PUBLIC MANAGEMENT OF SELECTED MUNICIPALITIES
SUFFERING LOSS OR DECLINE OF MAJOR TAXPAYING
INDUSTRIES: THREE ESSAYS IN CUTBACK MANAGEMENT

DISSERTATION

Presented in Partial Fulfillment of the Requirements
for the Degree Doctor of Philosophy in the Graduate School of
The Ohio State University

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* * * *

The Ohio State University
1981

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1981
For my parents, with love and thanks for their support, and for Dave, who got me into budgeting and chose to live with the consequences.
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INTRODUCTION

As the nation's economic base shifts among regions of the country reflecting high energy costs and new, computerized manufacturing processes, and as competition from foreign industries increases in areas of traditional U.S. advantage, the national economy is being pushed out of equilibrium. The advantages of northeastern and midwestern industrial cities as locations for new or growing industries have been lost to the more desirable climates of sunbelt regions. Many frostbelt cities have become distressed, losing major industrial firms and the tax base to which they contributed. As cities lose revenues, their physical infrastructures may deteriorate from prolonged deferral of maintenance. Crime rates may increase if safety forces are not supported at adequate levels. Middle and upper income residents will move to the suburbs or other parts of the country as their employers relocate outside the city boundaries. All of these factors contribute to the level of fiscal stress suffered by the city governments.

Whenever industries close or relocate for whatever reasons, disruption of both individual lives and governmental economies in the losing cities are expected results. The effect on a city's economy of the loss of a business firm depends upon several factors including the size of the firm in relation to the city's economic base, the size of the city, the local unemployment rate, the level
of demand for workers of the skill levels displaced by the plant closing, and the availability of other businesses interested in expanding or moving to the city as replacements for the lost firm. The type of firms involved is also likely to have an effect, e.g., closing a mine or oil well which was the mainstay of a local economy could have a very devastating, long-term effect. Loss of a major service or manufacturing firm which employed an equal number of people, but which might be replaced more easily, would probably have an equivalent short-run effect on the city, but the economy might be more likely to recover from such a loss in the long run. In either case, the city government's finances, as well as those of its citizens, would probably suffer from a decline in the local economic base.

Movement toward a national, regional economic equilibrium will probably not be painless for either the growing or declining regions, neither is it likely to include economic gains or losses in only one direction over the next several decades. Considerable fluctuations can be expected as regions adjust economically while the system remains out of equilibrium. Problems of industrial losses now prevalent in the declining frostbelt may occur later in the sunbelt as growth strains water availability in some areas or domestic oil reserves dwindle in others. It seems appropriate, therefore, to study the problems experienced by cities which lose major industries, now found mainly in the frostbelt, for two reasons: first, to document
municipal problems and responses in such situations; and second, to propose policies that may prevent similar problems in other cities or regions as well as alleviate those that already exist.

Few cities, especially in the Northeast and industrial Midwest, have surplus revenues beyond those needed to meet ordinary service demands. If revenues begin to fall after an industrial plant closes, or projections of lower future revenues are made, city officials are faced with serious decisions regarding where and how to reduce expenditures, increase revenues, or both. If, at the same time, service demands are actually increasing because of widespread unemployment following a plant closing, a serious financial crises could result. This situation is illustrated in Figure 1. As service demands increase after the shock of the plant closing at time 1, there may not be an immediate crisis, since there is usually a lag in revenue responsiveness before reassessments are made, for example. This lag maintains revenues near previous levels through time 2. Beyond that point, however, revenues begin decreasing. The rate of increase in service demands as well as the magnitude of revenue losses determine the size of the projected revenue - expenditure gap which would occur if all service demands were met. Even if no increases in services were provided, by time 3 a shortfall of revenues below the initial level of expenditures (shown in Figure 1 as the dashed line ii) would occur. Thus, it is virtually certain that city officials would be required to cut expenditures, raise revenues, or both, in order to
t - time
P - dollar cost of services and value of revenues
S - service demands, expressed in terms of cost
R - revenues collected, in dollars
ii - initial revenue and service levels

Source: Developed by Author.

FIGURE 1
MUNICIPAL SERVICE DEMANDS - REVENUE COLLECTIONS GAP
maintain a balanced budget. The length of the time lag, i.e., the amount of time between points 1 and 2, will depend upon the particular revenue structure of the individual city.

How city officials, primarily Mayors or City Managers, determine which expenditures to reduce and what revenue-increasing options are available is the focus of this dissertation. The first essay considers the cutback decision process itself from a theoretical perspective. It evaluates the applicability of prevailing budget process models to cutback decision making. Finding these somewhat lacking, especially because of their growth orientation, it proposes an alternative model of the budget process, especially developed for municipal declining revenue situations.

The second essay, building upon the theoretical development of the first, describes the results of empirical case studies of the actual cutback decision processes of five Ohio cities that have suffered the loss of a major industrial taxpayer. Both their decision making processes and the outcomes of those decisions are analyzed in this essay. The ability of top city officials to maintain fiscal viability in their cities after the industrial loss is analyzed, and some conclusions are drawn about budgeting in cutback situations.

The third essay develops a mathematical goal programming model of the cutback budgeting process found in the five case study cities. This model is presented as a useful aid to understanding the process
of cutback budgeting in research including many cities. When many cities are studied, the case study method is both prohibitively expensive and overly limited in producing generalizable results. The goal programming model is proposed for multi-city research because it can incorporate political, difficult to quantify variables, as well as easily measured ones.

Together, these three essays contribute to the literature on cutback budgeting and management in several ways. First, few contemporary empirical studies have been done on cutback budgeting in American cities. The few that are available considered large cities, mostly New York. The case studies in essay two are of medium and small sized cities. Second, multi-city research into primarily process-oriented issues is difficult. The model in essay three and suggested data collection methods summarized therein constitute one attempt at surmounting that problem. Goal programming models of other processes have been successful, so optimism for its applicability to cutback budget processes seems warranted. Finally, by placing the empirical research and model building in the theoretical framework developed in essay one, this research becomes more than a mere description of historical events in five Ohio cities which may or may not be applicable elsewhere. The theoretical basis of the empirical work is clearly established, and adds to the richness of these results. In addition, if the findings of the empirical cases turn out to be non-generalizable to other states or city sizes, t
theoretical framework remains for further testing elsewhere. In this way a contribution is made to the literature of cutback budgeting and management which transcends the limits of non-funded, case study research, useful as that traditional approach remains in the analysis of public choice under negative developmental constraints.
ESSAY 1

BUDGETING FOR RESOURCE DECLINE: UTILIZATION AND MANAGEMENT OF ALLOCATIONAL CONFLICT

This essay analyzes local government fiscal decision making given the loss or decline of a major industrial taxpayer; its propositions apply particularly to medium sized cities, although they probably could be extended to smaller or larger cities rather easily. The loss of a major taxpaying industry has several effects which are likely to influence local government decision making. First, loss of an industrial firm entails loss of tax income from both the firm itself and from the newly-unemployed workers. This is especially severe if the city relies heavily on personal income taxes as a source of revenue. Second, unemployed workers frequently need and demand more or expanded social and community services, potentially increasing local expenditures. Third, the city must begin short- and long-range planning for its own financial situation as well as for the maintenance or enhancement of its industrial and employment bases. If new employers are not attracted to the area, or existing employers expanded, decisions and plans would necessarily include the projection of future declines in population and tax revenues, as unemployed workers relocate to areas where jobs are available. These problems are illustrative of some of the challenges faced by governmental policy makers in a city which has lost a major industrial taxpayer.
None of these challenges is insurmountable. Traditional methods of budgetary and fiscal decision making, however, may not be as helpful in a declining revenue situation as they have proven to be in periods of growth. "Cutback-management" is the phrase coined to describe this type of situation, in which budgetary decisions require real tradeoffs, not at the margin above existing levels, but within the "base," the previously established level of expenditures, i.e., the existing staff, salary, and service levels.

It seems obvious that staff or service level reductions will be much harder to decide upon and implement than would comparable increases, especially if the magnitude of needed cuts is large. Cutback management requires policy makers and managers to make difficult decisions about the future of the organization, its service levels and functions, and its revenue base.

Cutting back is not as simple as just reversing the process by which the organization grew. Professor Charles H. Levine describes this phenomenon as the "paradox of irreducible wholes; ... an organization cannot be reduced piece-by-piece by simply reversing the sequence of activities and resources by which it was built." Levine attributes this to the "lumpiness" of public organizations. The growth process which has built up critical masses of resources, expertise, political support, if it were simply chronologically reversed,
could produce deficiencies in crucial segments of the organization which might result in unforseen and undesirable consequences.

Budgeting for Cutbacks

Budgeting for expenditure and program cutbacks at the municipal level requires decisions to be made concerning the allocation of resource reductions as well as of the resources themselves. Politically determined levels of public service provision may be threatened. The welfare and livelihoods of individual employees also could be adversely affected, if revenue reductions are of a magnitude that implies the possibility of layoffs. None of the alternative candidates for program reductions is likely to be without both supporters and detractors. The ensuing budgeting decision process might be expected to include a high level of conflict as strongly held positions are taken in budgetary debates.

This essay is concerned with the exploration and theoretical development of cutback budgeting processes leading to rational, politically implementable decisions. It is focussed on the various financial decision making and budgetary techniques which are available to municipal managers in the executive branch, the shortcomings of those models, and possible alternatives which are more appropriate for declining revenue situations than traditional, growth-oriented budgetary methods.
Organization of Essay

This essay is organized as follows. After a brief introductory discussion of the role of conflict in budgeting, the classical economic model of fiscal decision making will be presented. This model provides at least part of the theoretical basis for most modern budgetary methods. Building upon this model, several types of incremental budgetary processes will be discussed and critiqued on the basis of their applicability to budgeting for resource decline. Next, budgeting as a process of comprehensive, long-term planning, the opposite of incrementalism, will be considered and similarly critiqued. These criticisms will lead to a description of a mixed budgetary process model based upon a synthesis of the two extremes. Finally, an alternative budgetary model will be developed specifically for municipal declining revenue situations, which utilizes rather than suppresses allocational conflict. Throughout, this essay will be concerned primarily with the process of budgeting, although budgetary decision criteria will be discussed wherever necessary to delineate specific concepts.

Conflict in Budgeting

Budgeting includes implicit conflict. When adequate resources are available to support the politically desirable activities of a government (or governmental agency), the inherent conflict is easily suppressed in the executive branch by managers who wish to avoid it. Decisions can be made on the basis of rational economic criteria,
i.e., equating prices with marginal costs and maximizing the benefits obtainable from a given level of resources. With adequate resources, most interests will receive stable or increasing benefits, without the need for rigorously explicit competition among them over revenue allocation. Increasing revenues can make possible the (politically incredible) statements sometimes made by governmental managers that there is no competition among them for resources.

Whether or not it is expressed overtly, conflict among alternative uses of budgetary resources cannot be avoided in any politically based system. Resource scarcity implies winners and losers. Even in periods of revenue growth, governments rarely obtain sufficient funds to fulfill all agency budget requests. _Ergo_, resource scarcity is nearly always the rule. If governmental revenues are not growing, allocational conflicts are even more likely. Suppression of these conflicts, while it may appear to preserve bureaucratic harmony, would be likely to retard the development of creative alternative solutions to problems of providing adequate public services with declining resources. In addition, allocative conflict probably cannot be suppressed indefinitely because the interests represented by the implicitly competing agencies or programs will tend to exert overt political pressure at their various points of access to the governmental system. Conflicts of interest are routinely settled in judicial adversarial proceedings and legislative debates; executive branch managers forfeit their ability to develop and control
budgetary policy if they allow these conflicts to be surfaced explicitly only through legislative or judicial means.

Budgetary strategies which were developed in the past assumed patterns of debate and reward systems that were based upon growing (or at least stable) resources and suppression of conflict among their alternative uses. Declining resources tend to restrict managerial ability to contain and suppress conflict within the executive branch because agency budget cuts threaten traditional growth-based reward systems. Losing politicians, managers, or interest groups will be more likely to escalate implicit executive-branch conflict to the level of explicit legislative debate or judicial action. This effectively removes the policy-making prerogative from the executive. Retaining meaningful budgetary authority in the executive requires an allocative decision process which recognizes, uses, and benefits from the inherent conflict involved in cutback budgeting.

**Classical Model of Economic Rationality**

Economic theory provides a model of efficient allocation of scarce resources among competing alternative uses. Rational economic decision making requires that scarce resources be allocated so that their marginal cost, i.e., the cost of the last unit of resources used to produce the good or provide the service, is equal to the marginal benefit of the good produced, i.e., the price it can obtain in the market. Consumers purchase goods and services
according to the same principle, equating the marginal costs of the goods they buy with the marginal benefits they expect to receive from them. In this way resources are allocated according to criteria of economic efficiency through the mechanism of the market, and are used for purposes that provide the maximum benefit per unit consumed. Conflicts among alternative uses are resolved through the operation of the market, which results in long-run equilibria between prices and quantities of goods and services. 5

Economic theory assumes that buyers and sellers operate in perfectly competitive markets with full knowledge of product and factor prices. It also assumes that transaction costs are zero, and that long-run adjustments in prices and quantities of goods and services are accomplished with minimal socioeconomic disruption. Because of the presence of large numbers of buyers and sellers in the market, no one firm or consumer holds a monopoly or exerts significant influence on the market operations. Economic efficiency is achieved when the marginal costs of all goods equal the marginal revenues from their sale. Factor prices (labor, capital inputs into production processes are determined through factor markets, also operating in a climate of free competition and perfect information. 6

In some cases the market may fail to allocate resources in a economically efficient manner. Natural monopolies and public goods are two examples of market failure, both of which are solved in a
mixed economy, such as in the United States, by government intervention. Governments intervene by regulating monopolies and by providing public goods and services. Budgeting, is the means of allocating tax revenues collected from individuals and businesses to various public purposes. Historically, budgeting has been based upon principles of economic efficiency, attempting to achieve as closely as possible the resource allocations and service provision levels that would result if markets were operable.

**Economic Rationality Applied to Budgeting**

As applied to local governmental budgeting, the principles of economic rationality require that an alternative test of efficiency be developed to replace the market price mechanism. Although governments operate in factor markets to obtain labor and capital, their services are not priced, except in the enterprise operations, e.g., electric utilities. Budgeting methods have attempted to provide such efficiency tests, with varying degrees of success. Governmental resource allocation has become a mixture of economic considerations and political factors. Comparisons among alternative uses of tax dollars or other governmental resources can be made using marginal analysis techniques within a particular government. Marginal costs and benefits of using taxes for alternative purposes, e.g., libraries or sewers, can be compared and allocations made in order to maximize the benefits derived from tax revenues. Some, indeed many -- of the benefits received are difficult to quantify,
however, so subjective decisions must be made, in addition to economic ones, in assigning benefit values to the alternatives. Political decisions are also made by voters and their elected representatives determining the total resource (tax) level available to governments to be allocated to public purposes, rather than kept in private sector uses.

Use of traditional, formal economic market criteria in public sector budgeting does not necessarily result in the best decision making. Some of the formal economic assumptions are less valid for governmental operations than for private sector firms, since the former do not have product prices with which costs of alternatives can be compared and marginal analyses performed. Shadow prices or other substitute value measures of governmental goods and services are often difficult to determine. Because so many governmental functions are based upon market failure, using economic market criteria for resource allocation may not be possible, especially if some of the expected benefits to be compared for given resource investments (costs) are not quantifiable, or are highly dependent upon political values. Economic analysis based upon the evaluation of quantifiable marginal costs and benefits may yield results which are neither politically desirable nor actually acceptable.
Formal economic analysis, as applied to budgeting, is concerned with decision criteria rather than decision processes. The inherent conflict among various uses of resources is suppressed in the analysis because, by definition, the long-run equilibrium between quantities supplied and demanded precludes the presence of conflict over alternative allocation schema. The only conflict which may occur in the economic analysis is related to imperfect information; i.e., if the perfect information assumption is relaxed to reflect real public-sector situations, there may be disagreement over cost or benefit values assigned to public goods and services. Once these value judgments are made, however, resource allocation according to rational economic analysis is simply determined by the equation of marginal costs and benefits.

When conflict is suppressed, analytic processes may also reduce the possibility that new, creative solutions will be developed through the dynamics of the budgetary process. It may be argued, however, that public sector decision making is necessarily an incremental process in which conflicts occur only in relation to incremental changes from the previous budget or policy. Budgeting resembles economic analysis only at the margin. The comprehensive comparison of all alternative policy choices required by rational economic analysis criteria is replaced by successive limited comparisons of marginal differences from the status quo.
Incrementalism

The "strategy of disjointed incrementalism" was developed both as a description of government decision making and as a normative model of how policy analysis and budgeting should be conducted. Disjointed incrementalism is a model of how policy alternatives are developed and how choices are made among them in response to particular situations. Briefly stated, the strategy of disjointed incrementalism is based on the notion of marginal choices. The policy analyst or decision maker begins with the status quo situation which exists at the time he or she is confronted with the problem. He then considers only those alternative policies which differ incrementally from existing policies and whose known or expected consequences differ only incrementally from the status quo. The known or expected consequences of these policies also differ from each other incrementally. The decision maker then analyzes the incremental differences among the social states resulting from the alternative policies, rather than comprehensively analyzing each possible resultant social state. Finally, he ranks in order of preference (based upon his own or some politically derived criteria) the increments by which the policy outcomes differ, and chooses the highest ranking policy alternative.

Pluralistic Decision Making

Disjointed incrementalism is based upon a pluralistic model of the governmental process. This model describes governmental
decision making as polyarchal, i.e., characterized by a high degree of control over its leaders, public administrators and elected officials, by non-leaders. These form interest groups, which articulate particular views and present them in the political forum. Governmental policies are the resultant of pluralistic competition among the various interests in a sort of political competitive market.\(^{10}\)

Political parties in this model perform the role of political brokers, advocating aggregations of interests. Chosen candidates and platforms represent composites of competing interests which provide alternatives in the political "market" and ultimately the voting process chooses from among these the candidates presenting the optimal grouping of interests. The polyarchal process integrates the functions of interest articulation and aggregation into the policy making process through the influence of interest groups on both elected and appointed officials, and through members of the public administration bureaucracy itself.\(^{11}\) Decisions in the pluralistic model are made by elected and appointed officials, however, interest groups attempt to influence these decisions. The extent to which elected officials satisfy the interests of their constituent pressure groups tends to determine their (and their parties') probability of reelection.

**Limitations to Comprehensive Analysis**

In a polyarchal political system, Charles Lindblom argues that the real-world decision maker incurs significant search costs in
finding or developing alternative policies and that in addition, the implementation of some policies that require radical departures (or even moderately large ones) from the status quo ante may impose very large costs if, indeed, it is possible to implement them. Taking into account the limitations on the capacity of a decision maker to assimilate information, the costliness of the search for and analysis of policy alternatives, the diversity of the possible universe of alternatives and the difficulty of knowing with certainty or even a reasonable probability their full outcomes, and the interaction between value premises and factual knowledge which is inherent in public issues, the rational, comprehensive model of decision making is not only humanly unrealistic, it is probably too expensive in terms of both time and money. Since a truly comprehensive process cannot be carried out for these reasons, Lindblom argues that disjointed incrementalism can achieve an approximation of the ideal which will tend to be superior to those theories which propose closer adherence to comprehensiveness. 12

By budgeting incrementally, a local government can avoid the pitfalls of making a large change which has unexpected consequences. A series of small annual changes with relatively well known consequences can achieve through this process a result which might be too costly or meet with formidable opposition if attempted in one step. Similarly, incremental changes which do result in unexpected, adverse outcomes can be reversed or ameliorated more easily than can large policy
changes. Decision makers can gain considerable information through the successive limited comparisons of the disjointed incrementalist process which may be used to good advantage when a non-incremental decision is required. The process of taking incremental steps, some forward, some sideways or backward correcting erroneous decisions, provides a plethora of valuable information about cause-effect relationships which can be very helpful in a crisis that seems to require a radical departure from existing policies. Thus, the strategy of disjointed incrementalism is valuable even in the breach, which is to say, perhaps, that the exception proves the rule.

Incrementalism may -- and probably usually does -- result in satisficing, rather than optimizing, decisions and budgets. "Satisficing" is a much less complex process than optimizing and is less costly in terms of both time and money.\textsuperscript{13} To satisfice, the decision maker searches possible policy alternatives and analyzes their consequences until he finds one which provides a satisfactory, but not necessarily optimal, solution. In a complex public organization such as a city government, Herbert Simon argues that there are multiple goals and constraints which must be met, e.g., garbage collection, police protection, adequate street maintenance, balance between revenues and expenditures. Decision processes, then, are aimed at discovering policy alternatives which are both feasible and satisfactory in light of those goals and constraints. Similarly, actions or policies in one part of the organization become goals or constraints for
other parts. As a result, it is difficult to find policies which are optimal responses to any particular situation, let alone those which optimize overall organizational goals.\textsuperscript{14} The complexity of city government organizations does not require incrementalism, according to this model, but it does preclude optimizing as a decision process.

**Budgeting Incrementally**

Traditionally, budgeting has been a very incremental process. Line item budgeting relied upon few sophisticated alternative-generation or cost-benefit analysis techniques. Next year's needs for supplies, materials, personnel, and capital improvements were determined by this year's, adjusted for price changes or known new policies. Cities had been first to adopt executive budgeting at the beginning of the twentieth century, consolidating fiscal responsibility under the mayor or city manager.\textsuperscript{15} Most budgets from then until the 1950's (or in some cases until the present) were presented as requests for appropriation of funds according to objects of expenditure, e.g., salaries, supplies, contractual services, equipment.\textsuperscript{16} These budgets were incremental, sometimes in excruciating detail, for example, requesting specific amounts of paper and pencils as well as numbers of employees. Some budgets are still presented with object of expenditure detail included in the body of the document or as supplementary information. Line-item, object of expenditure detail alone does not allow comparisons among
programs or services as a whole, however, nor does it provide a means for evaluating the efficiency or effectiveness of governmental services, even incrementally.

Performance Budgeting

The need to measure and compare efficiency and effectiveness of governmental programs led to the development of performance budgeting during and after World War II. The term was first used in the report of the first Hoover Commission in 1949. Dollars budgeted in this format are tied to process, purpose, or achievements. Emphasis is on the functions performed by government agencies, rather than the inputs required to do them. Performance budgets are also incremental in nature. Their basis is the current level of services provided by government, which is measured and evaluated according to performance standards, which may be simply the previous year's accomplishments, or may be based upon workload measurement techniques and professionally developed norms.

Performance budgeting is essentially an application of microeconomic analysis to the problems of governmental service delivery. Workload or performance standards can be developed according to economic marginal cost analyses. Comparisons of the marginal costs of various programs are then used in budgetary decision making. Rather than requiring comprehensive analysis of all possible alternative service delivery levels or methods, however, performance
budgets measure current performance (marginal costs and benefits) against standards, and determine budget requests on that basis. As a result, performance budgets tend to differ from year to year only incrementally, mainly reflecting development of new, more efficient service delivery techniques or policy changes.

By organizing budgetary information on the basis of accomplishments or products, performance budgets, while incremental, do promote broader comparisons among governmental functions and agencies than do line item budgets. Since legally mandated balanced municipal budgets necessitate interagency, inter-program comparisons at least at the margin, whether these are consciously and overtly made or not, performance budgets by providing comparative information are likely to improve the quality of incremental budgeting.

**Empirical Examples of Incremental Budgeting**

In a 1969 computer simulation model of budgeting in three large cities, Detroit, Cleveland, and Pittsburgh, John P. Crecine found that the balanced budget requirement in most cities forces simultaneous comparisons, at least to some degree, of all budgeted expenditures. The budgetary process is a means of organizing and dealing with the complexity of this problem for a decision maker who is limited personally by the usual constraints of time, staff, and lack of technical expertise and understanding of all city functions. Crecine found that this complexity was handled in the three cities upon
which the model is based by assuming the problems vary very little from year-to-year and are appropriately solved incrementally, based on historical experience, i.e., incremental changes from the base. Crecine also concluded that the municipal budget system handled conflicts of interest among various groups or issues (or agencies, by implication) by ignoring them. The primary decision rules were based upon the feasibility of an alternative, and search for divergent alternatives was quite limited. 21

Crecine did not find overt competition among department heads for funds, although he did observe conflict between department heads and the mayor over granting of budget requests. 22 If a deficit situation occurred requiring expenditure reductions or projected revenues were declining at budget time, he found a decidedly incremental approach to resolving the problem. The decision rule used was first, to reduce or eliminate only increases that might have been granted, beginning with non-salary, low priority areas. If more cuts were required, uniform across-the-board reductions would be imposed in non-salary accounts. He did not find any reduction in salary accounts, i.e., in personnel levels, although hiring freezes might be imposed in a crisis or raises canceled. 23 Obviously, his study was done before Cleveland and Detroit entered their more recent crises. This incremental approach, protection of existing staff levels to the extent possible, and deemphasis of implied competition for resources
has been implied by much of the literature to be the standard practice in most cities, as well as in the federal government.

**Politics of Budgetary Processes**

Aaron Wildavsky's classic *The Politics of the Budgetary Process*, describing budgeting at the federal level of government, is relevant to city financial decision making in several ways. First, the process begins in the executive branch with determination of the amount of funds available to spend and the desired expenditure levels of various departments. Perhaps to an even greater extent in local government than in state or federal governments, those are executive functions. Where city councils have little staff of their own, the complexities of city budgets require that the proposals be decided upon by the mayor and presented with rationale as a finished document. Second, Wildavsky describes the process of deciding upon the level of the budget request as one of determining the increment to add to (or rarely, to subtract from) the agency's "base," the expected continuing level of operations, which might not include some special, short-term items in a current budget. Another concept, the agency's "fair share," relates to that agency's expectation of its relative position compared to others, which determines the approximate proportion of the total budget it receives, including the distribution of available increases in revenue.

Because federal budgeting in Wildavsky's descriptive model utilizes the concept of a budgetary base, decision making tends to occur
at the margin. A certain level of expenditures is taken virtually as a given while comparisons and analyses are made on those amounts requested beyond this base. This is essentially an incremental approach to decision making, as discussed above. City government budget processes, also have tended to follow these rules historically, but with one notable exception: city budgets do not always rise. Balanced budget requirements in most city charters or state statutes require balance between municipal expenditures and revenues annually, a rule the federal government has not observed in recent history.

Declining revenues from loss of major industrial taxpayers may cause city revenues to fall, forcing the budget process described by Wildavsky and Crecine to become decremental, i.e., characterized by small negative changes from the base, in order to keep budgets in balance. Whether incremental or decremental, budgetary decision making which focusses upon changes in an established base, either line-item or performance oriented, is likely to suppress conflict within the executive branch budgetary process. The polyarchal political influences on expenditures and revenues will be felt only in the legislative segment of the budget cycle. In the executive budget development process, as Crecine observed, decisions are made on such small changes that conflict is eliminated, since the bureaucratic stakes seem fairly low and professional objectivity is rewarded. When the issues remain, they surface in the polyarchal interest
competition of the legislative budget process, thus largely removing budgetary policy decisions from executive to legislative officials.

Comprehensive Planning

Criticisms of the incremental nature of performance budgeting and its emphasis on measuring the efficiency and effectiveness of governmental programs at the margin, but not allowing for real comparisons of the overall functions of government, led to a call for a more comprehensive, non-incremental approach to budgeting. The early developers of performance budgeting had intended that it serve a more comprehensive, comparative function. The complexities of performance measurement for many governmental services, its focus on operational-level measurements, and its orientation to short-run economic marginal analysis, tended to preclude its use as a comprehensive planning tool in most local governments. Budget reformers began in the 1950's and 1960's to suggest that budgeting should focus more broadly upon planning, management, and strategic decision making, rather than operational control and performance improvements.²⁵

Budgets fulfill three main roles according to Robert A. Anthony: operational control; managerial control; and strategic planning.²⁶ The incremental budgeting systems described above were concerned with operational and managerial control over governmental functions. Strategic planning can rarely be done incrementally. Proponents of comprehensive budgeting argue that the important budgeting decisions of
governments are strategic, and relate to consideration of alternative means of achieving governmental objectives, rather than incremental improvements in the operational efficiency or effectiveness of existing programs. Application of a budgetary process of comprehensive planning, including analysis of a wide range of policy alternatives, began at the federal level in the Department of Defense in the mid-1960's, and became the model for subsequent comprehensive planning/budgeting attempts in many other agencies.

Planning, Programming, Budgeting

Planning, Programming, and Budgeting (PPB) systems are based upon two fundamental ideas. First, PPB was designed to promote comparison among broad governmental programs as a part of developing budgets, in order to allocate resources in the most efficient and effective manner to achieve policy objectives. The second premise of PPB was that long-range systematic cost-benefit analysis of policy and program alternatives can provide information which will lead to better multi-year, as well as annual allocational decisions. Although it is widely recognized that the implementation of PPB in federal domestic agencies in the 1960's was a failure, many lasting features of PPB have remained as part of subsequent budgeting systems.

One of the distinguishing features of PPB is the importance of the program structure as an alternative budget classification format.
Line-item budgets were structured according to objects of expenditure. Performance budgets were organized by functional unit, especially corresponding to the organizational structure. These formats prompted budget decision making on the same basis, the former by material inputs and the latter by organization units. PPB required development of a broad program structure which cut across organizational lines. Agencies or service units were grouped according to broad programs such as public safety, health and welfare, recreation and leisure. Multi-year projections of needs, costs, and benefits were developed for the major programs as well as their component parts to facilitate decision making on allocations among those broad categories. Once initial tradeoffs were made at the program level, further decisions could be made at each sub-program level, also based upon systematic, multi-year analyses. Going beyond performance evaluations of functional units as primary decision criteria, PPB required budget decisions to be based upon long-range priorities (which might or might not include political factors) and systematic analyses of needs, demands, outputs, and impacts of the broad governmental categories, as well as of their functional component parts. This higher level, strategic planning focus was seen by PPB proponents as a way of reforming the polyarchal, interest-dominated, compromise-oriented, political budget process in order to improve budget decisions and make them more rational through systematic analysis.
Few cities have utilized PPB fully because of its highly structured nature and high implementation costs. These include both developing a program structure and educating legislative branch officials in the usefulness of its structure and analytical premises. The strategic planning framework, using a broad program structure and whatever degree of analysis their data and expertise could support, has been implemented in a number of cities, however. In a study of fourteen Michigan cities for his doctoral dissertation at Michigan State University, Lewis Friedman found that many of them were using some modification of program budgeting, rather than a more traditional incremental process.\textsuperscript{31} He noted a wide variety of budgetary processes in the fourteen cities, as well as diverse expenditures patterns. Friedman concluded from this research that the type of budgetary process used did affect the expenditure patterns of the cities.\textsuperscript{32} This result tends to support the PPB premise that analytical techniques and strategic planning orientations in budget program structures can be influential in altering the type or quality of allocational decisions. If, or to the extent that, this is the case, then the budget process model used for municipal declining revenue situations is likely to affect the quality of those decisions and the likelihood of successful management throughout a budgetary crisis.
Shortcomings of PPB in Budgeting for Decline

The strategic planning orientation of PPB rests on an important assumption: that reasonably accurate forecasts can be made of future expenditure needs and revenues. Cities in a revenue cutback situation may not have that capability. The sudden loss of a major industrial taxpayer may invalidate previous revenue projections, while the uncertainty of future jobs for its unemployed workers may complicate subsequent forecasting. In addition, PPB requires staff resources to be used for analyses of program alternatives. These resources may be diverted to crisis management in a cutback situation or, if the revenue losses are severe, may be lost in retrenchment.

PPB is inherently growth-oriented. While it does emphasize tradeoffs among broad program categories in resource allocation, it is oriented more toward cost-benefit analyses of new program or expansion, than to development of cutback recommendations.

Growth-oriented budgeting can be greatly improved by the addition of systematic, long-term analysis to a process which might otherwise be overly incremental. Budgeting for decline can also benefit from systematic analysis, but that will probably not make the cutback process less political. Rather than assisting in cutback budgeting tradeoffs by facilitating simultaneous consideration of all programs, PPB's strategic focus will tend to obscure the operational issues which must be considered in a retrenchment.
Since PPB programs are not grouped according to organization structure, no one person is necessarily responsible for a program, except the mayor or city manager, who is responsible for all of them. Broad policy decisions at the strategic program level must be translated into operational policies about layoffs and service levels. However political the analyses and strategic plans, it is unlikely that decisions to terminate city services, lay off employees, or raise taxes will be made entirely outside the realm of politics.

The program structure of PPB tends to suppress the conflict inherent in cutback decisions. It is much easier to decide, on the basis of sound analysis, to reduce a large program category by a certain amount in a retrenchment than to determine how to implement that decision. PPB is most beneficial at the strategic level, but the real conflicts in municipal cutback situations are managerial and operational. PPB was not developed for those levels of decision making.

Mixed Decision Processes

Declining revenue situations require resource allocation decisions to be made on two levels: operational and strategic. If only incremental, operational factors are considered in cutback budget decisions, then serious mistakes could be made which would affect the long-term fiscal viability of the city. An example of this is excessive borrowing to fund current expenditures, without adequate
provision for future debt repayment. On the other hand, city administrations could be so overly concerned with long-term economic strategies that they failed to make appropriate short-term decisions, e.g., too conservative financial management in a short-term fiscal crisis, which might lead to loss of employee morale or voter support. Neither view is appropriate. Instead, a budget process which incorporates both long-range strategic planning and operational control is needed.

The necessity for this type of mixed decision model in local governments was shown by Edward Banfield in his 1961 study of urban politics in Chicago. Basing his analysis upon the assumption (and observation) that the government of Chicago is basically polyarchal, Banfield used case studies to describe and analyze the nature of decision making in the city. Banfield saw Chicago as a city with a very decentralized formal power and authority structure and with a strong mayor who managed to centralize power from all those areas by using political influence to form a structure of control. By "influence," Banfield means the "ability to get others to act, think or feel as one intends." Banfield found that city decision making could be explained by two models: "social choice" and "central decisions." He then proposed an alternative "mixed decision choice" model to overcome the shortcomings of the others.

Banfield described the "social choice" model of city decision making as one in which decisions are "resultants" of the actions of
two or more parties (interest groups, generally, or politicians) who have no common intention and each seeks to further its own interests. The aggregate of all such actions is the outcome or resultant for the group. He contrasts this with the "central decision" model, one in which a purposeful or deliberate decision is made by someone (mayor, planning commission, council) as a result of trying to find a rational solution to a problem for the group as a whole. The "social choice" model is pluralistic and incremental, while the "central decision" model is rational, analytical, an attempt at a comprehensive solution to the problem.\textsuperscript{35} The problem with the "central decision" model is that it assumes that "it is possible for a competent and disinterested decision maker to find in any situation a value premise that uniquely determines the public interest."\textsuperscript{36} Because of the complexity of municipal public policy and the variety of interests and viewpoints, this is rarely possible. The value and problem of the "social choice" process is that there is a single decision criterion: the distribution of influence. "A criterion which reflects the distribution of influence also reflects, although roughly, the intensity with which the competing values are held."\textsuperscript{37}

Because there are obvious drawbacks to both types of decision processes, Banfield advocates a "mixed decision choice" model, utilizing the positive features of both models.\textsuperscript{38} Where criteria are available for central decisions to be made, that process should be
followed for rational, efficient decision making. Otherwise, in most cases of complex issues involving many interests, social choices should be made allowing all elements, factual and value, to be used to influence the decision result, so that as many as possible of the consequences of the decision will be articulated before the issue has been decided. This type of decision process has also been proposed by Amitai Etzioni as an alternative to both extremes of rational comprehensive and incremental decision models.

Mixed Scanning

"Mixed-scanning" differentiates contextuating, fundamental decisions from item or "bit" decision. The former are made through an exploration of the main alternatives seen by the decision maker in view of his concept of his (or the organization's) goals, omitting details and specifics in order to gain an overview of these alternatives. "Bit-decisions" are made incrementally, but always in the context determined by the fundamental decisions. As an example, a mayor faced with declining revenues first would consider, in a general way, all possible policy alternatives available, e.g., raise taxes, get intergovernmental grants, borrow, lay off employees, cut all services by a fixed percent, cut selective programs, etc., accepting and rejecting these in the context of political, legal, and other criteria. Then he would examine in much more detail those few alternatives which seemed to be most feasible within the political and legal contexts. His specific,
bit-decisions, then, would be made based upon his fundamental de-
cisions. For example, the mayor might decide that borrowing and
increasing taxes were not feasible legally and politically, but
selective cuts were also politically risky, so across-the-board
percentage cuts would be the response. Then his bit-decisions
would include how much these percentages should be and how they
would be implemented. In the mixed-scanning approach, the deci-
sion maker has considered a wider range of alternatives than dis-
jointed incrementalism would allow and has been able to approxi-
mate more closely an optimal outcome in his bit-decisions. This
is not to suggest that the final outcome will be optimal, but that
it may be superior to the incremental or satisficing choice.

Mixed-scanning would appear to be advantageous in a polyar-
chial local government setting because it allows the widest possible
range of general alternatives to come to the attention of the deci-
sion maker while limiting his consideration of specifics and details
to a few alternatives so as not to exceed his human information-
processing capacity. This strategy also provides an interesting
model for the city government organization, since at each succes-
sively lower level from the top (mayor) to bottom (line supervisor
and worker) mixed-scanning is a strategy which allows groups or in-
dividuals to place their incremental, bit-decisions within the over-
all framework of the organization's policies. The policy decisions,
fundamental and bit, made at each level are scanned and provide
the context for both types of decisions at the level below. Similarly, the lower levels' scanning of their perceived internal and external environments may provide information which is missed at higher levels and can become inputs to the policy process as these alternatives are presented to higher-up decision makers. Thus, mixed scanning can be seen to be a valuable process for decision making, especially in fiscal crises or in nonroutine cutback situations when a radical, non-incremental policy change may be required.

Typology of Decision Strategies

James D. Thompson's work on organizational decision making supports Etzioni's theory that a uniform strategy is not always appropriate. According to Thompson, decision issues contain two dimensions: beliefs about causal relations which affect decision outcomes and preferences concerning those desired outcomes. These dimensions determine the decision strategy required in each situation. Thompson's model includes four decision types: Decisions which are fairly routine, about which there is agreement on the desired outcomes and certainty about the cause-effect relationships upon which the decision is based, can be made using a computational strategy. Lower-level government decisions based upon rules as formulas would fall into this category, corresponding to Etzioni's bit decisions. If, however, causal relations are not known with certainty, but the outcome is agreed upon by the parties concerned, a judgmental decision
may be required. This allows for an expert judgment to substitute for concrete knowledge of the expected results of policies, where there is consensus on the desired outcomes. In the opposite case, where causal relations are outcomes, political compromises must enter into the decision strategy. In Thompson's view, the fourth possibility, in which causal relationships are not known with certainty and no consensus exists on the desired outcomes, is not likely to result in a decision. These dimensions of decision making are illustrated in Figure 2, adapted from Thompson.

Cell IV of Figure 2 represents the situation in which there is disagreement about desired outcomes as well as uncertainty about causal relations involved in various policy alternatives. This situation is quite likely to occur in a municipal cutback management situation for several reasons. First, in any circumstance in which public services may be reduced there is a high probability of conflict among constituent interest groups concerning which services should be affected. Alternative policy proposals detailing targets for program reductions or maintenance of existing service levels will be controversial, whatever their nature. Second, in most cities growth or stability of the work force has been the rule historically. Reductions in force, whether across the board or targeted, may have uncertain effects on productivity, ability to maintain essential service levels, and employee morale. Other considerations such as affirmative action rules or union contracts may influence policy alternatives
FIGURE 2
TYPOLOGY OF DECISION STRATEGIES

and contribute to uncertainty in policy outcomes. Third, in many cases there is little knowledge about the probable results of proposed policy changes. Some proposals may require additional capital expenditure to save labor and materials costs in the long run, for example. If the future savings rate is uncertain or productivity of the new system depends on unknown factors, then predictions of outcomes may not be reliable. Fourth, in some cases the initial outcomes of service reductions may be quite predictable, but their secondary or long-term effects unknown or seriously questioned by interested groups. Automated garbage collection systems might be an example of a policy alternative with uncertain savings and productivity results, while closing senior citizen centers could typify a controversial policy outcome.

Uses of Alternative Strategies

The decision typology in Figure 2 illustrates that differing strategies are appropriate for varying types of decision situations. In this model decision strategies appear as distinct cells, mutually exclusive and dichotomous. It might be more accurate to represent decision strategies as continua with these four strategies as extrema. Representation in a four-cell model, however, provides an analytical tool which can focus attention on the strategies which may be most helpful in cutback budgeting situations. Because the cost of decision strategies tends to rise as their complexity increases, the simplest appropriate strategy should be used. In cases where there is both
agreement on the outcome and certainty about the results of proposed action, decisions can be made computationally. Most routine decisions in city government that occur at the operational level fall into this category. Some might dispute whether these are decisions, but as an example, someone routinely makes a decision to add a certain amount of chlorine to water in a city treatment plant based upon tests of water samples. The decision is made computationally, according to a formula. It is an incremental or bit decision regardless of the amount of chemical added, because it follows a fixed rule and does not represent a departure from the status quo. Monitoring the water quality and incrementally deciding to add chemicals whose effect is known to maintain a particular water quality, an agreed upon policy outcome, illustrates the computational strategy cell of Figure 2.

In some situations there is a consensus about the policy outcome desired, but a high degree of uncertainty exists regarding the probability of proposed policy alternatives achieving the desired results. Firefighting is an example of the need for a judgmental strategy as in Cell II of the model of Figure 2. The outcome, saving lives and property, is agreed upon by all, but in each individual fire the means of achieving it may be uncertain. Decision making is likely to be of Etzioni's mixed-scanning type, providing as much wide range information as possible and focussing on details where wide-range scanning picks up trouble spots. A judgmental decision is made based upon the available information and the chief's expert knowledge of results when
firefighters and equipment are deployed. If the judgment as to causal relations proves to be inaccurate, incremental or radical changes are made in deployment strategies until the outcome is achieved to the extent possible. Many decisions, from determining building codes to developing crime prevention programs, are based upon judgmental decision strategies, i.e., individual judgement, usually based upon expertise, is used as a substitute for knowledge or certainty that proposed policies or actions will bring about the desired outcomes.

In other cases causal relationships may be fairly well known, but controversy surrounds the outcomes of proposed policies. Obviously, many examples of this situation can be found in city governments, especially in a cutback situation. There may be a general consensus that reductions in the frequency of garbage pick-up may be inconvenient and possibly insanitary, that reduced street maintenance will cause potholes and inconvenience to drivers, that rate increases will cause some people to ride buses less frequently. Disagreement arises over which of these alternatives should be used to achieve the expenditure reductions necessary to balance the budget. In this type of decision situation a bargaining or compromise strategy is appropriate. Political bargaining among the competing interests, usually through their representatives in administrative agencies or before city council, is needed to achieve a compromise policy decision, as in Cell III of Figure 2. Union contract negotiations fall into this category; causal relations are not uncertain, but unions and management disagree
on the desired outcomes in terms of wage levels, work rules, or fringe benefits packages. Decisions made using this strategy are likely to be incremental, differing from the status quo only marginally as compromises are made; although occasional non-incremental changes could result from compromises.

The fourth type of decision is characterized by both uncertainty about causal relationships affecting the results of policy actions and by disagreement over the desired outcomes. As described above, many cutback budgeting situations will be of this type, requiring a creative decision strategy, which must include a means of resolving the political disagreements over the ends to be achieved. A complicating factor, which may preclude a conventional political bargaining strategy leading to a compromise situation, is that not only the ends are disputed, but also the means. New alternatives may be needed which previously had not been developed and which may differ radically from the status quo or from conventional practices. The creative strategy required in this situation is one which allows or facilitates development and analysis of such new alternatives and their implementation. This strategy is likely to include recognition and use, rather than suppression, of those means-ends conflicts.

**Conflict in Organizations**

Conflict tends to be avoided in organizations, and if unresolved to be transferred if possible to legislative or judicial processes in
the public sectors. A conventional response to a conflictual situation in an executive, i.e., city administrative, agency would be to reduce that conflict to a minimum through manipulation of various controllable factors within the organization. Social and behavioral norms as well as an hierarchical organization structure encourage compromise- or concensus-seeking behavior and discourage overt expressions of disagreement, conflict, or divergent alternative viewpoints. For the most part, this is positive and conducive to efficiency and productivity in organizations especially at the managerial and operational control levels. One of the main functions of hierarchical authority in an organization is to resolve conflicts at lower levels.

In cutback situations requiring creative decision strategies, however, conflict is a fundamental characteristic of the decision problem, not an aberration to be suppressed or eliminated through rational organization structures or decision processes. The problem faced by a distressed city's Mayor is a political one not likely to be removed simply by suppressing internal conflict over resource allocation among departments. Internal conflicts arise for the same reason external ones do, and as a result the two might best be resolved in parallel fashion. A creative internal decision strategy is needed which reflects the external issues and thus enables the Mayor or City Manager to make policy choices for cutback management which resolve to the extent possible both internal and external conflicts.
Conflict, if properly managed, can be conducive to creative problem solving especially if a high level of uncertainty or disagreement exists regarding the correct interpretation of objective reality. Managed conflict can be used within an organization to insure that multiple positions on issues or divergent beliefs about causal relationships can be articulated in the decision or policy making process. In a city government there are obvious risks associated with conflict; for example, internal productivity losses could result if a state of perpetual conflict caused morale to fall, or paralyzed organizational activity. Similarly, uncontrolled external conflict could have negative political ramifications, detract from the acceptability of government programs, or reduce citizens' willingness to support the government, e.g., through reelection of officials or by voting tax increases where necessary. Successful use of conflict requires a depersonalized, institutional process which is structured to achieve a competition of ideas rather than a personal competition among individuals or groups to "win" a decision maker to a particular viewpoint. Institutionalization of the process is required in order to establish a priori the conditions under which conflict will be continued or terminated, so as to preclude growth of an uncontrolable or vituperative process out of an attempt at constructive problem solving.
Creative Decision Strategies

One example of the institutionalization of conflict in public organizations is the municipal budget process. While some executive budget processes tend to suppress rather than utilize conflict as we have discussed above, all include elements of competition over available resources to some degree. Budgeting under conditions of resource decline after the loss of a major industrial taxpayer is likely to engender more, not less, conflict than would budgeting for periods of revenue growth. As we have shown above, creative decision strategies are often required in cutback situations. The budget process used to develop and analyze alternatives and to make resource allocation decisions is at least a large part of that decision process. In small or medium-sized cities the budget process will probably comprise the decision strategy, since few will have resources for additional search for or analysis of alternatives.

The types of creative decision strategies which may be used in a city's search for cutback alternatives are shown in Figure 3. Two dimensions of the budgetary process used are identified in that typology: the type of search strategy used and the degree of centralization in decision making. The degree of centralization in decision making refers to the extent and type of participation in the governmental process. Most U.S. local governments are representative in nature, although the purely democratic form of government can be found in New England town meetings. Authoritarian regimes are not
<table>
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<tr>
<th>Degree of Centralization in Decision Making</th>
<th>Incremental</th>
<th>Mixed</th>
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<td>III</td>
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<td>Decentralized Mixed Scanning</td>
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<td>II</td>
<td>V</td>
<td>VIII</td>
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<tr>
<td>Pluralistic Social Choice</td>
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<td>Institution:lized Allocational Conflict</td>
<td>Planning Programming Budgeting</td>
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<td>Centralized Comprehensive Planning</td>
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Source: Developed by Author

FIGURE 3

CREATIVE DECISION STRATEGIES FOR CUTBACK MANAGEMENT
as likely to be found in local governments in the U.S. as in some other nations, or in particular private firms. The three types of search processes used to develop policy alternatives have been described in earlier sections of this essay.

In most municipal cutback budgeting situations, the three cells of interest in this nine-cell model in Figure 3 are II, V, and VIII. The strategies found in cells II (pluralistic social choice) and VIII (planning, programming, budgeting) were described earlier. The former is an incremental process, characterized by political bargaining and decision making only at the margin. The latter includes comprehensive alternative development and analysis, long-range planning, and tradeoffs between programs at the strategic level. Both tend to suppress conflict in the executive budget process.

**Institutionalized Allocational Conflict**

The third decision strategy utilizes rather than suppresses allocational conflict. The cell V situation in Figure 3 includes a representative governmental regime, typical of local governments, and a mixed-scanning search process for budgeting policy alternatives. The mixed search process both provides broad strategic information in a multi-year context, whenever available, and is attentive to the operational and managerial details so important for maintaining the everyday functions of local government. Its unique feature, however, is that the combination of representation of varying interests and access
to both strategic and operational information tends to create and institutionalize, rather than suppress, conflict.

Unlike incremental models which suppress conflict by narrowing the search for alternatives to incremental changes from the status quo, thus allowing disagreements only on matters of factual information, the institutionalized allocation conflict (IAC) model does include broad strategic scanning which will probably surface alternative interpretations of information and may cause disagreement over outcomes to be achieved. Similarly, the IAC model differs from PPB because it maintains an interest in the operation of governmental functions in addition to broad strategic programs, thus allowing conflict over means to achieve those ends to surface as well. The conflict is institutionalized within the budget process, however, which has always included some elements of political competition and conflict if not in the executive branch, then in the legislative process.

Using the IAC model for cutback budgeting, despite the conflict in its title, need not result in warlike combat among competing interests any more than the legislative budget debates do. What the model does is retain in the executive branch a measure of the policy making prerogative that might be lost to the legislature, i.e., city council, if the executive budget process too-successfully suppresses allocational conflict. Conflict in this sense is defined more as rational debate informed by politics than as overt combat over policy issues.
Typology of Conflict

Conflict theorist Anatol Rapoport has provided a typology of conflict which may be helpful in structuring the IAC process for constructive use in cutback budgeting. In his view there are three levels of conflict ranging from least to most useful and constructive: fight; game; debate. Fights involve the use of force at an irrational level. They also usually terminate in victory for one side and defeat for the other. Games also terminate in victory for one side, however, they are conducted rationally and depend upon technical skill to achieve it. The object of a debate is not victory, but convincing the opponent that one's viewpoint is valid or modifying the position of the opponent on a particular issue. This can only be done if each side in the debate really tries to understand its opponent's position and then re-examines its own position on that basis. In this way new insights are introduced through the debate process. Debate between opposing viewpoints, then, is structured conflict leading to new insights, better understanding, and an outcome in which resolution of an issue is achieved, not victory for one side over another. It appears feasible to extend the usual two-team debate structure to include many differing interests. The model for this sort of n-participant extension could be the budget process for allocation of resources among competing uses.

Organizational conflict also has been described by Louis Pondy, an organizational systems theorist, as occurring within four subsystems
of activity: functional; social; informational; and political. Functional conflicts are related to job roles, authority structures and incentive plans, and similar job or task-related issues. Social conflict occurs in social and motivational relationships among individuals and groups in the organization. It is related to individual or group feelings of tension, dissatisfaction, and similar emotional or personal responses. Conflicts which occur when problems seem to be insoluble, or when there are disagreements about goals or choices of alternative solutions, occur in the informational subsystem. The political subsystem requires balancing resources with desired activities, and conflict occurs when demands of various groups are so inflexible as to preclude a bargaining or compromise solution. Pondy shows that interindividual conflict in organizations, especially within the informational subsystem, is primarily related to disagreement over criteria for decision making, which he terms "goals." Political conflicts are also related to disagreements about goals, and occur when there are also strong interdependencies among parties. From this typology, it seems apparent that informational and political conflicts could be structured in such a way as to bring enlightenment and new ideas to bear upon the problems of municipal cutback management and budgeting.

Structured Use of Conflict

By merging the categories of conflict listed by Pondy with Rapoport's levels of conflict, a typology of organizational conflict can
be developed which suggests a structure for use of conflict in the IAC decision strategy. In Figure 4 conflict can occur in four sub-systems at each of three levels. Of course it is highly doubtful that an organizational conflict would occur as a physical fight, and we have already determined that social and functional conflict are not a primary concern here. We are left with the non-shaded portion of Figure 4 as the area in which a structured process including conflict, rather than avoiding it, would be appropriate. The two levels of conflict illustrate two possible structures: game or debate.

While games provide for the orderly conduct of conflict and guidelines for continuation or termination, they still result in victory for only one side or coalition and provide few new alternatives that are not already in the rules. Debates, on the other hand, if conducted in such a manner as to promote genuine listening to and understanding of other positions than one's own, and if extended to include more than two parties, seem to offer a process which would lead to new insights even in a situation of disagreement and uncertainty about both ends and means of policy alternatives. Debate is also appealing as a process in an administrative or political setting, since it is already used in legislative deliberations and is similar to adversarial court and hearings procedures. Practical use of debate in a city government as a creative strategy for cutback decision making, however, would seem to require a structured process which could be managed by city officials within the existing organization structures.
Levels Of Conflict

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FIGURE 4

TYPOLOGY OF CONFLICT IN ORGANIZATIONAL SUBSYSTEMS
The Dialectical Approach

The IAC approach to decision making could be implemented in a city government to provide just such a structured process for cut-back budgeting. Using the basic features of a Hegelian dialectic, i.e., presentation of thesis and antithesis leading to resolution by synthesis, a structured debate could be used to juxtapose differing policy objectives and beliefs about causal relationships required to achieve them.\(^5\) A dialectical approach to policy analysis has been proposed by Pondy and his colleague Ian Mitroff as a way to present "the strongest possible debate on the nature of the problem between two or more sharply contesting views of the problem."\(^6\) The object of this juxtaposition of differing viewpoints is to expose the variations in underlying assumptions which lead to such diverse conclusions or proposals based upon the same objective facts. By managing and observing this type of dialectical conflict, the decision maker is presented with both the alternative policy proposals and the underlying assumptions or beliefs about causal relationships which affect them. In this way either a synthesis can emerge from the dialectical process itself, if a new policy idea or consensus develops during the debate, or a decision can be made at the culmination of the process with the benefit of a greater knowledge of the issues and probable outcomes of the various policy alternatives than might otherwise be expected. The dialectical approach to decision making is based upon the "presumption that conflict is a better principle than
agreement in exposing the hidden assumptions on which every representation of the world depends." It is especially adaptable to the IAC strategy for the cutback budgeting process, since it attempts to present as much relevant information as is possible to decision makers through a structured process which is not haphazard and can be managed constructively.

Decision Behaviors

That a dialectical process which facilitates confrontation among diverse positions and interests can produce ideas superior to those from a more incremental process is supported by the work of Kenneth Thomas. He agrees with Mitroff and Pondy that constructive processes for airing conflicts can confront an individual with factors which were previously ignored, unknown, or discounted and in this way assist him in arriving at a decision which synthesizes these factors. This shifts the emphasis from suppression or elimination of conflict to its management, in order to avoid only its non-constructive elements. Thomas has provided a useful model of conflict management behavior based on each party's stake in a relationship and the degree of commonality of interests between the parties. He postulates that high stakes and mostly common interests will result in collaborative behavior, while high stakes and mostly conflicting interests result in competitive behavior. Adapting his model to a municipal cutback budgeting situation, it can be expected that for issues on which there are highly divergent positions and strongly felt interests, competitive,
conflictual behavior will result, which could benefit from a dialectical decision process leading to resolution through synthesis. In other types of situations decisions could be made using more conventional strategies. Figure 5, adapted from Thomas, illustrates this point, which reiterates the value of a budgetary decision process which institutionalizes allocational conflict.

Implementation of a Dialectical Model

The reader may at this point be in agreement with the author's premise that a dialectical debate process for utilization of conflict in the process of cutback budgeting might be theoretically desirable, but doubt that such a process could be implemented and managed with results that are worth the effort. In fact, a dialectical process for strategic planning has been developed and successfully implemented in a corporate setting. Implementation of this process is described in an article by its developer, Richard O. Mason. The process began when the planning department of a large corporation developed a plan, as the thesis of the dialectic, which recommended a future course of action for the corporation. The underlying assumptions which supported the plan, based upon available data, were made explicit (with the help of Mason as consultant to the process). A counterplan, the antithesis, was then developed based upon alternative assumptions contrary to those supporting the plan, which were held by other members of the corporation, using the same data. These two, plan and counterplan, were presented to the firm's management
Intensity of Interest in Policy Issue

High

• Competitive Conflict

• Collaboration

Low

• Compromise

Low

• Accommodation

High

Degree of Commonality of Interests


FIGURE 5

MODEL OF DECISION BEHAVIORS
in the form of a structured debate, both in written form and in an oral briefing session. In this case, both sides' oral arguments were given by one individual in order to eliminate differences in personal persuasiveness or style which could influence the process. The executives who participated then made their decisions on the firm's strategic plan based upon the information provided in the dialectical debate. In the case described, a synthesis plan did emerge, utilizing what the top executives believed were the best points of both plan and counter-plan, and based upon valid assumptions which were then explicitly known by all parties.\(^56\)

The planning process described used Mason as a consultant to facilitate the determination of assumptions underlying the initial plan, to develop the counter-assumptions and counterplan, and to present both plan and counterplan in the dialectical structured debate. Use of a consultant entails costs, not only for his time, but also in possible errors in finding out both the hidden assumptions held by planners and the alternative assumptions held by other firm members which could be used in the counterplan. Use of an in-house staff member in this role, however, as suggested in Mason's study, which considerably reduce both types of costs because the staff member, already a part of the organization, would be more likely to pinpoint correctly the assumptions held by himself and others. In applying the dialectical approach to a governmental cutback management situation it seems imperative that costs of the process, both financial and political, be minimized.
Use of an internal staff member as a facilitator in this process may also have costs, especially in a cutback situation. The individual would not only have to be reliable and able to ferret out hidden assumptions held by colleagues, he also would have to be insulated in some way from retaliation by other employees who might blame him if their programs were the ones recommended for cuts at the conclusion of the debate. The more open environment of municipal government, in contrast to the privacy of corporate decision making, could also pose problems. If the debate were open to reporters, as most governmental processes now are because of "sunshine" laws and freedom of information statutes, external conflicts might be aroused prematurely as the various budget reduction alternatives were presented, even though they might later be rejected. If allocational conflict is to be institutionalized as an aid to cutback budgeting, these problems will have to be resolved.

Cutback Budgeting with Institutionalized Allocational Conflict

In fact, these problems are not new, nor are they unique to cutback situations. One of the reasons conflict tends to be suppressed in most executive budget processes is probably that it threatens individuals caught in its midst and can cause serious political problems if (or when) preliminary budget analyses and proposals are made public. It may be possible, however, that the very nature of cutback situations includes so much allocational conflict that the particular budget process used is not
likely to increase appreciably the political risks. If that is the case, then the IAC strategy for cutback budgeting may be appropriate.

Since a formal budget process already exists in some form in most cities, it merely would have to be modified in order to implement an IAC strategy. The actual format used for IAC would probably vary from city to city, depending upon its size, the analytical capabilities of its budget staff, the availability of data, and so forth. Certain common characteristics would be expected, however, which would distinguish IAC from other budgetary processes. These would probably include:

1. Development of a strategic plan by the Mayor or City Manager giving broad policy guidelines to be followed in cutback budgeting, and dissemination of that plan to agencies with budget preparation instructions;

2. Development by agencies of proposed budgets, including both operational and strategic considerations;

3. Development by agencies and central budget (or Mayoral) staff of alternative, counterbudgets, based upon different priorities and assumptions;

4. Compilation of budgets and counterbudgets by budget (or Mayoral) staff, including explicit articulation of underlying assumptions as well as supportive facts;

5. Presentation of the budget-counterbudget dialectic in writing for Mayoral consideration;
6. The structured debate, using city employees as presenters of their agency views and possibly including representatives of community interest groups;

7. Cutback decisions based upon a synthesis of the budget and counterbudget alternatives, or a choice among them.

This process is illustrated in Figure 6.

Structured Debate Processes

The structured debate in this process could be accomplished in several ways. The Mayor's executive policy staff could be selected so as to constitute a representative group for decision purposes. Selection of individuals for key policy or administrative positions on the basis of divergence of views and representativeness of community interests defies the usual staffing choice criterion of convergence of views with those of the chief executive, however. Nevertheless, this arrangement could be managed by a strong executive, provided that basic, underlying values, such as the existence of the city government and its component parts, were not excessively diverse. Individuals, regardless of how representative of diverse community interests, when placed in organizational positions of authority and responsibility will tend to avoid conflict on issues for which other decision strategies will suffice, thus ensuring that overt conflicts will occur only on those issues about which there is disagreement over outcomes as well as causal relationships to achieve them, and for which other strategies are inadequate.
MODEL OF A DIALECTICAL DECISION PROCESS FOR CUTBACK MANAGEMENT
With a representative, diverse group of key policy staffers and/or department directors, staff meetings and budget headings in cutback situations could be managed in a structured debate format similar to the formal process discussed above. This would provide the mayor and top management team with necessary information for reaching a synthesis position. One advantage of this arrangement is that for many operational issues involving conflict between only two or a few departments or interests, the representatives could participate in a structured dialectical debate process on smaller scale, perhaps even in writing, to assist the Mayor in obtaining all relevant information, including underlying assumptions and goals, for deciding among the conflicting positions. Thus, the Mayor could gain beneficial spill-over effects from the cutback decision process devised to resolve allocational conflicts, possibly improving decision making in general.

Another model would require agency development and presentation of budgetary alternatives for consideration in the budget process. This is not really a new concept. In suggesting that a theory of budgeting was needed which would build upon sound principles of economic analysis, Verne B. Lewis in a 1952 article proposed a budget process which required several alternative plans to be presented for consideration. His proposed alternative budgets were to be developed for specific resource levels, based upon percentages of the previous year's budget, e.g., 80%, 90%, 100%, 120% of the base. This type of alternative generation was expected to provide decision
makers with information about tradeoffs within programs at various funding levels, as well as marginal cost information to facilitate inter-program comparisons. Termed "target budgeting," the alternative budget procedure proposed by Lewis has been used in the State of Michigan to budget for declining revenue situations. 60

Institutionalized conflict through deliberate representativeness of key officials and advisers is also not without precedent in public administration. President Franklin D. Roosevelt, in a severe "cutback" type situation in the 1930's, purposely fostered conflict among his top officials and advisers, both within and outside government. By recruiting strong individuals representing divergent backgrounds and viewpoints for key positions and through his own use of alternate information sources, President Roosevelt encouraged and purposely structured work definition in order to promote conflict among his inner circle. As a result of the insights and new ideas which came out of this type of dialectical process, he was able to develop and implement creative, innovative, non-incremental responses to the serious problems of the 1930's and 1940's. 61 President Roosevelt managed this process so that both he and his advisers would be forced to reassess their assumptions and consider new ideas as they emerged from the continuous dialectical debate. President Roosevelt's model was fairly extreme, including conflicting and overlapping assignments to top advisers and Cabinet members and nearly continuous conflict within his administration.
A similar process, perhaps less costly in terms of time and energy, could be implemented in a city government by careful selection of department heads or policy staff to assure both representativeness of community interests and openness to new ideas. Outside advisers could also be used by a Mayor or City Manager, as they were by President Roosevelt, to provide representation of additional interests not included internally. In this example, the dialectical debate would occur in staff meetings or budget hearings, with the Mayor or (City Manager) managing the process by arbitrating disputes and making final decisions that could not be reached by eventual consensus on the emergent synthesis proposals. Effective management of the dialectical debate process by the mayor is crucial. Without it, the allocational conflict could degenerate from a forum for idea generation and synthesis to a personal power game or fight, defeating the purpose of the dialectical process and possibly resulting in a loss (rather than a gain) of productivity.

Management of Allocational Conflict

Management of allocational conflict is not likely to be easy. The IAC process requires that the conflict inherent in all budget processes, and decidedly more pronounced in those requiring cutbacks, be surfaced in a structured debate so it can be utilized to improve decision making. A Mayor can, however, successfully manage allocational conflict by maintaining a fairly formal budget process. The formality of the process, the necessity of first
completing budget forms for alternative proposals, and the subsequent opportunity to speak for or against them in a debate setting, will tend to keep all but the most zealous advocates from pushing the debate into a fight. Most medium-sized cities have fairly professional employees in key positions, who can be relied upon by the Mayor to participate in the dialectical debate process in a constructive manner. Those who do not could be excluded from future debates, and required instead to confine their participation to the written part of the process. If legislative debates can remain relatively calm, as they generally seem to at all levels of government even with reporters present and tape recorders rolling, there is no reason to believe that similar reasonableness would not prevail in an executive debate.

Summary and Conclusions

Loss of a major industrial taxpayer and concomitant reductions in local revenues present a different budgetary problem from that experienced in periods of revenue growth. Declining revenues require expenditure reductions in order to meet municipal balanced budget requirements. The short and long term effects of program or service reductions may not be certain, especially if layoffs or major program changes seem to be required which disrupt organizational structures or established community service patterns. There may also be disagreement within the city administration and in its external community environment over the desired outcomes to be achieved and
priorities for their achievements. This combination of uncertainty about means for retrenchment and dissensus regarding desired outcomes is likely to produce budgetary conflicts.

In contrast to budgetary models which suppress conflict by "muddling through" incrementally or focussing only on long run strategic planning, a cutback budgeting model was developed in this essay which institutionalizes and takes advantage of that conflict to develop policy alternatives and arrive at budgetary decisions. The institutionalized allocational conflict model structures the cutback decision process so that alternative budget requests are presented along with preferred ones, thus allowing the Mayor or City Manager to consider program and policy tradeoffs at both the strategic planning and operational levels. The IAC process also includes a structured debate in which the various alternatives are presented as theses and antitheses. At the culmination of the process, decisions can be made based upon a synthesis of the alternatives presented, or a choice among them. It should be noted that adversarial administrative processes are not without precedent, e.g., administrative hearings, therefore, this model is a novel application of an existing concept, rather than a totally new process.

In a cutback decision situation incorporation of this model into the budget process allows the inherent allocational conflicts to surface and be resolved as comprehensively as possible, given available information. Actual decisions made may be incremental changes
or radical innovations, but decision outcomes will not have been limited by the budget process itself. The ideal type of rational comprehensive analysis will probably not be achieved either, but to the extent that analytical resources and information are available the IAC process does require some consideration of alternatives. This mixed decision process model also seems feasible to implement as a modification of the existing budget process in most medium-sized cities.

Innovation and creativity are not necessarily qualities associated with municipal budget processes. The institutionlized allocational conflict model for cutback budgeting may provide a forum in which innovative solutions to the problems of providing city services with declining revenues can be found. It is proposed here, not as a universal panacea for all budgetary problems, but as a way of including the allocational conflict which already exists in the process and using it as a positive force for creative problem solving. It can probably be implemented in most medium-sized cities by minor modifications to their existing budget process. While considered in this essay as a budgetary model for decline, it may also be appropriate for growth situations if they contain similarly high levels of conflict for some reason. This is a question for further research.

**Further Research**

Empirical tests of implementation of the IAC model in cutback budgeting situations would be desirable. While it appears from the
theoretical development above to be implementable, its usefulness as a budgetary tool cannot be assessed fully without an empirical test. Unfortunately, such a test is outside the scope of this project. The second essay of this dissertation, which follows, instead conducts case studies of five Ohio cities, in order to describe and assess the budgetary decision processes actually used by those cities in cutback decision situations. These five case studies also evaluate the Mayor's ability to maintain (or regain) municipal fiscal stability in a declining revenue situation after the loss of a major industrial taxpayer. These several analyses of cutback budgeting may also be helpful in further refining the IAC model.

Since mathematical modelling often can be an aid to understanding, the third essay in this dissertation develops a model of the cutback decision process. This mathematical model might be useful for evaluating the various alternatives developed for and from the dialectical debate of the IAC model in cities with sufficient analytical resources and data. It could also be used to simulate cutback decision making and so be an aid to further refinement of the IAC decision model.

Finally, the decision process developed in this essay raises difficult questions. Whether allocational conflict can be managed effectively once allowed to surface overtly in the executive branch which has been a bastion of consensus rather than conflict, is not
answerable with precision until this decisional technique is actually utilized. How the representation of minority interests is to be assured in the suggested dialectical debate must also be a concern in our pluralistic society. Whether city council members will be threatened by a competitive executive branch process, seeing it as a usurper of their prerogative to provide a forum for debate, is also intriguing.

Ultimately, the crucial question is whether or not better decisions actually result from the process here proposed. That answer would of necessity come from the residents of each affected city. This essay has developed the process in a theoretical context. Actual utilization would pose substantial practical difficulties. But the fiscal cutback situations here hypothesized pose hard questions not susceptible to easy answers or treatment by comfortable techniques.
NOTES TO ESSAY 1


2. Ibid.


4. Ibid., p. 51.


9. Ibid., pp. 85-86.


NOTES TO ESSAY 1: (Continued)


18. Ibid., pp. 133-142.


20. Crecine, p. 47.


22. Ibid., p. 73-75.


24. Ibid., p. 16-18.


NOTES TO ESSAY 1: (Continued)


30. Schultze, pp. 19-34.


32. Ibid., pp. 6, 230.


34. Ibid., p. 3.

35. Ibid, p. 326-337.


37. Ibid, p. 331.


NOTES TO ESSAY 1: (Continued)


46. Ibid., p. 402.


49. Ibid., p. 248-250.

50. Ibid., p. 253-254.


53. Ibid., p. 475


NOTES TO ESSAY 1: (Continued)


63. An open adversarial process may not always be helpful to decision making. For an alternative view of openness of governmental proceeding see Stuart M. Statley, "Let the Sunshine In?" American Bar Association Journal 67 (May, 1981), pp. 573-575.
ESSAY 2 - PUBLIC MANAGEMENT OF RESOURCE DECLINE: CASE STUDIES IN MUNICIPAL FINANCIAL MANAGEMENT

Does management affect the overall fiscal well-being of cities? Few observers, from "persons on the street" to academic analysts, would dispute the proposition that financial management probably plays a major role in determining the bottom-line fiscal position of most cities. On the other hand, overly conservative financial management requirements imposed by state laws and city charters, which obstruct the ability of elected and appointed officials to meet the service needs of their city's residents may also contribute to urban distress of a non-financial nature. Much of the recent literature on urban stress has emphasized the role of various non-financial, socioeconomic variables which seem to be both its apparent causes and its probable results.

Urban problems are undoubtedly related to socioeconomic variables such as the demographic composition of the population, the percentage of residents with incomes below the poverty line and the overall level of unemployment, as the growing body of fiscal stress indicators literature demonstrates. To attribute the plight of cities like Detroit, New York, and Cleveland solely to the socioeconomic characteristics of their resident populations and the increasing age and deterioration of their physical infrastructures, however, may also be to overlook a fundamental aspect of city government. That is, city government itself.
Are the "frostbelt" cities in the Northeast and Midwest making the most of their limited, and most likely declining, resources in order to serve the needs of their residents? In other words, are they well managed? Do the "sunbelt" cities really know what to do to avoid a future similar to their counterparts in the frostbelt, when natural resources are depleted or demographic trends change again? What could be learned from those declining cities which will assist their recovery as well as provide helpful guidance to other cities which are still growing? To what extent can management affect a city's financial stability in turbulent times? Answers to these and similar questions might begin to explain some of the disparities in financial status among cities which appear to have quite similar socioeconomic and demographic characteristics.

Questions about urban public management are probably asked much more frequently than they are answered. Although recognized to be important, the quality and role of management is difficult to measure. It cannot be considered independently of politics; public administration scholars have recognized for several decades that policy and administration are not dichotomous, but are components of the common whole of government. This is especially true of cities whose elected (i.e. political) officials tend to serve as administrators in a much more immediate sense than do their counterparts in state and federal governments. Of course, this effect may be mitigated by the form of government under which a city operates, e.g. council-manager or
mayor-council. Consequently, however difficult to quantify or measure, political and managerial factors must be considered, along with socioeconomic variables, as part of the problem of urban fiscal stress, and, concurrently, as part of a comprehensive solution.

Organization of Essay

The relationship between its management and the overall fiscal well-being of a city government is the focus of this essay. The role of top management in maintaining the fiscal viability of cities will be examined through the use of case studies as analytical tools. Several hypotheses will be developed relating the roles and activities of top-level managerial officials to city well-being and the maintenance of acceptable levels of public services in the presence of declining revenues. These hypotheses will be tested for five Ohio cities using case study data. The implications of the findings from these particular cases will then be compared to the results of other research on municipal cutback management. Finally, conclusions will be drawn about the relationships between financial management practices and the ability of cities to maintain public service levels in the presence of fiscal adversity.

Cutback Management

The phrase "cutback management," as used in the field of public administration, has come to mean the management of organizations which have declining real resource bases, either during short-term emergency
situations or because of long-term revenue losses.² Cities which have experienced revenue losses, either in absolute terms or in real terms after correcting for inflation, have of necessity been engaged in cutback management. Short-term economic shocks may not require substantial expenditure reductions in cities without other fiscal problems. Fiscal retrenchment of various types has been required in response to long-term real resource declines in many cities, because revenue shortfalls may be caused by voter tax-cutting initiatives as well as by unfavorable economic conditions. Inasmuch as few cities have had large surpluses historically, few possess a sizable surplus which can be used as a buffer when revenues begin to fall short of expenditure projections. Increased revenues or expenditure reductions become the only alternatives available.

Cutback management is required when public organizations such as universities or city governments are unable to support their existing levels of operations with available resources. Universities may be forced to reduce operations as declining student enrollments bring in lower income from tuition and state per-pupil subsidies. Smaller university enrolments also reduce demand for some of the products of universities, e.g. classes and faculty contact-hours. Up to a point, however, enrollment reductions may not automatically result in lower costs, since the pre-existing number of courses may continue to be demanded while the average class size declines.
Similar situations may arise in cities with stable or declining revenues in an inflationary economy. City services such as police and fire protection, street maintenance, and garbage collection are demanded by citizens at fairly constant levels even if revenues fall. Some service demands may increase for the same reasons revenues are decreasing, for example, in situations of widespread unemployment in an area after the closing of a factory. Difficult decisions must be made about how and where to reduce expenditures or raise revenues in order to balance the city's budget. These decisions are crucial to the quality of the cutback management process which follows, and probably to the future well being of the city.

Very little recent research has been done on cutback management in public organizations, mainly because historically revenue growth has characterized public sector budgeting. Recent events such as Proposition 13 and major city fiscal crises have changed that pattern for many local governments and this trend is expected to continue for the next 5-10 years. With budget cutters in the White House, it appears that even federal agencies may be engaging in cutback management in the near future. Interest in research in this area has increased as more public sector organizations are forced to reduce their budgets. Much of the available literature on cities is related to measurement of fiscal stress or to revenue forecasting for planning and budgeting. Once the extent of a cutback situation is known, through forecasting
or stress-measurement techniques, the task of managing within those resource constraints begins.

Cutback in Universities

Irene Rubin of the Institute for Urban Studies, University of Maryland, has hypothesized that decision making patterns will change in organizations which experience reductions in financial resource levels. At first, decision making will become somewhat chaotic as old, growth-oriented criteria are no longer valid and new decision rules for resource allocation have not been developed. Eventually, as more information is generated and new criteria for allocation of both available resources and budget reductions are developed, the decision process should be improved and result in resource allocation decisions which are superior to the pre-cutback experience. In a study of five universities undergoing financial stress, Professor Rubin found that decision making criteria did change and become more explicit as the budgetary information base expanded. But she concluded that the high level of uncertainty accompanying cutback situations precluded the unambiguous improvement in decision making that her hypothesis suggested would follow the initial period of confusion.4

Uncertainty in City Decision Making

The problem of uncertainty is compounded in city decision making if the economic conditions which have begun to reduce available revenues also lead to increased service demands from distressed sectors of
the local economy. Not only must city officials forecast revenues in order to develop or revise their budgets, they also must predict service level demands in order to gauge the political impact of cut-back decisions. This need for dual estimation in strategic planning tends to increase uncertainty significantly relative to a situation of stable (or possibly decreasing) demands and declining financial resources. Allocational conflicts, as discussed in the first essay, may become more acute. Cities with declining real resources, then, may be expected to experience similar types of upheaval to those found in the distressed universities and to have similar difficulties in resolving the retrenchment issues amid such uncertainty.

**Preconditions for Retrenchment**

Certain "preconditions" may enhance city officials' abilities to manage retrenchment in a declining resource situation. These include centralized authority to adjust budgets and make organizational changes to meet the lowered resource constraints; the ability to make necessary cutbacks selectively, rather than across-the-board; sufficient managerial continuity to carry out plans and strategies; timely and accurate feedback about the effects of any changes made; budgetary flexibility to transfer funds from one account to another, to allow substitution of capital for labor, for example; and sufficient incentive systems to promote improvement in productivity and conservation of resources.\(^5\)
Presence of any or all of the above preconditions cannot be assumed for most cities, however. Authority is generally fragmented between the Mayor and other elected executive officials on the one hand, and the city council on the other. Within the executive departments, multiple funding sources and legal restrictions often limit flexibility. Short terms of office for elected officials can eliminate continuity, especially in smaller cities where there are fewer appointed managers and more reliance on elected officials as managers. Centralization of authority and continuity are enhanced by a council-manager governmental structure, although a city-council with two-year terms could have sufficient discontinuities and changes in dominant coalitions to result in frequent turnover in city managers. In addition, feedback to managers on the effects of changes is likely to be slow and unreliable, especially in a turbulent, uncertain environment.

The ability to transfer funds between accounts may be restricted by state law or city charter, thereby limiting necessary flexibility. Political, as well as legal or contractual, considerations also reduce flexibility by limiting the ability of managers to target budget reductions to low priority areas. Finally, public sector incentive systems have traditionally relied upon budgetary growth, job security, and the opportunity to use organizational slack for pet projects to motivate managers and employees. Budget reductions and job insecurity reverse those incentives. If new motivational rewards and sanctions are not formulated to encourage resource conservation and productivity
Improvement, public sector cutback management will suffer from an
ability to implement necessary changes. In a municipal cutback
management situation, therefore, the preconditions for successful
retrenchment are likely to be absent.

The New York Experience

Probably the most studied case of fiscal stress, the New York
City fiscal crisis, seems to confirm this. As might be expected in
the absence of these preconditions, New York had serious difficulties
in its retrenchment process. New York's problems cannot be attrib-
uted solely to the absence of certain organizational preconditions
for management of decline, however. Political realities in an ex-
tremely pluralistic city and historical patterns of responses to those
political pressures were major contributors to the situation which led
to the bond-default crisis in 1975. That much-publicized financial
emergency, notwithstanding, New York is not the most financially dis-
tressed city in the U.S., according to several indices. New York's
response to its period of revenue decline beginning in 1970, may,
therefore, be helpful in describing and explaining retrenchment pro-
cesses in other, smaller and less publicized cities experiencing de-
clining revenues.

The New York retrenchment seemed to be characterized by three
types of responses, occurring in succession as revenue constraints be-
came more severe. First, the revenue declines were seen as short-term
problems and strategies of denial and delay were used, accompanied by use of short-term notes to cover deficits and deferral of maintenance expenditures. Second, as revenues continued to fall short of operating expenditures, incremental reductions in the labor force were made in most agencies through attrition. Some productivity and managerial improvements were made during this phase of retrenchment. Third, as the crisis became acute, more selective reductions were made in personnel and programs and attempts were made to increase taxes and user fees. Some of the latter changes were imposed by outside forces, such as the Emergency Financial Control Board. These three stages of response to fiscal stress seem to form a model applicable to other cities.9

Leadership Roles

The roles of various individuals and interests in shaping New York City's response to its fiscal crisis seem to indicate that the type of leadership present in a crisis can affect its outcome. Mayors and top organizational leaders are likely to respond more rapidly to crisis requiring organizational adaptation and change than will rank-and-file workers or middle managers, especially when fiscal crises threaten employment security. Fiscal crises, then, will probably be occasions that support, and indeed perhaps require, the centralization of power by city government leaders, especially in pluralistic settings, and that enhance their leadership roles.10
With centralization of power and strong leadership, the style as well as the content of the leader's actions become important. The "businesslike" approach to solving fiscal crises, is expected to attract more support from the business and banking community than would an approach perceived to be more "political" in nature, such as "power broker" or advocate of specific (non-business) interests. Similarly, the mayoral style affects the internal morale and functioning of the organization. Successful leadership depends, in part, upon the suitability of the Mayors' leadership and management styles to the internal and external constituencies of their cities' governments and their respective abilities to effect successful resolution of crises.  

Public versus Private Organizations

While it is widely accepted in business organizations that management is an important factor in the success of the business, this premise has not been applied as consistently to governments. Separation of powers between executive and legislative branches of government -- that valuable relic from the philosophy of the Enlightenment -- precludes a direct analogy to the corporate board of directors and the chief executive officer, who is usually a member of the board, although there are obvious similarities. Both corporate boards and legislatures set policies to be carried out by executives and managers, and both are responsible to constituents and shareholders who elect them. Sharing of political power between various separately elected executive officials in local governments, e.g., auditor,
treasurer, law director, sheriff, also undermines the ability of an
elected Mayor or appointed City Manager to manage a city. The po-
itics of reelection campaigns for both executive and legislative
positions and other "political facts of life" make cities more plural-
listic and open organizations than most corporations. Limitations on
revenue availability in this context make it more difficult for Mayors
and council members to maintain their political bases, since any re-
ductions in programs or services can be expected to reduce voter sup-
port among proponents of these programs.¹² The difficulties experi-
enced in New York City when attempts were made to bring the budget
under control prior to the 1975 crisis illustrate this problem.¹³

Also in contrast to modern corporations, city governments often
lack information about operating costs and the information that is
available may not be provided on a timely basis. Without a profit or
loss "bottom-line" city officials may have difficulty measuring the
efficiency and productivity levels of various departments. The very
nature of many government services, that are collectively provided
for market failure reasons, contributes negatively to a mayor's abil-
ity to apply business practices in management. Incentive systems
for efficiency of operation also are difficult to maintain, since most
public managers learn quickly that budgetary and organizational growth
bring personal and professional rewards, while cost containment and
efficiency measures that allow budget reductions usually do not.¹⁴
The inherent conflicts among different objectives of local government further restrict the application of business practices to city management. Conflict resolution processes must consider the many interests involved in a pluralistic society even when those interests appear irreconcilable. The public manager becomes the chief conciliator, bargainer, or power broker among these interests. It might appear, especially in times of fiscal crisis, that management is the least of the Mayor's or City Manager's concerns, so urgent are these other political demands. This observation gives rise to the hypothesis that management tends to be neglected. Since cities still function and appear to weather crises, some better than others, one might deduce, therefore, that management itself does not have a large influence on municipal service level outcomes, that these are largely determined by pluralistic political factors.

Hypotheses

One reason often given for the failure of public managers to influence policy is that they fail to recognize the long-range implications of a crisis or, having recognized the problem, they take action intended to minimize its effects and avoid politically difficult cut-back decisions. This appears to have been the case in New York City, for example: short-term borrowing and account transfers were used to hide deficits and minimize political difficulties. The more severe or prolonged the fiscal problems are perceived to be, the more likely
are municipal leaders to be forced to develop serious, long-term responses to those problems. Pressure for serious problem solving is most likely to come from outside the government itself, however, since there would still be few incentives for city officials to promote cutbacks from within. In New York, of course, cutbacks and changes were mandated by the Financial Emergency Control Board, by other regulatory agencies, and by the city's creditors in the banking and business communities. Yet many cities in fiscal difficulty never reach the crisis stage achieved by New York. City Mayors and Managers generally do appear to manage their cities through crises without being forced to do so by outside authorities.

The extent to which Mayors or City Managers (1) perceive fiscal crises to be serious and continuing, and (2) demonstrate willingness and ability to influence programmatic and service delivery outcomes in order to respond to the fiscal exigencies, provide the primary focus for the case studies which follow. Restated, these questions form the following null hypotheses.

\[ H_0^1 \]: The degree of perceived severity of a fiscal problem and the level of recognition by city officials that it is likely to be prolonged influence the probability of innovative responses to the problem and the likelihood of a favorable outcome.

The hypothesized relationships between these variables is illustrated in Figure 7 below. The actions listed in each cell of Figure 7 are
illustrative of the hypothesized relationships and are not intended to list all the possible actions in each cell.

The effectiveness of the actions taken in averting a financial crisis will depend on the influence of managerial activity upon the overall financial position of a city. \( H_0^2 \) considers that relationship.

\[ H_0^2 : \text{Municipal public management by top elected or appointed officials has a minimal effect on service level outcomes resulting from declining real resources. Political, legal, and socioeconomic factors cause any changes in services, programs, or priorities to be incremental.} \]

**Methodology**

These hypotheses have been tested in five medium-sized cities using case study data. The case study method for collecting data to test these hypotheses was chosen for several reasons. First, the nature of the hypotheses is such that quantitative socioeconomic and budgetary data, such as that available from the U.S. Census of Governments or similar state level financial reports, provide incomplete evidence for support or refutation. While giving fairly accurate portrayals of a city's financial situation in any given year or longitudinally, these data say little about the political and managerial decisions behind the balance sheets. In order to test the influence of management, it was necessary to collect specific, qualitative, managerial information not available in financial reports.
Perceived Severity of Fiscal Problem

<table>
<thead>
<tr>
<th>Expected Duration of Fiscal Problem</th>
<th>LOW</th>
<th>HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I Incremental (non-innovative) Response:</td>
<td>II Innovation (non-incremental) Response:</td>
</tr>
<tr>
<td>Long</td>
<td>- attrition reductions in personnel</td>
<td>- new service delivery methods</td>
</tr>
<tr>
<td></td>
<td>- no priority changes</td>
<td>- program priority changes</td>
</tr>
<tr>
<td></td>
<td>- productivity improvement</td>
<td>- layoffs</td>
</tr>
<tr>
<td>IV Mild Interim Measures:</td>
<td>- elimination of employee perquisites</td>
<td>- tax and fee increases</td>
</tr>
<tr>
<td></td>
<td>- deferred maintenance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>III Mild Interim Measures:</td>
<td>IV Strong Interim Measures:</td>
</tr>
<tr>
<td>Short</td>
<td>- attrition reductions in personnel</td>
<td>- temporary layoffs</td>
</tr>
<tr>
<td></td>
<td>- deferred maintenance</td>
<td>- across the board service reductions</td>
</tr>
<tr>
<td></td>
<td>- short term borrowing</td>
<td>- deferral of planned program improvements</td>
</tr>
<tr>
<td></td>
<td>- deferred capital outlay</td>
<td>- temporary fee or tax increases</td>
</tr>
<tr>
<td></td>
<td>- transfers from restricted funds to general fund</td>
<td></td>
</tr>
</tbody>
</table>

Source: Developed by Author

FIGURE 7

HYPOTHEZED MAYORAL/MANAGERIAL RESPONSES TO DECLINING MUNICIPAL REVENUES
Second, many studies of fiscal stress have been done using socio-economic variables to measure the degree of stress and to infer casual relations between those variables and the cities' financial conditions. While usually providing caveats alluding to the role of management and politics, these studies tend to discount their influence, essentially assuming the truth of the second hypothesis (H_0). Without going beyond those types of data, it would be difficult to test that underlying assumption. For public administration as a discipline, however, testing such assumptions is crucial. If it is indeed theoretically valid to assume away management as a factor in the fiscal health of city governments, then the public management profession is in serious trouble. If, as seems more probable, such assumptions are made simply for convenience and lack of available data, then research and data collection methodologies which begin to fill that void are sorely needed.\textsuperscript{16}

Third, much has been written about the experiences of a few large cities in financial distress, e.g., New York, Cleveland. While a thorough knowledge of a few extreme cases of financial stress and near-collapse can be very instructive, very little is known about management in less severe situations. Similarly, smaller cities receive much less research attention than larger ones, although their problems seem to be no less serious. A lot is now known about cutback management in these few large cities; very little is known about it under different conditions in different places. Case studies can
begin to provide an information base on tools and techniques of cutback management under different conditions. This information can then be used to improve management of resource decline and perhaps to eliminate its necessity in some cases, as well.

Case studies have limitations, of course. The most serious include the dangers of attempting to generalize from one case to the larger population and the difficulties of comparing results among various case studies. If the research community expected that only case study analysis would ever be done on certain topics, these limitations would pose serious problems for scientific inquiry. On the other hand, simple analogizing, while a primitive mode of thought, has not been without value in many decisional contexts, i.e., the law. At any rate, when case studies are used as preliminary data collection and analysis tools, in order to build a more complete knowledge base, these criticisms become less troublesome. Some experience is needed in any field before larger-scale hypotheses and research projects can be attempted, and case studies seem to be an appropriate method for gaining that experience. Since very little empirical work has been done in the area of municipal (or other level of government) cutback management, the field seems to be at that preliminary stage. Much of the published theoretical work now available is also preliminary, and generally calls for empirical testing, often suggesting the necessity of building a body of cases before further productive theorizing can be completed.
In this context, then, use of case studies to test hypotheses about managerial responses to fiscal crises is both valid and appropriate. It will contribute to a base of knowledge about cutback management which could not be obtained, except perhaps at great expense, in any other way at the present time. Of course, this reasoning implies that the cases studied here (and similar work in other cities) should be considered preliminary or foundational. Rather than providing definite answers, this research provides initial insights and suggests further questions while at the same time making contributions to the information base needed to answer such. The third essay of this dissertation develops a model based upon this information base which also may contribute to those answers. With these caveats, then, a description of the empirical case studies follows.

City Selection

In order to test the two hypotheses above, five cities were selected for the case studies. All are located in the same state (Ohio) which allows the researcher to compare the results in each city without the necessity of controlling for the effects of differing state laws, taxes, and regulations concerning city governments, in general. Differences in city structure and laws pertaining thereto may have effects, which are discussed below. In addition to state location, criteria for selection of the cities included: size; recent loss or severe decline in a major business or industry in the area; and willingness to participate in the study. Cities were selected ranging
in size from quite small (15,000 population) to medium sized (120,000 population). Large cities were excluded since most of the research and literature available to date has been concerned with large cities. The lack of knowledge about cutback management in smaller cities, where a lack of analytical and technical resources is likely to complicate the management process, is a gap in the literature which this research project will at least begin to address.

The five cities will be referenced in this essay by pseudonyms, in order to preserve anonymity of the individuals and city governments involved. All relevant descriptive information other than identifying names will be provided. For convenience, the cities will be named after former presidents of the United States. In no particular order, then, the five cities will be called: Harding, Harrison, Hayes, McKinley and Taft.

The Ohio Legal and Economic Climate in 1981

Ohio is a large, industrial state located in the Great Lakes region of the midwestern United States. The state has large coal reserves and a healthy agricultural sector; however, manufacturing industries dominate its economy. Approximately 29% of the state's labor force is engaged in manufacturing, well above the national average. Ohio's leading industries include steel, rubber, and clay and tile products. In addition, the state boasts the headquarters of a number of large corporations, including several in the finance and insurance industries. While this industrial base rightly
indicating a wealthy state economy, all regions of the state are not equally well off. Manufacturing employment in Ohio, as in other states of the industrial midwest, has been declining in the past five years. The national environmental restrictions on burning high sulfur coal have forced closing of a number of Ohio mines. The 1973-74 recession and more recent economic slowdowns disproportionately affected the automobile and related industries, which are a large part of Ohio's economy. While growth in other sectors has offset these problems somewhat, the state and its political subdivisions have experienced less prosperity in the past few years than had previously been taken for granted.

Ohio is an extremely low tax state. State/local taxes in Ohio per capita were $701 in 1978-79, well below the national average. As a percentage of personal income, Ohio state/local taxes rank lowest in the nation, equal to or below all other states and the District of Columbia. Expenditures in Ohio are also well below the national average at $1,184 per capita.\textsuperscript{20} The state income tax ranges from 1/2 of 1% at the low end to 3 1/2 % on income over $40,000. However, the intangible personal property tax, which is collected in Ohio unlike the situation in some other jurisdictions, applies a 5% rate to the income from productive intangibles. The state sales tax applies a 4% rate to a narrow tax base excluding food for off-premises consumption and most services. A temporary 1% increase in the sales tax was levied for the first six months to balance the state's budget for
the 1979-81 biennium, however, the Governor has indicated that no near term extension of that temporary increase will be sought.

**Low Tax Philosophy**

This low-tax philosophy extends to local governments in Ohio as well. The Ohio constitution limits the aggregate property tax levy for all overlapping or coterminous local government subdivisions to ten mills per dollar of taxable property value, unless the excess tax is specifically approved by the voters.\(^{21}\) This constitutional "10 Mill Limitation" is applicable to all local governments except those municipal corporations which have home-rule charters providing a limitation at a different level.\(^{22}\) While the 10 mill limit would logically seem to restrict unvoted real property tax levies to 1% of market value, in practice the limitation, as applied, is far more restrictive. The Ohio Constitution has been interpreted to mean assessed value rather than full market value. Ohio assessed value is set by law at 35% of market value. This results in the 10 mill limit being effectively reduced to 0.35% of market value. Moreover, in practice some property may be assessed at below 35% of market value. Reassessments are required every six years. Thus, the Ohio Constitutional property tax limit operates as a substantial and severe constraint upon local ad valorem fiscal patterns.

In addition to already low property taxes, several tax reduction factors enacted since 1970 have further reduced local property
tax yields. A 10% real estate tax rollback was enacted in 1971, reducing taxes paid on real property by 10%, with the loss reimbursed to local governments by the state from other state revenue sources. In 1979, the rollback was increased to 12.5% on residential property, remaining 10% on other use categories. Further tax relief was provided for elderly and disabled homeowners through a homestead exemption not reimbursed by the state, which resulted in a net revenue loss to local governments.

When property is reappraised in Ohio, tax laws have traditionally been interpreted to provide for a constant dollar-value yield from tax levies which have been voted outside the 10 mill limit ("outside millage") rather than a percentage of the higher value. This traditional interpretation was enacted into Ohio tax law in 1976 in the form of a system of tax credits ("House Bill 920 Credits"). These credits virtually eliminate any growth in the revenue from "outside millage" unless a tax rate increase is approved by the voters. Property taxes are collected by the counties in Ohio and distributed to local governmental units, with school districts receiving about three quarters of collections statewide.  

Permissive Municipal Income Taxes

City governments in Ohio are permitted to levy local income taxes on wages and net profits of businesses. These taxes must be flat-rate, and up to a 1% tax may be levied by the City Council. Increases beyond
the 1% limit must be approved by the voters, with no limit on voted levies.24 Because of limitations on the amount of property tax revenue earned and the small share of the total received by city governments, they often rely heavily on municipal income taxes for their operating revenue. Ohio municipal income tax rates in 1981 range from 1/2 of 1% in some cities to a high of 2.5%. Most cities levy a 1% tax. Income and property tax rates in the five cities being considered here are shown in Table 1 below.

Ohio municipalities rarely use voted property tax levies to raise needed revenues and, as a result, rely mainly on municipal income taxes and user fees to support city services. The State of Ohio gives very little aid to city governments to supplement local revenues, outside of returning to the local government its portion of shared taxes collected by the State, e.g., the retail sales tax. Because all local tax increases above the minimum levels must be approved by the voters, while state (and federal) taxes can be increased without such approval, voters often seem to show their dissatisfaction with taxes in general by disapproving local levies. As a result, Ohio cities are particularly vulnerable to income fluctuations in economic downturns, since this undermines their main source of revenue, the municipal income tax.
<table>
<thead>
<tr>
<th>City</th>
<th>10 Mill Limit Total</th>
<th>Income Tax Levy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>INSIDE</td>
<td>OUTSIDE</td>
</tr>
<tr>
<td>Harding</td>
<td>3.4</td>
<td>0</td>
</tr>
<tr>
<td>Harrison</td>
<td>3.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Hayes</td>
<td>4.0</td>
<td>1.0</td>
</tr>
<tr>
<td>McKinley</td>
<td>2.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Taft</td>
<td>3.7</td>
<td>2.7</td>
</tr>
</tbody>
</table>

* 1/2% increase to 1 1/2% approved by voters in March, 1981, effective July 1, 1981.

Municipalities fix the levels of their income tax rates, fees, and other charges. Property tax rates are summed at the county level and the proceeds are distributed among the several local governmental units by the County Budget Commission. This Commission consists of the elected County Auditor, County Treasurer, and Prosecuting Attorney, and may also include two elected public members if such a proposal is approved by the county electorate. The County Budget Commission is empowered to adjust the rate of taxation and fix the amount of taxes to be levied each year, but, this function is mainly a formality. Each municipality's so-called tax budget must be adopted and submitted to the Commission by mid-July of the year preceding the budget year.

The tax budget contains a statement of operating expenses and capital improvement expenditures not funded by bond issues, an estimate of expected non-property tax revenues and their sources, and the amount requested to be allocated from the property tax. Comparisons of budgeted receipts and expenditures with those of the two previous years are also required. The Commission meets in August to formally allocate the property tax revenues. Each municipality then must make any necessary changes in its budget to balance it, and pass an appropriation by January 1 of the budget year. Alternatively, the city council may pass a temporary measure in January, provided they enact the permanent budget by April 1.
Governmental Structure of Case Study Cities

With the exception of Taft, the cities included here as cases are "state statutory plan" or non-charter cities. As such, they are subject to the uniform state statutory civil service regulations for municipalities and must participate in state retirement systems and other programs. By state law statutory plan cities have an elected City Council, Mayor, Law Director, and Auditor or Finance Director. Because they are individually elected these officials may be of differing political parties. The city council members serve two-year terms, the other officials serve four-year terms. Ohio is a strong home rule state, even for statutory plan cities, leaving most municipal affairs, including financial problems, to be solved by the city or county of which it is a part. Little in the way of local government financial or other assistance is provided by the state, except to school districts, which receive school aid payments. The state's local government fund does provide some aid to localities, but not in large amounts, especially if the state is also short of funds.

Taft, as a charter community, has more flexibility to operate within the limits of its charter, than do the other cities. All five cities, charter or not, are seriously restrained in their ability to maintain public services and remain in sound fiscal condition by the low-tax mentality and fiscal structure of the State of Ohio. While California with Proposition 13 and Massachusetts with Proposition 2 1/2 have recently capped their ad valorem property taxes, Ohio has done so with minor variations since the 1930's. This fact constitutes a continuing
constraint upon municipal fiscal management in Ohio and, of course, applies to the five case studies under particular consideration here.
FIVE CASE STUDIES

Taft: Economic and Governmental Structure

Taft, population 115,400 in the 1980 census, is the largest of the five cities here considered. It has suffered a 17% loss from its 1970 population of 139,700. It has a home-rule charter form of government, with an elected mayor as its chief executive officer and a city council as its legislative body. The council is elected according to a ward system for two-year terms. The Mayor's term of office is also two years. City agencies operate under a civil service system and most, including police and fire uniformed services, are unionized. Ohio law does not allow for public employee strikes. Nonetheless, city and school district workers in Taft have gone out on strikes in recent years over pay and benefit issues. The unions also have had an influence on retrenchment actions taken by the city, as indicated below.

An old industrial city, Taft enjoyed economic prosperity until the early 1970's. The average manufacturing wage in the city in 1980 still is over ten dollars per hour. The major local industries helped build a strong local economy and high standard of living in the community. The major industry since the late 19th century in Taft has been basic steelmaking. In recent years automobile factories have appeared, contributing to the economic prosperity of the region as well. Both these and most of the related smaller manufacturing
industries located in the Taft area seem especially subject to the strong "boom and bust" cycles of economic expansion and recession. Until 1973, however, the employment level in the area remained fairly stable, with only minor disturbances during recessions, and with continued growth in some economic sectors in prosperous times. The steel companies consistently provided summer jobs for about a thousand youths of steelworkers families each year, thus helping many to finance college educations. The 1973-74 recession was worse for Taft than most, but many steel and auto workers laid off then were able to find other jobs in the area, or were rehired later as the national economy recovered.

The Economic Crisis

In September, 1977, one of the largest steelmakers in the area announced it was closing a large steel mill just outside Taft, laying off 5,000 employees. That company originally was locally owned and operated, but had been sold in 1969 to an out-of-town conglomerate firm. Most of its physical plant and equipment, dating to the early 20th century, was technologically outdated. It was inefficient and considerably less productive than the newer facilities of many domestic and, especially, foreign competitors in the steel industry. By the end of 1979 two other large outdated steel mills, employing an additional 5,000 workers, had closed. In total, 15,000 steel workers lost their jobs between 1973 and 1980, and another 11,000 related manufacturing jobs were also lost. A growth in the service sector
added about 18,000 jobs in the same time period, but many of these were low-paying, part-time jobs in the fast-food chains or similar service establishments. Wages and benefits in the new service establishments were clearly inferior to the lost steel jobs, and would not allow workers to enjoy the same high standard of living steel-working had given them. 25

Some of the heavy manufacturing industries in the Taft area are still prosperous, including automobile factories and a few remaining steel mills. Industrial development efforts by the city of Taft and neighboring communities have been slow, but a few firms have moved to vacant steel mills to do specialty steel or other heavy industrial manufacturing work, but these operate on a much smaller scale than previously. There is a deliberate effort underway by city officials as well as by business leaders in Taft to attract new, more diversified industries to take advantage of the large facilities available and an idle work force eager for employment. Unfortunately, the large open-hearth steel furnaces used in some of the old Taft mills are not easily converted to other non-steel uses, nor are some of the specialized or unskilled laborers who were employed by them able to convert their experience easily to other industries, or even to more modern steelmaking processes. Some skilled steel workers, however, have found jobs in the nearby automobile factories or remaining steel mills, a few have been transferred to other out-of-town steel mills by the parent companies, and about 1,600 have taken early retirements. Since
being idled in the 1977-1980 period, most workers have received one or both state unemployment compensation benefits and supplemental unemployment benefits from their companies although the latter funds ran out after only a few months for many workers. As these benefits are exhausted, unemployed workers are forced to take low-paying jobs or leave town in search of employment.  

City Fiscal Difficulties

From 1979 to 1980, city revenues increased by 13.7%. During the same period, expenditures increased 16.2%. At the end of 1977, Taft had a surplus balance of $198,400. The city ended 1980 with a current year revenue-expenditure imbalance of $799,400, a shortfall of 1.7%. When the effects of inflation are considered, the city's financial picture looks even worse. Over the 1977-1980 period revenues, expressed in constant dollars (using implicit price deflators from the Economic Report of the President, 1981 to eliminate the effects of inflation) fell by 10.2%, while expenditures fell 8.3%. If own-source revenues are considered alone, deleting state-shared and federal revenues received by the city, the loss is even more apparent: a 16.0% decline in own-source revenues, expressed in real terms. These revenue and expenditure trends are shown in Table 2, and Figure 8, following. As the trend in own-source revenues shows, Taft is heavily dependent upon federal and state revenues to remain solvent at existing service delivery levels.
City officials in Taft began to anticipate future financial problems in 1977 when massive steel mill layoffs began, but predictions about the severity of the problem were characterized by a high degree of uncertainty. Because the city obtains about one third of its revenue from the municipal income tax which unemployed workers do not pay, there was cause for concern. Real property tax collections fell in 1978, reflecting lowered assessments as well as more delinquencies in the aftermath of plant closings. Tangible personel property tax collections began to fall in 1979. While the municipal income tax yield did continue to increase in dollar terms, its purchasing power remained nearly constant when corrected for inflation. Federal funds were available at that time, however, and Taft's federal revenues increased in 1978 by 57% over 1977 levels. State shared revenues also increased, although less dramatically. By the 1980 fiscal year, the new Mayor (who took office in 1980) and other city officials were convinced that the problems would be long-term, and the economic recovery of the area would be slower and more difficult than it had been in the past.

Further Problems

The city had a number of problems in addition to falling own-source revenues. Heavy debt service obligations had been incurred during past financial difficulties when previous city councils borrowed rather than reduce expenditures. These debt service payments now drained available operating funds from alternative, current
service uses. Taft had lost its eligibility for federal Department of Housing and Urban Development (HUD) funds in 1979 because of a failure to construct enough low and moderate income housing units to meet departmental mandates. This resulted in the loss of an Urban Development Assistance Grant (UDAG) which would have helped the city develop new industries, and all other HUD-funded assistance. These losses or cancellations of federal grants hurt the city's chances of revitalization with outside funds.

On the expenditure side, city employee union contracts expired in 1980. The unions demanded higher wage and benefit packages when the city was least able to pay them. The contract dispute was eventually resolved in the summer of 1980 after a seven-day strike. The settlement, considerably less than the union had demanded, was reached after the Mayor convinced union leaders that funds promised to be "set aside" by the previous administration for employee raises, simply did not exist, and that meeting their demands would require a 25% cut in the city work force. Reluctantly, the unions agreed, but labor problems are probably not over for the city.

Action to Avert 1980 Deficit

After resolving the labor negotiations it became apparent that the city could not finish the 1980 year in the black without a reduction in expenditures. The Finance Department had installed a computer in the late 1970's, and by 1980 it was capable of providing up-to-date
### TABLE 2
TAFT REVENUES AND EXPENDITURES 1970-1980
(Dollars expressed in 1,000's)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>OPERATING REVENUES</th>
<th>OWN-SOURCE REVENUES</th>
<th>OPERATING EXPENDIT.</th>
<th>TOTAL REVENUES</th>
<th>OWN-SOURCE REVENUES</th>
<th>TOTAL EXPENDIT.</th>
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<td>30,644.8</td>
<td>21,633.0</td>
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<tr>
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<td>28,495.8</td>
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<td>48,513.7</td>
<td>25,805.5</td>
<td>17,351.8</td>
<td>26,237.8</td>
</tr>
</tbody>
</table>


Dollars

35,000
30,000
25,000
20,000
15,000

0 1970 71 72 73 74 75 76 77 78 79 80 time

Note: TR = Total Operating Revenues
OR = Own-Source Operating Revenues
E = Total Operating Expenditures

Source: Developed by author using Table 2 data

FIGURE 8
TAFT REVENUES AND EXPENDITURES 1970-1981
(constant, 1972 dollars, in thousands)
information on current receipts and on expenditures, and on historical revenue and expenditure trends back to 1977. As a result, the Finance Director was able to inform the Mayor by mid-1980 that a deficit would occur by year end if current trends continued. By recognizing this situation at an early date, the likelihood of resolving it without incurring a deficit was increased. Although funds had been very tight in the two previous years, the city had not had to lay off workers. The 1980 crisis was more serious, and appeared to require service reductions and layoffs.

The Mayor requested an analysis of possible alternative actions that could be taken to avert a year-end deficit. The Finance Department and Mayor's staff developed five alternative methods for expenditure reductions, analyzing each of these for financial, legal, and political implications. The alternatives included: layoffs; reduced work week; elimination of some departments and services; reprioritization of federal revenue sharing fund uses; and a combination of small reductions everywhere. The latter two alternatives were eliminated quickly because they did not provide enough savings to avert a problem. Meanwhile, the city went to the voters in August, 1980, requesting an increase in the municipal income tax. Not surprisingly in a depressed area, it was defeated.

After the income tax increase defeat and the completion of their analysis, the Finance staff recommended a reduced work week as the
"fastest way to recapture the money." The Mayor agreed, and in September, 1980, all city employees were reduced to 32 hour (4 day) work weeks, staggering their days off in order to keep city offices open as before and to maintain continuous availability of city services. While city offices were open five days per week, service delays did occur as 20% fewer work hours per department were available to perform necessary functions. The four-day weeks continued from September to November, 1980. After two months, the city returned to five-day weeks for two reasons. First, enough money had been saved to finish the year in the black. Second, the employee unions, displeased with a 20% non-negotiated pay (and work hour) cut, sued the city, claiming violation of their union contracts. While not a total success, the experiment in expenditure cutbacks through work-hour reductions did demonstrate to city officials in Taft that decisive managerial action can be taken to reduce expenditures and avoid year-end deficits, while still maintaining city services.

**Continuing Cutbacks Required**

Taft, although averting a crisis in 1980, was not "out of the woods" yet. Budget projections at the beginning of 1981 when passage of the final 1981 budget was required, indicated a deficit by year-end. Again a decision was required by the Mayor to avert a crisis. This time, he chose layoffs as the only possible way to reduce expenditures enough to keep them within available revenues.
Politically, layoffs were more palatable than work-week reductions. Laid-off steel workers were unsympathetic to city officials' desires to keep workers on the payroll. Work force reductions also were expected to be more convincing to voters that the city really was in serious financial difficulty.

The idea of job-security for city workers was difficult for unemployed steel workers to support, even if city employees worked and were paid for less hours. Although the city would have to pay unemployment compensation benefits to workers it let go, thus realizing actual savings less than their full salaries, payments by the city would continue for only 39 weeks. The reduced-savings problem with layoffs was little understood by city residents, who were not aware that the city government was a self-insurer. In addition, the union lawsuit over work-hour reductions in 1980 had not been settled, so legal difficulties were anticipated if that expenditure reduction method was repeated. The unions preferred operating under their negotiated contracts, even if some of their members would be laid off.

Ultimately, the Mayor decided to proceed with work force reduction through layoffs for these and one further reason. The fiscal crisis in Taft was anticipated to be very long term. The city's population was falling, and was expected to continue to fall, even if some industrial redevelopment took place. Long-range projections indicated
a possible population loss during the decade of the 1980's of 30% from the 1980 level. Commensurate reductions in city employees over that period were also projected since less services would be required and less revenues would be available to support them in a substantially smaller city. A gradual work force reduction beginning with 1981 seemed to be a rational way both to solve the current budgetary crisis and to responsibly prepare for future retrenchment. Accordingly, the Mayor ordered 10% cuts in all salary accounts in 1981. 109 city employ-ees were laid off on February 1, 1981, and 26 more were let go subsequently, as better estimates were available and cuts in several federal programs exacerbated the problem. In addition, a hiring freeze was instituted, allowing city departments to fill only the most urgent vacancies. In all, 133 employees were laid off in 1981, including police and fire uniformed personnel. Most, except police and fire employees, are not likely to be rehired.

Further Retrenchment

Other actions were taken in late 1980 and early 1981 which helped bring city revenues and expenditures into balance. Service charges and fees were increased for the first time in 16 years, making those enterprise operations of city government which were supported by fees and charges, completely self-supporting. Much of the road resurfacing scheduled for 1980 was deferred, resulting in the lowest levels of activity in history. While saving money in 1980, it was recognized
that eventually this work would have to be done. Sanitation was partially contracted out. At present (1981) a private contractor handles one half of the city's garbage pickup and city workers do the other half. This has increased efficiency greatly, eliminating service delays of up to five weeks which had occurred before the change, while keeping costs down. Budget scrutiny by the Mayor has increased, as has enforcement of employee discipline to eliminate possible losses by breakage or pilferage of equipment. Laxity had prevailed in some departments prior to 1980. Analyses have been made of equipment maintenance and replacement needs. Rather than deferring maintenance, however, the Mayor has directed department heads to use preventive maintenance to extend the life of existing equipment, purchasing costly replacements only if absolutely necessary. Purchasing of supplies and equipment also has been centralized, providing savings from quantity discounts as well as greater control.

The Mayor's retrenchment plan relied upon improvements in management practices throughout city departments in order to maintain future revenue-expenditure balance. An independent auditor was engaged to analyze the city's financial situation and to recommend future action to avert crises before they occur. Service provision response times were analyzed to develop methods for operating with fewer employees, and employees are being held responsible for their actions in meeting service needs. Through this period of retrenchment, city employees have begun to realize that the present financial conditions
in the city are serious. They no longer anticipate unconditional job security once city employment is obtained, as they often did before the latest crisis. Employee attitudes are beginning to improve as a result, with more emphasis being placed upon serving the public, since the public must approve the tax increases upon which future jobs and salary raises probably depend.

Mayoral Leadership

Throughout the 1980-81 period the Mayor of Taft has actively engaged in cutback management in order to maintain the fiscal integrity of the city government. Decision making has been of a crisis nature, although thoroughly supported by analysis wherever possible. Risks are higher in times of fiscal stringency because lacking slack resources to "cover it up, I cannot afford to make mistakes." Decisions have been made emphasizing getting the most productivity for every dollar spent. But many productivity improvements which would save money in the long (and short) run have not been possible because funds required for implementation are not available. While willing to make politically difficult decisions in order to maintain availability of city services, the Mayor feels restricted by the severe, continuing financial problems.

Mayoral control over the city's budget and management decisions has increased because of his leadership in the financial crisis. All federal grant programs are now scrutinized, for example, to ascertain
whether the local matching funds required would be more productive in another use. If so, the federal program is dropped as soon as possible. He also has led the effort of attracting new industries to the city, but sees Taft as caught in a difficult cycle of interaction among factors inside and outside the city government's control. Because of the depressed economic base of the area, street maintenance and other city services are being provided at below optimum levels. The school system, independent of the city government, but also supported by declining property tax collections, is also operating at less than desirable levels and has recently been disrupted by a long strike. These city problems make it much less attractive as an industrial relocation site. Yet industrial redevelopment would boost the tax and economic base of the city and the metropolitan area, and eventually enable the city to improve its service delivery. Overcoming this difficulty has been a major mayoral effort in his first year in office.

The Mayor believes that personal leadership is important for a city like Taft in a serious financial crisis. The Mayor and department heads set the tone for city service delivery and productivity. Through mayoral leadership the problems of HUD funding ineligibility and the city employees' strike were settled despite a reluctant city council. Council, as a legislative body, tries to balance its various constituencies politically, and as a result is reluctant, according to the Mayor, to make the politically difficult cutback decisions.
He feels, however, that these decisions are rightfully made by the executive branch of city government, to be ratified (or vetoed) by Council in passing the budget or by enacting enabling legislation where necessary.

In order to make these difficult decisions, many of which occurred in his first year in office, the Mayor concentrated on maintaining mental self-control. The city's problems have affected people's livelihoods, he said, and this makes it doubly difficult to make those decisions. The Mayor stressed that maintaining a personal ability to cope with the decisions of each day is the most important requirement for a Mayor, or any other top executive engaged in cutback management.

The Future For Taft

The problems of 1980 and 1981 are not over for the City of Taft. The long school strike in 1981 reduced city income tax collections in Taft by about $80,000. A municipal income tax increase passed in Harding, a nearby community (also a case study, below), brings its tax rate up to equal Taft's, thus eliminating the differential tax collected by Taft from its residents who work in Harding. This is projected to reduce city income tax collections in 1981 and future years by $100,000 to $150,000 per year. City population is expected to continue its decline, reducing tax revenues and eventually, if not as rapidly, reducing service demands as well. The Mayor has decided
to run for re-election, hoping to continue the progress he feels the
city has made toward retrenchment. In ten years, city officials feel
Taft will be well on its way to economic recovery, a smaller, more
well-run city. Meanwhile, retrenchment and cutback management will
continue as Taft weather's its continuing fiscal problems.

Harding

A small, industrial city located about 12 miles from Taft,
Harding also has a heavy industry based economy. Its 1980 census
population total of 55,450 residents showed a 12.7% decline from the
1970 level. Major manufacturing industries in Harding, like Taft, are
automobiles and steel. Several automobile-related manufacturing plants
and a large steel mill are located in Harding; an automobile assembly
factory is nearby. Workers in the steel, auto and other related in-
dustries often work in one of the region's cities and live in another,
making the cities' economies somewhat interdependent. For the most
part, however, Harding is independent of non-economic influences from
its larger neighbor and its citizens are said to dispute references
to it as a suburb (which it historically is not) of Taft.

The major steel mill in Harding remained open throughout the
1977-1980 crises that closed three others in the area. It now em-
ploys about 6,700 workers. Although that employment level is about
one fourth of peak levels when the area steel industry was prosper-
ing, the firm is expanding moderately and modernizing its production
processes to remain competitive with other domestic and foreign steel producers. Steel is no longer "king" in Harding, but its presence remains as a reminder of the past and an economic base of the present.

The automobile industry, like steel, seems to reflect and often exaggerate the general economic cycles of the Midwest and the nation. In 1978, automobile factories in Harding added 2,800 jobs, helping the area's economy by filling many of them with unemployed steel workers. In 1980, when the domestic automobile industry was in a serious slump, about 7,000 auto workers in Harding area plants were laid off, exacerbating the problems created by steel worker layoffs the year before. The two-industry economy of Harding was severely strained. An increase in domestic small-car production at a plant near Harding is expected to allow recall of 900 or more laid off workers in 1981. These economic cycles seem to be the rule, rather than the exception, in Harding.

Diversification of the local economic base is a major priority of city officials. A $3.5 million federal UDAG grant was obtained by Harding in early 1981 which will be used to create a business-development loan revolving fund. The entire amount will be loaned at low interest to an aircraft manufacturing firm locating in the Harding area which will provide needed jobs for its economy. As the loan is repaid, the revolving fund will allow loans to other industries which
can be attracted to the area. Economic Development Administration (EDA) funds also were obtained to assist in development of a large retail warehouse complex. Despite grant cuts by the agency in 1981, this project is still expected to be completed, creating 250 new jobs. While these developments are encouraging to Harding officials, the city's economy remained depressed in 1981, and employment in the area was in double digits.

**Harding Governmental Structure**

Harding is a state statutory plan city, not having an independent, home-rule charter. Its chief elected official is the Mayor, who serves for four-year terms. The City Auditor and Law Director are also elected for four-year terms. The twelve city council members are elected for two-year terms on a ward system. As a statutory plan city, Harding operates under a state-mandated civil service system for city employees. City employees are unionized as well. Harding does not use private contractors for city services, providing them all with city civil service employees. The elected Mayor, Auditor, Law Director, and the majority of Council were all of the same political party in 1980-81, although this had not been true of the previous Mayor who left office at the end of 1979.

**Harding's Fiscal Difficulties**

When the automobile factories in Harding laid off 7,000 workers in 1980, local income tax revenues began to fall for the first time
since 1975. Municipal income tax collections for the year were about $100,000 below 1979 levels, a 1.8% drop. In purchasing power, the city's total revenues fell by about one million dollars, although they rose slightly in nominal dollar terms. Besides declining municipal income tax revenues, the city's federal revenue sharing allotment was about $100,000 less than the previous year. Revenue sharing was used mainly to support police and fire operations. Harding ended the year in 1980 with an operating deficit of $250,000, which was eliminated only by transferring funds from the capital improvement and street paving funds. Harding's finances from 1970-80 are shown in Table 3 and Figure 9, following.

In January, 1981, a deficit of over one million dollars in the general operating fund was projected for 1981 if city service levels remained the same. No other funds were available for transfer to avoid deficit spending by the end of the year. In addition, the year-end transfers to avoid deficits and pay city employees in 1980 had created a serious cash-flow problem. There seemed to be no alternative available to the Mayor except laying off employees supported by the general fund. 36 police and firefighters (18 each) were laid off in January along with 34 employees of other departments. An additional six police personnel who retired in early 1981 could not be replaced. Further layoffs were possible if revenue collections fell short of projections. In the safety forces the cuts were drastic,
eliminating numerous functions. The eight person fire department rescue squad and paramedic team were all laid off and three of the four fire stations were closed. The police detective bureau, narcotics squad and juvenile division were all eliminated. Firefighters in the open central fire station answered calls as quickly as they could in all parts of the city without the benefit of the rescue squad. Police patrolled the streets and answered calls as they could with available personnel. It was a matter of grave concern to the Mayor and most residents that neither safety force could serve adequately the needs of the city residents.

Action To Solve The Problems

Since taking office in January, 1980, the Mayor, a former employee of one of the automobile factories, had been concerned that the city was not being managed as well as it could be. The necessity of fund transfers and then employee layoffs to balance the city's budget underscored the need for more efficient city operations, so that any savings realized could be used to rehire workers or avoid future problems. In January, 1980, there was no city-wide inventory control and departmental procedures were lax. Purchasing also was handled by each department. Employee absenteeism was as high as 20% in some departments. All the bookkeeping and inventory controls were done manually except the city's payroll, which was handled by a private, computerized contractor. Even before income tax collections began to fall, the Mayor recognized the city had a long-term financial
### TABLE 3

**HARDING REVENUES AND EXPENDITURES 1970-1980**

(Dollars expressed in 1,000's)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Nominal Dollar Amounts</th>
<th>Constant (1972) Dollars</th>
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<tr>
<td></td>
<td>Total</td>
<td>Own-Source</td>
</tr>
<tr>
<td></td>
<td>Revenues</td>
<td>Revenues</td>
</tr>
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Note: TR = Total Operating Revenues  
OR = Own-Source Operating Revenues  
E = Total Operating Expenditures

Source: Developed by author using Table 3 data

FIGURE 9
HARDING REVENUES AND EXPENDITURES 1970 - 1981  
(constant, 1972 dollars, in thousands)
problem because own-source revenues were not keeping up with inflation. Harding's total (nominal) revenues increased 82% between 1972 and 1981, while the city's expenditures for utilities, e.g., electricity for city buildings and street lights, increased 2000%, from $10,000 in 1972 to over $200,000 (projected) in 1981. The overall state-local inflation rate for 1972-1980 was 85%. "Inflation was the real death blow to the cities."^35

The Mayor began, in the middle of his first year in office, taking steps to improve the management of Harding's city government. An inventory control program was begun which immediately reaped savings. It was discovered, for example, that the city had been paying automobile insurance on some vehicles it no longer owned, as well as on those it did. All city cars were required to remain on city property at night when not in use for official business, eliminating the previous practice of some employees driving city cars home. Keeping the cars at worksites and requiring odometer checks reduced city gasoline consumption in the first six months after the controls were instituted to half the previous six months' level. When financial difficulties became more severe in late 1980, the Mayor centralized purchasing authorizations in his office. While individual departments still made purchases, they had to receive the Mayor's prior approval, no matter how small the item. While these controls created some additional work (for both the departments and the Mayor), unnecessary or
unjustified purchases were eliminated, saving money. Also, when cash flow problems occurred, all purchasing could be suspended by the Mayor until funds were available. 36

The Mayor also scrutinized the way services were delivered. In the sanitation department, for example, analyses of city garbage truck routes and worker methods revealed that with two-thirds the previous number of employees and trucks the same amount of work could be done, reducing costs. At the same time, the Mayor changed the city policy of picking up garbage only at the back door to taking anything at all that was placed at the curb for a mandatory monthly fee of $5.00. Back door service was still available, however, for a fee of $10.00, for those who wanted it. While saving the city money and putting the sanitation department on a completely self-supporting basis, including maintenance and purchases of capital equipment, citizen satisfaction with the service was greatly increased. Although fees were slightly higher, the city's willingness to haul away anything left at the curb was a more than offsetting convenience for many residents.

**Mayoral Leadership**

These examples of managerial control by the Mayor illustrate his leadership in setting a tone of productivity and professionalism for city government. Because he expected the city's revenue problems, to be long term, the Mayor proposed an income tax increase of 1/2 of 1%. This would raise the tax to 1 and 1/2%, and bring the city about
$2.5 million per year in additional revenues. While the Mayor favored a permanent tax increase, the city council placed the 0.5% increase on the ballot in March, 1981, restricted to 3 and 1/2 years, beginning July 1, 1981, and expiring December 31, 1984. Whether by design or not, this period coincided with the Mayor's elected term of office.

The campaign to pass the tax levy, led by the Mayor, emphasized the city's inability to provide adequate police and fire protection to its residents with current operating revenues. The new tax was to be earmarked for use in the police and fire budgets, exclusively. The total police and fire budget totalled over $6 million dollars. City officials in campaigning for passage of the levy emphasized safety, especially with senior citizens. The recent layoffs of police officers and firefighters, and announced April 1 layoffs of six more if the levy failed, as well as knowledge by some voters, at least, of improved management controls within the city government, impressed citizens that the city really was in financial distress. The inability of the city to provide adequate safety services with available revenue was unacceptable to enough voters that the income tax increase passed, with 58% voting in favor of it.

The tax increase was committed to use for police and fire services in the campaign and the Mayor will use it to bring those forces back to normal levels. This entire amount is not expected to be needed to maintain those forces at acceptable levels when the tax increase is
operative for the full fiscal years (1982-84), however. Using these funds for public safety will thus make available some other revenues for restoration of other city services reduced in the past year. The Mayor's emphasis in allocation of whatever funds are available will be on visible improvements such as the street paving projects virtually eliminated by budget balancing transfers in 1980, improvements to end flooding problems, and general maintenance and cleanup, wherever the need is most visible. The Mayor believes that seeing their tax dollars at work in physical improvements, open fire stations, and normal police activity levels should convince voters that the tax increase was needed and a wise decision. He hopes this will convince them to make it permanent in 3 and 1/2 years, because the city's finances are not expected to improve sufficiently to make those funds unnecessary when they expire.

The Future in Harding

Passage of the tax increase seems to indicate that, up to a point at least, Harding's citizens are willing to pay for the city services they demand. The Mayor is continuing his analyses of service provision methods to develop more efficiencies and improve productivity. Future plans include centralized purchasing and inventory controls and in-house computerization of accounting and inventory processes. The former are expected to allow economies of scale in purchasing and reduce losses from pilferage and poor record
keeping. The latter will support control processes and aid in planning. The Mayor has taken a long range perspective on city governmental management. He is projecting five to ten years ahead, and trying to make decisions in the present that will support future improvements as well. Employees' unions, some of which worked without contracts between January and April, 1981, waiting to see if the tax increase would pass, are expected to request only moderate pay increases. The Mayor pledged during the tax levy campaign that he would not "give away" the tax increase in huge wage settlements with the unions. The indications that unions will cooperate suggest that they, as well as the other residents, are following the Mayor's leadership in doing their part to keep Harding functioning as a viable city despite the difficulties of industrial losses and declining employment in the area.

McKinley

McKinley is a small city of about 24,000 population located near both Taft and Harding. It is growing slowly, both economically and in population, however, like other cities in the area its economy is based upon heavy manufacturing industries. Just outside McKinley a producer of Army tanks has been expanding, and a nearby automobile assembly plant is producing new small cars. Many McKinley residents work in Harding factories or in farther-away Taft. The retail sector of McKinley is expanding along the main state route between Harding and Taft. While not immune to the problems of steel and automobile
industry layoffs which have hurt those two cities, McKinley has not been as severely affected.

Structurally, the city government of McKinley is very similar to that of Harding. It is a statutory plan city, with elected Mayor, Auditor, Law Director, and an eight-member city council. City employees are unionized, and personnel policies follow the state-required civil service regulations. The Mayor, Auditor, and majority of council in 1981 were of the same political party. The city council in McKinley is highly political and responsive to constituent pressures. It is often slow to act on measures brought before it, resulting in occasional delays in implementation of Mayoral plans which need its approval. Controversial measures, or those not popular with constituent groups are especially difficult to pass. Budget-cutting would fall into the latter category.

City Financial Emergency

The prosperity of McKinley's economy in the early 1970's brought steadily increasing revenues to the city government. Municipal income taxes comprise nearly half the city's general fund revenues (excluding earmarked funds from utility fees and other sources). As incomes rose with prosperous industries and inflation, the city's general fund increased proportionately. Expenditures also grew steadily in the early 1970's, at about the same rate as revenues. In 1974 and 1975,
when the economy slowed somewhat, revenue growth began to slow, relative to inflation. Expenditures increased substantially, however, creating an operating deficit in 1974 of $1.78 million. The city continued to deficit spend for the next three years, incurring deficits of $1.2 million to $3.8 million. Steadily increasing municipal income tax revenues overtook expenditures in 1978, bringing the general fund into balance for that year. By the end of 1979, the city was having serious difficulties repaying its debts of over $3 million dollars incurred by previous years' overspending, and was placed in Municipal Financial Emergency status by the State at the beginning of 1980. McKinley's finances are illustrated in Table 4 and Figures 10 and 11, following.

Financial emergency status requires state supervision of the financial management of the city until it can demonstrate fiscal responsibility with balanced budgets for three consecutive years. The state requires audits of the city's books and any remedial action recommended by the auditors must be taken. Other technical assistance is provided to the city by the state as necessary, but the city bears the cost of the audit and other assistance. The Municipal Financial Emergency statute was originally developed for Cleveland but has been used since by other, smaller cities like McKinley, which have also had financial problems. One advantage of financial emergency status for a city having financial problems is
the provision by the state of a thorough audit and development of remedial financial practices where necessary. Conversely, since the city must eventually pay for these services, they might be better advised to spend that money when problems first occur and take the recommended action to avert the crisis. These options have been debated by other financially distressed cities in the area after observing McKinley's problems. Most of the Mayors interviewed preferred the latter option, although they acknowledged that politically it was more difficult.

Cause of the Problem

A new mayor took office in McKinley in 1980, about the time financial emergency status was obtained for the city. He attributes McKinley's financial problems to several causes. First, inflation-related wage and benefit increases for city employees raised costs of city services annually. Second, costs of the city-owned electric utility and sewage plant rose substantially without commensurate fee increases to residents. General fund revenues were used to subsidize the utilities. The Mayor estimated that from 1957-1976, about half the revenue from the municipal income tax was used to subsidize the sewage plant. Third, and perhaps most important, general-fund-supported departments consistently overspent their appropriations for four years. City appropriations budgets were balanced, as required by law, but spending was not kept within the appropriated levels. Fourth, city officials, especially city council, were politically
# Table 4

**MCKINLEY REVENUES AND EXPENDITURES 1970-1980**

(Dollars expressed in 1,000's)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>NOMINAL DOLLAR AMOUNTS</th>
<th>CONSTANT (1972) DOLLARS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TOTAL OPERATING REVENUES</td>
<td>OWN-SOURCE OPERATING REVENUES</td>
</tr>
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<td>1977</td>
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<td>1979</td>
<td>12,662.0</td>
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<tr>
<td>1980</td>
<td>13,293.6</td>
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</table>


Note: TR = Total Operating Revenues
OR = Own-Source Operating Revenues
E = Total Operating Expenditures

Source: Developed by author using Table 4 data

FIGURE 10

MCKINLEY REVENUES AND EXPENDITURES 1970 - 1981
(nominal dollar amounts, in thousands)
Note: TR = Total Operating Revenues
       OR = Own-Source Operating Revenues
       E  = Total Operating Expenditures

Source: Developed by author using Table 4 data

FIGURE 11

MCKINLEY REVENUES AND EXPENDITURES 1970 - 1981
(constant, 1972 dollars, in thousands)
afraid to raise taxes or utility (e.g., sewerage and electricity) fees. Many services were provided to the public free, i.e., general-fund (tax) supported, for which most cities would have charged additional fees. An example is the extension of water lines to new developments. This service historically had been relatively inexpensive, but substantial cost increases in its provision had occurred without a policy change. Finally, the city had neglected its growing debt obligations and had not provided for meeting debt service requirements. 38

McKinley's financial problems were not caused by the economic downturn of the area following steel mill closings and automobile plants. By sharply curtailing city revenue growth in 1979 and 1980 when funds were desperately needed to repay debts incurred from previous years' deficits, the city's already difficult financial situation was made more severe by the negative economic events, however, Remedial Action

After the financial emergency was declared, the new Mayor began to take remedial action to bring the city's budget into balance, including provisions for debt repayments. He began to analyze areas to be reduced using the criterion of cost-effectiveness. Water, electricity, and sewer rates were increased to make all utilities self-supporting. Only the sewer rate increases required Council approval, but that process took three months. The policy of free water line
extensions was eliminated, but this also was a slow process; Council debated six months before final passage of the measure. The Mayor developed a four-year financial plan to remove the city from financial emergency status. Meanwhile, both the Council and the Financial Planning Commission, appointed by the Governor to oversee city finances during the emergency, had to approve the city's budget. This provided a needed restraint on City Council, which was still reluctant to reduce prices for politically popular city services, or to increase fees.

The Mayor's plan required improving management and efficiency throughout the city. City employment was reduced about 10% after analyses indicated that some departments could provide the same services with less workers. Fourteen people were laid off in 1980 and another six who left for various reasons were not replaced. Attrition was being continued in 1981 as an analysis aid, with replacements allowed only where the need was clearly demonstrated. The Mayor is exploring the possibility of contracting for provision of some services if this will reduce costs. Garbage is collected in McKinley by a private contractor, paid directly by the residents. If the city could provide that service more cheaply, the Mayor would consider doing it, and, conversely, he would eliminate city provision of other services that private contractors could do more efficiently.39
The financial system of the city was in serious disarray prior to the financial emergency. Inadequate fund accounting and lack of a system for encumbering funds after purchases or contracts were authorized contributed to the chronic deficit spending. The independent accounting firm hired by the state Financial Planning Commission recommended a new accounting system for McKinley which included a system for encumbrances. After this system was installed, financial management improved substantially. Department directors and the Mayor could manage within their budgets because they knew the amount of obligations already incurred as well as the remaining funds available. While the Mayor admitted the system was forced on the city, he was very pleased with its results and did not wish to operate without it in the future.

Other production efficiencies were realized in various city departments which reduced expenditures while maintaining acceptable service levels. Comprehensive Employment and Training Act (CETA) Public Service Employment (PSE) workers had been available to the city for several years and were utilized to enhance city programs. A few of these workers were used as non-uniformed jailers for the city, replacing the uniformed patrolmen who had previously performed as jailers. Although the CETA funds eventually expired, the Mayor kept the civilian jailers, who were paid less than the uniformed forces, and released the latter to more appropriate functions. In a similar cost-effectiveness decision, the Mayor added a
part-time, non-uniformed police dispatcher to the existing force. While this increased costs, it provided full coverage by non-uniformed dispatchers, again releasing the police officers, who had filled in when dispatchers were off, to patrol duties.

The Mayor also began to scrutinize the so-called "pet projects" provided by the city, such as park subsidies, ambulance service, school patrols, senior citizen centers, and the cemetery. These totaled over $200,000 of the general fund budget, and detracted from the city's ability to provide basic services, e.g., police, fire, street maintenance. Budgetary priorities were changed regarding these items, which will eventually allow the public to receive these programs only if they are willing to pay for them. Not all subsidies were eliminated in 1980 or 1981, but, the parks were required to become self-supporting.

Tax Increase Proposals

An existing one half mill property tax levy, which expired in December, 1980, was on the books supporting parks. Because of delayed tax collections, this levy would provide funds for parks through 1981. The Mayor's 1981 budget eliminated the general fund park subsidy, and the city placed an additional one half mill levy on the June, 1980 ballot. It failed, as did the renewal of the original tax the following November. The Mayor still refused to subsidize parks if the public would not support them, and a rigorous campaign was launched to
pass a 1 mill levy in June, 1981, expected to provide $130,000 annual revenues. The stringency of the city's financial situation and its consequent inability to fund popular recreational programs without the levy was the focus of that campaign.

The city in the spring of 1981 was considering levying other taxes permitted under state statutes, such as a permissive five dollar license plate fee to be used for necessary equipment replacement for the street department in the first year, and then to support street resurfacing costs in future years. No capital improvements were possible in 1980 because of the budget problems, and without additional funds future improvements will be sparse.

McKinley's Future

McKinley's economy is recovering from 1978-80 recession with less difficulty than neighboring cities. The Mayor has taken action to manage the city financially and to improve productivity and efficiency in its service provision. He is optimistic that balanced budgets can be maintained and the financial emergency status eventually will be lifted. The park levy failures, however, have concerned city officials. If these indicate an unwillingness of residents to pay higher prices for city services, then further retrenchment may be required. The Mayor's "back to basics" budget will continue to reduce general-fund subsidies to optional city services in order to maintain streets and provide police and fire protection. In the
immediate future, however, barring reductions in non-categorical intergovernmental aid, the city appears to be managing its way out of the financial emergency.

HAYES

Hayes is a small town of about 15,000 people located near Taft. Also a steel town, its economy was devastated by the 1977-80 layoffs in the large Taft mills. Unlike some of the other area cities, there was little economic activity in Hayes not directly tied to the steel mills that closed. The city’s government is structured according to the state statutory plan, with elected Mayor, Auditor, and City Council. All are part-time, since the Mayor’s and Auditor’s salaries are too low to support them full-time. The council members serve for two-year terms, which expire in 1981. The Mayor and Auditor both serve four-year terms which will expire in 1983. The Auditor, Mayor and a majority of Council are from the same political party.

Hayes has joined with four other small communities nearby to form a redevelopment group to lure new industry into the area. This community improvement corporation has acquired one of the closed mill sites located in Hayes and is developing it as an industrial park. City officials are concerned that if employment opportunities are not developed soon in or near Hayes, the younger people (25-45 age bracket) will be forced to move elsewhere in search of jobs. This could devastate the city’s economy as well as its social existence as a small-town community.
City Financial Problems

When the steel mills located in and near Hayes closed their doors in 1979, the city began to lose both municipal income tax and property tax revenues. There were absolute losses in property tax revenues in 1979 and 1980, and a further decrease is projected for 1981. Personal property tax collections, falling primarily on business inventory and equipment, had dropped sharply in 1979 when the mills closed and continued to fall. Income taxes increased slightly in absolute dollars in 1979 and 1980, but at a rate below the rate of inflation. The city ended both 1979 and 1980 with deficits in operating accounts. City finances are depicted in Table 5 and Figure 12, following.

Hayes is a relatively low tax city in a low tax state. With the exception of its municipal income tax rate of 1 1/2%, tax rates in Hayes are below those in most neighboring cities. Fees and charges for public services are also low. Both water and electricity are supplied to Hayes residents by private utilities. The city operates the sewer system and sewage disposal plant. Sewer rates traditionally had been set below cost, subsidized by the general fund. Garbage is collected by private haulers, licensed by the city, whose fees are subsidized by the city.

Remedial Action

When city revenues fell in 1979 and 1980, the Mayor took action to maintain essential city services while reducing expenditures. No
employees were laid off, however, the work force of 78 was reduced to 75 by attrition. Since the steel mills closed only police and fire employees who have left city employment have been replaced. Street resurfacing scheduled for 1980 was deferred, and other planned capital improvements such as sewer repairs and equipment replacements were cancelled. Sewer rates were raised 100% in 1980, making the sewage plant self-supporting. Even these actions, however, were insufficient to prevent small operating deficits in 1979 and 1980.

**Bonding for Streets**

The City Council members, running for re-election in 1981, were concerned that citizens would not vote for them if the city's infrastructure continued to deteriorate visibly. With bad streets it would be hard to attract the new industry needed to revitalize the area. The Council authorized a bond issue, therefore, to fund street repairs and resurfacing in 1981. Despite the Auditor's concerns that the city could ill afford further debt, the street improvement program began and bonds to fund it were offered for sale in April, 1981. Hayes did not have a bond rating in 1981. The city had been rated Baa eight years before, but had not renewed its status. The Auditor was quite concerned about both the availability and cost of money for a non-rated city, since he know of a much larger public entity with a AAA rating that had paid 10% interest on a $3 million bond issue in 1980. The statutory maximum allowable interest rate in Ohio is 10 1/2%. The Auditor had made several trips to Washington, D.C. to discuss the city's
### TABLE 5

HAYES REVENUES AND EXPENDITURES 1970-1980
(Dollars expressed in 1,000's)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>NOMINAL DOLLAR AMOUNTS</th>
<th>CONSTANT (1972) DOLLARS&lt;sup&gt;1&lt;/sup&gt;</th>
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<tbody>
<tr>
<td></td>
<td>TOTAL OWN-SOURCE TOTAL OPERATING REVENUES OPERATING REVENUES OPERATING EXPENDIT.</td>
<td>TOTAL OWN-SOURCE TOTAL OPERATING REVENUES OPERATING REVENUES OPERATING EXPENDIT.</td>
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<tr>
<td>1970</td>
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<td>1,203.3 1,055.4 1,067.0</td>
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<td>1972</td>
<td>1,236.4 999.4 1,120.3</td>
<td>1,236.4 999.4 1,120.3</td>
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<td>1973</td>
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<td>1974</td>
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</tbody>
</table>


Note: TR = Total Operating Revenues
     OR = Own-Source Operating Revenues
     E  = Total Operating Expenditures

Source: Developed by author using Table 5 data

FIGURE 12

HAYES REVENUES AND EXPENDITURES 1970 - 1981
(constant, 1972 dollars, in thousands)
problems with the Reagan Administration urban tax force, urging low-interest loans to distressed, small cities for 3-5 year periods, but these efforts had not produced tangible results for Hayes.  

The Mayor, in addition to deferring capital improvements, sought other means to reduce costs by improving the efficiency of city service provision. One way found was to use available welfare recipients ("workfare") to enhance city work crews. The city paid these workers, who were used on street crews and in other unskilled jobs, $2.35 per hour, in accordance with state and county regulations. Although many of these workers were unaccustomed to this type of work, they did perform useful functions and helped stretch city resources for more services. CETA workers were also used when they were available.

Productivity improvements were also sought to improve city service provision. Mechanical sewer cleaning was analyzed, for example. This type of change would improve city workers' productivity and provide longterm cost savings. Unfortunately, the cost of capital equipment and the necessity to increase wages for the skilled workers who could operate the equipment was difficult for a small, already financially distressed city to manage. The Mayor and Auditor are exploring this and other productivity improvements, however, and are planning to move forward whenever funds become available.
The Future for Hayes

Major problems have not occurred in Hayes' city finances despite declining revenues as a result of industrial losses. The city has experienced minor operating fund deficits, has raised sewer rates, and has been required to borrow for street resurfacing. These financial problems could grow more serious if city revenues continue to fall and the City Council continues its penchant toward spending without increasing taxes or fees. The Mayor and Auditor have worked together to manage the city as efficiently as possible, making reductions where necessary, but trying to maintain public service levels. The Auditor's Report to Council in March, 1981, prior to the bond sale for street resurfacing, stressed that the city would need to take responsible action either to reduce expenditures or increase revenues if more serious problems were to be avoided. He predicted the city would be in serious difficulty by January, 1981, without such action. The willingness of the City Council to support retrenchment in an election year probably will determine the success of the Auditor and Mayor in leading the city into a more financially stable future.

HARRISON

Harrison, with a 1980 census population of about 56,000, is a small, industrial city. Located in a farming region of Ohio, the city is situated near a major interstate highway with good access to larger metropolitan areas. Its economic base is composed mainly of light industry, with a growing retail and service sector. The city's
population is relatively stable, growing by only 1,300 people from 1970 to 1980. No one industry dominates the city economically. Recent developments in Harrison include a new high rise city office building, of which city employees are very proud, and a downtown mall extending several blocks from the town square through the central business district.

City governmental structure in Harrison follows the state statutory plan. A city charter commission was elected and proposed a charter in 1979. It contained little change from the statutory plan, however, which was cited as a major reason for its defeat. The Mayor, Law Director, Auditor, and City Council are elected in partisan elections, and are of the same political party. Harrison's approximately 500 city employees are under the state statutory plan civil service regulations, and most, including police officers and firefighters, are unionized. The appointed Service-Safety Director, working closely with the Mayor, functions as a City Manager for day-to-day operation of the city. He is unable to control all financial decisions as a City Manager would, however, because of the statutory powers of the elected Auditor. The incumbent Service-Safety Director, hired in January, 1980, was a former city manager.42

City Financial Problems

In late 1978 a tire and rubber manufacturing company located in Harrison went out of business, eliminating 1,600 jobs. This loss was
felt very quickly by the city government, as property tax revenues fell in 1979 and again in 1980. While the 1% municipal income tax collections continued to increase, they barely kept pace with inflation. Although the tire plant layoffs represented only a small percentage of the city's total work force, the loss nevertheless was a significant one. Two years later some of those laid off still had not found other employment. The expansion of another local manufacturing firm, creating 300 jobs subsequent to the tire plant's closing, and growth in the retail and service sectors have not fully compensated for that loss. When the tire plant closed the city not only lost tax revenues, fees and charges also dropped. Most affected were water charges, since the tire plant had been a heavy commercial user of water. About 50% of the city's water charges were collected from its commercial customers.

Harrison's finances from 1970 to 1980 are shown in Table 6 and Figure 13, following. It should be noted that in the years 1975-1977 considerable bond-financed capital outlays were undertaken, inflating the operating expenditures shown. These do not account for the total deficit incurred, however. In the 1979-1980 period with which this case study is concerned, city operating costs, especially personnel salaries and benefits, rose faster than the rate of inflation. These rising costs plus debt service obligations incurred in previous years, brought the city into a serious financial situation when its own-source revenues fell after the tire plant closed.
Actions to Maintain Financial Stability

As the gap between own-source revenues and expenditures widened, operating funds were projected to be in serious financial difficulty in 1980. Enterprise funds, i.e. those supported by specific fees and charges, were affected as well as the general fund. The Mayor acted first to increase charges where necessary to maintain city enterprises on a self-supporting basis. These fee increases did not require Council action. The general fund, supported by the property tax and municipal income tax, was more difficult to increase. The city's 1% income tax, when levied by Council, had been committed for use in three funds according to a formula: 44% general fund; 44% street improvement fund; and 12% capital improvement fund. Because of the city's financial problems, the street and capital improvement funds were allocated at a much lower percentage of the income tax revenues in 1980 and 1981. The actual breakdown became: 77% general fund; 17% street improvement fund; and 7% capital improvement fund. The latter two categories of city services were reduced, eliminating all but emergency activities, because of the changed funding allocations.

In the general fund, which supports police and fire services, the electrical department, and other basic city services, cost reductions were required. By a combination of layoffs, firings, and attrition, the police, fire, and electrical (sign and signal) departments were reduced by twelve, four and six employees, respectively. The
### TABLE 6
HARRISON REVENUES AND EXPENDITURES 1970-1980
(Dollars expressed in 1,000's)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>NOMINAL DOLLAR AMOUNTS</th>
<th>CONSTANT (1972) DOLLARS¹</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TOTAL OPERATING REVENUES</td>
<td>OWN-SOURCE OPERATING REVENUES</td>
</tr>
<tr>
<td>1970</td>
<td>9,728.0</td>
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<td>13,236.1</td>
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</tbody>
</table>


Note: TR = Total Operating Revenues  
OR = Own-Source Operating Revenues  
E = Total Operating Expenditures

Source: Developed by author using Table 6 data.

FIGURE 13

HARRISON REVENUES AND EXPENDITURES 1970 - 1981  
(constant, 1972 dollars, in thousands)
cut in the electrical department represented a halving of its work force. One employee was also laid off from the city's airport, and the Service-Safety Director cut his own clerical staff from two to one secretary. CETA workers were used to perform some of the job functions that could not be funded from the general fund, e.g. dispatchers for the fire department and sanitation workers. When CETA funds were cut nationally in 1981, those workers were laid off, further reducing Harrison's ability to perform necessary city functions.

Work force reductions lowered the level of city service provision at the same time the tire plant's closing was increasing the demand for them. Demand for services at the joint city-county health clinic increased. A small footbridge across a creek behind the tire plant had been maintained by the plant. People used it a shortcut frequently when walking in the neighborhood. When the tire plant closed they stopped maintaining the bridge, and it eventually was closed to traffic. The city does not have enough funds to maintain it. Vandalism in the neighborhood of the closed plant has also occurred, increasing the need for police services.

Further Problems

By late 1980, even after the work force reductions from layoffs and attrition described above, the city Auditor projected a large deficit for 1981. the Mayor developed a financial plan which called for further austerity measures and a 1/2% increase in the municipal income tax. This measure was placed on the ballot in November, 1980,
with only halfhearted City Council support. It did not pass. Further reductions in expenditures were made for 1981 by deferring all street maintenance and other capital improvements. As attrition and employee realignments forced reductions in areas such as recreation programs and crime prevention, alternative ways to provide those services were sought. Neighborhood youth corps (U.S. Department of Labor funded) teenagers were used along with volunteers to staff some city functions, including a children's safety program previously done by the police crime prevention unit.

By February, 1981, the Auditor's projection of the city's 1981 general fund deficit was reduced to $300,000, after all actions already taken were considered. The Mayor and Service-Safety Director analyzed their service priorities for the city and possible courses of action to eliminate the deficit. They determined that maintaining safety forces at their existing levels must remain a high priority for the city. Analysis revealed that a reduction of 8% would be required in the salary accounts of all other general-fund departments in order to eliminate the deficit. Other accounts, e.g. equipment, supplies, had already been reduced as much as possible. Laying off more employees would have required the city to pay them unemployment benefits, necessitating a reduction of more than 8%. Instead, the Service-Safety Director recommended an 8% reduction in work hours for all non-uniformed (i.e. non-police and fire) city employees. The implementation of this plan on March 1, 1981, required a 35 hour work
week across the board. Reduction to 35 hour weeks was chosen as a cost-reduction alternative because of the inequitable and unpredictable nature of attrition reductions. Also, city officials felt that city services could be maintained at higher levels with short work weeks than with layoffs.

The Service-Safety Director and Mayor felt that 35 hour weeks would cause some employee morale problems, as well as reduction in availability of city services. They feared loss of good employees if they "rewarded" them for efforts to improve efficiency with pay reductions instead of raises. The only alternative was an increase in the city's revenues. The Mayor finally succeeded in obtaining City Council support for another attempt at increasing the income tax by 1/2%. The Mayor proposed using the proceeds 50% for the general fund and 50% for streets and capital improvements. With this Mayoral commitment for its use, the Council placed a 3 1/2 year, 1/2% income tax increase on the June, 1981, ballot, and pledged wholeheartedly to support and campaign for its passage. The Mayor's projection in March, 1981, was that the vote would be very close, but might pass. 44

Harrison's Future

The Mayor of Harrison is a professional, a former city planning consultant, and is an innovator with many ideas for improving the efficiency and productivity of city functions. He is a fiscal conservative, opposed to what he perceives to be the free-spending, non-taxing,
proclivities of the current (and past) City Councils. The Service-Safety Director is a manager who appears to be committed to effectiveness, efficiency, and honesty in city government. Under their leadership, despite a reluctant City Council, Harrison is likely to maintain its financial viability even without a tax increase. In the event the tax increase fails, actions will be continued or extended to keep expenditures within available revenues. If, however, the tax increase passes, the city will be in good financial health. Some productivity improvements which require expenditure outlays to be achieved will be possible, which will enhance the city's long-term financial stability. In the past Harrison's voters have been reluctant to tax themselves, even to pay for services they were demanding. If the Mayor's financial plan convinces them this is the time to change their thinking, the city's future should be positive. If the tax levy fails, more austerity budgets are in store for Harrison.

1

TESTS OF HYPOTHESIS: \( H_0 \)

\( H_0^1 \): The degree of perceived severity of a fiscal problem and the level of recognition by city officials that it is likely to be prolonged influence the probability of innovative responses to the problem and the likelihood of a favorable outcome.

In all five cases described above, city executive officials (Mayor, Service-Safety Director, Auditor) recognized the seriousness
of their cities' financial problems as soon as reliable revenue forecasts were available. The very nature of the crises in Taft and Hayes, the two cities most severely affected by the steel mill closings, led city officials to conclude almost immediately that the problems would be severe and prolonged. They responded with fee increases and incremental expenditure reductions. In both Harding and Harrison, problems were not as severe in the beginning, but as they grew worse both Mayors recognized the need for increased revenue and requested tax and fee increases. At the same time they reduced expenditures incrementally. McKinley's problems were precipitated by laxity in financial management practices which a new Mayor recognized as a problem and took steps to correct through incremental expenditure reductions.

Most of the five cities used conventional means for revenue increases and expenditure reductions: raising service charges and fees in enterprise departments; requesting increases in the municipal income tax; deferring street maintenance and other capital improvements; and laying off employees. Only one city requested voters to approve a property tax increase (McKinley's park and recreation levy). Two cities reduced working hours for city employees (Taft's four-day week and Harrison's 35 hour week), which was an innovative way to cut back expenditures in both cities. McKinley's use of civilian employees to replace police officers in jail operations was a cost-saving innovation, as was the new accounting and financial management system installed at the direction of the financial emergency commission.
Other cities installed productivity related innovations as well. Harding's inventory control system was an innovation, and its development was directly attributed to the necessity for greater financial control because of the city's financial condition. In both McKinley and Taft computer systems were installed or planned for managerial use. This in itself was not considered by city officials to be an innovation. Computers are in such widespread use in businesses and industry and in larger cities that specific applications of them may be innovative in a particular city but installation of the hardware itself is not. Harrison's Mayor had developed a number of innovative, productivity enhancement programs, but found implementation of these to be difficult, especially with most employees on short work weeks.

**Innovation**

The risks involved in innovating when a city is experiencing serious financial problems are great. There are no slack resources to cover mistakes, as the Mayor of Taft pointed out. A failure could be very costly, both financially and politically. Rather than encouraging risk taking, the severity of a crisis reduces the flexibility of city officials to develop new solutions to their problems. Shortages of employees because of layoffs, attrition, or reduced working hours overload those remaining, often reducing their receptivity to new ideas. Many productivity related innovations require capital expenditures, as well, which are some of the first items eliminated
when financial crises occur. It appears from analysis of the five case study cities that there is an inverse relationship between the severity of a financial problem and the innovativeness of responses to it.

As a fiscal problem such as declining municipal revenues becomes more severe, the resources supporting innovation fall. Shorter working hours hinder employee flexibility and time to learn new techniques. Lack of funds may preclude purchase of cost-cutting equipment. As the extent of a fiscal crisis increases, the impediments to innovation responses also increase, thus creating an inverse relationship between crisis severity and innovations. This result implies that managers should implement expenditure-reducing or productivity enhancing innovations before there are financial problems, i.e., when cutting costs may not appear to be as urgent, rather than waiting until a crisis situation occurs, in which they may not be able to innovate.

Expected duration of city financial problems seemed to be more directly related to willingness of city officials to innovate. If a problem was perceived to be short-term, the case study data supported the hypothesis that responses would be incremental in order to get by for the crisis period. When problems were expected to be of longer duration, city officials began to search for new ways to provide services at lower cost. Productivity innovations were tried or planned
in Harding, McKinley, and Harrison when they perceived financial problems would be prolonged. Tax increase proposals, which would shorten the duration of a financial problem, were a non-innovative response chosen by several of the cities (Taft, Harding, Harrison), allowing then to use incremental, interim measures until the success or failure of the tax levy was known.

Data from the five Ohio cities seem to indicate that the severity of a crisis and the expectation that it will be prolonged, taken together, are inversely related to the likelihood of an innovative response. While there is some evidence that expectation of a prolonged problem will encourage innovation, if it is expected also to be quite severe, the risks of failure of an innovation are compounded. The data from the five cities thus contradict the relationships hypothesized in Cell III (cutback and retrenchment) of Figure 7. Data relating to the other three situations (mild or strong interim measure and productivity improvement) however, seem to support the hypothesized relationships. The case study findings relating to $H^1_0$ are shown in Figure 14 below.

**Cutback Responses**

Data from the five cities suggest that when the Mayor and other top administrative officials perceive that the city is in a cutback and retrenchment situation they are highly motivated to find ways to move the city into Cell IV (strong interim measures) or Cell I (productivity improvement). Even in low-tax areas, when tax levies for
cities or schools rarely pass, a Cell III (cutback and retrenchment), situation impelled Taft, Harrison, and Harding all to request municipal income tax increases as well as to increase fees and charges. If these tax increases passed, as one did in Harding, the city would move immediately into Cell IV (short-term severe problems), and eventually into Cell I (minor long-term problems), if not out of financial difficulty altogether. Managing a short-term financial crisis until the voted tax increase funds became available was highly preferable to managing a severe, long-term fiscal crisis. Without the perception of a severe problem, however, and the ability to transfer that perception to the voters by strong interim actions, Mayors could not convince City Councils that tax increases were justified. Political ramifications were too great when voter attitudes were anti-tax and anti-government.

One of the major obstacles to innovation, and to responsible financial management in a few cities, was the City Council. City Council members were much more politically sensitive than the Mayors in part because their terms were only two years. Mayors in four of the cities did not have to run for office as frequently. In addition, except in Hayes, the Mayor was a full-time administrator while the City Council was a part-time legislative body. Even in Hayes, the Mayor was at City Hall one full day a week and the Auditor was there nearly full time. The City Councils exhibited a "watch dog" legislative scepticism about city operations which sometimes kept them
<table>
<thead>
<tr>
<th>Expected Duration of Fiscal Problem</th>
<th>Low</th>
<th>High</th>
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<tbody>
<tr>
<td>Long</td>
<td>I Productivity Improvement Measures:</td>
<td>II Cutback and Retrenchment Measures:</td>
</tr>
<tr>
<td></td>
<td>- attrition reductions in personnel</td>
<td>- layoffs</td>
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<td></td>
<td>- stricter inventory control</td>
<td>- reductions in service levels</td>
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<td></td>
<td>- keeping city cars at work sites overnight</td>
<td>- tax increase requests placed on ballot</td>
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<td>- borrowing for capital improvements (streets)</td>
<td>- service charge &amp; fee increases</td>
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<td>- use of volunteers</td>
<td>- financial management reforms</td>
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<td>- economic development activities</td>
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<td>Short</td>
<td>III Mild Interim Measures:</td>
<td>IV Strong Interim Measures:</td>
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<td>- attrition reductions in personnel</td>
<td>- layoffs</td>
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<td></td>
<td>- deferred maintenance and capital outlay</td>
<td>- reductions in level or frequency of service provision</td>
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<tr>
<td></td>
<td>- transfers from restricted to general funds</td>
<td>- reduced work hours</td>
</tr>
<tr>
<td>Source: Developed by Author</td>
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FIGURE 14

ACTUAL RESPONSES TO REDUCTIONS IN OPERATING REVENUES FOR FIVE OHIO CITIES
from understanding the severity of a financial problem reported by executive branch officials. Even when they understood, their perspective was more political and less managerial. As a result, when tax increases were placed on the ballot by Council, they tended to be short term (3 1/2 years in both Harding and Harrison) rather than long term (10 years) or permanent as the Mayor, Auditor, or Service-Safety Director might have preferred. This same scepticism thwarted proposed innovations in service provision where Council approval was required.

Tests of Hypotheses: $H_0^2$

$H_0^2$: Municipal public management by top elected or appointed officials has a minimal effect on service level outcomes resulting from declining real resources. Political, legal, and socioeconomic factors cause any changes in services, programs, or priorities to be incremental in nature.

This null hypothesis strikes at the core of municipal public management. If top city officials are unable to effect changes in priorities or programs in order to respond to crises and maintain adequate (i.e., politically acceptable) levels of essential services, then cities are indeed at the mercy of economic and social events far out of their control. If this extreme incrementalist view of managerial ineffectiveness is false, then most well-managed cities can be expected to maintain financial stability in the long-run, even if social or economic events cause occasionally severe crises. Evidence from these
five case studies indicates that city management does indeed have an effect upon municipal financial viability.

Managerial Actions

In all five of the cities described above, managerial actions were taken by the Mayor which altered programs or priorities in order to maintain service levels to the extent possible with declining resources. McKinley's financial problems had resulted in part from overspending and bad management practices of previous city administrations and City Councils. After a financial emergency was declared, the recently elected Mayor began to take managerial action to increase revenues and curtail expenditures. He said his experience demonstrated that "management makes the difference" between a financially stable city and one with serious problems in meeting its obligations. He added that since city employees are paid as well as those in private businesses because of beneficial union contract agreements, "we are not of line to demand as much as private industry in terms of a product."45

Improving efficiency in city service provision helped McKinley officials to balance the city's outlays with available revenues and to maintain city services at the levels needed and demanded by citizens, while staying within the budget. If, as $H_0^2$ suggests, managerial actions could not counteract the political forces which had pushed the city into serious financial difficulties, we would have expected only incremental changes in service levels and no priority
changes. Instead, the Mayor was able to institute policies that reduced costs in some programs without altering levels of service, while increasing fees in others. Priorities were changed to include retiring the city's debt obligations as quickly as possible while maintaining essential services such as police and fire. Other services (sewer, water, electric utilities) for which fees were charged were made self-supporting. By fee increases, so-called "pet projects" of City Council members that were funded or subsidized by the city were reduced to lower priority status in the Mayor's "back-to-basics" retrenchment plan.

In Harrison, the Service-Safety Director and Mayor eliminated or drastically cut some popular recreational programs, as well as reducing employee work hours, in order to balance their city's budget. The reduction of work hours in all city general-fund departments was chosen as a cutback tool in part because it would enable city services to be provided at levels as close as possible to those existing before the city's financial difficulties began. Although an 8% reduction in hours (and therefore salaries) is not large, its use as a cost-cutting tool can hardly be called incremental since previous changes in employee wages and benefits had always been increases.

Managerial actions also were not incremental in Taft. Their experience with a four-day work week also represented an unprecedented cut in employee wages. Union lawsuits to force a five-day week were
evidence of the consequences of that policy change. The Mayor tried to maintain prior service levels, although in some cases at lowered service frequencies, by keeping city offices open regularly, even with four-day weeks and later with layoffs. Priorities were changed. Street maintenance and resurfacing dropped from a high to a low priority item to allow smaller cuts in police and fire services. The Mayor facilitated construction of (federally funded) low income housing units, previously a very low (or negative) priority, in order to regain the necessary certification from HUD to be eligible for industrial redevelopement grants. He also contracted for sanitation services in part of the city rather than using city workers, which reduced costs, enabling service levels to be higher than they could have been otherwise. As a manager, the Mayor emphasized employee responsibility both for efficient provision of city services and for proper care, maintenance, and safekeeping of city equipment.

**Priority Changes**

Efficiency and elimination of equipment losses also became high priorities in Harding when resources declined. As in Taft, the high priority previously given to street maintenance fell while that of safety forces rose, although both received cuts. Managerial actions such as inventory control and centralized purchasing were used to reduce expenditures while keeping service levels as high as possible. The strict austerity measures, increased efficiency, and priority
changes emphasizing safety services, were used by the Mayor as selling points in the successful income tax increase campaign. The Mayor felt that evidence of sound city management helped the tax campaign succeed with the voters.

Mayoral management of city functions included priority changes in Hayes as well. A low priority was given to street maintenance because it could be deferred, while safety forces and other ongoing, daily operations were maintained at levels close to those before the steel mills closed. When this priority change disturbed the City Council members who were concerned about re-election, they authorized bond sales to fund the street resurfacing. Management and priority setting by the part-time Mayor kept the city financially stable, despite Council's continuing proclivities for spending.

In all five cases, the classic struggle over priorities between executive and legislative branches of government was evident. Also in all cases the two branches were both of the same political party, which did not seem to temper the struggle. The legislators, running for re-election every two years, wanted to expend more than the revenues available in order to satisfy their constituents. The Mayors, some of them in contrast to their predecessors, were trying to manage within available funds, which meant either cutbacks or tax increases. The extent and duration of revenue declines and expenditure retrenchment were new to the City Councils in all five cities, although some
had experienced declining revenues before. It is interesting to note that all five Mayors were newly elected at about the same time the extent of their cities' problems were becoming known. Most of their predecessors had voluntarily decided not to seek re-election; at least one (Taft) reputedly because of the difficulty of managing a city with such severe financial problems.

The evidence summarized above from the five case studies indicates that Mayoral (or top executive) management is able to affect municipal programs and priorities in order to maintain adequate levels of essential public services during financial crises. This refutes $H_0^2$, which hypothesized that management could not have more than an incremental effect on service delivery outcomes. Case study data from the five Ohio cities shows that rather than having a minimal effect, Mayors and top appointed officials (e.g. Service-Safety Director) are the major factor in determining the city's financial future. Responsible leadership on the part of the Mayor, a long-range strategic planning focus, as well as day-to-day efficiency in management of the city's operations, are the counter forces to the political and socio-economic pressures for particular programs or service levels which tend to influence City Councils to overspend when resources are scarce.

Without Mayoral management decisions, essential services (police, fire, sanitation) could not have been kept at near-normal levels in
several of the cities when revenues fell. By enforcing austerity measures in lower priority areas and improving productivity and efficiency, the Mayors had enough funds to keep police officers on the street. Of course, the severity of several cities' financial problems meant that even essential services were provided at reduced levels or with delays. This does not deny, however, that management was a major factor in maintaining the highest level of services possible while the cities were experiencing severe financial stress.

Implications For Cutback Management:

In the five case studies, some of the "preconditions" for successful cutback management outlined by Levine, Rubin, and Wolohojian, were available to the Mayors. They did have authority to make many budgetary adjustments, to lay off employees, and to change service delivery methods, within some limits imposed by Council. They had some ability to transfer funds among various budgetary categories, although often Council approval was required. The Mayors also were able to target budget cuts or personnel reductions to effect organizational retrenchment with the least possible decrease in service provision. While these three "preconditions" were substantially met, the other three were not as available. All the Mayors were new and City Council faced re-election campaigns every two years, so there was very little top leadership continuity. Some of the other elected officials in several cities had longer tenure, however, which may have provided some continuity. As in many cities, these five did have delays in information
feedback after cuts were made. Conventional incentive systems for reducing personnel and budgets were absent, as they generally are in most public organizations. Perhaps the presence of three of the preconditions did help the Mayors exert the managerial leadership required for successful retrenchment, even in the absence of the others.

The "businesslike" approach to management of their cities was stressed by several Mayors in their discussions with the author about cutback management strategies. Rather than emphasizing the political aspects of their roles in solving the financial problems, the Mayors apparently had discerned the need for strong managerial tactics. Keeping (or putting) the budget in balance was the first priority; political ramifications were handled as they arose. In Harding, at least, the Mayor's emphasis on productivity and management, as well as his politically unpopular but necessary reductions in safety forces, paid off when the voters approved a tax increase. The most difficult part of managing cities in financial stress, according to top officials in the five Ohio cities, was finding and eliminating lax management practices and inefficiencies, so that their managerial practices would bear the scrutiny of skeptical City Councils and voters. In this sense, the Mayors might be described as having a "revitalizing entrepreneurial" style of leadership.47

Cutback management in cities which have declining resources as a result of events such as the closing of a major industrial plant
may be different from that of in organizations which have to reduce expenditures for other reasons. The problem of maintaining essential public services and balanced budgets during fiscal retrenchment differs from the task of realigning a private sector organization during a sales decline, for example. Many of the problems are the same, e.g., analyzing where to cut back, increasing efficiency of operations, improving productivity. The complications of politically set priorities for certain services, e.g. police and fire, and civil service regulations dictating layoff practices make the city's task more difficult. These five case studies have illustrated, however, that municipal cut-back management can be successful in keeping cities financially viable under conditions of severe financial stress.

Further Research Implications:

The decision processes used by the collective actor, city government, in order to maintain adequate public service provision levels during a financial crisis are an essential part of successful cutback management. Differing from private sector decision making techniques, municipal cutback decision making must include consideration of both the political and the financial "bottom line" implications of any decision. There are other differences. Most governmental units, including the five Ohio cities, are unemployment self-insurers. This means that when city employees are laid off their unemployment compensation benefits must be paid by the city for 39 weeks. The city as a result, must let 75% more employees go than if they did
not have that liability, in order to reduce expenditures by layoffs. Civil service rules often have very disruption consequences when employees are laid off, because they allow employees to "bump" out of their jobs employees with less seniority in the same classification in other departments. This may leave some departments with staffs unfamiliar with their work during retrenchment. Decisions made by Mayors and other city officials during cutback periods may have long-term consequences as a result of these and other unique features of governmental structures.

These case studies have described the processes of cutback management in five medium-sized and small cities and have offered some explanations of their results. They suggest but have not provided with finality a systematic model of cutback management and the decision processes used by Mayors and managers. Further research which will develop a larger body of descriptive cases from which more general conclusions may be drawn will be valuable in the future. A more systematic model of the cutback management process is also needed. Differing from private sector decision making techniques, municipal cutback decision making must include consideration of both the political and the financial "bottomline" implications. Without these, it is a mere theoretical exercise. Since effective modelling can produce pregnant and indeed stimulating hypotheses and since the technique can formulate useful options effectively for harried municipal decision makers, to the extent that such programs merit and
receive managerial confidence, we now turn to that subject in the third essay of this dissertation.
NOTES TO ESSAY 2


NOTES TO ESSAY 2: (Continued)


11. Ibid., pp. 329-331.


13. Shefter, pp. 77-81, describes the power struggles among various interest groups, unions and business leaders which kept city budgets increasing more than revenues from 1960 to 1975.


15. Levine, Rubin, and Wolohojian, pp. 22-23.


18. The Ohio State University Human Subjects Review Committee has required that anonymity of all officials and cities be preserved in this research project. Accordingly, city names have been changed and city officials will be referenced by title only.

NOTES TO ESSAY 2: (Continued)

20. Ibid., p. 15.
22. Ohio Revised Code, Section 5705.18; Ohio Const., Art. XVIII.
23. 1 Baldwin, Ohio Tax Law and Rules, OT 1 (3rd ed. 1980).
24. Ibid., OT67.
25. Ohio Revised Code, Sections 5705.27-5705.38.
27. Ibid.
28. Data for this case study were collected in interviews conducted by the author in April, 1981 with various city officials including the Mayor, and two assistant finance directors, and materials provided by them.
29. Assistant Finance Director of Taft, interview with author, April, 1981.
30. This suit was still pending in the courts at the time of this research. The city was unsure of the outcome, but expected future union negotiations to include the work hour issue. Because it is unresolved, this issue is not discussed further in this dissertation.
31. Mayor of Taft, interview with author, April, 1981.
32. Ibid.
34. Data for this case study were collected in interviews conducted by the author in March and April, 1981, with various city officials including the Mayor and Auditor, and materials provided by them.
35. Mayor of Harding, interview with author, April, 1981.
36. Mayor of Harding, interview with author, April, 1981.
NOTES TO ESSAY 2: (Continued)

37. Mayor of McKinley, interview with author, March, 1981. Data for this case study were collected in interviews with city officials including the Mayor and Auditor, conducted by the author in March, 1981, and from materials provided by them.

38. Mayor of McKinley, interview with author, March, 1981.

39. Ibid.

40. Data for this case study were collected in interviews conducted by the author with city officials including the Mayor and Auditor in April, 1981, and materials provided by them.

41. Auditor of Hayes, interview with author, April, 1981.

42. Data for this case study were collected in interviews conducted by the author with city officials including the Mayor and Service-Safety Director in March, 1981.

43. Internal memoranda from Service-Safety Director to city department heads in general fund departments, dated February 15, 1981, and March 5, 1981.

44. Mayor of Harrison, interview with author, March, 1981.

45. Mayor of McKinley, interview with author, March, 1981.

46. Levine, Rubin, and Wolohojian, pp. 3-9.

47. Glassberg, p. 329
ESSAY 3 - A BUDGETARY MODEL FOR CUTBACK DECISION MAKING

Systematic research in the area of municipal cutback decision making and management cannot be conducted unless models of the decision processes can be developed which explain and predict, as well as describe. Case studies are useful tools for collecting non-quantifiable data and describing activities of governmental units. They are inadequate, however, for more systematic comparisons among large numbers of cities or for comparisons of similar processes among different types of organizations. Because each case has unique features, a great deal of information can be collected in case studies which will improve overall knowledge of financial retrenchment processes. Organizing this information into systematic theories which can be tested and applied to other organizations is the logical next step in the research process.

Building upon the theoretical and descriptive research of the previous essays, a model of the budgetary process for cutback decision making will be proposed in this essay. This model will be capable of being tested systematically against empirical data from other cities. In addition, it may be adaptable to individual cities for use as part of the analytical processes which support cutback decision making by top managers. Although based upon experiences in five particular cities, the model should be general enough to be useful in
explaining, and possibly predicting, cutback decision making strategies in cities of varying sizes as well as in other similar types of governmental organizations.

Empirical Testing of Model

The model presented below could be empirically tested in several ways. First, case study information from individual cities could be used to test the validity of the model for each particular city. Although a time consuming process, this would provide some systematic evidence for determining its validity. So long as large scale managerial data on cities experiencing fiscal retrenchment are not available, this may be the only method of testing possible. As more research is needed, however, this method could become expensive and cumbersome. Second, attempts could be made to test the model using proxies for the managerial data required. If suitable surrogates for the variables could be developed from the extensive financial data compiled in the annual U.S. Census of Governments by the Census Bureau Governments Division, for example, the model could be tested nationally for a large number of cities, both cross-sectionally and longitudinally. Unfortunately, at the present time much of the necessary managerial data is not available from that source, which collects mainly aggregate financial information for each city.

Field Network Evaluation

A third alternative for empirical research was developed at the Brookings Institution and Princeton University by Richard Nathan and
others in order to evaluate federal grant-in-aid programs. Field network evaluation studies have been conducted for three major federal programs: general revenue sharing; community development block grants; and the public service employment component of the Comprehensive Employment and Training Act. Using networks of field associates a large number of local jurisdictions are included in an adaptation of case study research. Each field associate completes a uniform report form for a particular jurisdiction which includes both qualitative, descriptive data and quantitative data, such as financial or program statistics. (Field associates become experts in the activities of their jurisdictions, which may improve accuracy.) The reports from each jurisdiction are analyzed and pooled to provide comparable information for all cities which can be systematically analyzed. Because of the uniform collection methods, these data also can be used in conjunction with other statistical information, such as census data for the same jurisdictions, in statistical and econometric analysis.  

While field network evaluation has so far been used only for federal grant programs, it appears adaptable to evaluations of other local government programs, or to research into managerial processes of city governments themselves. By providing responses to a standard report format, some of the non-comparability problems of case studies can be overcome. A network of researchers can be maintained nationally at a reasonable cost in order to continue the data collection longitudinally, since the uniform report form allows replacement
of researchers if necessary. Unlike survey research, however, which also can be conducted economically, field network evaluation is not limited to questioning a random sample of program participants or city residents who may not understand all aspects of the program's operation. The field associates use both interviews and other relevant data, which could include surveys, to complete the report form. Information provided is accurate, to the best of the field associate's ability, and consistent with the purposes of the questions asked.

An adaptation of field network evaluation research could be used to test hypotheses or models of municipal cutback management processes. Researchers would in this way be able to obtain information which is difficult to measure by other than descriptive techniques. At the same time, a large number of cities could be included in the research, overcoming the major limitation of case studies and other qualitative data collection methods.

It appears to be reasonable, then, to expect that a process model of cutback decision making at least partially based upon qualitative data could be tested empirically. Since several methods for collecting and using such data on managerial variables are available, hypothesis testing is possible, and not so limited in scope as to be trivial. Within the scope of this essay, however, the model will be developed theoretically and mathematically, based upon the case study results of the previous essay.
Criteria For Cutback Decision Process Models

Budgetary decision making can be defined as the process by which a manager (Mayor or other city official) allocates resources to city activities according to priorities and goals. When declining resources require cutback decisions, a similar process is followed, allocating both available resources and reductions in those resources according to a set of goals. These goals may include political objectives, program or service delivery levels, and organizational goals, such as efficiency of operation and high employee morale. Some, such as service frequencies, may be easily quantifiable, while others may be more difficult to measure. These goals also may interact with each other, complicating the decision process.

Formal budget processes are used by governmental units to provide systematic means for resolving conflicts among competing uses of available resources. When the need for expenditure cutbacks is predicted at the beginning of the regular, annual budget development cycle, this process will automatically be used to determine the new resource allocation strategies. If the need for reductions becomes apparent subsequent to adoption of the annual budget, a similar process will probably be followed for cutback decision making. In the latter case the process is likely to be a truncated version of the regular budget cycle. In either case, budgetary decisions will be made which allocate reductions in resources so as to come as close to resource allocation goals (of all types) as possible.
A model of the budgetary process for cutback decision making should recognize and incorporate those multiple goals explicitly, rather than assuming their implicit presence. Some goals are easily quantifiable and not difficult to include in a simple model. These would include the dollar amounts of resource constraints and the frequency of provision of certain services such as garbage collection. Other goals are less easily quantifiable, such as maintaining employee morale or electing some set of city officials. Even when political and organizational goals can be expressed mathematically or quantified, they may not be commensurate or functionally comparable with other goals. A model of cutback decision making ought to be able to include the process of reconciling non-commensurate goals as it occurs in real-world, political decision making.

The process of resource allocation is not static. It is a dynamic, iterative effort involving many successive actors as well as multiple goals. The goals of the Mayor and top administrative officials are or may be different from those of managers lower in the organization. In order to accomplish city-wide budget goals, the Mayor or his group of advisers sets sub-goals for various departments, in terms of both service delivery levels and resource levels. Thus, budget decisions represent a hierarchical allocation of both resources and expected activities utilizing those resources to achieve a perceived set of more or less specific goals. Although some goals, especially political ones, may not be stated explicitly in budget documents
or Mayoral directives, this should not lead one to assume that they are less important or need not be met. On the contrary, these obviously are some of the most crucial goals of top officials.

With multiple goals and multiple actors there will necessarily be tradeoffs among them as budgetary decisions are made. A model of the cutback decision process needs to be flexible enough to express these tradeoffs. That is, as some goals are met by the resource allocation process, others may become unattainable. If a model does not capture these dynamic aspects of the process, its descriptive accuracy will suffer and, as a result, it is less likely to be helpful in empirical research and derivative analysis. While a theory or model may not be exactly descriptively accurate because of the assumptions necessary for generalized application, it should be operationally valid in order to be useful tool for research. A static, inflexible model of a dynamic and occasionally volatile process may be operationally invalid, and so be less likely to contribute to improved knowledge of the process being modelled.

In developing a budgetary model of the cutback decision making process then, the following factors should be included. The model should be based upon the process of decision making for resource allocation to meet specific goals. These goals, both quantifiable and non-quantifiable, may not be commensurate, some may be implicit only, and attainment of one may preclude meeting others. The model must
allow tradeoffs among the various goals and subgoals of multiple actors, and be versatile in expressing these tradeoffs. The dynamic nature of a budgetary process, which may be continuous, i.e., may not reach a final conclusion if resource levels are quite uncertain, must be captured and incorporated into the model. If, and to the extent that these qualities can be included, the resultant model is likely to be operationally valid and a useful tool for understanding municipal cutback decision making.

**Budgeting Models**

Several models of the budget process have been developed for analytical purposes. One of the best known was developed by John P. Crecine in 1969, based upon research in three cities: Detroit; Cleveland; and Pittsburgh. His computer simulation model of the budget process is mainly descriptive of the behavioral processes followed by city departments, the Mayor, and the City Council in developing a budget. The model assumes fairly stable or growing revenues and finds mainly incremental decision making, basing this year's budget decisions on last year's. The model also assumes little conflict among departments over funds, continuity of actors in the system, and minimal external influences from community groups. He also assumes that decisions about complex budget issues are made by fragmenting and simplifying each problem, then using simple decision rules to solve it.
Crecine's model does not allow the possibility of unusual or innovative changes in budget allocations or departmental service delivery procedures. He also assumes that political pressures from groups external to the government are exerted only through the Mayor. When innovation is allowed to occur, it is as a result of a regular trend of budget increases that have provided slack resources with which innovative ideas can be tried.\textsuperscript{4} When the cities in his study had to reduce their expenditures, Crecine found that they did so incrementally, reducing or eliminating regularly scheduled increases first, then cutting non-salary items, and finally freezing hiring or eliminating pay increases. The model reflects this pattern. He did not find nor did his model predict, employee layoffs as a means for expenditure reduction.\textsuperscript{5}

Crecine's model, because it is based upon a pattern of expenditure stability or growth, is inadequate for a budgetary situation requiring cutbacks. Conflicts among divergent interests are largely ignored in the workings of the model, and complexity is reduced by assumptions that solutions to prior years' problems will still be valid for this year's. Although the model does approximate a hierarchical decision making structure, it does not allow goal conflict resolution among the various levels of the hierarchy. By assuming that the process is highly centralized around the Mayor, the model precludes horizontal interaction among programs or goals at levels
below the top. As a result of these features, Crecine's governmental problem solving model may approximate the formal budget process as it was in periods of growth with descriptive accuracy. It lacks the necessary flexibility and the capacity to handle the conflict resolution that is essential in the cutback case. Accordingly, it is a less than useful tool in describing or explaining the process of budgeting for cutback management.

A later study of municipal budgeting was done by Lewis B. Friedman for his dissertation at Michigan State University which was published in 1975. He also developed a model of municipal budgeting, less formal than Crecine's, based upon interview data from officials of fourteen medium sized Michigan cities. Friedman also focussed on the process of municipal budgeting.

He found the process to be more political and less centralized around the Mayor than Crecine had. Friedman's model was descriptive, providing comparative information about the political processes of resource allocation in cities. Since the model is primarily descriptive, it does not provide a sufficiently systematic framework for analysis of the political aspects of budgeting. Rather, it does supply much evidence of the shortcomings of non-political decision models, such as Crecine's, for adding to the understanding of municipal resource allocation under serious revenue constraints.
Most other models of the budgetary process that can be found in the literature are based upon a particular type of budgetary process. Planning - Programming - Budgeting - Systems (PPBS) processes are described and modelled.\(^7\) Zero-based budgeting (ZBB) models for municipal budgets have been plentiful since its public sector introduction in Georgia State Government.\(^8\) Budgeting texts describe performance budgeting, emphasizing efficiency over political considerations in budget processes. While all of these models describe budgetary processes, they are mainly prescriptive models, selling or evaluating a tool, rather than modelling empirically the actual decision making process.\(^9\) Lacking generality because of their prescriptive, technique oriented focus, these models fail to have sufficient explanatory power to enhance understanding in the area of resource allocation for cutback management especially in the local government case.

None of the models summarized above is truly dynamic, nor does any of them include a process for resolution of the multiple, conflicting goals of city organizations, except by assuming that such issues will be decided personally by the central decision maker. Although that may be the final action which concludes a conflict over the allocation of resources, many factors influence such decisions. Mathematical models, such as Crecine's, fail to incorporate the more political aspects of budgetary decision making which are difficult to quantify and include in a computer simulation, and which his results
discounted anyway. A descriptive model like Friedman's can incorporate such factors and provide a certain implicit dynamism, but does not lend itself to systematic testing except by replication in other cities. Budget process models touting a particular method tend to be too prescriptive to have sufficient analytical value. A systematic, mathematical model is needed which can incorporate multiple priorities and conflicting goals, be sufficiently dynamic to allow tradeoffs among the multiple goals and the actors holding them, and be empirically testable. The model which is proposed below attempts in a preliminary fashion to incorporate these features.

**Budgetary Processes**

Most cities develop their annual budgets according to a fairly standard process. Revenue estimates are made for the budget year and these become constraints within which department heads are asked to develop their budget proposals. After a series of budget hearings or meetings between the Mayor and his staff and the departments, final decisions are made by the Mayor. The executive budget is then submitted to the City Council, which may also hold hearings. The City Council may make changes in the particulars of the budget, and then they enact it into law. Often the Mayor has some form of veto power over the entire budget or over specific line items.

In the five Ohio cities described in the previous essay, a very formal budget process must be followed because of certain requirements
in Ohio statutes pertaining to Ohio local governments. In the spring of the year prior to the budget year (i.e., Spring, 1980, for 1981 calendar year budget) the City Auditor estimates revenues and expenditures for the coming year. Based upon these revenue estimates, city department heads are asked by the Mayor to prepare budget proposals. Meetings are held with the department heads and Mayor to discuss the proposals and determine the appropriate levels of expenditure for each department for the budget year. These expenditure estimates (requests) are then compiled with the Auditor's revenue estimates to form the "tax budget" which must be passed by the City Council and submitted to the County Budget Commission by July 20.\textsuperscript{10}

The County Budget Commission is composed of the County Treasurer, Prosecuting Attorney, and County Auditor, all elected officials. It may also include two public members, who do not hold other public offices, elected at large in the County, if such a proposal is passed by the electorate. The County Budget Commission is legally empowered to adjust the rates of property taxation in the county, fix the amount of such taxes to be levied each year, and allocate those taxes to the various local jurisdictions within the county, but in practice acts only pro forma.\textsuperscript{11} After taxes are formally allocated, the local governments are notified of the amount they will receive from property taxes for the budget year.
Local governments in Ohio are required by law to enact a balanced budget based upon revenues certified to be available by the County Budget Commission on or about January 1 of the budget year. They may pass a temporary budget in January, but if so, must enact the final budget by April 1 of the budget year. Between September, when local governments receive their revenue certifications from the County Budget Commissions, and January, when the final budget must be enacted by the City Council, another round of budget negotiations takes place. The Mayor revises his expenditure targets for each department, who in turn revise their requests, and another set of meetings is held to develop the final budget proposals. While the tax budget is likely to have been out of balance with expected revenues, the final budget presented to City Council must be balanced. The latter part of the budget process tends, as a result, to be much more political and the decisions more difficult than was development of the tax budget. In comparison with other local governments not required to prepare tax budgets for County approval, the September-December budget process probably more closely resembles their budget preparation process than does the earlier one.

In the Ohio municipal budget process, as in most other governmental resource allocation processes, decisions are made which attempt to come as close as possible to meeting the implicit and explicit goals of decision makers and the citizens they represent. A general model of this process of budgetary decision making to achieve
specified goals, given resource constraints which may include severe reductions, is developed below. It should be useful not only in describing and explaining the Ohio municipal budget processes upon which it is based, but be generalizable to other cutback decision making situations as well.

Resource Allocation Constraints

When city governments suffer from severe financial stress, probably the most difficult budgetary problem their Mayors and top officials have is finding the best allocation of their available revenues, given the multiple objectives to be met as well as the numerous constraints on the budget process. The most serious constraint, especially for cities which have lost major portions of their tax base from industrial relocations or closings, is the amount of revenue available. In the short run revenue usually cannot be changed, although short-term borrowing may be possible in some cities and fee or tax increases may be sought to alleviate shortfalls eventually. Other constraints may be equally inflexible.

Many factors affect the resource allocation process: statutory (or home-rule charter) requirements for city governmental structure and operations, including civil service rules; employee union contracts for wages, benefits, and working conditions; contracts with other agencies or private firms to provide goods and services to the city government or its residents; commitments by city officials to provide utilities or other services to specific beneficiaries; and
expected levels of city services to be provided to residents and businesses operating within the city. Other constraints include the possible political ramifications of changes in previous resource allocation patterns, and legal restrictions in federal, state, or local statutes and/or administrative rules which may inhibit change. In addition, financial constraints such as the requirement to pay unemployment compensation to laid off employees for up to 39 weeks (most governmental units are self-insurers), and technical factors such as long lead times for obtaining some types of equipment, may restrict decision makers' ability to obtain optimal or indeed effective results from particular resource allocation alternatives. Many of these factors were found to influence managerial cutback responses in the Ohio case studies described in the second essay of this dissertation.

Revenue inelasticity and the other constraints noted above serve to limit the ability of municipal decision makers in cutback situations to meet their multiple objectives. Service delivery, political, and personal goals may not be attainable given available revenue and other constraints. Mayors and subordinate decision makers will be forced to satisfice, that is, to settle for alternatives below the optimum attainment level for all goals. If a single goal or objective function can be determined, linear (or non-linear) programming can be used to solve the problem of maximizing (or minimizing) the value of that function subject to known applicable objective constraints. This methodology is limited, however, to single objective
problems. As discussed above, most city resource allocation problems for cutback management will have multiple and usually conflicting goals which need to be met. In such a case, the methodology of goal programming can be useful in analyzing the problem and providing a tentative solution.

**Goal Programming**

Goal programming is a special adaptation of linear programming which is capable of solving decision problems with multiple goals and subgoals. It was developed in the early 1950's and since that time has been applied to many different types of problems, including resource allocation. Linear programming optimizes an objective function subject to a set of constraints. Goal programming expresses a set of goals within the constraint set and minimizes deviation from these goals. Multiple goals can be prioritized so that the most important goal is addressed first in the optimization process, followed in order of preemption by lower priority goals and subgoals which may be conflicting. Since goal programming objective functions attempt to minimize deviations from goals, such programs can produce optimal solutions in which all goals have not been met, but simply approximated. In this way goal programming models the managerial decision process of satisficing.
Mathematical models usually require quantification of variables and constraints, which can be difficult for primarily political factors. Resource allocation problems, however, have features which make mathematical expression of political constraints less difficult. Political goals such as re-election of the Mayor or City Council members cannot explicitly be expressed mathematically, however, a perception that re-election chances would be severely hurt if garbage collection services fell below a certain level or insufficient police patrols were on duty at night, can be expressed mathematically as a constraint and included in the model. Within the goal programming, methodology, the various goals can be weighted in a relative or preemptive fashion to indicate their priority. The solution to such programs will be a set of resource allocations which approximates, as closely as possible, the stated goals or goal surrogates, according to their importance, while meeting all binding constraints that can be effectively expressed.

Constraint Equations

Expressing constraints mathematically for purposes of goal programming is fairly straightforward. They take the form of linear equations which include variables representing positive or negative deviations from the desirable (or required) value of the constraint. For example, let $x_t$ represent the allocation decision for total available expenditures for a city and $r_t$ represent total available revenues.
Then,
\[ x_t - y_t^+ + y_t^- = r_t \]  \hspace{1cm} (1)

represents the requirement for a balanced city budget, where \( y_t^+ \) represents positive deviations from \( r_t \), or overspending, and \( y_t^- \) represents negative deviations, a budgetary surplus. In the context of goal programming, then \( r_t \) is the goal and all \( x_t \) represent allocation subgoals. Political constraints can be expressed similarly. If \( r_p \) represents the minimum level of police patrols which would be politically acceptable to the Mayor's constituency for re-election, it can be quantified as the resources (dollars) required to support that level of police protection. Then
\[ x_p - y_p^+ + y_p^- = r_p \]  \hspace{1cm} (2)

expresses the goal of having \( r_p \) dollars spent on police patrols in order to assure re-election.

Interaction among various goals and subgoals can be expressed using coefficients on the variables. Thus, we could include interaction between the goal of a balanced budget and subgoals of particular service levels which are politically desirable. Interaction between specific subgoals of police and fire service allocation levels \( (x_p, x_f) \), the total expenditure level \( (x_p) \), and a balanced budget could be expressed as follows:
\begin{align}
\begin{aligned}
a_t x_t - y_t^+ + y_t^- &= r_t & (3a) \\
a_f x_f - y_f^+ + y_f^- &= r_f & (3b) \\
a_p x_p - y_p^+ + y_p^- &= r_p & (3c)
\end{aligned}
\end{align}

where \(a_t, a_f, a_p\) are the interaction coefficients. Similarly, technological processes (production functions) or governmental structure constraints can be represented using multiple variables in a single constraint equation. These might include capital-labor ratios; for example, the size of street repair or sanitation crews per truck:

\begin{equation}
a_1 x_1 + a_2 x_2 - y^+ + y^- = r \quad (4)
\end{equation}

where \(a_1\) and \(a_2\) represent the relationships between crew members \((x_1)\) and trucks used \((x_2)\). As above, \(y^+, y^-\) are the deviation variables and represent the resource level (dollars) available for the activity. Other relationships among variables, such as union contract provisions requiring certain work rules, fixed costs for debt service related to bond-financed expenditures, or special requirements of intergovernmental grants could also be included using interaction coefficients.
Objective Functions

After the set of goals, subgoals, and other constraints has been developed, the objective function of the model can be established. This function consists of the set of slack variables to be maximized or minimized, such that deviation from the goal is minimized. If the problem is to come as close as possible to a certain goal without exceeding it, the objective function will be of the form:

$$\text{Minimize } y^+ + y^- \quad (5)$$

with $y^+$ and $y^-$ always constrained to be non-negative. Since it would be impossible in a real world situation both to exceed and to fall short of the goals, one will necessarily equal zero. If both $y^+$ and $y^-$ equal zero, the goal is attained exactly. If one is positive, then the goal has been exceeded ($y^+ > 0, y^- = 0$) or underattained ($y^- > 0, y^+ = 0$).

Multiple, interacting goals can be optimized relative to one another or by assigning preemptive i.e., prioritizing, weights to some subset of the objective function. The latter weighting scheme assures that the most important goals will be met first. (Weights are chosen arbitrarily, based upon goal priorities.) A multiple goal objective function with such ordering weights ($M_i$) could assure, for example, that the revenue constraints would be met first, then other resource allocation goals such as political considerations, would be attained in turn, to the extent possible. For example:
Minimize \( M_1 y_1^+ + M_3 (y_2^+ + y_2^-) + M_2 y_3^- \) \( \quad (6) \)

would require the goal associated with the slack variable \( y_1^+ \) to be met first, then the goal for \( y_3^- \), and finally that of \( y_2^+ \) and \( y_2^- \).

The above weighting format, then, directs the optimization process by means of preemption \( (M_1 > M_2 > M_3) \). In this case, the program would minimize the overattainment of goal 1, the underattainment of goal 3, and the absolute deviation (overattainment or underattainment) from goal 2, in that order.

Goal Programming Models

Goal programming models can be stated in the general case for multiple goals and subgoal variables using vector notation. Suppose we have \( M \) goals which are expressed as an \( m \)-component column vector \( r \). Further assume that these goals can be attained mathematically by linear combinations of \( n \) subgoal variables, represented by an \( n \)-component column vector \( x \). Let \( A \) depict an \( m \times n \) matrix of technological coefficients representing the relationships between goals and subgoals. Then the problem of goal attainment for multiple goals and subgoal constraints can be stated mathematically as follows:

Minimize \( e y^+ + e y^- \) \( \quad (7a) \)

Subject To \( Ax - I y^+ + I y^- = r \) \( \quad (7b) \)

\( x, y^+, y^- \geq 0 \) \( \quad (7c) \)
where \( e \) is an \( m \)-component row vector all of whose elements are equal to 1, \( y^+ \) and \( y^- \) are \( m \)-component column vectors of deviations from the goal vector \( r \), and \( I \) is an \( m \)-dimensional identity matrix.\(^{19}\) The objective functions for goal attainment of "goal functionals" in (7a) is of the simplest type. It is also possible to use a "goal interval" functional if the goal does not have to be achieved exactly but can be met by any point in an interval.\(^{20}\) This type may be particularly useful for managerial or political goals which are important, but not precisely quantifiable.

**Constraints in a Cutback Budgeting Model**

In a municipal cutback management situation such as that caused by the loss or decline of a major taxpaying industry in the metropolitan area, decision making can be modelled with the existing goal programming methodology described above. The constraints, goals, and subgoals in such a model will be of several types. The first constraint, perhaps the most important one relative to cutback management, is revenue availability. In the short term the estimated amount of revenue expected for a particular year is usually fixed and thus is a definite constraint on the level of governmental activity which can be undertaken. This constraint may be less rigid if fees and service charges, taxes, or intergovernmental transfer payments can be increased or loans can be obtained. While balanced budget requirements in most cities tend to eliminate the latter option, the other possibilities do offer some relief from severe revenue problems, but often only in the
longer term. Multiyear planning and budgeting are less restricted by revenue constraints than single-year or midyear crisis budgets.

The second type of constraint is the level of services demanded by citizens from the city. This includes the frequency of garbage collection, the size of police patrols and availability of special forces such as detectives or drug investigators, the average response time of fire and ambulance units and their availability to all parts of the city, and the extent of street maintenance, repair, and resurfacing. Often service levels can be expressed in terms of the amount of resources (dollars) needed to provide them at a certain level. Changes in service delivery methods to improve productivity may, of course, allow the same level of service to be provided at a lower cost. In developing models for specific cities the mathematical and verbal expressions for service level constraints would need to consider such possibilities. Each city department would contribute one or more service level constraints to the budgetary model.

A third type of constraint is legal, rather than demand-oriented or financial, although such limits may be quantified in money or service level terms. Union contracts, civil service rules, and private sector vendor or service provider contracts with which the city must comply are binding constraints at least in the short run. These include wage and fringe benefit levels for employees and payment levels
for private vendors. They also may include agreements on working
hours or production methods which determine the number of employees
needed to complete certain tasks. With rare exceptions contracts
are valid for specific time periods after which they may be rene-
gotiated. Civil service rules, especially if imposed by state
law, may be difficult -- or some would say impossible -- to alter.

A fourth, and often related, type of constraint is structural.
City departmental structure, the number and type of elected and ap-
pointed officials, and the services that must be performed by the
city may be determined by state law, city charter, city ordinances,
or executive orders. Structural constraints imposed by state law
or city charter (e.g., the number of elected officials and their
terms of office) are difficult for an individual city to change
and, therefore, are usually binding. Locally determined structures,
set by the Mayor or Council, are more easily changed and, as a re-
sult, less binding. Those structural constraints which have an ef-
f ect on resource allocation and are binding for the period covered by
the model should be included to the extent they can be expressed
mathematically.

The fifth type of constraint is political. Re-election possi-
bilities of city officials may depend upon maintenance of (or changes
in) minimum levels of service provision or maximum levels of taxes.
Governmental activities may also affect chances for passage of tax
levy changes or renewals. Both political and structural constraints are difficult to quantify and include in a mathematical model. They may be expressed, however, as parts of other constraints (e.g. service or tax levels) rather than separately included. Political constraints also may appear in the model as priorities for goal attainment.

Inclusion of all political and structural constraints which affect cutback management may not be possible, since some may not be expressible mathematically. The usefulness of the model may not be diminished by their exclusion, however. The most important political and structural constraints usually can be included, either explicitly or implicitly, in the constraints and goals. Decision makers' judgment is probably required for other, more subtle political factors to be considered. These need not be mathematically modeled, since the model proposed here is not intended to substitute for such judgments. Instead, it may serve as a helpful tool to support better decision making for managers faced with cutback situations. Similarly, as an explanatory model for municipal cutback decision making this, like other mathematical models, is at best a limited representation, rather than an exact replication of a complex political-fiscal process of behavioral adaptation.

Other constraints may also affect a city's ability to manage within its available resources and consequently should be included in the model. The necessity of paying unemployment compensation if employees are laid off provides a useful example. Since most governmental units
are self-insurers, they must pay the unemployment compensation of laid-off employees for up to 39 weeks, as long as the employees are eligible. This results in a net savings of less than the total salaries of employees laid off. Other constraints which restrict a city's ability to change service delivery methods, reduce expenditures, or make productivity improvements (e.g., long lead times for new capital equipment purchases) could and doubtless should also be included in the model if they are relevant for cutback management and are significant process determinants. Many of these constraints will be specific to particular cities and not necessarily included in a general model.

Objective Functions for Cutback Budgeting Models

The objective function for a cutback management decision model will reflect at least two goals: keeping expenditures within the limits of available revenues and maximizing levels of services provided at a given expenditure level. Most city budgets are required by state law or city charter to be balanced. In those states where operating debt is allowed, there are usually severe restrictions on the type, purpose, and amount of such debt; often debt is legal only as a cash flow aid, in anticipation of tax revenues in the future. Because most cities cannot borrow money to supplement their operating funds, revenue constraints are binding. In cutback situations with declining absolute or nominal revenue, this constraint may have to be met before any others are considered in order to assure that
the city budget is legally balanced. The objective function would then necessarily include the goal of minimizing, i.e. forcing to zero, overspending.

The second goal in the objective function, maximizing service provision, would be achieved after overspending was eliminated and the budget was balanced. This goal would be expressed in the objective function as minimizing underattainment of the departmental service provision goals. Based upon budget requests and citizen demands for services, service provision goals are likely to exceed the available revenue constraint in every case, in both cutback and growth situations. Since overspending is not allowed, some, if not all, of these goals will be underattained. Inclusion in the objective function of a goal to minimize underattainment in all departments is necessary in order to assure that resources are utilized to the extent available to provide services. Without this objective, the model could produce large surpluses in order to assure that expenditures stay within revenues. The expression of this objective would require inclusion of numerous subgoals, deliniating which service functions should receive priority over others in the allocation of funds.

The objective function may -- and if properly developed would -- include multiple goals to be met in addition to these two basic types. Subgoals of the revenue constraint, including goals for each separate funding source may be included, especially if some funding sources are
more flexible than others. Enterprise functions, e.g., an electric utility or water and sewer facilities, may have separate subgoals since their revenues can be increased in most cities with approval of only the City Council or the department head and Mayor. These funds are consequently technically -- if not politically -- less difficult to increase than the general fund which consists mainly of voter-approved tax revenues. Expenditure subgoals also may be included in the objective function to represent priorities for certain types of services.

The specific objective function for a particular situation in one city might include the dual goals of maximizing service levels while balancing expenditures and revenues, but differ from other cities in the inclusion and weighting of subgoals depending upon the particular actor or actors upon whose goals the model was based. Mayoral goals and priorities would probably differ from Council's, nor would theirs be likely to be equivalent to those of particular departments. A set of models could be developed for a city including the same basic goals and constraints, but having different objective functions depending upon the actor involved. The model could be solved for each of those individuals' or groups' objectives. In this way the model might be used by one party, the Mayor for example, to estimate the possible solution another party (or parties), e.g., the City Council, might wish to achieve. This could provide useful information to facilitate decision making on Mayoral budgetary
proposals for cutbacks. As a research tool, this would allow the analyst to simulate the sequential, interactive multiple-party decision making process which characterizes Mayor - Council (or Manager - Council) relationships.

**Decision Variables:**

After the goals of the model have been determined, the subgoals through which the goals are achieved can be determined. These are the basic decision variables of the model. For the general cutback budgeting model two types of goals will be used: service (expenditure) level goals for each city department and revenue (fund source) limits which cannot be exceeded. The decision variables represent the subgoals related to these primary goals. For example, particular groups of service and activity goals set by (or for) each department require equipment, supplies, personnel, and other types of expenditures for their attainment. Subgoals can be stated according to service levels for each component of a department's activities or as levels of employees, materials, supplies, etc. The former would be more helpful if the city's budget were organized according to a program budgeting format. The latter is compatible with line item or object of expenditure budget organization.

In our model decision variables will represent service or program subgoals rather than objects of expenditure. This is consistent with the budgeting format required in Ohio for submission of tax budgets and annual reports. It is also a more general presentation of the
subgoal decisions, since differences in service delivery methods might require object of expenditure type decision variables to be more specific to individual cities. Subgoal decision variables are represented, as $x_{ij}$. The double index $(ij)$ represents the two primary goals to which each subgoal contributes: sources of funding $(j)$ and total expenditures for each department $(i)$. The variable $x_{ij}$ represents the budgetary allocation from a particular funding source $j$ to department $i$ for its activities.

**Constraint Sets**

Using these decision variables the constraint set can be developed. It consists of service department demands for budgetary allocations to carry out its functions; such that

$$\sum_{j} x_{ij} - y_i^+ + y_i^- = r_i, \quad i = 1, 2, 3, \ldots, m \quad (8a)$$

and fundings source available to be used for general and specific city purposes:

$$\sum_{i} a_{ij} x_{ij} - z_j^+ + z_j^- = f_j, \quad j = 1, 2, 3, \ldots, n \quad (8b)$$

where $r_i$ and $f_j$ represent budget requests for expenditures and funds available from each source, respectively. The $a_{ij}$ represent allocation weights within each funding source for particular uses. These enable the model to include funding source allocations only for departments which can use those funds, or to apply a proportion of certain funds
to the general fund. It is also allows percentage allocations from particular funding sources if these have been politically promised. (This would be one way of including that particular type of political variable.) Thus, the $a_{ij}$ coefficient representing electric utility fees might be equal to zero for all $x_{ij}$ except the one representing operation of the electric utility. (Note that the summation over $i$ of the $x_{ij}$ for each particular $j$ will give the total for that funding source, i.e., for $j = 1$, $\sum_i a_{i1} x_{i1} = a_{11} x_{11}$, the total for funding source 1. Similarly, the summation over all $j$ for each $i$ gives total for each department, i.e., for $i = 1$, $\sum_j x_{1j} = x_{11}$, the total for department 1.).

These two types of equations comprise the constraint set. Each department or division will have an equation of the type (8a) included in the model representing its particular functions. The sum of all department demands will total the budget request $R$ ($\sum_i r_i = R$). Each funding source will also have an equation in the model of the type (8b) representing the allocation of funds from that source to city departments or activities. The sum of all funding sources will equal total funds available $F$ ($\sum_i f_j = F$). In general, $R > F$, since budget requests in a cutback management situation will undoubtedly exceed the revenue available. It is this feature of the model which makes it particularly interesting since it requires the model to approximate the decision process of cutting back expenditures from
(or requested) levels. Since budget requests not infrequently exceed available revenues in growth situations as well, the model is versatile and might be used to analyze municipal budgeting in good times as well as bad, if there were sufficient uncertainty over results of budgetary decisions to make its use profitable.

**Goal Functionals**

It remains to express the goal functional or objective functions of the model mathematically. Many different goals can be expressed in a goal program, however, only the ones most relevant to our model will be included here. The goal of avoiding funding source overspending is usually the most crucial in a cutback situation. This can be in-cluded by minimizing the positive deviation from the available funding source limit or goal. Mathematically, where $Z_j^+$ represents overspending and $Z_j^-$ represents underspending from funding source j, this can be ex-pressed as:

\[
\text{Minimize } \sum_j Z_j^+ \quad (9a)
\]

The goal of maximizing departmental service levels within avail-able revenues would be expressed by adding a service level goal to the objective function above:

\[
\text{Minimize } M \left( \sum_j Z_j^+ \right) + \sum_i C_i Y_i^- \quad (9b)
\]
The $c_i$ represent cost coefficients for various departments which allow inclusion of cost saving differentials for particular types of services, because reductions of some departmental budgets yield more savings in a cutback situation than others. Political cost factors associated with service levels in particular departments could also be expressed with cost coefficients. Note that by minimizing the deviations of department expenditures below their goals $(r_i)$, service levels will come as close as possible to budget request levels, but expenditures will be prevented from exceeding available funds by the pre-emptive weight on the revenue goal.

Other types of goals can also be expressed mathematically and included in the objective function. For example, if a tax increase were possible, one might wish to include a goal that relaxed limits on that funding source in order to determine how large a tax increase to request. This could be put into the model by including it separately in the objective function and minimizing its under-attainment. For example, if the tax to be increased is the $n$th funding source:

$$\text{Minimize } M \left( \sum_{j=1}^{n-1} Z^+_j \right) + \sum_i c_i y_i^- + Z^-_n \quad \text{(9c)}$$

This would assure that only the $n$th funding source could be exceeded but all others would be binding. If debt financing were allowable, this type of objective function also could be used to determine the
This model can be further illustrated by a hypothetical example for six major departments and seven funding sources, shown below for decision variable \( x_{ij} \).

<table>
<thead>
<tr>
<th>FUNDING SOURCES (( j ))</th>
<th>DEPARTMENTS (( i ))</th>
</tr>
</thead>
<tbody>
<tr>
<td>j = 1. General Fund</td>
<td>i = 1. Public Safety</td>
</tr>
<tr>
<td>3. Water Works Fund</td>
<td>3. Parks and Recreation</td>
</tr>
<tr>
<td>5. Street &amp; Highway Fund</td>
<td>5. Streets &amp; Highways</td>
</tr>
<tr>
<td>7. Capital Improvements Fund</td>
<td></td>
</tr>
</tbody>
</table>

The problem to be solved by the model is allocation of the seven funds to the six departments, remaining within resources in all funds, and providing the highest service levels possible. Specific revenue and expenditure goals \((f_j, r_i)\), the variables \((z_{ji}^+, z_{ji}^-, y_i, y_i)\) representing deviations from the goals, and the cost coefficient \(c_i\) would be determined according to the resources and priorities of the city. The preemptive weight \(M\) is an arbitrary number large enough to assure that the revenue constraint would always be met.

For this hypothetical six-department, seven-fund city, the model would be written as follows:

\[
\begin{align*}
\text{Minimize} & \quad M \left( \sum_{j=i}^{7} z_{ji}^+ \right) + \sum_{j=1}^{6} C_i y_i^- \\
\text{subject to} & \quad x_{11}^+ + x_{12}^+ + x_{31} + x_{61} - z_1^+ + z_1^- = f_1
\end{align*}
\]
\[ x_{12}^+ x_{22}^+ x_{32} + x_{62} - z_2^+ + z_2^- = f_2 \] (12c)

\[ x_{43} - z_3^+ + z_3^- = f_3 \] (12d)

\[ x_{44} - z_4^+ + z_4^- = f_4 \] (12e)

\[ x_{55} - z_5^+ + z_5^- = f_5 \] (12f)

\[ x_{16}^+ x_{26}^+ x_{36} + x_{56} + x_{66}^+ z_6^+ + z_6^- = f_6 \] (12g)

\[ x_{17} + x_{67} - z_7^+ + z_7^- = f_7 \] (12h)

\[ x_{11}^+ x_{12}^+ + x_{16}^+ x_{17} - y_1^+ y_1^- = r_1 \] (12i)

\[ x_{21}^+ x_{22} + x_{26} - y_2^+ + y_2^- = r_2 \] (12j)

\[ x_{31}^+ x_{32} + x_{36} - y_3^+ + y_3^- = r_3 \] (12k)

\[ x_{43} + x_{44} - y_4^+ + y_4^- = r_4 \] (12l)

\[ x_{55} + x_{56} - y_5^+ + y_5^- = r_5 \] (12m)

\[ x_{61}^+ x_{62} + x_{66}^+ x_{67} - y_6^+ + y_6^- = r_6 \] (12n)

\[ \sum_i r_i > \sum_j f_i, \]

\[ x_{ij}, y_i^+, y_i^-, z_i^+, z_j^- \geq 0^-, i = 1, \ldots, 6, j = 1, \ldots, 7 \] (12o)
amount of debt that would be required based upon the goals and constraints of the model.

The Budgetary Model for Cutback Management

These elements: constraints; goals and subgoals; and their expression in an objective function; can be brought together mathematically to form a goal programming model of budgeting for cutback management. Let us suppose that for a municipal budget with declining revenues we have \( m \) city departments and \( n \) funding sources. Further suppose that we wish to keep expenditures within those available funds while maximizing the amounts of city services that can be provided. We can use goal programming to model this situation as follows:

Minimize \( M \left( \sum_{i} z_{i}^{+} \right) + \sum_{i} C_{i} y_{i}^{-} \)  \( (11a) \)

Subject to \( \sum_{i} a_{ij} x_{ij} - z_{i}^{+} + z_{i}^{-} = f_{j}, j = 1, \ldots, n \)  \( (11b) \)

\[ \sum_{i} x_{ij} - y_{i}^{+} + y_{i}^{-} = r_{i}, i = 1, \ldots, m \]  \( (11c) \)

\[ x_{ij}, z_{i}^{+}, z_{i}^{-}, y_{i}^{+}, y_{i}^{-} \geq 0 \]  \( (11d) \)

In solving this problem, we will presume that \( \sum r_{i} > \sum f_{j} \). This will mean that all the expenditure subgoals \( x_{ij} \) cannot be met, but the objective function will assure that as many as possible are achieved within the revenue constraint.
In this model equation (12b) represents allocation of the general fund \((j=1)\) to four departments \((i = 1, 2, 3, 6)\). Other departments would not receive general fund support. Equation (12i) represents the total expenditure request for the Public Safety Department \((i=1)\), which receives funds from four sources \((j=1, 2, 6, 7)\). The decision variables could have been assigned interaction coefficients \((a_{ij})\), however, for simplicity all such coefficients are assumed to equal one \((1)\) in this example.

**Uses of the Model**

This model is conceptually useful for analysis of municipal budgeting subject to revenue and other constraints for several reasons. It illustrates the complexities and problems of administering a multiple funding source budget in which some sources are earmarked for specific uses, while others are more flexible and may be used for any purpose. In the above example the general fund and income tax fund \((j = 1, 2)\) were assigned to all except two departments, both of which had separate, fee-supported funds. If these departments had not been self-supporting, however, they might also have received general fund allocations. The model also suggests that some budget requests be reduced since budget requests exceed available funds \((\Sigma r_i > \Sigma f_j)\). This forces the allocation process to follow the priorities built into the model and actually simulate Mayor's and Council's budget decision process. A third value is that the model requires goals to be met as
closely as possible within constraints, approximating managerial (and political) satisficing behavior. This is in contrast to other models which assume that decision makers have perfect information and can optimize. Since few real-world municipal managers have sufficient information, analytical capability, time or opportunity to make optimal decisions, this model seems appropriate as an explanatory making tool for research and teaching.

As a cutback decision making tool, the model is also very versatile. More extensive objective functions (goal functionals) can be included than those described above in order to explicitly include political or other types of goals which are of concern in a particular city. By weighting the deviation variables appropriately in the goal functional, non-commensurate goals can be included and met or approximated according to the manager's priorities. Different goal functionals could also be used with the same basic set of constraints and goals for a city in order to reflect the differing priorities of individual decision makers, e.g. Mayor's versus City Council's priorities. The Mayor or his staff could use the results of the different versions of the model to compare possible policy outcomes before making decisions. The outcomes of various responses to political issues could be analyzed by developing goal functionals representing the different sides of the issue and then comparing the results of the budget allocation model under those alternatives. As mentioned above, revenue constraints could also be relaxed to determine the results if a fiscal crisis were
averted by a tax increase or the receipt of increased or time accelerated intergovernmental transfer payments. The model could also be applied at the departmental level to analyze the allocation of resources internally and help the department heads to understand the resource allocation process from a broader perspective.

It is not intended that this model would be used -- or indeed could be so used -- as a substitute for managerial judgement and political processes in cutback decision making. Rather, it can be a useful tool for Mayors, City Managers, or Finance Directors to use when difficult budgetary decisions must be made. The model could be used, for example, to determine preliminary budget or cutback guidelines based upon the Mayor's priorities and the best revenue estimates available at that time. These could be provided to department heads at the beginning of the budgetary process along with instructions for budget development. By giving department heads an idea of the possible allocations, this might facilitate development of more realistic requests in cutback situations. It could also help managers analyze alternative methods of expenditure reduction if decision variables for objects of expenditure (e.g. salaries, supplies, contracts, equipment) within departments were included in the model, for example.

The model could also be adapted to predict cutback decisions of other political or managerial officials, e.g. to predict the City Council's reaction to a mayoral budget, by including their priorities
which, as was found in the case studies, might rank specific programs above a balanced budget. To the extent that the Mayor could predict their goals and include them in the model, their likely alterations of the Mayor's budget could be forecast and analyzed prior to final executive budget development. The model could be used as well to help generate alternative budgets for the dialectical debate process for resolving allocational conflict, described in the first essay of this dissertation. It thus becomes a decision support tool as part of a cutback budget process which facilitates creative decision making.

The budgetary model for cutback decision making developed in this essay thus has a twofold purpose. It can be used in research as a general model of the process of municipal decision making for cutback management and as a cutback management (or budgetary) tool for municipal managers in that it can provide a limited display of alternative fiscal options as an initial base for the operation of necessarily complex cutback decisions. While a large-scale empirical application of the model to explain and delineate cutback budgeting options in a number of cities is outside the scope of this essay, its conceptual development is a new departure from the standard growth-oriented, economic model of budgeting. Rather than provide a "new technique"-oriented budget model (e.g. ZBB, PPB), it provides a process model of cutback decision making which not only
supplies information on possible policy outcomes, as do other models, but also models the budgetary decision making process.

**Model Solution Process**

The process of solving the goal program mathematically for a particular model is also in keeping with the real-world budgetary decision process. Goal programs are solved by an iterative process of incremental movement from one set of values for the decision variables to another set, until the goals are met as closely as possible. The municipal budget processes described in the literature, as well as in the case studies of the previous essay, also are iterative. They include a series of hearings or meetings first with the Mayor and second with City Council, until a final set of allocations can be determined. In the Ohio cities this process occurs twice, once for development of the tax budget and later for the final budget.

Because the solution of the model's equations follows a process very similar to the actual decision process being modelled rather than being an unrealistic mathematical abstraction, it may also be more appealing to managers as a technique that could be helpful to them. Similarly, it could be a more valuable teaching aid for courses or workshops in budgeting and cutback management than simulation game models which work in a "black box." Managers and students could understand conceptually how the model worked, although actually solving it mathematically would be left to a computer. This is not to say that
other types of expenditure determination models are not useful for research. Rather, they are complementary to the goal programming model and may be used with it in many cases for enhanced understanding.

**Summary and Conclusions**

The budgetary model for cutback management developed in this essay was based upon actual processes followed in the five Ohio cities discussed in the previous essay. Each element of the model was described in relation to cutback budgeting, and the general model was built from a combination of these elements. Use of the model as both a research tool and an analytical method for municipal managers was discussed. We can conclude from these applications that the model is versatile and useful in non-routine, cutback decision situations which differ from patterns of budgetary growth. We have seen that the drawbacks of older budgetary models based upon revenue growth assumptions or specific budget formats require a new method for cutback budgeting models. The proposed goal programming budget methodology is versatile and able to surmount many shortcomings of other models. While it may necessarily exclude some non-quantifiable political variables, as do most models, it is able to approximate rather closely both the cutback budget process and, to a certain extent, the politics involved therein. It is not a substitute for managerial and political judgements in cutback management, nor for economic revenue forecasting models, but is a useful budgetary model for both managerial and research use.
The model developed in this essay is suggested as a methodology for systematic research into the processes and outcomes of budgetary decision making in fiscal cutback situations because it combines the structural budgeting system variables with a solution process that approximates the actual budgetary process. Data from various sources can be used to develop the mathematical model which, when combined with other socioeconomic research into the causes and effects of municipal fiscal stress, will help improve our understanding of city problems and their possible solutions.

Budgeting in cutback situations, especially of the types considered in these essays when plant closings result in long-term municipal fiscal problems, will never be easy for managers or politicians. A goal programming model developed along the lines of this essay also could be useful to municipal decision makers engaged in cutback budgeting. By enabling them to simulate the policy positions of other parties, e.g., city council, department heads, interest groups, in several iterations of the model, Mayors could make decisions in a more informed manner. When combined with the dialectical debate of the institutional allocational conflict process developed in the first essay, this model would provide a set of scenarios for alternative budget outcomes which could be debated and considered. Since a more informed process is likely to produce better results, the dialectical debate using goal programming model solutions as some of the alternatives would be expected to lead to a creative synthesis for budgetary decisions.
Of course, some of the model's results might be unacceptable to Mayors or City Councils for political reasons and others might be unpalatable to line managers in service departments for reasons unable to be incorporated into the model. There might be a tendency for decision makers to use those alternatives generated by the model or the dialectical debate process with which they agree and to reject others because they contradicted previously held ideas. Most decision support models will be victims of this phenomenon, however. The urgency of many declining revenue situations, the officials' frequent lack of previous experience with cutback management and budgeting, and the unacceptability of many possible solutions, e.g., drastic reductions in safety forces, may encourage -- or indeed compel -- Mayors and City Councils to seek new alternatives. This openness to new ideas was found in several of the cities described in the five case studies in the second essay of this dissertation. Where public officials are seeking new solutions to problems of cutback budgeting they probably will be receptive to models which help them develop those alternatives. As evidence, albeit circumstantial, of this, several of the Mayors and finance officers interviewed by the author for the case studies expressed interest in her research findings, indicating that they were searching for new ideas for cutback management.

The goal programming model for cutback budgeting may not be useful for all cities experiencing revenue declines. For some, however,
it is likely to be an aid to better decision making than might be possible otherwise. It is proposed, then, as a cutback budgeting tool for those municipalities which have the capability and willingness to use it. As such, it is a contribution to the field of public budgeting which deserves application and further testing and development.

Further Methodological Research

Several aspects of the budgeting model for cutback management could be explored further. The model could be reformulated into a dyadic structure which would take advantage of the matrix structure of the constraints. Funding sources could be represented by rows and expenditures by columns, for example. This structure would allow a network funds-flow methodology to be used to solve the problem. This type of model would be especially applicable in cities with numerous funds which all have revenue constraints and many are earmarked for specific purposes. This formulation would be most useful for application to individual city resource allocation models, rather than for multi-city research.

Another departure would be to change the objective function into a goal-interval format. This would allow goals to be met within an interval, rather than at a specific level. When there are many conflicting goals to be reconciled this format is more versatile than the
point-goal program used above. An upper and lower bound can be specified to form the interval within which a goal is to be achieved. As a long-range planning tool or in other situations in which revenues and expenditures are known only approximately, this might be a much better model. Goal interval programming could help the manager develop budget guidelines giving permissible ranges of expenditures for example, when conflicting goals make cutback decision making difficult.

Finally, the field network evaluation process and other modified case study data collection methods could be adapted further to provide a large scale information base for use in the goal programming model developed in this essay and other research models which utilize qualitative and political, as well as quantifiable socioeconomic variables.
NOTES TO ESSAY 3


3. Ibid, pp. 47-49.


5. Ibid, pp. 73-75.


9 One exception to this may be found in Timothy W. Ruefli*, "Planning in Decentralized Organizations," (Ph.D. dissertation, Carnegie-Mellon University, 1969), which models PPB as a general resource allocation model.


11. Ohio Revised Code, Section 5705.27, 5705.32.

12. Ohio Revised Code, Section 5705.38.
NOTES TO ESSAY 3: (Continued)


NOTES TO ESSAY 3: (Continued)

AFTERWORD: A SUMMING UP

The three essays on cutback management that constitute this dissertation consider municipal fiscal decision making under the stress caused by the loss of a major industrial taxpayer. Revenue declines in excess of expenditure reductions necessarily adversely affect the level and quality of affordable municipal services in this situation. One of the factors that influences the varying short and long run effects of such a municipal fiscal crisis is the quality of its management. When the crisis is recognized early and corrective action is taken promptly, the long run situation is ameliorated despite near term difficulties. Managerial action influences results and materially affects the long term fiscal well being of the city. In a nutshell, management matters.

The case studies of five Ohio cities described in Essay 2 of this dissertation demonstrated that management can indeed made a difference in city financial stability. While none of the cities weathered its fiscal crisis without some deterioration in city services, managerial action in several cities averted more severe crises by early responses. Work hour reductions in Taft and Harrison enabled those cities to finish fiscal years in the
black, while still maintaining city services, albeit with some delays. In both Harrison and McKinley previous city administrations had failed to keep city revenues and expenditures balanced during earlier recessions. While Harrison had recovered quickly, McKinley's lack of sound financial management practices had resulted in the declaration of a financial emergency in that city. Cutbacks and retrenchment, including layoffs, were difficult in all the cities, but did not appear to be politically damaging to any of the elected officials at the time of the case studies.

Good management and priority setting were, instead, political positives in several of these cities. The Mayor of Taft was urged to run again at the end of his two-year term, during which he had presided over budget cuts, layoffs, and service reductions. The income tax levy increase in Harding passed after Mayoral action reduced police and fire budgets and raised service charges in order to keep the city budget in balance. It appears that not only the McKinley financial emergency board, but also the "person on the street," recognize that difficult managerial cost-cutting decisions are required to maintain municipal fiscal stability when revenues fail to keep pace with inflation or worse, fall in absolute terms.

Managerial innovations are less likely to occur in times of fiscal stress than they are in better financial conditions. Good
management, therefore, must also include planning for contingencies before crises occur, as well as after the fact. Managerial processes are as important to fiscal stability as is efficiency of service provision. Tried-and-true managerial processes that worked in growth periods may not be as appropriate in periods of decline, however. Thus, it is important for Mayors and municipal managers to develop techniques for managing decline which can be used should such contingencies occur.

Declining resources necessarily cause conflicts among various alternative uses. Disagreements over the allocation of budgeted reductions may be more intense that the usual budgetary competition over the allocation of increases, however modest. Managerial techniques which constructively utilize that conflict, rather than avoiding it at the administrative level of decision making, may be more appropriate to periods of decline, as a result, than traditional growth-oriented budgetary processes. The first essay of this dissertation discussed such a technique here captioned institutionalized allocational conflict.

Institutionalized allocational conflict (IAC) as a budgetary technique for declining revenue situations is an alternative to traditional, conflict-avoiding budgetary processes. By incorporating and utilizing the conflict already present, as a result of the need to reduce programs and/or staff, a more creative solution to fiscal crisis situations can be obtained within the executive-budget
process. Avoidance of conflict may inhibit the alternative-generation process supportive of decision making. Bringing latent and hitherto suppressed the conflicts into the open in a constructively managed, dialectical debate allows a creative synthesis of various positions to be achieved, if possible, which may produce a better solution to the fiscal problems. Basic assumptions about the relationships among variables which influence decisions can be uncovered with such a process. This may result in improved understanding among the different participating interests, as well. Thus, conflict and the adversary process are harnessed within the executive budget process to produce improved fiscal decisions.

Implementation of decision making processes conducive to cutback management can also be assisted by effective decision support tools. The goal programming model for cutback budgeting developed in the third essay of this dissertation can be used as a managerial tool to aid in cutback decision making. Its design is especially suited for sensitivity analyses of different possible cutback strategies in a declining revenue situation. With such a tool, a Mayor could model the possible budget priorities and probable responses of various actors in the city. While in no sense replacing political judgment, the results of this modelling of various budget scenarios could be very helpful to a Mayor in developing budget guidelines for department heads and developing or reviewing his own strategy. Implications of specific service reductions for other programs could
also be predicted with the model, which might be a valuable aid to decision making. Tools are seldom if ever adequate replacements for good management, but appropriate techniques are indispensable aids to effective management in difficult retrenchment situations.

The future of our nation's cities depends to a large extent upon the quality of their management. To be sure, their tax bases, demographic characteristics of their citizens, inflation, and energy costs will have a profound effect on the financial and social stability of most cities. These factors notwithstanding, the way cities are managed in both favorable and adverse conditions will probably determine their long term futures. Management makes the difference between cities which control their affairs constructively, even in declines, and those which are unable to meet long term obligations. Of course, short term crises may and ordinarily will severely tax the financial and managerial resources of some cities. The decisive factors are managerial ability to cope with serious problems and appropriate techniques to use in that process. Short term crises need not become long term problems, if appropriate managerial actions are taken before situations become uncontrollable.

This research has considered municipal cutback management in the case of one variety of fiscal stress -- that caused by the loss of a major industrial taxpayer. Analysis of the Ohio municipal case studies concludes that effective and decisive management does indeed make a significant difference in the fiscal well being of stressed
cities. The budget process institutionalizing allocations conflict and the goal programming budget model are proposed as useful tools to assist the cutback decisional process. Both techniques should be tested in real city situations to determine their usefulness. Beyond testing specific techniques, however, more knowledge is needed about actual city responses to declining revenue situations. The few case studies in this dissertation and the sparse set in the fiscal stress literature only begin to build a base of knowledge about the problems and successes of municipal cutback management. Much further research is needed to broaden that base. Future policy decisions at federal and state levels affecting cities will be enhanced if more is known about the way in which cities are able to manage fiscal stress.

The research reported in this dissertation is necessarily preliminary. It is hopefully the first step in a program of research on a larger scale into municipal cutback management. In a dynamic economy, the future of many cities will depend, in part at least, upon adequate responses to questions of municipal cutback management. Further research leading to development of new methods for managing cities during revenue declines, and for maintaining stability at new lower resource levels is needed. This study is an initial step in the process of satisfying that need.
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