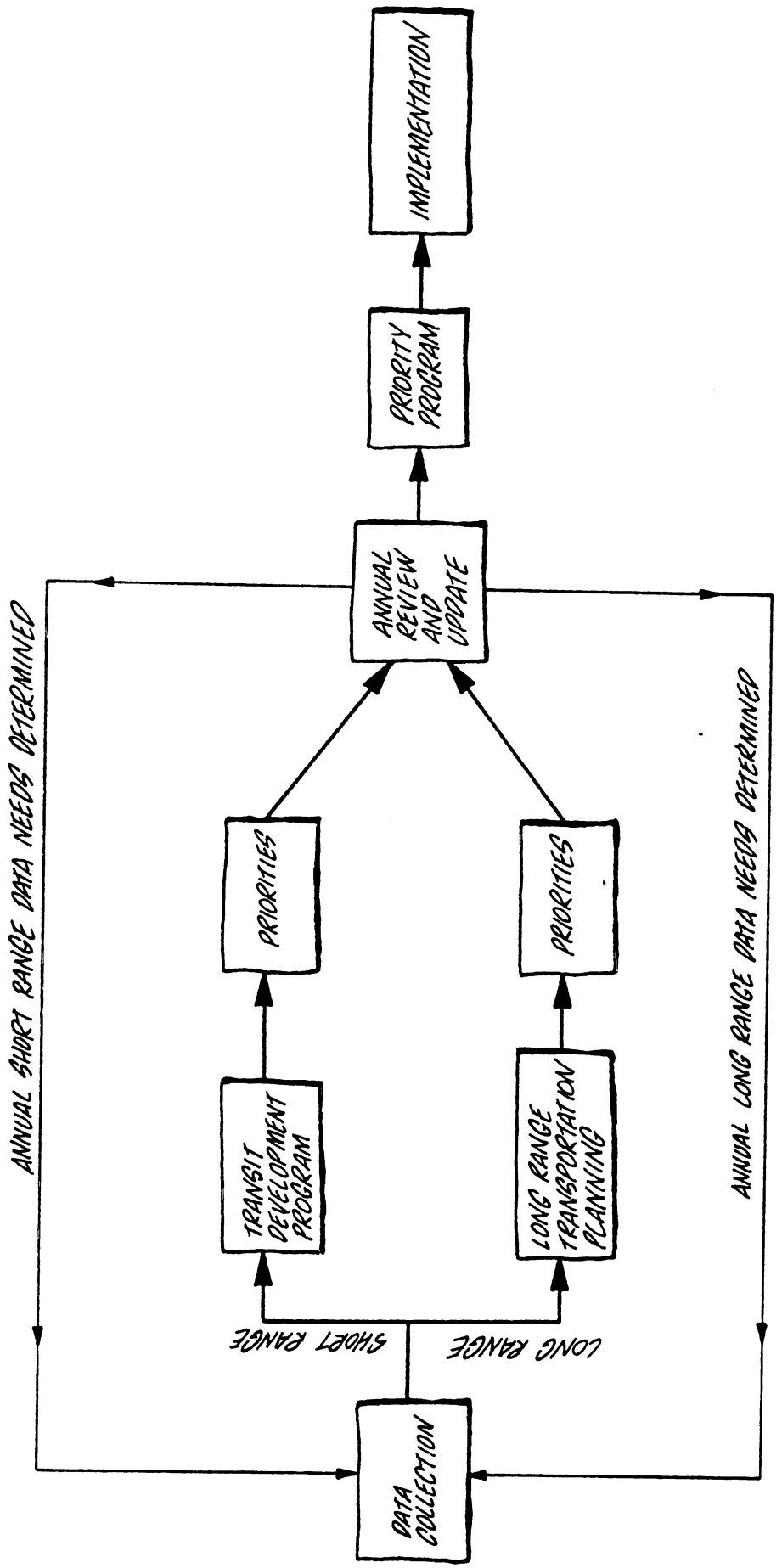


Figure 1. Relationship of Short-Range and Long-Range Transportation Planning

Two important elements of the TDP lie in the development of transit alternatives and their evaluation. The evaluation phase is critical in assuring that national goals and objectives are being achieved by the proposed activities. In addition, the Department of Transportation placed higher emphasis on service improvements which increase the mobility of transit-dependent persons and revitalize existing public transportation performance. An important requirement which was essential in the development of the TDP in Cleveland was the receptiveness of citizens and policy-makers to the plan. Regional cooperation was not only essential in qualifying for federal dollars, but needed to enlist public support for transit reorganization, fare reductions, local assistance, and capital investment proposals.

Two major study components which shaped the development of the Ten Year Transit Development Program Plan were the development of level-of-service standards and the survey of latent transit demand. The level-of-service standards were developed with the assistance of the Transit Operator's Council, to provide a means of measuring the level of services each community would receive under the program. In addition, the standards would be used by the transit operators to equitably distribute transit services to various sectors of the area and its population. The latent demand survey, discussed previously, provided

the basis for recommending community-responsive transit strategies, fare reductions, and expanded services on existing routes.

1. Program Recommendations.

The level of service standards and survey recommendations were instrumental in determining the "basic package" of the Ten Year Transit Development Program:

> Community Responsive Transit--Small bus route services for several neighborhoods in the city of Cleveland and its older suburbs.
>
> Areawide Coordination--The Cleveland Transit System, Maple Heights, Shaker Rapid, and the other major transit operations in the region would be acquired and consolidated to achieve coordination of services, fares, labor, and schedules.
>
> Fare Reduction--The basic fare structure would be reduced to 25¢.
>
> Service Improvements--Schedules and routes would be realigned to provide more dependable service and shorter waiting times.

Listed below are the recommendations that were transmitted to the Northeast Ohio Areawide Coordinating Agency Board and the Urban Transportation Task Force.

1. Organizational Improvements.

   Consolidation of all public and private transit agencies under the direction of a regional transit authority.

2. Fare Structure.

   Coordination of the transit fare structure with a base fare of 25¢, 10¢ for express and rush hour surcharges, 10¢ for downtown look fare, and free transfers.

3. Service Improvements.

   Increased service on most of the existing routes. The total vehicle miles for the system would increase by 43% in the fifth year and 95% in the tenth year.

   Community Responsive Transit Services, to be implemented in areas containing a large population of low income, elderly, and handicapped residents. The fare for these services would be 25¢.

4. Rapid Transit Extensions (see Figure 2).

   Northeast Rapid Transit Extensions from the existing Windermere station to Mentor in Lake County.

   Cleveland Heights Rapid Transit Extension from the existing University Circle Station to Severance Center and Warrensville Center Road.

   Shaker Boulevard Rapid Transit Extension to Emery Road.

   Southeast Rapid Transit Extension to Rockside Road.

   Southwest Rapid Transit Extension to Brookpark Road.

   I-90 West Rapid Transit Extension to Claque Road.

5. Bus Priority Lane Construction.

   Clifton Memorial Shoreway Bus Priority.

   Cuyahoga Community College Bus Priority with a special bus-rapid interchange facility.

6. New Rapid Transit Construction.

   Chester/Euclid Corridor.

   Superior Avenue Subway.

   CBD Subway Loop.

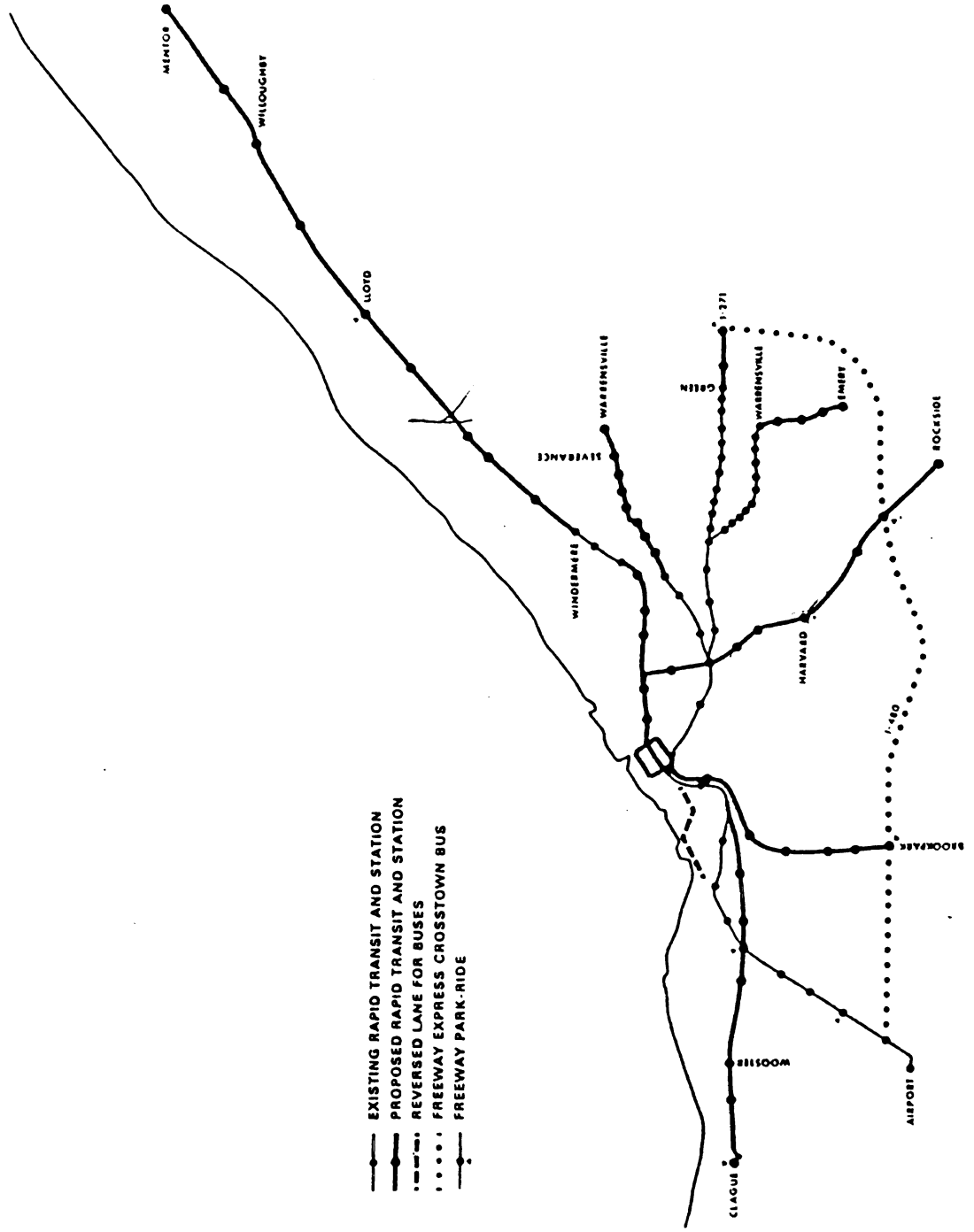


Figure 2. Selected Facilities and Corridors

7. Pedestrianway Development.

   CBD Pedestrianways incorporating moving walkways and access to various buildings both aerial and underground to supplement the CBD Subway Loop.

8. Euclid Avenue Transitway Mall.

   A proposal to restrict traffic on Euclid Avenue to buses and service vehicles only.

9. Transit-Freeway Interchange Development of Park and Ride Facilities.

   I-71 /Puritas Interchange
   I-271/Shaker Rapid Extension
   I-90 East/SR-2 Northeast Rapid Extension
   I-480/Southeast Rapid Extension
   I-480/Southwest Rapid Extension
   I-90 /I-90 Rapid Extension

10. I-480 Crosstown Express Bus Service serving four rapid transit extensions and bus routes.

11. Facility Improvements.

    Expansion of storage and maintenance garage facilities.

    Maintenance equipment.

    Conversion of station platforms and facilities to the right hand side.

    Transit station upgrading.

    Airport transit station remodeling.

12. Fleet Extension.

    800 50-passenger buses.

    260 vans.

    140 rapid transit vehicles.

13. Bus Shelters.

    100 large and 2500 small bus shelters to be purchased over the next 10 years.

14. Marketing Program.[25]

2. Evaluation Methodology of the Ten Year Transit Development Program.

Although the Five County Transit Study spent a considerable amount of effort in developing a set of standards to evaluate the services of the Ten Year Transit Development Program, a major portion of the improvements appeared to be evaluated primarily in terms of their political impacts. Despite the fact that the citizen participation process used in preparing the study provided a set of evaluative criteria for the proposed recommendations (criteria developed by the transit operators council, neighborhood groups, and community forums), the rail recommendations of the plan were only evaluated on economic and political considerations.

Among evaluation design features that hampered the study were the following: obsolete data, reliance on traditional methods accepted by the Urban Mass Transportation Administration, and the political appeal of the rail alternatives to Cleveland's business leaders and transit operators.

The Urban Transportation Task Force, established as the policy-making and supervisory body for the study, set forth the following guidelines for evaluating the Ten Year Transit Development Program:

> Develop alternative transit evaluative criteria that will take into account community values, environmental, social, and institutional impacts, projected costs and revenues, and other factors obtained primarily from the community participation

> program to assist the Task Force in evaluating and selecting alternative transit improvements which will provide the highest levels of service for the least cost.
>
> To utilize the total trip demand estimates for the 5 County area as a forecast by the NOACA Seven County Transportation and Land Use Plan as the basis for the initial formulation of transit corridor alternatives related primarily to increasing transit use differentially with respect to automobile travel for all persons.[26]

However, the Five County Transit Study used traditional cost-benefit analysis for the major improvements, which included rapid-transit, transit busways, CBD subway development, and pedestrianways. The following criteria provided the major focus of the evaluation:

Capital Costs
- construction costs
- acquisition costs
- equipment costs

Benefits Costs
- patronage
- revenue
- operating costs
- time savings[27]

Other criteria provided by the citizen participation process involved noise impact, aesthetic and environmental impacts, displacement, reliability, safety, and public acceptance. Many of these criteria were evaluated by using a relative rating scale. However, one has to question the importance of these variables because the study used traditional cost benefit analysis to satisfy the Urban Mass Transportation Administration.

> The benefit cost framework utilized in this analysis was developed for the evaluation was adapted by UMTA as the basic standard for this type of analysis.[28]

The basic trip information used by the study was provided by the data generated by the Ohio Department of Transportation for the Seven County Transportation and Land Use Study. The initial data was used to prepare the region's long range transportation plan for 1990, A Framework for Action. In effect, the Five County Transit Study used the same trip variables for each traffic district in 1963, even though there had been a major variation and decline throughout the region, in the last fifteen years, coupled with the fact that many of the older neighborhoods of the city and its older suburbs contain a larger proportion of low income and elderly populations with lower trips per household. Aged or obsolete data and a reliance on traditional benefit cost analysis seriously hampers the evaluation used in the Five County Transit Study, particularly the major investment rail recommendations.

a. Level of Service Standards

The level of service standards were developed with the additional requirement of obtaining measurements that were readily available, suitable for updating, and could be easily understood by citizens and politicians. With the assistance of the Transit Operator's Council, standards to be used in the development of the TDP were developed in the following areas:

route layout (route spacing)

frequency of service

reliability (service headways)

accidents

station and stop spacing

passenger amenities

information services

security

Another component of the level-of-service standards was the development of an opportunity-length index which was used to improve trip opportunities in low income areas. Four categories were used to identify the number of trip opportunities available given the weighted average travel time from every travel zone; travel to work, travel to shopping, travel to health care, travel to education, cultural, recreational and social opportunities. The weighted average travel time from every zone to the opportunities were derived from the transit network and traffic analysis zones prepared for the Seven County Transportation and Land Use Study. An index of traffic zones containing of its relative importance as a potential destination was categorized by income groups. The index identified all zones with an opportunity length index of five minutes or more of the average for its income range as being deficient in transit services. The opportunity length index was also used in estimating the increased ridership that might result from proposed transit improvements.

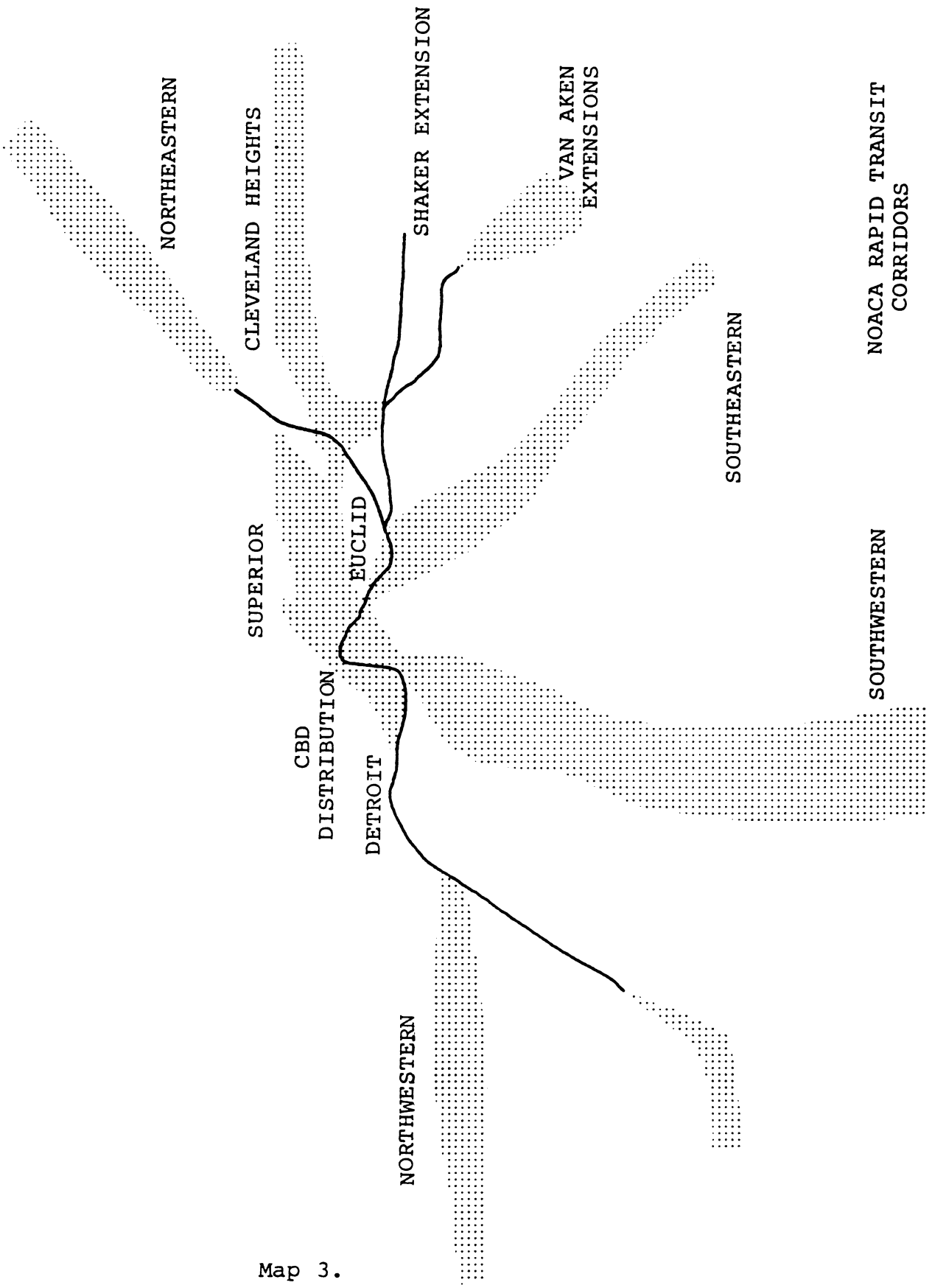
Using the level of service standards, the following benefits would be provided for City residents:

> Reduced round-trip public transportation travel time to the average job opportunity by 11 minutes.
>
> Reduced round-trip travel time to the average shopping destinations opportunity be 38 minutes.
>
> Reduced round-trip travel time to the average medical trip destination opportunity, including doctors' offices and hospitals, by 28 minutes.
>
> Reduced round-trip travel time to the average destination opportunity of trips for all other purposes by 29 minutes.[29]

b. Evaluation of the Major Capital Improvements.

The analysis of transit alternatives for major transportation corridors of the region began with the "shopping list" of recommendations contained in the region's long-range transportation plan, A Framework for Action (see Map 3). The evaluation of the capital improvements began without the benefit of developing a set of service and capital intensive alternatives for each major corridor. In fact, the study states that, in many cases, bus alternatives would have been effective in attracting new riders at the same service level as rapid transit.

> The study of expansion of high speed facilities indicated that busways in several corridors would be as effective in attracting new riders and provide an equivalent speed of service as rail transit, and in some cases at less capital costs.
>
> Nevertheless, the Task Force concluded that the major transit corridors should be served by rail routes.[30]


NORTHEASTERN
CLEVELAND HEIGHTS
SHAKER EXTENSION
VAN AKEN EXTENSIONS
NOACA RAPID TRANSIT CORRIDORS
SOUTHEASTERN
SUPERIOR
EUCLID
CBD DISTRIBUTION
DETROIT
SOUTHWESTERN
NORTHWESTERN

Map 3.

An example of how benefit cost analysis was first used and then discarded for policy considerations is illustrated by the treatment of the rail and busway alternatives for the Southeast Corridor. This area included the Southeastern Broadway Avenue Corridor of Cleveland, Maple Heights, Bedford, and Bedford Heights. The alternatives considered were a) a busway or rail facility for the route via the existing CTS/Shaker Corridor to the CBD and terminating at the intersection of I-480 in Maple Heights, and b) extending the rail alternative to Rockside Road. Using the present worth discount of 6%, the busway alternative exceeded the rail alternative in annual benefits of time, capital cost, and transit user benefits. The busway alternative generated the same level of revenue benefits (fares) as the rail. Therefore the benefit-cost ratio for the busway alternative was much higher than the rail, 1.35 compared to 0.51. Yet, the rail alternative was selected by the Task Force for the following reasons:

- extending the rail alignment to Rockside Road would facilitate reverse-commuting to employment centers more easily.
- right of way acquisition would be cheap because it would use available city-owned and railroad properties.[31]

The policy decision for the rail alternative was made prior to the analysis of this alternative. In addition, the Task Force leveled the following criticisms at all busway alternatives considered by the consultant:

- the all-weather reliability of busways, which would pose difficult problems of snow removal and of operation under other adverse weather conditions.

- the single purpose tendency of busways, which cannot be linked as effectively to crosstown routes and nondowntown destinations as can rapid transit lines.

- the possibility that bus operating costs will be significantly increased by the rising cost of fuel.[32]

An examination of these anti-busway arguments are exaggerated. In the case of the Southeast Corridor rail/busway alternatives, little consideration was given to extending the busways to Rockside Road. This could have been done just as easily as in the rail alternative. In addition, the Task Force used the rail alternative to force a policy recommendation to construct a Southeast Corridor freeway, a proposal also contained in the long-range transportation plan. Much of the city-owned right of way would be available from freeway construction, even though the freeway--its alignment, as well as its funding--has not been approved or even reviewed formally by the city, state, or Federal Highway Administration. The argument that busways are single-purpose in nature and not accessible to crosstown or feeder routes is simply unsubstantiated. Both rail and busways must depend upon feeder services. The fact that busways would become fully operational in a shorter time frame than rail was not considered.

Apparently, the arguments and rationale provided by the consultant for the Southeast Corridor as well as

the other rapid transit alternatives has been used on a number of occasions in other cities considering rapid transit construction. In fact, the consultant has used similar arguments in several cities.[33] The major rationale offered by the Task Force for this policy decision was "maximizing the use and effectiveness of the proposed downtown distribution facilities that are needed and justified to enhance the present rapid transit service.[34] However, it is difficult to assess the benefits of the proposed downtown distribution subway and the proposed rail extensions. The recommended alternatives would influence the efficiency levels of the system. Yet, little effort was made to assess the impact of these alternatives on the transit dependent population. The costs and benefits of rail construction were never assessed for this group by the study.

3. Budget Priorities of the Transit Development Program.

Over 75% of the Ten Year Transit Development Program budget would be allocated to rapid transit extensions and improvements. While the total estimated cost of the program was $1,181,3 billion, over $600 million dollars would be devoted to these improvements.[35] In contrast, the operating and capital costs of the Community Responsive Transit Service would be provided annually when the system is fully operational. However, the cost of implementing the Community Responsive Transit Services, as proposed by the Ten Year Transit Development Program, may have been substantially underfunded.

The Ten Year Transit Development Program recommends an annual allocation of $3.00 per person for each of the region's service areas. Yet, the latent-demand survey projected that a neighborhood oriented system, particularly for Cleveland's low income neighborhoods,would cost in the vicinity of $6.00 per person.[36] The recommended system allocates a service cost of what was described as the "low level of service," a service level that will only minimally meet the needs of the transit-dependent. The low level of the community oriented service would serve a ridership of 1,639,790 on the east side and 843,503 on the west side per year, even though there was a projected demand of 2,823,295.7 on the east side and 1,149,609.8 on the west side for these specialized services per year. Furthermore, the Ten Year Transit Development Program places a cost and ridership ceiling for these services, despite the fact that there has been no experimentation of the system to substantiate this level of subsidy. Therefore, one can only assume that the recommendations contained in the latent-demand survey were ignored in favor of financing the "highly desired" rail alternatives.

Despite the fact that the Five County Transit Study Task Force adopted as its primary objective for the Transit Development Program was to "rehabilitate existing transit services and improve the mobility of transit dependent populations," a major proportion of these funds will be spent on preliminary engineering, acquisition, and

construction of facilities that primarily serve a suburban commuter market. In fact, the marketing research for the program prepared by Voorhees and Business Research Services revealed that rapid transit improvements were one of the lowest areas of priorities for inner city and suburban residents alike.[37] The market study indicated that residents do not readily embrace the concept of new and improved rapid rail facilities because they prefer more direct line-haul service to the Central Business District and outlying suburban communities. Since rapid transit usually requires feeder bus service and transfers, the public demonstrated little interest in expanding rapid transit.

G. Summary of Transit Issues in Cleveland

The purpose of this chapter was to provide the reader with the necessary background to the transportation issues faced by the city of Cleveland. Although many of these issues were aggravated by the actions of the federal government, such as forcing the region to seriously consider massive reoganization of transit services and funding a comprehensive review and analysis of existing services (the Five County Transit Study), the local response to funding priorities raised the issue of "equalizing the opportunity for mobility for low income residents" in a region that is dominated by commuter-oriented interest groups. The Cleveland City Planning Commission was faced

by the prospect of losing its regulatory status over the city's transit agency as part of the reorganization effort. In view of the past policy actions of the NOACA Board and the interest groups which influenced its decisions, transit-dependent residents will continue to have little opportunity to make their preferences known to transit operators.

To summarize, the issues raised by the Five County Transit Study showed how the existing transit services were inadequate in serving a major portion of its ridership:

1. Inner city residents were limited in using existing services as the region was served by 21 separate transit systems, each operating on separate fare and operating schedules.
2. Increasing operating and maintenance costs had increased local fares while decreasing the level of services.
3. Eroding transit services, reduced service hours and routes, threatened the mobility of a major portion of residents who have few opportunities for travel because they cannot afford or operate a car.
4. The lack of coordination of transit services in a region with a high dependency on transit services by city and suburban residents alike

threatened the region's eligibility for continued support from the federal government.

The Ten Year Transit Development Program provided the federal government and local municipalities with the leverage to insure that coordination issues would be resolved. The service-level standards and the official recognition of the region that certain portions of the community warranted special transit services was a major step in equalizing access to travel opportunities. However, a review of the budget priorities established by the Ten Year Transit Development Program reveals that service improvements were relegated to a lower priority. These priorities reflect the continued policy to place more and more emphasis on commuter or work-purpose trips than providing services for all trip purposes. It demonstrates the reluctance of the regional agency to consider transit services as a public necessity for residents who lack access to alternative modes for travel.

REFERENCES

1. United States Department of Commerce, Bureau of Census, 1970 Census of Population and Housing: Census Tracts Cleveland. PHC(1)-45.

2. Cleveland Planning Commission. Cleveland's Population. Volumne I. 1975.

3. Cleveland City Planning Commission. Jobs and Income. Page 65.

4. The median income for city residents was $9,107 and the SMSA, $11,107 in 1969. City residents only made up 38.2% of the work force. This is even below the percentage existing in 1940, when the Works Progress Administration was considered necessary. Cleveland City Planning Commission. Jobs and Income. 1974. Pages 3, 10.

5. Cleveland City Planning Commission. Ibid. Pages 3-8.

6. Alan Voorhees & Associates. Five County Transit Study. The Ten Year Transit Development Program. 1974. Pages 43-44.

7. Cleveland Planning Commission. Transportation and Poverty: General Guidelines for the city of Cleveland Planning Commission. General Plan-Transportation Paper #2. July,1971. Page 2-3.

8. Cleveland Planning Commission. Cleveland Policy Report. Volume I. 1975. Page 50.

9. John Friedmann. Retracking America: A Theory of Transactive Planning. Garden City, New York: Anchor Press/Doubleday. 1973. Page 72.

10. Krumholz, Cogger, and Linner. "The Cleveland City Planning Report." Journal of the American Institute of Planners. September, 1975. Volume 41, No. 5. Page 300.

11. Retracking America. op cit. Page 72.

12. Transportation and Poverty. op cit. Pages 2, 3.

13. The Seven County Transportation and Land Use Study (SCOTS) was conducted from 1963-1969 to develop the region's long-range transportation plan for 1990. Although the plan recommends few improvements for transit in general, it proposed several rail recommendations and further study of the local deficiencies of bus transportation. Cleveland/Seven County Transportation and Land Use Study. A Framework for Action. Cleveland, Ohio. 1969. Page 35.

14. Andrew Marshall Hamer. The Selling of Rail Rapid Transit. Lexington Books. 1977. Page xiii.

15. Alan Voorhees & Associates. Five County Transit Study. The Ten Year Transit Development Program. 1974. Pages 43-44.

16. John C. Falcocchio and Edmund J. Cantilli. "Modal Choices and Travel Attributes of the Inner City Poor." Highway Research Board. Record No. 403. Washington, D.C. 1972. Page 17.

17. U.S. Department of Transportation. 1972 National Transportation Report: Present Status--Future Alternatives. Office of the Assistant Secretary for Policy and International Affairs. Washington, D.C. July, 1972. Page 65.

18. U.S. Census of Population and Housing. Cleveland SMSA. 1970. op cit.

19. Abt. Associates, Incorporated. Travel Barriers: Transportation of the Handicapped. Department of Transportation. NTIS.PB 187-327. August, 1969.

20. Social and Economic Administration. Bureau of Census. Supplementary Report. Low Income Neighborhoods in Large Cities. 1970. Cleveland and Toledo, Ohio. May, 1974. PHC 90. Pages 51-72.

21. Systems Design Concepts, Inc. Community Oriented Transit Services for the Transit Dependent Population. Five County Transit Study. Washington, D.C. February, 1974.

22. Systems Design Concepts, Inc. Technical Report #5. Survey of Transit Needs in Inner City Cleveland Communities. Five County Transit Study. June, 1973. Page 10.

23. Transportation and Poverty. op cit. Pages 26-30.

24. Community-Oriented Transit Services. op cit. Pages 26-30.

25. Alan Voorhees & Associates. Five County Transit Study. The Ten Year Transit Development Program. 1974. Page 207.

26. Alan Voorhees & Associates. Ibid, pages 43-44.

27. Alan Voorhees & Associates. Ibid, page 34.

28. Alan Voorhees & Associates. Ibid, page 34.

29. Alan Voorhees & Associates. Ibid, Page 76.

30. Alan Voorhees & Associates. Ibid, page 165.

31. Alan Voorhees & ASsociates. Ibid, page 174.

32. Alan Voorhees & Associates. Ibid, page 165.

33. The Voorhees firm performed an evaluation of rapid bus alternatives for the Southern California Rapid Transit District in Los Angeles, the Metropolitan Atlanta Rapid Transit Authority, and the St. Louis East-West Gateway Coordinating Council. In each area, the firm tried to recommend busway alternatives that were later discounted by the client and then justified by the consultant. The Transit Development Program for Cleveland may be the only city that includes at least one busway alternative in the consultant's experience.

34. Alan Voorhees & Associates. Ibid, page 169.

35. Alan M. Voorhees. Ibid, Page 204.

36. Alan M. Voorhees. Ibid, pages 188 & 208.

37. Alan Voorhees & Associates, Inc. and Business Research Services, Inc. Transit Marketing Research and RTA Assistance Study. Prepared for the Northeast Ohio Areawide Coordinating Agency. August, 1975. Pages 51, 52, 53, 60 & 66.

CHAPTER FOUR

CASE STUDY--BENEFITS FOR THE TRANSIT-DEPENDENT APPLICATION OF THE GOALS ACHIEVEMENT MATRIX

In this chapter the goals achievement matrix will be employed in an analysis of the Ten Year Transit Development Program. As previously discussed, increasing concern for the conflicting program and budgetary strategies prompted local planning agencies, such as in Cleveland, to determine whether federal dollars serve local objectives. The goals achievement matrix was selected to illustrate one way local agencies can make this determination. The goals achievement matrix is particularly suited for this purpose because it begins by determining community goals. These goals then become the basis for evaluating proposed good plans and selecting evaluation criteria.

Previous chapters have discussed the growing need for policy analysis as a method of coordinating governmental projects and establishing spending priorities for local areas. The policy issues of transportation for the Cleveland Region certainly demonstrate this need. The transit-dependent population represented a major segment of the city's population. As substantiated by the latent demand survey, inner city residents were limited in using

public transportation because of the prevailing multiple-fare structure, lack of route coverage in inner city neighborhoods and outlying suburban activity centers, and long waiting and travel times when using the service. A large proportion of the city's population, particularly inner city households, were carless or owned one car. The availability of adequate transit services was a major issue in developing improvement plans for transit facilities in the region.

To reiterate the policy positions of the major actors of developing transportation policy in the region, the Cleveland City Planning Commission established as early as 1972 a set of policy guidelines highly responsive to the needs of the transit-dependent. The Cleveland City Planning Commission formulated these policies with the objective of maintaining adequate levels of transit services in inner city neighborhoods in order to aid in their revitalization. These guidelines were used to evaluate all proposals for transportation improvements, particularly those requiring local matching funds or affecting the development of the city.

The Five County Transit Study was prepared by the Northeast Ohio Areawide Coordinating Agency, the regional agency for the Cleveland SMSA, to provide a comprehensive review of the existing transit services and propose short range improvements. The study was particularly necessary to obtain federal funding of transit services in the

region, although reorganizing the structure of the delivery of transit services, rethinking the level of financial commitment for both capital and service improvements, and improving the local base for financial support became volitile issues for many of the municipalities involved. The Urban Transportation Task Force, the subcommittee of the NOACA Board managing the study, articulated the policy objectives for the study and its recommendations. The Ten Year Transit Development Program was the product of this study effort.

This Ten Year Transit Development Program represented the improvement priorities endorsed by the regional agency: it proposed major reorganization of transit services, fare reductions, and service and capital improvements. Overall the Ten Year Transit Development Program provided a shopping list of improvements to satisfy the variety of transit interests in the region. However, the major preference for improvement endorsed by the regional agency was the major rapid transit construction. These improvements were ultimately endorsed by the Urban Transportation Task Force and the NOACA Board despite the fact that the public had expressed a higher preference for more service improvements.

A. Policy Analysis of the Ten Year Transit Development Program

To perform a policy analysis of the Ten Year Transit Development Program first requires a description

of the evaluative criteria established by the Cleveland City Planning Commission. A weighting system has been used to describe the impact the proposed improvements could have on these criteria. The analysis of these scores will consist of the description of the policy impacts implied by the program. The policy impacts of the Transit Development Program will be categorized in the following ways:

No Change--the level of service or condition will not be improved by the program.

Minimum Change--The level of service or improvements will be upgraded or improved to a level tolerably close to community standards.

Achievement Assured--Improvements will full satisfy the community's standards or goals.

1. Evaluative Criteria.

The criteria of the goals achievement matrix for the policy analysis of Cleveland's Transit Development Program will be based on the priorities determined by the Cleveland City Planning Commission, and specifically its highest priority for transit improvements, that transit subsidies be used to upgrade the mobility of transit-dependent residents. The Commission established these criteria for evaluating proposals for transportation improvements.

I. POLICY: Expansion of facilities to serve the transit-dependent populations:

1. develop demand-responsive transit services.

2. expand off-peak services.

3. develop barrier-free transportation facilities.

II. POLICY: Improve facilities serving transit-dependent populations:

1. decrease average waiting time on line-haul and neighborhood services.

2. develop low fare services.

3. provide security provisions at stops and stations.

4. reduce the need for multiple transfers to reach destinations.

5. reduce travel time on major routes.

6. coordinate all transit and travel modes along major corridors.

III. POLICY: Improve access to educational, employment, medical care, housing, cultural, shopping, and recreational activities in the region for transit dependent populations:

1. expand transit routes to facilitate crosstown travel to activity centers in the region.

2. improve internal circulation in low income neighborhoods.

3. locate new and major redevelopment in areas served by public transportation facilities.

IV. POLICY: Encourage the redevelopment or joint use of transportation corridors:

1. coordinate private and public redevelopment plans with transportation redevelopment plans.

2. initiate land use reconnaissance studies outlining the development character.

V. POLICY: Develop transportation facilities which improve or protect the urban design, safety, and environmental character within the corridor:

1. develop transportation facilities which reduce air, noise and water pollution.

2. develop transportation facilities which preserve natural and man-made resources, aesthetic, and cultural character.

3. develop transportation facilities utilizing equipment, landscaping, or urban design techniques which upgrade the character of the corridor.

B. Benefits for the Transit-Dependent

1. Expansion of Facilities to Serve the Transit-Dependent Population.

"Expanding facilities to serve the transit-dependent population" was stated as the highest priority by the Cleveland City Planning Commission. Developing demand responsive services, providing barrier-free access, and expanding off-peak services are all measures or means in accomplishing this objective. The Ten Year Transit Development Program proposed Community Responsive Transit Services, designed to combine a mixture of fixed routes and dial-a-ride features, coordinated by a community transit manager, to ration special transit services for the community. These special services would include the following:

a. morning and afternoon service to day care centers on an advanced schedule basis.

b. special runs on days of worship and religious holidays.

c. shopping specials to neighborhood and nearby shopping centers.

d. advance scheduled service between home and areawide line-haul transit for handicapped persons.

e. worker specials to job centers not served by areawide transit.

f. special runs to community activities such as school graduations, athletic events, and recreational areas during special events.

The TRANSITMAN, the transit manager, would be responsible for scheduling and promoting special services. Special services will be provided 72 hours per week on the near west side and 288 hours per week on the east side. In addition, a fixed small bus route will be added in both areas. Areawide coordination of the individual community system would be provided by the areawide transit authority.

Although the federal government is requiring that all buses be designed for "barrier free access" after 1982, the plan does not address this issue. Community Responsive Transit Services will provide door to door pickup for the elderly and handicapped on the special runs only. If Community Responsive Services are not expanded to provide regular pick up or dial-a-ride services for this population segment, it will only minimally serve this population segment. The physically disabled (including over a third of the elderly population) have the same travel needs as the general population, but will be subjected to the same

travel constraints they now have under the existing system. Coordination of existing special transportation services provided by the Cuyahoga Metropolitan Housing, the Cuyahoga Community Services Administration, Easter Seals, and other voluntary services should also be included in the Ten Year Transit Development Program. The Urban Mass Transportation Administration is reinforcing the coordination of these services on a regional basis, requiring a review of budget requests to minimize the cost of capital investment in vans designed with wheel chair access, to improve the efficiency of door-to-door pickup, and to improve the ability to serve the elderly and handicapped for all trip purposes utilizing all available resources in the region. The organization of the Community Responsive Transit Service offers a unique opportunity for organizing and coordinating these fragmented services.

Ideally, the Community Responsive Transit Service should provide door-to-door service, 24 hour service. The service should also subsidize some trips by taxi, when it is unable to provide service in a reasonable time period. However, the Ten Year Transit Development Program does not include taxi services to facilitate shorter response times, nor does it guarantee that services will be provided within 8 hours. Coordination with existing service providing agencies could improve the service of Community Responsive Transit, allowing the transit manager system to schedule needed trips on their services.

Residents in low income areas indicated a preference for expanded off peak services, particularly on the east side. Low income residents desired 24 hour service and shorter waiting times for local bus service during off peak periods.

The Ten Year Transit Development Program, using the service standards developed for the region, proposes to initiate thirty minute headways for all inner city neighborhoods during off peak hours and one hour services from 12 to 6 a.m. This applies to express, local, cross-town, feeder, and neighborhood transit services. Existing routes will be expanded during off peak services to provide access to suburban activity centers.

2. Improve Transportation Facilities.

The Planning Commission would seek to "improve transportation facilities" to serve the transit-dependent populations. The objectives of decreasing average waiting time, lowering fares, increasing security, reducing the need for transfers, reducing travel time, and coordinating modes of travel would assist in accomplishing this objective.

Fares under the Transit Development Program will be reduced to twenty-five cents with an express surcharge of 10¢ for express, rush hour travel, and rapid transit. A downtown fare will be charged for loop services. Transfers will be free; off-peak line-haul and Community Responsive Transit will be 25¢.

According to the transit dependent survey, the existing fare structure, averaging 54¢ one way, was a major deterrent to travel. With the fare reduction proposed by the Ten Year Transit Development Plan, ridership in low income areas would increase 25%. In fact, a reduction of fares without additional improvements proposed by the plan would increase ridership by 27.2% regionwide. Coupled with the Community Responsive Transit Service, an estimated 10,400,000 trips would be generated from low income areas throughout Cuyahoga County.

Multiple transfers to reach destinations were described as one of the major deterrents to using public transportation by low income residents. The Ten Year Transit Development Program would expand the number of street miles with no transfer service from 210 to 370 miles. A major item included was the off-peak transfer connections in the Central Business District, where all services will arrive and leave at the same time. In addition, several routes were realigned to better serve desired travel destinations.

Reducing travel time on all major routes to compete with the travel time provided by automobile use was an overall objective of the Transit Development Program and the Cleveland City Planning Commission. Presently, when considering the time absorbed in traffic congestion and delays, it was found that transit users spend an equal amount of time traveling door-to-door as automobile users.

Travel time on rapid transit and express buses was reduced by 7 minutes. Using the level-of-service standards prepared for the TDP, travel time standards were prepared for several trip purposes. For example, the average travel time for work purposes would be reduced by 11 minutes under the Plan.

Much of this time reduction would be accomplished by expanding rapid transit facilities and developing a bus priority system in the Clifton-Memorial Shoreway. The subway construction in the Central Business District and the addition of crosstown express service on I-480 also reduced the average waiting time under the Plan. Overall, the Plan proposes that a minimum of 60 minutes in travel in the service area will be necessary to reach most destinations.

But few of these improvements offering reduction in travel time will benefit low income residents because of their locational disadvantages. Coordination of the various alternative modes was viewed as having some benefit for riders who can spend part of their travel time on rapid transit and transfer to reliable and efficient crosstown bus services. But the Development Plan did make several recommendations which would attract commuters and aid in reducing the travel time for low income residents:

Coordination of the Community Responsive Transit Services with major transit stations

Express service at local stops in low income areas

Local bus coordination with rapid transit services

Express bus service serving rapid transit sections

Pedestrianways serving underground CBD subway loop system

Transitmall serving pedestrians on Euclid Avenue

Park and ride facilities serving rapid transit stations at freeway interchanges

Although these improvements are primarily oriented to attracting a sizeable commuter market, a few have the potential of facilitating reverse commuter travel patterns. For the most part, only local bus service and Community Responsive Transit have some potential for transferring low income residents to line-haul routes serving suburban activity centers.

The plan also proposed to improve security on transit services. The fear of riding buses was expressed by low income residents as a deterrent to travel. Security guards will be dispatched at rapid transit stations, buses, bus stops, and depots in high crime areas. Improved emergency communication equipment and efforts to improve cooperation with local police were also recommended.

3. Improving Access to Major Activity Centers.

Improving the access to employment, educational medical care, housing, cultural, shopping, and recreational activities for transit-dependent population was the second highest priority of the Planning Commission. This policy objective could be achieved by expanding cross-town routes, improving internal circulation in low income

communities, locating major activity areas served by transit communities, and requiring that major development areas be served by transit.

The Transit Development Program recommended the addition of new routes by superimposing a grid route pattern on the existing radial system. As a result, access to suburban and central city shopping and commercial districts will be enhanced. As part of the Community Responsive Transit Service, three fixed routes were added to improve accessibility to activity centers.

Part of the Community Responsive Transit Service recommendation provide special services to community centers, recreational areas, cultural programs, medical centers, certain job sites, and shopping centers, though at the discretion of the Community Transit Manager. While low income residents will be dependent upon these schedules, the services offer the potential for innovative routing and some expansion of destination choices of the transit-dependent populations under the plan.

Another method of improving the access to various educational, employment, shopping, recreation, medical care, and cultural activities is to require that these development areas or future development areas be served by transit. Although this will require some cooperation by other municipalities and governmental units, the addition of these requirements will greatly enhance the mobility of the transit-dependent market and improve the

marketability of these activities. There are several ways this provision could be implemented. As part of the municipal zoning or site plan review process, developers could be encouraged to either negotiate additional service or locate in areas which are presently served. In addition, proposals for development involving tax abatement or other publicly funded or subsidized projects (industrial rehabilitation and development, section 8 housing proposals, and major commercial and housing redevelopment areas) could be subject to this locational requirement. Although this is a long term objective, it is consistent with central city development and land use control policies. While the Ten Year Transit Development Plan does not specifically include recommendations for restricting development through control and review procedures, it discusses the need for reorientating present land use policies to encourage efficient public transportation services to all residents in the region.

4. Providing Redevelopment Potential.

As a third priority, the Cleveland City Planning Commission was amenable to transportation improvements which encourage the redevelopment or joint use of transportation corridors. As part of this policy recommendation, provisions requiring plans for redeveloping and coordinating transportation improvements were included to initiate administrative procedures which encourage early coordination and review by private and public development

efforts. By requiring all plans to be approved by the municipality and initiating coordination procedures prior to the approval of the NOACA Board and the State of Ohio, joint planning can be accomplished. Too often, intergovernmental communication has lagged in these areas, hindering the achievement of each agency's own objectives.

To insure access to the planning and design process by citizens and city staff, land use reconnaissance studies should be designed to include their input. Although requirements for federal assistance require citizen and local review and comment, various agencies have minimally satisfied the intent of the law by holding only required public hearings.

The Ten Year Development Program Plan, being a service and capital improvement plan, generally outlines the locations of physical improvements and provides preliminary engineering and planning monies for the individual programs. As part of the procedural requirements for NOACA, the TDP should have established some guidelines in organizing and coordinating local review and citizen participation efforts.

5. Improving the Environment.

Improving the environmental and safety of transportation facilities was a fourth priority of the Cleveland City Planning Commission. This policy recommendation refers to improving the adjacent land use as well. The objectives prepared for this policy guideline refer to the

reduction of environmental hazards, preserving natural and man-made resources, improving the aesthetic or design character, and improving safety standards of the facilities. These policy objectives are consistent with state and federal environmental objectives.

According to the Environmental Protection Act of 1968 and the Urban Mass Transportation Assistance Act of 1974, all federally funded projects must submit an assessment of expected environmental effects or environmental impact statements which describe the impact of proposed improvements on the air, noise, water and land use. While the Transit Development Program only generally describes the improvements on an areawide or systemwide basis, a full environmental impact statement will probably be needed for most of its rapid transit and transit mall proposals. However, the Plan refers to a reduction of automobile use over the next 10 years by retaining more than 40 million transit trips which would have been diverted to automobile trips if the plan were not implemented. Ridership under the plan would increase from 61.2 million trips to 139.5 million trips in 1984. A major portion of this ridership would increase as a result of the completion of the proposed rapid transit improvements. A reduction in air pollution and energy consumption is estimated, although the exact amount would not be realized until these improvements are completed. The full impact of the improvements on air,

noise, water and land use will not be explored until preliminary engineering studies are completed. It is conceivable that the improvements will be required to conform with stricter federal and state air, noise, and water quality standards in the future.

Although specific recommendations for blending or preserving natural and man-made resources were not prepared for each recommendation, the Ten Year Transit Development Plan discussed several proposals offering this potential. Architectural standards will be drafted at a later date. In any event, the assurances that environmental, urban design, man-made and natural resources should be prepared in cooperation with a citywide citizen organization. Such an organization, coordinated by the City Planning Commission, should include local residents in affected areas, art councils, and other civic organizations. An urban design policy should be developed as part of the city's community development and maintenance policy. Safety provisions should be included in the preparation of architectural standards by the regional agency.

6. Freeway Construction and Housing Displacement.

The Cleveland City Planning Commission identified as its lowest priority, the construction of freeways and expressways which are primarily used by suburban commuters. Retaining the integraity of existing neighborhoods and improving the quality and supply of low and

moderate income housing were policies which often directly conflict with highway construction in the central city. The city's proportion of low income families increased from 40% to 44% from 1960 to 1970 even though the actual numbers had declined. While the actual number of housing units declined 10% as a whole, the number of units for low income families have increased from 36% to 44%. A major portion was 2000 units built by the Cleveland Metropolitan Housing Authority.

Although the actual number of the housing displacements was identified, rapid transit construction, especially linking outlying suburban areas, will displace some housing units. Where much of the rapid transit right-of-way is owned by the railroad, or the city, the number of displacements should be minimized.

As its policy for housing, the Cleveland Planning Commission urged the expansion of low and moderate income subsidized in suburban areas. The Transit Development Program and the region's transportation policy should reinforce this objective by requiring that expanded high use facilities such as rapid transit construction be approved for those suburban communities which will accept low and moderate income housing in suburban areas.*

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*The Cleveland City Planning Commission, in 1971, proposed the development of a fair share plan for Cuyahoga County which allocated subsidized housing to suburban communities according to their population size and proportion of their elderly and low income

7. Summary of Benefits.

The city of Cleveland can expect the following benefits for its transit-dependent population:

1. Special services offered by the Community Responsive Transit Service.
2. Expanded all-night service for low income neighborhoods.
3. Elimination of multiple fare structures and a reduction in the basic fare structure.
4. Security improvements in high crime areas.
5. Improved access to the major activity centers in the region through route realignments and expansion.
6. Coordination of schedules provided by the new regional authority.

However, the Transit Development Program is deficient in the following areas:

1. Providing adequate services for the physically disabled.
2. Improving off peak travel by decreasing waiting time.
3. Reducing travel time.
4. Expanding services to newly developing activity centers.

The major deficiency of the Ten Year Transit Development Program is its budget prioritization. Because

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families. This proposal was rejected by the NOACA Board. Ultimately, the Housing and Urban Development Department decertified the agency as an A-95 review body. One condition of the recertification of 1971 was the development of a suitable housing element. NOACA has only recently begun preparation of a housing plan which addresses low income housing.

a major portion of the proposed budget will be used for planning and constructing rail, subway, and other major capital improvements, the service improvements, particularly the Community Responsive Transit Service, will be underfunded. Assurances for expanding service improvements in the future are totally dependent upon the final cost estimations of the rail alternatives.

An analysis of the budget priorities identifies the areas that may be underfunded by the Program. In view of the UMTA requirements for areawide treatment for special transportation services and barrier free design improvements for all physical facilities, the service and capital investment for Community Responsive Transit and line-haul service improvements may be inadequate. The additional requirements for serving a larger proportion of the physically disabled, as well as integrating and managing all special transportation services in the region, are not included in the budget allocations for Community Responsive Transit.

The Community Responsive Transit Service will only provide a stopgap alternative for door-to-door recipients because it is designed as a feeder service to line-haul facilities. Direct service via the door-to-door transportation will only be provided under the "special runs" provisions. Furthermore, little effort will be made to coordinate the special transportation provided by the existing agencies. In the absence of these provisions,

one has to assume that the regional agency is not willing or eager to assume these alternatives. If UMTA is serious about its requirements, the regional authority will have to provide door-to-door transportation or contract these services out to the local volunteer agencies currently providing special transportation. Nevertheless, the proposed budget offers little flexibility for these requirements.

If the cost estimates provided by the latent demand survey are taken seriously, the entire Community Responsive Transit Service will be inadequate to serve the needs of inner city neighborhoods. Not only were the consultant's recommendations ignored, but the experience of dial-a-ride and other bus systems in the city of Cleveland was not considered. At the time of the study there were eight agencies providing demand-responsive services, including one operated by the City of Cleveland Commission on Aging.

The line-haul services, particularly the ability of the regional authority to reduce travel time and provide off peak services and expansion to new acitivity centers, will also be hampered under the proposed budget priorities. The majority of the time savings, produced by the Ten Year Transit Development Program will be achieved by rail alternatives. The orientation of these alternatives will not facilitate reverse commuting and will provide few benefits for the transit-dependent.

C. Policy Ramifications

The policy to expand and improve services for inner city residents received minimum policy attention under the proposed Ten Year Transit Development Program. The improvement package was developed on the philosophy of providing "something for everyone." It reflects the powerful interests of the region that view the promise of federal grants and subsidies as low cost opportunities to expand the region's rapid transit system. In fact, the plan equated rapid transit with regional prestige, a symbol of economic development, and progress. Although special services were recommended, the improvement program stops short of providing the minimum needed by inner city residents and the elderly and handicapped. Fare reductions were included to improve the package's public appeal.

The Five County Transit Study and the plan it produced demonstrate that urban public transportation policy has not changed dramatically since the adoption of the long-range plan, A Framework for Action. Once again, rapid transit construction was promoted as the necessary ingredient to improve ridership. In fact, the region is still unwilling to develop less costly alternatives that would increase ridership.

The heavy emphasis on rail construction in the projected plan budget illustrates the vulnerability of the Community Responsive Transit services and other service improvements in the future. Faced with the

prospect of increasing engineering, acquisition, construction, and operating costs, it is conceivable that service improvements will be sacrificed or reduced to support growing rapid transit costs. The proposed reorganization of transit services and the acquisition of the Cleveland Transit System will reduce the city's ability to protect important transit services. The city of Cleveland will have no guarantees that services in low income areas will not be sacrificed to support the rapid transit market. At best, Community Responsive Transit, the fare reductions, and other service improvements are temporary, short term benefits, because they represent minor investments when compared with the magnitude of the rapid transit capital and operating investments.

D. Policy Recommendations

The goals achievement matrix illustrates the point that the Transit Development Program contains few assurances for inner city residents (see Table 3, page 110). It demonstrates the need for the city to develop a set of service guarantees, such as those presented in the matrix, as part of its approval of the Ten Year Transit Development Program and its approval of the proposed acquisition of the Cleveland Transit System as part of the consolidation agreement.

The following policy areas and service guarantees must be included in any agreement for the city's participation in the program.

Table 3. Goals Achievement Matrix: Assessment of the Ten Year Transit Development Program Plan

Cleveland City Planning Commission Transportation Policies[1]

Goal Description: Expansion of Facilities to Serve the Transit Dependent Populations
POLICY I
Relative Weight: 5

Activity Objectives	Relative Weight	Policy Impacts: No Change	Minimum Changes	Achievement Assured
1. Develop demand responsive system	2		X	
2. Expand off peak services	1	X		
3. Develop barrier free transportation services	2		X	

Goal Description: Improve Facilities to Serve Transit Dependent Populations
POLICY II
Relative Weight: 5

1. Decrease average waiting time on line-haul and neighborhood services	1	X		
2. Develop low fare services	3		X	
3. Provide security provisions at stops and stations	3		X	

[1]Cleveland Planning Commission. Transportation and Poverty: General Guidelines for the City of Cleveland Planning Commission. General Plan-Transportation Paper #2. July 1971. Pages 2-3.

Table 3 (cont'd.).

4. Reduce the need for multiple transfers to reach destinations	3		X
5. Reduce travel time on all major routes	3		X
6. Coordinate all transit and travel modes along major corridors	3		X

Goal Description: Improve access to educational, employment, medical care, housing, cultural, shopping, and recreational activities in the region for transit-dependent population

POLICY III
Relative Weight: 4

		Policy Impact		
Activity Objectives	Relative Weight	No Change	Minimum Changes	Achievement Assured
1. Expand transit routes to facilitate crosstown tranvel to activity centers in the region	4		X	
2. Improve internal circulation in low income neighborhoods	3		X	
3. Locate new and major redevelopments in areas served by public transportation	2	X		

Goal Description: Encourage the redevelopment or joint use of transportation corridors

POLICY IV
Relative Weight: 3

1. All redevelopment plans for transportation improvements must be coordinated with private and public redevelopment efforts.	3		X

Table 3 (cont'd.).

2. Initiate land use reconnaissance studies outlining the development character and potential use of the corridor prior to preliminary engineering studies.	3		X

Goal Description: Develop transportation facilities which improve or protect the urban design, safety, and environmental character within the corridor

POLICY V
Relative Weight: 2

		Policy Impacts		
Activity Objectives	Relative Weight	No Change	Minimum Changes	Achievement Assured
1. Develop transportation facilities which effectively reduce air, noise, and water pollution in the corridor	3		X	
2. Develop transportation facilities which preserve natural and man-made, resources, and aesthetic, and cultural character	2	X		
3. Develop transportation facilities utilizing equipment, landscaping, and urban design techniques which either conform or upgrade the character of the corridor	1	X		

Table 3 (cont'd.).

4. Develop transportation facilities which avoid conflict and decrease congestion at major traffic intersections and use equipment with federally approved safety standards	1		X

Goal Description: Develop freeways and expressways which divert traffic around developed areas where the local shares is waived and the city of Cleveland is compensated for housing and revenue displacements

POLICY VI
Relative Weight: 1

Activity Objective	Relative Weight	Policy Impacts: No Change	Minimum Changes	Achievement Assured
1. Locate facilities in conformance with an approved land use plan in the city	1	X		
2. Planned facilities must be located in areas which minimize the displacement of low and moderate income families, housing stock, and maintain neighborhoods	1	X		

1. Minimum service levels and route expansion for the city.

2. Coordination of the existing special transportation services.

3. Twenty-four hour service on all major cross-town and corridor routes.

4. Higher subsidies and expanded demand-responsive services for the Community Responsive Transit System.

5. Federal barrier-free design provisions for new equipment and facility renovations.

6. Assurances that the 25¢ base fare will remain in effect for at least the first five years of the program.

7. Reevaluation of all major corridors designated for high facility improvements.

8. Joint preparation of preliminary plans for all major corridors by the city of Cleveland, the new regional transit agency, and the Northeast Ohio Areawide Coordinating Agency (NOACA).

9. Yearly evaluation of the Ten Year Transit Development Program.

E. Conclusion

The goals achievement matrix method was used to evaluate the anticipated benefits which would be received by inner city residents under the Ten Year Transit Development Program. The matrix served as a policy evaluation tool that demonstrates the transit policies for the region have not substantially changed since the development of the long range plan, A Framework for Action. Furthermore,

it identifies the areas that should be changed to make the improvement program more responsive to Cleveland's growing low income population.

With the implementation of the Ten Year Transit Development Program being dependent upon the acquisition of the Cleveland Transit System from the city of Cleveland, the city has a powerful asset to use in bargaining for higher benefits for its residents.

CHAPTER FIVE

CONCLUSION

The goals achievement matrix was used in this research to evaluate the anticipated benefits that might be received by inner city residents under the Transit Development Program. The focus of this research is directed to the necessity for local agencies to enter into local policy research and evaluation in order to more effectively negotiate higher benefit levels for their residents. The goals achievement matrix is proposed as an evaluation mechanism for policy analysis to identify the latent policy direction of governmental activities and to determine whether or not community objectives will be servied by these activities. An overall goal of this research was to demonstrate an evaluation tool providing local agencies with an exploratory aid in the policy-making and planning process.

The transportation issues discussed in this research demonstrate the need for expanded local policy research. Since the passage of the first Urban Mass Transportation Act of 1964, the federal government has advocated a regional strategy for the planning and delivery

of transit services, coupled with redirected policy attention to the needs of the transit-dependent population in urban areas. However, attempts to target investments for this population segment are often compromised in the regional transportation decision-making process in favor of "higher political objectives."

The goals achievement matrix clearly reveals the potential policy conflicts of proposed activities in Cleveland's regional transportation planning effort. This instrument was particularly suited for this effort on the local level because it is formulated through a process of community goal determination, the prioritization of community objectives and, finally, the definition of community-oriented evaluative criteria. Because it begins as a community-based evaluation mechanism, the goals achievement matrix provides a useful tool in identifying areas that will require higher policy attention.

The transportation issues discussed in this research demonstrate the need for local policy analysis. The policy analysis of the Ten Year Transportation Development Program illustrates the expectations created by the Urban Mass Transportation Assistance Act of 1974 in the Cleveland region. To summarize the findings, the expectation of higher federal subsidies encouraged the development of major capital investment strategies of

rapid rail facilities which rarely improve service and ridership levels. An analysis of the region's plan revealed the following:

1. The cost implications of the rapid rail components of the plan were ignored to maintain the long-standing recommendations for rail improvements contained in the region's long-range transportation plan.

2. Special transportation services was ignored in the region's improvement plan.

3. Community Responsive Transit may be under funded in the improvement plan.

4. Despite federal policy objectives and local guidelines, the region opted for an improvement package designed to reflect what they defined as the prestige of rail development rather than the rehabilitation of its existing services.

5. The few service improvements proposed in the improvement plan may be placed in a vulnerable position in view of the growing and inflationary costs of rail development.

These statements imply that the policy attention paid to localized concerns has not changed substantially since the region's long-range planning efforts began, despite the fact that the Ten Year Transit Development Program was to represent a short-range investment strategy. According to the legislative guidelines of the 1974 Urban Mass Transportation Assistance Act, the short-range planning activity should concentrate on the less capital-intensive and service-oriented improvement projects. Yet the Urban Mass Transportation Administration has not adopted any standards in evaluating the virtues of rapid transit improvements nor discouraged regions by requiring

some level-of-service thresholds as a funding requirement. In fact, some researchers feel that the agency has a dangerously high regard for major capital investments. Andrew Hamer points out that the endorsement of "incremental development" of mass transit corridors has led to the development of back door rail proposals. Incremental development of rapid transit, based on an analysis of the projected 5-10 year transportation needs, has encouraged the development of networks in discrete stages capable of operating in the absence of other segments.[1] The discrepencies inherent in the legislation and UMTA's requirements illustrate the weakness of the federal government's attempt to target needed improvements.

The goals achievement matrix method is further used, in this research, to help local policy planners in identifying the latent and overt policy conflicts in governmental funding allocation strategies. Such a use of policy analysis is part of an emerging practice where interventional efforts, such as lobbying and negotiation, are used to encourage marginal policy shifts to create more socially desirable conditions. Practitioners and researchers of the planning profession are advocating the use of policy analysis to provide direction in their attempts to facilitate compromise, bargain, and accommodation with competing interest groups. The analysis of the Cleveland's transportation issues demonstrate that policies are rarely formulated in response to a

comprehensive review of resources. Public policy, after all, is traditionally formulated to be responsive to the known preferences and values of specialized interests and the more organized, vocal, and articulate spokesmen. The programs they support and successfully implement not only advance their interests, but are advanced under the assumption that all people hold (or should hold) the same goals as they do.

The goals achievement matrix method also aids the policy planning process because it structures the discussion of resource allocation in terms of the community's priorities. Community values are reflected through a weighting system incorporated in the design of the method. An added benefit of this method is its compatibility with other plan evaluation tools. For example, the policy analysis presented in this paper could also include an application of the benefit-cost or cost-effectiveness analysis of the Ten Year Transit Development Program. Another virtue of this method is its ability to include citizen participation in policy analysis. The design of community oriented evaluative criteria can assist local agencies in their policy planning efforts and satisfy federal citizen participation requirements.

Thus the goals achievement matrix method represents one attempt to provide a framework for policy discussions on the local level. Among potential difficulties involved in using this tool, it is conceivable that the

goals achievement matrix method could place demands on an agency's staff and work program since it requires reviews the community's priorities and goals on a regular basis. Ideally this should occur in the agency's capital budget or development program planning process. But, since capital budget (or capital improvement programming) planning efforts are annual activities for most local agencies, the reevaluation of community priorities could frequently be performed with citizen groups.

REFERENCES

1. Andrew Marshall Hamer. The Selling of Rail Rapid Transit. Lexington Book. Lexington, Massachusetts. 1976. Page 250.

APPENDIX

A MATRIX FOR ASSESSING THE PERFORMANCE OF THE TEN YEAR TRANSIT DEVELOPMENT PROGRAM PLAN

MATRIX CRITERIA	CATAGORY WEIGHT
I POLICY--EXPANSION OF FACILITIES TO SERVE THE TRANSIT-DEPENDENT POPULATION	5

OBJECTIVES	RATING
1. Develop Demand Responsive Transit Systems.	5. Plan provides small bus transit with door-to-door pickup, 24 service, 4 hour response time, designed for barrier free access, and subsidizes some trips on taxi.
	4. Plan provides small bus transit service with door-to-door pickup 18 hour service, 4 hour response time, and is designed for barrier free access.
	3. Plan provides small bus transit service with door-to-door pickup 18 hour service, 8 hour response time, but coordinates and provides special transportation services.

OBJECTIVES	RATING
	2. Plan provides small bus transit service which provides door-to-door service for special transportation needs.
	1. Plan provides no small bus transit services but coordinates special transportation needs with existing social service providers.
2. Expand off peak services	5. Plan provides 24 hour service at 15 minute headways on all major crosstown and corridor routes.
	4. Plan provides 24 hour service at 15 minute headways on major corridor routes and thirty minute headways in crosstown routes.
	3. Plan provides 24 hour service at 15 minute headways and thirty minute headways after 2 a.m. on all major crosstown and corridor routes.
	2. Plan provides 16 hour services at 15 minute headways in all major corridor routes and thirty minute headways on all major crosstown routes after 10 a.m.

OBJECTIVES	RATING
	1. Plan provides 16 hour services at 15 minute headways and thirty minute headways after 10 a.m. on major corridor routes only.
3. Develop Barrier Free Transportation Facilities	5. All buses and stations, under the plan, within five years, will be replaced or redesigned for barrier free access. Special transportation services will be consolidated and administered through small bus services.
	4. New buses and station renovations within five years, will have barrier free access. Special vans will be purchased in the interim and coordinated with existing services.
	3. Special transportation services will be expanded and coordinated with existing service providing agencies. New buses will have barrier free access within five years.
	2. Special transportation services will be expanded and coordinated with existing service providing agencies.

OBJECTIVES	RATING
	1. Special transportation services will only be provided by existing service providing agencies.

II POLICY--IMPROVE FACILITIES TO SERVE TRANSIT DEPENDENT POPULATION	5

OBJECTIVES	RATING
1. Decrease average waiting time on line-haul and neighborhood services.	5. Average waiting time for all line-haul routes will be 15 minutes and on small bus services, 4 hours.
	4. Average waiting time for all line-haul services (crosstown and major corridor) will be 15 minutes and thirty minutes after 2 a.m. Small bus services, 4 hours.
	3. Average waiting time for all line-haul services (crosstown and major corridor) will be 15 minutes at peak times and thirty minutes during off peak periods. Small buses will have an 8 hour response time.
	2. Average waiting time for line-haul services is 15 minutes at peak, thirty minutes during off peak periods. Special transportation services will have 12 hour response times.

OBJECTIVES	RATING
	1. Average waiting time for line-haul services will be 15 minutes at peak, thirty minutes off peak and one hour after 10 a.m. 24 hour response times for special transportation services will be provided.
2. Develop low fare services	5. Plan provides uniform fares of 25¢ and free transfers on all small bus, rapid, line-haul, special transportation, and express services. A special rate of 15¢ will be charged for the elderly and school children. A special surcharge will be added for travel outside Cuyahoga County.
	4. Plan provides uniform fares of 25¢ and free transfers on all buses; 15¢ for school and elderly riders, 35¢ for rapid transit, special transportation, and express. A surcharge for travel outside Cuyahoga County will be added.
	3. Plan provides uniform fares of 25¢ and free transfers on all buses; 15¢ for school and elderly riders, 35¢ for rapid transit and express

OBJECTIVES	RATING
	services, and 50¢ for special transportation services. A surcharge will be added for travel outside Cuyahoga County.
	2. Plan provides uniform fares of 25¢ and 5¢ transfers, 50¢ for rapid transit, express, and special transportation services.
	1. Plan allows a different fare structure on all transit systems, 10¢ for all transfers on CTS, and 50¢ for rapid transit, express, and special transportation services.
3. Provide security provisions at stops and stations	5. All stops are lighted and provided with shelters. Stations and major transfer points have emergency and security services (phones and personnel).
	4. All stops have shelters with major transfer stations providing emergency and security services (lighting, phones, and personnel).
	3. Only major transfer stations are lighted and have security phones and personnel. Stops in neighborhoods have shelters.

OBJECTIVES	RATING
	2. Only major transfer stations are lighted and have emergency phones and personnel. Major stops in neighborhoods have shelters.
	1. Only major transfer stations are lighted and have emergency phones with personnel.
4. Reduce the need for multiple transfers to reach destinations	5. Plan provides direct service to major activity centers on line-haul and crosstown routes, as defined by the Cleveland City Planning Commission and requires that one transfer service be needed for 90% of the service area.
	4. Plan provides direct services to major activity centers on line-haul and crosstown services and requires that one transfer service be needed for 75% of the service area.
	3. Plan provides direct services to major activity centers on line-haul and crosstown services with transfer stations in CBD and all major transfer points. New routes will be added when the need for two or more transfers arise 15% of the service area.

OBJECTIVES	RATING
	2. Plan provides direct services to major activity centers with transfers in the CBD and all major transit stations.
	1. Plan provides direct services to major activity centers from CBD only.
5. Reduce travel time on major routes	5. Destinations, including transfers, will be within 45 minutes of travel within the Cuyahoga County area, through the use of preemption devices and separate reserved bus lanes along major streets.
	4. Destinations including transfers will be within 60 minutes of travel within Cuyahoga County. Traffic preemption devices and separate reserved bus lanes will be used on all major streets.
	3. Travel time, including transfers, will be reduced by 15 minutes for peak times.
	2. Travel time, including transfers, will be reduced by 10 minutes for peak periods only.

OBJECTIVES	RATING
	1. Travel time on most major routes will be unchanged. Transit and express travel time will be reduced by 10 minutes.
6. Coordinate all transit and travel modes along major corridors.	5. Plan proposes consolidation of all transit services. Plan provides the development or renovation of all major transfer stations for buses, rapid transit, park and ride areas, and railroads.
	4. Plan proposes consolidation of all services. Plan provides the interchange of buses, rapid transit, car storage at major transfer stations and redevelopes a major railroad/bus/rapid transit interchange at Union Terminal and along E. Ninth Street.
	3. Plan provides the interchange of bus, rapid transit, carstorage, and carpooling at major transfer points throughout the Cuyahoga County region and the Central Business District.
	2. Plan provides the interchange of bus, rapid transit and car storage at major transfer points throughout Cuyahoga and bus/park and ride in the out-regions.

OBJECTIVES	RATING
	1. Plan provides the interchange of bus/rapid transit but fares and schedules are not coordinated.

III POLICY--IMPROVE ACCESS TO EDUCATIONAL, EMPLOYMENT, MEDICAL CARE, HOUSING, CULTURAL SHOPPING, AND RECREATIONAL ACTIVITIES IN THE REGION FOR TRANSIT-DEPENDENT POPULATIONS	4

OBJECTIVES	RATING
1. Expand transit routes to facilitate crosstown travel to activity centers in the region	5. Plan provides expanded line-haul service to CBD and all activity centers defined by the Cleveland City Planning Commission.
	4. Plan provides expanded line-haul services to the CBD and major activity centers defined by the Cleveland Planning Commission.
	3. Plan provides expanded line-haul services to the CBD and all major employment centers defined by the Seven County Transportation Plan.
	2. Plan provides expanded line-haul services to the CBD and major major employment centers defined by the Seven County Transportation Plan.

OBJECTIVES	RATING
	1. Plan provides expanded line-haul services to the CBD and all major shopping centers defined by the Seven County Transportation Plan.
2. Improve internal circulation in low income neighborhoods	5. Plan includes small bus or innovative routing in low income areas.
	4. Plan includes small bus services or fixed routes in low income areas.
	3. Plan provides small bus services and special transportation to low income areas.
	2. Neighborhood circulation is unchanged by the plan.
	1. Plan provides expanded services in suburban areas and neighborhood services are unchanged.
3. Locate new and major redevelopments in areas served by public transportation	5. Plan proposes or a resolution is passed requiring that new and major redevelopment projects, where the potential daytime or nighttime population is over 200, have bus service.

OBJECTIVES

RATING

4. Plan requires that no building permit or rezoning will be provided for new and major redevelopment projects of over 5000 in population not served by public transportation.

3. Plan requests that all municipalities voluntarily adopt policies which require locations presently served by public transportation for all major redevelopments and new housing subdivisions of 200 or more where these projects are subsidized by public funds.

2. All major housing, employment, medical recreational, shopping, cultural, and educational centers in the city of Cleveland will have access to bus services if they are receiving public subsidies or abatements from the city.

1. All new major housing, employment, recreational, shopping centers, cultural, medical, and educational centers will be developed for access by buses.

IV POLICY--ENCOURAGE THE REDEVELOPMENT OR JOINT USE OF TRANSPORTATION CORRIDORS	3

OBJECTIVES	RATING
1. All redevelopment plans for transportation improvements must be coordinated with private and public redevelopment efforts	5. The Plan calls for the preparation of a joint development plan reconnaissance and public hearing. The joint development plan must be approved by the cooperating municipalities and governmental units and NOACA. 4. The Plan calls for the preparation of joint development plan reconnaissance. Plan requires that the joint development plan must be approved by cooperating municipalities and governmental units. 3. Plan calls for the preparation of a joint development plan reconnaissance. The joint development plan must be approved by the city of Cleveland and full coordination should be established with the Community Development Department. (For those improvements located in the city of Cleveland.

OBJECTIVES	RATING
	2. The Plan calls for the full coordination of proposed improvements only after preliminary engineering and project plans have been developed.
	1. The Plan only requires the review and comment of concerned municipalities. Coordination will occur at the agency's discretion.
2. Initiate land use reconnaissance studies outlining the development character and potential use of the corridor prior to preliminary engineering studies.	5. A full land use reconnaissance study of the land use, housing, population and economic characteristics have been prepared for alternative locations has been prepared with the local unit of government and citizens living in the affected corridor prior to the selection of the final location.
	3. A final land use reconnaissance study with a plan for citizen and local participation has been initiated.

V POLICY--DEVELOP TRANSPORTATION FACILITIES WHICH IMPROVE OR PROTECT THE URBAN DESIGN, SAFETY, AND ENVIRONMENTAL CHARACTER WITHIN THE CORRIDOR 2

OBJECTIVES	RATING
1. Develop transportation facilities which effectively reduce air, noise and water pollution in the corridor.	5. Plan will reduce the number of cars in major corridors and will reduce air, noise, and water pollution in the corridor.
	3. All facilities will conform with federal air, water and noise standards within corridors.
	1. Transportation facilities will increase the level of air, noise and water pollution required by the federal EPA regulations, but will reduce the number of cars in major corridors.
2. Develop transportation facilities which preserve natural and man-made resources, and aesthetic and cultural character.	5. Plan provides that all improvements develop plans which avoid the displacement of natural and manmade, cultural and aesthetic resources.
	3. Plan must provide remedial or relocation alternatives and reimbursement of natural, man-made, aesthetic, and cultural resources, according to an approved land use plan.

OBJECTIVES	RATING
	1. Plan does provide remedial alternatives, according to an approved site plan.
3. Develop transportation facilities utilizing equipment, landscaping and urban design techniques which either conform or upgrade the character of the corridor.	5. A site specific plan outlining landscaping and urban design treatment and renderings of equipment is prepared and approved by local resident representatives, and architectural commission.
	3. A policy plan outlining landscaping urban design treatment for equipment has been reviewed by citizens and local planning commission.
	1. A site plan for landscaping has been prepared and forwarded to the planning commission for comments.
4. Develop transportation facilities which avoid conflict and decrease congestion at major traffic intersections and use equipment which conform to federally approved safety standards.	5. Plan calls for the development of transportation facilities which avoid major traffic intersections, provides access by pedestrians and the handicapped. Development plans have been prepared in cooperation with the traffic safety division, highway department, citizens and planning commission. Equipment exceeds federal safety standards.

OBJECTIVES	RATING
	3. Plan calls for the development of transportation facilities which have been approved and jointly prepared by the traffic safety division, highway department, citizens, and planning commission. Equipment conforms with federal safety standards.
	1. Plan calls for the development of transportation facilities which conform to federal safety standards and is approved by the traffic safety division.

VI POLICY--DEVELOP FREEWAYS AND EXPRESSWAYS WHICH DIVERT TRAFFIC AROUND DEVELOPED AREAS WHERE THE LOCAL SHARES IS WAIVED AND THE CITY OF CLEVELAND IS COMPENSATED FOR HOUSING AND REVENUE DISPLACEMENTS 1

OBJECTIVES	RATING
1. Locate facilities in conformance with an approved land use plan in the city.	5. Planned facilities are located in corridors approved by the City Council and NOACA. The Plan prepared jointly by the City Planning Commission, NOACA, and citizens living in the corridor.

OBJECTIVES	RATING
3. Planned facilities are located in corridors approved by the City Council, Planning Commission, and citizens living in the corridor.	

BIBLIOGRAPHY

ABT, Associates, Incorporated. Travel Barriers: Transportation of the Handicapped. Department of Transportation. NTIS PB. August, 1969.

Alan M. Voorhees & Associates. Five County Transit Study. The Ten Year Transit Development Program. Prepared for the Northeast Ohio Areawide Coordinating Agency. 1974.

Business Research Services. Transit Marketing Research and RTA Assistance Study. Prepared for the Northeast Ohio Areawide Coordinating Agency. August, 1975.

United States Department of Commerce, Social and Economic Administration, Bureau of Census: 1970 Census of Population and Housing: Census Tracts. Cleveland. PCH(1)-45.

Supplementary Report. Low Income Neighborhoods in Large Cities. 1970 Cleveland and Toledo, Ohio. PHC90. May, 1974.

Cleveland Planning Commission. Cleveland Policy Report, Volume I, 1975.

Cleveland's Population. Volume I, 1975.

Jobs and Income, Volume I, 1974.

Transportation and Poverty: General Guidelines for the City of Cleveland Planning Commission. General Plan--Transportation Paper #2, July, 1971.

Cleveland/Seven County Transportation and Land Use Study (SCOTS). A Framework for Action. Cleveland, Ohio. 1969.

Falcocchio, John C. and Edmund J. Cantu. "Modal Choices and Travel Attributes of the Inner City Poor." Highway Research Board. Record No. 403. Washington, D.C. 1972.

Friedmann, John A. "Notes on Societal Action." Journal of the American Institute of Planners. Volume 39. July, 1969.

Retracking America: A Theory of Transactive Planning. Garden City, New York: Anchor Press/ Doubleday. 1973.

Gans, Herbert. "Planning for Declining and Poor Cities." Journal of the American Institute of Planners. Volume 41. No. 5. September, 1975.

Hamer, Andrew Marshall. The Selling of Rail Rapid Transit. Lexington, Massachussetts: Lexington Books. 1977.

Hatry, Harry P. "Criteria for Evaluation in Planning State and Local Programs," in Decision Making in Urban Planning, edited by Ira M. Robinson. Beverly Hills: Sage Publications. 1974.

Hill, Morris. "A Goals Achievement Matrix for Evaluating Alternative Plans," in Decision Making in Urban Planning, edited by Ira M. Robinson. Beverly Hills: Sage Publication. 1974.

Planning for Multiple Objectives: An Application to the Evaluation of Transportation Plans. Monograph Series No. 5. Philadelphia: Regional Science Research Institute. 1973.

Kaufmann, Jerome L. "Contemporary Planning Practice: State of the Art," in Planning in America: Learning from Turbulance, edited by David R. Godschalk. Washington: American Institute of Planners. 1974.

Krumholz, Cogger, and Linner. "The Cleveland City Planning Report." Journal of the American Institute of Planners. Volume 41. No. 5. September, 1975.

Nelson, Stephen. The Policy Approach in Urban and Regional Planning. Unpublished thesis for the degree of Urban Planning and Landscape Architecture. Michigan State University. 1964.

Public Law 93-503, 93rd Congress, Senate Bill 386. Urban Mass Transportation Assistance Act of 1974. November 26, 1974.

Susskind, Lawrence E. "The Future of the Planning Profession," in Planning in America: Learning from Turbulance, edited by David R. Godschalk. Washington: American Institute of Planners. 1974.

Systems Design Concepts, Inc. Community Oriented Transit Services for the Transit Needs in Inner City Cleveland Communities. The Five County Transit Study. Washington. February, 1974.

Technical Report #5. Survey of Transit Needs in Inner City Cleveland Communities. Five County Transit Study. June, 1973.

U.S. Department of Transportation. 1972 National Transportation Report: Present Status-Future Alternatives. Office of the Assistant Secretary for Policy and International Affairs. Washington, D.C. July, 1972.

Wildavsky, Aaron. "Rescuing Policy Analysis from PBB," in Public Expenditures and Policy Analysis, edited by Robert H. Haveman and Julius Margolis. Chicago: Markham Publishing Company, 1972.

GENERAL REFERENCES

ABT. Associates, Inc. Accessibility of the Metropolitan Transportation System to the Handicapped and Elderly. Cambridge, Massachusetts. August, 1972.

Altschuler, Alan. "Transit Subsidies: By Whom For Whom? Journal of the American Institute of Planners. March, 1969. Volume 35. Number 2.

Cantonese, Anthony. Planners and Local Politics: Impossible Dreams. Volume 7. Sage Library of Social Research. Beverly: Sage Publications. 1974.

Cleveland City Planning Commission. A Fair-Share Plan for Cuyahoga County in Low Rent Housing. January, 1971.

A Picture of Residential Vacancy. Cleveland, 1969.

1970 Census Population and Housing Data by Wards and Neighborhood. June, 1972.

Toward Equitable Transportation Opportunities for Cleveland's Elderly and Poor. Two Proposals and an Analysis of Taxi Problems. August, 1972.

Community Development Improvement Program. Housing Stock in the City of Cleveland (A Summary). City of Cleveland. Cleveland Now Program and U.S. Department of Housing and Urban Development. February, 1971.

Dickey, John W., Senior Author. Metropolitan Transportation Planning. Washington: Scripto Book Company. 1975.

Dror, Yehezkel. Public Policy Making Reexamined. San Francisco: Chandler Publishers. 1968.

Friedmann, John. "The Public Interest and Community Participation: Toward a Reconstruction of Public Philosophy." Commentaries by Herbert Gans and Robert Nisbet. Journal of American Institute of Planners. Volume 39. Number 1. January, 1973.

Godschalk, David R., Editor. Planning in America: Learning from Turbulence. Washington: American Institute of Planners. 1974.

Hatry, Harry P., Robert E. Winnie and Donald M. Fisk. Practical Program Evaluation for State and Local Governmental Officials. Washington: The Urban Institute. 1973.

Heathington, Kenneth W. "A Planning Perspective on Evaluating Urban Public Transportation." Research Needs for Evaluating Urban Public Transportation Special Report 15. Transportation Research Record. Volume 28 , March, 1975.

Highway Research Record. Transit for the Poor, the Aged, and the Disadvantaged. Washington: Highway Research Board. Number 403. 1972.

Kain, John F. "How to Improve Urban Transportation at Practically No Cost." Harvard University. May, 1970. Program in Regional and Urban Economics. Discussion Paper Number 60.

Kaplan, Marshall. "Advocacy and the Urban Poor." Journal of the American Institute of Planners. Volume 35. Number 2. March, 1969.

Koutsopoulos, C. and C. G. Schmidt. "Mobility Constraints of the Carless." Traffic Quarterly. ENO Foundation for Transportation. Volume 30. Number 1. January, 1976.

Kruekeburg, Donald and Arthur L. Silvers. Urban Planning Analysis: Methods and Models. New York: John Wiley & Sons, Inc. 1974.

Levine, Robert. Public Planning: Failure and Redirection. New York: Basic Books, Inc. 1972.

Linner, John. Poverty and Substanance Housing: An Analysis of Residential Deterioration in Cleveland. Cleveland City Planning Commission. March, 1973.

Lynch, Thomas D. Policy Analysis in Public Policy Making. Toronto: Lexington Books. 1975.

McKelvey, Francis T. and Thomas D. Larsen. Environmental Impacts of Transportation Facility Design Decisions. Course Notes. The Pennsylvania State University: The Pennsylvania Transportation Institute. 1974.

Mouchahoir, George E. "The Management of a Transportation System for the Disadvantaged." Traffic Quarterly. ENO Foundation for Transportation. Volume 18. Number 2. April, 1974.

Murin, William J. Mass Transportation Policy Planning: An Incremental Approach. Toronto: Heath Lexington Books. 1971.

Northeast Ohio Areawide Coordinating Agency. Program of Projects. Continuating Existing Transit Service. November 26, 1974 through June 31, 1975. Project No. 60102. February, 1975.

Transportation Capital Improvement Program. FY 1975-FY 1979. May, 1974.

Transportation Improvement Program. FY 1975-FY 1980. June, 1975.

Owen, Wilfred. The Accessible City. Washington: The Brooking Institution. 1972.

Paaswell, Robert E. and Joseph Berechman. "The Urban Disadvantaged and the Search for Locational Opportunity." Traffic Quarterly. ENO Foundation for Transportation. Volume 30, Number 1. January, 1976.

Robinson, Ira, editor. Decision-Making in Urban Planning An Introduction to New Methodology. Beverly Hills: Sage Publications. 1972.

Rodenelli, Dennis. "Urban Planning as Policy Analysis: Management of Urban Change." Journal of the American Institute of Planners. January, 1973.

Smerk, George M., Editor. Readings in Urban Transportation. Bloomington: Indiana University Press. 1968.

Systems Design Concepts, Inc. Technical Report. #5. Survey of Transit Needs in Inner City Cleveland Communities. June, 1973.

The Need for Public Transportation Improvements: East Side Communities, June, 1975.

The Need for Public Transportation Improvements: Near West Side Cleveland, June, 1973.

Urban Mass Transportation Administration. Transportation Systems Center. The Handicapped and Elderly Market for Area Mass Transit. PB 224 821 NTIS. October, 1973.

Weiss, Carol H. Evaluating Action Programs: Readings in Social Action and Education. Boston: Allyn and Bacon, Inc. 1972.

Wildavsky, Aaron. The Politics of the Budgetary Process. Boston: Little Brown and Company. 1964.