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Transportation

Public Transportation in the 1980's

Responding to Pressures of Fiscal Austerity

February 1982



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**Public Transportation
in the 1980's:**
Responding to Pressures
of Fiscal Austerity

Final Report
February 1982

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EXECUTIVE SUMMARY

Many public transit agencies are beginning to face serious difficulties in obtaining the financial support needed to operate service at previous levels. Local pressures for fiscal austerity, and the resulting competing demands for an often smaller pot of money, have severely constrained many transit agencies. And cutbacks in Federal operating assistance could provide a potentially significant impact on transit operations. Meanwhile, capital and operating costs continue to rise at rates greater than inflation. The purpose of this research was to examine how transit agencies are responding to these fiscal pressures and to identify actions that could be taken to ease the transition to a resource-scarce environment.

A telephone survey of 30 transit general managers was used to determine the general response of transit agencies to fiscal pressures. A more detailed case study of the Greater Bridgeport Transit District provided greater detail on the response process in one agency, especially focussing on the identification and implementation of feasible options. The concept of a transit agency's operational environment was used to identify the key analysis variables that guided the survey and case study. In general, these variables could be classified into two major categories: 1) those relating to the degree of decisionmaking independence of the agency, and 2) those relating to the degree to which an agency is capable of responding to financial pressures.

TRANSIT AGENCY RESPONSE TO ENVIRONMENTAL CHANGE: THE GENERAL MANAGER'S PERSPECTIVE

The survey of general managers provided information on two important issues--the sources of financial pressure currently facing transit agencies and the typical responses adopted by the agency. On the first instance, the financial situation of the surveyed agencies varied widely across the agency sample. One third (10) of the managers felt their situation was currently stable and that they would not have financial

problems in the short run. Ten other systems were facing financial problems because of poor performance of dedicated tax sources; seven systems were facing major financial problems; and three others could be facing significant problems depending on the resolution of negotiations with outside actors. Not surprisingly, those agencies with neither dedicated sources of income nor state aid appeared as a group with the most consistently difficult financial pressures bearing on them.

In terms of response to financial pressure, the general managers mentioned most often raising fares. Seventeen of the 30 systems had already increased their fares in 1981, with 11 of these having raised their fares in 1980 as well. Eight other systems had raised their fares in 1980, but had not yet increased fares in 1981. Only five systems had not raised fares during the eighteen months prior to the survey.

The second option mentioned most often was reducing service. Ten systems had made significant cutbacks in service miles during 1981, and another five were involved in minor cutbacks. Six systems were planning to expand service. One of the most interesting results of the survey in regard to service cuts was the process used to choose which services would be curtailed. Few systems had criteria or procedures for cutting service that would enable them to evaluate fully trade-offs. Most systems seemed not to have any policy with regard to cutbacks.

A third option pursued by transit agencies was management efforts to reduce operating costs. These actions were of two major types: cost reductions through labor negotiations and reductions in staff. Fifteen of the systems, for example, had negotiated an agreement to use part-time labor. The staff reductions were most often focussed on the departments of planning, marketing, and administration.

A fourth option was to seek increased funding from public sources. However, although this option was tried, it was often unsuccessful. Nine systems, for example, had lost referenda or legislative battles to enhance their sources of income. Six properties were hoping for increased state aid; three others were counting on changes to state gas taxes.

A final option suggested by the general managers was to improve the efficiency of service provision. There were four levels where actions were being taken to improve efficiency:

- 1) Organizational efficiency: the process of improving the efficiency of the overall organization by clarifying responsibilities, improving information, and strengthening control.
- 2) Network efficiency: the process of improving the performance of the route structures and network in order to reduce system costs.
- 3) Operational efficiency: the process of improving operational performance, and ensuring a more efficient use of the various resources (labor, capital, information) needed to provide service.
- 4) Individual efficiency: the process of inciting better individual performance from each employee.

Examples of actions at each level include: management by objectives programs at the organizational level; transportation system management actions (e.g., bus priority lanes) at the network level; articulated buses and improved driver utilization at the operations level; and employee morale programs at the individual level (see Tables 3.7 and 3.8).

THE BRIDGEPORT CASE

The purpose of the case study was threefold: 1) to refine the characterization of the operational environment, 2) to refine the understanding of the agencies' response to financial pressures, and 3) to analyze in depth the linkage between characteristics of the operational environment and development of a response. The response actions pursued by Bridgeport included: 1) fare increase, 2) budgetary scenario building, 3) resistance to state budget cuts, 4) use of a crisis to establish transit coalition, 5) reduction in costs, 6) analysis of unproductive service, 7) short-term funding options, 8) development of alternative service/financial options, 9) formation of Chamber of Commerce transportation committee, 10) use of the Metropolitan planning organization as a

lobbyist, and 11) negotiations with State government officials to increase local funding. The package of actions developed by Bridgeport officials included both short- and long-term options, and sought help from outside the public sector.

ASSESSMENT OF TRANSIT AGENCY RESPONSE

The survey and case study provided an interesting perspective on how transit agencies respond to financial pressure, and the likely response to cutbacks in federal operating assistance. Many of the problems with agency response stem from the way the problem is defined a priori as a short-term imbalance of resources that must be compensated for. By focussing on the problem in such a way, management is subject to a crisis management attitude that prevents a long-term perspective, and which overlooks opportunities for desirable change that might arise from external events.

From the point of view of local officials, the following characteristics of a local response to financial pressures seem most appropriate:

1. Transit service must be considered as just one component of the urban transportation system. All too often, the debate on transit funding is conducted as an "either-or" situation, either transit is funded and you have service, or it is not funded and there is no service. There are many alternatives for providing transportation services that can supplement or complement transit, for example, car pools, van pools, subscription bus service, jitneys, and demand-responsive transportation services. These alternatives must be considered when discussing the types of services that should be provided with public funding support, and the most effective structure of the public transit system.

2. The focus of the debate on local transit financing must be on the equity implications of each alternative. All of the funding alternatives being considered by local officials have significant impacts on the poor, elderly, and handicapped, the groups in an urban area often having the least access to the political process. It thus becomes the responsibility of local officials to raise these issues, and to provide a forum for their resolution.

3. The community benefits that come from transit service must also be clearly articulated, and considered in the possible actions to fund the service. For example, transit investment, when combined with private development funds, has provided an important catalyst for developing new and older areas of U.S. cities. Many city officials have also used transit investment and a resulting commuter shift to transit services as a means of reducing street congestion and improving air quality.

These benefits, and to whom they accrue, have increasingly become an important consideration in identifying possible funding support for transit service. For example, in many cities, the business community has become more active in supporting the local transit service because of the important role transit plays in its economic survival. It thus becomes necessary for local officials and transit management to point out to local groups the importance that the survival of a transit service has for their own future.

4. Local officials should view the current problems with transit finance as an opportunity to improve service productivity and internal management efficiency. The financial pressures on transit systems should provide an incentive for local officials, transit management, and labor representatives to reach agreement on cost-saving measures such as limiting Cost of Living Adjustment (COLA) escalators or using part-time labor. Other actions that could be considered to improve efficiency of operations include: management information systems, preventive maintenance programs, improved driver participation, employee incentive structures, increased control of absenteeism, and closer monitoring of costs and revenues. Finally, network structures and route performance could be evaluated in light of financial pressures, to ensure that service is efficient and effective in obtaining stated goals.

5. Although the immediate concerns of maintaining a viable transit system in the face of cutbacks in federal operating assistance will occupy much of the time of local officials concerned with public transportation, the longer-term considerations of what role transit should play in their communities, the type of stable funding source necessary to support this

role, and the equitable distribution of costs must also be addressed. Ideally, such an image of the future role of transit should influence the more immediate steps taken to support the transit system. At the very least, the longer term options that become available and those foreclosed when local officials adopt specific actions to support transit in the short term, must be understood.

Within the management structure of transit agencies, several principles should be followed to address the problems outlined above. Although several of these principles are incorporated into the comments above, they deserve reiteration in regard to management action.

1) Understanding Change

- Fully Evaluate -- The real dimensions of a disruption to the operational environment are not obvious and must be assessed in order to determine whether the disruption is just an imbalance or the sign of a fundamental change.
- "Change" Requires a Long-Term Perspective -- A fundamental change to the operational environment cannot be adequately dealt with if the agency responds to it as if it were only a temporary imbalance, since the disruption will only re-occur. A "change" thus has two aspects that must be addressed; it entails both a "crisis" imbalance, and a set of long-term implications.
- "Change" Provides Opportunities -- In spite of the crisis aspect of financial disruptions, such a crisis offers management an opportunity for organizational renewal. Opportunities for overcoming organizational inertia occur so seldom that they must be seized when they occur.

2) Assessing Factors that Influence Response

- Explicitly take into Consideration the Decision-Implementation Context -- A response to environmental disruption entails both decisionmaking and implementation and is thus highly influenced by characteristics of the decision-implementation context. Such

a context is implicitly taken into consideration by management in formulating a response, but explicit recognition allows one to put the problem to be dealt with in perspective.

- Do Early Feasibility Analyses -- Early analysis of the constraints imposed by the context of decisionmaking on various options helps to refine the understanding of realistic options and thus improve timeliness. These analyses also help to identify both organizational constraints and opportunities, thus helping to identify problems to be dealt with, or non-related resources that might be used. Feasibility analysis can thus strengthen the efficient utilization of resources.
- Strengthen Executive Leverage -- Analysis of current constraints on decisionmaking helps to identify agency capabilities of response, and thus provides guidelines on the possible structural and personnel changes that might be needed to meet future problems. In an environment where change occurs frequently, it is as important to improve one's leverage to deal with events as it is to resolve short-term imbalance. Thus, even if permanent solutions to the problem cannot be implemented (which is likely), one's leverage to deal with future events in this bargaining arena can be strengthened.

3) Choosing Between Alternatives

- Develop a Full Range of Alternatives -- A broad range of alternatives provides management with the means to improve the quality of choice. The range of alternatives considered is at once a reflection on the understanding of the problem and the attitude one has in addressing it. Developing a wide range of alternatives can be a learning process for management that widens perspective and refines intuition, and thus allows better choice even if refined evaluation is impossible. It also improves management's leverage to put together a package of response actions, more in tune with the reality of the problem and context. Users seem to be impacted most when few alternatives are considered.

- Analyze Impacts on Users -- Impact analysis is both important and difficult. However, there are definite trade-offs between different actions in terms of impacts on users. Without explicit recognition of this in the evaluation process, the agency response can likely be most severe on the riding public.
- Evaluate Real Trade-Offs -- Evaluation should focus on the real trade-offs that are involved in any choice process that is responding to financial pressures. Evaluation should thus outline to management the trade-offs between product quality, process quality, changes to executive leverage, financial feasibility, organizational feasibility, and political feasibility.
- Place Emphasis on Negotiations -- In a public environment where a considerable portion of any outcome can be explained through the bargaining process, the importance of negotiation as an executive process should be emphasized, and considerable attention should be paid to the skills necessary to participate effectively in such negotiations.

As discussed above, a key concept in the proposed response process is strategic planning, a concept which has been used in corporate planning activities for many years. Although originally developed for application in the private sector, the results of this research indicate that the concept of strategic planning could be usefully applied in transit agencies.

Strategic planning can be defined as a planning process that examines integrated sets of organizational actions which link the operational environment and agency goals, objectives, and purposes; and which identifies long- and short-range policies and plans for achieving them. Strategic planning thus differs from normal functional planning in that it looks internal to the organization to identify its strengths and weaknesses in facing environmental pressures; and it also identifies major actors in the environment who could provide substantial support for the organization. Another defining characteristic of strategic planning is its focus on implementation strategies, i.e., it is not enough

to consider only the alternative actions that could be taken to solve the financial problem, but also the implementation steps necessary to utilize these actions.

In sum, the development of a strategic planning process in transit agencies should receive high priority from transit managers and support from government agencies in funding demonstrations and developing the planning techniques needed to allow planners to undertake a strategic assessment process. Such a process is one of the few mechanisms that can overcome some of the deficiencies of the existing response process, and still effectively address the financial problems facing the agency.

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PUBLIC TRANSPORTATION IN THE 1980's
RESPONDING TO PRESSURES OF FISCAL AUSTERITY

1.0 INTRODUCTION

Recent trends in the cost and finance characteristics of public transportation present some ominous signals of the difficulties that transit agencies might face in the 1980's. Capital and operating costs continue to rise at rates greater than inflation. Many local governments, constrained by the poor state of the economy, are having difficulty finding the resources needed to continue transit subsidies. In addition, the Reagan Administration has proposed serious cutbacks in federal assistance. The purpose of this research was to examine how transit agencies are responding to these political and fiscal pressures, and to identify actions that both federal and local agencies could take to ease the transition to a resource-scarce environment.

The research methodology was based on an extensive telephone survey of transit general managers and on a detailed case study of one transit agency, the Greater Bridgeport Transit District. The results of the survey were used to identify the general response of the industry to the changing fiscal and political environment. The case study was designed to examine in some detail the complex processes of decisionmaking and implementation as they related to one agency's response to this changing environment. Based on the results of these two research efforts, one would be able to identify the types of actions that transit agencies could adopt in response to these new pressures.

This report is organized in a way that reflects the tasks undertaken in this research. The next section presents some theoretical concepts that lie at the foundation of this type of research. Many of these concepts come from theories of organizational structure and behavior. Sections

three and four will present the results of the telephone survey and case study, respectively. The fifth section will provide a general description of the way transit agencies seem to be responding to environmental changes. The last section will interpret the results of this research and outline actions that can be taken by the federal government and the transit industry to help transit general managers cope with the rapidly changing environment.

2.0 ORGANIZATIONAL RESPONSE TO A CHANGING ENVIRONMENT

For purposes of this research, the operational environment of a transit agency will be defined as the locus of relations and processes which take place within an organization, and between the organization and relevant actors, that affect the way decisions are made and implemented. This concept of operational environment portrays the different dimensions of factors (organization, institutional, and political) that influence the processes of decisionmaking and implementation, and emphasizes the fact that the agency cannot be understood as a simple "black box" process with inputs entering the top and outputs produced at the bottom. Provision of transit services consists of inter-related transformation processes, which can be called tasks, each of which might be related to different actors in the agency's environment through different interaction mechanisms. There is need to identify the characteristics of the operational environment, but also to structure these in a way that provides a fairly clear perspective on this complex arena of relations.

The emergence of fiscal pressures as an issue represents a significant change in the agency's operational environment. It is not just a matter of short-term imbalances in the agency's budget, but implies inadequacies in the assumptions, information, and criteria used in setting policy, as well as in the processes of decisionmaking control, and social accountability. Potential changes in the operational environment may entail new actors (state); new relations of influence (changes in resource structure); changes in the communication network (increased management interaction with environment); new tasks (management control, productivity measurement and evaluation); or changes to existing tasks (fiscal-service planning, increased resource accountability).

The response to these pressures by a given agency, i.e., the formulation of proposed solutions, the negotiation of any required changes, and the implementation of decisions, is as much a function of the political and inter-organizational characteristics of the operational environment as they are of the intra-organizational ones. This is illustrated by the types of responses normally considered: increasing fares is eminently political, seeking new funding involves political negotiation and inter-organizational mechanisms, improving productivity is intra-organizational in nature but may ultimately depend on the political influence of the unions, and service changes involve aspects of all three dimensions.

Specific variables that describe the operational environment (and which served as a guide to telephone and personal interviews) are shown in Table 2.1. These variables were derived from three sources:

- Theoretical literature in organizational studies and political science has identified a wide variety of variables to describe organizational and environmental structures and processes.
- Transit literature which has provided insight into the activities of the transit agency, the transformation processes (tasks) there involved, and the functional inter-relationships between tasks.
- Specific criteria derived from the research's focus on fiscal austerity, emphasizing sources of funding, and on transit management, emphasizing the importance of managerial expertise in conservatively structured organizations such as transit. This aspect is also particularly important when trying to make explicit the issue of contract management, which might be of particular importance in the development of a response.

In reviewing these variables and in trying to construct a global understanding of how to characterize the operational environment, a certain pattern emerges. Characteristics of the operational environment seem to relate to one of two major categories. On the one hand there are those variables which relate to the degree of decisionmaking independence the agency has vis-a-vis its environment. The structure of funding sources, the amount of external intervention, and the degree of environmental support all help to indicate to what extent the agency is forced to respond to demands and pressures in the environment or to what extent it is independent in making decisions. Other characteristics,

TABLE 2.1

DESCRIPTIVE VARIABLES OF ENVIRONMENTAL SETTING

- I FUNDING
 - Resource Concentration
 - Fiscal Pressure

- II FORMAL DECISION-MAKING DEPENDENCE
 - Authority Concentration
 - State Involvement

- III ENVIRONMENTAL SUPPORT
 - Importance of Transit
 - Local Political Leadership's Attitude
 - Organization of Users

- IV COMMUNICATIONS WITH ENVIRONMENT
 - Communication Mechanisms with Governments
 - Communications with Users

- V PERSONNEL RESOURCES
 - Specialization of Management Team
 - Back-Up Staff
 - Planning Staff

- VI DECISION PROCESS
 - Task Authority Structure
 - Control Structure

- VII INFORMATION SYSTEM
 - Inputs to Decision
 - Periodic Planning Process
 - Monitoring Network

- VIII OPERATIONAL CHARACTERISTICS
 - Size
 - Labor Relations
 - Capital Situation
 - Maintenance Situation

on the other hand, relate more to the degree of organizational leverage. The degree of specialization of personnel; the quantity and quality of interaction (both external and internal) used in making decisions; the ability to communicate and negotiate choices with external actors; and the extent of internal control--all are important factors that indicate in what ways the organization affects management's ability to deal with financial pressures.

It is important to note that management responses might take a variety of forms depending on the specific characteristics of a given operational environment, and one useful approach to classifying responses would be to view individual responses as lying on a spectrum of possible formulations of which one could define the extremes. These two extremes are described in Table 2.2.

One extreme formulates the problem as that of a short-term fiscal crisis. The attitude is that of "crisis management" and the strategy consists of a combination of undifferentiated one-time actions to balance the budget for the current year. The other extreme views the problem as a major shift in the political and fiscal environment which requires adjustments in the agency's position in the environment. The attitude is that of "strategic planning" and is characterized by the establishment of policies and procedures to clarify and stabilize the agency's position within the new environment. Actions are based on sophisticated analysis and are differentiated across different user segments as well as incrementally phased in over time. Table 2.2 identifies specific variables which allow to distinguish whether an agency's response is more "crisis management" or "strategic planning" oriented.

3.0 TRANSIT AGENCY RESPONSE TO ENVIRONMENTAL CHANGE: THE GENERAL MANAGER'S PERSPECTIVE

Because potential cutbacks in federal funding could pose a serious problem for transit agencies, it was essential for this research effort to discover what preparations were being made by general managers to handle this contingency. In order to accomplish this, telephone interviews were conducted with general managers in 30 transit agencies (see Table 3.1), a sample which represented a broad spectrum of medium-sized properties (100 to 1,000 vehicles) [12]. Each general manager was asked questions in three topic areas.

TABLE 2.2

SPECTRUM OF STRATEGY FORMULATIONS

<u>Overall Perspective</u>	<u>Fiscal Crisis</u>	<u>Adjustments to Major Shifts</u>
Attitude	Crisis Management	Strategic Planning
Purpose	Balance Budget this year	Clarify & stabilize Agency Position
Types of Actions	Short-Term Actions	Structural Policies & Procedures
Uses of Levers:		
- Fares	<ul style="list-style-type: none"> • Across the board increase • to levels environment will bear 	<ul style="list-style-type: none"> • Differentiated • Related to Policy (Recovery Ratio)
- Service	<ul style="list-style-type: none"> • Across the board cuts • Internally generated criteria • Minimal Analysis • Overnight Implementation • No criteria for re-evaluation 	<ul style="list-style-type: none"> • Differentiated • Consultation & Negotiation • Impact Analysis (on different users) • Phased plan • Periodic review process
- Funding	<ul style="list-style-type: none"> • No attempt to rationalize funding sources 	<ul style="list-style-type: none"> • Subsidy Policy
- Productivity	<ul style="list-style-type: none"> • No attempt 	<ul style="list-style-type: none"> • Improved efficiency • Use crisis to establish: monitoring, controls, evaluation

TABLE 3.1

TRANSIT AGENCIES SURVEYED

- (CA) • San Francisco Municipal Railway
 - San Diego Transit Corporation
 - Santa Clara County Transportation Agency
- (CO) • Denver Regional Transportation District
- (CT) • Connecticut Transit-Hartford Division
- (FL) • Jacksonville Transportation Authority
 - Metropolitan Dade County Transportation Administration
- (GA) • Metropolitan Atlanta Rapid Transit
- (IN) • Indianapolis Public Transportation Corporation
- (MD) • Mass Transit Administration of Maryland
- (MI) • SE Michigan Transportation Authority
- (MN) • Metropolitan Transit Commission
- (MO/IL) • Bi-State Development Agency
- (MO/KS) • Kansas City Area Transportation Authority
- (NY) • Niagara Frontier Transportation Authority
 - Rochester Regional Transportation Authority
- (OH) • Cleveland Regional Transportation Authority
 - Queen City Metro
 - Central Ohio Transit Authority
- (OR) • Tri-County Metro
- (PA) • Port Authority of Allegheny County
- (TN) • Memphis Area Transit Authority
- (TX) • Dallas Transit
 - Metropolitan Transit Authority (Houston)
 - VIA Metropolitan Transit Authority
- (UT) • Utah Transit Authority
- (VA) • Tidewater Transportation District Commission
 - Greater Richmond Transit Company
- (WA) • Metro Seattle Transit
- (WI) • Milwaukee County Transit System

- Background information. This involved questions concerning specific tasks, such as planning (size of planning staff, types of service standards used, organization of route evaluation), marketing (marketing tools, public participation process, existence of system map), and operations (last strike, use of part-time labor, management-labor communications). Other questions sought to give a picture of ridership and agency structure (institutional arrangements and organizational structure). All this information was to help supplement information collected from printed sources.

- Financial issues. This involved questions concerning the existing financial condition and its likely evolution. Questions were asked concerning present fares, recent fare increases, formal fare policy, breakdown of revenue sources, existence of dedicated taxes, prospects for new sources of funding and future constraints.

- Issues relating to operating under fiscal constraints. These questions looked at recent or future service changes, efforts to improve productivity, and actions taken to otherwise reduce costs.

In the rest of this section, the survey results concerning the sources of financial pressure and the types of responses being pursued by transit agencies will be presented, and the issues they raise discussed.

3.1 SOURCES OF FINANCIAL PRESSURE

One of the underlying assumptions of this study was that transit agencies were facing significant financial pressures, and that specific steps were being taken, or were at least being contemplated, by transit managers in response. In order to put a particular agency's response in perspective, a brief assessment had to be made of the specific financial pressures facing that agency. For this purpose, the assumption was made that costs were fixed in the short run, and that the financial condition of an agency could be assessed by determining whether revenues were sufficient to meet the given level of expenditures, and by then identifying the pressures on the various revenue sources.

The results of the survey show that the financial situation varies tremendously from agency to agency in terms of whether the system's financial situation is healthy, currently stable, dependent on outside events, or severely constrained. One third (10) of the managers felt their situation was currently stable and that they would not have financial problems in the short run (see Table 3.2). One of the following three reasons was usually given for this belief: 1) large contributions from sales tax revenues (usually in areas experiencing high rates of growth), 2) exceptionally high operating ratios (i.e., that proportion of costs covered out of farebox revenues), and 3) extremely diversified funding sources. However, only four of these ten systems appeared capable of facing Section 5 cutbacks without some response to this funding loss.

Of those systems whose general manager expressed concern about the financial status, the most frequent cause was the shrinking revenues from a major dedicated tax (sales, property, earnings, gasoline). This was affecting ten properties, and ranged from situations where sales tax revenues grew last year at a pace slower than anticipated creating minor shortfalls, to one where the growth rate of the dedicated tax has been consistently under the inflation rate for the last years, causing any previously accumulated surplus trust funds to be at the point of exhaustion. Several managers felt that dedicated taxes were no longer a sure guarantee of financial stability. Sales and earning tax revenues were being affected by the recession, and revenues from gas taxes were reduced because of gains in fuel conservation and automobile efficiency.

Other problems cited involved the poor financial condition of major financial contributors to a transit agency, e.g., states (2 systems), counties (1 system), and municipalities (4 systems). Finally, in three cases, the financial condition of the system depended on outside events that would be resolved in the near future, e.g., suburban communities refusing to renew service contracts, current contract negotiations, or the expiration of a dedicated taxing authority.

Table 3.3 outlines the information gathered from the survey concerning major sources of revenues. Fares are still the predominant source of revenue (on average covering 41% of costs), although there is a fairly

TABLE 3.2

PRINCIPAL FINANCIAL PRESSURE ON AGENCIES SURVEYED

- **Currently Stable or Healthy Financial Situation:** 10 systems

- **Poor Performance of Dedicated Tax Sources,** 10 systems
 - **sales tax:** (5)
 - **property tax:** (3)
 - **gasoline, earnings:** (2)

- **Poor Financial Condition of Major Contributors,** 7 systems
 - **state:** (2)
 - **county:** (1)
 - **cities:** (4)

- **Depending on Resolution of Outside Events:** 3 systems

TABLE 3.3

SOURCES OF REVENUES FOR SYSTEMS CONTACTED

• Fares	All Systems
- Average contribution: 41% (range 15% to 66%)	
- Only 3 systems under 25%	
- Only 3 systems over 55%	
• Section 5 Funds	All systems
- Average contribution: 18% (range 4% to 30%)	
- Only 4 systems under 12%	
• State Operating Assistance (>10% of agency revenues)	13 systems
• Dedicated Local Taxes:	16 systems
- Sales Tax:	(11)
- Property Tax:	(2)
- Earnings, Payroll, License Fee:	(3)
• Systems Receiving <u>Both</u> State Aid and Dedicated Taxes:	5 systems
• Systems Receiving <u>Neither</u> :	6 systems
(only receiving federal and local general revenues)	

wide variance concerning its exact contribution. Section 5 operating assistance is also an important source of funds, although its contribution is much smaller (18%) than fare collections. These findings are consistent with numbers available from the Section 15 reporting system for fiscal year 1979, which found an average fare contribution for the classes of systems surveyed of 38%, and an average federal contribution of 18% [13].

As for the other sources of revenues, there is a distinct pattern of income coming more frequently from dedicated taxes or state aid than from local governments. Only four systems received income from county general revenues, and nine received municipal operating assistance. Perhaps this ensures some stability since the six systems which received neither dedicated sources of income nor state aid appeared as a group with the most consistently difficult fiscal pressures bearing on them.

3.2 RESPONSE TO FINANCIAL PRESSURES

There are five major types of actions that transit officials have used individually, or in combination, to respond to financial pressures:

- 1) Increased Fares
- 2) Reduced Levels of Service
- 3) Reduced Costs
- 4) Increased Public Funding
- 5) Improved Efficiency

Each of these five types of actions will be analyzed using the results of the general managers' survey.

3.2.1 Increased Fares

Increasing transit fares was suggested most often by the general managers as the first step in responding to financial pressures. This reflects a general change in perception about the role of fares that seems to be the result of several phenomena. First, there has been much discussion about fares and their direct influence on the industry's decreasing operating ratios. Several managers expressed interest in the

concept of user charges and felt that fares should at least keep pace with inflation, and a few felt that transit patrons should be covering a larger percentage of the costs of using that service.

Second, several managers felt that during the last few years great strides had been made in improving the quality (comfort, reliability, and attractiveness) of the service offered, especially when compared to the condition of many private systems that were taken over publicly in the 1970's. These managers argued that in places where the public transit service compared favorably, not only to the previous state of the system, but to competing modes, such as private suburban bus or even to the automobile, patrons must become convinced that a quality ride is worth a higher price.

Third, most managers stated that ridership is more sensitive to service cuts than it is to fare increase. Thus, in times of severe financial pressure it is preferable to increase fares, rather than cut significant service.

Fourth, it was felt that the general economic picture has made fare increases easier to implement than previously. The recession has reduced the resistance to fare increases. The representatives of those constituencies who use transit heavily have other issues to defend such as the maintenance of public services, i.e., police, fire, and education or employment. Furthermore, many managers argued that the mood of fiscal conservatism in the country has given more influence to opponents of public service and has created greater pressures for user charges to be increased.

As shown in Table 3.4, seventeen of the thirty systems had already increased their fares in the first seven months of this year. Of these seventeen, eleven had also raised fares in 1980. Eight more systems without fare increases this year had their last fare increase in 1980. Thus, only five systems (out of thirty) had not raised fares in the last eighteen months. Table 3.5 shows the distribution of fares (base fare + transfer). The mean fare of the thirty systems was 63¢.

TABLE 3.4

LATEST FARE INCREASES OF SURVEYED SYSTEMS

	Never	Before 1980	1980	Both 1980 & 1981	(1981 but not 1980)
Number of Systems	1	4	8	11	6

TABLE 3.5

DISTRIBUTION OF FARES (BASE FARE + TRANSFER) OF SURVEYED SYSTEM

Fare	40¢	50¢	55¢	60¢	65¢	70¢	75¢	80¢	85¢	\$1.00
Number of Systems	4	5	2	6	3	4		2	2	2

TABLE 3.6

DISTRIBUTION OF FARE INCREASES (PERCENTAGES) OVER 19 MONTH PERIOD
(JANUARY 1980 - JULY 1981)

Percentage Increase	20	25	30	35	40	50	60	65	70...	100...	140...	200
Number of Systems	2	2	2	1	2	5	3	1	3	2	1	1
Mean = 62% fare increase for 19 months												

Some managers suggested that a catching-up process was taking place. This was illustrated by the fact that the mean fare increase over the January 1980 to July 1981 period was 62 percent (see Table 3.6), implying a 39 percent increase per annum (three times the inflation rate). The average amount fares increased over that nineteen-month period was 21¢. Over half of the systems have explicit fare policies where a specific amount of costs must be covered through fares. These dictate, in many cases, fare increases every year. Many managers felt that these fare policies would be shifted upwards, increasing the operating ratio to be achieved in the years to come, thus shifting the burden increasingly onto transit riders.

Finally, there appears to be a certain movement away from a flat fare system. Two properties (Columbus, Ohio and Salt Lake City) adopted a peak/off peak pricing scheme in 1981. Two other properties (Denver and Cincinnati) already had such a system. In some cases such a pricing system was justified not only through the potential savings in costs by spreading the peak, but through increases in ridership that would occur by tapping a latent market, thus producing a net gain in revenues.

3.2.2 Reduced Levels of Service

Although most transit managers felt that cutting service was much more harmful than increasing fares, it becomes the next option because other potential responses require a longer time to be implemented. It is not surprising then that a smaller number of systems cut service than increased fares. Nonetheless, ten systems had to make significant cutbacks in service miles over the last year, and another five were involved in minor cutbacks. Only six systems claimed to be expanding their service, and some of these were in the last stages of a planned growth process. Eleven of the thirty systems did not foresee cutbacks next year, but many of the others said that it depended on a series of factors whose outcome they were not sure of (e.g. the phasing out of Section 5 funds, labor negotiations, and pending state legislation).

In comparison to fare increases which were being pursued by the vast majority of properties, changes in service levels illustrate the

major differences between properties. At one extreme, one property cut vehicle miles by 25 percent in 1981. At the other extreme, one system was proposing to double service miles at the end of its five-year plan. However, more systems were cutting service than adding it, and most managers saw this trend continuing in the future.

One of the most interesting results of the survey in regard to service cutbacks was the process used to choose which services would be curtailed. Few systems had criteria or procedures for cutting service that would enable them to fully evaluate trade-offs. This was primarily explained by the fact that route planning had been geared either to expanding service to new areas or generators, or to fine-tuning the service provided on a route to match the demand as it varied by month, by day, or by hour. Cutting service is a recent phenomenon and is a dramatic change from the growth that took place in the 1970's. Most systems seem not to have evolved any policy that makes choices clear, and although many properties had formal service standards, most used them only as guidelines. A few systems were trying to develop indicators to identify costs by route of providing service but were hindered by the complexity of the data management process involved. In most cases when cutting service, ridership as expressed by "x passengers per hour," seemed to be the main, and often exclusive, criterion for analysis. This was used to weed out unproductive routes on weekends or evenings, and also served, as one manager pointed out, to eliminate 'political' routes. Only a few managers explicitly mentioned trying to take into consideration the existence of alternative service so a minimum of passengers were left completely without service.

When more drastic cuts were needed, transit officials took the ridership criterion approach a step further, and evaluated overall ridership by weekly time periods. A similar pattern of service cuts emerged from systems going through massive cuts: first, owl service was eliminated, then Sunday service, then night service, then major cuts in evenings, and then large reductions in Saturday service. When massive cuts had to be achieved and preserving ridership was the primary criterion, this cycle of cutting successive time-blocks seemed to be the most convenient method, especially when planning staff resources were limited.

3.2.3 Reduced Costs

A third option often pursued as a response to financial pressures was direct attempts by managers to reduce their operating costs. These actions, however, usually required a larger time to implement and were of two types: a) cost reductions through labor negotiations and b) reductions in staff.

a) The two principal cost-cutting measures sought during contract negotiations included the right to use part-time labor and the limitation of Cost of Living Adjustment (COLA) escalators. There was a significant move towards part-time labor; fifteen systems had already negotiated this agreement with five of these in the last year alone (Muni, Santa Clara, Indianapolis, SEMTA, Cincinnati). The usual limitation to the use of part-time labor was that it should not exceed 10 percent of the work force. Opinions varied considerably on how useful it was to the system, ranging from enthusiasm and strong results in systems where the ratio of peak to base ridership was very high, to systems that hardly used part-time labor because of training and labor issues. However, all agreed that it did increase the manager's flexibility. Many managers also expressed concern about the cost increases and uncertainty caused by COLA payments. Seven systems had actively sought, in the last year, to cap the COLA escalator during negotiations.

b) Reductions in the level of service usually translated into reductions in the number of drivers. However, several managers also stated that their staff had been severely reduced, with one agency eliminating 170 staff positions. These staff reductions usually fell hardest on the departments of planning, marketing, and general administration in order to, as one manager put it, preserve "the productive service" of the agency, namely operations and maintenance.

3.2.4 Increased Public Funding

A fourth option in responding to fiscal pressures is to modify the public sources of income to the system, either by increasing income from

current sources, or by seeking new sources of funding. During the 1970's this appears to have been the preferred method of dealing with fiscal pressures. This practice was based on the public's perception that after public take-over of private systems (usually financed by new sources of income themselves), there was an expectation that not only should service be improved but fares should become stable.

However, this situation has changed dramatically, and the very pressures that affect transit also affect its ability to seek increased public funding, and even the ability to exchange an inadequate taxing authority (such as property tax) for one that is more sensitive to inflation (sales tax). One-third of the properties surveyed saw no prospects for changing their current mix or levels of revenue from public sources. Even though one system (Columbus) managed to obtain through a referendum a new sales taxing authority, nine others lost referenda or legislative battles to change their sources of income. Managers suggested various reasons why their attempts at modifying or increasing sources of public funding failed-- the recession, Proposition 13-type mood, the strength of rural or suburban constituencies, conflicts between highway and transit lobbies, etc.

Nonetheless, different types of options were being pursued with some prospects of success. Six properties were hoping for increased state aid; three others were hopeful about changes in state gas taxes that would move from a volume base to a price base. Three others were counting on either new state operating assistance or on a local option tax. Other prospects included increasing the local sales tax, creating a downtown transit district, or utilizing new federal legislation on charter operations and leasing vehicles.

In terms of the pressures on existing dedicated taxes and their relation to inflation, it would appear that no single tax is truly adequate. The most reliable tax is the sales tax by most accounts. However, in many cases, managers stated that revenues produced by it have diminished as sales are affected by recession. Its revenue producing capabilities were greatest in areas of sustained growth (although in one case this was inexplicably not true). As for revenues produced by gas taxes, the managers noted that they consistently continue to fall

as conservation and fuel economy increased. Basing gas taxes on a sales rather than volume base would help and has been sought in two properties, but the revenues are usually shared by different modes and are thus subject to competition for their use (especially as the needs for highway maintenance soar).

3.2.5 Improved Efficiency in Providing Service

Much recent discussion in the transit field has focused on trying to improve the efficiency of service provision. [14,15,16,17,18] Most of this discussion has focused on trying to pay more attention to the real costs of operations and the use of performance criteria, but it is sometimes difficult to see how the concern for efficiency is actually incorporated by operators into the agency's activities. Though not a quick strategy to an immediate problem, some managers did identify actions to increase efficiency as part of their response to financial problem. There seemed to be four levels at which actions might be taken to improve efficiency:

- 1) organizational efficiency: the process of improving the efficiency of the overall organization by clarifying responsibilities, improving information, and strengthening control.
- 2) network efficiency: the process of improving the performance of the route structures and network in order to reduce system costs.
- 3) operational efficiency: the process of improving operational performance, and ensuring a more efficient use of the various resources (labor, capital, information) needed to provide service.
- 4) individual efficiency: the process of inciting better individual performance from each employee.

Organizational Efficiency - One development in recent years that is significant for transit organizational efficiency is the rapidly increasing number of properties with Management by Objectives (MBO) processes. The survey showed that twenty of the thirty properties had formal MBO processes and thirteen of these were less than three years old. The process was aimed at specifying goals for the system, and objectives for each department, division, or unit, against which related performance could be compared, and sometimes linked to employee evaluation.

Several managers felt that there was a definite trade-off between the level of detail of the process and the time and effort spent on it. Each property appeared to be evaluating that trade-off through an adjustment period in the first years of the process' implementation. In two cases, the process had been rejected because the results did not warrant the effort and perceived complexity of the process. Though not directly related to dealing with financial pressures, the MBO process is relevant in that it provides a framework to identify priorities that can help in trading off alternative actions.

Network Efficiency - Actions aimed at network efficiency seek to improve the productivity of operations thus resulting in reduced costs. Two types of actions that serve this purpose were mentioned by managers as part of the agency's response to financial pressures. The first concerned Transportation System Management (TSM) actions. Although responses from some managers indicated that TSM as a concept loses some of its priority when immediate financial problems exist, two specific examples were provided where a TSM action was being pursued as a component of the agency's response to financial problems. One involved four bus priority lanes (Pittsburgh), and the other a bus-activated signal priority system (Jacksonville). In both cases, the reduction in travel time meant that less buses would be used to maintain the same headways. The priority system cost \$80,000 and was estimated to recover its cost in three years.

The second type of network efficiency action changes in the overall structure of routes. In one transit agency, corridor planning was adopted to permit a planning process that would be more capable of identifying and eliminating duplicative service. In three other transit systems, the total route structure had been or was being modified from a radial orientation to a grid system. The intent of this change was again to eliminate duplicative service, and provide a better market base for crosstown or circumferential routes.

Operational Efficiency - In seeking more efficient use of the various resources needed to provide service, a small number of properties were re-evaluating their performance criteria to improve the cost-effectiveness of individual routes.

However, most efforts in this area involved actions to improve utilization of labor and capital resources, or actions to mechanize certain tasks.

As shown in Table 3.7, there are a variety of actions that were taken to improve resource utilization. These ranged from innovative supervisory techniques and the use of higher capacity equipment, to the active use of driver suggestions to improve operations. Mechanization and computerization to increase the performance of some tedious manual tasks was an on-going process in many properties, and in a longer-term perspective of improving management performance, Management Information Systems (MIS) were continuously being expended to increase their role for accounting, reporting, parts inventory, and run-cutting.

Individual Efficiency - Finally, a few properties recently implemented procedures to increase the efficiency of individual employees. This involved three different types of actions: actions to increase employee involvement in the agency's activities in order to improve labor relations, actions to improve employee morale or to create positive incentives for better individual performance, and actions to avoid costly undesirable behavior such as absenteeism or misconduct. Examples of actions used in different agencies are illustrated in Table 3.8. Many agencies expressed particular concern about absenteeism, and eight systems had recently strengthened performance codes and were increasing enforcement through disciplinary actions. Interestingly, there was also an emphasis on increased monetary rewards (four systems), sometimes in the same agencies that had taken tough stands on discipline.

The pursuit of efficiency, whether organizational, network, operational, or individual, as a response strategy to fiscal pressures, may not produce significant short-term cost savings. Rather, its importance lies in providing the manager with sufficient flexibility to address longer-term financial issues. Successful management in an era of service cutbacks means maintaining employee morale and discipline as much as possible, and especially not losing sight of the agency's goals as the need for cuts become more pressing.

TABLE 3.7

EXAMPLES OF ACTIONS TO IMPROVE OPERATIONAL EFFICIENCY

Actions to improve resource utilization:

- Transit line coordinator
- Driver utilization program
- Reduced number of job bids to avoid "job-hopping"
- Use of articulated buses
- Modernization of maintenance facilities
- Bus quality control program
- Driver suggestions program

Actions to mechanize certain tasks:

- Improvement of Management Information System (MIS)
(major activity in 6 systems, ongoing in 8, starting in 3)
- Mechanized public information system
- Mechanical vehicle identification and information system
- Computerized recording of inspections, attendance, job descriptions
- Audio-visual driver and management training classes

TABLE 3.8

EXAMPLES OF ACTIONS TO IMPROVE INDIVIDUAL EFFICIENCY

Actions to increase employee involvement:

- Driver suggestion program (4 systems)
- Development production groups (3 systems)
- Passenger service committee

Actions to improve employee morale or to create positive incentives:

- Driver of the month program
- Employee of the year
- Employee newsletter, produced by employees
- Comprehensive employee assistance program
- Monetary rewards for performance (4 systems)

Actions to avoid undesirable behavior (absenteeism, misconduct, etc.):

- Strengthened performance code/program (7 systems)
- Citations for safety violations
- Attendance recording
- Probationary contracts with code offender

3.3 SURVEY INTERPRETATION

The survey results provide a good picture of the current status of the transit industry as it begins responding to several political and financial challenges. The survey showed the diversity of the various agencies' positions, but also indicated some trends which have important policy implications. There are several issues which these results raise some related to the actions taken, and others related to the sustained nature of these financial pressures.

3.3.1 Diversified Funding Sources

Fare increases have been the first action taken in response to financial problems. All the systems that were financially constrained had increased their fares recently, often by large amounts. This raises the question of how high should fares be, and how fast should they increase. Should we anticipate, as one manager did, that fares in three years would be 150% of what they are now? There is a limit to the extent such a response can be pursued. It is clear that fares cannot at the same time cover the increases due to inflation, replace public funding sources which are not growing fast enough (property tax, gasoline tax, and even sales taxes in many cases), and substitute for phased out Section 5 operating assistance.

With respect to public funding, it appears that the existence of dedicated taxes and/or state aid, even if they are not always keeping pace with inflation, still offers the agency some flexibility in dealing with fiscal pressures. This flexibility also seems to increase if the agency is able to diversify its funding sources. In comparison, the single group of agencies with the most consistent pattern of financial problems were those that received neither state aid nor revenues from a dedicated tax. These systems relied on only three revenue sources (fares, Section 5, and municipal or county general revenues). They were particularly threatened by economic forces affecting local finances or by the elimination of Section 5.

However, the existence of a sales tax is not in itself a guarantee of a healthy financial situation, since these sources can be affected by economic recession. An agency should thus resist relying too much on present revenues from the tax, and from using large tax revenues to maintain extremely low fares. Any excess revenues could rather be used to create a trust fund that can permit reliable five-year planning. In the absence of large revenue-creating taxes, diversity of funding sources could be sought. Though it may complicate political interactions, it allows for more flexible response.

3.3.2 Role of the State

The role and attitude of the state will also be an increasingly important factor to consider in analyzing financial options. Eleven of the twenty-two states covered in the survey provided operating assistance, several others had passed legislation enabling local option taxes. However, the surveyed managers were generally pessimistic on the prospects of increased aid in states which did not already have aid programs, given the mood of fiscal conservatism. Given the new federal policies of returning funds and program authority to the states, this perceived reluctance for increased state aid could be a serious indication of even more financial difficulty in the future.

3.3.3 Criteria for Service Reduction

The survey showed the predominant criterion used by managers in reducing service was to minimize total ridership affected, sometimes taking into consideration the existence of alternative service. This often led to a cycle of cutting service from whole successive time periods. The use of this criterion has a hidden implication that should be recognized; it implies that the fundamental purpose of transit is to serve commuters (these are the single group of users who are protected the longest during such a cycle of cuts). This may be in fact what is desirable, but then it should be recognized that alternative social goals may not be served.

3.3.4 Re-evaluation of Service Planning

Service planning is usually one of the first staff functions to be severely reduced in times of staff cut-backs. This occurs because increased emphasis is placed on preserving "the productive service" and because service planning is viewed essentially as a tool for serving growth, (i.e., planning for expanded service). Several managers felt that once the system is operating at the necessary level and no service expansions are projected, service planning becomes less essential since minor changes are assumed to be handled by the Scheduling and Operations staff.

However, it is important to realize that periods of severe cutbacks entail major (if negative) service changes to the system, and if such a trend is to continue it becomes critical to preserve the agency's means of analysis in order to minimize as much as possible the disruptive nature of these changes on both users and personnel.

Another aspect of this issue is that service planning may have to be re-evaluated in light of this new trend. Goals, criteria, and procedures should be rethought in order to take into consideration increased emphasis on costs, explicit analysis of existing alternative services, and the need to trade-off different potential options for responding to financial pressures.

3.3.5 Curtailment Cycle

Although many managers felt that fiscal pressures were more than just current imbalances in budgets, only in a few cases did an analysis of the implications, or of the actions to be taken, extend beyond the current year. Such a short-term perspective usually leads to a crisis-management attitude when problems occur. To the extent that a property's financial problems are not simple imbalances in the budget, but a signal of a longer-term change in the agency's financial and institutional environment, the response should perhaps be thought of as part of a curtailment cycle with goals and processes different than when service is being ex-

panded during a growth cycle, and which might have implications for goals to serve, the organization of various tasks, and for network structure.

3.3.6 Importance of Strategic Planning

Given the long-term nature of the financial situation of many transit agencies and its implication on the goals, objectives, and planning procedures the agency uses, strategic planning may become an important tool for agencies trying to deal with this financial uncertainty. Strategic planning provides an analysis framework that helps to define goals and objectives, analyze trends, evaluate options, and merge various actions into a strategy whose outcome a few years hence is understood and desirable.

The identification of goals is a particularly difficult problem during a curtailment cycle. It is easy to serve a variety of goals during growth periods just by expanding service; to serve new geographic areas or new user groups one can expand the network, and to attract non-users one can increase frequency or purchase nicer vehicles. During a curtailment cycle, one must constantly trade off one goal for another, and there is always the danger of collapsing all goals into one.

Goals have to be specified and the linkages between the transit service provided and the well-being of the community must be made explicit. The manager must know what components of the service are important and why, so he can determine how best to protect the achievement of these goals. This is important for top management in its efforts to organize the production of transit service during a curtailment cycle, but it is also important for them in their dealings with outside actors. Defining goals explicitly in a way that links the long-term well-being of the community with that of the agency, and that can be translated into clear objectives might help improve transit's image and ease discussions in times of financial problems. The problem is of course how to make goals explicit and how to operationalize them. In this respect, the trend observed in the survey towards the development of MBO processes in many agencies might provide a good preliminary base since it establishes a coherent procedure to determine priorities.

3.3.7 Improving Efficiency

A longer term perspective of the financial trend facing transit justified considering improvements to efficiency as another option in responding to financial pressures. However, efficiency improvements are not only difficult to achieve, but also difficult to understand and trade-off with other managerial options. More analysis should be made of their role within a coherent strategy involving other actions. It was clear from the survey that managers are more prepared to take strikes to achieve gains in efficiency. But it should not be forgotten that unions also have a stake in preserving service, for purposes of employment. To the extent that this can be communicated and fair exchanges negotiated, labor relations need not deteriorate.

4.0 THE BRIDGEPORT CASE

The purpose of the case study was threefold, 1) to refine the characterization of the operational environment derived from the telephone interview, 2) to refine the understanding of the agency's response to fiscal pressures, and 3) to analyze in depth the dynamic linkage between the characteristics of the operational environment and the development of a response (i.e., to identify which characteristic were critical to the outcome, and how and when they affected the process).

Bridgeport was chosen as a case study for a variety of reasons. Bridgeport appeared representative of one type of operational environment - constrained decisionmaking but sophisticated management. The telephone survey led to a preliminary classification of agencies along two dimensions, decisionmaking independence and management sophistication, that were hypothesized as being particularly important in the determination of how the operational environment affected agency response. Bridgeport, based on the preliminary contacts, appeared to be representative of an operational environment that was highly dependent on an outside actor (the State of Connecticut), but whose internal management seemed to be fairly sophisticated (large planning and management staff relative to size of system, several specialists, good grantsmanship, testing ground of innovative ideas, relatively good information base).

The Greater Bridgeport Transit District (GBTD) was facing financial pressure that represented a significant change to its operational environment. The GBTD has only recently taken over bus operations from four previous private companies. A process of route rationalization, service expansion, and development of innovative concepts (such as new town circulatory system served by minibuses, consortium of coordinated elderly and handicapped services, employer-based subscription bus service, shared-ride taxi system) had been underway and was planned to continue. In 1982, however, this process of expansion is threatened by financial pressures coming from the state. This case thus presents a situation where a transit agency was experiencing a significant change in its operational environment, and might thus offer interesting perspectives of how an agency's goals and activities are affected by the change and incorporated into the organizational response.

4.1 HISTORY OF TRANSIT IN BRIDGEPORT

Although the Greater Bridgeport Transit District (GBTD) has existed since 1972, it has only fully assumed operating activities since the spring of 1980. A brief historical overview will provide a good summary of the major events relating to transit that have occurred in Bridgeport during the past 10 years.

1972: The Connecticut Light and Railway (CL&R) Company, the major provider of transit services in Bridgeport, starts to suffer large declines in ridership. In 1970, CL&R carried 10 million passengers in its combined operations (Bridgeport, Waterbury, and New Britain). In one year, this ridership declined to 8 million. In response, CL&R officials cut service. A strike by employees, along with an increasingly apparent unprofitable situation, resulted in the owner decision to cease operations in 1972.

1972-1973: The Greater Bridgeport Transit District (GBTD) is created by the Connecticut legislature with a mission to promote public transportation and to coordinate existing services in the Bridgeport area. The GBTD was given regulatory authority over all public transportation (including taxis) in the area. Four private bus operators continued to serve the Bridgeport

region: Bridgeport Area Transit, Gray Auto Company, Chestnut Hill Transportation Inc., and Stratford Transit. Over the course of the next few years, these four companies would pick up various portions of the CL&R network. The GBTD was given a mandate to help ease this process, and to seek new ways of improving service, especially that provided to the elderly. The GBTD staff is small in number, and funding comes from small grants from the three (later four) members of the District: Bridgeport, Stratford, Fairfield, (and later Trumbull).

1974: Various activities are undertaken to improve transit. A major on-off board survey of ridership on the four services is performed by the University of Bridgeport, College of Engineering. This survey gives some indication of ridership by time and route segment, useful information for undertaking a route rationalization process. The transportation committee of the Chamber of Commerce finances the development of a unified map of the routes of the four bus companies. It also finances the development of schedule and marketing materials, which are distributed by the Chamber of Commerce and GBTD. The Connecticut Department of Transportation (Conn DOT) finances demonstrations of an express bus from Stratford, a 5¢ downtown shuttle bus, and special transportation for the elderly. A policy of fare subsidization for the elderly is developed during these years where tokens could be purchased by the elderly for 35¢ and participating companies would then turn these in to receive an extra 15¢. The subsidy was provided by the state and was handled by the city of Bridgeport.

1975: The GBTD commissions a consultant group to prepare an evaluation of the route service offered by the private companies, and to analyze alternative network and organizational structures that would improve the overall quality of transit service in the area. The consultants outline three alternative structures for transit service in Bridgeport:

- 1) The first option continues to operate the service privately, but uses GBTD's regulatory authority to eliminate network inefficiencies and to improve coordination.
- 2) The second buys out the private companies and transfers operations to a quasi-municipal authority.

3) The third buys out the private companies and transfers operations to the GBTD which truly becomes a regional transit district.

1976: Local officials opt for the third option and begin to take over the privately-owned routes. A five-year plan is developed as part of the agency's first Transit Development Program.

1977: The Greater Bridgeport Regional Planning Association (GBRPA) publishes the transportation element of their five-year plan which summarizes previously collected ridership and census data and projects future trends based on modeling efforts. These efforts serve to fulfill basic information needs while GBTD goes through the lengthy process of hiring personnel and establishing a planning department of its own. From 1977 on, management staff is expanded, starting with a new executive director, and a director of planning.

1978: Two major grant proposals are submitted to the Urban Mass Transportation Administration (UMTA). The first is a section 3 capital grant proposal that would provide companies (vehicles and facilities), to replace old vehicles, and to allow expansion of paratransit service and special service for the elderly. UMTA approves a grant and public take-over proceeds.

One important aspect of this proposal was the commitment by the state for funding the total amount of the local share for both capital and operating expenses. This was a significant move since expenses might be substantial given the ambitious expansion program that was outlined in the proposal. Furthermore, it totally reversed the previous pattern of funding for the GBTD. During the years 1971-1979, the GBTD consisted only of a small regulatory and coordination body with minor ongoing expenses. These were assured totally through local contributions.

Once the UMTA grant was available, the GBTD system was to become much larger in scope and thus required some state support. This larger state role was consistent with state transit-related actions in other parts of the state. The legislature had already established a quasi-state agency, Connecticut Transit, to serve the areas of Hartford, New Haven and Stamford.

Connecticut Transit was solely dependent on the state for its funding and it was felt for political/equity reasons that a similar arrangement must be initiated in Bridgeport.

The second grant proposal is made to the Service and Methods Demonstration Group at UMTA. The proposal outlines an experiment whereby the GBTD would use its operating, regulatory, and coordinating capabilities to establish a transportation brokerage system. It also provides funding for an innovative pricing scheme and for economic development projects. The proposal is accepted by UMTA.

1979: Two private companies are taken over, but the remaining two companies sue the GBTD in regard to questions of compensation. The executive director leaves GBTD and takes a position in state government.

1980: The final two private companies are purchased. GBTD expands service into evening hours and Sundays, and a regional consortium is created to coordinate all specialized transportation for the elderly and handicapped.

As can be seen in this brief chronology, the GBTD is a relatively new agency, highly dependent on federal and state support. Although the initial stages of GBTD's operation were well-supported by state and local officials, several recent events have created some uncertainty as to the future of transit in Bridgeport.

4.2 FINANCIAL PRESSURES AND RESPONSE

In 1980, the state of Connecticut found its ability to meet its budget severely constrained. An 8¢ sales tax was the principal source of revenue, and this revenue was simply not keeping pace with inflation. Given these problems, state officials decided to cut the budget of all state agencies, thus affecting the transit agencies which greatly depended on state subsidy.

Three actions have been taken by the state which have impacted the financial position of the GBTD: 1) a Conn DOT policy decision not to fund any service expansion in FY 1982, 2) an administrative action by Conn DOT to

restructive and unify the Section 5 grant application procedure, and 3) a state administrative response to the state's budgetary problems consisting of a 10¢ across-the-state fare increase and a 5% cut in subsidy to all bus operators.

The decision not to expand service affected Bridgeport in two ways. On the one hand, it meant that service improvement would not be funded, thus bringing to an abrupt end the growth in service associated with public take-over. Not only would this affect the efforts to provide a more than minimal level of service, but it also threatened the possibility of rationalizing the route structure.

On the other hand, this policy created some concern over the regional equity of subsidies received by different metropolitan areas in the state. The areas covered by Connecticut Transit (i.e., Hartford, New Haven and Stamford) received the lion's part of state subsidies, not only in absolute terms but also relative to their population base. For example, the metropolitan population of the Hartford and Bridgeport areas are approximately the same size, and yet the subsidy and service to Hartford are larger than that of Bridgeport. One main reason for this is that the service of Connecticut Transit grew over 60% from 1976 to 1979, following the state take-over of the system.

Thus there are real imbalances in terms of service per capita between different areas of the state, in particular between those that were publicly taken-over at an early stage and which enjoyed considerable growth, and those that have just recently become public and are now being told that money is no longer available to finance their expansion. The new policy precludes the planned growth of GBTD, which would have helped re-establish some regional balance, and locally there are strong feelings that the state is involved in a conflict of interest: it not only judges how much subsidy each system in the state receives, but it is also the main recipient (through the state-owned Connecticut Transit) of the benefits of that decisionmaking authority. Thus, this decision not only affects GBTD's ability to adequately provide a rationalized public service with its region, but also inhibits progress towards regional equity of subsidies within the state.

A second state decision that has constrained GBTD's financial position is an administrative action by Conn DOT to restructure and unify the Section 5 grant application procedure. The state is the recipient of Section 5 federal operating assistance in Connecticut unlike most urbanized areas. In its budget the State does not formally link the amount of subsidy for an operation to the amount of section 5 money received by that area. Section 5 grants are processed separately and money reimbursed at the end of the fiscal year by UMTA goes directly to the state's general fund and does not appear as part of Conn DOT's budget.

Up through FY 1981, Conn DOT prepared a separate grant application for each eligible operation. In FY 1981, there were twelve such grants, 11 bus operations and the ConRail New Haven commuter line. For FY 1982, the state proposed to simplify its procedure and prepare only two applications: one for ConRail and one for the Hartford bus operation. From the state's point of view, this would save administrative costs, a worthy goal in light of the state financial situation, and would also provide more leverage to convince UMTA to respond in a more timely way to its needs and to the reimbursement of operating assistance. From the state's point of view, it would not affect subsidies to bus operations since these are funded 100% out of Conn DOT's budget.

However, from GBTD's perspective, this relatively straight-forward administrative move has serious consequences on its present financial situation, and would affect its future prospects for negotiating local contributions. In FY 1981, the state did not draw the total amount of federal operating assistance authorized to the Bridgeport area through the Section 5 population/population-density formula. GBTD had negotiated and obtained from the state the right to draw on whatever was left using local funding as matching funds. This allowed GBTD to fund a mini-mover, demand-responsive system. An imaginative arrangement was derived to fund this low-density, low-productivity service that otherwise fell far short of the state's "basic level of service" concept: one-sixth of costs are covered through fares, one-sixth would be financed through grant from Fairfield which would leverage and additional one-sixth in federal operating assistance. The total of these three sources would approximate the recovery ratio of the regular route service (approx. 50%) and thus would fall with the state's service definition, and

thus the remaining portion would be paid for by the state in its total subsidy to GBTD.

The net effect of administratively collapsing all Section 5 grant applications into only two would prohibit such an arrangement. It directly threatens the survival of the Mini Mover system itself, and by the same token forecloses chances of leveraging local contributions from the other communities in the district.

These two previous actions - change in policy and administrative change to Section 5 - evolved slowly through the end of 1980 and into the FY 1982 budget negotiations in early 1981, and the change to Section 5 procedures has yet to be finalized. However, in April 1981, a more specific and important state action occurred which precipitated the financial crisis that the other actions were heralding in. At this time, the state Office of Policy and Management (OPM) decided that the state's financial situation called for two-fold administrative action in the areas of urban transportation: an across-the-board 10¢ fare increase in all state bus operations to be implemented in August 1981, and a 5% cut in subsidy to all bus operations.

The overall effect of these three state actions was that GBTD was facing a considerably smaller amount of financial support than had been planned for. This represented a significant change in GBTD's operational environment, from a situation in 1980 where public ownership was just being achieved and the agency was looking forward to expanding and rationalizing its service, to one in 1981 where service reductions seemed to be already inevitable and future expansion was all but dismissed.

4.3 RESPONSE TO FINANCIAL PROBLEMS

The response to these financial problems consisted of a series of actions taken by GBTD during the spring and summer of 1981. Initial warning of the problem occurred during the fall of 1980 after state officials had started to elaborate their budget and subsidy projections for transit operations. At this time, they notified the GBTD chairman and executive director that state finances were constrained and that they should be prepared to

receive less subsidy than anticipated. The executive director notified agency staff through an internal monthly report that such was the case. However, no precise idea of what this would mean to GBTD's budget emerged until February, 1981 when budget and subsidy negotiations began between the state and GBTD.

These early negotiations focused primarily on reconciling the budget submitted by GBTD in November 1980 with that elaborated by Conn DOT. Differences arose because GBTD officials felt Conn DOT's assumptions were not accurate in that they were either based on GBTA data from its first year of operations (before it had completely taken over the private companies) or on data derived from Connecticut Transit, a well established and mature system. Negotiations consisted primarily of continuous correspondence between Hartford and Bridgeport discussing the format of the budget, the justification of certain items (for example short-term borrowing expenses), and the assumptions used to derive actual estimates.

In April 1981, GBTD was notified by a memorandum addressed to all operators of the two administrative actions that would substantially modify the state subsidy to each operation (i.e., the 10¢ fare increase and the cut in subsidy). With this new information, the final budget for FY 1982 would need to be significantly below that required to provide the previously planned levels of service. Thus, the GBTD would have to respond in some way to these financial constraints.

The actions considered by GBTD officials ranged from fare increases to negotiations with local governments to raise further funds. The extent of the actions considered is shown in Table 4.1 where the 11 major actions are identified, roughly in the order addressed by GBTD officials. Each of these options will be discussed below.

4.3.1 Fare Increase

As mentioned previously, a 10¢ increase in the base fare was imposed on GBTD by Conn Dot as one mechanism to deal with the reduction in state support. The executive director felt that this increase in fares was

TABLE 4.1

LIST OF RESPONSE ACTIONS

PURSUED BY GBTD

- 1) Fare Increase
- 2) Budgetary Scenario Building
- 3) Resistance to Budget Cut
- 4) Use of the Crisis as Political Catalyst
- 5) Reduction in Costs
- 6) Analysis of Unproductive Service
- 7) Short-Term Funding Options
- 8) Development of Alternative Service/Financial Options
- 9) Chamber of Commerce Transportation Committee
- 10) Use of the MPO as a Political Lever
- 11) Negotiations to Increase Local Funding

reasonable and for that reason did not oppose it. The last fare increase (the first for GBTD as an operating agency) occurred in August 1980 when fares were increased from 35¢ to 50¢.

Although the origin of this fare increase clearly demonstrates the predominant role of the state over fare policy, the agency does enjoy the flexibility of determining the form of payment. Currently, innovative forms of prepayment are being experimented with through a pricing demonstration. Tokens and different monthly passes (commuter pass, off-peak pass, and full pass) are being sold in an attempt to maximize marginal revenue.

As opposed to the traditional view that prepayment passes should be used as marketing devices to encourage ridership and thus should be sold at considerable discount, GBTD officials view a system of correctly priced passes as a way of increasing operational efficiency while maintaining, or even increasing revenues. The user gains the convenience of the pass which is ever more important as the fare and amount of change required increases. Furthermore, a system of sale rebates from local merchants has been developed as a cheap way to encourage riders to buy the passes; a booklet of coupons ("value fares") is received when a pass or 10 tokens are purchased. Although designed prior to the financial problems, this pricing innovation might help deal more effectively with financial problems by simplifying operations, by making fare increases less difficult to implement, perhaps even by increasing revenues. This effort is also useful in that it helps establish communications with local private merchants which could serve to increase awareness and concern for transit in the area.

4.3.2 Budgetary Scenario Building

In trying to assess what the implications would be of a sharp reduction in the budget, the staff person responsible for budget analysis put together two budgetary scenarios - one based on the agency's own estimation of how much it would cost to just maintain existing service, accounting for inflation; and one based on the state's proposed budget.

The initial gap between what the state was proposing to provide and that which GBTD estimated was needed to carry on the current level of service was over \$500,000 (on a total budget of \$5.4 million which already included a 10¢ fare increase). To obtain such an amount through service reductions would require a 12% reduction in service vehicle-hours.

After a third round of budget negotiations, the shortfall between the subsidy the state intended to provide (and which did not change in the end) and the revised estimates of what would be needed, still represented a shortfall of \$240,000 (out of a total deficit of \$2.93 million). Different scenarios were calculated and showed that this would translate in the worst case, into a 6.9% reduction in service vehicle-hours. Constructing such budgetary scenarios was important since it helped to assess the situation and to clarify the bottom line during the continuous and complex evolving negotiations that concerned budgetary assumptions, budgeted expenses, levels of service, state subsidy, and other sources of support. At certain points in the negotiation process, these scenarios helped to clarify the situation for indirect participants, and thus helped in efforts to build outside support.

4.3.3 Resistance to Budget Cut

The administrative budgetary cut imposed on GBTD and other smaller operators was quite unfavorable when compared to the proposed cut in Connecticut Transit's budget. The percentage to be cut from Bridgeport's budget was considerably larger than that proposed for Connecticut Transit. This fairly uneven allocation of the administrative cut was dealt with in two direct and indirect ways.

Direct resistance to the cut, or at least to the way it was being allocated to the various operators, consisted primarily of many phone calls and heated correspondence between GBTD and Conn DOT. Local legislators were also asked to place indirect pressure on Conn DOT through the legislative and any political pressure they could bring to bear on the state's executive office. These efforts were finally fruitful and the proposed allocation of the cut was substantially modified to make it more proportional to the size of the system.

4.3.4 Use of The Crisis as a Political Catalyst

The administrative cut brought to the political fore the issue of regional funding equity which had been a latent concern of GBTD and of the other smaller operators in the state. These younger transit districts had not enjoyed the sustained growth of the mid-1970's that the Hartford and New Haven areas (Connecticut Transit) experienced and now found themselves often without a sufficient base to face the state's new policy of "no new service expansion". In order to articulate some of these concerns, the executive director of GBTD formed a caucus of these various operators in the fall of 1980.

The unevenness of the administrative cut gave new importance to this issue of regional funding equity and the involvement of local legislators provided impetus to the caucus' desire to re-evaluate the entire funding situation for transit in the state. A previously proposed legislative study on equity and finance of transit in the state, which had not been supported, was suddenly strongly backed by various legislators and was voted through the legislature. Among other things, this study was to analyze the possibilities for new sources of transit funding.

4.3.5 Reduction In Costs

The final agreement between Conn DOT and GBTD, although not as severe as had been envisioned initially, nonetheless represented a shortfall of \$188,000 in GBTD's budget (or a 6.5% shortfall in funds to cover the operating deficit). At this point, internal options had to be considered to deal with the short-term shortfall in agency funding. One option involved taking another look at the budget and trying to find some areas for cost reduction.

Reductions in costs were obtained from two basic areas. First, competitive bidding and revision of assumptions during that period when budget negotiations were being carried on resulted in substantial savings and a revised estimate of the budgeted cost for insurance purposes that was \$165,000 less than the initial estimate.

Secondly, the budgeted amount for support services (marketing and planning) was reduced by \$20,000. In the case of planning support, this reduction can be compensated to some degree by the large amount of federal demonstration projects that are currently underway in Bridgeport. These projects are funded independently of Bridgeport's budget and have led to the hiring of a large and competent planning staff. The presence of this staff offers a buffer to management and means that a reduction in planning funds does not entail an immediate reduction in planning support. However, this is not true for marketing purposes, and the decision to cut marketing funds may seriously affect the ability to analyze user needs and communicate any changes in service to users.

4.3.6 Analysis Of Unproductive Service

Given some re-evaluation of the budget, and the fact that a fare increase had already been decided upon, some attention would have to be given to service itself since service cuts seemed necessary. To this end, an analysis of unproductive service was carried out by the planning department. This analysis was deemed necessary to analyze the service expansions that had taken place in early fall 1980 (expansion of service hours into the evenings and to Sundays, and extensions of a few routes), as well as to lay the foundation for determining service cuts.

The analysis consisted of five steps. First a special system wide on-off bus count was carried out in order to elaborate the route profiles for all routes during their new hours of service. Not only would this help to supplement a major ridership count of July 1980 (which took place before the new hours of service), but it would help identify those extensions which had not been able to build a ridership base.

The second step was to analyze the results of this survey in terms of the productivity (passengers per hour) of various route segments in the evenings, Saturdays, and Sundays. The route productivities were calculated and then ranked within each of the three time periods of interest. Clear patterns emerged of routes falling substantially below the norm. However, it was felt that service cuts should also be sensitive to user

needs and thus a third step compared the unproductive routes with the availability of alternative service so that no major areas of the city would be left unserved.

The identification of unproductive routes at specific time periods led to the identification of routes that should be modified or eliminated. The fourth step focused on these routes and designed a series of potential modifications: reducing route frequency, changing route alignment, shortening route length, interlining one bus between two routes, reducing service hours, or elimination of service altogether in the evening or on Sunday. This led to the construction of a hierarchy of different service changes which could be implemented as necessary, and rough cost savings of each modification were estimated using average operating costs.

The final step was to evaluate the feasibility of these service modifications. Certain changes were deemed too complicated or confusing for drivers or users, or were unable to provide any real savings. The Director of Operations formulated some suggestions of how service might be restructured based on his own estimate of what savings would accrue although real savings could not be truly known until a new driver schedule was actually cut. These were then incorporated into the analysis.

4.3.7 Short-Term Funding Options

Some flexibility existed at GBTD to secure funding in the short-term which could be used to ease the severity of service cuts in the current year. On the one hand, a small fund of local contributions has accumulated which might have served to cushion the financial problem. This fund consisted of a small contribution made by each community to the District. During the period between 1972 and 1979, this fund had financed the minor expenses of the GBTD when it was only a regulatory agency. Since 1979, when the agency became an operator, its expenses have been financed out of fares and state revenues. The communities have continued to contribute to the fund (\$83,500 total per year for the four communities) and had accumulated \$200,000, of which \$100,000 was needed for short-term liabilities. This small fund was totally controlled by the Board of Directors, and in the

final decision, roughly \$75,000 of this fund was needed to balance FY 1982's budget.

A second source of potential short-term funding was the local contribution provided by Fairfield for its internal circulatory system (the Mini Mover system). As explained previously, a formula had been derived by which one-sixth of the system's costs were paid for by the community, one-sixth out of a federal matching grant, one-sixth out of fares, and the rest by the state. However, the original estimates of the cost of operating the system for the last few months of FY 1981 (the service started February 1981) and for FY 1982 were considerably higher than the actual operating costs, partly because these were based on experience with minibuses elsewhere, and partly because the amount of vehicles needed to fulfill the community's needs had been over estimated. As a result, the amount actually allocated by the community for FY 1982 was \$51,000 more than would be necessary to cover the one-sixth of costs as set by the formula.

However, the Mini Mover service was also being threatened: the state's proposed changes to the Section 5 application procedure would indirectly threaten the ability to leverage federal funds using Fairfield's contributions; the state was particularly displeased about this service that recovered only 17% of its costs through the farebox. Furthermore, the system's productivity was much lower than the least productive regular route service which was to be cut. If the same standards were applied, the entire Mini Mover system would disappear. Negotiations were thus carried out between the executive director and Fairfield officials as to a potential deviation from the existing formula in exchange for only minor modifications to the Mini Mover system. This in fact was agreed upon and the total \$131,000 budgeted by Fairfield (significantly higher than the original one-sixth contribution) was given to the operation of that service.

4.3.8 Development Of Alternative Service/Financial Options

After having secured agreement from Fairfield to contribute the entire \$131,000 budgeted by the town, GBTD officials considered four alternative

options that might save the remaining \$137,000 needed to meet the budget, combining different amounts and types of service cuts with different levels of local contribution. These are presented in Table 4.2.

The first option involved no changes to service, but required local contributions in excess of what had occurred in the past. The second option involved cuts to the most unproductive service, but a smaller contribution from local communities. The cuts would not affect area coverage since it provided for alternative service. It basically consisted of service modifications needed to rationalize existing service somewhat. The third and fourth options involved extensive cuts to service, but no extra local contributions. They represented two alternative ways of designing cuts if extensive service cuts were needed.

These alternatives were presented to the executive director with the recommendation by the planning staff that option two be adopted. These options were then submitted to the board, discussed, and a variant of option two was finally chosen and implemented. The chosen option resulted in \$75,000 being contributed by the local communities.

4.3.9 Chamber Of Commerce Transportation Committee

In trying to find a short-term solution for the financial problem, some longer-term actions were taken by the executive director to improve the agency's leverage in its environment. One such action was to renew communications with the private sector through the forum of the Chamber of Commerce.

The Chamber of Commerce had been active previous to this time in transportation activities when it financed the development of a system map and other marketing materials and helped distribute them. In recent years, however, the Chamber had become less active with regard to transportation. Using the financial crisis as a motivation, GBTD officials reopened discussion with the Chamber of Commerce about transportation, its importance for the area, financial problems and related issues. Chamber officials decided that a transportation committee should be formed to provide a formal means of focusing this interest and discussion. The executive director of

TABLE 4.2

ALTERNATIVE SERVICE/FUNDING OPTIONS

	Maintain Existing Service	Cut Unproductive Service	Moderate Reductions-A	Moderate Reductions-B	Maximum Reductions
Proposed Service Changes	None	-Cut Mini Mover Sunday Service -Cut PM Service: 2 routes -Cut Sunday Service: 2 routes	-Cut Mini Mover Sunday Service -Cut PM Service: 4 routes -Cut Sunday Service: 4 routes	-Cut Mini Mover Sunday Service -Cut PM Service: 5 routes -Cut Sunday Service: 4 routes	-Cut Mini Mover Sunday Service -Cut PM Service: 5 routes -Cut Sunday Service: 4 routes -Cut Subscription route -Cut One Daytime Route 25%
Ridership Loss	-0-	416 passengers/ week	1,243 passengers/ week	1,713 passengers/ week	3,125 passengers/ week
Budget: (thousands \$)					
Expenses	5,040	4,973	4,923	4,907	4,849
Revenue	2,162	2,157	2,151	2,154	2,129
Deficit	2,878	2,816	2,773	2,753	2,720
State Share	2,610	2,610	2,610	2,610	2,610
Additional Local Funding Required	\$137,456	\$75,287	\$31,848	\$12,249	(\$20,751) surplus

GBTD, who had been a major proponent of the committee, was appointed its chairman. Although the committee was multi-modal in its outlook, the executive director hoped to bring to the fore the problems of transit. This committee will serve not only to raise interest in transit and to discuss the private sector's transit needs, but also to use recommendations and endorsements by the committee as leverage in seeking support from individual companies.

4.3.10 Use Of The MPO As A Political Lever

Another action was being considered to deal with the state's desire to re-organize and unify the application procedure for Section 5 grants. As mentioned earlier, the indirect effect of this administrative action would be to preclude the leveraging of federal money using local contributions, which would not only threaten the very existence of the Mini Mover system, but could constrain even more the possibility of future local funding.

In order to bargain with the state to either prevent this administrative action or to compensate for its indirect effect, GBTD used a recent re-designation of the region's Metropolitan Planning Organization (MPO) as a political lever for pressure. Tri-State, which had previously been the area's MPO, was dissolved and its functions were distributed in the Bridgeport SMSA to a Transportation Endorsement Board (TEB), chaired by the Director of the Regional Planning Agency (GBRPA), and composed of representatives of local communities as well as the chairman of GBTD. The TEB is responsible for approving the Transportation Improvement Program (TIP), of which one component is the application of federal Section 5 operating assistance, and this responsibility might possibly be used as a political lever in negotiating with the state.

4.3.11 Negotiations To Increase Local Funding

The final action that emerged as a response to the financial problems faced by GBTD, was increased contacts with local officials concerning local financial contribution, particularly in Stratford. At this point in time

Fairfield had already increased its financial contribution substantially after the provision of transit service was re-evaluated and re-organized within that community, to the point that it is by far contributing the most of all four communities. Efforts are currently underway to evaluate alternative service configurations in the town of Stratford, and in conjunction with this analysis, negotiations have started on increasing its level of contribution as a result of the increased level of service it would be receiving. Although initial response from local officials has not been enthusiastic, and negotiations will be lengthy, the Fairfield precedent has indicated to GBTD officials that local communities might be willing to increase contributions if 1) some service improvements are made, and 2) transit officials are perceived to have seriously considered internal actions to cut administrative costs.

4.4 CASE SUMMARY

The Bridgeport example illustrates the wide range of options that transit agencies can consider in responding to financial pressures. In this case, the GBTD also devoted some effort to examining longer range actions that could address the fundamental problems facing the agency. The package of actions that were developed by GBTD officials thus constituted both short- and long-term options.

Most importantly, the Bridgeport case shows that not only do changes in the operational environment affect agency activities, but that major actors in this environment can also provide solutions to the problem. For example, the Chamber of Commerce in Bridgeport might provide needed support in the longer run to some of the GBTD's financial problems. Agency officials must therefore be careful to identify possible actors that can help in overcoming major barriers.

5.0 ASSESSMENT OF TRANSIT AGENCY RESPONSE

The immediate impact of cutbacks in federal operating assistance will vary from region to region, depending to the extent that local communities have provided alternative funding sources for covering transit costs. In

many cities, sales, gas, and employee taxes have been dedicated to fund public transit, whereas other cities rely on operating assistance from state or local governments. However, only 12 states have established such an assistance program, and only one-third to one-half of U.S. transit systems have local dedicated taxes. Thus, a large number of transit systems are vulnerable to cutbacks in federal operating assistance.

The survey of general managers provided the first indication of how transit systems will respond to federal cutbacks. Raising transit fares was suggested most often as the first step in responding to financial pressures. Not only did the general managers feel that transit fares were too low, but they felt that, in today's fiscally conservative political environment, raising fares was more acceptable to local officials than cutting service. The significance of this response is found in the fact that seventeen of the thirty transit systems surveyed had already increased their fares in the first seven months of 1981. Of these seventeen, eleven had also raised fares in 1980. There was little doubt from those interviewed that much of the burden on increased local funding support for transit was being shifted to transit riders.

The second, most often, cited strategy for responding to financial pressure in the short-term was reducing service. From August, 1980 to August, 1981 ten transit systems of those contacted had significantly reduced service, and another five had made minor cutbacks. In one instance the transit system was facing a 25 percent reduction in service by the end of 1981. An interesting characteristic of these cutbacks is the pattern that most cities are following -- first, elimination of night service, then Sunday service, and finally Saturday service. In short, service cuts were designed to preserve the service offered during the peak weekday hours.

The third option available to local officials was seeking revenues from new sources, for example, state governments. Nine of the thirty systems surveyed had recently lost referenda or legislative battles to change their sources of income. Six transit systems were hoping for increased state aid, three others were hopeful about changes in state gas taxes, and four others were counting either on new state operating assistance or on a

local option tax.

The results of this survey provide some ominous indications of how transit systems will respond to cutbacks in federal operating assistance.

First, the impact of major federal cutbacks will be to exacerbate any differences in relative financial positions that exist today, and large disparities already exist between those systems that are financially stable and those that are already severely constrained. It is those properties that are in the healthiest situation, often because of large revenues from a sales tax, that tend to depend the least on federal aid, and will have the most flexibility to survive federal cutbacks without much change.

Second, it is apparent that few local officials have examined the longer term implications of federal cutbacks. Even in those cities where state revenues or local dedicated taxes will "cushion" transit service from declining federal assistance, the long-term future of transit finance is still in doubt.

Third, all of the actions recently taken, which would be accelerated in the event of major federal cutbacks, directly harm those who can least afford it. Fare increases, increases in taxes, and cut in off-peak service could fall disproportionately on the poor. Service cutbacks most significantly affect those not having an automobile, or those unable to drive, i.e., the poor, elderly, or handicapped. From an equity perspective therefore, federal cutbacks are likely to produce a local response that is highly inequitable.

Finally, the other benefits that could possibly come from transit, e.g., reduced highway congestion, improved air quality, decreased fuel consumption, and improved land accessibility, have not been seriously considered in the debate surrounding transit finance. If these benefits are not considered, the calculus of cost effectiveness might be heavily biased against maintaining even a basic public transit system.

As shown in Table 5.1, there are several characteristics of transit agency response to the changing fiscal environment that merit special

TABLE 5.1

CHARACTERISTICS OF TRANSIT AGENCY RESPONSE

1) Understanding Change

- Crisis-management attitude
- Lack of long-term perspectives
- Missed opportunities for desirable change

2) Assessing Factors that Influence Response

- Missed importance of constraints on response
- Under-utilization of organizational resources
- Undermined capability of response

3) Choosing Between Alternatives

- Limited set of alternatives
- Limited evaluation of trade-offs
- Satisficing approach to decision-making

attention. In the following sections, the more important response characteristics will be discussed more fully.

5.1 UNDERSTANDING CHANGE

Many of the problems with agency response stem from the way the problem is defined a priori as a short-term imbalance of resources that must be compensated for. This affects the scope of the problem to be dealt with and thus automatically limits the alternatives to be considered. By focusing on the problem in such a way, management is subject to a) a crisis management attitude, b) that prevents a long-term perspective, and c) overlooks opportunities for desirable change that might arise from these external events. There is insufficient perspective to evaluate the situation in a way that allows one to fully understand the dimensions of the change.

5.1.1 Crisis Management Attitude

The overall process is characterized by an attitude of crisis management and this effects the entire process of trying to cope with change. When considering managers' attitudes toward external events, One cannot help but notice the defensive posture that is usually taken vis-a-vis the stream of external events with which they must deal with. In this light, external change is perceived as a negative disruption of the fragile equilibrium that managers have constructed, and one that is bound to increase uncertainty and instability. It is not surprising thus, that problems are defined using an approach that minimizes the implications and reduces the actions to be pursued to their simplest form.

By defining the problem simply as "an imbalance", a temporary solution to the discription can be quickly achieved, but it does not ensure that the problem has been truly dealt with, and it might not allow one to consider longer term actions that might be needed to deal with it permanently. To the contrary, the set of options considered is reduced to a very small number, which can be used quickly (irrespective of issues of efficiency or effectiveness) and simply (where each option can be designed and implemented independently).

To a certain extent, there are several characteristics inherent to the provision of transit service in the United States which lead naturally to the development of a crisis management attitude. The high degree of dependence on public support, the power of interest groups, the political culture which has not yet accepted transit as a public service, the variety of conflicting expectations placed on transit management, the inability to attract or train high caliber managers, the political nature of agency policy boards, have linked transit closely to the local political environment, and provided a short-term horizon of problems and decisions. In responding to financial problems, this political aspect is compounded by the uncertainty, and related feelings of lack of control, that lead to the described course of events.

Nonetheless, beyond inherently difficult aspects of providing transit service, a certain amount of leverage is available to the manager to make decisions and implement them in an effective and efficient way. The successful managers, those able to address the long term problems of the agency, are those that have been able to break this defensive crisis attitude by using this leverage. They have established an extensive and complex network of relations with their environment. They take advantage of opportunities as they appear and are capable of recognizing trends of change and of dealing with them as such. They have established an organizational structure with qualified people, appropriate controls, and monitoring procedures.

5.1.2 Lack Of Long-Term Perspective

In some cases, external events are only short-term imbalances, such as when sales tax receipts fall unexpectedly in one year. In such cases, a crisis-management attitude may be appropriate since that is exactly what has to be dealt with, a crisis confined in time. However, in most cases, financial short-falls are in fact the first signs of a longer-term trend of successive crises, or of fundamental shifts in the institutional environment. The current process of response suffers from a lack of longer-term perspective, in good part because of the crisis management attitude.

The present process does not enable transit management to assess the

real dimensions of the change. All external events are treated as short-term imbalances and dealt with as such. For those events that represent long-term shifts in the environment, this approach might temporarily allay the financial imbalance, but would not permit the management to analyze what would be needed to deal fundamentally with the change.

5.1.3 Missed Opportunities For Desirable Change

A change in the agency's environment entails disruptions in the processes by which the agency carries out its mission. Disruptions are usually perceived in a negative light because they render more complex the daily activities of management.

But from another perspective, they can also provide keys for renewal and for organizational change. Important environmental change or even short-term crises naturally disrupt the status quo, the compact inter-relationships of standard operating procedures which people have grown used to and wish to preserve. This very disruption, however, may provide opportunities to overcome natural barriers to change personal resistance, and organizational inertia. It may represent a unique opportunity to re-assess goals, re-organize responsibilities, re-define procedures, and implement changes that have been on management's agenda for some time, but which could not be achieved for lack of a spark to overcome organizational resistance. By narrowing as much as possible the scope of the problem and the options to be considered, the current response process misses these opportunities provided by the change in the environment.

5.2 JUDGING AGENCY CAPABILITY OF RESPONSE

A second important issue that should be outlined with respect to the current process of response is to recognize that the process of responding to a change (i.e., of analyzing an external change, of choosing a course of action, and of implementing it) does not occur in a void. It is subject to all the constraints and distortions that the operational environment places on any process of decisionmaking and implementation. The current process a) does not recognize the importance of the agency's capability of

response and thus cannot fully evaluate organizational and institutional constraints and their impacts on outcomes, nor does it b) fully utilize organizational resources which, even if not directly related, may be positively harnessed, nor does it enable a manager c) to strengthen the agency's capability of response, by identifying current weaknesses and ways to eliminate them through the response process.

5.2.1 Missed Importance Of Agency's Capability Of Response

The response that the agency develops is strongly influenced by the reality of the decisionmaking and implementation context of the agency's operational environment. And yet this relationship is not explicitly recognized by the current response process. The agency's ability to analyze change, to project trends, to develop and evaluate alternatives depend considerably on organizational characteristics such as staff availability, expertise, quality of information, delegation of authority, and internal communications. The ability to choose a course of action, to resist the change, and to seek external options will depend on institutional or political factors such as the degree of communication with its environment, the degree of decisionmaking independence, and the amount of environmental support. As for implementation, it will be affected by the sources of organizational resistance, the structure of control within the agency, labor relations, and the physical limitations of the vehicle fleet as network.

To some degree, these considerations are usually unconsciously part of management's process of response. However, the potential amount of distortion that might affect outcomes is such that there should be recognition of the importance of these variables and a more explicit evaluation of the agency's capability of response. This would amount to taking stock of the current operational environment within which the change occurs and which establishes certain limitations on the processes of making and implementing decisions. By then comparing this to the steps that have to be performed, in order to respond to external events, some evaluation of the agency's capability of response may be derived.

This would give management the ability to assess what the agency is and is not capable of doing. This becomes especially important in order to identify, before the fact, likely sources of problems that might occur during implementation. In the current process, within a crisis mode of analysis, implementation distortions remain relatively unknown, and the process of implementation is something of a black box.

5.2.2 Under-Utilization of Organizational Resources

The present process of response in certain instances does not lead management to fully utilize organizational resources at their disposal in responding to change. One recurring example is the often neglected use of planning or budgeting staff in order to develop information for purposes of negotiation with external actors. The survey indicated that only few managers could offer a clear picture of what they felt the implications of the financial pressures were and what were likely scenarios. Such a clarity of perspective strengthens their position on the negotiating table, and is often obtained through research performed by staff units not necessarily designated for such a role (planning staff).

An analysis of agency capability of response serves not only to identify potential implementation problems and other weaknesses in the agency's ability to deal with change, but would also serve to identify agency strengths. Thus, for instance, information producing resources that one might not think directly related to responding to environmental change might be identified through such an analysis as appropriate tools for preparing for negotiations.

5.2.3 Strengthening Capability of Response

Finally, the current process because it does not analyze the present capability of response provides no guidelines as to how the process might be strengthened. In a highly dependent industry where external events interfere frequently with the ongoing stream of activities, it becomes as important to recognize agency weaknesses in dealing with change, as it is to resolve any given disruption. An assessment of agency capability of response which would analyze current organizational or institutional weaknesses and strengths,

would not only help to identify potential problems in developing a response or to determine resources which might be capitalized on, but could also serve, through the identification of existing weaknesses, to generate a list of actions that might be implemented as part of the response and would serve to strengthen the ability of the agency to deal with change by correcting those weaknesses.

5.3 CHOOSING A COURSE OF ACTION

The third issue that should be raised with respect to the current response process relates to how a course of action to deal with external change is chosen. The current decisionmaking process is highly compatible with the limited definition of the problem, the crisis-management attitude, and the limited number of actions that are contemplated. It is based on a) limited evaluation of trade-offs, and b) a decisionmaking process based on "satisficing", where the first acceptable solution is chosen. However, if the scope of the problem is expanded to deal with the real dimensions of the change (and thus more alternatives are considered), then the choice of a course of action should at least consider the real trade-offs involved and recognize that in such a situation the first solution is not necessarily the best.

5.3.1 Limited Evaluation of Trade-Offs

The current process does not evaluate alternative options in ways that would allow for meaningful comparisons. It is clear that this is a difficult task and yet procedures must be developed so that a fare increase may be compared to a service cut to a new dedicated tax, etc. At present, evaluation only consists of a screening mechanism to screen out "non-options", and no mechanisms exist to consider needed trade-offs. Such an evaluation process becomes even more important when a wider range of alternatives is considered, such as comparison between short- and long-range actions.

The issue of limited evaluation capability not only affects the difficult trade-off of different response options, but also the more tangible evaluation of alternative configurations of a given option. For example, although a capability to compare service reductions and a fare increase would

be useful, a more important tool would be evaluating alternative configurations of service reduction. Although some generation of alternative configurations is currently done, it usually focuses on alternative levels of resources (such as different ways to cut service). Thus, there is usually no real evaluation of what the impacts of different configurations might be for different categories of users, and no basis for making a decision of what is the most desirable configuration of an option.

5.3.2 Satisficing Approach To Decisionmaking

A complementary limitation affects the actual process of choice within the existing response process. Choice of a course of action in the current response process might be best described as a process of "satisficing". In this case, evaluation consists of weeding out "non-options". From that point, all options are pursued until one option, or a set of options, fulfills the basic criterion of adequacy, i.e., resolving the imbalance in the required time-span. Thus, decisionmaking becomes a process by which the first acceptable solution that appears is chosen, irrespective of whether it is better than other options. Clearly, different courses of actions may involve complex trade-offs and very sizeable differences in impacts on users. In such a context, even a cursory evaluation and a decisionmaking process that would allow more extensive trade-offs at options or alternative configurations would certainly improve the response outcome in terms of reducing unnecessary negative impacts on users or staff.

6.0 CONCLUSIONS

The next few years will likely be most significant for the future of public transit in the U.S. No matter what changes to the existing federal transit program are adopted by Congress or made by the U.S. Department of Transportation, the characteristics of the program seem clear -- decreased federal operating assistance, increased local funding responsibility, reduced federal regulations, and few opportunities for major new construction starts. From the local perspective, these changes produce pressures for key decisions that must be made on the future of transit in urban areas.

These pressures also provide opportunities for local officials to improve transit system productivity and service effectiveness. Specifically, the following characteristics of a local response seem most appropriate:

1. Transit service must be considered as just one component of the urban transportation system. All too often, the debate on transit funding is conducted as an "either-or" situation, either transit is funded and you have service, or it is not funded and there is no service. There are many alternatives for providing transportation services that can supplement or complement transit, for example, car pools, van pools, subscription bus service, jitneys, and demand-responsive transportation services. These alternatives must be considered when discussing the types of services that should be provided with public funding support, and the most effective structure of the public transit system.

2. The focus of the debate on local transit financing must be on the equity implications of each alternative. All of the funding alternatives being considered by local officials have significant impacts on the poor, elderly, and handicapped, the groups in an urban area often having the least access to the political process. It thus becomes the responsibility of local officials to raise these issues, and to provide a forum for their resolution.

3. The community benefits that come from transit service must also be clearly articulated, and considered in the possible actions to fund the service. For example, transit investment, when combined with private development funds, has provided an important catalyst for developing new and older areas of U.S. cities. Many city officials have also used transit investment and a resulting commuter shift to transit services as a means of reducing street congestion and improving air quality.

These benefits, and to whom they accrue, have increasingly become an important consideration in identifying possible funding support for transit service. For example, in many cities, the business community has become more active in supporting the local transit service because of the important role transit plays in its economic survival. It thus becomes necessary for local officials and transit management to point out to local

groups the importance that the survival of a transit service has for their own future.

4. Local officials should view the current problems with transit finance as an opportunity to improve service productivity and internal management efficiency. The financial pressures on transit systems should provide an incentive for local officials, transit management, and labor representatives to reach agreement on cost-saving measures such as limiting Cost of Living Adjustment (COLA) escalators or using part-time labor. Other actions that could be considered to improve efficiency of operations include: management information systems, preventive maintenance programs, improved driver participation, employee incentive structures, increased control of absenteeism, and closer monitoring of costs and revenues. Finally, network structures and route performance could be evaluated in light of financial pressures, to ensure that service is efficient and effective in obtaining stated goals.

5. Although the immediate concerns of maintaining a viable transit system in the face of cutbacks in federal operating assistance will occupy much of the time of local officials concerned with public transportation, the longer-term considerations of what role transit should play in their communities, the type of stable funding source necessary to support this role, and the equitable distribution of costs must also be addressed. Ideally, such an image of the future role of transit should influence the more immediate steps taken to support the transit system. At the very least, the longer term options that become available and those foreclosed when local officials adopt specific actions to support transit in the short term, must be understood.

Within the management structure of transit agencies, several principles should be followed to address the problems outlined in section 6. These principles are shown in Table 6.1 along with the characteristics of the response process to which they are addressed. Although several of these principles are incorporated into the comments above, they deserve reiteration in regard to management action.

TABLE 6.1

CHARACTERISTICS OF TRANSIT AGENCY RESPONSE AND MANAGEMENT PRINCIPLES

CHARACTERISTICS

PRINCIPLES

1. UNDERSTANDING CHANGE

- Crisis management attitude
- Lack of long-term perspectives
- Missed opportunities for desirable change

- Fully evaluate dimensions of disruption
- Change requires long-term perspectives
- Change provides opportunities

2. ASSESSING FACTORS THAT INFLUENCE RESPONSE

- Missed importance of constraints on response
- Under utilization of organizational resources
- Undermined capability of response

- Explicitly consider context
- Conduct feasibility analyses early in response process
- Strengthen executive leverage

3. CHOOSING BETWEEN ALTERNATIVES

- Limited set of alternatives
- Limited evaluation of trade-offs
- Satisficing approach to decision-making

- Develop full range of alternatives
- Analyze impacts on users
- Evaluate real trade-offs
- Emphasize negotiations

1) Understanding Change

- Fully Evaluate - The real dimensions of a disruption to the operational environment are not obvious and must be assessed in order to determine whether the disruption is just an imbalance or the sign of a fundamental change.
- "Change" Requires A Long-Term Perspective - A fundamental change to the operational environment cannot be adequately dealt with if the agency responds to it as if it were only a temporary imbalance, since the disruption will only re-occur. A "change" thus has two aspects that must be addressed; it entails both a "crisis" imbalance, and a set of long-term implications.
- "Change" Provides Opportunities - In spite of the crisis aspect of financial disruptions, such a crisis offers management an opportunity for organizational renewal. Opportunities for overcoming organizational inertia occur so seldom that they must be seized when they occur.

2) Assessing Factors That Influence Response

- Explicitly Take Into Consideration The Decision-Implementation Context - A response to environmental disruption entails both decisionmaking and implementation and is thus highly influenced by characteristics of the decision-implementation context. Such a context is implicitly taken into consideration by management is formulating a response, but explicit recognition allows one to put the problem to be dealt with in perspective.
- Do Early Feasibility Analyses - Early analysis of the constraints imposed by the context of decisionmaking on various options helps to refine the understanding of realistic options and thus improve timeliness. These analyses also help to identify both organizational constraints and opportunities, thus helping to identify problems to be dealt with, or non-related resources that might be used. Feasibility analysis can thus strengthen the efficient utilization of resources.
- Strengthen Executive Leverage - Analysis of current constraints on decisionmaking helps to identify agency capabilities of response, and thus provides guidelines on the possible structural and personnel

changes that might be needed to meet future problems. In an environment where change occurs frequently, it is as important to improve one's leverage to deal with events as it is to resolve short-term imbalance. Thus, even if permanent solutions to the problem cannot be implemented (which is likely), one's leverage to deal with future events in this bargaining arena can be strengthened.

3) Choosing Between Alternatives

- Develop A Full Range Of Alternatives - A broad range of alternatives provides management with the means to improve the quality of choice. The range of alternatives considered is at once a reflection on the understanding of the problem and the attitude one has in addressing it. Developing a wide range of alternatives can be a learning process for management that widens perspective and refines intuition, and thus allows better choice even if refined evaluation is impossible. It also improves management's leverage to put together a package of response actions, more in tune with the reality of the problem and context. Users seem to be impacted most when few alternatives are considered.
- Analyze Impacts On Users - Impact analysis is both important and difficult. However, there are definite trade-offs between different actions in terms of impacts on users. Without explicit recognition of this in the evaluation process, the agency response can likely be most severe on the riding public.
- Evaluate Real Trade-Offs - Evaluation should focus on the real trade-offs that are involved in any choice process that is responding to financial pressures. Evaluation should thus outline to management the trade-offs between product quality, process quality, changes to executive leverage, financial feasibility, organizational feasibility, and political feasibility.
- Place Emphasis On Negotiations - In a public environment where a considerable portion of any outcome can be explained through the bargaining process, the importance of negotiation as an executive process should be emphasized, and considerable attention should be paid to the skills necessary to participate effectively in such negotiations.

The process characteristics described above, and a comparison with the characteristics of the process found from the survey and case study, are shown in Table 6.2. A key concept in the proposed response process is strategic planning, a concept which has been used in corporate planning activities for many years. Although originally developed for application in the private sector, the results of this research indicate that the concept of strategic planning could be usefully applied in transit agencies.

Strategic planning can be defined as a planning process that examines integrated sets of organizational actions which link the operational environment and agency goals, objectives, and purposes; and which identifies long- and short-range policies and plans for achieving them. Strategic planning thus differs from normal functional planning in that it looks internal to the organization to identify its strengths and weaknesses in facing environmental pressures; and it also identifies major actors in the environment who could provide substantial support for the organization. Another defining characteristic of strategic planning is its focus on implementation strategies, i.e., it is not enough to consider only the alternative actions that could be taken to solve the financial problem, but also the implementation steps necessary to utilize these actions.

In sum, the development of a strategic planning process in transit agencies should receive high priority from transit managers and support from government agencies in funding demonstrations and developing the planning techniques needed to allow planners to undertake a strategic assessment process. Such a process is one of the few mechanisms that can overcome some of the deficiencies of the existing response process, and still effectively address the financial problems facing the agency.

TABLE 6.2

FROM CRISIS MANAGEMENT TO STRATEGIC RESPONSE TO CHANGE

<u>PERSPECTIVE</u>	<u>CRISIS-MANAGEMENT</u>	<u>STRATEGIC RESPONSE TO CHANGE</u>
Implicit View of Decisionmaking	Rational Actor	Bargaining
Attitude towards External Events	Seen as Negative Disruptions	Unpredictable Events that Create both Pressures and Opportunities
Problem Definition	Temporary Imbalance	Major Shift to Equilibrium
Goals	Compensate for Imbalance (Balance Budget)	<ul style="list-style-type: none"> o Re-establish True Equilibrium o Deal with Short-Term Imbalance o Increase Executive Leverage
Time Horizon	Crisis	Long-Term Change, but with Short-Term Component
Range of Actions to be Considered	Pre-Determined Set Relating to Imbalance	Open Range Relating to All Three Goals
Relations between Actions	Ad-Hoc Actions	Integrated Strategy
Use of Actions	"Across-the-Board" Implementation	Differentiation Relating to Programs and Policies

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