MANAGING STATE URBAN ECONOMIC DEVELOPMENT:

THE CASE OF STATE-AIDED URBAN INDUSTRIAL LAND DEVELOPMENT IN MASSACHUSETTS

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MANAGING STATE URBAN ECONOMIC DEVELOPMENT:
THE CASE OF STATE-AIDED URBAN INDUSTRIAL LAND
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Alan Robert Bell

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requirements for the degree of Master of City Planning.

ABSTRACT

Chapter 121B of the General Laws of the Commonwealth of Massachusetts,
enacted in 1961, created a program of state aid for urban industrial land develop-
ment projects which were ineligible for federal urban renewal grants. Pursuant
to the provisions of 121B, the Bureau of Urban Renewal in the Department of
Community Affairs (DCA) has provided local redevelopment authorities with the fol-
lowing tools for undertaking industrial land development projects: (1) eminent
domain powers, (2) advances for up to 75% of the costs of planning, and (3) grants
for up to 50% of the difference between the costs of assembling and preparing land
for industrial use and the proceeds from property disposition.

This thesis was commissioned by DCA to investigate the history, status, and
impacts of state-aided industrial projects and provide direction for the future
operation of the program. The study focuses primarily on the design and management
of the program and offers specific recommendations on the operation of the 121B
program, the organization of DCA, and the management of economic development efforts
by the State.

The thesis is divided into three parts. Part I defines a normative management
framework for programming public economic development activities that includes sec-
tions on management control, strategic planning, project management, organization
development, and the characteristics of nonprofit organizations. The framework is
intended to have general applicability to public development programs and attempts
to identify and respond to the unique management demands of government organizations
and project oriented programs. The normative framework is applied to an analysis of
the 121B program to yield the series of findings and recommendations in Part II.
Part III consists of detailed case accounts of the fifteen industrial park projects
which entered into execution.

Increasingly, all levels of government are being called upon to play more ac-
tive roles in developing the economies of older, declining urban centers. However,
the literature on public economic development programs deals primarily with develop-
ment tools and neglects discussions of the requirements for designing and managing
programs. This thesis attempts to address this deficiency in a number of ways.
First, the normative management framework and findings and recommendations offer
guidelines for managing 'output' oriented economic development programs. In partic-
ular, the analysis focuses on the need for project management techniques and formal
lateral forms of organization, such as project managers and teams. Second, the pro-
ject cases describe models of urban industrial development projects. Third, the
economic rationale and measures of effectiveness for an urban industrial development
program are outlined. Fourth, the components of an action oriented project plan are
described in detail. Fifth, the requirements for a reporting system are specified.

Thesis Supervisor: Professor Kent Colton
PART I

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This report on the Chapter 121B urban industrial development program was prepared for the Bureau of Urban Renewal in the Massachusetts Department of Community Affairs (DCA) as one part of a larger study of the state's sixteen year old subsidy program for urban renewal projects not receiving federal aid. A separate review of the use of the Chapter 121B program for industrial projects was initiated in order to examine and document the history, impacts, and status of individual industrial projects, assess the economic rationale for and effectiveness of 121B as a tool for urban industrial development, and analyze the weaknesses of the design and management of the program.

Although the original conception of the program review included an evaluation of the economic and fiscal benefits to municipalities and the Commonwealth of Massachusetts from individual projects and the program as a whole, DCA's lack of essential information on the impacts of projects, and a weak response from redevelopment authorities to a questionnaire seeking complete and reliable information, precluded precise quantitative assessments of net project and program impacts. As progress on this study revealed that the absence of basic information was symptomatic of DCA's failure to view and operate the industrial development program as an economic development program directed toward the achievement of valued economic objectives, study efforts increasingly concentrated on the program design and management practices.
which define the program. The broad range of design and management issues that arose called for a comprehensive and systematic treatment of all aspects of program and project management. However, a review of the management literature failed to produce a conceptual framework which directly addressed the particular demands of managing public sector economic development programs. As a result, program review activities included the development of a normative management framework for public sector economic development programs. That framework was then applied to a review of the Chapter 121B urban industrial development program to yield a comprehensive assessment of the design and management of the program.

The larger study of "solely state-aided" urban renewal, of which this report is a part, proceeded under the direction of John P. Sawyer, Jr., director of the Bureau of Urban Renewal, between September 1976 and May 1977. Mr. Sawyer had recently assumed his post and lacked any experienced staff or written evaluation to provide information on the status of the forty-one projects in execution and past problems with the program. A team of students and faculty from the Department of Urban Studies and Planning at the Massachusetts Institute of Technology and the Center for Community Renewal Studies at the University of Massachusetts (Amherst) surveyed all "solely state aided" industrial, residential, and commercial urban renewal projects. Information was gathered by team members from file reviews, questionnaires to local redevelopment authority boards and staff, site visits, and interviews. Project summaries prepared on industrial projects were used for this report. A final study report entitled "The Economic Development Potential of 121B" presents summary information on all of the
projects and offers conclusions and recommendations on the entire Chapter 121B program.

This examination of the use of Chapter 121B for urban industrial development relied on numerous sources of information in addition to the study team. Interviews were conducted with present and former members of the DCA urban renewal staff, DCA management staff, personnel working for various local economic development organizations, state personnel in the Office of State Planning and Departments of Commerce and Development and Manpower Development, redevelopment authority staff, and federal personnel with the Economic Development Administration. A "Chapter 121B Industrial Park Survey Questionnaire", a copy of which is included in the appendix to this report, was prepared and sent to local personnel to obtain the information on all fifteen industrial park projects needed for assessing the economic impacts of projects and identifying the key factors influencing project outcomes. Theoretical and research literature on urban economic development was studied to investigate the economic basis for an urban industrial development program and the assumptions underlying such a public effort. Various reports and policy papers from units of Massachusetts state government were examined. The writings on the management of public and private sector organizations identified in the notes to PART I of this report were utilized to develop the normative framework for managing public economic development programs. The notes to PART III of this report list the sources of information relied upon for preparing the individual project cases.
INTRODUCTION

The Commonwealth of Massachusetts, pursuant to Chapter 121B, Sections 45-57, of the General Laws, as amended in 1969, has provided monies to municipalities for planning and subsidizing state approved industrial, commercial, and residential urban renewal projects which have not received federal Title 1 urban renewal aid. The Bureau of Urban Renewal in the Department of Community Affairs (DCA) has been responsible for approving projects, processing advances to local redevelopment authorities for planning projects, and approving state grants to partially subsidize the difference between the costs of assembling and preparing land for a project and the funds received from disposition of the property. Of the twenty-five projects which have entered the execution stage since Chapter 121B was enacted in 1961, fifteen projects have been industrial developments. Thus, DCA has been operating a 'solely state-aided' (i.e. no federal urban renewal assistance) urban industrial development program for well over a decade.

The report contained in the pages that follow this introduction attempts to accomplish six primary purposes:

(1) present a comprehensive normative management framework which can be utilized as a basis for programming public sector economic development programs;

(2) employ this management framework as a standard for evaluating the design and management of the Chapter 121B urban industrial development program and proposing detailed changes in the content and operation of the pro-
gram to transform the program from an "urban renewal" into an economic development program;

(3) document and analyze in a detailed manner the experiences of the fifteen Chapter 121B urban industrial park projects which entered into execution;

(4) outline the economic rationale and define measures of effectiveness for the state urban industrial development program;

(5) study the character of economic development tasks and the management context of government organizations in order to identify the organizational development strategies and project management techniques needed for effective and efficient performance; and

(6) describe the needs and opportunities for inter-agency coordination to achieve development objectives.

This study was commissioned by the director of the Bureau of Urban Renewal to investigate the history, present status, and impacts of individual industrial projects and provide direction for the future design and management of the urban industrial development program. Consequently, the program review reflects the perspective of the program manager by focusing in a detailed manner on management procedures and the program rules and regulations as well as addressing broader policy questions and issues of program design. By concentrating on the needs of the program manager, this report differs from the common program evaluation which reflects the policy concerns of top managers, policy makers, and legislators. However, inasmuch as program managers in the public sector normally play a larger role than their private sector counterparts, this report is also directed at the Secretary of the Department of Community Affairs, the state
Development Cabinet, and the Governor. Many of the findings and recommendations relate directly to the activities of units of state government other than DCA, to the organization of DCA, and to the management of economic development efforts by state government as a whole.

The report is divided into three major sections. PART I establishes a normative management framework for programming public economic development programs. The framework is drawn from literature on the management of public and private sector organizations and includes sections on management control, strategic planning, project management, organization development, and the distinguishing characteristics of nonprofit organizations. Thus, the broad scope of management concerns treated by the framework provides a comprehensive view of program management: every organization must decide on goals and objectives (strategic planning), use resources efficiently and effectively (management control), respond to the requirements for managing unique, one time tasks (project management), and develop an organization structure and promote individual behavior that contribute to effective and efficient performance (organization development). The framework is intended to have general applicability to programming in the public sector and attempts to identify and respond to the unique management demands of government organizations and economic and physical development programs. The framework is applied to a review of the urban industrial development program.

PART II presents numerous sections of findings and recommendations which have resulted from employing the management framework in a programming process. One section deals with the failings of the basic design of the program - an "input" or physical development orientation rather than a focus on economic development "outputs" -
and offers various suggestions for redesigning the program with an economic development orientation. Problems in coordinating project tasks and opportunities for inter-agency coordination to improve performance are described and analyzed and a series of recommendations are presented for achieving integration through organization design initiatives. Use of the Department of Commerce and Development's Business Contact Program to assist in the marketing of industrial projects is examined. The duties of an economic development specialist, who should be obtained to create an economic development program, are considered in detail. The benefits to be achieved from revising the municipal monograph series and transferring responsibility for its preparation to DCA are described. A thorough examination of the present requirements for a project plan is presented along with detailed recommendations for creating an output oriented plan. A series of recommendations are proposed for developing a project reporting system. The need for reporting to the legislature is addressed. A few sections of findings and recommendations examine the propriety and accuracy of state payments for projects and policies on the recapture of state funds. Suggestions for revising the state audit reports are advanced. Financial record keeping and cost accounting issues are treated in the final few sections. Although time limitations have precluded a complete analysis of the urban industrial development program as comprehensive as the scope of management concerns encompassed by the normative management framework, the presentation of the framework in PART I should enable DCA personnel to identify and review in a systematic manner aspects of the program not considered in PART II.

PART III consists of detailed case descriptions and analyses of the fifteen industrial park projects which have entered the execution
stage. The format used for the cases structures the information on each project into sections which reflect many of the recommendations found in PART II for viewing and managing projects as economic development efforts directed toward the achievement of valued state and municipal objectives. Basic descriptive data is provided and the financial status of each project is indicated, including the costs assumed by the state and municipality. Aspects of each project that suggest a particular model of development are identified. Use of the five development tools offered by the state urban industrial development program and inputs at the municipal level are described. The participants on projects are noted and accounts of the roles played by the different actors are provided. The timing, status, and problems of the implementation process are discussed. Fiscal and employment need assessments are made of each municipality to judge the appropriateness of projects in relation to state and municipal development objectives. The performance of each project is judged through a number of measures of effectiveness: positive net municipal fiscal flows, employment impacts, growth of the state economy, evidence of agglomeration economies, induced benefits, and increased diversity of the local economy. The effectiveness of each project in achieving these types of positive benefits is analyzed in relation to the assessment of municipal fiscal and employment needs. A narrative account is provided of aspects of each project not covered in other parts of the case. Finally, a summary judgement is advanced on each project which assesses whether the project was justified, notes the status and impacts of the project, identifies the key factors accounting for success or failure, and offers recommendations for future actions by DCA. The information presented in the cases was drawn from a variety of sources and serves as much
of the data base for the findings and recommendations developed in PART II.

To an increasing degree, the governments of older urban centers are attempting to intervene in the market economy and affect the location of economic activity in order to counteract economic decline and respond to the human problems which are associated with the loss of jobs. As a result, state governments and the federal government are being called upon to establish urban development policies and programs to assist in urban economic revitalization. In addition, many states which are suffering from regional economic declines, such as those in the Northeast and "Crescent" areas of the nation, are seeking to identify specific measures which can aid in promoting economic growth and address the problems of fiscal strain and unemployment that accompany the loss of economic activity. The development policy in some states, such as Massachusetts, has directly linked the welfare of the state economy to the economic well-being of the state's urban centers. Thus, demands are being placed on all levels of government to play more active roles in directly shaping the spatial economy.

The contents of this report should prove relevant to other urban economic development efforts in a variety of ways. First, little published material addresses the unique requirements for managing public sector programs, especially economic development programs. In the normative framework presented for programming public economic development programs and the analysis of management problems offered in the findings and recommendations on the Chapter 121B urban industrial development program, guidelines for managing public economic development programs are defined. In particular, the need for lateral forms of organization and the project management approach are estab-
lished. Second, the project cases describe specific models of successful development projects and the key inputs for effective performance. Third, the findings and recommendations outline an economic rationale and measures of effectiveness for an urban industrial development program that can serve as a basis for designing and operating such a program. The limited literature on public urban economic development programs consists mostly of discussions of development tools and policies rather than the requirements for designing and managing programs.

The term "urban renewal" is generally associated with the discredited and abandoned federal Title 1 program for subsidizing residential and commercial projects. Although Chapter 121B is designated as an urban renewal program, this study has found that label to be grossly misleading and damaging to the state's urban industrial development efforts. The principal themes of the findings and recommendations of this report include the following:

(1) despite problems with the design of the program and severe management weaknesses, many projects have demonstrated that the program can achieve urban economic development objectives;

(2) the major problems with the program have related to program and project management rather than the development tools offered by the program;

(3) the program has been designed and operated with a traditional urban renewal focus on physical development rather than as an economic development program directed toward the achievement of valued development objectives;

(4) the literature on urban economics and studies of the Massachusetts economy suggest a basis for a well managed state urban industrial development program utilizing eminent domain powers, planning advances, state infrastructure investment, development grants, and an active unit of state government;

(5) the unique characteristics of public "project oriented" economic development programs require the adoption of
lateral forms of organization and project management techniques to achieve efficient and effective performance; and

(6) the effectiveness of projects and the program depends upon the coordination of activities among many units of state government and the application of various state resources in addition to Chapter 121B assistance.
Chapter 121B of the General Laws of the Commonwealth of Massachusetts was enacted by the General Court in 1961. The statute established the terms for state-aid to federally subsidized commercial and residential urban renewal projects and created a 'solely state-aided' urban renewal program for industrial projects which were not eligible for federal Title 1 assistance. Pursuant to the provisions of Chapter 121B for assisting projects not receiving federal aid, the commonwealth, through DCA, provides local redevelopment authorities or other local development organizations designated by municipalities with the following tools for developing industrial projects: (1) the public powers of eminent domain; (2) funding advances for up to 75% of the costs of project planning; and (3) reimbursement grants for up to 50% of the "net project cost" of an industrial project. The "net project cost" is equal to the difference between the costs of assembling and preparing project land and the proceeds from disposition of the property. The state execution subsidy is paid in twenty equal annual installments. Thus, a municipality must advance the total funds for developing a project and assume all costs until the disposition of property and the receipt of annual state subsidy payments. The legislation authorizes a maximum of $20 million in total state grants for projects not receiving federal urban renewal assistance and a $1 million per year limit on state payments.

From the time of the passage of the act in 1961 until 1966, only two projects, industrial parks in Lawrence and New Bedford,
were approved for state assistance pursuant to the industrial development provisions of Chapter 121B. However, neither of these projects received planning advances and both projects were funded retroactively after completion. The Bureau of Urban Renewal was very active in processing almost ninety federally-aided urban renewal projects in the state during the decade of the '60s and into the early '70s and little staff attention was devoted to industrial projects. The first planning advance was extended in 1967. Chapter 121B was amended in 1969 to expand eligibility for the "solely state-aided" program to include residential and commercial projects.

Beginning in 1969, the number of projects approved to receive only state assistance increased considerably due to a number of factors: an increased public concern over the loss of industry from older cities; a boom in industrial park development activity spurred by an increase in federal funding for research and development; the extension of eligibility to residential and commercial projects; and a reduction in federal urban renewal activity. Interest in industrial projects subsided with the recession and federal cutbacks in funds for research and development. Whereas fifteen out of the twenty-five 'solely state-aided' projects which reached the execution stage have been industrial parks, only five out of twenty-two projects which received survey and planning approval after 1970 were industrial. Almost all of the $20 million authorization for state execution subsidies for non-federally-aided projects has been committed.
PART 1

A NORMATIVE MANAGEMENT FRAMEWORK FOR PROGRAMMING PUBLIC ECONOMIC DEVELOPMENT PROGRAMS

* SOME DISTINGUISHING CHARACTERISTICS OF NONPROFIT ORGANIZATIONS
* MANAGEMENT CONTROL IN NONPROFIT ORGANIZATIONS
* STRATEGIC PLANNING
* PROJECT MANAGEMENT
* ORGANIZATION DEVELOPMENT
Some Distinguishing Characteristics of Nonprofit Organizations

The Profit-Nonprofit Distinction

For the purpose of distinguishing the requirements for management systems -- strategic planning, management control, project management, and organization development--profit and nonprofit organizations can be differentiated on the basis of organizational purpose. Although any classification of organizations into profit and nonprofit categories cannot be exact, profit oriented organizations are motivated primarily to earn profits, and success is measured primarily by the amount of profits earned, whereas nonprofit organizations exist primarily to render services, and success is measured primarily by the amount and quality of service delivered. As used in this context, the term services refers to the "public goods" and "merit goods" provided by government as well as to personal services such as health care and education. Inasmuch as many profit motivated organizations provide services and many nonprofit organizations receive revenues for services rendered, the differences between the two are not exact. Nevertheless, the crucial distinction for purposes of management relates to whether or not the success of the organization is defined in terms of profit maximization. Borderline cases such as public authorities (ex. local airport, bridge, tunnel, and port authorities, the Tennessee Valley Authority, etc.), government or quasi-government corporations (ex. Amtrack), and municipal power
plants, although managed in many ways as businesses, should not operate so as to maximize profits but should attempt to maximize public welfare subject to some minimum notion of profitability.

A useful way to distinguish profit and nonprofit organizations for considering management differences, which strikes at the essence of the matter, is to regard organizations which have difficulty defining and measuring the quantity and quality of outputs and establishing the relationships between inputs and outputs, and outputs and objectives, as nonprofit while organizations with easily defined and measured outputs and established relationships between inputs and outputs, and outputs and objectives, are profit organizations. Thus, the well developed decision approach of the profit organization which consists of comparing costs and benefits is complicated in nonprofit organizations because the causal relationship between costs and benefits is difficult to establish and both are difficult to measure.

Distinguishing Nonprofit Organizations

For the purpose of further refinement of management differences in organizations, nonprofit organizations can be distinguished between client-oriented -- those that render services to identifiable individuals and exact a fee for the service -- and public-oriented organizations -- those that provide services to the public at large or to particular segments of the public without demanding a fee. Client-oriented organizations, such as hospitals, universities, and
public transportation organizations, can employ some of the tools of profit making firms because output can be measured by counting clients or by totalling revenues. Public-oriented organizations, such as police and fire departments, the U.S. Department of Defense, or the Massachusetts Department of Community Affairs, usually provide more purely public goods -- i.e. nonexclusive consumption -- and they cannot readily measure the amount and quality of service rendered. As with other organization distinctions, this is a matter of degree.

Anthony and Herzlinger identify four characteristics which are useful for distinguishing nonprofit organizations along a continuum with respect to the degree of management control difficulty encountered:  

(1) The extent to which the organization charges clients for services at approximately the cost of provision.

(2) The importance of program decisions and the frequency with which program decisions are made and, therefore, organization functions and objectives changed.

(3) The relative importance of social and political criteria as opposed to purely economic criteria in decision making.

(4) The extent to which other organizations perform comparable functions so that comparative data exists.

Characteristics Which Affect Management

A number of features typical of nonprofit organizations in general, and government organizations in particular, influence the requirements for management of government economic development programs (a few additional features which do not particularly affect economic
development programs have been omitted).

1) Absence of the profit measure:

Nonprofit organizations lack the advantages which the profit measure provides to businesses. The absence of an equivalent to the profit measure is the single most serious management control problem in a nonprofit organization.

a) No Single Criterion: Since nonprofit organizations have multiple objectives and these objectives cannot be easily measured quantitatively, they lack a single performance criterion, such as profit, which can be agreed upon by all decision makers. The different actors participating in or impacted by a government program may, and usually will, have differing criteria for success.

b) No Relation Between Costs and Benefits: Lacking the profit measure, which is synonymous with the difference between costs and benefits for the firm, nonprofit organizations find it difficult measuring the relationship between costs and benefits and determining causal connections between expenditures and the achievement of objectives.

c) Difficulty of Measuring Performance: Whereas the profitability of the firm incorporates both efficiency and effectiveness performance measures by definition, nonprofit organizations must search for unique devices for measuring effectiveness and standards by which efficiency can be judged. For the nonprofit organization, performance with respect to the amount and quality of service delivered is not reflected by the numbers on a financial statement.

d) Limited Comparability Among Units: Whereas the profit measure allows for organization comparisons across all functional types, units in nonprofit organizations can only be compared with units serving the same function because performance measures are function specific (ex. fire department units can only be compared with other fire department units and performance measures must be specifically devised for fire department units).
2) Outputs are services:

Organizations providing services lack the management advantages of goods producing organizations.

a) Since goods can be stored, production can be maintained at a level pace while the fluctuations of consumer demand are met. Inasmuch as services cannot be stored, fluctuations in demand result in periods of underutilization and over extension of resources and it is difficult to plan for a level of services which meets demand.

b) Machine dominated production activity is easier to monitor than labor intensive services because activities are fixed.

c) The quantity and quality of services rendered are more difficult to measure than the quantity and quality of goods produced (i.e., the task does not consist of measuring the number of patients seen by a doctor but the amount and quality of medical care provided).

d) The quality of service cannot be inspected in advance of the client exchange.

3) Less responsiveness to market forces:

Although far from the ideal corrective mechanism suggested by some economists and businessmen, market forces dictate performance parameters because products and prices must be accepted by consumers and competition will ruin a poorly performing organization. The absence of market signals to many nonprofit organizations leaves the program manager without an automatic device for checking on performance or redirecting activities. In the case of the Chapter 121B industrial park program which is dependent on the location decisions of private firms, competition does exist and there are market signals which indicate that performance is inadequate. However, inasmuch as one of the objectives of the program is to induce firms to locate in areas
that they otherwise would not choose as locations (i.e. depressed urban centers), the interpretation of market signals is equivocal; i.e. the response should not be simply to build parks in areas which firms currently find attractive because this runs counter to the objectives of the program (although a conclusion that firms cannot be induced to move to publicly desired locations may be valid after all other explanations have been considered, such as the adequacy of public support or marketing efforts). In addition, whereas market signals of poor performance may doom a business, in the case of the state assisted industrial park program, poor performance does not directly threaten the continuance of the program, which is a political decision (the program will be threatened over the long run), or the jobs of state employees who are protected by civil service. On the contrary, local personnel working for Redevelopment Authorities may find themselves employed only as long as projects remain unfinished. Many nonprofit organizations share this latter incentive problem when successful performance leads to the elimination of the job: welfare, manpower training programs, etc.

4) Weakness of the vertical authority structure? Although the shareholders who own major corporations do not actively control the operations of the firm, they retain ultimate authority and vest management responsibilities to a Board of Directors which in turn delegates full powers of management to a chief executive office. In government organizations the corresponding line of responsibility
and authority is less clear and substantial diffusion of power is common.

a) Staff and program management personnel are often insulated from top management authority by virtue of civil service job security and rules. In addition, since civil servants know that they will outlast the terms of the chief executive and top managers (where frequent turnover is common), they may be unresponsive to policy and program directions from higher levels in the organization either because they do not agree with the substance of changes or the new directions upset comfortable ways.

b) Agencies, departments, divisions, or program units may have independent sources of power, such as through special interest groups with political influence, which are strong enough to set the unit off from the control of higher line managers.

c) There may be fragmentation of responsibility by level of government for programs bearing on the same problem or for components of a single program. Thus, the development of a Chapter 121B state assisted industrial park may require independent actions of the U.S. government (EDA public facilities grant), the Commonwealth of Massachusetts (DCA: plan review and approval, execution subsidy, technical assistance, etc. and DFW: highway and bridge construction), municipal governments (project approval, expenditure of funds, etc.), and semi-independent organizations created by the state and the municipality (Redevelopment Authorities: preparation and submission of project applications, management of development activities, etc.). This fragmentation within a program is often part of the design of government programs which consist of one level of government providing incentives for the actions of other levels. The fragmentation by level of government usually reflects an attempt to devise an appropriate division of resource commitments and execution responsibilities based on the principles of fiscal federalism and local control and preferences. The additional common problem of horizontal divisions of authority within government organizations is not unique to nonprofit organizations.

d) The division of government authority among the executive, legislative, and judicial branches results in conflicting judgements on objectives and the means for attaining them.

e) Government personnel systems afford managers little ability to reward employees for superior performance.
f) The frequent turnover of executives and program managers in government organizations leads to a management focus on short term objectives and reduces staff responsiveness to management directives. In addition, the necessary on-the-job training for new managers and changes in policy and operations which accompany new managers result in delays, inaction, and confusion.

g) Salaries and other compensation for managers in the public sector tend to be low given the pressures encountered and the skills required for good performance.

The above factors which weaken vertical authority relations in government organizations result in a need for management systems which do not assume the vertical responsiveness of the private firm.

5) Politics:

Important consequences of the political nature of government organizations for management tasks include the following:

a) Concern for Re-election: Conflicting pressures are often brought to bear on government organizations by elected representatives who are eager to demonstrate gains to their own constituencies rather than concern themselves with the best interests of the public at large. The chief executive may engage in "logrolling" with individual legislators by directing program expenditures to their districts in return for support of his own measures before the legislature. The chief executive's re-election related need for a visible display of program success commonly leads top managers to adopt a short term view of program and policy management. In such instances, premature or unwise project approvals may be ordered in order to demonstrate executive leadership and deliver valued resources to particular constituencies.

However, the most serious management problems arise from the general tendency on the part of newly elected and newly appointed top managers to "re-invent the wheel" with programs of their own making rather than manage potentially worthwhile programs which are identified with a previous administration or lack glamour and high visibility.
b) Public Scrutiny: In a democratic society the public's right to know what government does is fundamental. However, the understandable tendency of the public and the press to suspect legitimate mistakes as willful wrongdoing leads many managers to avoid the collection of information essential for effective management for fear that some information might unfairly be used against them at a latter time. This concern reinforces a more general feeling among civil servants that one is rewarded for avoiding mistakes rather than for effective and efficient performance which stems partly from the politically motivated risk averse behavior of top managers and partly from the lack of performance incentives in the civil service system.

The vertical authority structure in government organizations is undermined by the access of lower level employees to the press.

c) Inadequate External Pressures for Good Performance: Whereas multiple external pressures frequently lead to ill-considered and negative program decisions in government, comparable outside pressures demanding efficient and effective performance are usually absent.

c) Legislative Restrictions: Statutes enacted by the legislative branch often bind public managers much more severely than private sector managers are limited by corporate charters and by-laws. In addition, legislators normally exact a price from the executive branch for changes in statutory language.

e) Weak Top Level Management Skills: Voters rarely have the opportunity to elect officials on the basis of management expertise. Similarly, agency heads and other top managers are likely to be appointed because of political connections and/or the broad policy orientations of these individuals rather than on the basis of a capability for program implementation. As a result, program level managers often have a good deal of authority in government organizations, but they must act as program advocates within the political setting. The common tendency on the part of top managers to concern themselves with new policy and programs rather than the details of program management is a basic weakness of government organizations. Inasmuch as the vast majority of top managers will remain in particular government jobs for less than three years and are concerned about the political futures of their friends and themselves, they seek to initiate new programs which will be identified with their administration.
6) Tradition of a Neglect of Management in Government:

For a variety of reasons, some of which have been indicated above, little attention has been focused on the special needs of the public sector in fostering efficient and effective management. Perhaps the primary reasons for this tradition of management neglect are that most of the key actors have little incentive to improve management capability and the principal beneficiaries of improved management, the citizenry, lack a viable mechanism for signaling their dissatisfaction. Other important explanations for this tradition include a belief that business management practices are not applicable to the public sector, an unwillingness on the part of legislatures to provide the executive with adequate control powers and relinquish the politically valued line item budget format, and a trepidation felt by civil servants who fear that a good management control system will reduce their power.

The characteristics common to government organizations discussed above suggest that efforts to improve public sector management should focus on the following three concerns: first, the difficulty of measuring outputs and the relationship between inputs and outputs demands that considerable attention be devoted to defining objectives and devising methods for measuring outputs; second, attention should be devoted to the behavioral and structural factors which impede good management for without proper understanding of employee and organizational relationships, which encourage and limit sound
management, technical improvements are not possible; and, third, the weakness of the vertical authority structure in government organizations suggests that special measures are needed to increase vertical control (ex. improved information systems) and formal horizontal structures (ex. team management) may offer significant potential for improving performance.
Management Control in General

In all organizations... there is a process called management control. It has been defined as the process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of an organization's objectives.\(^1\)

This rather broad depiction of management control suggests that such processes have existed for as long as organizations have existed. However, the subject has received systematic study only over the past forty years.\(^2\) That which is now known as the management control process consists of evolved principles and techniques which are purported to be helpful in designing control systems and in carrying out management control tasks.\(^3\) As is the case with all management subjects, the principles of management control are not adequately founded on deductive or inductive bases and do not form a complete and definitive account of the management control process. Rather, one finds an assortment of principles, techniques, tools, and concepts which seem to work in a number of actual organizations. From the diverse evidence of experience, a tentative normative framework for the management control process emerges.

Although most studies of the management control process have dealt with business organizations, Anthony and Herzlinger base their seminal text, Management Control in Nonprofit Organizations, on the hypothesis that the same basic concepts are valid for both profit
and nonprofit organizations. They argue, however, that the application of these concepts to nonprofit (including government) organizations must be altered to suit the special circumstances of nonprofits. Thus, different techniques and strategies may be called upon in profit and nonprofit organizations to effect the same principles.

A good management control system is supposed to provide an organization with two basic types of benefits:

1. Better Planning: programs and activities are planned with reference to organization objectives and choices are made on the basis of the relative benefits and costs of alternatives; and
2. Better Control: a greater ability to improve the efficiency and effectiveness of organization operations.

The following terms are basic to the management control conceptual framework:

Responsibility Centers: According to the normative management control conceptual framework, every organization is composed of responsibility center units which are groups of people headed by a manager who is responsible for what the unit does. In large organizations, such as the government of the Commonwealth of Massachusetts, a complicated hierarchy of such responsibility centers exists: i.e. units, sections, departments, divisions, agencies, branches, etc. Therefore, responsibility centers, except for the smallest units, consist of aggregations of smaller centers and the organization itself is a single all encompassing
center. The management control function of managers, whether at the top, middle, or program level, is to plan, coordinate, and control the work of these component responsibility centers.

**Responsibility Center Objectives:** Responsibility centers exist for the purpose of accomplishing one or more objectives. These objectives should form part of the overall objectives of the organization. Decisions on the objectives of responsibility centers are usually made during a conceptually and operationally distinct strategic planning process which occurs in a sequence prior to the management control process.

**Responsibility Center Activities:** A responsibility center "works" with inputs of labor, materials, and services to produce outputs of goods and services. In a well managed organization, these outputs are related to the objectives of the unit. However, conceptually, the outputs of a responsibility center are equal to its activities. The goods and services produced by a responsibility center may be furnished to another responsibility center or to the outside world or combined with the outputs of other units to compose the outputs of the organization. In a control system the amount of labor, materials, and services used by the responsibility center is translated from physical quantities into the common denominator of money so that inputs can be combined and divided. Cost is the monetary amount which measures resources used by a
responsibility center. Outputs of responsibility centers in nonprofit organizations may or may not be measurable.

**Efficiency and Effectiveness:** The performance of a responsibility center is most commonly measured by the two comparative criteria of efficiency and effectiveness.

Efficiency is defined as the ratio of outputs to inputs. Thus, the amount of output per unit of input represents an efficiency measure. One organization unit is more efficient than another if either (1) it uses less resources than the other unit but has the same or greater output, or (2) it uses the same resources but has a greater output. When precise quantification of outputs is impossible because of data limitations or the intrinsic difficulty of measurement, efficiency judgments of the first type can be advanced if outputs can be judged equal and, of the second type, if outputs can be ranked. In some situations, efficiency can be judged by relating actual costs to some standard costs.

Effectiveness is defined as the relationship between a responsibility center's outputs and its objectives. Inasmuch as the quantification of outputs and objectives in nonprofit organizations is often exceedingly difficult, effectiveness measures must sometimes be sought in qualitative judgements or measurable surrogates must be devised. In addition, when quantification is feasible, one must be careful not to exclude remaining nonquantifiable outputs or objectives from an effectiveness judgement.
The management control process accepts the role and objectives of the organization as given by the strategic planning process and concentrates on how improvements in the control process can help the organization to perform functions more efficiently and effectively. Management control does not relate to the formulation of the organization's objectives, the building and structuring of the organization, or the selection of organization personnel.

Much of the management control process occurs informally through such means as memoranda, meetings, lunch time conversations, and social activities. The formal management control system consists of an information system and the four sequential phases of programming, budgeting, operating, and reporting and analyzing performance which occur in cyclical fashion. The basic information system in a formal system collects (1) planned and (2) actual information on (a) inputs and (b) outputs. Thus, according to the "accounting view of management control put forth by Anthony and Herzlinger, the four phases of the management control cycle operate so that "prior to actual operations, decisions and estimates are made as to what outputs and inputs are to be; during actual operations, records are maintained as to what outputs and inputs actually are; and subsequent to operations, reports are prepared that compare actual outputs and inputs to planned outputs and inputs, and action is taken on the basis of these reports." The following features of the management control process help
to define its character:

(1) A formal management control process, no matter how sophisticated, should be a total system in the sense that all of the organization's operations are included. This total system orientation attempts to provide managers with information on all parts of the organization in order to assure that all parts are consistent with one another.

(2) Management control systems should strive to operate so that the actions taken by managers pursuing their own self-interest are also in the best interest of the organization.

(3) A financial structure forms the core of the management control system so that resources used and outputs attained can be expressed in monetary terms which allow for combination and comparison. However, the collection of non-monetary information may serve a more important function for a management control system.

(4) A management control system should be an integrated system in the sense that data collected and organized by programs is coordinated with data collected and organized by responsibility centers. Information collected for different purposes and by different sources should be reconciled by program and responsibility center.

(5) Line and program managers are the critical management control actors because they are the people who make operating decisions, influence people, and are evaluated for performance.

(6) For a management control system to be effective, the flow of funding authority within an organization should generally follow the vertical organization hierarchy. It is difficult to improve top management decision making if funding for operations does not flow from the top down through the organization. If funding for a program is received from several sources, performance measurement is difficult because each funding source tends to focus on its own aspect of operations and no one may consider operations as a whole. Management control systems respond to such a situation through a program accounting framework and an ongoing programming process.
The Control Structure

Any system can be described in terms of its structure and its processes. For the management control system of an organization, the structure of the information system defines the structure of the organization. A control structure includes a method of classifying information and rules governing the content of information collected (an additional aspect, the processing of information, is the same for all organizations and so will not be considered here). After describing the structure of a management control system in this section, the management control processes of programming, budgeting, operating, and reporting and analyzing performance will be considered in the following sections.

Information Categories: The Accounts

"An account is a device for collecting homogeneous data about some phenomenon..." Accounts contain data on inputs and outputs. Data can be collected on what has happened or on what is planned. In the management control framework, the word account is used in a broad sense to include monetary as well as non-monetary information. Two interrelated account structures -- a program structure and a responsibility structure -- define the structure of the management control system.

The Program Structure:

Information on programs undertaken or planned by an organization is collected in a program structure. In a business, company
products or product lines correspond to programs. A program
structure is useful for three basic purposes:

(1) To decide upon the amount and kind of resources to be
devoted to each program;

(2) To allow for comparisons between programs in terms of
costs and benefits; and

(3) To provide an accounting of all the resources devoted
to a program directed toward achieving particular objectives.

A separate program structure is needed, and becomes a problem,
only in organizations in which programs cut across vertical lines of
authority; for otherwise the program and responsibility structures
coincide. The program structure should provide information which
allows top and middle management personnel to make resource
allocations between and within programs. Therefore, in order to
be useful for decision making, the structure should be based on
the outputs or objectives of the organization rather than on the
inputs or sources of funds for programs. The designation of program,
sub-program, and program element categories which form the structure
on the basis of objectives also serves to clarify and communicate
organizational purpose to employees and suggest improvements to
the structure of the organization. In any particular case, various
ways to categorize the program structure will have merit. Choices
on the program structure should be based on the usefulness of the
categories for facilitating the most important decision making.

Program structures are built up from program elements which are
the smallest units in which program information is collected. A
A program element should represent some definable activity carried on by an organization which is directly or indirectly related to accomplishing the organization's objectives. A program element should be the responsibility of a single person so that management decisions can be enforced, program performance can be related to the individuals responsible, and personal identification with programs is fostered. In addition, program elements should be defined in relation to a measurable output so that benefit/cost analysis is facilitated.\(^2^3\)

Inasmuch as program structures will cut across line agencies, the categories should be consistent throughout the organization. The number of years for which program information is recorded -- past and future -- should also be based on the needs of decision makers.\(^2^4\)

#### The Responsibility Structure:

The responsibility account structure should correspond to the organization of responsibility centers that carry out programs. The principle purposes of this structure are: (1) planning responsibility center activities; (2) coordinating work among responsibility centers; and (3) controlling the responsibility center manager.\(^2^5\) Responsibility centers can be classified as (1) expense or (2) revenue centers and as (a) mission or (b) service (existing primarily to provide services to mission centers) centers.\(^2^6\)

#### Relation of the Program and Responsibility Structures: \(^2^7\)

Both a program and a responsibility structure are required to
keep account of the inputs and outputs of responsibility centers by programs. A responsibility center may deal with more than one program and a program will often involve more than one center. The closer the match is between the program and responsibility structures the better is the system because responsibility center heads can be held accountable for a program or part of a program. Although both structures will rarely match, some person should have identifiable responsibility for each program category, sub-category, and element.

Purposes of Information Collection:

Anthony and Herzlinger list four basic questions which the account structure of a management control system should provide information to answer:

Before the event:

(1) What activities should the organization undertake? (i.e. planned outputs)

(2) What resources should it use? (i.e. planned inputs)

After the event:

(3) How effectively did the organization do its job? (i.e. actual outputs related to the organization's objectives)

(4) How efficiently did the organization use resources? (i.e. actual inputs related to actual outputs)

All four questions should be answered in terms of both programs and responsibility centers.

In addition to information on planned inputs and outputs, the management control system should provide two other types of
information on the future: (1) estimates of what will happen
in the future--forecasts; and (2) estimates of what should happen
over a period of the near future -- budgets.

Cost Accounts:

Every organization needs information on the costs of various
functions or activities. When such information is too detailed
to be of interest to anyone but the program manager or the program
and responsibility structure does not isolate such information, a
subsidiary cost account which is "tied" to the general accounts
should be established.

Information Content: Inputs and Outputs

Input Information:

Input information consists basically of costs, although non-
monetary input data may also be collected. The full cost of a cost
objective (i.e. any unit for which costs are collected) is the sum
of its direct costs plus an equitable share of indirect costs
which are shared by several cost objectives. The full cost of a
program (a cost objective) is the total amount of resources that
are inputs to that program. The following additional cost categories
are sometimes relevant for an account structure:

(1) Differential costs are alternative costs which vary with
the conditions of a project or program (costs are estimated
to analyze choices among alternative courses of action).

(2) Responsibility costs are those incurred by a responsibility
center as resources are consumed over a period of time.

(3) Controllable costs are sometimes distinguished from
noncontrollable costs to clarify where management can exercise
influence.
(4) **Variable costs** which change proportionally with the volume of activity are often distinguished from **fixed costs** which do not vary with volume in order to more easily identify the composition of total costs.

(5) **Opportunity costs** which measure the foregone productive opportunities from the use of resources rather than monetary outlays are sometimes estimated to assess "economic" costs.

(6) **Capital costs** should be distinguished from **operating costs** because operating costs benefit the current period whereas capital costs give rise to long lived assets which provide benefits over a long period of time.

**Output Information:**

Output information is needed to measure efficiency and effectiveness. The degree to which outputs can be measured quantitatively varies considerably with heterogeneous, multiple, and intangible outputs presenting special difficulties.

**Goals:** A goal is the broadest statement of intended output of an organization and should be neither quantified nor related to a specific time period. A statement of goals indicates the aims and relative priorities of an organization and serves to guide organizational strategies. Management efforts devoted to thinking about and expressing goals may facilitate later steps of the management control process but goals are not specific enough themselves to help in the measurement of organization performance.

**Objectives:** An objective is a specific result, usually stated in quantitative terms, to be achieved within a specific time period. In cases where objectives cannot be stated in quantifiable terms, objectives should be expressed with sufficient clarity so that some judgements can be made with respect to effectiveness.

In light of the usefulness of output measures for both planning and control purposes considerable effort in finding and developing output measures is normally worthwhile. On the other hand, output measures which do not serve a specific purpose should not be collected. Although almost any output measure can
be challenged, qualified data (if qualifications are stated) is usually better than no data at all. The development of quantity and quality measures is especially important for government organizations due to the variety of points of view on objectives and the intrinsic problems in measuring services.

The types of output measures that are appropriate for use in a given organization tend to be arranged along a continuum. At one end are social indicators that closely relate to organization goals but are not directly related to organization activities and are affected by exogenous forces. At the other end are precise "process" measures that are well related to the activities but remotely related to the goals of the organization. Between the two poles are "results" measures which relate directly to the goals and activities of the organization.

**Results Measure:** A results measure is a measure of output expressed in terms that are directly related to an organization's objectives. However, when objectives cannot be directly stated in measurable terms, proxy or surrogate results measures may have to be substituted. Inasmuch as surrogates by definition do not correspond exactly to an objective, caution is called for with their use.

**Process Measure:** Process measures relate to the activities of organizations undertaken in pursuit of objectives. Process measures are "means" oriented -- i.e. measures of activities -- whereas results measures are "ends" oriented -- i.e. direct measures of the achievement of objectives. Inasmuch as process measures imply a causal relationship between organization activities and the achievement of objectives which may not be valid, they are not as useful as results measures. However, the close causal connection between inputs and process measures (ex. the timely completion of the construction of site improvements in an industrial park project implies efficient effort by the Redevelopment Authority) makes them useful for measuring short term efficiency, for budget purposes,
for controlling responsibility centers, and for setting activity milestones for projects and programs with long execution periods.

Social Indicators: A social indicator is a broad measure of the achievement of objectives but it does not relate exclusively to the activities of the organization.

Different types of output measures may be useful for managers in the various levels of the organization hierarchy. Whereas process measures are most useful for the program manager concerned with activity performance, managers higher in the organization will be more interested in results measures which are useful for policy and resource allocation decisions and for reporting to the press and citizenry. Thus, a variety of measures should be employed to satisfy different needs. When possible, output measures should be related to program elements, sub-categories, and categories in order to facilitate control.

Accrual Accounting:

Two key accounting innovations serve to distinguish the management control accounting framework from the traditional "fiduciary" notion of accounting; i.e. keeping track of and ensuring the honest use of funds. The first, accrual accounting, will be discussed in this section and the second, program budgeting, will be presented below. Both accrual accounting and program budgeting have become mainstays of private business while their acceptance by the public sector has been slow and begrudging.

The accrual concept of accounting is a fundamental technique which the other planning and control activities depend and follow.
upon. According to accrual accounting, costs are recorded when resources are consumed rather than, as with other methods, when liabilities are incurred (expenditures) or resources are purchased (obligations). Costs are recorded by responsibility center and/or by program elements. The recording of costs following accrual accounting differs from obligation accounting with respect to both time and place. Whereas under obligation accounting a cost is recorded when an order is placed (a contract to acquire resources) and is recorded for the unit that places the order, costs are recorded under accrual accounting at the time resources are consumed and for the unit that uses the resources. Efforts to change government accounting systems from obligation to accrual formats are usually resisted by legislatures because obligation accounting directly controls agencies from contracting for more goods and services than allowed for by appropriation whereas accrual accounting does not. However, a system which combines both obligation and accrual accounting can be devised. An accrual accounting system is necessary to provide the responsibility center and program information needed for management control.

Information Needs of Different Actors

The diverse information needs of various actors should be addressed in the design of an information system:

1. Top managers need information for making policy decisions with respect to resource allocations among programs and for monitoring the performance of organization units. They may also need nondetailed data on individual projects for political purposes and for reporting to the citizenry. Therefore, aggregated effectiveness
and efficiency data should be reported by responsibility center, program, and project to these individuals.

(2) Planners and program analysts need information which will enable them to estimate the costs and benefits of programs, monitor programs for conformance with comprehensive and localized strategic planning, formulate changes to strategic planning on the basis of experience, and facilitate coordination with "outside" programs and actors. To the extent planners consider organizational development issues, they will need information by responsibility center as well as by program, sub-program, and program element.

(3) Program managers need information classified by responsibility center in order to ensure that expenditures are within authorized limits and by program structure in order to examine whether program responsibilities have been met by the responsibility center and other units coordinating with the center on programs. Thus, operating managers require detailed information by program element and project on process and results measures of performance.

(4) Outside agencies and the public should be provided with information for a variety of purposes: compliance with access to information laws, reporting to outside funding sources, reporting between agencies engaged in "team management" of a project; reporting to the press to stir citizen interest; etc. The type and level of detail of information reported will vary to suit the circumstances.

Every information system must strike a balance between one user's need for information and the cost of collecting and processing the 42

Now that a normative view of the structure of public sector management control has been described, attention turns to the processes which characterize the management control process.

Programming

This section on the management control framework deals with the nature of an identifiable "programming process" as described by
Anthony and Herzlinger as one of the four cyclical phases of the management control process. Although other authors may offer variations on this basic conception, the Anthony and Herzlinger textbook rendition of programming is here viewed as representative of general thought. However, inasmuch as one purpose of this evaluation effort is to present a somewhat distinctive view of the programming process, which differs from the standard version in several respects but nevertheless is based on most of the accepted notions, the account presented here will serve as the foundation for developing and contrasting a different conception of the programming process and as part of the framework for examining Massachusetts' Chapter 121B urban industrial land development program.

A well managed organization plans in terms of programs. Programming is the process of deciding on the programs to be undertaken by the organization to achieve its goals and the amount of resources to be devoted to each program. These decisions are based on objectives and strategies previously decided upon or they represent changes in strategy. In the later case, program decisions are usually made during a strategic planning process separate from and prior to the management control process. Thus, the strategic planning and management control processes tend to merge during programming.
A program has been distinguished from a policy as follows: whereas a program is directed to a specific situation with the purpose of maintaining or changing that situation in some fashion and has a particular place within the government structure, a policy seeks to be global and comprehensive by encouraging the largest possible range of phenomena and the systematic interrelationships between them.

Programs may be presented in the form of long range plans showing inputs and outputs over a number of years or reports which highlight facets of programs and indicate expenditures and strategies. The information needed to prepare such plans and reports tends to be program, rather than responsibility, data. To the extent possible decisions on programs are based on estimates of revenues or benefits compared with costs. However, decisions are also made on the basis of the persuasive abilities of advocates within and outside of the organization and political and personal considerations.

The programming process consists of two distinct types of activities: (1) the preparation and analysis of individual program proposals and decision making with respect to these proposals; and (2) a formal system for the generation, flow, and coordination of separate program proposals. Many organizations are more effective at one of these activities than the other. Of the two, good individual program analysis is the more important for good
organization management. In addition, a useful distinction should be drawn between new programs and ongoing programs.\textsuperscript{50}

The programming process receives varying amounts of attention by different types of nonprofit organizations. Public-oriented organizations, particularly government, normally devote considerable time to formulating, analyzing, and deciding on program proposals because activities tend to change frequently in response to changes in perceived and real needs, opportunities, and program funding sources.

Organizational Relationships With Respect to Programming:\textsuperscript{51}

The following four actors normally play the key roles in the programming process:

1. **Top managers** make program decisions concerning the entire organization under their authority.

2. A **staff unit** referred to as a planning staff, program office, systems analysis office, operations research office, or similar title provides information, analyzes proposals submitted by others and originates proposals of its own. The role of the unit is usually stronger if it initiates proposals. The programming staff should report to top management or the controller. Locating the programming staff unit within the controller's office provides the advantages of easy access to data, minimizing the number of units reporting to top management, and gaining the leverage of the budget process, but the short term nature of budgeting may subvert the long range view of programming.

3. The **controller's office** should be responsible for designing an information system and collecting program and responsibility center information because all information should flow through a single office. Experience indicates that when the planning staff assumes the function of collecting program information problems, such as duplication, data inconsistencies, and a lack of coordination across activities, often arise.
Although members of the operating staff may originate program ideas, the programming staff is normally given responsibility for developing these ideas because operating units lack the staff time and expertise to prepare full program proposals.

Benefit/Cost Analysis: 52

The basic technique for analyzing programs is benefit/cost or systems analysis which consists essentially of measuring whether program benefits exceed estimated program costs. Although in many cases most, and in all cases all, program factors cannot be expressed numerically, benefit/cost analysis can be a useful tool for estimating outcomes in quantitative terms and taking a systematic look at the key issues, basic assumptions, factual bases, knowable consequences, risks, inputs, and outputs which are the basis for program decisions. The ability to quantify some factors can reduce, but not eliminate, the need for judgement. Systematic benefit/cost thinking can serve to sharpen the basis for program decision debate. Merely the effort to clarify the goals and objectives of programs can help to point out inconsistencies or unfeasible programs and goal definition frequently suggests appropriate programmatic courses of action.

The two basic decision rules in benefit/cost analysis are: 53

1. a program should not be adopted unless benefits exceed costs;
and 2. the program with the greatest excess of benefits over costs is to be preferred among competing proposals. Therefore, even if benefits cannot be precisely quantified, one can choose between two proposals which meet the same objective if one is less costly.
than the other. Similarly, if competing proposals cost the same and a ranking of benefits is possible, the program offering the most benefits is usually preferred. However, benefit/cost analysis is not useful for comparing programs intended to accomplish different objectives and is weakened to the degree a causal connection between costs and benefits has not been established. Nevertheless, the inability to apply benefit/cost analysis to proposals in which causal connections between inputs and outputs have not been demonstrated should not be a basis for rejecting programs. Such a policy would tend to rule out innovative programs and lead to a conservative bias. The benefits of economic development programs often consist of difficult to measure externality, spillover, or social benefits and program decision criteria include political and distributional, as well as, aggregate economic considerations.

Inasmuch as most proposals are advanced by advocates and the accompanying analysis and justification tends, as a result, to be biased, top managers need methods for compensating for these prejudices. Commonly, managers rely on staff to make careful reviews of proposals or attempt to foster an adversary relationship with regard to a proposal in which natural opponents debate the merits of a proposed program.

Ongoing Programs:

For most organizations, activities are relatively unchanged from one year to the next. All too frequently, however, top managers do
not devote attention to an examination of current operations because new programs are perceived as more "glamorous" and politically rewarding than ongoing operations. Inasmuch as new activities constitute a relatively small proportion of the work in a typical organization, the well managed organization engages in periodic, systematic examination of ongoing programs. A review of current program operations should ascertain whether program benefits exceed costs and whether improvements in efficiency and effectiveness are possible. Ongoing programs may continue indefinitely if such a review does not take place. The recent wave of "sunset" legislation being proposed and enacted at all levels of government represents an effort to require that ongoing programs be subject to periodic examination. On the other hand, a need also exists to review programs that are lapsing from management neglect and little public attention but which provide benefits not commonly perceived. In any case, the systematic review of ongoing programs is warranted because opportunities for improved performance exist in every organization.

Whereas new programs have advocates, operating managers are less likely to advocate improvements in existing programs because a review may draw their own performance into question or call for a cutback in funding of their program. In most cases, a staff unit responsible to top management or the controller should have the function of examining ongoing programs. Outside consultants may
perform program reviews, but they are better suited to occasional reviews of specific programs than to an ongoing examination role which may be sabotaged by operating staff who resent the presence of outsiders. On the other hand, consultants chosen or approved by operating managers may establish better working relationships with program staffs than in-agency programming staffs which are often perceived as threatening. Blue ribbon type commissions or task forces of well-known citizens have, on occasion, proven effective in reviewing current operations when they have received top management support and have had the necessary staff expertise. However, more often than not, reports from such groups lack the operating staff participation necessary for the implementation of recommendations.

Techniques for Analysis:

(1) One of the simplest and most effective techniques for reviewing program operations is to question why operations are performed in their current manner. This technique may uncover procedures which serve no useful purpose and, more importantly, assist the operating unit staff in thinking about the program along with the analyst so that the reasoning to support changes is understood and the commitment of staff is obtained for implementing needed changes.

(2) Another technique consists of comparing the costs and/or output measures of activities with those of similar organizations.

(3) Work measurements of the time needed to accomplish tasks can be used to assess the efficiency of staff.

(4) Models can be developed that approximate input and output relationships. Models can be used to assess the impacts of various changes in circumstances and indicate the conditions under which greater efficiency and effectiveness are achievable. Models can be based on empirical or theoretical
relationships. Sophisticated mathematics is not necessary for a model to be useful for conceptualizing more clearly what a program does or can do.

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Zero-Base Review:

The process of reviewing all of the ongoing programs in an organization on a periodic basis is referred to as "Zero-Base Review" programming. As the term suggests, such a review involves the examination of each function in its entirety by requiring the justification of every activity expenditure starting with a base of zero. The review process starts by questioning the need for having the activity at all. In contrast, the more familiar budgetary review process operates by taking the current level of spending as the starting point and requiring only the justification of additional expenditures. Although this programming review process is sometimes referred to as "zero-base budgeting," the "Zero-Base Review" approach requires more time than is available during the one to two year budgeting process. Inasmuch as a zero-base review is a time consuming and often traumatic experience for managers, such a review is undertaken every four or five years and managers often attempt to subvert or delay the process.

A zero-base review will raise basic questions about a program, such as: (1) Should the function be performed at all? Is it needed? Is the program appropriate to meet the need? Is it adequate to meet the need? (2) What should the quality level and activity mix be? (3) Should the program be performed as it is presently and with the current organization structure?
(4) How much should the program cost? (5) What size should the program be? (6) Do less expensive or more effective alternatives exist? If possible, the basic systems analysis methodology should be employed: (1) determination of need; (2) definition of the objectives; (3) identification of capabilities and constraints; (4) generation of alternatives (with the current program viewed as one alternative); (5) analysis and selection of alternative; (6) development and pilot implementation; (7) evaluation; and (8) feedback and modification (feedback loops exist for each step). The possibility that certain functions might be performed more efficiently and/or effectively by the private sector is usually explored (known as privatization).

Formal Ongoing Programming Systems: 64

Some organizations establish a formal system for the ongoing programming process. The components of such a system commonly include: (1) procedures prescribing the preparation and analysis of individual program proposals and the flow of proposals through the organization to the decision makers; and (2) a "program summary" document that summarizes the costs and outputs of a program over a number of future years. A formal programming system is an expensive effort which demands considerable time and energy from program and top managers. However, if the process is understood and accepted by operating managers, top managers are in a position to judge the relative priorities among programs and the process provides for a long run point of view on operations.
fosters clear thinking about the relationship between activities and objectives, and encourages consideration of the interrelationships between the program activities of responsibility centers and the related activities of other responsibility centers. Once the substantial job of creating the initial data base, documents, and program descriptions has been accomplished, the task of "running" the system is much less demanding.

Anthony and Herzlinger list several features which characterize organizations which find it worthwhile to consider programs together in a formal process rather than one at a time:

(a) a number of program decisions are made each year;

(b) interrelationships among the parts of the organization are complicated;

(c) implementation of program decisions requires a relatively long lead time;

(d) a complex scheduling of program elements is necessary to ensure that activities and capital investments are in proper sequence; and

(e) resources are scarce and the number of desirable programs is large.

The first step in the formal system is the dissemination of guidelines to operating managers throughout the organization which specify, at a minimum, the constraints within which program proposals are to be prepared (financial and non-financial), a definition of what is considered a program, and instructions on the format and content of the program memoranda. Working from the guidelines, operating managers prepare program memoranda which describe proposed programs...
over a period of several years: a statement of the problem; a
definition of program objectives; a description of the specific
activities proposed for accomplishing these objectives; and an
accounting of the resources required by the responsibility
center and other responsibility centers to carry on these
activities. An attempt should be made in the program memorandum to
distinguish two aspects of the problem: 67 (1) the "population"
(whether persons, acres, towns, etc.) that needs or can use the
program; and (2) the "demand" that will actually be served by
the program. Numbers should be used to describe the problem
components and trends but the quality of the numerical information
should be indicated. If possible, the proposal should be in the
form of a benefit/cost analysis. Although program managers propose
programs, much of the data analysis and writing should be done
by programming staff. These memoranda are then analyzed by a
staff unit and discussed with program and top managers. The approved
programs which emerge are subject to refinement and modification during
the budgeting process. Initially, programs are likely to be defined
in terms of the individual responsibility centers that initiate the
ideas. With greater refinement of the system, programs will cut
across organization units.

A program summary differs from a budget by not focusing on all
of the activities of responsibility centers, by presenting less
detail, by covering more than one future year, and by representing
an estimate of the future rather than a bilateral commitment on
resources and activities. The programming process is not contained by the one year time horizon which defines and limits the budgeting process.

Conceptually and sequentially, the budget process follows the programming process. The budget is usually a one-year plan expressed in monetary and other quantitative terms. In the budgeting process, the previously approved programs are refined by specifying the amounts to be spent on program components and the program activities to be undertaken by individual responsibility centers. In practice, no clean separation exists between the programming and budgeting phases and the budgeting process may call for revisions to previously approved programs. Nevertheless, an organization that does not maintain a separate programming process may, as a result, lack creativity, responsiveness to new opportunities or changing conditions, a comprehensive view of program activities, and a grasp of the interrelationships among programs. The budget presents an annual operating plan with careful estimates of costs and benefits against which responsibility center performance can be checked.

Budgeting is a more important component of the management control process in nonprofit organizations than in profit oriented organizations for the following reasons:

First, whereas costs are "engineered" by labor and production requirements in many businesses, a large fraction of costs are discretionary in most nonprofit organizations;
Second, whereas the level and mix of business activity will change frequently during a year in response to changes in demand, a government agency usually is responsible for executing a certain authorized program; and

Third, whereas operating managers in business are given latitude to modify plans in pursuit of the maximization of profits, operating managers in nonprofit organizations must adhere closely to budget figures.

The final budget is arrived at through a process of negotiation between the managers of responsibility centers and their superiors. The budget process begins with an estimate of the amount of revenue expected during the budget year and expenses are budgeted to equal that figure. The format and content of the budget documents should be designed to facilitate analysis and the comparison of actual with planned performance. The budget should include a quantitative statement of planned objectives (the inclusion of objectives as part of the budget is commonly referred to as "Management By Objectives") as well as statements of the outputs expected and the resources that are to be used to achieve these outputs. Whenever possible, dollar amounts should be broken down into physical quantities and unit costs, measures of output should be indicated, and data for the previous year(s) should be included for comparison. In addition, the budget should distinguish between revenues that are "hard" and, thus, can be counted upon, and "soft" revenues about which there is some uncertainty, and program commitments should be based on the certainty of funding.

Due to severe time constraints on analyzing budget proposals, the level of current spending is usually taken as the starting point for negotiations between program managers and their superiors.
The final budget which results from negotiations should represent a bilateral commitment: responsibility center managers commit themselves to achieving the planned objectives with spending limited to the specified amounts and their superiors commit themselves to accepting such performance as satisfactory.72

Program Budgeting:

Limitations of the "fiduciary" approach to accounting were noted above when the advantages of accrual accounting were described. The "fiduciary" attitude is commonly evident in the budget formats of government organizations which detail amounts that can be obligated by agencies on a line by line basis for different object classifications such as personnel, travel, and supplies. Without a program budget format which emphasizes the programs undertaken within and across responsibility centers, the budget cannot serve as a tool for controlling the effectiveness and efficiency, in addition to the expenses, of government organizations.

The slowness of government to adopt program budget formats can be attributed to two primary reasons:

(1) legislatures are reluctant to change from familiar ways and legislators frequently suspect that the executive is gaining additional power at their expense; and

(2) managers often fear that a good information system will provide for easy review of their activities by outside authorities such as the legislature and the public.

Operating and Accounting 73

Program activities occur during the operating phase: resources are used by the organization in working to achieve outputs. During
this phase of the management control cycle, managers need information of two types for control purposes: "environmental" information on the outside world and the larger organization of which the operating unit is a part; and "internal" information on the performance of the manager's responsibility center.

Environmental information is essential for judging alternative courses of action. However, because the volume of potentially useful information is almost limitless, an information system should only collect information on key variables which are likely to affect a program. The challenge in designing an information system is to collect enough, but not too much, relevant information in a format that serves the different needs of various levels of management. The controller's office should normally assume the role of collecting all information for the organization and issuing reports to suit the needs of the various managers. Gaining the cooperation of program managers is an essential but often difficult task because knowledge provides power in an organization and shared knowledge is perceived as a threat to managers who control programs. In the public sector, the political nature and short tenure of top management appointments and the absence of incentives for effective and efficient performance contribute to the distrust felt by program level managers toward demands for increased reporting. Horizontal flows of information cut against the common parochialism and protective attitudes of responsibility center managers.

Internal information is collected in order to compare budgeted
costs and outputs with actual costs and outputs. The accounts should be structured to collect costs and outputs by programs and by responsibility centers. In this manner, top managers can ascertain whether and by what magnitude actual and planned occurrences differ and the source of any discrepancy. In addition to numerical information, narrative accounts of performance which identify the causes for discrepancies are needed by decision-makers before future courses of action can be decided.

Internal auditing procedures and an audit staff should exist in order to insure that information is accurate, rules governing the handling of funds are adhered to, and losses due to theft, fraud, or defalcation are minimized. In addition, in order for an information system to serve its purpose for management control, top management must devote attention to the review of performance. In particular, top managers should attempt to counter the natural tendency to spend 100 percent of the amounts authorized, whether needed or not, by offering appropriate rewards to those managers and staff who are able to reduce spending and still accomplish planned objectives.

Reporting and Analyzing Performance

During the fourth and final phase of the management control process, collected information is summarized, analyzed, and reported to those who are responsible for knowing what is happening and improving performance. Control reports prepared for managers consist essentially of comparisons of planned with actual inputs.
and outputs.

All of the information contained in reports should serve a specific and well understood purpose. The types and levels of detail of data in reports should vary to suit the needs of the different levels of management. For example, top managers need highly aggregated output data which shows results by program categories, whereas operating managers need detailed information on unit efficiency and the status of individual projects. Display formats for reports should be concise, visually unambiguous, and easily comprehensible.

Control reports should provide the information necessary to answer two basic questions:

(1) Has the unexpected happened, and, if so, what should be done about it?; and

(2) Are activities proceeding as planned, and, if not, what should be done?

The environmental information and some of the internal information address the first question and most of the internal information responds directly to the second question. A "variance analysis" that identifies the specific categories in which planned and actual performance differ can help to pinpoint the targets for corrective action. Variances may be attributable to changes in the volume of activity, prices, the mix of activities, efficiency, or external conditions.

Operational Auditing:

In recent years, the audit function in the private sector has begun to mirror prior changes in accounting by expanding from a
traditional "fiduciary" or "compliance" orientation, which encompasses only considerations of the accuracy of information and the legality of the use of funds, to an "operational" auditing approach which also deals with questions of effectiveness and efficiency. When following the operational audit orientation in reviewing organization efficiency, the auditor considers items such as whether the entity is managing its resources in an economical and efficient manner and whether inadequacies exist in information systems, procedures, and organizational structure.

System Design and Installation

A new or revised management control system is difficult to install. A new system changes the way in which plans are made and performance is measured and judged (and may mark the first effort at measuring performance) and establishes new relationships among managers at various levels. Managers may feel threatened by a new information system until they understand its limitations. Studies undertaken to develop the system may lead to changes in organization structure which upset comfortable patterns. Installation of a system in the public sector is especially difficult because employees are familiar with incentives for mistake avoidance rather than for superior performance and public organizations usually lack the private sector climate of management control. Operating managers may resist any move to a new system because of uncertainty about the possible loss of power as top managers gain centralized authority. Questions similar to the following arise: Who benefits from and is hurt by the system? How will the informal structure of the organization be affected?
Will outside agencies obtain control over unit activities?
Will top managers be helped at the expense of operating managers?
Operating managers may also resist the shift of information collection responsibility from operating units to the controller. As the rules and style of management are changed, current managers may be threatened as individuals with greater technical skills are recruited.

The literature on management control reveals a basic difference of opinion on the issue of whether system installation requires the support and participation of operating managers or can be accomplished with the impetus from top management without lower level support. Anthony and Herzlinger opt for the latter view on the basis of a feeling that lower level employees will inevitably subvert the installation process. However, whereas the active involvement of top managers is definitely a requisite for successful system installation, this author believes that the participation of operating personnel in system design and installation is essential in government organizations due to the weak vertical authority structure of organizations in the public sector.

Anthony and Herzlinger identify four necessary conditions for a successful effort to improve management control: top management support, acquiescence from outside agencies or authorities, a competent system design team, and sufficient time for system installation. Top managers should allocate a significant amount of time to the system development effort in order to convince operating
managers that the new system will be used, hold meetings with subordinates to discuss how information can be utilized, and clear roadblocks during design and installation.

System designers must have access to top managers and spend considerable time educating and gaining the participation of operating managers. In spite of the resistance of operating managers, system designers must work with managers to define the information needs of units by asking managers to identify their information needs and, most importantly, assessing the information requirements of jobs irrespective of what managers indicate as needs. Operating managers can judge the feasibility of the information collection effort suggested by system designers and assess the format and content of proposed reports. In order to foster staff identification with and commitment to the system change, in-house personnel rather than outside consultants should be used for system design and installation if possible. In order to overcome the resistance of operating managers, system designers should devote time to educating operating managers on how the system can help them to do a better job and convincing them of the impending reality of the new system. System designers must be careful, however, not to oversell the advantages of the system if hardheaded managers are to become less skeptical.

The principal steps of the system design and installation process are as follows:
(1) Develop a plan for system design and installation, including a timetable and a statement of responsibilities.

(2) Diagnose the objectives of the organization, the existing control system, and the existing organization structure.

(3) Examine and catalogue the existing sources of information.

(4) Develop the control structure by starting with the program structure.

(5) Develop procedures.

(6) Test the proposed structure and procedures.

(7) Develop and implement an education program.

(8) Run the new system concurrently with the old system and phase out the old system.

Rather than attempting to install a new system in the entire organization, it is often preferable to limit the initial effort to a single part of the organization which can demonstrate the value of the changes, work out difficulties on a smaller scale, and stimulate managerial acceptance. In addition, a system should be installed in stages to allow enough time for managers to become accustomed to changes.
Strategic Planning

Anthony and Herzlinger distinguish the strategic planning and management control processes by stating that the former involves decisions on the goals and strategies of the organization whereas the latter accepts these goals and strategies as given and deals with the work undertaken by the organization to achieve its objectives. Strategic planning takes up fundamental questions not considered during the management control process: Should the organization exist?; How should it be organized?; What is the kind and extent of need to be addressed by the organization?; What should be the missions of the organization and its component parts?; Are current goals and objectives good or bad? What activities are appropriate and adequate to meet goals? In contrast, the programming activities of the management control process involve the identification of programs that will effectively and efficiently achieve the goals determined during the strategic planning process. Nevertheless, the line between programming and strategic planning is not finely drawn in practice. Studies which are conducted as part of a programming effort frequently indicate the desirability of changing goals and strategies and strategic planning often considers specific programs. The essence of the distinction concerns the scope of inquiry: whereas strategic planning explores an unlimited range of needs for the direction of organization efforts, programming is limited to an examination of previously identified needs.
whereas strategic planning considers the constraints and capabilities of the organization in the broadest terms, programming encompasses an assessment of capabilities and constraints only in relation to specific programs or objectives; and whereas strategic planning includes a study of alternative goals for the organization, programming deals only with alternative programs to achieve previously decided upon goals.

A primary purpose for distinguishing between the strategic planning and programming conceptually and as distinct processes is that programming tends to become routine whereas strategic planning should be creative, unsystematic, and informal. Although the management control system collects information that is useful for strategic planning, strategic decisions are normally occasional events and require information in the form appropriate for the issue at hand.
Project Management in General

A distinctive management approach and several specific tools and techniques have been developed for the management and control of projects. Whereas the general framework of management control focuses on the work done by organizations over various periods of time, project management and control is concerned with the accomplishment of a project which is non-periodic. However, most of the basic control principles are the same for both. Thus, project management is distinguished from production or program management primarily by the nonrepetitive or temporary nature of the work defined as a "project." Although work similar to a project may have been done previously, the activity is not being repeated in an identical fashion and on a regularized production basis. Consequently, in order to efficiently implement a project, the project manager or project team must rely on experience with similar projects and judgements on the unique conditions of individual projects to plan and schedule implementation.

In a broad sense, the term project management refers to a collection of organization, planning, and control tools and strategies, and information systems used to manage a complex, one-time task. From a narrower perspective, project management consists of those techniques that enable a manager to plan a sequence of activities and assign responsibility for those tasks in order to accomplish a complex mission and to monitor the allocation of resources so that those
activities are accomplished within time and cost targets. The ingredients of the project management approach include the following items:

* Gantt and Milestone charts for scheduling and monitoring the progress of activities;

* CPM and PERT network diagram methods for planning the sequence of activities and establishing the interrelationships among activities and the most critical sequence of activities for meeting time and cost targets;

* Project plans for a concise account of the rationale, strategy, objectives, organization design, activities, resource requirements, constraints, and measures of performance for projects;

* Reporting systems or display devices for the conveyance of project status and performance information;

* Computer-aided information processing and reporting; and

* Organization development strategies for increasing project effectiveness and efficiency, such as the lateral organization forms of team management and matrix organization.

With the growing emphasis on temporary organizations in our "temporary" or ever changing society, project management approaches to one-time projects are increasingly in use. Project management began and is widely employed in construction and defense-related Research and Development enterprises, and is now frequently in use in the fields of business and industry, government, health, and education.

Projects for which the project management approach has proven valuable are defined by the following characteristics:
(1) projects are one-time efforts with tight time schedules;
(2) definable goals are evident;
(3) activities are different from ongoing operations in existing line or functional agencies;
(4) tasks are somewhat uncertain or stochastic;
(5) complex task interrelationships are necessary and the relationship between activities and results is uncertain; and
(6) projects require the participation of many actors and the coordination of separate functional operating units.

Inasmuch as Chapter 121B industrial park projects exhibit all of the above characteristics, use of the project management approach for these projects should prove to be worthwhile.

Network Techniques

The development of network diagram methods, such as CPM (Critical Path Method) and PERT (Program Evaluation and Review Technique), has provided the basis for a more formal approach to an emerging discipline of project management. Network methods consist of a graphical portrayal of the interrelationships among project activities and an arithmetic procedure which indicates the relative importance or "criticality" of each activity in the over-all schedule. A network graph diagrams a planned sequence of activities and shows the precedence relationships -- the dependency of activities on prior activities -- which lead to project completion. The calculation of a "critical path" through a network enables a manager to focus attention and resources on the subset of activities that form
the longest path through the network and, therefore, the most
critical sequence of events for on-time project completion. The
amount of "slack" time by which other paths of activities through
the schedule fall short of the critical path and, thus, the degree
of sensitivity of the network to changes in activity times along the
critical path, are also revealed by this Critical Path Method.
PERT differs from CPM by including a statistical treatment of the
probabilities of uncertain activity performance times.

Although network diagram methods have become mathematically
sophisticated with computer applications, probability statistics,
time-cost tradeoff procedures, resource allocation optimization
techniques, and cost control procedures, the majority of applications
of network diagram methods are limited to the following basic steps:
preparation of a network diagram; estimation of the expected time
or time and cost to perform each activity; computation of the critical
path; and updating of the network. Experience with a broad range
of project types has shown that these basic steps can serve to:

* encourage a logical discipline in the planning, scheduling,
and control of projects;

* encourage more long-range and detailed planning of
projects;

* provide a standard method for documenting and communicating
project plans, schedules, and time and cost performance;

* identify the most critical elements in a plan and, thus,
focus the attention of managers on the 10 to 20 percent of a
project that is most constraining on the schedule; and

* illustrate the effects of technical and procedural
changes on the over-all schedule.
The basic network diagram and critical path computations also encourage detailed consideration of project objectives and resource needs and constraints.

From the above account of the benefits of network techniques, some of the features of network diagram methods that suggest their usefulness for the Chapter 121B industrial land development program can be identified:

1. Networks can be applied at several stages of project management; the planning phase, when alternatives and resource needs are being considered; the scheduling phase, when time and resource schedules are established; and the operating phase, when actual progress is compared with planned activities.

2. Networks are easy to understand conceptually and can be explained to persons without a background in network theory. Calculations are not difficult or time consuming.

3. The network graph displays in a simple, direct, and comprehensive fashion all of the complex interrelationships among project activities. Project actors can quickly perceive how their portion of the project affects, and is affected by, other portions.

4. Critical path calculations direct the attention of managers to the subset of activities in a project that are most critical and, thereby, facilitate management by exception.

5. As simulation tools, network diagrams enable managers to project the effects of planned or unanticipated changes so that appropriate actions can be taken.

However, the usefulness of network diagrams is limited to the degree that the following underlying assumptions of the methods are not valid:

(a) A project can be divided into a set of predictable, independent activities.
(b) The precedence relationships of project activities can be completely represented by a noncyclical network graph in which each activity connects directly into its immediate successors. For example, network methods do not allow for activity sequences which are conditional on the outcomes of preceding activities.

(c) Activity times can be estimated -- either directly or probabilistically -- and are independent of each other.

The Project Plan

The project plan is the basic tool for defining a project: background rationale; objectives; measures of performance; strategy; resource requirements; constraints; organization design; activities; and schedule. From the project management perspective, a plan is not a static picture of a desired future state of affairs but an action document which answers the why, what, how and who questions related to the achievement of project objectives. A plan is not an ideal map on the basis of which task responsibilities are delegated by a manager but a consensus strategy which emerges from a common understanding and the individual commitments of participating actors. The contents of a plan are based on a systems analysis methodology and commonly include the following items:

(1) background introduction to the project or program setting forth the problem, the key actors, and the historical context of the undertaking;

(2) definition of objectives and effectiveness measures;

(3) rationale for the project strategy chosen;

(4) available resources and constraints on resources and capability;
(5) design of the organizational relationships which structure tasks and responsibilities: external, parent, and client environmental considerations and measures of success related to strategic choices in organizational design are treated;

(6) a schedule for the implementation of activities using networks based on time and cost estimates: precedence relationships and task interrelationships are mapped; and

(7) milestone charts, which indicate task responsibilities and scheduling, are prepared for the future monitoring of implementation.

In addition to providing for progress monitoring through "process measures" on milestone chart reports, a plan establishes the measures of effectiveness, basic strategy, and data base which allow for the preparation of a format for periodic reporting on the effectiveness of the project in achieving its objectives.

As an action oriented tool, a good project plan is a working document that is continually referred to and modified as rescheduling and redirection are required. Periodic milestone reports are the central focus for multi-actor or team management decision-making with respect to the accomplishment of project tasks. Effectiveness reporting systems supply information on the outcomes of projects. In addition, exception reporting, which identifies only those tasks that are behind schedule, is a useful technique for focusing the attention of top managers on specific problems. Milestone and exception reporting enable project participants to take collective actions and bring resources to bear on problems.

**Essentials of a Project Control System**

The orientation of project control differs somewhat from management
control in that project management deals with all of the resources necessary for numerous actors to accomplish a given job whereas management control also concentrates on all of the resources used by units (responsibility centers) in working on a variety of projects and programs. The essentials of a project control system are as follows:  

(1) At the beginning of a project, the work to be done, resources needed to do the work, and the anticipated time required to complete activities are estimated. Activities are broken down into work packages which are measurable increments of work that can be related to a milestone or other "process measure" of progress and are the responsibility of a single organization unit.  

(2) A work schedule and related budget are prepared from this information that indicate: (a) the milestones to be used to measure task progress; (b) the costs for each work package; (c) the starting and completion times for each work package; and (d) the unit responsible for each work package.  

(3) Based on the project strategy and measures of effectiveness in the project plan, a reporting format is prepared which indicates: (a) projected outputs in total and on a per unit basis (ex. jobs per firm or per acre); (b) actual direct outputs in total and on a per unit basis; (c) planned and actual indirect or induced outputs in total and on a per unit basis; and (d) a narrative account of nonquantifiable social, political, and economic outputs and a qualitative assessment of the quantifiable outputs.  

(4) Records are maintained of actual outputs and actual costs.  

(5) Reports are prepared at regular intervals which indicate performance over the interval and cumulative performance.  

(6) Plans, budgets, activities, organizational relationships, and programs are revised on the basis of these reports.
Strategic Considerations for the Design of a Project Management System

In addition to the above "tactical" aspects of project management, such as the preparation of network diagrams and the collection and reporting of information, experience indicates that the successful use of the project management approach requires a "strategic" conception of the design and management of the components of a project within a specific context of people and organizations. Sophisticated project management tools have proven ineffective when environmental factors which define the setting of project management activities have not been addressed: for example, when personnel refuse to accept project management tools; when the commitment of all actors on a project has not been obtained; or when the measure of project success is political approval rather than effective performance. Therefore, managers must consider the design of the project management system itself in addition to the particular tools for managing operations. Although the task orientation of project management, i.e., the focus on discrete achievable objectives, is one of the strengths of the approach for coordinating complex activities, a neglect of the environmental variables which affect project management efforts has weakened the usefulness of the other techniques. However, Lawrence Bennigson, on the basis of his personal experience with project management, has developed a conceptual framework for considering in a systematic fashion relevant environmental factors for the design of
an effective project management system and measures for assessing a project management system independent of the particular project at hand.

Bennigson has identified a number of environmental areas that he believes should be addressed when a project management strategy is formulated.

(1) Political, economic, and social conditions external to a particular project are aspects of the general environment which affect project management priorities. For example, if the discovery of offshore oil presents competitive opportunities for the Commonwealth that must be exploited quickly, a premium should be placed on time rather than cost or effectiveness measures of project success. This may call for a project management strategy which places a member of the governor's staff as the project manager in order to obtain maximum authority leverage over other actors and assure access to the chief decision-maker. In a case in which the demand for industrial land is very sensitive to price differentials, closer attention must be given to cost than to time or effectiveness considerations.

(2) The environment presented by the parent organization poses constraints for a project management system by the particulars of its management systems and its financial, political, and social dimensions. For example, the choice of a project manager must respond to inner political and bureaucratic dynamics and lateral forms of organization which cut across vertical lines of authority may fail if top line managers refuse to delegate authority, along with responsibilities,
to lower level personnel.

(3) Political, social, and financial features of the customer environment are also important considerations for the design of a project management system. For example, if an industrial park project is undertaken for the purpose of creating jobs for unemployed residents of a depressed community, attention should focus on measures to insure effectiveness more than on time or cost considerations in order to guarantee that unemployed individuals are being placed and retained in newly created jobs. In contrast, a municipality with limited bonding capacity must devote primary attention to cost control efforts. In another instance, a politically unstable environment would call for timely project completion as the paramount concern.

The above discussion of environmental considerations suggests that tradeoffs are necessary in the design of project management systems for individual projects among the three most basic measures of project success: time, cost, and effectiveness. Although all three measures are always important, the strategic settings of projects demand emphasis differences. Customer satisfaction is an additional strategically important measure of project success identified by Bennigson. Inasmuch as local citizens and/or politicians may be dissatisfied even though a project is doing well in time, cost and effectiveness terms (for example, because of the long development time required), the building of confidence among local citizens and local political support are also measures of project management success.
A fifth measure of project success relevant to industrial park programs is the change effect which is an explicit objective of development projects. With change as an objective of a project, the project management strategy must address those people affected by as well as those participating in the change effort. For example, the information system should provide status information to both the project participants and the impacted citizenry.

In addition to the above project measures of success which bear on the design of a project management system, the characteristics of project tasks, in particular, task importance, task complexity, and task uncertainty, should affect system design. Different views on the importance of a project by the participants will influence the priorities which should be placed on the other success criteria. The greater the complexity of a project the more need there is for formal coordination mechanisms and information processing. The impact of task uncertainty is similar to task complexity and will be examined in a later section on Organization Development through a presentation of the "information processing" view of organizations advanced by Jay Galbraith.

Along with an account of environmental considerations and measures of project success which should be analyzed in designing a project management system, Bennigson identifies five criteria for evaluating a project management system independently of the particular task at hand: (1) obtaining multi-actor commitment; (2) achieving transition
or termination; (3) effecting integration; (4) providing visibility or a clear view of the information on a project; and (5) satisfying the job security needs of personnel.

(1) Inasmuch as work on a project is temporary, projects usually represent only part-time activity for individuals in line agencies, and line agency employees are frequently not rewarded for inter-agency project performance, commitment to projects may be difficult to obtain among state and local government employees. Various organization design forms, such as lateral forms of organization, can be employed to "projectize" the project management system in order to foster personnel commitment and integration among organization units. These organization design strategies are reviewed in the later section on Organization Development.

(2) Inasmuch as a project must end at some point, the management system should address in an explicit fashion which of three ways project termination will occur: (1) out-and-out termination; (2) adoption into an ongoing permanent organization; or (3) becoming a permanent entity. Experience indicates that project completion will be delayed if dependent relationships are fostered and personnel rely solely on temporary projects for their livelihood. In order to provide incentives or minimize disincentives for timely project execution, choices with respect to the design of the project management system should address termination. For example, if an industrial park project is viewed as a singular economic development
effort by a municipality, responsibility for project execution should, perhaps, be contracted to a local industrial development commission that engages in other activities which will continue after the completion of the project. (Having the board and staff of the local Chamber of Commerce serve as the board and staff of the Redevelopment Authority is a similar option for this situation.) On the other hand, if a municipality is contemplating a long-term and multi-faceted economic development effort, DCA should demand evidence of planning and resource commitments for these other activities in order to be assured that a dependency relationship is not being established for the industrial park project. In a third case, the termination strategy may call for responsibility for a project to shift to the municipal community development agency or industrial development commission at a specified point in time. Examples of aspects of a project management system that affect a project's ability to successfully terminate include the design of information systems, selection of the organizational approach, establishment of reporting procedures, and distribution of authority for resource allocation decisions.

(3) **Integration** is a third criteria for assessing a project management strategy. The effective integration of activities on a project involves the achievement of coordination among work groups, responsibility centers, and entire organizations. Projects frequently create unique and complex interrelationships among actors who normally
do not work together. A project management strategy should consider what the needs for coordination are, what kind of coordination is required, how to achieve this coordination, and how coordination needs may change. In a section below on Organization Design Strategies, a framework for assessing and responding to integration needs is examined in detail.

(4) Attention to project "visibility" through the information system is especially critical in a temporary project situation because actors are commonly unfamiliar with team approaches to execution, tasks are complex, a great amount and variety of types of information are needed during different phases of a project, performance deadlines must be met, and environmental needs must be satisfied. The project management techniques used to meet information and visibility needs have been discussed previously: network diagram methods; exception reporting; process measures reporting; and effectiveness measures reporting. The particular kinds of information collected and reported are largely a function of the specific emphasis on success criteria for a project.

(5) A project can pose a serious threat to the job security of personnel because of the uncertainty of new tasks and relationships, the change from vertical performance rewards to rewards for cooperating in lateral forms of organization, and the temporary nature of project activities. A fifth criterion for judging the adequacy of a project management system is attention to the security needs of personnel. A project management system can respond to this need by providing for the continuation of project activities, selecting
personnel not likely to feel threatened, providing incentives, or maintaining line authority relationships.

Reasons for the Failure of Project Management

The above classification of environmental considerations and measures of project success for the design of a project management strategy and criteria for assessing project management strategies independent of the task at hand were derived by Bennigson from experiences of problems, failures, and successes with project management. Ivars Avots identifies five additional reasons for the failure of the project management approach:

1. The basis of the project is not sound;
2. The wrong man is appointed project manager;
3. Top-management fails to supply enough support;
4. Task definitions are inadequate; and
5. Management techniques are inappropriate.

The basis of a project is not sound if it merely represents the transfer of an idea from another context without critical analysis or if project participants are not given the proper authority and rewards for working on the project. The individual selected for the position of project manager must be capable of leadership and conflict resolution as well as demonstrate technical competence. Support from top management must include a delegation of authority to project managers and organization changes, such as project or program accounting, needed to facilitate project control. Avots claims that inadequate definitions of the work content of activities, activity costs, schedules, technical
requirements, and responsibility assignments are the most common failings of project management. Techniques used for planning, scheduling, and monitoring should be understood by managers and other participants and tendencies toward over sophistication should be resisted.
Organization Development in General

Organization Development (OD), as commonly understood with reference to a particular body of literature, consists of theories, normative principles and models, methods, strategies, and techniques concerned with ways to achieve desired changes in organization structure and behavior and ways organizations can be better structured to accomplish organization missions. Thus, OD focuses on aspects of the management of organizations not directly treated by the strategic planning, management control, or project management frameworks: approaches to effecting behavioral change in organizations and organization design options for improving performance.

Beginning with psychology and the sociology of organizations, OD practitioners have aimed at developing an approach to organization analysis and "planned change" that serves to better adapt the structure of organizations to their environmental circumstances and alter working relations within organizations to maximize human potentialities and satisfactions. Thus, OD deals with both the behavior of individual contributors to an organization and the organization which structures that behavior. However, OD is not concerned with identifying ideal types of organization structures and behavior patterns which are invariant but with aiding organizations and people to respond to changing environments. "Organization development," writes Warren Bennis, "is a response to change, a complex educational strategy.
intended to change the beliefs, attitudes, values, and structure of organizations so that they can better adapt to new technologies, markets, and challenges, and the dizzying rate of change itself."^2 Thus, OD efforts are change interventions broadly concerned with the dual objectives of mobilizing the resources of an organization to achieve performance objectives while satisfying the needs of individuals for self-worth, growth, and satisfaction. In order for organizations to meet these needs, OD focuses on new forms of organization structure, the learning of more effective goal setting (individual, team, and organization wide) and planning processes, and the devotion of organization time to improving the methods of working, decision-making, and communicating within teams of interdependent people.

Private Sector Origins

As in the cases of strategic planning, management control, and project management, OD techniques and theories have been developed in the private sector. OD has evolved in the business world to deal with the altered conditions and environments facing contemporary business managers. Managers in business have moved from a pre-World War II concern for "human engineering" to maximize the production of goods, through subsequent attention to "human relations" issues of the work environment and job security during the 1950s, to dealings with present day problems related to the dynamic and more complex business setting. The increasing pace of technological and communication changes has been accompanied by basic changes in the firm: the internationalization
of markets; shorter product life; the increasing significance of marketing; more specialist staff relative to line personnel; and production which requires the inputs of numerous line functions in ever more complex relationships. These contemporary environments, in turn, require adaptive organization structures with characteristics significantly different from the common bureaucratic models of the past, such as a high degree of internal differentiation, overlapping responsibilities, appropriate mechanisms of integration, temporary organization boundary arrangements, a predominance of high-capacity horizontal channels of communication, and innovation seeking leadership roles.

An Experience Based Approach

In contrast to the traditional rationalist view of organization behavior and decision-making which implicitly assumes that actions follow in course from decisions, the organization development approach regards implementation as inseparable from decision-making. Rather than a rationalist method of adapting means to ends, OD presents an experience based methodology focusing on organizational change. Organization development is a process of planned change which attempts to move an organization and the people who compose the organization to find their own way toward greater effectiveness within the particular context of environmental circumstances, capabilities, and constraints. A "rationalist approach, in contrast, attempts to find the invariant rules that will lead to best solutions.
Defining Characteristics of Organization Development

Some of the principal characteristics of OD are as follows:

1. OD is an educational strategy adopted to bring about a planned organizational change;

2. The changes sought through OD efforts are coupled directly with the exigency or demand the organization is trying to cope with; that is, OD is always related to the organization's mission;

3. Organization development relies on an educational strategy which emphasizes experienced behavior;

4. OD activities are action oriented; rather than either educational activities devoted to increasing the skills of personnel who will subsequently apply their expertise or analyses of organization structure which are prepared for top managers to implement, change efforts are developed and implemented during the OD process;

5. OD is usually a long-term affair;

6. Organization development implies a collaborative relationship between change agents and the constituents of the client system;

7. OD focuses on changing attitudes and/or behavior;

8. The aim of OD is to increase organization health and effectiveness; the criteria for initiating OD activities are whether the change will lead to either a better fit between the organization and the demands of the environment and/or to a better fit between the organization and the needs of individual contributors;

9. OD change efforts deal primarily with groups; individual learning and personal change occur as a by-product of the OD process;

10. Change agents share a set of normative goals, including: improvement in interpersonal competence; a shift in values so that human factors and feelings come to be considered legitimate; development of increased understanding between and within working groups in order to reduce tension; development of more effective "team management," and development of better methods of conflict resolution.
Basic Concepts for Developing Organizations

Lawrence and Lorsch, two prominent OD practitioners and authors, offer a definition of organization which is based on many of the fundamental concepts of OD:

An organization is the coordination of different activities of individual contributors to carry out planned transactions with the environment.7

The focus on "individual contributors" in this definition reflects the view that an organization consists only of the activities of individuals who participate within a group to accomplish specific purposes. The expression "planned transactions with the environment" adds to this view by indicating that people form organizations for the purpose of finding better solutions ("planned") to the problems they encounter in dealing with an external environment and that activities involve exchanges with the environment. Together these components of the definition imply that organizations exist principally to engage in activities with the aim of achieving objectives related to dealings with the environment and that an organization must respond to external circumstances rather than simply impose the collective will of its participants. In addition, the definition implies that organizations exist only to satisfy the needs of their individual contributors and do not have an independent purpose of their own. Furthermore, the environmental nature of the objectives of an organization and the relationship of exchange between contributors and the environment suggest that organization activities should
change in response to changes in the environment. The phrase "different activities of individual contributors" in the definition connotes the familiar notion of division of work. The term coordination qualifies the division of labor requirement by noting that work is not randomly distributed among individual contributors but is organized in a fashion to accomplish the objectives of the collective. Thus, coordination implies the need for mechanisms of communication and decision-making in order to organize for a planned purpose. Finally, by stating that people contribute activities to an organization rather than being themselves parts of an organization, the definition suggests that individuals will differ in their concern over the performance of the organization and will seek differing degrees of personal satisfaction through participation.

The above definition and definitional analysis of organization suggest the four major problem areas or "interfaces" for OD change efforts: organization-and-environment; group-to-group; individual-and-organization; and person-to-person. With respect to the organization-environment interface, OD interventions strive to improve the efficiency and effectiveness of the "planned transactions" conducted by the organization in attempting to achieve organization objectives. The OD developmental task at this problem area encompasses both the formulation of an organization strategy based on the mission of the organization and the maintenance and adaptation of organization-
environment transactions in the face of environmental changes. The specific items for the focus of OD efforts at this interface include the proper division of activities by the organization, the efficiency of organizational and administrative practice, and the consistency of the thought and behavior of individual contributors to the organization with the requirements of environmental transactions.

OD efforts directed at the interface between groups or units within the organization address the problem of achieving integration or "coordination" among units which evolve distinctive task related characteristics and different points of view. OD issues at the individual-and-organization interface relate to the implicit and explicit agreement entered into between individuals and organizations which establishes the inducements to be provided to individuals in exchange for specific individual contributions to the organization.

The fourth major area for OD attention, the person-to-person interface, involves questions concerning interpersonal relations between individual contributors and the development of effective face-to-face task group behavior.

The above definition of organization also suggests a few basic normative concepts of OD used to determine the desired direction of organizational change. First, the environmental demands on an organization establish the degree of differentiation that should exist among the various individuals, groups, and units. In particular, differentiation within an organization is dependent upon the similarity
of the degree of certainty of the information on the different parts
of the environment dealt with by the units of an organization. Thus,
units which share a level of certainty with respect to information
they hold about the aspects of the environment they confront should
exhibit similar practices and personnel attitudes, whereas units which
differ concerning the certainty of environmental information require
differentiation with respect to ways of thinking and behaving.

Second, the task demands facing an organization also determine
the degree of integration necessary among units: (a) which units need
to work together and (b) the degree of interdependence required
among the units. However, the more differentiation which is required
among units, the greater is the level of difficulty in achieving
integration. As a consequence, when the tasks faced by an organization
demand highly differentiated and tightly integrated units,
formal integrating mechanisms must be developed to supplement the
basic integrating device of a management hierarchy. Supplemental
integrating devices used include individual coordinators, cross-
cutting teams, and entire departments devoted to achieving integration
among other units. Thus, the concepts of differentiation and
integration can be employed to analyze the needs of organizations
in dealing effectively with other environments and to suggest
appropriate formal structural devices for achieving desired behavior.

Another key OD concept which follows from the notions of
differentiation and integration is the management of intergroup conflict.
Conflicts inevitably arise in organizations as individuals strive to
fulfill the dual requirements of difference and unity. Therefore, the ability of an organization to achieve integration is largely a function of how effective it is at managing conflict. From empirical study OD practitioners have concluded that conflict is successfully managed when the pattern of influence or power for decision-making with respect to conflicts resides at the level of the organization hierarchy where the knowledge to reach decisions exists. In addition, the groups, units, or individuals with the most critical knowledge about the environment should have the most influence in resolving conflicts. Furthermore, OD practitioners have found that, regardless of environmental conditions, effective conflict management occurs when conflict is dealt with openly and solutions are reached in terms of organization goals rather than when conflict is avoided or raw power forces one party to accept a resolution. The OD literature also indicates that individuals assigned to integrating roles are effective on the basis of their perceived knowledge and competence rather than their formal power position in the hierarchy.

In summary, the concepts of differentiation and integration can be used to understand the problems of and prescribe solutions for organizations attempting to deal effectively with their environments. The demands of the environment on an organization determine the degree of differentiation, the pattern and degree of integration, the integrative mechanisms, and the appropriate conflict-resolving actions.
Two additional concepts which are basic to the OD conceptual framework are part of the general "systems" view of organizations which forms the basis for much of OD. The first of these notions holds that the parts of an organization are interdependent such that a change in one part impacts on the others. Therefore, although the conceptual framework of OD addresses various problem areas and organization needs, the practice of OD is directed at an organization as a whole. The second idea derivative from the systems view is that organizations are capable of self-modification. A cybernetic process occurs when members of an organization find problem discrepancies in comparing desired with actual results and initiate a search for causes and remedies. This feedback mechanism provides organizations with the potential for extending human control over the environment.

Characteristics of Healthy Organizations

The basic methodology for an OD change intervention consists of a descriptive diagnosis of the present state of an organization and a prescriptive analysis of the organizational characteristics that would provide the best fit with organization task requirements and individual needs. The normative goals which serve as the basis for diagnosis and prescription are expressed in the OD literature by the following list of qualities characteristic of a healthy and effective organization:
(1) The total organization and its component parts manage work against goals and plans for the achievement of these goals.

(2) Form follows function; that is, the mission, the problem, the task, or the project at hand determines how resources are organized rather than fitting tasks into existing structures; an organization should be flexible and responsive enough to organize differently depending on the task.

(3) Decisions are made by and near the sources of relevant information regardless of where these sources are located on the organization chart. There is a norm of the authority of knowledge rather than an absolute reliance on the authority of rule or rank.

(4) The reward system responds to managers for effectiveness, the creation of viable working groups, and participation in cross-agency team management.

(5) Lateral and vertical communication is relatively undistorted. Personnel are generally open and confronting and share feelings as well as facts.

(6) At all levels of the organization conflicts are treated as problems subject to problem solving methods. Self-criticism is welcomed. Less than healthy organizations expend energy dysfunctionally trying to avoid conflicts which are inevitable.

(7) Conflicts center on tasks and projects rather than personalities. There is a move toward high collaboration and low competition between interdependent groups.

(8) The parts of the organization see themselves as interacting with each other and a larger environment.

(9) Management tries to help each person and unit in the organization maintain individual integrity because perceptions of threats undermine communication, reduce flexibility and responsiveness, and foster parochialism.

(10) Feedback mechanisms exist so that individuals and groups can learn from their own experience.

Components of an OD Effort

The elements of the normative conceptual framework outlined above are commonly employed in an OD change process composed of the following
identifiable, but not completely separable stages: diagnosis; action-planning; implementation; and evaluation. The initial diagnosis phase is usually provoked by the perception of a discrepancy between expected and actual outcomes. During this phase two different analyses are undertaken. First, analyses of the environmental task demands confronting the organization and/or the needs of members of the organization lead to the formulation of a normative prescription of the organizational characteristics that best satisfy task and individual needs. Second, a descriptive diagnosis of the current state of the organization considers issues such as the degree of differentiation, integration problems, conflict management, and individual satisfaction and dissatisfaction. In any particular situation, these two analyses together point to the desired direction for organization change. During this diagnostic phase data is collected on the variables of the OD conceptual framework in order to identify the causes of problems and the variables contributing most to the problems.

In the action-planning phase alternative plans for interventions to move the organization in the desired direction are examined. Typically, the OD "change agent" considers which individuals are motivated to change, what leverage or influence they have, and what variables they can most readily affect. The answers to these questions guide the choice of interventions from among several types.
(1) working on unit, group, or team development: improving effectiveness; forming new units, groups, or teams; altering tasks; modifying working relationships; developing problem solving skills; reorganization; formulating rules; changing communication patterns and methods; modifying planning methods; etc.

(2) working on intergroup relationships;

(3) working on planning and goal setting and processes for individuals, teams, and larger systems; and

(4) working on educational activities for upgrading the knowledge, skills, and abilities of personnel or changing the expectations, attitudes, or feelings of organization members.

During the subsequent implementation phase, the planned interventions are carried out according to a specific sequence of activities. The final evaluation phase consists, once again, of comparing planned with actual results and diagnosing discrepancies and their causes.

The OD Process

A fundamental operating principle of organization development holds that any lasting change in process and structure must come from within an organization. This self-transformation requirement may be regarded as a process of learning. A critical assumption of the "action-research" methodology of OD is that people affected by change must actively participate and develop a sense of ownership in the planning and conduct of change. OD practitioners serve as "change agents" or catalysts guiding the organization learning process in accord with its inner dynamic. It is the job of the change agent to lead the members of an organization through a descriptive diagnosis
of the current state of the organization and a normative prescriptive analysis of organizational characteristics that would provide the best fit with environmental task demands facing the organization.

The work of analysis and diagnosis serves to translate perceived symptoms of organization problems into a coherent picture on the basis of which action can be planned and carried out to achieve change objectives. Although diagnosis is usually triggered by some discrepancy between desired and actual outcomes, it is also a way to locate unanticipated opportunities. A set of OD concepts provide for the selection and ordering of data so that a systematic view of an issue is developed. As analysis and diagnosis sort out the multiple causes of a problem, the variables which can be altered to move an organization in a desired direction are identified. The types and degree of quantification of data used in the diagnosis can vary widely to suit the receptivity of the individual organization. However, no matter how the analysis and diagnosis are accomplished, results in all cases are brought back to the relevant actors. Relying on the normative concepts of OD, the change agent shapes the data into a conceptual framework and presents the findings to personnel in order to accomplish two purposes: to obtain a reasonable consensus on the facts and create a shared way of thinking and talking about the facts. The generation of a shared analysis and diagnosis leads into the subsequent "action-planning" phase.
Action-planning involves alternative periods of exploring "what is desirable" and examining "what is" and considering change methods for closing the gap between the two. This experience based approach to planned change circumvents discussions concerning ideal organization types or whether people or structures should be changed first.

From the OD perspective there is no one best way to organize because the desired model is conditional on the tasks of the organization, the environment, and the characteristics of the individual contributors.

Similarly, the planning stage overlaps with the implementation stage because the key to successful implementation is the degree of commitment to the proposed change felt by participants and the required degree of understanding and commitment is generated during the diagnostic and planning phases.

Conditions for OD Success

A list of conditions which have been identified in the OD literature as necessary for successful OD efforts follows:

1. The external or internal environment exerts pressure for change.

2. OD is strongly supported by top management. Top managers must have knowledge of and commitment to the goals of the OD effort and actively support the methods used to achieve these goals.

3. Someone in a strategic position feels the need for change: the chief executive; a unit head; or a natural leader in the organization.

4. Some personnel in strategic positions are willing to pursue a real diagnosis of the problem.

5. Leadership is present.

6. Operating staff and strategic personnel collaborate on problem identification.
(7) There is some willingness to take risks in trying new organization forms or relationships.

(8) A long-term perspective is adopted.

(9) Data on the situation is used to analyze and change the situation.

(10) People are rewarded for the effort at changing the organization.

(11) Tangible intermediate results are evident:

   (a) an invention of some new solutions to problems which produces some commitment to new courses of action;

   (b) experimentation with new solutions which produces a search for results with the experiments; or

   (c) reinforcement in the system from positive results which produces an acceptance of the new practices.

Building Lateral Forms of Organization

For the purpose of setting forth a particular conception of the components of a public sector programming process related to economic development programs, one aspect of the OD conceptual framework, a normative view of the design of organizations, warrants detailed exposition and elaboration. In the opinion of this author, a focus on how planned change efforts can restructure organizations to perform more effectively is more important for managing economic development programs than OD interventions dealing with organization processes such as problem solving or communications or the attitudes and behavior of organization members. More specifically, an analysis of the management of public sector economic development programs involving projects should include detailed considerations of the lateral forms of organization needed for effective program performance.
Jay Galbraith, in his book Designing Complex Organizations, presents a framework for organization design decisions which identifies the types of lateral decision processes or matrix forms adopted by organizations and the conditions under which these alternatives are appropriate. Galbraith succinctly states the rationale for OD efforts aimed at establishing lateral forms of organization:

The implicit assumption underlying the use of matrix designs is that we cannot find authority structures in the form of product divisions, regional departments, programs, functions, etc., which will encompass all the activities which require coordination... In addition... defects may not be corrected by the informal organization which can arise to work across lines of authority... the informal processes do not always arise spontaneously out of the needs of the task. I assume that if these lateral processes do not arise spontaneously they can be designed. 31

Whereas much of the OD literature is concerned with planned interventions directed at changing the structure of organizations, Galbraith presents a normative framework for identifying what the appropriate organization structures should be.

Following the OD conceptual framework, Galbraith states that his approach is based on "contingency theory" which holds that (1) there is no one best way to organize and (2) any way of organizing is not equally effective for an organization. 32 Thus, OD researchers have found through empirical studies that effective organizations differ widely in their forms of organization but the forms adopted by effective organizations are contingent upon their particular organizational and environmental circumstances. Relying on the differentiation-
introduction model presented by Lawrence and Lorsch and numerous empirical studies which examined variations in organization structures, Galbraith concludes that the best way to organize is contingent upon the uncertainty and diversity of the basic task being performed by an organization unit. However, Galbraith goes beyond the concepts of differentiation and integration by presenting an "information processing view of organizations" which attempts to explain why task uncertainty affects organization design and identifies the design policy variables related to uncertainty.

Galbraith relates task uncertainty to organization design with the proposition that the greater the uncertainty of the task, "the greater the amount of information that must be processed among decision makers during task execution in order to achieve a given level of performance." Thus, if one has considerable knowledge about a task prior to its performance, the activity can be planned in advance. On the other hand, if a task is not well understood prior to its performance, more information must be processed during the execution of the task in order to make necessary changes in allocations, schedules, and priorities. Therefore, if the effect of uncertainty is to limit the ability of an organization to preplan, Galbraith theorizes that the observed variations in organizational forms represent alternative strategies of organizations to "(1) increase their ability to preplan, (2) increase their flexibility to adapt to their inability to preplan, or (3) decrease the level of performance required for
continued viability. The choice of a strategy is dependent upon the
degree of uncertainty and the relative costs of the alternative
strategies. Therefore, the job of the organization analyst is to
define the uncertainty faced by an organization and the costs of
the alternative strategies for dealing with that uncertainty.

Galbraith defines task uncertainty in terms of both a specific
task and a specific organization: "Uncertainty is defined as the
difference between the amount of information required to perform the
task and the amount of information already possessed by the organization." He goes on to define the amount of information needed to perform a
task as a function of "(1) the diversity of the outputs provided as measured by the number of different products, services, or clients,
(2) the number of different input resources utilized as measured by the number of different technical specialists on a project, ... and
(3) the level of goal difficulty or performance as measured by some efficiency criterion." Thus, the greater the diversity of outputs and number of inputs and the more difficult the performance goal, the more and greater the complexity of the factors that must be considered by decision-makers. However, it is not uncertainty, per se, that is critical for organization design, but rather, the amount and diversity of information that must be processed by the organization during the actual performance of the task that is the key to proper organizational form. Uncertainty is inversely related to the amount of information possessed by an organization.
Galbraith starts with the basic bureaucratic model to describe the structural changes that occur as the organization adapts to increasing task uncertainty and, consequently, greater amounts of information processing during task execution. After defining the most fundamental organization design problem as the creation of mechanisms for the integration of behavior across interdependent groups, Galbraith presents the following additive sequence of strategies which evolve to process an increasing amount of information in order to maintain a level of performance or reduce the need for processing information and/or the level of performance:

(1) Rules, Programs, Procedures:

The simplest methods for coordinating interdependent subtasks and the most common consist of ways of specifying necessary behaviors in advance of their execution. Rules provide stability to organization operations and eliminate the need for communication to guarantee coordinated action. However, this strategy is limited to situations which can be anticipated in advance.

(2) Hierarchy:

Managerial roles are created and arranged in a hierarchy to handle information collection and problem solving with respect to situations not routinely faced by an organization. A hierarchy functions on an exception basis. As unanticipated events arise, decision-making is referred upward in the hierarchy to the point where a shared superior exists for all of the subunits dealing with the new situations. The weakness of a hierarchy is the finite capacity of each link for handling information. As a hierarchy becomes overloaded with exceptions, delays develop between the time of the upward referral of information and the receipt of a response to the information by operating level units.

(3) Targeting or Goal Setting:

As the volume of exception information referred upward overloads a hierarchy, it becomes more efficient to bring the points of decision-making down to the points of action where information originates. However, as the amount of discretion exercised at
lower levels of the organization increases, an organization must set goals or targets for units to insure that employees choose the appropriate responses for achieving coordinated action. However, the ability to set targets is a function of the degree of task uncertainty. The violation of planned targets leads to the upward referral of information for hierarchical decision making and the volume of exceptions can overwhelm an organization.

(4) Organization Design Strategies:

In order to respond to greater information processing demands, an organization can adopt one or two organization design strategies to reduce the amount of information processed and/or one or two basic strategies to increase its capacity to process more information. The effect of any of these organization design changes is to reduce the number of exceptions referred upward through the hierarchy.
Creation of Slack Resources: The number of exceptions referred up through the hierarchy can be reduced by lowering the level of performance with increased costs in time, man-hours, resources, etc.

Creation of Self-Contained Tasks: A second method for reducing the amount of information processed is to change from a functional organization design of differentiated subtask units to one in which each unit contains all of the resources it needs to perform its task. The self-containment strategy shifts the structure from one based on input or skill functions to one based on output or geographical categories. Information processing needs are reduced in two ways: first, by reducing the amount of output diversity faced by a collection of resources (for example, rather than having the Chapter 121B staff allocate time among CBD, residential, and industrial projects, separate units could be established for each type of project); and, second, by reducing the division of labor (for example, rather than sharing an environmental impact specialist at the Executive Office of Environmental Affairs with other state programs and projects, the EIR could be reviewed by someone on the Chapter 121B staff).

The above two strategies reduce overloads on the hierarchy by reducing the number of exceptions that occur. In contrast, the following two strategies accept the required level of information and attempt to increase the capacity of the organization to process the information during task execution.

Investment in Vertical Information Systems: This strategy consists of mechanisms that enable more information to be handled by managers so that replanning can occur with the frequency of exceptions.
Creation of Lateral Relations: The last strategy involves selecting from various formal lateral forms of organization or decision processes which cut across lines of authority. Lateral forms of organization serve to lower the point of decision making in an organization to where the relevant information exists. The number and types of structures employed are a function of the degree of task uncertainty confronted. The following lateral processes are presented in order of responsiveness to greater task uncertainty: direct contact between two people; a liaison role; task forces; teams; integrating role; managerial linking roles; and matrix forms of organization.

An organization should choose from among the above strategies the approach or combination of approaches which is least expensive. According to Galbraith the list of strategies discussed is an exhaustive set of alternatives for responding to greater degrees of task uncertainty, such that at least one of the four organization design strategies must be adopted as uncertainty increases. Thus, in the absence of an explicit effort to choose a strategy, the alternative of reduced performance will occur automatically. The information requirements for performing tasks and the capacity of an organization to process information are necessarily equal. Not to decide is to decide on slack resources. Accepting Galbraith's framework, one must conclude that the design of the structure of an organization should be given detailed consideration at the same time that decisions are made with respect to organization programs and policies.

This focus on lateral forms of organization and the conditions under which different forms are appropriate complements and augments the concepts and techniques of strategic planning, management control, and project management. Whereas the management control framework implies that coordination can be achieved through vertical information
systems such as program budgeting and accounting, experience suggests that coordination is not a necessary by-product of management control improvements. Thus, the analytical framework presented by Galbraith serves to delimit the place and potential of management control. However, the potential for the use of organization design mechanisms for furthering the functions of management control suggests that combinations of management control and organization design initiatives may reinforce each other and, thereby, improve the chances of success for both efforts (for example, team management and program budgeting). Moreover, problems experienced with the installation of management control improvements may be sometimes attributable to a failure to understand the design problems of an organization and may be remedied by simultaneous attention to organization design changes.
NOTES

PART

Some Distinguishing Characteristics of Nonprofit Organizations


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3. Ibid., pp. 11-12.

4. Ibid., pp. 40-42.

5. Ibid., pp. 42-43.

6. Ibid., p. 44.

7. Ibid., pp. 48-50.

8. Ibid., pp. 50-52.

9. Ibid., p. 58.

10. Ibid.

Management Control In Nonprofit Organizations


2. Ibid.

3. Ibid.

4. Ibid.

5. Ibid., p. 2.

6. Ibid., p. 17.

7. Ibid., p. 18.

8. Ibid., p. 18.


10. Ibid., p. 28.

11. Ibid.

12. Ibid., pp. 28-29.

13. Ibid., pp. 31-33.


15. Ibid., p. 78.

16. Ibid., p. 21.

17. Ibid.

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19. Ibid.
20. Ibid., p. 87.
21. Ibid., p. 89.
22. Ibid., p. 88.
23. Ibid., p. 94.
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27. Ibid., p. 23.
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32. Ibid., p. 27, pp. 133-148.
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37. Ibid., pp. 143-144.
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39. Ibid., pp. 118-119.
40. Ibid., pp. 119-121.
41. Ibid., p. 79.
42. Ibid.
43. Ibid.
44. Ibid., p. 30.
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47. Anthony and Herzlinger, Management Control In Nonprofit Organizations, p. 30.
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63. Ibid.
64. Ibid., pp.214-222.
65. Ibid., p.215.
66. Ibid., p.216.
69. Ibid., pp.229-230.
70. Ibid., p.231.
71. Ibid., p.235.
72. Ibid., p.31.
73. Ibid., pp.31,272-291.
74. Ibid., pp.276-277.
75. Ibid., pp.31, 297-314.
76. Ibid. p. 31.
77. Ibid.,p.30.
78. Ibid., pp.302-303.
79. Ibid., pp.309-312.
80. Ibid., pp.315-336.
81. Ibid.,p.315.
82. Ibid., p.323.
83. Ibid., p.316.
84. Ibid., pp.317-321.
85. Ibid., pp.330-331.
86. Ibid., p.183.
87. Ibid.

Project Management

2. Ibid.
5. Ibid.
8. Ibid. pp.5-6.
9. Ibid., p.6.
10. Ibid., p. 135.
11. Ibid., pp. 127-129.

Organization Development


4. Ibid.


8. Ibid., pp.4-7.

9. Ibid.

10. Ibid., p.12.

11. Ibid., p.13.

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18. Ibid., pp.9-11.


21. Ibid.

22. Ibid., p.86.


26. Ibid., p.86.

27. Ibid.

28. Ibid., pp. 84-86.

29. Ibid., p. 86.

32. Ibid., p. 2.
33. Ibid., p. 4.
34. Ibid.
35. Ibid., p. 5.
36. Ibid.
37. Ibid., p. 9.
38. Ibid., pp. 10-19.
39. Ibid., p. 19.
PART II

FINDINGS AND RECOMMENDATIONS
PART II

FINDINGS AND RECOMMENDATIONS

* PROGRAM DESIGN: FAILURE TO DESIGN AND OPERATE CHAPTER 121B AS AN ECONOMIC DEVELOPMENT PROGRAM
* COORDINATION/INTEGRATION
* BUSINESS CONTACT PROGRAM
* DUTIES OF ECONOMIC DEVELOPMENT SPECIALIST TO BE ADDED TO STAFF OF BUREAU OF URBAN RENEWAL
* TRANSFER OF MUNICIPAL MONOGRAPH SERIES TO DCA
* THE PROJECT PLAN
* PROJECT REPORTING
* REPORTING TO LEGISLATURE
* REVIEW PROPRIETY OF STATE PAYMENTS
* UPDATE NET PROJECT COSTS
* POLICY ON RECAPTURE OF PLANNING ADVANCES FOR PROJECTS NOT ENTERING EXECUTION
* POLICY ON RECAPTURE OF PLANNING ADVANCES FOR PROJECTS IN EXECUTION WITHOUT STATE AID
* REDESIGN LEDGER
* STATE AUDITS
* ROUNGING OFF FINANCIAL FIGURES
* COST ACCOUNTS/COST CONTROL
Strategic Planning / Management Control: Programming

Findings:

All fifteen of the Chapter 121B industrial park projects which have reached the execution stage have been complete successes. Although this startling statement is accurate as it stands, an important qualification should be added to clarify the particular sense in which it is true. All of the industrial park projects have successfully achieved the goals and objectives of Chapter 121B set forth in the declaration of necessity in the statute and the rules and regulations. Thus, if one wants to question and criticize the performance of the program, and one should inasmuch as some projects have not achieved positive net economic benefits, one should begin by questioning and criticizing the design of the program as elaborated in the statute and regulations. The failures and inadequacies of the 121B industrial land development program can be largely attributed to the weaknesses of the strategic planning and programming processes which defined the program in the statute, regulations, and execution. The Chapter 121B industrial land development program has been designed and operated with an "input" or physical development orientation as a program to develop "blighted" property in any community rather than with an "output" orientation as an economic development program directed at the achievement of state and local economic development objectives.

Input or Blighted Parcel Focus

The 121B statute is almost the only information resource for answering the basic strategic planning questions with respect to the program: Why should the program exist?; What is the need addressed?;
What are the goals and objectives? and How should the program be organized? In addressing these questions, the statute defines the program solely in terms of the physical development process. Thus, the declaration of necessity in s.45 of c.121B states the goals of the urban renewal program as the following:

1. the elimination of decadent, substandard, or blighted open areas which are dangerous to the inhabitants of the Commonwealth;

2. the redevelopment of land in accordance with a comprehensive plan to promote the sound growth of the community; and

3. the prevention of the spread of blight or its recurrence in an area.

The focus on the physical condition of the project property in the program goals follows directly from the statute's definition of the problem addressed by the program as various social maladies which are caused by the deteriorated condition of property: "each (decadent, substandard, and blighted area) constitutes a serious and growing menace, injurious and inimical to the safety, health, morals and welfare of the residents of the commonwealth;...contributes...to the spread of disease and crime,...substantially impairs or arrests the sound growth of cities and towns;...". In addition, the statute affirms that the tool of redevelopment is appropriate and adequate to meet the goals and address the needs identified for the program: "the redevelopment of blighted open areas promotes the clearance of decadent or substandard areas and prevents their creation and occurrence". Therefore, on the basis of the reasoning reflected in the statute, one can declare without reservation that all of the Chapter 121B projects have achieved the goals of the program. The statute makes no reference to the achievement of economic development objectives such as the provision of jobs to the unemployed, the addition of tax revenue to needy municipalities, or the construction of
space for the expansion of local firms. Projects which have completed site clearance and preparation work but have not disposed of any acreage are effective performers pursuant to the language of the statute. The casual attitude of the statute toward the outputs of redevelopment activities is expressed clearly by the following phrase: "the disposition of the property for redevelopment incidental to the foregoing" (emphasis added).

The "input" or physical development orientation of the design of the Chapter 121B urban renewal program derives from the federal Title 1 urban renewal program on which the state program is based. The language of the 121B statute and rules and regulations was taken largely from the statute and regulations for the federal program. The "parcel" orientation of Title 1 of the Federal Housing Act of 1949 reflected the concerns of the national program for slum conditions and the view that physical deficiencies caused public problems such as poverty, disease, and fire.

In a simple minded fashion which ignored the reuse of once blighted land, the federal program held that the elimination of the poor physical circumstances of people and cities would contribute significantly toward a reduction of various social problems (accepting the legislation at face value and disregarding any hidden agendas of supporters of the bill). Consequently, urban renewal was based on the view that the public powers of eminent domain would solve the "prisoner's dilemma"* and "monopoly rent"** problems of large area development which inhibited private market activity and the market would determine the highest and best commercial and/or

*optimal area development can be achieved through the unified action of all property owners but each individual owner optimizes his welfare by not acting because the participation of others is not assured.

**an individual property owner can demand exorbitant payment from someone attempting to complete assembly of a large property.
residential use for the assembled property, subject only to disposition restrictions on the physical design of the project, or low and moderate income housing would be built. Theoretically, the assembled property should be worth more in the market than the cost of obtaining the individual parcels, but a public "write-down" subsidy was provided to cover the additional costs of public improvements, relocation expenses, and administrative costs and to account for the higher than market acquisition costs that result from court awards in eminent domain takings. The federal program did not adequately consider the multiple reasons for why people live in older, low rent districts, such as poverty and consumption preferences, or the impact on housing prices from the destruction of large numbers of low rent units. In addition, the legal basis for the public use of eminent domain powers had been tested with respect to the damaging consequences of physical blight. Although this legal foundation did not preclude the design of an output oriented program for blighted property, the tie between public purpose and the elimination of blight contributed to the design of an "input" oriented program. The faulty causal assumptions underlying the federal program ultimately led to its demise as the outputs of projects came under challenge.

The logic of the federal program is even less applicable to the redevelopment of blighted open areas for industrial development than for residential and commercial redevelopment. The report of the Special Commission on Audit of State Needs entitled "Massachusetts Needs In Urban and Industrial Renewal", published in 1960 and co-authored by Michael Dukakis, which was the impetus for the enactment of the state-aided urban renewal program, cited the problems of obsolete structures, inadequate amounts of urban land for construct-
ing new industrial buildings, the negative reinforcing effects of industrial flight on remaining businesses and residences (ex. increased tax burdens, atmosphere), and the reduction in municipal revenues from the loss of industry as the reasons for the legislation to establish a state subsidized urban industrial land development program. However, this report, which served as the sole strategic planning document for preparation of the act, did not define objectives for the program, analyze the economic causes for the decline of manufacturing or the possibilities for industrial growth in urban centers, establish a clear basis for the state and local roles in the initiation and development of projects, attempt to estimate the costs and benefits expected from projects and the program, or consider the need for the use of other state resources in conjunction with the 121B powers. Thus, although the contents of the report implied a concern for the outputs of renewal -- additional jobs, positive net municipal fiscal returns, the expansion of local firms, etc. -- and a judgement about some of the causes of industrial decline -- inadequate urban land for modern facilities at competitive prices -- these goals and causes were not incorporated into the design of the program. Although the solely state-aided renewal program was enacted for the purpose of supporting urban industrial development, which was an ineligible activity for federal aid, the contents of the statute and rules and regulations were based on the federal program for residential and commercial projects.

The basic physical development focus of the Chapter 121B program and weaknesses of the strategic planning and programming processes have resulted in a program which has not been perceived or operated as an economic development program directed toward the achievement of valued local and state development objectives. This
major failing is reflected by the following design problems with the program:

(1) Absence of Project Selection Criteria Related to Need and Expected Outputs

The only conditions required by the statute and rules and regulations for project approval by DCA are the same six findings that apply to federal and state-aided residential and commercial projects:

(a) the project area would not by private enterprise alone and without either government subsidy or the exercise of government powers be made available for urban renewal;

(b) the proposed land use and building requirements in the project area will afford maximum opportunity to privately financed urban renewal consistent with the sound needs of the locality as a whole;

(c) the financial plan is sound;

(d) the project area is a decadent, substandard, or blighted open area;

(e) the urban renewal plan is significantly complete;

(f) the relocation plan has been approved under c. 79A.

Finding (a) is usually made on the basis of title problems, ownership patterns which appear to preclude easy assembly, a lack of adequate infrastructure, or topographical conditions which require costly site improvements. Due to the vagueness of finding (a), any property that isn't being used will provide adequate evidence to support the finding. The second finding is considered to be satisfied by receipt of a Land Utilization and Marketability study prepared by a consultant that indicates a market exists for industrial land in the area. The financial plan is accepted if the costs for acquisition and site clearance and improvements appear to be reasonable. The finding of financial soundness is not based on benefits exceeding the costs of a project or a judgement that the municipality can afford the necessary debt service. Finding (d) on the condition of the land is based on the broad criteria set forth in the rules
and regulations. The project plan does not call for a definition of the problem to be addressed by the project, a justification for the project in terms of a specific strategy and objectives, or evidence that the project will achieve positive net benefits (see separate findings and recommendations on project plan).

Although the report which led to the enactment of 121B described the fiscal and economic problems faced by municipalities experiencing the loss of industry and indicated that land was needed in the older urban centers for the retention and expansion of local firms, the criteria for project approval do not include any assessment of municipal need or economic development objectives. As a result of the absence of approval criteria related to expected net benefits, project plans do not analyze the unique opportunities and constraints of individual municipalities. Due to the absence of need criteria for project approval, projects have been developed in the relatively prosperous and growing communities of Woburn, Wilmington, Methuen, and Peabody. Moreover, firms have moved out of more needy communities in the state to locations in these projects. Thus, the state has subsidized projects which have subverted state economic development goals and the legislative goal of the development of depressed urban centers. Despite the explicit focus of state development policy on the economic revitalization of older urban centers and evidence that indicates that 121B can address the industrial development needs of these municipalities, the program has not been employed as a tool for the development of depressed urban areas (however, the program has been utilized with some degree of success in such needy urban centers as New Bedford, Brockton, and Lawrence).

Due to the ease of qualifying for 121B assistance, projects were accepted on a first come, first served basis and not a single
project was ever rejected by DCA. According to the former director of the program, the DCA approval process consisted of the following steps: an assessment of the cost to acquire and prepare the project property; a judgement that the municipality and DCA want to share the net project cost assuming the property can be sold for 50% of the cost of assembly and preparation; and a judgement that the site was appropriate for an industrial park. Project feasibility was determined on the basis of a feeling about the desirability of the location. DCA operated on the assumption that local personnel would take a harder look at the project because the municipality must advance the entire cash cost of the project. The period of the late 1960s and early '70s was a boom time for industrial park development in the Commonwealth and DCA personnel regarded any project as marketable. Land Utilization and Marketability studies were treated as formalities by DCA and were not even read by staff.

(2) Inadequate Definition of Needs, Problems, and Rationale for Program

As a consequence of the weaknesses of the strategic planning and programming processes related to the design and operation of 121B, the program has suffered from an inadequate definition of the problems to be addressed and, therefore, objectives to be achieved through the program and assessment of the appropriateness and adequacy of the tools provided to meet objectives and satisfy needs. As noted above, the legislation defines the problem solely in terms of dangerous physical conditions and the report which precipitated passage of the act refers to the fiscal problems of municipalities caused by the loss of industry due to the obsolescence of buildings. No analysis was undertaken which examined the causes or extent of industrial decline, isolated the impacts of the loss of industry from cities on people and municipalities, or considered the rationale
for various public actions and the strategy proposed by the legisla-
tion.

The first and most important step in any programming process is
the definition of the problem or need to be addressed. The aim in
definition is not only to provide a general account of the problem --
what, where, how much, etc. -- but to break the problem down into
components which indicate how the program should be designed and
directed. The identification of activities to solve a problem fol-
lows directly from the definition of the problem. Thus, general
statements such as high urban unemployment or the loss of industry
do not serve as an adequate basis for programming. For example,
a high rate of urban unemployment may mean any one or combination of
the following problems which call for different programmatic respon-
ses: (a) a high job turnover rate; (b) too many unemployed youth;
(c) a high labor participation rate; (d) a shift of the economy to
service employment; (e) high seasonality; (f) a cyclically sensitive
economy; (g) structural obstacles to job access; (h) high welfare or
unemployment benefits; (i) considerable immigration; (j) a dual labor
market; and/or (k) too few jobs.

From the definition of the problem, the goals and objectives of
a program can be established and the appropriateness and adequacy
of the tools of the program for achieving goals can be assessed.
The program analyst must rely on available research and theoretical
discussion to examine the program strategy. Although it may not be
possible to categorically establish the adequacy of the program,
the programming process should determine the assumptions underlying
a program and the combination of resources that should be applied to
address a problem.
In addition to inadequate attention to defining the problems to be addressed by and rationale for the program as a whole, project plans have not defined the problems to be addressed by individual projects or justified the particular development strategies proposed. Inasmuch as each municipality has a unique economy with particular problems and opportunities, the project plan should describe a particular development strategy in relation to local conditions. The case of Attleboro can be used to illustrate how the specific economic conditions of the municipality should establish the basis for a project. For a project in a community such as Attleboro, which does not suffer from fiscal and unemployment needs, to serve publicly valued objectives, special efforts must be made to manage the project with reference to specific objectives. Inasmuch as Attleboro's employment problem is not a matter of high levels of unemployment but of a concentration of low wage jobs, firm selection criteria and an employment program should have been established to insure that public development objectives were met through the hiring of under- and unemployed local residents in "primary labor market" quality jobs. The project was initiated principally as an intra-community industrial relocation project to serve the expansion needs of firms located near Attleboro's congested central business district. Therefore, objectives of the project included the retention of existing firms and jobs within the city, the expansion of specific firms, and the upgrading of the downtown area after the relocation of firms. The concentration of the jewelry industry in Attleboro and nearby Rhode Island communities strongly suggests the presence of agglomeration economies. Thus, by providing modern space that was not otherwise available in Attleboro, the project enabled jewelry and related firms to locate, start-up, or expand where they can take advantage of
unique economies not available at other locations and thereby contributed to the growth of the state economy and strengthened the state's agglomerations.

(3) Failure to Differentiate Program Components

Lacking an understanding of the needs, objectives, and rationale for the program, DCA has failed to differentiate the components of the Chapter 121B urban industrial development program and properly identify the circumstances when the various components should be used. Five distinct economic development tools should be isolated as elements of the program: (1) eminent domain powers, (2) state advances or subsidies for project planning, (3) partial state subsidization of the net project cost, (4) state infrastructure investment, and (5) DCA's role as regulator, coordinator, and assistance provider. The experience of the fifteen industrial park projects which have reached execution suggests that each of these elements be regarded as a separate program. However, DCA has not identified the different circumstances under which these tools should be applied or attempted to vary the emphasis on the use of these tools to address particular development problems.

The fifteen industrial park projects which have reached the execution stage have differed widely in the use of the five development tools. In the case of Attleboro, eminent domain powers and the construction of I-95 have been adequate to execute a project which has yielded substantial local and state fiscal and economic benefits. In Brockton, a state execution subsidy and the construction of Rt. 24 have contributed to the development of an industrial park, but the failure of DCA to actively monitor and assist the project has limited the positive net benefits from the project below the potential level of such benefits. The Fitchburg and Gardner projects have utilized
state planning and execution funds but have received inadequate assistance from DCA and have not disposed of any property. Holyoke has relied on state planning and execution funds and the construction of a highway through the project area but the lack of assistance from DCA will limit the chances for success. State execution aid was the only tool employed to complete a project in Lawrence which has provided significant benefits but DCA's weaknesses at project management reduced the benefits from the project. In Methuen and Wilmington, eminent domain powers and state planning advances have been sufficient to develop successful projects but DCA's weaknesses at project management have limited the public benefits achieved. State execution subsidies and infrastructure investments have been employed to develop the three projects in New Bedford, two of which have resulted in considerable net benefits, but DCA's failure to assist with the third project has contributed to the lack of benefits to date. Northampton and Palmer have utilized eminent domain powers and state planning and execution funds, but DCA's limited assistance efforts have contributed to a lack of progress. The project in Peabody has relied on all of the program components but the project has not progressed far due in part to DCA's weaknesses at project management. The Woburn project has achieved substantial net benefits employing all of the state components, but DCA's lack of assistance efforts have reduced the level of benefits.

The program has suffered in the following ways from DCA's failure to manage efforts in terms of the individual components of the program:

(a) Failure to Appreciate the Importance of Infrastructure Investments

DCA has not given proper recognition to the importance of state
infrastructure investments for the success of projects and actively coordinated activities with the Department of Public Works. As a result, many projects have been slowed by delays in DPW activities, DPW projects have been placed in locations disadvantageous to 121B projects, and DCA has not utilized DPW projects as tools to initiate worthwhile projects, such as those in depressed urban areas.

Although there is a general awareness in state government that highways and bridges are elements of economic development efforts, the absence of formal mechanisms to integrate infrastructure investments with economic development activities indicates a lack of appreciation of the critical importance of highways and bridges as economic development tools. (see the separate section of findings and recommendations on integration for an account of coordination problems with DPW) The Governor's Management Task Force noted in its report that the state lacked an effective capital budgeting capability and recommended that the Office of State Planning serve as the unit responsible for examining capital expenditures in relation to state policies and programs. This recommendation has not been implemented and the state continues to lack an ability to evaluate the economic impacts of infrastructure investments and assess investments in relation to complementary state activities. The construction of a highway by the Commonwealth to enable the Digital Equipment Corp. to locate a major facility in the state is an isolated example of targeted capital investments to promote economic development objectives. Much of the literature on urban economic development indicates that highway investments are essential for providing new modern industrial parks in dense urban centers. Kinnard and Messner, two industrial real estate experts, state in a report entitled "Inner City Industrial Development" that selective highway invest-
ment is an effective and essential tool for creating viable industrial sites in inner city areas and they cite industrial projects in New Haven and Hartford that were successfully developed as a result of the construction of access roads to major highways.

(b) Neglect of Projects Not Receiving State Execution Subsidies

DCA has neglected to monitor and assist projects not receiving state execution assistance and has failed to treat such projects which receive planning advances and/or infrastructure investments and/or utilize eminent domain powers as part of the 121B urban industrial development program. Although DCA's adoption of a "hands-off" attitude stems partly from the limited leverage DCA maintains over projects not receiving annual state subsidy payments, no basis exists for regarding the state execution subsidy as any more or less important than the other components of the program. DCA retains responsibility for assuring that all of the tools of the program are serving development objectives. In addition, experience indicates that considerable potential exists for the abuse of eminent domain, which is a power of the state selectively granted to redevelopment authorities, because of the large differences in financial gains that can result from public as compared with private land assembly.

Moreover, DCA should actively monitor all projects to insure that public goals are not being subverted by projects. For example, evidence suggests that the projects in Methuen, Attleboro, Wilmington, and Woburn have allowed for the flight of industry out of high priority development areas to these more prosperous communities. If projects were more dependent on DCA for assistance, which would be the case if project approval was based on municipal need criteria, DCA would have more leverage over projects not receiving annual state aid payments.
(c) Inadequate Understanding of DCA's Role

DCA has treated the program as a local redevelopment program and has failed to understand and fulfill its necessary role as regulator, coordinator, and provider of assistance. Numerous references to DCA's weaknesses in performing these functions are noted in the project cases in this report. Inasmuch as the direct benefits which accrue to the Commonwealth from projects consist mostly of increases in employment and employment for the previously unemployed, whereas municipalities benefit directly mostly through increases in real estate tax returns, the Commonwealth cannot expect redevelopment authorities to manage projects to achieve state development objectives without DCA playing an active role in project development. Nevertheless, DCA has operated with a passive or "minimum compliance" orientation to the program.

Although the passive role assumed by DCA can be partly attributed to the contents of the statute which set forth the six criteria for project approval, DCA has considerable latitude in preparing the rules and regulations which define the respective roles of redevelopment authorities and the Bureau of Urban Renewal and the requirements for satisfying the findings specified by the statute. However, DCA has not gone beyond the statute by detailing project selection criteria based on the achievement of state and local economic development objectives. For example, whereas DCA merely reviews the reasonableness of project costs to establish the soundness of the financial plan, the following additional information should be required to satisfy the finding: a definition of the problem, objectives, and rationale for the project in economic development terms; an assessment of the net economic benefits, net fiscal flows to the state, and net fiscal flows
to the municipality expected from the project; and evidence of resource commitments from participating local, state, and federal actors. In addition, the rules and regulations describe DCA's role in project management after project approval as limited to the following activities: plan change approvals, approval of land disposition prices, approval of all expenditures of over $1,000, and periodic auditing of redevelopment authority accounts. These regulatory functions assigned to DCA are intended to assure compliance with the physical plan, the responsible use of funds, and a disposition process which is open and honest. However, inasmuch as DCA does not provide assistance to redevelopment authorities, authority personnel commonly view these requirements as onerous burdens and DCA as an obstacle to the development process. As a result of these widely shared hostile attitudes toward DCA, few authorities comply with the regulations and DCA does not provide even the minimal monitoring necessary to protect state participation and the public interest.

In addition to the above reasons, the need for DCA to play an active role in project management is evident from the following:

(1) as Regulator/Monitor:

(a) DCA's neglect of its regulatory responsibilities has allowed illegal and unethical activities to occur in numerous cases, for example:

* Woburn: municipal and redevelopment authority officials profited from land speculation, rezoning, and road construction; the Mayor and the Chairman of the redevelopment authority purchased land in an area prior to the designation of the property for a project and sold the land to the authority at a much higher price than they had acquired it for; DCA failed to approve any of the 19 contracts for site improvements and only 3 of the 19 contracts were opened up for public bidding as required by the regulations.

* Methuen: the redeveloper of the entire project property acquired the land for the cost to the authority for property acquisition which suggests
that the town was not adequately compensated for
the land and eminent domain powers were used for
private advantage; the eminent domain taking of the
property was initiated prior to DCA approval of the
project in violation of the regulations; DCA did
not review and approve of the disposition price
prior to the sale as required by the regulations.

(b) The absence of an adequate reporting system has de-
prived DCA of the information necessary to compare
actual with estimated costs and assess the impacts from
projects:
* The lack of comparisons of actual with budgeted
costs and revenues has resulted in some projects
receiving a state subsidy equal to more than one-
half of the net project cost and other projects
receiving less than one-half. Thus, the Common-
wealth is over paying some municipalities and under
paying others without regard for the accomplishment
of objectives. DCA may now lack adequate funds to
adjust state payments on the basis of one half of
the actual net project costs.
* DCA and the Commonwealth lack the information needed
to assess the benefits and costs of projects and
the merits of the program as a whole. As a result,
legislators and personnel in state government have
formed negative opinions about the program based
on crises during the development of projects rather
than the economic outcomes of projects.
* The lack of detailed information on the impacts of
projects is especially unfortunate inasmuch as
a number of projects have achieved significant pos-
itive net economic development benefits.

(c) The failure of DCA to enforce design and construction
standards for projects has reduced the physical attrac-
tiveness of projects and, thereby, lowered the poten-
tial of some projects for attracting high quality
firms.

(d) State economic development goals have been subverted
as firms have moved from high priority development
areas to state assisted projects in more prosperous
communities because DCA has not established a "non-
relocation" regulation comparable to the regulation
promulgated by EDA.

(2) as Coordinator:

(a) Some projects have suffered from poor highway access
(ex. Brockton, Wilmington) but DCA has not attempted
to secure state or federal funds to improve access.

(b) DCA has not attempted to obtain the assistance of the
Department of Manpower Development to establish employ-
ment programs for projects (ex. by targeting CETA training funds) in order to help projects achieve valued state economic development objectives related to the employment and training of the unemployed. Most projects have failed to address the needs of unemployed local residents.

(c) Despite the inherent difficulty of marketing land which private developers had not attempted to develop, DCA has not sought the assistance of the Department of Commerce and Development in marketing projects through its business contact program and the targeting of public sources of business capital (MIMIA, MBDC, SBA, etc.) to projects.

(d) Despite the participation of numerous local, regional, state, and federal actors on every 121B industrial park project, DCA has not attempted to use its leverage as a state agency to coordinate the many activities which are part of the implementation of projects. In particular, although many redevelopment authorities have experienced difficulty in dealing with the Department of Public Works, DCA has not intervened on their behalf.

(3) as Assistance Provider:

(a) The failure of DCA to assist authorities in formulating firm selection criteria based on the quality and number of jobs provided by businesses locating in parks, and review disposition agreements to ensure that reuse with respect to employment objectives is specified, has allowed for land sales to firms with low labor intensity uses and poor employment quality and for firms to substitute low labor intensity uses for high intensity uses agreed to verbally.

(b) The employment benefits from projects have been reduced considerably due to DCA's failure to require and assist in formulating employment programs for the hiring of unemployed persons by firms in projects.

(c) Every redevelopment authority has lacked adequate expertise for marketing its project but DCA has not provided assistance in marketing despite the investment of substantial amounts of state funds in projects with good potential for achieving valued state economic development objectives.

(d) Failure to Identify the Circumstances which Require Only the Use of Eminent Domain Powers

In the cases of Attleboro, Methuen, and Wilmington the public powers of eminent domain were employed to assemble property and the land was subsequently sold for a price equal to or greater than the cost of acquisition. Inasmuch as a large assembled parcel of land
should be worth more than the cost of acquiring the individual parcels, these experiences are not surprising. However, DCA has not considered the possibility that subsidies may not be necessary in other cases or focused attention on the conditions under which eminent domain powers are sufficient to execute a project. Rather than seeking projects which require only the use of eminent domain powers and planning advances for successful implementation, DCA has tended to treat such projects as less than bona fide Chapter 121B state assisted projects.

(4) Inadequate Attention to Mechanisms for Insuring the Achievement of Project Objectives

As a result of DCA's general neglect of project and program outputs, the following three mechanisms, which have been identified from experience as necessary for insuring the achievement of objectives, have not been adopted:

(a) A Non-Relocation Regulation:

A number of Chapter 121B industrial park projects have been developed in relatively prosperous and growing communities: Attleboro, Methuen, Northampton, Peabody, Wilmington, and Woburn. In a few of these cases, evidence indicates that firms locating in these projects have moved from "depressed" urban centers in the state. Inasmuch as the Commonwealth professes a development policy which regards depressed older cities as high priority development areas due to the concentration of fiscal and employment problems, the substantial state revenue loss from the further decline of such areas, the existing investment of infrastructure, and the potential for the state to receive considerable benefits from the economic revival of these communities, some state assisted and aided industrial park projects have served to subvert state economic development objectives.
The federal Economic Development Administration requires, as a condition of receiving a public facilities grant for an industrial park project, that the public or non-profit developer of the park and firms moving to the park execute and comply with a non-relocation statement which prohibits the movement of firms from other localities to the project. The non-relocation provision, which is required by statute, is intended to insure that projects lead to economic growth rather than the transfer of employment and plant piracy. The non-relocation prohibition becomes a covenant on the title to property in projects in perpetuity because the project must continue to provide public benefits over a long period of time in order to justify the public subsidy to the project. As a result of the non-relocation provision, the market for projects assisted with EDA funds is limited to relocating and expanding local firms, business start-ups, and branch plant expansions of out-of-area firms.

DCA's failure to establish a variant of EDA's non-relocation regulation, and the absence of a requirement for such a provision in the Chapter 121B statute, have allowed state assisted projects to subvert state economic development goals by supporting the flight of industry out of high priority development areas and have limited the net growth benefits achieved by the state from the development of industrial parks.

A number of state assisted projects have received or will receive EDA grants (Fitchburg, Gardner, New Bedford (2), Palmer, and Peabody) and, therefore, are subject to EDA non-relocation prohibitions in marketing these parks. However, inasmuch as all of these communities, with the exception of Peabody, are experiencing economic problems, the EDA restriction will further limit the already weak markets for these projects whereas the projects in more pros-
perous are not so restricted. In addition, Fitchburg, Gardner, and Palmer are relatively small and isolated municipalities which lack sufficient economic activity for filling parks with relocating and expanding local firms and business start-ups. Moreover, the relocation of non-expanding local firms to parks within the same community does not contribute to economic development objectives unless the space vacated by such firms is filled by new economic activity or the local firms would have closed or fled the community if modern space was not provided.

Inasmuch as the Commonwealth has expressed a policy commitment to depressed area development and such communities face weak markets, DCA should establish a non-relocation regulation which only applies to the movement of firms out of high priority development areas to projects, rather than the relocation of any firm as is the case with EDA provision. Furthermore, the relocation of firms contributes to state economic growth when moves are made in order to take advantage of efficiency advantages, such as transportation services, or economies, such as low wage labor or agglomeration economies, at new locations. A non-relocation regulation should serve the policy objective of depressed area development by prohibiting the movement of firms out of such areas to state assisted projects but should not preclude firm relocations from non-depressed areas.

(b) A Standard Land Disposition Agreement and Requirement for Performance Clauses in Agreements

DCA has not prepared a standard land disposition agreement for use by redevelopment authorities, despite the requirement in the rules and regulations for DCA to approve all disposition agreements. As a result, redevelopment authorities have relied on inexperienced local attorneys, municipal counsels, and developers purchasing
property to compose disposition agreements. Therefore, many agreements have not adequately served the interests of the redevelopment authority, the municipality, or the Commonwealth.

In addition, with the exception of the project in Palmer, land disposition agreements have not incorporated provisions related to the performance of firms and developers in meeting specific economic development objectives, such as the number of unemployed persons hired, the total number of persons employed, or uses permitted. Thus, in Brockton, where economic reuses were not specified in disposition agreements, the Knapp Shoe Company located a low labor intensive warehouse and retail facility in the project after indicating verbally that a manufacturing plant would be built. The absence of performance clauses in agreements follows from the lack of specific objectives in the project plan. However, in the case of the disposition agreement for the project in Palmer (see case), the disposition price and sale of property to a developer were made contingent upon meeting a timetable for the creation of specific numbers of jobs in the project.

(c) The Negotiation of Disposition Prices on the Basis of Performance in Meeting Development Objectives

Contrary to the beliefs of many of the executive directors of redevelopment authorities, the rules and regulations do not require disposition of property at the highest price obtainable. The five methods for offering project land to developers described in the rules and regulations (see pp. 130-33) all allow for disposition which maximizes project objectives rather than the disposition price. Obviously, if redevelopment authorities have not identified detailed objectives for projects, disposition negotiations cannot be based on tradeoffs between price and performance. If dispositions are based
on performance in achieving objectives, clauses can be added to disposition agreements which specify the performance conditions which are the terms for the disposition price.

(5) Project Plan Does Not Serve as an Action Document Oriented Toward the Achievement of Objectives

A separate section of findings and recommendations on the project plan details the inadequacies of the present requirements for a project plan and presents recommended modifications for a plan with an output focus.

As noted above, project plans have not defined the problems to be addressed by projects or justified the particular development strategies proposed. Thus, project plans have not defined specific economic development objectives for projects or measures for monitoring the effectiveness of projects in reaching objectives. In addition, as noted above, DCA has not developed a system for reporting on the impacts of projects or attempted to monitor the effectiveness of projects. As a result, DCA does not know whether or not projects have been successful or which types or models of projects are most desirable. In addition, the Commonwealth cannot assess the merits of the program or compare the program with other state economic development efforts.

In addition to failing to define objectives for projects, project plans lack accounts of all of the activities required for project implementation and all of the actors participating on projects. Thus, the project plan is not an action document which directs the accomplishment of project tasks.

(6) Few Incentives Exist for Achieving State and Local Economic Development Objectives and the Timely Completion of Project Development Tasks

After DCA approves a project and executes a financial assistance
agreement with a redevelopment authority for a state execution subsidy, the Commonwealth makes 20 annual payments of the subsidy without regard for the status of project implementation or the achievement of economic development objectives. Inasmuch as redevelopment authorities often undertake only a single project, authority staff preserve their jobs by delaying the execution of project tasks. Although municipal officials and residents may apply pressure on redevelopment authority personnel to efficiently execute projects, they usually lack the expertise and information needed to demand efficient performance. In addition, as noted previously, municipal objectives for industrial development projects consist principally of increases in real estate tax revenues whereas the Commonwealth primarily seeks to reduce unemployment. Inasmuch as the benefits captured by the state and municipality differ, few incentives exist for redevelopment authorities to focus on state economic development objectives. Therefore, various options should be examined for linking state subsidy payments to milestones in project execution and/or the achievement of state development objectives.

(7) Failure to Consider Economic Constraints on the Program

DCA has operated the Chapter 121B industrial park development program as if the appropriation limit on subsidy funds were the only economic constraint on the program. Thus, DCA has not attempted to assess the supply and demand for industrial space in specific areas or the state as a whole when approving projects and, therefore, has not considered whether the private market could absorb the land made available in state assisted industrial parks. As a consequence of this failing, projects have been developed in areas where private industrial parks have absorbed much of the demand for industrial land. In addition, DCA approved most of the projects during a boom
period for industrial park development in the Commonwealth (the late '60s and early '70s) without regard for possible changes in the state or national economies. These projects have come on the market at a time of a sharp decline in demand for industrial land in Massachusetts as a result of the recession and the reduction in federal research and development expenditures. Thus, DCA has failed to consider the conditions of the state and national economies in operating the program.

(8) Identification of the Program as "Urban Renewal" rather than Urban Industrial Development and a Reliance on Redevelopment Authorities rather than Economic Development Organizations as the Vehicles for Development

Although the "solely state-aided" Chapter 121B urban development program was established in 1961 for the purpose of developing industrial projects which were not eligible for federal Title 1 funds (the scope of the program was expanded to include residential and commercial projects in 1969), the program was incorporated into the 121B legislation which set forth the requirements for state participation in federally subsidized residential and commercial projects and tied to redevelopment authorities. As a result of the identification of the program with redevelopment authorities and federal Title 1, persons within state government and at the local level have tended to view the program as "urban renewal" and actors involved in economic development efforts have been unaware of and/or unable to utilize state subsidies for urban industrial development.

Redevelopment authorities have lacked the economic development expertise to design and execute industrial development projects (authorities formed from local economic development organizations have proven more effective). Redevelopment authority personnel have, for the most part, successfully executed the physical development tasks which are traditional urban renewal functions while failing
to address the economic development aspects of the design and execution of projects.

**RECOMMENDATION:** THE STATE URBAN INDUSTRIAL DEVELOPMENT PROGRAM SHOULD BE VIEWED AND OPERATED AS AN ECONOMIC DEVELOPMENT PROGRAM

**RECOMMENDATION:** THE PROGRAM SHOULD BE LABELED AS THE STATE URBAN INDUSTRIAL DEVELOPMENT PROGRAM AND USE OF THE TERM "URBAN RENEWAL" WITH REFERENCE TO THE PROGRAM SHOULD BE DISCONTINUED

The term "urban renewal" is associated in most people's minds with the discredited and abandoned federal Title 1 program for residential and commercial projects and fails to accurately describe the purposes and activities of the state program for industrial development.

**RECOMMENDATION:** DCA SHOULD DISTINGUISH CHAPTER 121B INDUSTRIAL PARK PROJECTS FROM RESIDENTIAL AND COMMERCIAL PROJECTS IN ALL COMMUNICATIONS DESCRIBING THE PROGRAM

**RECOMMENDATION:** STAFF RESPONSIBILITY FOR PROCESSING CHAPTER 121B INDUSTRIAL PROJECTS SHOULD BE DIFFERENTIATED FROM RESPONSIBILITY FOR RESIDENTIAL AND COMMERCIAL PROJECTS

The basic organization development design rule of "form follows function" should be applied to the management of Chapter 121B. Thus, the development tools created by the legislation should not define an all inclusive "urban renewal" program, but should be used in conjunction with other state development tools to establish a state urban industrial development program, a state central business district development program, and an urban housing development program. Greater DCA staff expertise is needed in each of these functional areas to effectively manage programs directed at development objectives than for carrying out the tasks required in processing Chapter 121B projects in general.

**RECOMMENDATION:** A NEW STATUTE SHOULD BE WRITTEN AND ENACTED WHICH DEALS EXCLUSIVELY WITH STATE ASSISTANCE FOR URBAN INDUSTRIAL DEVELOPMENT PROJECTS

A state program for assisting urban industrial development should be designed and operated independently of state programs for aiding residential and commercial development projects. The new legislation for a state urban industrial development program should incorporate the many recommendations advanced in this report. The act should be composed with an "output" orientation to describe an economic development program directed toward the achievement of valued state and local economic development objectives.

The declaration of necessity for the act should define in economic terms the problems to be addressed by the program, the rationale for the tools offered by the program, and the objectives sought through the program. Although the statute should include an account of the detrimental consequences of physical blight, the emphasis of the language of the act should be on economic development problems
and solutions. Thus, the legislative declarations should include items such as the following:

whereas, conditions of substantial and persistent unemployment and underemployment exist in many municipalities of the commonwealth;

whereas, these conditions cause hardships to many individuals and families, such as ...

whereas, concentrations of unemployment and underemployment in municipalities have been caused in part by industrial companies moving from these municipalities;

whereas, industrial companies have moved from these municipalities and others have not started-up or relocated to sites in these municipalities due in part to the availability of only obsolete and inefficient facilities;

whereas, municipalities have experienced fiscal strain as a consequence of the reduction of industrial companies and the added service demands and revenue losses from unemployed and underemployed persons;

whereas, the fiscal strain experienced by some municipalities has led to increased taxes which have further reduced the attractiveness of the community for industrial companies;

whereas, the industrial sector of the economy generally provides desirable job opportunities for the inhabitants of municipalities;

whereas, the economy of the Commonwealth of Massachusetts has experienced a net loss of industrial jobs;

whereas, the concentrations of underemployed and unemployed persons in municipalities have been caused in part by a shift of the composition of the state economy to a greater reliance on service jobs;

whereas, employment in the service sector as a whole provides more unstable and lower paying jobs than in industry;

whereas, service jobs have been statistically linked to higher public assistance burdens;

whereas, new service jobs have not been created in many municipalities in sufficient numbers to replace lost industrial jobs;

whereas, the new service jobs in the commonwealth are concentrated in a few of the largest cities and growing suburban areas;

whereas, the residents of some municipalities lack access to industrial and service jobs in suburban areas;

whereas, unique agglomeration economies exist in some municipalities which are threatened by the flight of industry as a result of a lack of modern facilities;

whereas, evidence indicates that some industrial companies find urban locations desirable if modern industrial space is available with efficient transportation services;
whereas, unaided private efforts cannot provide the necessary industrial sites within urban centers due to the "monopoly rent" problem of land assembly, the "prisoner's dilemma" problem of unified action, the absence of adequate public infrastructure, the unavailability of sufficient private capital for development, and the complications of dealing with municipal government agencies and the residents of populated areas;

whereas, the location of firms in depressed urban areas which hire unemployed persons provides benefits to the Commonwealth of Massachusetts in the form of lower public assistance payments, higher income and sales tax revenues, . . . ;

whereas, the location of firms in depressed urban areas provides benefits to municipalities in the form of increased real estate tax revenues, . . . ;

whereas, the federal government provides various forms of financial assistance to localities for industrial land development projects and the commonwealth can provide valuable assistance in obtaining such funds.

RECOMMENDATION: THE PROGRAM SHOULD BE DESIGNED AND OPERATED ON THE BASIS OF A RATIONALE AND OBJECTIVES DRAWN FROM ECONOMIC DEVELOPMENT THEORY, RESEARCH, AND EXPERIENCE

Although the material available on urban economic development theory, research, and program experiences does not categorically establish the basis for an urban industrial development program, the following justifications and objectives which have been extracted from such sources indicate a possible foundation for a program.

Need For A Program:

(1) The price for industrial land in urban centers is bid up by competing uses so that land costs are too high relative to suburban locations.

(2) Private developers are discouraged from assembling land parcels large enough for modern industrial parks in dense urban areas by a variety of factors: (a) the "monopoly rent" problem (i.e. a single property owner can demand an exorbitant price for a small amount of land needed to complete the assembly of a large property), (b) the possible opposition of present occupants of a site; (c) the difficulties in obtaining necessary permits from municipal agencies; (d) the reluctance of sources of finance to invest in older urban areas; (e) the physical unattractiveness of many older areas; (f) the scarcity of land with suitable access to major highways; (f) the problem of establishing clear title to land parcels; (g) the large number of owners to negotiate with; and (h) the uncertain futures for older areas.

(3) The residential segregation of unemployed and underemployed persons in older urban centers deprives them of access to jobs in suburban areas and leads to the creation of dual labor markets (i.e. structural rigidities in the labor market which
result in artificially high wages for an employed pool of workers and chronic unemployment and low wages for an inner city pool of persons).

(4) Experience indicates that some industrial firms find urban locations desirable if modern industrial space is available at sites offering good access to major highway networks.

(5) Unique agglomeration economies in some municipalities are threatened by the flight of industry as a result of a lack of modern facilities.

Responses To Frequently Voiced Economic Objections To A Program:

(1) Objection: The state should not attempt to influence the location decisions of firms because the market provides for the most efficient allocation of resources.

Responses: (a) Private market decisions create negative externalities or costs which are borne by society, for example:

* labor markets are segmented as one pool of workers is relegated to a situation of low wage, undesirable jobs and unemployment;
* public infrastructure is underutilized in older communities while new public costs are incurred for new infrastructure in growing communities;
* scarce open space is utilized for new industrial facilities;
* small marginal firms are deprived of urban economies which are necessary for initial viability and growth.

(2) Objection: The flight of industry from urban areas represents an efficient transformation of urban economies from industrial to service uses and the loss of industrial jobs will be compensated for by new service jobs as municipalities become regional service centers.

Responses: (a) A report prepared by Donald Stone for Harbridge House on the Massachusetts' economy indicates that state statistics on services are dominated by the figures for Boston and smaller cities are not gaining large numbers of service jobs.

(b) Service jobs are generally more unstable and lower paying and offer less advancement opportunities than industrial jobs.

(c) The lower capital to labor ratio for services results in lower real estate taxes per employee than industry.
The Parent Environment:

(1) The revitalization of the older cities of the Commonwealth of Massachusetts is an avowed policy goal of the Dukakis administration. State initiatives to support urban revitalization have included creative strategies such as the Culture Park in Lowell and the reuse of old buildings for housing in several cities, but the commonwealth has not addressed the need for industrial jobs in older cities.

(2) The Community Development Finance Corporation, a state financed development financial institution for making equity investments in business ventures sponsored by community-based development corporations in depressed urban areas, was enacted on December 31, 1975 and will soon begin to seek ventures in depressed urban areas of the state. In order for firms receiving CDFC funds to operate competitively from depressed area locations, a mechanism for developing modern industrial facilities may be needed. In addition, policy papers on the recently established Massachusetts Industrial Mortgage Insurance Agency, a state financed vehicle for insuring industrial mortgages, have expressed an intent of focusing as much as possible on depressed area development.

(3) The Office of State Planning has recently indicated support for measures to foster industry in older urban centers through real estate tax incentives. However, considerable economic literature suggests that real estate tax incentives are ineffective measures for inducing firms to locate in urban areas. High real estate taxes should not affect the location decision of firms if taxes are capitalized into the price of land or the consumers of a firm's products bear the incidence of taxes. In addition, evidence suggests that a firm's decision to locate in an older urban center is not based on marginal considerations and the advantages for firms that want to locate in urban centers (ex. proximity to markets) far outweigh real estate tax differentials between city and suburb. Nevertheless, high urban real estate taxes may have a psychological effect of discouraging firms from locating in urban centers.

(4) The Governor's Employment and Training Plan prepared recently by the State Manpower Services Council calls for expanded state efforts to create jobs in depressed areas.

Examples Of Needs and Opportunities:

(1) The town of Greenfield is threatened with the loss of the Millers Falls Company, a major employer in the entire area, due to the unavailability of a suitable site for the relocation of the plant into a modern facility.

(2) Kassanoff's Bakery, a major employer in the Roxbury area of Boston, was forced to close due in part to an inability to expand operations at a site in the area.

(3) The discovery of significant oil deposits in the Georges Bank
area may provide coastal communities in the commonwealth, especially New Bedford, with opportunities for industrial development that must be quickly exploited through the provision of suitable land for development.

Program Objectives:

(1) the provision of jobs to underemployed and unemployed persons.

(2) the retention of expanding local firms by depressed communities.

(3) the strengthening of unique agglomerations in urban centers by enabling expanding, relocating, and/or start-up firms to locate in areas to take advantage of the economies present.

(4) "incubation facilities": the provision of modern lease space for small marginal firms which lack sufficient capital for the purchase of land and structures; the development of such projects contributes to growth by providing more efficient space for small firms than is otherwise available in older buildings.

(5) growth of the state economy through the expansion of local firms, the start-up of businesses, and/or the movement of out-of-state firms to locations in projects due to the advantages particular to an industrial park (so as not to count activity that would have occurred anyway) and the achievement of fiscal and employment objectives which reduces the fiscal demands on the commonwealth (by reducing welfare expenses, etc.) and, thereby, the need for taxes which impair the competitive position of the state for all business.

(6) positive net fiscal flows to municipalities.

(7) positive net fiscal flows to the commonwealth.

(8) increasing the stability of municipal and regional economies.

(9) improve the quality of jobs available in municipalities with concentrations of "secondary labor market" quality jobs.

RECOMMENDATION: DCA SHOULD ESTABLISH MUNICIPAL NEED CRITERIA FOR THE APPROVAL OF PROJECTS BASED ON THE OBJECTIVES OF THE PROGRAM AND DEFINE A METHODOLOGY FOR ASSESSING MUNICIPAL NEED.

The need criteria and methodology should be consistent with those applied to other state legislation dealing with depressed area development, such as the Community Development Finance Corporation and Urban Job Incentive tax incentive.

RECOMMENDATION: FIVE DISTINCT ECONOMIC DEVELOPMENT TOOLS SHOULD BE DISTINGUISHED AS SEPARATE ELEMENTS OF A STATE URBAN INDUSTRIAL DEVELOPMENT PROGRAM: (1) EMINENT DOMAIN POWERS, (2) STATE ADVANCES OR SUBSIDIES FOR PROJECT PLANNING, (3) PARTIAL STATE SUBSIDIZATION OF THE NET PROJECT COST, (4) STATE INFRASTRUCTURE INVESTMENT, AND (5) DCA'S ROLE AS REGULATOR, COORDINATOR, AND ASSISTANCE PROVIDER.
The program experience to date indicates that these five components are applicable under differing circumstances. DCA should identify the conditions under which each of these tools is appropriate and vary the relative emphasis on the use of these tools as situations require.

(1) EMINENT DOMAIN POWERS

The public powers of eminent domain are needed for a variety of situations but are not necessary for every project. The use of eminent domain is required for dealing with the following land assembly problems: to clear the uncertain status of the title to property; to prevent property owners from demanding prohibitive prices for land needed to complete assembly of parcels large enough for industrial purposes; and to acquire property from owners who refuse to sell small amounts of land needed to complete the assembly of property for industrial parks.

Inasmuch as older urban centers do not have suitably large areas of vacant land strategically located with respect to highway access and controlled by a few owners, eminent domain powers are essential for any program of industrial development in urban centers. Older urban areas are usually characterized by the following circumstances which require the use of eminent domain powers: numerous owners of small parcels of land; few sites with easy access to highway networks; land parcels with uncertain titles; slow permit approval processes; and mixes of residential and commercial uses which bid up the price for land and create relocation problems. Land assembly problems are frequently cited by private developers and firm executives as a primary reason for the flight of industry from urban centers.

RECOMMENDATION: THE STATUTE AND RULES AND REGULATIONS FOR CHAPTER 121B SHOULD BE AMENDED TO EXPLICITLY ALLOW FOR PROJECTS WHICH REQUIRE THE USE OF EMINENT DOMAIN POWERS BUT NO EXECUTION SUBSIDY

The current language of the rules and regulations and statute assumes that all projects utilizing eminent domain powers will also need state execution aid. However, in many cases, projects which serve state and local economic development objectives can be developed employing the tool of eminent domain exclusively.

(2) STATE ADVANCES OR SUBSIDIES FOR PROJECT PLANNING

State planning advances act as catalysts for the development of industrial projects by local organizations. Firms prefer to locate in industrial park settings in order to take advantage of amenities and avoid problems with residential areas. Multi-firm developments are often necessary to justify public expenditures on infrastructure improvements. Private real estate developers are reluctant to undertake the planning and execution of industrial parks in older urban areas for a variety of reasons: too slow of an absorption rate to provide sufficiently high financial returns; the high risks of untested areas; the uncertainties of dealing with a multitude of actors; etc. In addition, the advance of state funds for park planning can provide the commonwealth with some control to promote
state economic development objectives in projects not requiring a state execution subsidy.

RECOMMENDATION: THE STATUTE AND RULES AND REGULATIONS FOR CHAPTER 121B SHOULD BE AMENDED TO EXPLICITLY ALLOW FOR PROJECTS WHICH NEED PLANNING FUNDS BUT NO EXECUTION SUBSIDY

The current language of the statute and rules and regulations assumes that all projects receiving planning advances will also require state execution aid. Inasmuch as the land for projects may sometimes be disposed of for more than the cost of assembly and development, state execution aid is not always necessary.

The statute and rules and regulations should be revised to require that DCA receive 50% of the excess of land disposition proceeds over project costs until all of the planning advance is returned. In this manner, DCA will contribute one half of the net project cost to projects not receiving execution assistance and recoup advances that can be used for other projects. In addition, an incentive remains for redevelopment authorities to dispose of property for a price greater than the costs of assembly and development.

(3) PARTIAL STATE SUBSIDIZATION OF THE NET PROJECT COST

State and local subsidization of industrial park projects is often necessary to reduce the price of land sufficiently to attract firms to locations in older cities. Cheap land is frequently a necessary inducement for firms due to a number of circumstances: the competition for land in urban centers drives up the price of land; the expenses for relocating existing residential, commercial, and industrial occupants of land; the additional business costs which accompany locations in depressed urban areas (ex. higher insurance costs, vandalism); and the general unattractiveness of inner city sites. In addition, although property acquisitions through eminent domain takings are supposed to occur at market prices, court awards consistently favor owners with payments greater than market value.

Inasmuch as municipalities capture higher real estate tax revenues as direct benefits from industrial projects and benefit to a lesser degree from increases in jobs (which may go to non-residents) and economic growth, whereas the state captures job and growth benefits directly through higher income and sales tax revenues and reduced expenditures for human services, the state should participate with municipalities in subsidizing projects. Moreover, the municipalities most in need of development are least able to afford the cost of infrastructure improvements associated with a project.

RECOMMENDATION: AMEND THE LEGISLATION AUTHORIZING STATE SUBSIDY PAYMENTS TO ALLOW FOR SUBSIDIZATION OF THE NET PROJECT COST ONLY FOR PROJECTS IN DEPRESSED URBAN COMMUNITIES, PROJECTS WHICH OFFER SIGNIFICANT OPPORTUNITIES FOR THE STATE TO ACHIEVE VALUED ECONOMIC DEVELOPMENT OBJECTIVES, OR PROJECTS IN COMMUNITIES EXPERIENCING DISASTERS OR THE LOSS OF A MAJOR EMPLOYER
By limiting state subsidies to the types of projects indicated above, the expected benefits from state subsidization will be more clearly apparent. Projects in non-depressed communities are likely to provide negligible "net benefits" because some development would occur even without a project. In addition, the potential for abuse of the program is greater in non-depressed areas. However, some projects in non-depressed areas, such as the Peabody project, may offer rare opportunities for achieving state economic development objectives.

RECOMMENDATION: ON THE BASIS OF ANALYSES OF THE FISCAL AND ECONOMIC BENEFITS TO MUNICIPALITIES AND THE COMMONWEALTH FROM THE FIFTEEN INDUSTRIAL PROJECTS WHICH HAVE ENTERED THE EXECUTION STAGE, DCA SHOULD ASSESS THE PROPRIETY OF THE ONE HALF OF NET PROJECT COST STATE SUBSIDY

(4) STATE INFRASTRUCTURE INVESTMENT

The construction of highways and bridges is a traditional public sector function because these infrastructure items are "nonrival public goods" (i.e. A's consumption does not diminish B's consumption, the marginal cost of use is zero and, therefore, no price should be charged for use if maximum efficiency is to be obtained). Thus, the expense of such major infrastructure items is too great to be borne by individual firms which do not maintain exclusive consumption rights to these facilities.

RECOMMENDATION: DCA SHOULD RECOGNIZE THE IMPORTANCE OF STATE HIGHWAY AND BRIDGE PROJECTS FOR THE SUCCESS OF INDUSTRIAL DEVELOPMENT PROJECTS, ESPECIALLY PROJECTS IN DEPRESSED URBAN CENTERS, AND ACTIVELY COORDINATE ACTIVITIES WITH THE DEPARTMENT OF PUBLIC WORKS

As one measure to improve coordination with DPW, DCA should require that a memorandum of understanding between DPW and the redevelopment authority be included as part of the project plan for any project with DPW participation. In addition, DCA should explore the possibility of initiating projects in depressed urban centers with local organizations utilizing state infrastructure investments.

RECOMMENDATION: DCA SHOULD PRESS THE DEVELOPMENT CABINET TO ADOPT THE RECOMMENDATION OF THE GOVERNOR'S MANAGEMENT TASK FORCE TO EXPAND THE ROLE OF THE OFFICE OF STATE PLANNING TO INCLUDE CAPITAL BUDGETING

The state machinery for managing economic development activities should include a capital budgeting capability to integrate infrastructure investments with economic development activities, examine capital expenditures in relation to state policies and programs, evaluate the economic impacts of proposed highways and bridges, and identify the need for coordination among activities. Evidence suggests that the success of state efforts to revitalize older cities will demand the selective use of capital investments.
DCA'S ROLE AS REGULATOR, COORDINATOR, AND ASSISTANCE PROVIDER

RECOMMENDATION: DCA SHOULD NOT REGARD CHAPTER 121B URBAN INDUSTRIAL DEVELOPMENT EFFORTS AS EXCLUSIVELY THE RESPONSIBILITIES OF LOCAL PERSONNEL BUT SHOULD PLAY AN ACTIVE ROLE AS REGULATOR, COORDINATOR, AND ASSISTANCE PROVIDER FOR A STATE ECONOMIC DEVELOPMENT PROGRAM DIRECTED TOWARD ACHIEVING LOCAL AND STATE OBJECTIVES

DCA should view its functions as an essential component of an urban industrial development program. Inasmuch as the state and local benefits from projects are not identical, the commonwealth cannot expect redevelopment authorities to execute projects to achieve state development objectives without DCA playing an active role in project management. DCA has considerable latitude in preparing the rules and regulations which define the respective roles of redevelopment authorities and DCA. Many of the findings and recommendations in this report provide detailed accounts of the need for active participation in project management by DCA.

RECOMMENDATION: DCA SHOULD NOT TREAT THE STATE EXECUTION SUBSIDY AS ANY MORE IMPORTANT THAN THE OTHER COMPONENTS OF THE PROGRAM AND SHOULD MONITOR AND ASSIST ALL PROJECTS WHETHER OR NOT THEY INCLUDE ANNUAL STATE SUBSIDY PAYMENTS

RECOMMENDATION: ESTABLISH A NON-RELOCATION REGULATION WHICH PROHIBITS THE MOVEMENT OF FIRMS OUT OF PRIORITY DEVELOPMENT AREAS TO SITES IN STATE ASSISTED INDUSTRIAL PROJECTS

DCA should obtain a copy of the EDA non-relocation statement as a guide for drafting a suitable regulation for the state industrial development program. The DCA regulation should differ from the EDA statement by only prohibiting the movement of firms out of depressed communities.

RECOMMENDATION: DCA SHOULD PREPARE A STANDARD LAND DISPOSITION AGREEMENT WHICH INCLUDES CLAUSES DEALING WITH THE PERFORMANCE OF FIRMS AND DEVELOPERS IN MEETING ECONOMIC DEVELOPMENT OBJECTIVES

RECOMMENDATION: DCA SHOULD ENCOURAGE REDEVELOPMENT AUTHORITIES TO DISPOSE OF PROPERTY ON THE BASIS OF MAXIMIZING DEVELOPMENT OBJECTIVES RATHER THAN DISPOSITION PRICES

In addition, DCA should require authorities to submit estimates of the objectives expected through the disposition of property as a condition for DCA's approval of disposition.

RECOMMENDATION: VARIOUS INCENTIVE OPTIONS SHOULD BE CONSIDERED FOR LINKING STATE SUBSIDY PAYMENTS TO THE COMPLETION OF PROJECT DEVELOPMENT TASKS AND/OR THE ACHIEVEMENT OF STATE AND LOCAL ECONOMIC DEVELOPMENT OBJECTIVES
(1) DCA might make the provision of other state development resources, such as manpower training funds or bridge construction, conditional on the performance of authorities in accomplishing project tasks.

(2) Rather than automatic annual subsidy payments by the state, the state subsidy could be paid in lump sums at the times specific stages of the development process are completed. (This would serve to increase the pressure from local officials and citizens on redevelopment authority personnel for timely performance because the municipality advances all of the project expenditures.)

(3) The payment of the state subsidy could be proportional to the accomplishment of project objectives, such as the percentage of land disposed of or the percentage of estimated jobs created.

(4) The state could offer bonuses for achieving state development objectives, as for example, attracting particular industries which provide high multiplier effects for the state economy.

(5) Bonuses could be offered to redevelopment authority personnel for efficiency and effectiveness.

RECOMMENDATION: THE STATE URBAN INDUSTRIAL DEVELOPMENT PROGRAM AND ALL LEGISLATION ESTABLISHING TOOLS FOR THIS PURPOSE SHOULDN'T OPERATE PRIMARILY THROUGH REDEVELOPMENT AUTHORITIES BUT SHOULD ALLOW FOR PROJECTS DEVELOPED BY ANY NONPROFIT PUBLIC PURPOSE LOCAL ECONOMIC DEVELOPMENT ORGANIZATION

Thus, DCA should accept applications from and assist organizations such as community development corporations, local development organizations, economic development and industrial corporations (Chapter 121C), and industrial development commissions. Many of these organizations possess more expertise for economic development activities than redevelopment authorities and offer greater potential for fulfilling the purposes of the program.

RECOMMENDATION: DCA SHOULD ATTEMPT TO OBTAIN DATA ON THE SUPPLY AND DEMAND FOR INDUSTRIAL LAND AND SPACE IN THE COMMONWEALTH
COORDINATION/INTEGRATION

Project Management: Strategic Considerations For The Design Of A Project Management System / Organization Development

Findings:

The failure to coordinate the activities of the numerous actors who are involved, or should be involved, in the development of a Chapter 121B industrial park project has been, perhaps, the most damaging and difficult to remedy problem for the program. An evaluation of the need for integration for an effective industrial park project management system reveals the critical importance of coordination among units of state government and among the numerous local, state, and federal participants on projects.

Task Complexity

In order to implement an industrial park project, activities must be coordinated among individuals, units, governments, independent organizations, departments, agencies, and offices. In the fifteen project cases prepared for this report, the following different actors have been identified as participants or as actors who should have participated in some fashion:

UNITS OF STATE GOVERNMENT:
* DCA: Bureau of Urban Renewal
* Department of Public Works: Transportation Planning
* Department of Public Works: Highway and Bridge Construction
* Environmental Impact Review
* Department of Environmental Management (previously Dept. of Natural Resources)
* Department of Environmental Quality Engineering
* Water Commissioners
* Department of Commerce and Development
* Department of Commerce and Development: Business Contact Program
* Department of Commerce and Development: Training Assistance Program
* Department of Commerce and Development: Planning, Research, and Statistics
* Department of Manpower Development
* Department of Manpower Development: Balance of CETA Prime Sponsor
* Department of Employment Security
* Lt. Governor's Office: Office of Federal-State Relations
* Energy Facilities Siting Council (Note: no case on this project in report: Stoughton)
* Energy Policy Office
* Office of State Planning
* Executive Office of Environmental Affairs: (Note: no case on this project in report: Watertown)

SEMI-AUTONOMOUS STATE AGENCIES:
* Metropolitan District Commission (Note: no case on this project in report: Watertown)
* Massachusetts Business Development Corporation
* Massachusetts Industrial Mortgage Insurance Agency
* Community Development Finance Corporation

LOCAL ACTORS:
* Redevelopment Authority: Board
* Redevelopment Authority: Staff
* Community Development Agency
* Harbor Development Commission
* Municipal Department of Public Works
* City/Town Counsel
* Planning Department
* City Council/Board of Selectmen
* Mayor/Town Meeting
* Local Planning Board
* Conservation Commission
* Chamber of Commerce
* Industrial Development Commission
* Economic Development and Industrial Corporation
* Industrial Development Finance Authority
* SBA 502 Local Development Corporation
* Consultants: planning, LUM study, appraisals, relocation plan, geological, and legal
* Contractors: demolition, site preparation, rehabilitation, and construction
* Developers of Speculative Buildings

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* Redevelopers of Entire Project Area
* Businesses
* Relocatees
* Citizens

REGIONAL ACTORS:
* Regional Planning Commission
* Regional CETA Prime Sponsor/Sub-grantee
* other: ex. Essex County Economic Development Corporation

FEDERAL GOVERNMENT ACTORS:
* Economic Development Administration
* Small Business Administration
* Army Corps of Engineers
* Federal Highway Administration
* Department of Housing and Urban Development
* Bureau of Outdoor Recreation (Note: no case on this project in report: Watertown)

Although all of the above actors have never participated together on any one project, and the vast majority of the activities for project implementation involve only a small portion of these participants, the above list of actors accurately depicts the scope of coordination required for the effective operation of the Chapter 121B industrial land development program. The importance of integration for efficient and effective performance is a major finding of this report.

Extensive multi-actor participation appears to be a necessary characteristic of public industrial land development projects. Three levels of government must be involved for the following reasons:
(a) public industrial land development must be a "local initiative" program (i.e. project conceptualization, initiation, and execution at the local level) due to the strong tradition of local autonomy and control in the Commonwealth of Massachusetts; (b) state participation is required because the state has legal authority over the use of eminent domain powers, municipalities usually lack sufficient resources to fund projects in full, state participation serves as both a stimulus and a control, resource expenditures of the Common-
wealth frequently establish the opportunity for projects (ex. highway construction) and enable projects to achieve economic development objectives (ex. manpower training funds), and state regulatory powers apply to all development projects; and (c) federal funds are made available to serve national development and regional redistribution objectives, and municipalities and the Commonwealth are encouraged to make use of these monies. The participation of numerous actors at each level of government, especially the local and state levels, also appears to be a requisite property of public economic development projects due to the variety of functional tasks necessary to execute a project. However, the acceptance of project complexity does not imply resignation with respect to the problems of managing project implementation. Various mechanisms for managing complex, one-time projects should be investigated along with the possibilities for redesigning the roles and organization of the actors at the three levels of government.

Although integration problems are evident within and between the three levels of government, the most severe difficulties involve the coordination of activities within state government and between state and local actors. The principal areas of integration weaknesses which have been identified are the following: (1) weak inter-actor information flows; (2) weak program conceptualization and joint decision making across state agencies; (3) absence of the creative combination of development resources; and (4) inadequate management of project tasks.

Before reviewing the experience in the above problem areas, the management context of state government will be considered. Despite the complex interdependencies among actors involved on projects, formal integrating devices have not been introduced within state
government. In addition, DCA has assumed a passive monitoring role which has not encompassed the most fundamental components of project management. The need for the adoption of project management techniques is discussed in sections of this report dealing with reporting requirements and the project plan.

The Parent Environment

At present, the Development Cabinet is the only formal mechanism within the structure of state government, other than the Governor, for achieving information flows, decision making, and program and project coordination across line functional agencies. Table 1 presents a detailed view of the organization of economic development actors in the executive branch of state government in Massachusetts. The table indicates that the only formal lateral form of organization is the Development Cabinet. The Development Cabinet was formed by Governor Dukakis in January of 1976 for the purpose of increasing coordination among line agencies involved in economic development related activities.

The cabinet device is a team approach to lateral integration. The mechanism lowers decision making one step from the Governor by creating a new level of organization where shared information exists and, thereby, reduces the information and decision overload on the chief executive and allows him to focus on "exceptions" which cannot be handled by the Cabinet. However, although the Director of the Office of State Planning serves as the Chairperson of the Cabinet, he does not direct the activities of the group in a project, program, or team management sense. For example, no information system has

* The two year old "Inter-agency Economic Development Project Coordinating Committee" is an attempt to establish a formal lateral structure at the level of policy staff but it does not deal with Chapter 121B projects and has floundered without a formal role and explicit powers.
Table 1: Organization of Economic Development Actors in the Executive Branch of Massachusetts Government

GOVERNOR

Office of Governor's Staff
- Cabinet Coordinator

Office of the Lieutenant Governor

EXECUTIVE CABINET

Office of the Governor
- Governor's Staff
- Cabinet Coordinator

SECRETARIES

Office of the Secretary of Administration and Finance
- Division of Administration
- Division of Finance

DEPARTMENT/COMMISSIONS

Office of the Secretary of Community Affairs
- Division of Community Development
- Office of Housing Development
- Office of Commonwealth Service Corps
- Office of Citizen Participation

Office of the Secretary of Economic Development
- Division of Economic Development
- Office of Economic Development
- Office of Planning & Research
- Office of Tourism
- Office of Minority Business Assistance

DEPT. OF COMMUNITY AFFAIRS
- Mass. Port Authority
- Turnpike Authority
- DEPT. OF PUBLIC WORKS

DEPT. OF ECONOMIC DEVELOPMENT
- Economic Development
- Planning & Research
- Tourism
- Minority Business Assistance

DEPT. OF THE COMMERCE & DEVELOPMENT
- Office of Federal-State Relations
- Office of Employment Security
- Office of Economic Security
- Office of Energy Policy
- Office of Industrial Accidents
- Office of Large & Industries

OFFICE OF MANPOWER DEVELOPMENT
- Office of Federal-State Relations
- Office of Employment Security
- Office of Economic Security
- Office of Energy Policy
- Office of Industrial Accidents
- Office of Large & Industries

OFFICE OF MANPOWER DEVELOPMENT
- Office of Federal-State Relations
- Office of Employment Security
- Office of Economic Security
- Office of Energy Policy
- Office of Industrial Accidents
- Office of Large & Industries

OFFICE OF FEDERAL-STATE RELATIONS
- Office of Employment Security
- Office of Economic Security
- Office of Energy Policy
- Office of Industrial Accidents
- Office of Large & Industries

OFFICE OF RECREATION & TOURISM
- Office of Economic Development
- Office of Planning & Research
- Office of Tourism
- Office of Minority Business Assistance

OFFICE OF THE SECRETARY OF COMMERCE & DEVELOPMENT
- Office of Manpower Development
- Office of Economic Development
- Office of Planning & Research
- Office of Tourism
- Office of Minority Business Assistance

OFFICE OF THE SECRETARY OF ECONOMIC DEVELOPMENT
- Office of Economic Development
- Office of Planning & Research
- Office of Tourism
- Office of Minority Business Assistance

OFFICE OF THE SECRETARY OF COMMUNITY AFFAIRS
- Office of Community Development
- Office of Housing Development
- Office of Commonwealth Service Corps
- Office of Citizen Participation

OFFICE OF THE SECRETARY OF PUBLIC WORKS
- Mass. Port Authority
- Turnpike Authority
- DEPT. OF PUBLIC WORKS

DIVISIONS/SUBDIVISIONS

Office of the Secretary of Administration and Finance
- Division of Administration
- Division of Finance

Office of the Secretary of Community Affairs
- Division of Community Development
- Office of Housing Development
- Office of Commonwealth Service Corps
- Office of Citizen Participation

Office of the Secretary of Economic Development
- Division of Economic Development
- Office of Economic Development
- Office of Planning & Research
- Office of Tourism
- Office of Minority Business Assistance

Office of the Secretary of the Commerce & Development
- Office of Federal-State Relations
- Office of Employment Security
- Office of Economic Security
- Office of Energy Policy
- Office of Industrial Accidents
- Office of Large & Industries

Office of the Secretary of Recreation & Tourism
- Office of Economic Development
- Office of Planning & Research
- Office of Tourism
- Office of Minority Business Assistance

Office of the Secretary of Public Works
- Mass. Port Authority
- Turnpike Authority
- DEPT. OF PUBLIC WORKS

Organizational Chart of Economic Development Actors in the Executive Branch of Massachusetts Government.
been established to report regularly on the activities of the secretariats and the interrelationships among activities. The only periodic reporting consists of exception or project status reports from the individual agencies to the Governor's staff. Although such exception reporting to the Governor serves to reduce the information flow to the chief executive as intended by the introduction of the cabinet mechanism, the added responsibility for sharing information at the Cabinet level has not been pursued. As a result, a gap exists in inter-agency information processing and decision making which has led to implementation delays, inefficiency, and ineffectiveness. Informal direct inter-agency contacts at the staff level may fill some, but not all, of this gap.

According to interviews with several persons familiar with the operation of the Development Cabinet, the Cabinet acts as a forum for the airing of individual agency policies and announcing agency programs, and as a vehicle for responding to problems with high priority projects, but does not serve as a mechanism for coordinating program operations and policy formulation. Rather than providing for project and program management across agencies, the exchange of information through the Cabinet has fostered the compatibility of "policies" among agencies and the spread of thematic guides and goals for overall state activities. For example, the theme of mill renovation in old urban centers. The "management by policy and exception" approach practiced by the Cabinet leads to informal lateral coordination across line functions but fails to deal with cross-cutting program operations and program decision making in a comprehensive and systematic fashion. For example, the Cabinet lacks its own staff for preparing options papers, program analyses, and proposals for management changes to achieve coordination across agencies. In order
to strengthen the Governor's role in administering state agencies and "bring the Cabinet Secretaries into the decision process" the report of the Governor's Management Task Force recommended that "a program-oriented individual ... be added to the Cabinet Coordination Unit to prepare necessary program and policy analyses and proposals". The Task Force report pointed to a weakness in the "management concept and structure for the Governor and the Cabinet" which has resulted in a failure to effect governmental decisions, formulate programs, monitor implementation, and measure progress in achieving objectives. However, the recommended program analyst has not been hired. In addition, the recommendation of the Task Force to establish an information system at the Cabinet level has not been acted upon. Furthermore, although the secretaries have ultimate responsibility for coordinating the programs under their jurisdiction, a body composed of the top managers is an inappropriate mechanism for dealing with the daily activities of program operations.

The policy reports prepared by the Office of State Planning are the only mechanisms for encouraging the coordination and creative combination of line programs and resources to achieve state development goals and establishing state development priorities which pertain to all departments; ex. State Economic Development Program, State Growth Policy Report. However, these policy documents are limited to the strategic planning functions of identifying general needs, articulating goals, and assessing resources and program directions. They do not address the operating needs for the coordination of line agency activities. Although one such report is entitled "Economic Development Program For Massachusetts", the document merely identifies goals and lists projects, programs, and government activities related to those goals, rather than presenting dollar commit-
ments, a timetable of actions, the tasks of individual actors, detailed objectives, and organizational relationships to achieve the goals.

The weakness of the vertical authority structure in Massachusetts government is an additional reason for the limited usefulness of strategic planning documents and the Development Cabinet for effecting coordination. Most secretaries lack direct authority over the budgets and programs of the agencies and departments under their jurisdiction (the Secretary of the Executive Office of Communities and Development is also the Commissioner of the Department of Community Affairs and, therefore, exercises budget control). Agency and department budgets are submitted individually to the legislature rather than as components of an overall secretariat budget and the secretaries' authority is limited to recommending changes in agency requests to the General Court. Some agencies completely circumvent the secretaries and the Governor by dealing directly with the legislature on budget requests, and the independence exercised by many agencies leaves the secretaries without means for implementing executive and Cabinet programs and policies. Recognizing this failing of the present system, the Governor's Management Task Force concluded:

"If the benefits of a cabinet system are to be realized, the Commonwealth must take the second step and make the Secretariats meaningful elements in the Commonwealth's management structure. The major factor will be the ability of all executive offices to exercise line and budget authority over the agencies under their jurisdictions."

However, the Governor has decided not to file legislation to effectuate this recommendation.

In addition to lacking budget authority over agencies within secretariats, the form of the current budget limits the vertical
authority of the secretaries. The present budget includes an excessive number of appropriation accounts (approx. 700), which vary considerably in the scope of activities covered, and specify dollar amounts for subsidiary accounts and numbers of personnel. Thus, secretaries and department heads have little flexibility for shifting resources to meet needs and delays often result from the inevitable attempts to redirect resources. In addition, inasmuch as the collection and summarizing of expenditure data are not tied to operating units, top managers are unable to hold lower level program managers accountable. The attempt by legislatures to control spending through "obligation accounting", which details appropriations for various "object classifications", serves to weaken executive authority, add to administrative work, and divert the attention of managers away from program outputs.

The civil service system, which is more cumbersome in Massachusetts than in most states, is another major obstacle to the exercise of vertical authority by secretaries. The rigid job classification scheme provides top managers with little ability to place the proper people in positions. The absence of incentives for performance and the existence of inviolable job security contribute to an atmosphere of unresponsiveness to top managers.

The above features of Massachusetts' government add to more general characteristics of public sector organizations which result in a weak vertical authority structure: frequent manager turnover, division of authority into three branches, fragmentation of programs by level of government, etc.

The weakness of vertical control by the secretaries limits the effectiveness of the Development Cabinet as an integration mechanism. Whereas team approaches to management in the private sector frequently
suffer from a failure of top level managers to delegate authority to lower level personnel on teams, the Development Cabinet suffers from a failure to gain authority over lower echelon units. This suggests that the need for, and constraints on, integration differ in the public and private sectors. However, state government shares the private sector problem of inadequate delegation of authority to program managers in preparing budget requests.

The present form of the state budget, in addition to weakening the vertical authority structure of government, does not enable the budget to fulfill its potential as a vehicle for coordinating programs. The appropriation account structure is not organized by responsibility centers or by program categories. No centralized budget planning mechanism exists to communicate policy and program priorities to personnel preparing budget requests. Inasmuch as the budget is structured in terms of expenditures rather than program activities, objectives, and goals, the budget cannot serve as a mechanism for coordinating the activities of different agencies which bear on the same goals or for monitoring program performance with respect to objectives. The budget preparation process does not call for the quantification of objectives, the calculation of benefit/cost analyses, or the identification of activity milestones. In addition, although the Governor's Management Task Force noted that the state lacked a mechanism for coordinating and analyzing capital budget items, and recommended that the Office of State Planning review capital requests for conformance with program priorities and objectives, the recommendation has not been adopted and no method exists for ensuring that capital expenditures are coordinated with the activities of other units of state government.
Inter-Actor Information Flows

Examples of the negative consequences of the absence of adequate inter-agency information flows within state government are plentiful. The lack of formal channels of communication between the Department of Community Affairs (DCA) and the Department of Public Works (DPW) has been the source of the greatest number of coordination problems. Although ten of the fifteen Chapter 121B industrial park projects have been directly dependent upon, effected by, or developed as a consequence of DPW highway and bridge projects (see cases), no mechanisms exist for the regular exchange of information between the two agencies. Despite the frequent interdependence between the activities of the two agencies, and their ostensible sharing of economic development goals (however, some people may view DPW's purpose as building highways and not as economic development), DCA and DPW personnel have rarely been in contact during the planning or execution phases of Chapter 121B industrial park projects. Moreover, problems with DPW projects have often been major obstacles to the timely and effective execution of state-assisted industrial parks.

Although the Secretary of Transportation and Construction and DPW Commissioner can make resource allocation decisions on the basis of the guidelines and policies expressed in the strategic planning documents prepared by the Office of State Planning, no information flows exist to enable the decision maker to match DPW funding with industrial park projects supported by the Commonwealth to promote state economic development objectives. In addition, although the construction of highways by DPW often creates the possibility for development of industrial parks, and DCA approved projects are often dependent on DPW highway and bridge construction, DPW does not transmit information to DCA on a regular basis on planned projects, fund-
ing priorities, and construction timetables.

These problems cannot be solved simply by supplying DPW with a list of Chapter 121B projects and DCA with a list of highway and bridge projects (however, this would be a useful first step), but require the creation of a project planning and execution machinery among DCA, DPW, and other state agencies. For coordinating activities during the planning of projects, DPW should review proposed Chapter 121B industrial park projects which involve DPW participation with DCA in order to assess whether the costs and benefits of the projects warrant DPW expenditures, and agree on the timing of DPW construction, and DPW should inform DCA of planned highway and bridge projects and the availability of funding for new projects so that DCA can assess whether developments will affect 121B projects and identify opportunities for new projects (which could require the replanning of proposed DPW highway routes). For coordinating project execution activities, DPW and DCA should establish the timetable and responsibility for project tasks and meet on a regular basis to review the status of projects.

As a result of the absence of adequate information flows between DCA and DPW, projects suffered from DCA's failure to take account of the following factors critical to project implementation:

(a) the planned construction of a major state highway: the 121B project in Fitchburg (approved in 2/75) is located at the opposite end of the city from where DPW plans to construct a major highway interchange between the new I-190 and existing Rt. 2; the private development of an industrial park near the interchange may draw the limited market of the area away from the state-assisted project; the state-assisted park in Gardner is likely to be similarly affected;

(b) detailed knowledge of the siting, design, and schedule for construction of a major state highway: DCA and the Holyoke Redevelopment Authority discovered after approval of a project in 6/75 that DPW is going to build I-391 through the project area and the plan had to be revised,
and site preparation work was halted, until the location and schedule for the road was determined;

(c) eligibility of projects for highway funding: Amherst planned on and applied for the use of federal "TOPICS" funds for street construction associated with a residential/commercial project and waited over two years before being informed by DPW that the town was not eligible for the program;

(d) need for redevelopment authority expenditures for the planning of highway access roads: the Woburn Redevelopment Authority was forced to pay for the preparation of three alternative designs for the construction of a bridge and highway access road in order to expedite the development process with DPW;

(e) frequent dependence of DCA approved projects on DPW expenditures: projects have depended on the construction or operation of bridges by DPW in Woburn, Peabody, New Bedford, and Beverly (a waterfront project); projects have depended on the construction of roads by DPW in Woburn, Peabody, New Bedford, and Holyoke; projects have been initiated as a result of highway construction by DPW in Attleboro and Brockton; in every case the feasibility of a project has been directly conditional on the presence of a highway constructed by DPW.

Although the project plans for the above projects may have indicated the need for the construction of a highway access road or bridge (in many cases this dependency was not noted), evidence of DPW approval or commitment to construct the facility, and the probable schedule for construction, were not required components of the project plans. In addition, DCA made no effort to ascertain DPW's position on projects either before or after passing judgment on projects. Redevelopment authorities have had to deal with DPW without assistance from DCA. Perhaps the most serious problem with the management of projects has been the failure of the executive branch of state government to view Chapter 121B assistance to industrial park projects and DPW infrastructure investments as a single economic development program devoted to the achievement of valued state economic development objectives. Choices with respect to the commitment of state resources have not been made on the basis of complementary state investments or with reference to economic development objectives.
Coordination problems stemming from the lack of information flows between DCA and the departments within the Executive Office of Economic Affairs, or their precursors, have also been frequent and damaging to Chapter 121B projects. Although two of the primary goals for a state-assisted industrial land development program are the growth of employment and the provision of jobs to the unemployed, the absence of established communication channels between DCA and the Departments of Commerce and Development (DCD) and Manpower Development (DMD) has severely limited DCA's ability to manage projects with reference to employment needs and opportunities, inform redevelopment authorities of the availability of state manpower resources to assist parks in marketing and meeting employment objectives, target manpower training funds to state-assisted projects, and require redevelopment authorities to establish employment programs for projects.

(a) The state's customized manpower training program TAP (Training Assistance Program), which funds the costs for firms to train unemployed persons, has not been employed in 121B projects.

(b) Redevelopment authorities have not developed employment programs by utilizing local CETA funds for manpower training, establishing job referral relationships between firms in projects and local vocational education programs, satisfying the transportation needs of unemployed persons without access to park locations, and creating a mechanism for attracting and screening unemployed persons for jobs with firms in parks.

(c) DCA has not promoted projects in areas of greatest unemployment, used a measure of local employment need as a criterion for project approval, or employed labor supply information to formulate park marketing strategies (ex. identifying target industries for the Gardner project on the basis of labor force skills similar to those needed for the declining furniture industry in the city).

The absence of formal information flows between DCA and DCD has also deprived redevelopment authorities of potentially valuable marketing assistance:
(a) DCD's Business Contact Program has not been used to provide firms seeking land for expansion or relocation with information on available property in state-assisted projects.

(b) Although personnel in DCD are often contacted by firms seeking industrial land, DCD does not maintain information on land available in state-assisted projects or refer firms to the Bureau of Urban Renewal.

(c) Until recently, redevelopment authorities have been unaware of the availability of promotional material on the Commonwealth and literature explaining state business taxes, from DCD.

(d) Redevelopment authorities have not been informed of the new public sources of business capital which may aid in the marketing of projects, such as the Community Development Finance Corporation and the Massachusetts Industrial Mortgage Insurance Agency.

(e) In the case of Palmer, DCA did not seek marketing assistance from DCD when the Miller Brewing Company was choosing between the project in Palmer and a site in New York State for the location of a major brewery.

DCA has not taken advantage of the computer information available at the Department of Employment Security (DES), on the employment activity of businesses locating in state-assisted industrial parks, in order to monitor the employment impacts of projects. DES might be able to supply periodic computer print-outs on employment in firms in state-assisted parks so that DCA can monitor firms for compliance with employment performance clauses in land disposition agreements.

Whereas the lack of adequate information flows with DPW has caused problems for the physical development of 121B projects, the failure to communicate with the departments within the Executive Office of Economic Affairs has weakened the ability of projects to achieve economic development objectives. Moreover, the absence of effective integration with the Economic Affairs' departments has led DCA personnel, and others in state government, to inaccurately view Chapter 121B, narrowly, as an urban renewal program rather than properly.
identify it as an economic development program.

Due to the absence of formal information flows between DCA and the Lieutenant Governor's Office of Federal-State Relations, no efforts have been made to utilize various sources of federal assistance for Chapter 121B projects, and DCA has not employed the political leverage of the Lt. Governor's Office to speed the EDA grant application approval process for the Chapter 121B projects in Fitchburg, Peabody, and Gardner or to obtain additional EDA funds for state-assisted industrial parks. Although the Office of Federal-State Relations is responsible for dealing with all issues and programs involving relations between the federal and state governments, no information system currently exists which provides the Lt. Governor's Office with timely information on all economic development projects and programs in the state which depend on federal assistance, or informs state agencies of the availability of federal funds for economic development. An information system to report on the flow of federal funds to Massachusetts, and compare funding levels with those in other states, is presently being created.

The failure to establish ongoing channels of communication between DCA and the Office of State Planning has proven to be damaging to the Chapter 121B program as well as to state comprehensive economic development planning efforts. Inasmuch as OSP is responsible for all state planning related to economic and physical growth and development, and performs the strategic planning functions of formulating state development policies and goals which guide the actions of all units of state government, the absence of information flows has served to relegate the Chapter 121B industrial land development program to the status of a "non-program" which has little place in overall state economic development efforts. Evidence of the general
neglect of the program as a tool for state economic development is plentiful:

* the "Directory of State Development Agencies" makes a vague reference to the state urban renewal program but fails to note the existence of a Bureau of Urban Renewal;

* the "Economic Development Program for Massachusetts", prepared by the Office of State Planning, refers only to urban renewal powers for land assembly under the provisions of Chapter 121B;

* in the program for the Governor's Conference On Community Revitalization, Chapter 121B is listed as a tool for the "(a)cquisition or securing of land for preservation or future use", but not as a vehicle for "Industrial and Commercial Development", and is not listed as a "Community Mechanism for Economic Development" (CDCs, CAAs, EDICs, IDCs) or as a "State Program To Assist Community Development".

Evidence indicates that the neglect of the Chapter 121B program derives largely from the lack of collection and exchange of information and is not a policy choice based on program analysis. In an interview, OSP's principal economic development planner expressed a total lack of awareness of the existence of the fifteen state-assisted industrial park projects. No study of the history and impacts of Chapter 121B industrial projects has been prepared which can serve as a basis for judging the merits of the program.

OSP's disregard for 121B as an economic development tool can be partly attributed to the neglect of the program by the top level managers within DCA, and the failure of DCA to manage projects with reference to economic development objectives. Inasmuch as DCA has never collected and reported information on the economic development benefits of the program, persons in state government have formed negative opinions about the program on the basis of well publicized crises during the development phases of projects and the identification of the program with the discredited label of "urban renewal".
The common tendency of policy makers to reject old program names and programs which are associated with prior administrations, or have come under attack, often results in a failure to appreciate the benefits and learn from the problems of past programs. Despite numerous problems with the design and operation of the Chapter 121B industrial land development program, projects have resulted in positive net benefits to municipalities and the Commonwealth, and the program appears to offer considerable potential for addressing industrial development needs in the Commonwealth. Attempts to "reinvent the wheel" at the highest levels of state economic development policy making suffer from a failure to appreciate Chapter 121B and incorporate the 15 years of experience with the program.

The absence of channels for the flow of information between DCA and federal agencies has also negatively affected Chapter 121B projects. Although six of the fifteen state-assisted industrial parks which reached the execution stage have relied on EDA public facilities grants, DCA has not maintained communications with the area office of the federal Economic Development Administration. In addition, DCA has never attempted to increase the number of EDA grants going to state-assisted projects or to other public and non-profit industrial parks in the state. Redevelopment authorities have applied to EDA for grants without receiving any assistance from the Bureau of Urban Renewal in preparing grant applications or arguing for grant approval. DCA has not reviewed grant applications prior to submission to EDA for compliance with state rules and regulations or the accuracy of information, and does not have copies of completed applications on file for any of the six projects which have received grants.

Numerous problems have resulted from the failure to establish
formal channels of communication and grant application processing procedures between DCA and the EDA office. In the case of Fitchburg, the public facilities grant approved by EDA provided only sufficient funding for the installation of utilities above ground, even though DCA regulations and the project plan require underground utilities. Inasmuch as the grant application was not submitted to DCA for review prior to being forwarded to EDA, and no review procedures existed between EDA and DCA, the application was never scrutinized for compliance with state regulations and the project plan.

In the case of Palmer, DCA approved the sale of the entire park to a single redeveloper in violation of EDA policy against sales to "middleman" redevelopers, and without requiring the developer to sign the four agreements demanded by EDA as conditions for the receipt of grant funds: statements on civil rights, firm non-relocation, non-profiteering, and property covenants extending the civil rights and non-relocation provisions to future purchasers of park land. DCA personnel were probably unaware of the EDA policy and conditions on the award of grants. The subsequent dispute among EDA, the Palmer Redevelopment Authority, and the developer over compliance with the EDA conditions has brought the project to a standstill over the past 18 months. DCA has not intervened in an attempt to mediate the dispute until very recently, despite the large annual subsidy payments from the Commonwealth (the largest subsidy to any state-aided project), and DCA's position as a neutral but interested party. As a result of the problems with the Palmer project, EDA officials will likely be reluctant to support other state-assisted projects.

Despite the limited resources at the state and local levels for
supporting industrial land development, DCA has not sought information on EDA funding priorities and the availability of grant funds, or encouraged redevelopment authorities to apply for public facilities grants. In addition, although many redevelopment authorities have maintained useful relationships with SBA 502 Local Development Corporations to assist firms which qualify for low cost SBA loans for plant and equipment, DCA has never attempted to establish a relationship with the area office of the Small Business Administration in order to expedite the processing of applications for SBA assistance from firms in state-assisted projects, assist in the formation of Local Development Corporations in communities where they do not exist, or obtain the cooperation of SBA in targetting resources to state-assisted projects.

Many examples of problems resulting from a lack of regional-federal, state-regional, state-local, federal-local, regional-local, and intra-local inter-actor information flows can be added to those cited above. A reading of the cases in this report provides considerable evidence of coordination weaknesses. The critical point to be made with respect to all of these failures of inter-actor communication is not simply that contacts should have been made, but that no formal machinery existed for the flow of information among project participants in an ongoing and systematic fashion.

Program Conceptualization and Joint Decision Making Across State Agencies

The absence of an adequate machinery for inter-agency information flows both reflects, and perpetuates, the failure of state agencies in Massachusetts to conceptualize and make decisions in terms of programs rather than, as is the case, line agency functions. Table 1 indicates that, with the exception of the Development Cabinet, the units of state government involved in activities related to
economic development are organized in the familiar functional or line agency form. Functional forms of organizations serve the purpose of increasing specialization and, therefore, technical expertise in specific areas, such as consumer affairs and environmental affairs. The number of specialists that need to be hired by an organization are minimized by the functional form because specialists are pooled together and shared on a variety of projects and programs. For example, a single environmental impact specialist can review all environmental impact statements related to the projects of different agencies. However, inasmuch as the tasks of organizations require varying amounts of participation from specialized personnel in changing sequences, formal integrating mechanisms must be employed in order to complete tasks on time while fully utilizing all specialist resources. The greater the complexity and uncertainty of the task, the less pre-planning can occur, and the more integrating devices are required to accomplish tasks without waste in resources and extended periods of time. Thus, gains through specialization must be judged against loses in the ability of organizations to manage programs or projects which require the participation of different functional specialists.

As detailed by Galbraith, the following sequence of integrating devices must be employed in additive fashion to deal with greater degrees of task uncertainty and complexity, while maintaining the basic functional form, in order to effectively and efficiently manage projects and programs:

* rules and regulations for predictable and repetitive activities;
* hierarchy for dealing with unpredictable and unique activities;
* targeting or goal setting to reduce the referral of exceptions through the hierarchy by bringing decisions down to the points of action;

* investment in vertical information systems to enable managers to handle more information; and

* lateral forms of organization which cut across lines of authority: direct contact between two people, a liaison role, task forces, teams, integrating roles, managerial linking roles, and matrix forms of organization.

Although numerous actors in state government commonly participate, or should participate, on Chapter 121B industrial park projects, the Commonwealth does not employ adequate mechanisms for viewing and managing the resource commitments from different units to projects as a single urban industrial economic development program directed toward the achievement of publicly valued objectives. Similarly, although numerous units of state government perform activities which are directed toward achieving state economic development objectives, the lack of integrating mechanisms within state government prevents different economic development resources from being applied together to meet objectives. The weaknesses of program conceptualization and joint decision making across state agencies can be attributed to the inadequacies of current integrating devices.

The rules and regulations for the Chapter 121B program are of limited usefulness for coordinating the activities of various government units because of the unique character of individual projects, and applicability of the regulations to residential, commercial, and industrial projects. Inasmuch as most industrial park projects should involve the participation of units under the jurisdiction of a minimum of three secretariats (Transportation and Construction, Economic Affairs, and Communities and Development), the Development Cabinet is the lowest point in the hierarchy at which shared authority exists for a project. However, the kinds of decisions required for
the coordination of project activities are too detailed for the attention of secretaries. The Development Cabinet would quickly become overloaded with decisions if the coordination of activities on individual 121B, and other projects depended upon Cabinet action. Moreover, the previously noted limitations of the Cabinet reduce its usefulness for achieving coordination: ex. the lack of staff to prepare program analyses and propose options; the weakness of the vertical authority structure; and the absence of an information system for reporting on program activities among the agencies of the Cabinet.

In order to limit the number of decisions that must be referred up through the hierarchy to the Cabinet, decision making should be brought down to the program manager level and coordination achieved through goal setting and targets. However, the Commonwealth has not employed many of the basic methods for fostering program conceptualization and joint decision making through goal setting:

(a) the state budget is not organized by programs; a program budget would identify the expenditures of different units of government pursuing the same objectives and enable decisions on expenditures to be based on complementary activities;

(b) the state budget does not specify outputs to be achieved by units and, therefore, does not encourage program managers to plan together to meet specific objectives;

(c) the Office of State Planning does not prepare comprehensive economic development plans which specify how state resources are to be combined to achieve objectives;

(d) the capital budget is not based on the programs and activities of state units involved in economic development.

The only information system for reporting on the activities of state agencies involved in economic development consists of the periodic reports of secretariats to the Governor's office on the status of major projects. Despite the complexity and uncertainty
of industrial park development tasks, DCA has no system for collecting and reporting information on the impacts, status, or problems of individual Chapter 121B projects.

No forms of lateral organization have been employed within state government to manage projects and programs other than the Development Cabinet.

A variety of negative consequences have resulted from the lack of program conceptualization and joint decision making across state agencies with respect to 121B industrial projects:

1. Projects have not utilized all of the specialized state tools and resources which could have contributed to effective and efficient performance.

2. An assessment of the benefits and costs of a Chapter 121B industrial park project would not encompass all of the costs borne by the state.

3. Key personnel responsible for economic development policies and programs in the Office of State Planning, the Department of Manpower Development, and the Department of Commerce and Development have been unaware of the existence of the Chapter 121B industrial park projects. As a result of its "urban renewal" label, Chapter 121B is generally viewed as a downtown and housing program comparable to its discredited and abandoned federal parent and namesake. Top managers within DCA share this misconception.

4. The Bureau of Urban Renewal has failed to manage the program with an output orientation directed toward the achievement of economic development objectives.

5. DCA personnel have been left out of most policy and program formulation work related to industrial development.

6. Reviews of state government economic development efforts have failed to note the state's $10 million commitment and assistance to 15 industrial parks throughout the Commonwealth.

7. A potentially valuable data source for studying the motivations for business location decisions in the state, and the expansion, birth, and relocation of firms in urban locations in the state, has been ignored.

8. Personnel in state agencies are given no direction or incentives to cooperate with DCA on industrial park projects.

9. State agencies are unable to decide on internal priorities on the basis of Chapter 121B industrial park projects. For
example, highway expenditure decisions are not related to 121B projects.

(10) Local economic development actors are unable to easily grasp the full range of tools available at the state level for undertaking economic development projects.

(11) The legislature and the executive are unable to compare the costs and benefits of the different state programs.

(12) Little impetus exists to creatively combine resources to achieve economic development objectives.

Creative Combination of Development Resources

As a consequence of inadequate inter-actor information flows, and too few integrating devices within state government for fostering program conceptualization and joint decision making across state agencies, the Commonwealth has failed to combine state resources needed to effectively implement Chapter 121B industrial park projects or take advantage of opportunities presented by projects for creatively combining the efforts of different units of state government to promote economic development objectives.

As noted in the fifteen project cases in this report, almost all Chapter 121B industrial parks have needed the assistance of the Departments of Commerce and Development and Manpower Development for marketing property, designing marketing strategies to meet local development objectives, and establishing employment programs for the training and hiring of unemployed persons. In numerous instances, projects have not fulfilled their potential for achieving positive employment benefits, despite the disposition of property to businesses, because of an absence of effort to insure the hiring of the unemployed. Employment training programs, such as CETA and the Training Assistance Program, have not been targeted to 121B projects to assist in marketing and contribute to achieving positive employment impacts.
In addition to the negative effects on all projects from poor coordination, many examples of missed opportunities for achieving state economic development objectives through the creative combination of resources can be cited. For example, despite the large amount of federal funds available for energy research and demonstration projects, and a growing federal interest in small scale hydroelectric power, DCA has made no effort to contact the state Energy Policy Office or Office of State Planning to investigate the possibility of obtaining a federal grant for studying the potential, and developing a demonstration project, for the industrial reuse of the abandoned millraces in the Holyoke project area. The millraces are a clean and virtually costless power supply in the highest energy cost region in the nation and were the original impetus for the industrial development of Holyoke. Over the July 4th weekend, the millraces in the Holyoke project area were filled with concrete (other millraces remain in Holyoke and other cities). The City of Holyoke and the Commonwealth of Massachusetts may have passed up a unique opportunity for achieving economic advantages and notoriety, and developing a project with implications for the economic development of the entire region.

The Peabody project presents the Commonwealth with a rare opportunity for attracting major out-of-state firms to the state and achieving substantial employment benefits. The park has the potential to be designed, marketed, and maintained as a first class park for "blue chip" companies because the large property is one of the most attractive remaining industrial sites along Rt. 128. However, the effectiveness of the project in meeting state economic development objectives will depend largely on the ability of DCA and the redevelopment authority to skillfully manage the project with the
assistance of other state agencies.

Redevelopment authorities commonly view environmental regulations and review processes as obstacles to development rather than as legitimate requirements which may lead to more physically desirable projects. Despite DCA's responsibility for reviewing project environmental impacts and minimizing negative environmental effects, the Bureau of Urban Renewal has made little effort to assist redevelopment authorities in planning projects to serve environmental needs, or obtain the services of departments within the Executive Office of Environmental Affairs to aid projects. In the case of Peabody, DCA should pursue the possibility of securing a grant for the preservation of an open area within the project, that would enhance the physical appearance and marketability of the project.

Although the construction of highways and bridges by the Department of Public Works has proven to be important for every Chapter 121B industrial park project, DCA has not cooperated with the DPW to target public works investments to approved projects or create opportunities for industrial park development in needy communities. Evidence indicates that few opportunities exist in older cities for industrial park development due to inadequate access to major highways, and that opportunities for industrial parks can be created through selective highway investment.

Although the Massachusetts economy is characterized by a relatively high proportion of small businesses, the driving force of the state economy has been the start-up and growth of high technology and new product firms, and cities in the Commonwealth in need of economic development efforts may provide "incubation" economies which enable small under-capitalized firms to start-up and grow, DCA has not encouraged redevelopment authorities to dispose of land to local Economic Development and Industrial Corporations, Industrial
Development Commissions, or Local Development Corporations for the construction of modern industrial space for lease to small marginal firms. The "incubation hypothesis" holds that marginal businesses start-up in cities because of the availability of business services and inputs which new firms cannot internalize. Whereas Massachusetts has an abundance of cheap old industrial space, new industrial space in attractive locations is rarely built for lease to small firms. Neither DCA nor the Department of Commerce and Development has attempted to test whether the "incubation hypothesis" has merit for Massachusetts cities, by assessing the demand for small amounts of modern, leased industrial space.

As indicated in the case on Brockton in this report, an analysis of the economic base of Brockton reveals a high percentage of small firms. Existing industrial space available for rent may present inefficiencies, such as poor highway access, which dampen the start-up and growth of firms. Private developers may not be meeting the demand for new leased space for small firms due to the risk and/or financial unattractiveness of such space. Thus, the provision of modern space for lease to small firms may satisfy an unfilled demand and, thereby, contribute to the growth of the state economy and the economic development of depressed urban centers. The Commonwealth may be neglecting an opportunity for achieving its avowed objective of urban economic development. A program which combines the provision of modern space, capital for equipment, and funds for manpower training to small firms might result in significant net economic benefits for the state.

Finally, despite the professed commitment of state policy to the revitalization of Massachusetts' older cities, and support for community development corporations and other local development
organizations operating in these older cities, the Chapter 121B program has not been used in conjunction with the industrial development efforts of such organizations. As a result, the Commonwealth finds itself subsidizing industrial parks in such prosperous communities as Woburn and Peabody but providing mere verbal support for developments in such needy communities as Boston, Haverhill, and Springfield. The policy of encouraging the economic development of older cities is partly based on the view that the state reaps greater net benefits through reduced costs for welfare payments and services, and the employment of unemployed persons, by developing depressed communities, than with continued suburban and ex-urban growth. However, the Commonwealth has failed to combine development resources and programs to achieve these valued objectives.

Management of Project Tasks

Despite the complexity of the planning and execution of Chapter 121B industrial park projects and the need for the participation of numerous actors at the municipal, state, and federal levels, DCA has placed all of the responsibility for project implementation with the redevelopment authorities and has played a passive monitoring role. Neither the components of the project plan nor the management practices of DCA have provided an adequate basis for the coordination of project tasks. The fifteen project cases in this report provide detailed accounts of some of the many coordination problems which have occurred during the implementation of projects.

Examples of problems which have resulted from inadequate attention to the integration of tasks include the following:

(a) The participation of the Environmental Impact Review division of the Executive Office of Economic Affairs as the last step in the project approval process has resulted in costly and time consuming delays to make plan changes and a neglect of environmental needs in the initial planning for projects.
In the case of Palmer, EDA provided a planning grant without notifying DCA or the Regional Planning Commission, and the expenditure of federal funds had the effect of preventing the change of the location for the project to a less environmentally sensitive site.

In the case of Holyoke, planning was completed and land assembled for the project before the redevelopment authority received information from DPW on the proposed location for a highway through the project area.

In the case of Fitchburg, DCA did not review the grant application submitted to EDA for compliance with the Chapter 121B rules and regulations and project plan and the grant provided for above ground installation of utilities in violation of both the plan and the regulations.

In the case of Woburn, project marketing has been adversely affected by the seven year delay in the construction of a bridge by DPW.

The above findings on the importance of coordination for managing Chapter 121B industrial park projects, and weaknesses of the past and current efforts at integration, suggest that additional integrating mechanisms are necessary. The tasks required to efficiently and effectively implement an industrial park project appear to demand a high degree of both differentiation and integration. The various individuals, groups, and organization units participating on a project should be highly differentiated because they vary widely in the extent of their involvement, the degree of uncertainty they face in performing their tasks, and the importance of their participation. On the other hand, actions must be well integrated in order to achieve efficient and effective performance due to the high degree of interdependence among tasks.

In general, project implementation tasks manifest great uncertainty and a considerable amount of information must be processed by actors during task execution in order to perform efficiently and effectively. The uncertainty of tasks is a function of the limited expertise of key actors, such as the redevelopment authority staff.
and board members and DCA personnel, and the great amount of information required to perform tasks. The following characteristics of 121B industrial projects account for the considerable demands for information processing:

1. the diversity of outputs of projects: employment growth, jobs for the unemployed, positive net fiscal flows to the municipality, the elimination of blight, multiple reuses, the attraction of out-of-state firms, etc.

2. the many resource inputs required for projects: planning consultants, lawyers, municipal, state and federal funds, manpower training monies, marketing assistance from DCD, municipal public works, etc.

3. the great number of tasks in planning, executing, and marketing projects and the difficulty in achieving valued objectives.

4. the dependence on the decisions of market actors and the behavior of the national and regional economies for the outcomes of projects.

The Chapter 121B program has suffered from inefficient and ineffective performance as a result of lacking sufficient integrating mechanisms and lateral forms of organization for processing the necessary amount of information.

The above examination of integration problems indicated that Massachusetts' government has not devoted sufficient attention to the basic coordination mechanisms: rules, regulations, and procedures; hierarchy; targetting or goal setting; and vertical information systems. In addition, the high degree of task uncertainty associated with industrial park projects, the management limitations of Massachusetts government (i.e. weak vertical authority structure, lack of a program budget, absence of capital budgeting, etc.), and the common weaknesses of public sector organizations, suggest that lateral forms of organization should be introduced to supplement the basic integrating mechanisms and the Development Cabinet. With respect to the coordination of activities among local, state, and federal actors,
the tools and strategies of project management should be applied to effect integration. The reliance on integrating mechanisms to achieve coordination is accomplished in an additive fashion with each device contributing to the capacity of an organization to deal with greater degrees of task uncertainty.

**RECOMMENDATIONS**

Rules, Regulations, Procedures:

Rules coordinate actions by specifying proper behavior in advance of situations. Rules stabilize the operations of organizations by eliminating the need to treat situations as unique.

However, rules are useful only for situations and responses that can be anticipated in advance. Although the commonwealth relies heavily on rules and regulations to manage the Chapter 121B program, the high degree of task uncertainty associated with industrial park projects does not allow for a reliance on rules and regulations to achieve coordination. Nevertheless, some changes can be made to the current rules, regulations, and procedures to improve coordination.

**RECOMMENDATION:** DCA SHOULD ESTABLISH PROCEDURES WITH THE AREA EDA OFFICE FOR THE PROCESSING OF GRANT APPLICATIONS FOR STATE ASSISTED INDUSTRIAL PROJECTS

DCA should review all grant applications submitted to EDA for state assisted projects for compliance with state rules and regulations and the accuracy of information. In addition, DCA should assume responsibility for assuring that firms and developers execute the four agreements required by EDA as conditions for the receipt of grant funds.

**RECOMMENDATION:** THE REQUIREMENTS FOR THE PROJECT PLAN SHOULD BE AMENDED TO INCLUDE THE FOLLOWING COMPONENTS:

- DEVELOPMENT STRATEGY AND RATIONALE FOR STRATEGY: an account of the local, state, and federal resources to be used to achieve specific development objectives, and a justification of the strategy proposed;
* PARTICIPANT APPROVALS AND RESOURCE COMMITMENTS: a listing of all of the actors involved with the project and descriptions of the roles they are to play; a listing of all of the resource expenditures required; and evidence of commitments from all participants;

* A REPORT ON THE DESIGN OF THE PROJECT MANAGEMENT SYSTEM: a discussion of external, parent, and client environmental considerations and the efforts of the redevelopment authority to respond to these issues (for example, for a project in a municipality with a community development agency, a description of the role of the agency and reporting arrangements); an account of how the authority is going to achieve coordination at the local level;

* A REPORT ON PROJECT TASKS: a breakdown of work packages of activities; a network diagram, a milestone chart, and inter-actor reporting methods.

Hierarchy:

Managerial roles are arranged in a hierarchy in order to collect information and make decisions with respect to situations not routinely faced by an organization. As exceptions arise, decision making is referred upward in the hierarchy to a point where a shared manager exists for all of the subunits dealing with the new situations. Inasmuch as a hierarchy also structures authority and reward relationships, managers can direct the behavior of task performers in lower units.

The major weakness of a hierarchy is the finite capacity of each manager for handling information. The greater the degree of task uncertainty faced by an organization, the more delays occur between the time of the upward referral of information, and the receipt of a decision by operating personnel. In addition, the hierarchy is limited as a coordinating mechanism in the public sector by the weakness of the vertical authority and reward structure.

The weak vertical authority structure of Massachusetts' government and the high degree of task uncertainty associated with industrial
park projects limit the usefulness of the state government hierarchy for coordinating project tasks.

Targeting or Goal Setting:
As an organization faces a high degree of task uncertainty the hierarchy is soon overloaded with exceptions and it becomes more efficient to allow lower level employees more decision making authority. In order to insure that personnel choose the appropriate responses for achieving coordination among many different units, an organization must set goals or targets.

However, the ability to set targets specific enough to coordinate activities is a function of the degree of task uncertainty. As noted above, Chapter 121B industrial park projects manifest a very high degree of task uncertainty as a result of the numerous inputs, variety of outputs, and considerable difficulty in achieving objectives which characterize projects, and the limited skills and experience of project participants. Targets cannot be easily defined because projects are affected by many external, parent, and client environmental factors. Nevertheless, a number of target setting mechanisms should be introduced in order to improve the coordination of activities.

RECOMMENDATION: DCA SHOULD PRESS THE DEVELOPMENT CABINET TO CALL FOR THE ADOPTION OF A PROGRAM BUDGET FORMAT FOR THE STATE BUDGET

The Development Cabinet should pursue the recommendation of the Governor's Management Task Force to establish a budget organized by program categories and responsibility centers.

RECOMMENDATION: DCA SHOULD PRESS THE DEVELOPMENT CABINET TO ESTABLISH A "MANUAL" PROGRAM BUDGET SYSTEM FOR THE AGENCIES INVOLVED IN ECONOMIC DEVELOPMENT ACTIVITIES IF THE PROGRAM FORM IS NOT ADOPTED FOR THE STATE BUDGET

RECOMMENDATION: THE STATE ECONOMIC DEVELOPMENT PLAN PREPARED BY THE OFFICE OF STATE PLANNING SHOULD BE AN ANNUAL REPORT WHICH SPECIFIES OBJECTIVES FOR INDIVIDUAL UNITS AND
HOW STATE RESOURCES ARE TO BE COMBINED TO ACHIEVE OBJECTIVES

Vertical Information System:
Vertical information systems enable organizations to process greater amounts of information during the execution of projects. Information systems increase the ability of managers to plan projects prior to their initiation and to replan in response to exceptions.

Inasmuch as no vertical information system exists in Massachusetts state government that deals with the status and impacts of Chapter 121B industrial projects, coordination should improve considerably if DCA adopts the various recommendations in this report on collecting and reporting information. However, numerous factors limit the usefulness of any information system for achieving the desired degree of coordination for industrial projects:

* a "global" data base which includes information on actors outside of state government is needed because many project participants are not units of state government, and outside actors are likely to be reluctant to provide information on a regular basis;

* the formalization of information collection and reporting in a system requires personnel with the expertise to design and use such a system and an appreciation of the need for the system; personnel with these qualities are not likely to be available at the state or local level;

* the information needed for the system may not be easily obtainable at the local level.

RECOMMENDATION: AN INFORMATION SYSTEM SHOULD BE CREATED TO PROVIDE THE OFFICE OF FEDERAL-STATE RELATIONS WITH INFORMATION ON ALL PROJECTS AND PROGRAMS IN THE STATE THAT DEPEND ON FEDERAL ASSISTANCE AND INFORM UNITS OF STATE GOVERNMENT OF THE AVAILABILITY OF FEDERAL FUNDS FOR ECONOMIC DEVELOPMENT

Lateral Forms Of Organization:
The provision of more information to an organization through an information system will overload the decision making mechanism if the mechanism is not expanded to process the additional information. The creation of various formal lateral forms of organization serves
to increase the capacity of an organization to process information during task execution. Lateral forms of organization cut across vertical lines of authority and lower the point of decision making to where the relevant information exists. Whereas vertical information systems are most useful for situations involving standard, quantitative information, and an organization with a strong vertical authority and reward structure, lateral decision processes are necessary to supplement information systems in situations involving qualitative and nonstandard information, and an organization with a weak vertical structure.

Although some forms of lateral relations usually arise spontaneously when the need exists, lateral forms of organization may not develop when obstacles or disincentives to lower level cooperation are present; for example, parochialism or political opposition. The following forms of lateral organization are considered in order of increasing cost and responsiveness to greater task uncertainty.

(1) Direct Contact Between Two Managers Or Project Participants Who Share A Problem

The direct contact between two project participants is the simplest form of lateral decision process and is often employed by DCA for problems with Chapter 121B projects. However, the usefulness of the direct contact approach is limited by a number of factors:

* Few incentives exist for personnel from different units of state government to cooperate. Inter-agency communication is not a behavioral norm in Massachusetts state government and some agencies, such as DPW, have strong vertical orientations which deprive lower echelon personnel of the authority to make decisions.

* Middle level managers are usually more concerned with short term departmental success than with longer term effectiveness in working with other units.

* Units often view their mandates differently; for example, DPW may view its role as constructing highways and not as economic development.
* The occasional nature of direct contacts does not address situations which require regular consultation due to high degrees of task uncertainty and inter-actor interdependence.

* Direct contact is limited to two actors.

Goal setting and direction from managers high in the hierarchy can improve the chances for achieving coordination through direct contacts.

(2) Liaison Roles To Link Two Units Which Have Substantial Contact

When the volume of contacts between two units is substantial, a special liaison relationship can be created so that an ongoing relationship is established and the responsibility for communication is assigned to specific personnel. The liaison mechanism suffers from the same limitations as the direct contact approach and is inadequate for situations of great task uncertainty and task interdependence.

RECOMMENDATION: DCA SHOULD ESTABLISH AN ONGOING LIASON RELATIONSHIP WITH THE DEPARTMENT OF PUBLIC WORKS TO EXCHANGE INFORMATION AND COORDINATE ACTIVITIES ON PROJECTS INVOLVING BOTH UNITS

DPW should transmit information to DCA on a regular basis on projects in planning, funding priorities, and construction schedules. DCA should review proposed industrial projects which involve DPW participation with DPW in order to assess whether the costs and benefits of the projects warrant DPW expenditures, and establish a timetable for activities. DCA and DPW should meet on a regular basis to examine the status of projects.

RECOMMENDATION: DCA SHOULD ESTABLISH AN ONGOING LIASON RELATIONSHIP WITH THE AREA EDA OFFICE TO MONITOR THE AVAILABILITY OF FEDERAL FUNDS FOR INDUSTRIAL PROJECTS AND ENCOURAGE THE USE OF FEDERAL GRANTS WITH STATE ASSISTED PROJECTS

In addition, DCA should assist local nonprofit public purpose organizations in applying for federal grants and in arguing for grant approval. DCA should assume responsibility for monitoring the flow of federal funds to projects in the commonwealth and increasing the use of federal funds for public purpose projects in the state.

RECOMMENDATION: DCA SHOULD ESTABLISH AN ONGOING LIASON RELATIONSHIP WITH THE AREA OFFICE OF THE SMALL BUSINESS ADMINISTRATION TO EXPEDITE THE PROCESSING OF APPLICATIONS

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FOR SBA ASSISTANCE FROM FIRMS IN STATE ASSISTED PROJECTS AND INCREASE THE USE OF SBA PROGRAMS IN STATE ASSISTED PROJECTS

In addition, DCA should assist communities in forming SBA 502 Local Development Corporations. DCA should also assume responsibility for monitoring SBA activity in the commonwealth and increasing the use of SBA programs in the state.

(3) Create Task Forces Composed Of Many Project Participants

Unlike liaison roles and direct contact strategies which are appropriate for coordinating the activities of two actors, task forces are established for joint decision making involving many participants. Task forces are temporary groups of full or part time members formed with representatives from each of the affected units.

The temporary task force form of lateral organization is inappropriate for managing the industrial park program because the same units of state government must be integrated on many projects on a continuing basis.

(4) Employ Teams On A Permanent Basis For Recurring Inter-actor Decision Making

A team is a group decision making mechanism formed on a permanent basis to respond to a situation with a high degree of task uncertainty. Teams can be formed at different levels of the hierarchy to deal with different problem areas. In order to be effective, teams require an information system for communicating on the activities of members and supplying relevant "external" information for decision making.

RECOMMENDATION: AN ECONOMIC DEVELOPMENT PROGRAM AND POLICY DEVELOPMENT TEAM SHOULD BE FORMED WITH PROGRAM AND DIVISION MANAGERS FROM THE UNITS WHICH ARE MEMBERS OF THE DEVELOPMENT CABINET

This permanent team mechanism of middle management personnel should deal in a more detailed fashion than the Cabinet with the coordination of activities among units, the exchange of information, the creation of economic development programs, the initiation of projects, and the monitoring of the performance of economic development projects and programs. Middle managers should have the necessary de-
tailed knowledge and management control of projects and programs to integrate program operations and pursue innovations.

**RECOMMENDATION:** AN URBAN INDUSTRIAL PROJECT DEVELOPMENT TEAM SHOULD BE FORMED WITH STAFF REPRESENTATIVES FROM THE UNITS OF STATE GOVERNMENT WHICH PARTICIPATE ON SUCH PROJECTS

The team should meet on a regular basis and include representatives from the proposed Office or Division of Community Economic Development in DCA, the Department of Commerce and Development, the Department of Manpower Development, the Office of State Planning, and the Department of Public Works. Representatives from other units of state government should also be permanent members of the team but should attend meetings only when appropriate. The team should focus on the tasks necessary to implement individual projects and achieve development objectives.

**RECOMMENDATION:** THE DEVELOPMENT CABINET SHOULD BE GIVEN ITS OWN STAFF RESOURCES TO ENABLE IT TO FULFILL ITS POLICY FORMULATION AND PROGRAM DECISION MAKING FUNCTIONS

As noted by the Governor's Management Task Force in their report, the Cabinet needs staff for preparing options papers, program analyses, and proposals for management changes to achieve improved coordination across agencies. In addition, the Development Cabinet should assume an active role in monitoring the implementation of projects and programs and their progress in achieving development objectives.

**RECOMMENDATION:** THE OFFICE OF STATE PLANNING SHOULD CREATE AN ECONOMIC DEVELOPMENT INFORMATION SYSTEM FOR REPORTING TO THE DEVELOPMENT CABINET ON THE STATUS AND IMPACTS OF PROJECTS AND PROGRAMS

**RECOMMENDATION:** THE SECRETARY OF TRANSPORTATION AND CONSTRUCTION MUST OBTAIN BUDGET CONTROL OVER THE DEPARTMENT OF PUBLIC WORKS IN ORDER FOR THE DEVELOPMENT CABINET TO INTEGRATE STATE INFRASTRUCTURE INVESTMENTS WITH OTHER ECONOMIC DEVELOPMENT ACTIVITIES

(5) Create An Integrating Role When The Leadership Of Lateral Processes Becomes A Problem

An integrator acts as a surrogate for the general manager (ex. Governor) who lacks time to manage individual projects. The integrator is not responsible for accomplishing project tasks but for coordinating the activities of the participants on a project. The challenge for the individual acting as an integrator is to influence the decision making behavior of individuals who are not under his direct authority. In order to achieve coordination, the integrator
relies on his contact with the general manager, access to information, competence in the areas of greatest task uncertainty, and skills at interpersonal dealings.

A member of the Governor's staff, or project manager from the Office of State Planning or Development Cabinet, acting as an integrator on Chapter 121B industrial projects, would have a difficult time gaining influence over state agencies due to the weak vertical structure and lack of an information system in Massachusetts state government, and an even more difficult time dealing with local project participants who are not likely to respond to the authority of the Governor. Nevertheless, if problems develop with coordinating activities among members of the urban industrial project development team, use of an integrator may be a worthwhile next step.

RECOMMENDATION: THE DEVELOPMENT CABINET OR OFFICE OF STATE PLANNING SHOULD HAVE PROJECT MANAGERS TO ACT AS INTEGRATORS ON MAJOR HIGH PRIORITY AND HIGH VISIBILITY PROJECTS AND PROJECTS WHICH REQUIRE ESPECIALLY RAPID EXECUTION

(6) Shift From An Integrating Role To A Linking-Managerial Role When Faced With Substantial Differentiation

A reliance on the expertise of the integrator to achieve integration is inadequate when the degree of task uncertainty and goal diversity is too great to base decisions on facts, or participants disagree over goals rather than means. In such situations, the integrator role can be transformed into a managerial-linking role by increasing the power of the integrator in the decision process. Although the linking manager does not have line authority over the participants on a project, he can be given approval power in the decision process, such as authority over budget requests submitted to the general manager, and a role in initial planning.

In light of the weak vertical authority structure of public organ-
izations in general, and Massachusetts state government in particular, managers in line agencies are capable of successfully resisting any move to establish a linking-managerial role for Chapter 121B or other economic development projects.

(7) Establish Dual Authority Relations At Critical Points To Create A Matrix Design

For organizations which face task demands that require both a high degree of specialization and a high degree of integration, the integrator role can be strengthened by establishing a dual authority relationship. At some level of the organization a manager becomes a member of both a resource or functional unit (ex. DPW) and a product or program unit (ex. Bureau of Urban Renewal). Thus, the matrix organization form creates a power balance and adversary relationship between the roles of functional specialist and project participant.

A move to a matrix form of organization would represent a radical change for the design of government organizations and would require legislative action. Line agency managers would certainly resist the attempt to reduce their power and operating personnel would likely object to the dual reporting requirements. Inasmuch as the different departments of state government are involved to varying degrees on Chapter 121B industrial projects, dual reporting relationships would not be appropriate for all units. In addition, despite the demands of economic development projects for both a high degree of differentiation and integration, most government activities appear to require more functional specialization than integration.

Creation Of Self-Contained Tasks:

Vertical information systems and lateral forms of organization are methods for increasing the capacity of an organization to process information in the face of the greater volumes of information needed
to efficiently and effectively perform tasks of higher degrees of uncertainty. The creation of self-contained tasks is an organization design alternative that responds to greater task uncertainty by reducing the need for information processing.

The amount of information that an organization must process to achieve a level of performance can be reduced if the design of the organization is changed from a functional form to one in which each group contains the resources required to perform its mission. The self-containment strategy shifts the authority structure of an organization from a functional basis, such as skills, resources, or inputs, to an output or project basis. Information processing needs are reduced in two ways: (1) a single collection of resources (personnel, etc.) deals with a more limited diversity of outputs; and (2) specialization is reduced as employees take on multiple functions. In addition, self-containment reduces the need for information processing because exceptions travel through fewer levels of the hierarchy before reaching a shared superior for all of the affected resources.

The critical variable for a self-containment approach is the scope of activities that must be contained. The costs of self-containment are those connected with a reduction of skill specialization and economies of scale. If a group internalizes resources that are normally shared, it must either reduce the specialization of resources which otherwise would be used on only a limited basis (ex. manpower training expertise), or duplicate the specialization of the entire organization in the group.

RECOMMENDATION: RESPONSIBILITY FOR THE STATE URBAN INDUSTRIAL DEVELOPMENT PROGRAM SHOULD REMAIN WITH DCA RATHER THAN BE TRANSFERRED TO THE DEPARTMENT OF COMMERCE AND DEVELOPMENT OR ANY OTHER UNIT UNDER THE JURISDICTION OF THE EXECUTIVE OFFICE OF ECONOMIC AFFAIRS
Although the units under the jurisdiction of the Executive Office of Economic Affairs (EOEA) have the primary responsibility within state government for economic development programs, and the effectiveness of industrial park projects is dependent upon coordination with departments within the EOEA, the tasks required for a state urban industrial development program require a degree of specialization that would be lost if the program were transferred to the Department of Commerce and Development.

Upon initial consideration, a number of factors suggest that the industrial development program is inappropriately located within DCA: the Departments of Community Affairs and Commerce and Development were parts of the same agency when the Chapter 121B legislation was enacted; the two departments were separated in the late 1960s with DCD taking over economic development functions and DCA assuming housing and urban renewal functions; and the industrial development program has been incorrectly viewed and operated by DCA as an urban renewal rather than an economic development program. However, public purpose industrial park projects have characteristics which distinguish the program from the other economic development activities of the Department of Commerce and Development:

(1) projects are initiated and carried out by local organizations;
(2) projects are developed to serve the economic development needs of individual municipalities; and
(3) projects consist of the development of land and physical improvements.

Whereas the Department of Commerce and Development approaches economic development from the point of view of statewide goals and the needs of businesses, the Department of Community Affairs deals with municipalities and views development from the point of view of physical development projects, the needs of individual communities, and the problems of poverty and depressed local economies. C.23B s. 3 of the General Laws of Massachusetts, which defines DCA's powers and duties, indicates that DCA is the principal state agency to "mobilize the human, physical, and financial resources available to combat poverty and provide economic training...(and) encourage and assist communities in the development, renewal, and rehabilitation of their physical environment..."

In addition, whereas the principal activities of the Department of Commerce and Development consist of assisting businesses and studying state economic development policy issues, DCA personnel work on various kinds of "projects" and deal with many types of local organizations. DCD's weak efforts to promote and assist Economic Development and Industrial Corporations (Chapter 121C), which are local public purpose economic development organizations, suggest that DCD personnel lack the ability and/or desire to relate to local development organizations. DCD currently lacks any staff with expertise in developing industrial parks and usually refers inquiries from local organizations to DCA.

Furthermore, a shift of the 121B industrial development program to DCD would only eliminate the need for coordination with one secre-
tariat, and integration problems would remain at the departmental level within the EOEA, and between the EOEA and other secretariats.

Thus, although this report establishes the need for improved coordination of industrial park projects with the Departments of Commerce and Development and Manpower Development, the need for DCA's specialized functions is a more compelling consideration that calls for the program to remain with DCA.

RECOMMENDATION: DCA SHOULD BE REORGANIZED TO INCLUDE A DIVISION OF COMMUNITY ECONOMIC DEVELOPMENT

Although DCA assists municipalities, deals with physical development projects, and views economic development from the point of view of community needs and poverty, the commonwealth lacks a line agency capability for assisting with the broad range of community economic development activities and addressing community economic development needs in a comprehensive fashion. Despite the state's policy commitment to the revitalization of the older urban centers of the commonwealth, no single unit of state government has the responsibility for providing urban development services. In addition, no unit of state government is responsible for monitoring and assisting the great number of local public purpose economic development organizations which exist in the state: EDICs, SBA 502 Local Development Corporations, Industrial Development Finance Authorities, Industrial Development Commissions, Community Development Corporations, Redevelopment Authorities, Community Action Agencies, municipal Departments of Community Development, etc.

The absence of a unit of state government responsible for community economic development has the following negative consequences:

* the commonwealth lacks information on the numbers of local public purpose economic development organizations and the activities, needs, and successes of these organizations;

* the commonwealth fails to make creative use of federal funds available for community economic development purposes;

* local actors are confused by the variety of state actors that deal in some fashion with community economic development;

* local actors feel that the state's avowed commitment to urban revitalization is a policy without any programmatic substance;

* information on successful models of urban economic development projects is not shared.

The organization of DCA should be changed from the present three divisions of Community Development, Community Services, and Social and Economic Opportunity, to the following four divisions:

* Housing
* Municipal Services
The Division of Community Economic Development should be composed of an Office of Urban Industrial Development, an Office of Central Business District Revitalization, an Office of Neighborhood Development, and an Office of Relocation. The Office of Urban Industrial Development would be responsible for monitoring and assisting local economic development organizations undertaking industrial projects. The office would have jurisdiction over state tools for industrial development, such as Chapter 121B for industrial projects and Chapter 121C (Economic Development and Industrial Corporations), and play an active role in obtaining federal funds from EDA and SBA. The Office of Central Business District Revitalization would be responsible for assisting communities with downtown redevelopment efforts. The office would have jurisdiction over state tools, such as Chapter 121B for commercial and residential projects and Chapter 121A, and provide consultative services to municipalities on possible redevelopment strategies (ex. SBA 502 Commercial Development Program). The Office of Neighborhood Development would control the Neighborhood Improvement Program and assist communities in developing neighborhood preservation and revitalization programs.

RECOMMENDATION: THE DESIRABILITY OF EXPANDING THE ROLE OF THE STATE LAND BANK TO PROVIDE A STATE VEHICLE FOR URBAN INDUSTRIAL DEVELOPMENT SHOULD BE EXPLORED.
BUSINESS CONTACT PROGRAM
Integration/Coordination

Findings:

The "Business Contact Program", operated by the Department of Commerce and Development (DCD) through its regional offices, is a major effort by the Commonwealth of Massachusetts to obtain information on the needs of, and provide assistance to, individual businesses. In addition to collecting information on problems faced by firms in the state, DCD obtains information on the expansion and relocation plans of businesses.

Inasmuch as DCD collects information on business location decisions, and establishes personal contact with firm executives, the Business Contact Program is a potentially useful tool for marketing state-assisted industrial park projects. At present, the marketing of Chapter 121B industrial projects is not coordinated with Business Contact Program activities. However, by providing redevelopment authorities with the names of firms considering expansion or relocation to a new site, and contact persons within these firms, and/or providing these firms with information on sites available at state-assisted parks, the Business Contact Program could assist in the marketing of Chapter 121B industrial projects. In addition, through such efforts DCD would be providing a service to firms seeking information on available industrial land. To the degree state-assisted industrial parks are developed to achieve public economic development goals, cooperation between DCA and DCD in this manner would contribute toward accomplishing these goals.

RECOMMENDATION: USE THE BUSINESS CONTACT PROGRAM OF THE DEPARTMENT OF COMMERCE AND DEVELOPMENT TO ASSIST IN THE MARKETING OF STATE-ASSISTED INDUSTRIAL PARKS

The Director of the Bureau of Urban Renewal should meet with the Director of the Business Contact Program in order to obtain the
cooperation of DCD, and establish policy and procedures with respect to the coordination of activities and exchange of information.

DCA should assume responsibility for collecting information on the availability and characteristics of land in Chapter 121B industrial park projects and forwarding the information to DCD. DCA should develop a one or two page form for presenting detailed information on individual projects, and a summary form for data on all projects. Information to be supplied on the forms should include such items as the number of acres and size of parcels available, the availability and costs of utilities, distance to major highways, characteristics of the community, and, if possible, a map showing the location of the project in relation to major highways. Information for completing the forms can be obtained from the completed "DCA Chapter 121B Industrial Park Survey" questionnaires and through the recommended new reporting requirements.

The Bureau of Urban Renewal should arrange with DCD a process for informing DCD personnel in the regional offices about the Chapter 121B industrial park program, the projects in execution in the state, and the role of the Business Contact Program in assisting in marketing. The Director of the Business Contact Program should determine whether completed copies of the forms on individual projects should be distributed by DCA directly or through the central office to DCD regional offices. DCA should supply copies of the completed forms to DCD for distribution to firms. A directive from the Commissioner of the Department of Commerce and Development should be sent to the regional offices calling for the promotion of land in state-assisted parks.

If the Bureau of Urban Renewal is transformed into an Office or Division of Community Economic Development as recommended in this report, the marketing assistance provided by the Business Contact Program can be extended to all industrial space and land projects sponsored by local public purpose organizations to achieve explicit public objectives; ex. EDIC's, Local Development Corporations, Industrial Development Commissions, Community Development Corporations.

Expected Benefits:

* provide immediate marketing assistance to struggling projects;
* add a service to those now provided to firms through the Business Contact Program;
* use an existing program to better serve state economic development objectives;
* more closely integrate the functions of DCD in dealing with the needs of businesses, with DCA's role in addressing the economic development needs of individual communities;
* gain responsiveness from redevelopment authorities in return for providing marketing assistance;
* target marketing efforts to firms considering moves, and match firms and industrial parks in regions of the state.
Costs:
* DCA staff time to prepare forms, assemble information, and instruct DCD personnel.

Actions Required:
* establish policy and procedures with the Director of the Business Contact Program;
* prepare forms and assemble information;
* present a brief proposal on the use of the Business Contact Program for marketing state-assisted projects to the Development Cabinet.

Time Horizon:
* Immediate

Constraints:
* Department of Commerce and Development may resist idea for fear of alienating businessmen;
* DCD personnel in the regional offices may lack enthusiasm for promotional efforts.

Complementary/Supporting Actions:
* creation of a state-wide computer data bank on available industrial land at DCD;
DUTIES OF ECONOMIC DEVELOPMENT SPECIALIST TO BE ADDDED TO STAFF OF BUREAU OF URBAN RENEWAL

Management Control: Programming/Organization Development

Findings:

The Bureau of Urban Renewal is grossly understaffed to efficiently and effectively carry out its varied responsibilities. One full-time staff position and 1/3 to 1/2 of the time of the Director of the Bureau of Neighborhood Improvement, Urban Renewal, and Relocation are devoted to managing activities related to Chapter 121B: (1) the exclusively state-aided urban renewal program (21 projects in execution; nine active projects which have received planning assistance; commercial, residential, and industrial park projects); (2) approximately 90 federally-aided urban renewal projects which the state also subsidizes; and (3) a number of non-aided development projects which must be reviewed and approved pursuant to the 121B rules and regulations (ex. Park Plaza, Wellington Circle).

In contrast, the Bureau of Urban Renewal was the largest and most active unit within DCA during the late 1960's and early 1970's, with a full-time staff of 14 and a full-time director who at one point was a commissioner.

Although the end of federal Title I funding for urban renewal, and the commitment of most of the authorized funds for the exclusively state-aided program, warranted a reduction in staff because of the drop in the initiation of new projects, the drastic cut in personnel was inappropriate in light of the demands of managing the approved projects, and the continued development
of new state-aided and non-aided projects. The tasks required to monitor and assist projects and address problems are often more difficult and time consuming than the staff activities during the planning of projects. Inasmuch as the Commonwealth is committed to substantial subsidies for projects presently in execution ($20 million total or 1 million/year over 20 years to exclusively state-aided projects and $70 million total or $3.5 million/year over 20 years to federally-aided projects), a need remains for DCA to manage projects to assure that state development objectives are being served. In addition, despite the serious deficiencies of the urban renewal program, many of the federally-aided projects which are being closed out by HUD, and the exclusively state-aided projects in execution, represent valuable opportunities for advancing state development objectives. Furthermore, the Chapter 121B statute continues to be applied to new projects in the Commonwealth, some of which are of major dimensions. Projects currently being reviewed by the Bureau include such high priority developments as Park Plaza, Wellington Circle, Charlestown Navy Yard, and Kendall Square. "Urban Renewal" may be dead as a specific program concept, a name applied to urban development projects, and a source of federal and state funding, but new publicly subsidized and assisted development projects continue to be initiated and the legacy of urban renewal remains in the numerous federally and state-aided projects which are active and/or offer potential for achieving valued benefits.

With respect to the Chapter 121B industrial park program
projects reaching execution of which 2 are completed), DCA staff resources are inadequate to manage the approved projects as economic development efforts directed at the achievement of state and local objectives. The skills necessary to successfully manage industrial park projects are distinct from those needed for commercial or residential projects: ex. techniques of economic base analysis to assess project feasibility and identify target industries for marketing; economic impact analysis involving job and multiplier effects; approaches to marketing industrial land; knowledge of industrial location theory; familiarity with types of industrial parks. At present, the single full time staff person lacks sufficient time to devote to the particular economic development assistance and monitoring activities recommended by this report. Therefore, an individual with industrial development expertise should be obtained to manage the industrial park projects. Moreover, an economic development specialist must be hired if the Bureau of Urban Renewal is to be transformed into an Office / Division of Community Economic Development as recommended by this report.

RECOMMENDATION: AN ECONOMIC DEVELOPMENT PLANNER / SPECIALIST / ANALYST SHOULD BE ADDED TO THE STAFF OF THE BUREAU OF URBAN RENEWAL

An economic development planner / specialist / analyst should be obtained by the Bureau of Urban Renewal in order to begin:

(1) redesigning the Chapter 121B urban industrial park development program from an "input oriented" urban renewal strategy focused on blighted parcels of land in any municipality to an "output oriented" program directed toward achieving public economic development objectives through industrial development in depressed communities and other localities where need or opportunity exist;

(2) redirecting the industrial development activities and
functions of the Bureau of Urban Renewal from an exclusive concern with Chapter 121B (and Chapter 121A) to develop a general capacity, and assume responsibility within state government, for providing industrial development assistance to municipalities and local organizations in the Commonwealth;

(3) reorienting the role of the Bureau of Urban Renewal, together with another individual hired to provide assistance with respect to downtown revitalization, from a unit functioning with reference to particular statutes (i.e. Chapters 121A and 121B) to the primary Office / Division within state government responsible for Community Economic Development activities.

With recent assignment of the Bureau of Urban Renewal to DCA's Division of Community Services, it may be possible to borrow a staff person with economic development expertise from the Office of Local Assistance, on a full or part time basis, until a permanent staff position can be secured.

Some of the initial tasks for the economic development specialist should include the following:

(a) assist redevelopment authorities in identifying target industries for marketing, developing marketing strategies, and marketing project property with reference to specific economic development objectives;

* instruct redevelopment authority staff in the use of the methodologies presented in the handbooks prepared by the Center for Community Renewal Studies at U.Mass. for conducting economic base studies and marketing industrial parks, and direct authority personnel to data sources for employing these methodologies;

Note: A staff member of the Bureau of Urban Renewal should be responsible for this education effort even if the Center for Community Renewal Studies is retained to provide instruction to authority personnel in the use of the handbooks because these methods of economic base analysis should be internalized by the Bureau as part of the broader attempt to manage the program in terms of outputs, and expand the functions of the Bureau to include provision of industrial development assistance to municipalities.

* negotiate agreements with redevelopment authorities on the respective tasks of authority personnel and the Bureau in preparing economic base analyses and formulating marketing strategies; the DCA economic development specialist should play a role in preparing the analyses for the following reasons: (1) the DCA specialist can assemble and prepare some of the data needed for all of
the projects from the same source more quickly than if inexperienced authority personnel search separately for the same type of information on their respective communities; (2) authority staff often lack the expertise and will to perform the required analyses and the active participation of the economic development specialist will provide skills and stimulate activity; and (3) the DCA specialist will be aware of the feasibility of utilizing state resources in marketing projects:

* use the information collected on the "Chapter 121B Industrial Park Survey" questionnaires to complete application forms for obtaining from the Economic Development Administration the computerized industrial location service print-outs which will identify the types of firms likely to be attracted to industrial parks; the EDA print-outs, which identify target industries by five digit SIC code and degree of location match, can supplement the economic base analysis; Dr. Destackleberg of EDA has agreed verbally to provide the service for four or five projects; therefore, unless EDA can be persuaded to provide the service to all of the state projects, the economic development specialist should select the four or five projects confronting the most difficult marketing problems to receive the service; an explanation of the computer service and a sample print-out are on file at the Bureau of Urban Renewal; each print-out will cost approximately $50 for computer time (but up to $150 worth of time has to be guaranteed for each project); in order to complete the application forms to receive the print-outs, the economic development specialist must gather additional data from published government sources;

* establish schedules with individual redevelopment authorities for the performance of marketing tasks with milestone dates for the completion of specific activities; the schedule should represent a commitment by both parties to complete the agreed upon tasks; with responsibility for tasks clearly specified, DCA will be able to notify redevelopment authority boards and local officials if authority staff fail to complete tasks as agreed, and authority staff will be in a position to demand action from DCA and explain a lack of progress to their boards if DCA does not satisfy its commitment; DCA can use the schedules to concentrate assistance efforts on those authorities which perform well;

* on the basis of the economic base analysis, the cases prepared as part of this report, and other available information (ex. LUM studies), the economic development specialist, in consultation with redevelopment authority personnel, should prepare a basic problem definition/needs assessment for formulating economic development objectives and a marketing strategy;
on the basis of the economic development objectives for projects agreed upon by the economic development specialist and the redevelopment authority staffs and boards, land disposition policy, and provisions to be included in land disposition agreements with respect to the performance of firms in meeting development objectives, should be established;

subsequent to the identification of target industries, and formulation of a marketing strategy (ex. performance provisions, local vs. national market area, ties to schools for research and development firms, etc.), the economic development specialist should work with redevelopment authorities using the marketing handbook prepared by the Center for Community Renewal Studies at U. Mass to detail the methods and approaches to be employed to advertise, contact firms in target industries, prepare literature, and respond to inquiries;

establish channels of communication with staff of the Department of Commerce and Development's Business Contact Program in order to inform them of the availability of land in state assisted industrial parks, gain their cooperation in promoting state assisted projects to firms seeking land, and obtain information on firms contemplating expansion or relocation; in addition, the economic development specialist should investigate with the Department of Commerce and Development the possibility of promoting state assisted projects to out of state firms (land costs can be reduced substantially to attract out-of-state firms);

seek the cooperation of the Department of Commerce and Development, the Department of Manpower Development, and redevelopment authorities in targeting the "Training Assistance Program", a customized manpower training program which firms can employ at no cost to train a work force, to state assisted industrial park projects, in order to support marketing efforts and help projects achieve economic development objectives related to the hiring and training of unemployed persons; in addition, the economic development specialist should pursue with the Department of Manpower Development the possibility of targeting portions of local CETA funds for job training programs in state assisted industrial parks, and obtain the assistance of the Department in working with local CETA sponsors and redevelopment authorities in establishing employment programs for projects;

establish a relationship with the area/regional office of the Small Business Administration in order to provide information to redevelopment authorities on SBA programs which may help to market property, expedite the processing of SBA loans and loan guarantees for firms in state-assisted
projects, monitor the amount and use of SBA funds in state assisted projects, assist organizations in communities in which state assisted projects are located to become Local Development Corporations which qualify for low interest SBA business loans for plant and equipment, and monitor the total amount and use of SBA loans and loan guarantees flowing into Massachusetts in comparison with the experience in other states;

* maintain communications with public and quasi-public sources of business capital at the state level, such as the Massachusetts Business Development Corporation, the Community Development Finance Corporation, the Massachusetts Industrial Mortgage Insurance Agency, the Massachusetts Industrial Finance Agency (proposed), and the Technology Development Corporation (proposed), in order to obtain information on the availability of capital, assist in expediting applications from firms in state-assisted industrial parks, and closely link state assisted projects with these capital sources; inasmuch as these public vehicles for business capital share many of the development objectives of the Chapter 121B industrial land development program, and the purported "capital gaps" which warrant the existence of these vehicles are most evident in the depressed urban centers in which Chapter 121B should operate, efforts should be made to target capital to state assisted industrial park projects;

* assemble information on the characteristics and availability of land in state assisted industrial park projects from the completed questionnaire, the cases in this report, and other sources for conveyance to the Department of Commerce and Development for the listing of projects in the state-wide computer data bank of available industrial land currently being created;

(b) establish a relationship with the area office of the Economic Development Administration in order to monitor the availability of funding for industrial parks, obtain information on EDA funding priorities, formulate processing procedures for state assisted projects applying for EDA grants, and monitor the amount and use of EDA funds flowing into the Commonwealth;

(c) follow-up the "DCA Chapter 121B Industrial Park Survey" conducted with the questionnaire in appendix with a survey of firms which have located in state assisted parks using a questionnaire (a sample is presented in appendix) which gathers information on items such as the following: what factors influenced firms to select project locations; whether firms expanded, started up, or relocated from another location; the previous locations of firms; the types of firms which have located in individual projects; the marketing strategies and features of parks which proved persuasive in attracting firms; the linkages of firms with the state economy; and the employment impacts from firm moves to project locations;
the questionnaire should be introduced as a required component of the land disposition process for Chapter 121B industrial projects as noted in the recommendation on the reporting of redevelopment authorities to DCA; the questionnaire should provide information to help assess the "net" economic development impacts of projects, identify the factors which are important for business location decisions, and supply a valuable data base for examining factors affecting economic activity in the Commonwealth;

(d) attempt to obtain completed "DCA Chapter 121B Industrial Park Survey" questionnaires from redevelopment authorities and other local organizations which have not returned them, and assemble the data collected into a format for reporting to the Department of Commerce and Development on the amount and characteristics of land available in individual industrial parks; a single page of detailed information should be prepared on each project (ex. size of parcels, costs of utilities, community characteristics), and a summary page or two should provide information on all of the state assisted projects; copies of these reports should be made for distribution through the regional offices of the Department of Commerce and Development to firms seeking industrial land; a directive from the Commissioner of the Department of Commerce and Development, calling for the promotion of land in state assisted parks, should accompany the reports; the reports should be revised annually;

(e) contact the statistics unit of the Division of Employment Security to investigate the feasibility of DCA receiving computer reports on the employment experience of firms located in state assisted parks on a regular basis; DES data may prove to be an invaluable resource for monitoring the employment impacts from projects and assessing the net benefits from projects on a periodic basis; the computer facilities at DES can provide information quickly and at little expense; the economic development specialist should discuss with DES personnel the kinds of information available through the computer which would be useful for judging net benefits; information should be available on changes in the number of employees and employee wages, and other useful data, such as the previous employment status of employees, the kinds of jobs in parks, and the standard industrial classification code number of park firms, may also be computerized; inasmuch as some detailed information may be considered confidential, the economic development specialist should attempt to define the level of aggregation of data suitable for assessing the net benefits from projects; any agreement on the reporting of information from DES to DCA will require contact between the Director of the Bureau of Urban Renewal and the Commissioner of DES;
(f) Develop documents and provide instruction for periodic reporting by redevelopment authorities to DCA (see the separate recommendations on reporting requirements in this report for the suggested contents of these documents):

* Effectiveness reporting: a format should be prepared for reporting on the accomplishment of objectives on a semi-annual basis;

* Process reporting through milestone charts: a sample chart should be prepared and authority staff should be instructed on the purpose and use of milestone charts, which should be submitted on a quarterly basis;

* Exception reporting: a format should be prepared and authority staff should be instructed on the purpose and use of exception reporting, which should be on a quarterly basis with milestone chart reporting;

* Financial reporting: a format should be prepared and authority staff should be instructed on the purpose and use of quarterly financial reporting;

* Annual reports: a format should be prepared;

(g) Define a methodology and create a format for the preparation of fiscal and economic impact analyses of projects; the methodology and format should be added as a required component of the project plan (see recommendations on revised content of the project plan in this report), included as a component of the annual report, and used to prepare analyses of current projects;

(h) Prepare fiscal and economic impact analyses of all projects in execution or completed; three separate calculations should be undertaken: economic evaluation (social costs and benefits), municipal costs and revenues, and state costs and revenues; information to produce the analyses can be obtained from the following sources:

* Industrial park survey questionnaire;

* Questionnaire for firms in project;

* Division of Employment Security computer print-outs on job impacts;

* Massachusetts Industrial Directory, available from the statistics unit within the Department of Commerce and Development, which provides the Standard Industrial Classification code numbers of firms and total firm employment; firms are listed by municipality and only those firms that responded to the survey are listed;

* Cases prepared as part of this report;
* annual reports and other literature provided by redevelopment authorities;

* project files;

* new effectiveness reporting instruments recommended by this report;

In almost every instance, additional information will have to be requested from redevelopment authorities, municipal tax collection offices, or municipal agencies;

(i) review the actual costs and disposition proceeds on all projects and assess the propriety of the current level of annual state payments; establish conditions for individual redevelopment authorities to meet in order to either receive higher state payments or avoid a reduction in state payments on the basis of actual net project costs;

(j) formulate a "non-relocation regulation" which prohibits the movement of firms out of high priority development areas to sites in state assisted industrial parks;

(k) revise the rules and regulations to reflect the recommendations set forth in this report;

(l) attempt to transfer responsibility for preparation of the Municipal Monograph Series from the Department of Commerce and Development to DCA.

**Expected Benefits:**

* obtain individual with the necessary expertise for redesigning the Chapter 121B industrial land development program as an economic development program through the many recommendations in this report;

* begin to build a capacity for DCA to serve as the department, and the office/division of Community Economic Development to serve as the unit, of state government responsible for assisting communities in economic development efforts;

* provide needed assistance to redevelopment authorities in marketing state assisted industrial parks;

* obtain an individual with the expertise and time needed to monitor activities on industrial park projects, respond to problems, and focus on the important job of coordinating projects with the resources of other government agencies;

* effect the changes in the rules and regulations and statute recommended in this report;
* collect information necessary for assessing the performance of projects and the program, and prepare reports on performance for the Development Cabinet and the legislature;

**Costs:**

* funding for the staff position.

**Actions Required:**

* increase the budget for Bureau of Urban Renewal to support an additional staff member;

* decision to accept many of the recommendations of this report on redesigning the Chapter 121B program and move to establish the capability within DCA to serve as the lead agency for community economic development.

**Time Horizon:**

* Immediate.

**Constraints:**

* difficulty in securing funding for new staff position at level necessary to attract individual with requisite expertise because of negative perceptions of program held by personnel within DCA and the executive branch of government.

**Complementary / Supporting Actions:**

* recommended changes to Chapter 121B industrial land development program and role of Bureau of Urban Renewal in community economic development;

* focus of state policy on the economic development of depressed urban centers;

* recent establishment and proposed enactment of a variety of public vehicles for business capital for plant and equipment: Community Development Finance Corporation; Massachusetts Industrial Mortgage Insurance Agency; Massachusetts Industrial Finance Agency (proposed), and Technology Development Corporation (proposed).
TRANSFER OF MUNICIPAL MONOGRAPH SERIES TO DCA

Organization Development (form follows function)

Findings:

The present form and content of the municipal monographs prepared by the Department of Commerce and Development do not enable these statistical reports to meet their potential for serving as standardized, comprehensive, concise, and easily obtainable sources of information useful for local economic development activities. Monographs are prepared on an irregular basis for all municipalities and Standard Metropolitan Statistical Areas in the Commonwealth. The failure of the monograph series to directly address local economic development needs may be partly attributable to the assignment of monograph preparation to the Department of Commerce and Development, which deals with economic development from the point of view of business needs, rather than the Department of Community Affairs, which considers economic development with respect to the needs of individual communities and works with local organizations and government on physical development projects (see recommendation on establishing an office or division of community economic development for a fuller account of the different roles of DCA and DCD).

The most obvious shortcomings of the present monographs, aside from being outdated, include: the absence of trend data, unclear maps, overly aggregated industry data for large municipalities, the absence of state-local comparisons, the lack of detailed labor supply information, such as wage rates
and worker skills, and the unattractive appearance of the report. On the other hand, some of the desirable features of the current monographs include: the narrative accounts of municipal economic history, the scope and detail of the information on local transportation resources, and the degree of disaggregation of retail business information.

With a substantial, but not prohibitive, expenditure of effort, the monographs could become a valuable data source for local economic development planning and project development, and a resource for DCA and other government units to use in assessing the desirability and feasibility of economic development projects. Inasmuch as well paid consultants who prepare Land Utilization and Marketability Studies for Chapter 121B projects, and economic base analyses and feasibility reports for local organizations and governments, frequently provide reports which consist of little more than data compilation from government sources of information, the availability of improved monographs could save considerable time and expense for local economic development actors, sharpen the demands placed on consultant services, and provide a more useful document than the reports often prepared by consultants. In addition, for the many municipalities which lack a planning staff or Office of Community Development, a revised monograph could provide the information needed for completing applications for federal funds, such as public works or revenue sharing.
RECOMMENDATION: REVISE CONTENT OF MUNICIPAL MONOGRAPH SERIES AND TRANSFER RESPONSIBILITY FOR MONOGRAPH PREPARATION FROM THE DEPARTMENT OF COMMERCE AND DEVELOPMENT (Division of Planning, Research, and Statistics) TO NEW OFFICE / DIVISION OF COMMUNITY ECONOMIC DEVELOPMENT (current Bureau of Urban Renewal) WITHIN THE DEPARTMENT OF COMMUNITY AFFAIRS

In order for the municipal monograph to meet its potential for serving as a valuable information resource for community economic development, the format and content of the report should be revised, and responsibility for preparation transferred to the new Office / Division of Community Economic Development. Some suggested modifications of the present monograph are as follows:

(1) employ one or more economic base analysis methodologies in order to identify which industries offer the greatest potential for growth, have declined relative to some benchmark, and provide export income for the municipality, and supply a narrative explanation of the methodologies and the results of the analysis;

* provide a table which indicates the growing industries in the municipality and/or region at the three digit SIC code level of detail, and compares the local growth of these industries with changes in these industries in the nation and the Commonwealth over the same period, and projections for the growth of these industries; provide a similar table for declining industries (comparisons with state and national data will suggest which industries are declining due to a local comparative disadvantage and which declines reflect broader trends); data sources for these tables include the Census of Manufacturers, Division of Employment Security, and Bureau of Labor Statistics;

* use the VAMP (Value Added Minus Payroll) measure, which is a surrogate for profitability, to compare the changing profitability in the Commonwealth of those industries growing in a municipality or region with the changing profitability of those industries nationally, in order to identify which industries have growth potential in a municipality or region;

* use a methodology, such as the location quotient or minimum requirements technique, to identify export and non-export industries;

(2) develop a methodology for identifying target or preferential industries for municipal economic development;

* for example, list local growing industries in order of average wage levels with the current mean or median average annual wage in the municipality marking the cut-off between preferential and nonpreferential industries;
other factors to consider include labor intensiveness, state multiplier effects, energy intensiveness, local linkages, match of local labor supply, etc.;

* provide coefficients from the state input-output table for all local industries to indicate their degree of interdependence with the economy of the Commonwealth;

(3) include a table which compares service sector employment shifts in the municipality or region with shifts regionally and/or state-wide at the three digit SIC code level of detail;

(4) for large cities (ex. over 60,000 population), disaggregate local and regional data on manufacturing employment by three digit SIC code level of detail;

(5) include maps of Massachusetts and New England which clearly identify the municipality in relation to major highways;

(6) present information on the availability of industrial space (this may be possible with the introduction of the state-wide industrial space data bank currently being created in the Department of Commerce and Development);

(8) provide data for assessing municipal fiscal and economic need;

* time series data on unemployment (also underemployment if available) and comparative data on the state, the nation, and the municipalities in the state (ex. city averages in the case of a city) over the same period;

* time series data on per capita and median income, and comparative data on the region (SMSA), the state, and municipalities in the state over the same period;

* time series data on the municipal equalized property tax rate, and comparative data and comparative mean and median rates for the state's municipalities over the same period (data source: Massachusetts Taxpayers Foundation);

(9) provide labor supply data, such as wage rates, skills, and occupational mix;

(10) note all state and federal special designations and the eligibility of the municipality for state and federal programs, such as:

* EDA designation as an economic development district, a growth community, and/or a redevelopment area;

* eligibility for state "Urban Job Incentive" property tax credit and payroll reduction against state excise tax liability;

* eligibility for investments by the Community Development
Finance Corporation;

* eligibility for federal counter cyclical revenue sharing, federal public works, and federal community development block grant funds;

* eligibility for CETA and other manpower training, public service employment, and job development funding;

(11) provide history of receipt of federal and state community development, manpower training, and economic development funds;

(12) list major employers in and near municipality with their five digit SIC codes, and all significant federal and state government installations or facilities in or near municipality; this information will assist in identifying backward linkage or "import substitution" opportunities and, thus, businesses that will contribute most to local economic development by increasing multiplier effects;

(13) include time series data on the composition of employment by major sector and within each sector, and show regional and state comparative data over the period (data source: Division of Employment Security);

(14) provide a directory of local, state, and federal economic development organizations with contact names, addresses, and telephone numbers, including:

* municipal government: planning department, community development agency, public works department, etc.;

* public organizations: Redevelopment Authority, Industrial Development Finance Authority, Economic Development Industrial Corporation;

* private public purpose organizations: Chamber of Commerce, Industrial Development Commission, SBA 502 Local Development Corporations, Community Development Corporations, Small Business Investment Corporation, producer and consumer cooperatives, etc.;

* local banks;

* regional planning commission;

* CETA sponsor for municipality;

* regional office of the Department of Commerce and Development;

* directory of state development agencies;

* area and regional offices of federal agencies: EDA, SBA, HUD, FmHA, etc.;
(15) note major projects undertaken during previous ten years and major projects planned in or near municipality during upcoming five years;

(16) utilize an attractive looseleaf binder so that the monograph will serve as a working document that local governments and organizations will want to purchase from the Commonwealth;

* individual sections can be easily removed for copying or updating;

* sections can be added.

A redesigned and expanded monograph could prove invaluable to municipal governments and local organizations for a variety of purposes: comprehensive and project planning; a comprehensive reference; supplying information needed for completing applications for federal and state funds; for marketing industrial park projects; and for defining local economic problems, needs, and opportunities. Inasmuch as consultants commonly receive from $1,000 to $10,000 from municipal governments and local organizations to prepare economic base reports which usually supply less information and analysis than is proposed for the revised monograph, the Commonwealth should be able to charge enough for the monographs to pay for some or all of the staff time needed for preparation of the expanded documents.

The production of a standardized monograph for all cities and towns in the Commonwealth offers an opportunity for achieving tremendous economies in the cost of preparing such reports. If the municipalities and local organizations which now spend substantial amounts for consultant services, and those that lack needed reports due to the expense, can be convinced of the greater usefulness and savings from a revised monograph, the
staff expenses for revising and producing the monograph might be covered by orders from local organizations. Alternatively, DCA could seek a grant to pay for the development and preparation of the monograph series. The job of updating and refining the new monograph should prove to be much less demanding than the initial tasks of development and production of the document.

In light of the limitations of economic base analysis methodologies, the staff for the municipal monographs (which might be a single economic development planner) should experiment with new small area economic development planning techniques. Whereas the use of any single technique of analysis can be faulted, a variety of approaches should provide useful results for the monographs.

Responsibility for the municipal monograph series and other state services to assist local economic development should be shifted to the proposed Office / Division of Community Economic Development within DCA, which should become the primary unit within state government for assisting municipal governments and local organizations with economic development activities and projects. Although the Department of Commerce and Development is the primary state line agency for economic development, DCD focuses on the needs of businesses and state-wide economic activity and issues. The Department of Community Affairs, on the other hand, is the primary state agency for providing services to local communities, working with local organizations, and dealing with local physical development projects. Due to DCA's role in focusing on local development
needs and dealing with local organizations, the distinctive tasks of community economic development should be the responsibility of DCA at the state level.

The economic development planning staff at DCA responsible for preparation of monographs should establish requirements for consultant prepared economic base analysis and market feasibility reports for Chapter 121B industrial park projects and review reports submitted by consultants.

Expected Benefits:

* offer a standardized and comprehensive document to guide community economic development activities in all of the cities and towns of the Commonwealth, which supplies more information and a more sophisticated analysis than is commonly provided by consultants;

* enable the numerous local actors involved in economic development activities to save the considerable expense of employing consultants to prepare a basic economic base analysis and assemble relevant data on the municipal economy;

* help local actors to sharpen demands for reports prepared by consultants and limit the use of consultants to more specialized tasks.

Costs:

* the development and preparation of a revised monograph series as recommended above, for all Massachusetts cities and towns, will require, at a minimum, the full time services of an economic development specialist and a typist for a year; however, the redesign of the monograph should require no more than six months and the production of monographs could be facilitated through the use of student interns; as indicated above, the cost for the initial development and preparation of the monograph series could possibly be funded through orders from municipalities and local organizations or a grant from federal sources.

Actions Required:

* discussion with the Department of Commerce and Development on the transfer of responsibility for the municipal monograph to DCA;

* preparation of a proposal to the Development Cabinet
for the establishment of an Office or Division of
Community Economic Development within DCA which will
assume responsibility for the monograph series;

* a decision on how to fund the development and preparation
of a revised monograph series.

Time Horizon:

* Medium / Long Term.

Constraints:

* possible resistance of Department of Commerce and
Development;

* unavailability of funds.

Complementary / Supporting Actions:

* recommendation on establishing an Office / Division of
Community Economic Development;

* redesign of the Chapter 121B industrial park development
program from an input orientation to a concern for the
objectives of development.
THE PROJECT PLAN

Project Management: The Plan

Findings:

The required components of a Chapter 121B industrial park project plan are detailed in the rules and regulations established by the Department of Community Affairs. Inasmuch as the language and content of the Chapter 121B statute and rules and regulations are based on the federal urban renewal program, the elements of the project plan mirror the type of plan required for federally-aided residential and central business district commercial projects. Thus, the project plan for state-aided industrial park projects reflects the narrow focus of the federal program on the physical development of the project property, rather than a concern for the objectives of economic development and the organization of activities and resources to achieve those objectives. In short, the project plan is "input" rather than "output" oriented.

The physical parcel focus of the 121B project plan is evident from an examination of the requirements of the rules and regulations for the elements of a "Final Project Report" and, a component of the report, the "Urban Renewal Project Plan". The "Urban Renewal Project Plan" includes the following items:

(1) Description of Project
   
   (a) Boundaries of Urban Renewal Area: consisting of a word description and map delineating the project area boundaries.

   (b) Urban Renewal Plan Objectives: the examples provided in the rules and regulations are the removal of structurally substandard buildings, elimination of blighting influences, provision of low and moderate cost housing, provision of land for needed public facilities, removal of impediments to land disposition and development, and achievement of changes in land use.
(c) Types of Proposed Renewal Actions: the examples provided in the rules and regulations are clearance, redevelopment and/or rehabilitation, provision of public improvements, and placement of underground utility lines.

(2) Land Use Plan
   (a) Land Use Map showing:
       (i) thoroughfare and street rights-of-way;
       (ii) all easements and other public uses.
   (b) Land Use Provisions and Building Requirements:
       (i) statement of uses to be permitted, such as residential, industrial, or commercial;
       (ii) controls on property sold or leased with respect to items such as maximum densities, land coverage, setbacks, off-street parking and loading, and building height or bulk;
       (iii) statement of time period during which provisions will continue in effect;
       (iv) applicability of provisions to property not to be acquired in the project area.

(3) Project Proposals
   (a) Land Acquisition
       (i) identification of property to be acquired for clearance and redevelopment, supporting facilities and project improvements, and rehabilitation.
   (b) Rehabilitation: property rehabilitation standards for property within project area not to be acquired.
   (c) Redeveloper's Obligation: with respect to the timing of development and conformity to plans.

The following additional elements of the "Final Project Report" also demonstrate an "input" orientation by focusing on the physical development of the project area and fail to address project "outputs" in terms of economic development needs and objectives:

(1) A Project Area Report consisting of a map of the area boundaries, data on building deficiencies by block, the criteria used for judging building deficiencies, and a statement on meeting the program eligibility criteria.

(2) A Report On Planning Proposals consisting of zoning proposals, the basis for proposed land uses, a statement on conformity with the general community plan, a statement concerning coordination with highway programs, and a statement describing consultation with area residents and their reactions to the plan.

(3) A Citizens' Participation Report describing the activities of the citizens' committee during planning and the role of the committee during the execution phase.
(4) A Rehabilitation Report describing the basis for property rehabilitation standards, the basis for the finding of rehabilitation financial feasibility, the type and availability of financing, the administrative organization, the proposed work program, and the estimates of costs.

(5) A Land Acquisition Report consisting of estimated property acquisition expenses, a property map, a set of appraisals, and explanations of estimated acquisition costs.

(6) A Relocation Report based on the requirements in the rules and regulations for Chapter 79A of the General Laws.

(7) A Project Improvement Report providing information on the eligibility and costs of project improvements and an estimate of the cost of site clearance activities.

(8) A Land Disposal Report consisting of a document on land marketability prepared under separate consultant contract called a Land Utilization and Marketability (LUM) study, two reuse appraisals on each property, engineering reports on land conditions, a tabulation of land disposal estimates, a statement on any provisions for special taxation, and the identification of site work required by redevelopers.

(9) A Cost Estimate and Financing Report consisting of a project expenditures budget for the acquisition, physical development, and administrative expenses of the project, a project financing plan indicating local and state shares of the net project cost, and a justification supporting the project expenditures budget and the financing plan.

(10) Legal Data consisting of required approvals.

(11) An Environmental Impact Report (not in current rules and regulations but may be required pursuant to state and federal environmental regulations).

The required Land Utilization and Marketability study, which is prepared through a contract with a real estate consultant, serves as the sole basis for establishing the economic feasibility of a project. In the language of the rules and regulations, the LUM study must provide "evidence of marketability sufficient to justify a conclusion that the land is marketable for redevelopment in accordance with the Plan and can be disposed of within a reasonable time". Thus, economic feasibility is defined only in terms of whether or not the project property can be marketed, and not in relation to the achievement of economic development objectives or benefits greater than costs. The plan does not define objectives
related to the unique economic conditions of a municipality or assess the feasibility of meeting such objectives. Specific development objectives that might be indicated by a project plan include such items as adding 400 primary labor market quality jobs, increasing municipal tax revenues by $250,000 annually, providing six local firms with modern expansion space, attracting firms from a list of industries which will serve to stabilize the local economy, supplying 50,000 sq. ft. of land for five businesses sponsored by local Community Development Corporations, or providing training and jobs to 250 unemployed local residents. Moreover, without a definition of economic development needs and objectives, project plans allow for economic outcomes which may worsen economic and fiscal problems, such as the disposition of industrial park land to firms offering "secondary labor market" quality jobs.

In addition to failing to address the issue of project feasibility with respect to economic development objectives, LUM studies have not adequately performed the function of establishing the marketability of project land. DCA has not specified a methodology to be used to assess marketability or provided guidelines for the content and format of LUM studies.

The LUM studies that have been prepared at great expense for projects have varied widely in approach and coverage and, in general, have served no useful purpose. Most LUM study authors purport to present economic base analyses of communities, but merely offer pages of information, such as demographics, labor force skills, and industrial composition, reprinted from primary government sources with the barest assessment of local trends. The better reports simply identify which industries have been growing or holding steady in an area and suggest that these are appropriate targets...
for marketing efforts. The vast majority of the LUM studies do not employ even a simple economic base technique for examining comparative trends, such as the location quotient or shift share approaches. Although reports sometimes provide information on industrial land sale and lease activity in a community, little attempt is made to examine the supply and demand relationship for industrial land in an area and note industrial park property in direct competition with the proposed project.

Inasmuch as redevelopment authorities contract and pay for LUM studies, it is not surprising to find that not a single report concluded with a judgement that a project could not be marketed. LUM studies invariably neglect to mention complementary development activities, such as bridge or road construction, which are necessary to market a project, and fail to indicate the physical characteristics of parks sought by firms which form the potential market for the project. These studies do not offer marketing strategies for projects, either by identifying target industries in a detailed fashion or by presenting a step by step "how to market" methodology for redevelopment authorities to follow.

As a result of these shortcomings, redevelopment authority personnel tend to view LUM studies as documents to fulfill the DCA application requirements rather than as a data base and strategy piece for guiding actions. The lack of an output orientation to LUM studies is partly attributable to the provision of the rules and regulations which allows studies to be prepared by real estate appraisers.

Whereas extensive documentation of the physical condition of the project area is required to establish the eligibility of the property as either a "decadent, substandard, or blighted open area"
and detailed information must be provided on the physical characteristics of proposed redevelopment activities, the project plan does not contain any discussion or data on the economic or fiscal problems found in a municipality, or the economic development objectives sought through the project. In addition, although the project plan contains information on the costs of project development, the anticipated revenues from disposition, and the sources of funds to cover project costs, the requirements for the plan do not include an account of the benefits to be achieved through a project or a calculation of the expected benefits relative to the costs. Thus, the plan does not present an assessment of net benefits for undertaking a project or the sensitivity of benefits to key variables. Moreover, the plan does not describe an economic development strategy designed to address particular needs.

A review of the plans which have been prepared for projects indicates that objectives are usually stated in very general terms (see appendix A), such as increase employment opportunities, and non-comparative statistical evidence on unemployment, per capita income, and migration, is presented to establish the need for a project. Plans often refer to demands by local firms for expansion space, but invariably do not provide specific information on the number of firms committed to or considering moving to a park, the types of industries interested in park land, the square footage or acreage of the demand for land, or the employment impacts expected with expansion.

As a consequence of the absence of a clear problem definition/needs assessment, an economic development strategy designed to meet those needs, and a description of specific project objectives, project plans do not contain measures of effectiveness for monitoring
and judging projects. In addition, project plans fail to address considerations relative to organizational relationships, constraints, and environmental variables which affect the development and outcome of projects. Furthermore, project plans do not include a schedule for the implementation of activities and an account of the costs of those activities, which can serve as a basis for monitoring project progress. Due to the limitations of project plans, redevelopment authority personnel regard plans as DCA requirements rather than as useful working documents.

In the section of the normative management framework on project management, a project plan was characterized as an action document which defines a project's problem, objectives, measures of performance, strategy, resource requirements, constraints, organization design, activities, and schedule. With this project management view of the project plan as a basis for analysis, the following weaknesses of the present requirements for a Chapter 121B industrial land development project plan can be identified:

(1) The 121B project plan or "Final Project Report" presents two still pictures of the project area - the present physical state and the desired future physical state - but does not serve as an action document which answers the what, why, how, and who questions that should be asked with respect to the achievement of economic development objectives. As a result of its limitations, the project plan is treated by both DCA and redevelopment authority personnel as a perfunctory effort for meeting statutory requirements, rather than as the basic guide for action.

(2) The Final Project Report defines the problem to be addressed by a project, pursuant to the language of the statute and the rules and regulations, in terms of the physical deficiencies of the project property rather than the economic and fiscal needs of the community. The needs assessment/problem definition required for a project plan relates only to establishing the eligibility of a project on the basis of the criteria set forth in the statute: (a) a decadent, substandard, or blighted open area; and (b) impediments to private development without public intervention (ex. infrastructure, land assembly, uncertain title). Thus, a project plan offers no assessment of the economic and fiscal
needs of a community or the particular economic problem to be addressed by a project. Following the "parcel" orientation of federal urban renewal, the Chapter 121B statute and rules and regulations are based on the simple view that deteriorated property causes fiscal and economic problems in communities and, therefore, the elimination of undesirable physical conditions will relieve these problems. No element of the project plan considers economic factors that have contributed to physical decline. In addition, plans do not present evidence of the fiscal and economic problems caused by blighted property and, consequently, imply that all deteriorated property must cause such problems. The reasoning reflected by the requirements for project plans can be faulted on a number of grounds:
(a) deteriorated property may not cause fiscal and economic problems but may represent a natural and healthy evolution of an economy; (b) the elimination of negative physical conditions does not automatically lead to positive outcomes (for example, if the property is not marketed, if firms move out of more needy communities to park locations, if firms offering "secondary labor market" quality employment move into a community with a high percentage of such jobs, or if the costs of a project exceed the benefits); (c) the causes of municipal economic and fiscal problems are complex; and (d) the characteristics and causes of fiscal and economic problems are unique to individual communities. Inasmuch as plans do not contain definitions of local problems, they do not enable the Commonwealth to determine whether the economic development needs assessment implied by the legislation, and indicated in the report which led to the enactment of the program, is being addressed by the selection of projects.

(3) The project plan does not contain a statement of specific objectives in quantitative or measurable terms or measures of project effectiveness. Plans usually list objectives in a very general fashion such as broadening the city tax base or increasing employment opportunities (see Appendix A for an example of a statement of objectives from an approved project plan). The common presentation of a "laundry list" of generally accepted goals does not allow for measuring and monitoring the performance of projects, assessing whether benefits exceed costs, or developing a marketing strategy for a project.

(4) The Final Project Report does not define a proposed economic development strategy or justify a strategy in relation to particular problems and objectives. Fiscal and economic impact analyses are not required components of the project plan. Inasmuch as the project plan does not include a definition of the problem to be addressed or the objectives to be achieved by a project, it does not contain an explanation of the particular strategy to be employed to meet the unique needs of a community. By assuming the "physical parcel" causality of economic problems, the project plan ignores the differences in economic circumstances of communities and the differences in strategies appropriate to achieve valued economic development objectives. The
importance of local economic conditions and a specific
development strategy is suggested by the following cases:
a project which justified as a facility for the expansion
of local firms may not be warranted as an effort to attract
out of area businesses; a project to provide "primary labor
market" quality employment may be justified whereas a project
marketed to "secondary labor market" quality firms may not be
appropriate; and a project with warehouse and distribution
uses, which provides high fiscal but low employment benefits,
may be justifiable in one community but not another. The
Final Project Report presents narrow physical development
answers to the questions of "why" - ex. the elimination of
blighting influences, such as obsolete structures and poorly
designed streets - and "what" - ex. land assembly and public
improvements. Moreover, the project plan does not contain
fiscal and economic impact analyses which examine whether
benefits exceed costs, and the sensitivity of project outcomes
to key variables.

Despite the dependence of every project on the actions and
resource expenditures of a number of federal, state, and
local government and private actors, the project plan does
not encompass all of the resource expenditures which are
necessary, or likely to be employed in project execution
or require evidence of resource commitments and approvals
from all participating actors. For example, although a
project may be dependent on the construction of a bridge or
highway access road by the Department of Public Works, the
requirements for the project plan do not call for evidence of
a commitment from DPW on the necessary expenditure and
the timing of construction. In addition, the Final Project
Report does not include such an expenditure as part of the
public cost of a project and, therefore, fails to embrace all
of the public costs. This lack of a project/program
accounting framework within state government precludes an
accurate assessment of the costs and benefits of economic
development projects and programs, and hinders joint decision
making and coordination across state agencies. Project plans
are prepared by consultants, and the participation of all
relevant state and local actors is not a part of the planning
process. Project plans are "delivered" by consultants to
redevelopment authorities, which are left to their own devices
to obtain the support of all participating actors. The ex post
fatto attempt to gain the support of participants for the plan
results in delay, confusion, animosity among actors, or a halt
to the project. Inasmuch as project plans focus on the physical
inputs to projects, and not on the desired outcomes or activities
to achieve outcomes, plans fail to note all of the actors who
are likely to participate in the execution of a project and
the resource contributions and approvals required. Pursuant
to the language of the statute, the rules and regulations
call for evidence of approvals from the redevelopment authority
and municipal officials, and a public hearing, but do not require
evidence of approvals or resource commitments from federal,
state, and local participants. A project plan should serve as
a basis for discussion, and a means for reaching a common
understanding of, and agreement on, the purposes of a project, and obtaining commitments from actors on the tasks and schedule for accomplishing agreed upon tasks.

6) **The Final Project Report does not contain evidence of local capability to execute a project.** The rules and regulations do not set forth criteria for assessing redevelopment authority capability, or require evidence of capability as a component of the project plan. Thus, DCA does not assess local capability for undertaking a project through factors such as the "track record" of the redevelopment authority or municipality (ex. history of urban renewal activities and controversies), the level and quality of staffing at the authority, or resource commitments from the municipality for necessary public improvements that are outside of the project area. The rules and regulations do not establish qualifications for redevelopment authority executive directors or other staff, or indicate the number or kind of staff required for undertaking a particular kind of project. Redevelopment authorities have varied considerably in their staff capability and almost all projects have suffered from staff weaknesses. In a few cases, redevelopment authority boards have not hired any full time personnel, but have relied on the part time donated time of board members to develop and market projects and, as a result, have experienced delays. In a few instances, projects have come to a halt after municipalities have refused to pay for staff beyond the 60 month execution period estimated in the project plan. DCA lacks any authority over the hiring of authority staff, and the position of executive director has often been filled with persons who lack the requisite expertise and motivation for the job.

7) **The project plan does not identify and address the constraints affecting a project.** For example, LUM studies do not consider the present or likely future supply of industrial land which will compete with a project. In one case, the plan failed to note that the uneven topography of the project area would require a terraced park. In the absence of a strategy to deal with this situation, the prime sites were disposed of first, and the property with less desirable access and topography was left in a difficult market position due to the reduced flexibility to draw parcel configurations to suit firm needs. Relevant constraints can be physical, political, financial, organizational, legal, and market related.

3) **As presently constituted, the project plan does not deal with strategic aspects of designing a project management system to efficiently and effectively implement a project.** General external, parent, and client environmental considerations can influence the organization of project tasks and the emphasis on various measures of effectiveness. For example, if an active and politically influential Industrial Development Commission or similar entity exists in a municipality, it may be advantageous to delegate the functions of the redevelopment authority to the local organization. In the case of a municipality which is severely limited in its bonding capacity, a premium should be placed on timely completion and cost control, rather than on effectiveness in meeting objectives. If the citizens of a community have previously voted down a renewal project, added effort should be devoted to informing residents on project plans and activities. In addition to project specific
environmental issues, the project plan fails to address the five criteria noted in the normative management framework for evaluating a project management system independently of the particular task at hand: (1) obtaining multi-actor commitment; (2) achieving transition or termination; (3) effecting integration; (4) providing visibility; and (5) satisfying job security needs. As a result of the failure to deal with project termination, projects undertaken as the sole activity of redevelopment authorities have often been delayed and prolonged by authority personnel.

(9) The project plan does not explicitly consider uncertainty with respect to resource inputs to the project, the accomplishment of tasks, and the possible outcomes of the project. Inasmuch as the Final Project Report does not contain a calculation of the costs and benefits of the proposed project, it also does not test the sensitivity of net project benefits to changes in critical parameters. For example, project plans do not indicate the impact of varying rates of park land absorption. In addition, the impact of delay on the effectiveness of a project is not normally addressed. Sensitivity analysis of the costs and benefits of a project reveals which factors are critical for success so that managers can focus on these matters.

(10) The requirements for the project plan presented in the rules and regulations do not call for the delineation of the "tasks" necessary for project completion, or the presentation of the sequence schedule or responsibility assignments for those tasks. Without a listing of activities, and an account of the interrelationships among tasks, DCA and redevelopment authority personnel, who usually change often during the course of project execution, have been unable to grasp all of the activities required for execution and the precedence relationships among activities. As a consequence, DCA staff cannot monitor the progress of projects and focus on the steps necessary for completion.

RECOMMENDATION: REVISE REQUIREMENTS FOR PROJECT PLAN

The requirements detailed in the rules and regulations for the format and content of the project plan, or Final Project Report, should be substantially altered for industrial land development projects, to reflect a shift from a focus on the condition and development of the land parcel, to a concern for economic development objectives. The project plan should become an action oriented document based on the principles, concerns, and techniques of "project management". Thus, the revised project plan should serve a number of purposes: (a) establish a need/define a problem; (b) set forth a specific economic development strategy directed at a particular development problem; (c) examine in a detailed fashion whether expected benefits exceed expected costs; (d) describe and justify organizational relationships among actors; (e) list all resources, actors, and activities and provide evidence of commitments from actors; (f) specify objectives in quantitative terms, and measures of progress and effectiveness for monitoring; (g) provide a graphic portrayal of the interrelationships among, and schedule
of project activities, and identify the most critical sequence of activities; (h) organize activities into work packages which can be costed; and (i) assign task responsibilities to individuals and prepare milestone charts for monitoring implementation.

Although the recommended additions and modifications to the present requirements for a project plan demand greater effort and expertise, the examination of the weaknesses of the current components of the project plan suggests that these changes are needed to provide for efficient and effective projects.

The revised project plan should include the following components:

(1) **Introduction:**
* A summary of the problem to be addressed by the project, the proposed strategy, the key actors, the historical context, and the expected costs and benefits of the project.

(2) **Needs Assessment/Problem Definition:**
* An assessment of the economic and fiscal needs of the municipality based on criteria established by DCA (ex. state averages and municipal comparative data on equalized tax rate, unemployment rate, extent of underemployment, changing composition of employment, average annual wage).
* A detailed definition of the economic development problem to be addressed by the project, and evidence of the problem (ex. provision of expansion space for local firms not served by the private market; development of modern industrial space in a depressed area of a city for community-based enterprise; generation of "primary labor market" quality jobs in a municipality suffering from a concentration of "secondary labor market" quality employment; problems of land assembly for constructing modern industrial structures in desirable locations in a land scarce urban center; lack of modern space for small growing firms; high unemployment in communities within commuting distance of a site with the potential for attracting major firms).

(3) **Statement of Goals, Objectives, and Measures of Effectiveness**
* A general account of the goals of the project in order of priority (ex. 1. positive net fiscal flows to the municipality, 2. "primary labor market" quality jobs to under- and unemployed community residents).
* A quantitative account of the specific objectives to be achieved through the project in numerical (total and on a per unit basis) and narrative terms (ex.}
the number of local firms moving to the project area and number of sq. ft. of space to be utilized; the number of "primary labor market" quality jobs to be provided to under- and unemployed local residents; the number of jobs generated from out-of-state firms moving to project; the net fiscal returns to the municipality and Commonwealth).

* a quantitative and qualitative account of measures of effectiveness, in total and on a per unit basis, with respect to the following project benefits: (a) net municipal fiscal flows; (b) employment impacts; (c) growth of the state economy; (d) strengthening agglomeration economies; (e) induced development; and (f) increased diversity of the local economy.

* a description of the economic development strategy proposed to meet previously identified problem(s) (ex. the provision of 100 "primary labor market" quality jobs to unemployed local residents, through the expansion of two local firms in the primary metals standard industrial classification category, and the attraction of two firms providing 25 jobs from outside of the area in the same industrial category, to be accomplished with the promotional assistance of the Department of Commerce and Development and the establishment of a customized job training program funded through a local CETA sponsor).

* justification for proposed strategy (ex. names of local firms committed to moving to park and number of projected expansion jobs; recent economic activity in municipality; evidence of strength or potential for growth of particular industries).

* assessment of benefits and costs of project through fiscal and economic impact analyses based on methodologies and assumptions set forth by DCA; three
separate analyses should be undertaken: economic evaluation (social costs and benefits), municipal fiscal analysis, and state fiscal analysis; each analysis should include worst case, best case, and most probable case variations; each analysis should also examine the sensitivity of the project outcome to such critical variables as costs and time.

(5) Economic Base and Marketing Report
(to replace currently required LUM study)

* report prepared by a consultant which:
  (1) identifies target industries for marketing of industrial land by use of economic base techniques specified by DCA (ex. VAMP, shift share, etc.);
  (2) assesses the supply and demand for industrial land in the municipality and region through a methodology specified by DCA;
  (3) identifies the physical needs of firms identified as target industries (ex. rail transport, fuel); and
  (4) specifies, in a "how to" fashion, steps for redevelopment authority personnel to follow in marketing project land (ex. promotional materials, trade journals for advertisements, responses to inquiries).

(6) Participant Approvals and Resource Commitments

* a listing of all of the actors involved, or possibly involved, in any way with a project and a description of the role of each actor.

* a listing of all resource expenditures which may be directly or indirectly related to project development (ex. value of municipally donated land, municipal street and sewer construction, SBA loans and loan guarantees, industrial mortgages from local banks).

* evidence of a commitment or intent to expend or the availability of the above resources from the individual actors.

* with respect to the activities of the state Department of Public Works, a memorandum of understanding should be entered into and form part of the project plan, which sets forth the terms of the commitment of DPW and its relationship with the redevelopment authority and the schedule for undertaking and completing DPW activities.
  (Note: a memorandum of understanding should force DPW to realistically assess
Evidence of Local Capability

Statement on the Constraints and Uncertainties Facing the Project

Report on the Design of the Project Management System

whether and when it can provide infrastructure essential for the development of a project, and will provide DCA with a basis for demanding action from the Governor and/or the Development Cabinet in the event DPW fails to fulfill its obligations)

* approvals from participating actors of their involvement in the project.

* evidence of local capability to execute the project pursuant to criteria established by DCA:

* history of development activity by the redevelopment authority and other municipal agencies and public purpose economic development organizations;

* commitment of the authority and the municipality to employ a specific number of staff for the duration of the project execution period with the qualifications set forth in the project plan;

* a statement of the chief fiscal officer of the municipality regarding the ability of the municipality to issue the bonds required for the project, and the projected impact of the debt service on local fiscal affairs.

* a listing of the key physical, political, financial, organizational, legal, and marketability constraints facing the project and descriptions of the strategies of the authority for dealing with them.

* an account of the critical areas of uncertainty affecting the project.

* a discussion of how general external (political, economic and social), parent, and client environmental considerations influence the relative emphasis on the following measures of effectiveness: (a) time, (b) cost, (c) effectiveness, and (d) citizen satisfaction, and efforts of the redevelopment authority to respond to these issues; DCA should formulate a series of strategic questions to be addressed by the project plan; the plan should prioritize measures of project success in relation to strategic issues, and describe management efforts to deal with these issues; for example, in a municipality with a history of citizen opposition to development projects, the plan might call for an emphasis on timely
project completion and describe special efforts of the authority to inform the citizenry of development activities.

* submission of evidence of all opposition to the project (ex. newspaper articles, a narrative account).

* statement of land disposition strategy to foster economic development objectives (ex. tradeoff of hiring of an unemployed person for X$ in the land disposition price).

* Reuse Provisions: statement of regulations, controls, and restrictions to be imposed on the disposition of property in order to achieve economic development objectives.

(a) clauses for inclusion in Land Disposition Agreements with respect to the performance required of firms or developers (ex. number of jobs for unemployed local residents, number of acres disposed of to out-of-state firms, number of persons hired from vocational education program).

(b) prohibitions against specific uses (ex. warehousing and distribution which provide low job impacts).

(c) promulgating a non-relocation regulation which prohibits the sale or re-sale of property to firms moving out of high priority development areas.

* accounts of efforts to address the following aspects of project management: (a) obtaining the commitment of all actors; (b) eventual termination of the project through out-and-out termination, adoption by another ongoing organization, or transformation of the authority into an ongoing entity; (c) integration of activities at the local level; (d) providing information on the project to local citizens, municipal officials, and DCA; and (e) the job security needs of authority personnel.

(10) Report on Condition of Project Area

* amend current requirements in rules and regulations for the "Project Area Report" as follows:

* prepare new forms for the presentation of data on the project area (see pp. 58-61 of rules & regs);

* add to the project area data form a listing of the eligibility criteria which property must satisfy to qualify
as a "blighted open area";
* require the inclusion of the components of the survey and planning report on the project area in the Final Project Report (see p. 52 of rules and regs); and
* require a statement of the basis for the determination that the project meets the statutory requirement that "the project area would not by private enterprise alone and without either government subsidy or the exercise of governmental powers be made available for urban renewal".

(11) Physical Renewal Plan

* amend current requirements of rules and regulations for the "Urban Renewal Plan" as follows:

* change section 2.b. from "Urban Renewal Plan Objectives" to "Physical Development Objectives", and require more detailed information on physical development objectives;
* include descriptions of physical developments outside of the project area which are related to the project;
* note that maintenance and landscaping controls may be established along with parking and loading, density, land coverage, setback, and building height regulations; and
* require an explanation as to how the proposed physical controls relate to the economic development strategy and target market for the project.

(12) Report on Project Tasks

(12)a. Work Packages

* work to be done, resources required to accomplish work, and anticipated time needed to complete activities are established; activities are broken down into increments of work that can be related to a milestone and are the responsibility of a single individual or organization unit.

(12)b. Network Diagram

* a diagram is prepared which graphically portrays the sequence and interrelationships among activities, and the most critical sequence of activities for meeting time and cost targets; the network diagram is updated periodically to assess changes in the critical path. (Note: Inasmuch as network diagrams can only be employed to represent a sequence
of activities which are non-conditional on the outcomes of preceding activities, the diagram can only apply to project implementation activities up to the time of marketing).

(12)c. Milestone Charts

* a work schedule and budget are prepared that indicate milestones of progress, the costs of each work package, the starting and completion times for each work package, and the unit or individual responsible for each work package.

(12)d. Inter-actor Reporting

* methods and schedules for communicating among actors involved in the project should be indicated (ex. monthly meetings, milestone charts).

(13) Report on Proposed Physical Changes

* no amendment to current requirements of rules and regulations for the "Report on Planning Proposals" except to change the title of report to "Report on Proposed Physical Changes"(see pp. 55-56 of rules and regs).

(14) Report on Citizen Participation

* amend rules and regulations by changing the composition of the citizen committee for industrial projects; projects on open blighted property rarely have enough residents to form a committee, and residents have little interest in economic development activities which benefit the community as a whole; the committee should be composed individuals with an interest in development activities and the expertise to direct and control redevelopment authority behavior, such as community business leaders, persons active in local economic and industrial development, representatives of organizations of lower income citizens, and personnel in municipal government.

(15) Rehabilitation Report

* amend rules and regulations to require a listing of sources of rehabilitation financing for industrial buildings (ex. SBA 502 funds, CDBG funds).

(16) Relocation Report

* as currently specified in rules and regulations.

(17) Land Acquisition Report

* revise form for "Tabulation Of Property To Be Acquired" (p. 73) to include a listing of all individual acquisitions.

(18) Site Improvements Report

* as currently specified in rules and regulations (pp. 95-97).

(19) Land Disposal Report

* amend rules and regulations by requiring supporting material for the estimated land disposition proceeds that indicates per acre prices for the different
(20) Cost Estimate and Financing Report

* amend current rules and regulations as follows:

* provide unit costs and quantity figures for the "Data Supporting Project Expenditures Budget";

* correlate the account numbers on the "Data Supporting Project Expenditures Budget" format with the numbers on the "Project Expenditures Budget"; and

* add an attachment indicating the public resources directly and indirectly contributing toward the development of the project, which are not part of the project cost, for purposes of computing the amount of state aid.

(21) Legally Required Approvals

* as currently specified in rules and regulations (pp. 19-23).
The principles and techniques of project management can serve as a normative framework for examining the practices followed in managing Chapter 121B industrial land development projects. Inasmuch as 121B projects are unique, complex, one-time work efforts, the "project management" approach ought to be applicable to managing projects.

The common failure of projects to meet time and cost targets suggests that inadequate attention has been devoted to the requirements for effective and efficient project management. The components of the project plan specified in the rules and regulations do not call for the delineation of a schedule of activities necessary for project execution, an account of who is responsible for individual project tasks, or a listing of all of the resources and actors contributing to a project. As a result of the absence of a schedule of tasks, DCA is unable to easily assess the status of projects and focus assistance efforts on the most critical activities for completion. Redevelopment authorities often experience setbacks as a consequence of neglecting to undertake necessary actions.

Without an account in the project plan of all of the resources and actors directly and indirectly related to a project, DCA lacks an accurate basis for assessing all of the public expenditures on a project and the need for assisting with the coordination of activities across agencies within state government, and between levels of government. The absence of a full rendering of public costs reinforces the lack of a program and project budget framework within Massachusetts' government. Two negative consequences of these
weaknesses have been an almost total absence of communication between DCA and other state agencies involved on 121B projects, and a widespread tendency to view the 121B program as an "urban renewal" program rather than as an economic development program directed toward the achievement of publicly valued economic development objectives.

No system for reporting on the status and performance of projects has been established by DCA, and the Bureau of Urban Renewal has made little effort to monitor projects. Although redevelopment authorities are required to submit an annual report on activities in Section 52 of Chapter 121B, in a form prescribed by DCA, only a few redevelopment authorities comply with this statutory requirement, and DCA has not specified the contents for annual reports or utilized reports which have been submitted. The failure of DCA to establish an adequate information system for the regular reporting of data on the status and impact of projects has limited DCA's ability to assist projects, improve operations, and assess the costs and benefits of projects, and has deprived the Commonwealth of a data base for evaluating the merits of the program.

Lacking a breakdown of work packages of activities which are related to costs and milestones, DCA is unable to monitor whether projects are over or under budget and ahead of or behind schedule. The reports of the state auditor, which include a comparison of actual cumulative costs with budgeted amounts for expense categories, serve a limited purpose by revealing instances where expenses exceed the total budgets for categories, and indicating how closely completed projects have followed budgets. In order to monitor costs during the period of project execution, DCA personnel must compare the costs of activities with the budgeted amounts for these individual "work packages".
The absence of a complete account of all of the resources and actors contributing to a project in the project plan reflects a failure to address the complexity of organizational and task interrelationships. Almost every project involves many different functional operating units on the local, state, and federal levels. In addition, tasks are somewhat uncertain, and the relationship between activities and results is necessarily uncertain. The complexity and uncertainty of project tasks have proven to be problems for redevelopment authority staff, and the absence of project management efforts to deal with these difficulties has led to frequent delays and periods of total inactivity. Chapter 121B industrial land development projects manifest all of the features which characterize projects for which the project management approach has proven valuable: (a) one-time efforts, (b) definable goals, (c) unusual activities in line agencies, (d) uncertain tasks, (e) task complexity and an uncertain relationship between activities and results, and (f) numerous actors.

RECOMMENDATION: EMPLOY NETWORK DIAGRAM METHODS

Network diagram methods should be required as part of the project plan to indicate the sequence of execution activities, and establish the interrelationships among activities, and the most critical sequence of activities for meeting time and cost targets. The basic steps for the use of network diagrams are as follows:

1. list all project activities in sequence;
2. organize activities into "work packages" which have beginning and ending times and are the responsibility of an individual or an organization unit;
3. estimate the expected time and cost to perform each activity;
4. prepare the network graph depicting the sequence and interrelationships among activities;
5. compute the critical path of activities for on-time project completion; and
6. update the network periodically.

Expected Benefits:
* achieve clarity in the planning, scheduling, and control of projects;
* encourage detailed planning;
* provide an easy standard method for communicating schedules and time and cost performance targets;
* identify the most critical elements of a project for the attention of managers;
* embrace all of the resources and actors involved with a project;
* provide a format for comparing actual with planned progress;
* create a simple, direct, and comprehensive vehicle for expressing the complex interrelationships among activities;
* employ a method which is easy to understand and explain to novices, and involves simple calculations.

Costs:
* time and expense for modest amount of training of authority and DCA personnel in the preparation and use of network diagram methods (est. three 2 hour classroom sessions);
* time and effort of authority and DCA personnel in updating and using diagrams.

Actions Required:
* amend rules and regulations to require network diagrams as part of the project plan and as one method for the regular reporting of authorities to DCA;
* prepare sample network diagram;
* provide instruction to authority and DCA personnel.

Time Horizon:
* Medium/Long Term

Constraints:
* diagram methods can be used only with predictable activities;
* inasmuch as network methods do not allow for activity sequences which are conditional on the outcomes of previous activities, network methods cannot be used for marketing tasks;
* authority personnel will likely resist the introduction of network diagram methods.

Complementary/Supporting Actions:
* use of milestone charts;
* revision of the program and project plan from their current focus on the physical parcel, to a concern for achieving economic development objectives.

RECOMMENDATION: ESTABLISH A SYSTEM FOR EFFECTIVENESS REPORTING

Based on the development strategy, objectives, and measures of effectiveness specified in the project plan, a format should be prepared for redevelopment authorities to report semi-annually to DCA on the accomplishment of project objectives. The reports should include the following:

(a) projected direct outputs in total and on a per unit basis;
(b) actual direct outputs in total and on a per unit basis;
(c) planned indirect or induced outputs in total and on a per unit basis;
(d) actual indirect or induced outputs in total and on a per unit basis; and
(e) a narrative account of non-numerical social, political, and economic outcomes, and a qualitative assessment of numerical outputs.

Expected Benefits:
* obtain necessary data for calculating the fiscal and economic impacts of projects;
* identify for DCA areas where actual outputs are falling short of planned outputs, so that corrective actions can be taken;
* provide information to DCA on the reasons for discrepancies between planned and actual outputs, so that proper assistance can be provided;
* collect the information required to assess the net benefits of projects and the program as a whole;
* direct the thinking of redevelopment authority and DCA personnel toward the achievement of economic development objectives and away from an exclusive focus on "process" tasks;
* assemble information on economic development outcomes for reporting by the Bureau of Urban Renewal on program and project performance to top level managers within DCA, the Development Cabinet, the Governor, other units of state government, the legislature, and the press;
* assemble information on economic development outcomes for reporting by redevelopment authorities on project performance to local officials, residents, and the press.

Costs: 249
* staff time and/or expense of hiring a consultant to determine the amount and type of information that should be reported, and design a format for reporting, aggregating, storing, and communicating the information;

* effort required by DCA to convince authority personnel of the usefulness of collecting and reporting the information.

Actions Required:

* amend rules and regulations by inserting a new section on reporting to DCA which specifies the contents, format, and timing for reporting on project effectiveness; the new section on reporting requirements should deal with effectiveness reporting, the use of milestone charts, the use of network diagram methods, exception reporting, the content and format for the annual reports of redevelopment authorities, and financial reporting (the management concerns now included under items III to VI in the section on Project Financing should be combined with the reporting requirements into a new section on Management and Reporting);

* determine whether DCA staff or a consultant will prepare the reporting system, and obtain any needed finances;

* educate authority personnel on how to prepare reports and the reasons for the introduction of reporting requirements;

* use reports to identify and solve problems.

Time Horizon:

* Medium/Long Term

Constraints:

* limited time and expertise of DCA staff for preparing the reporting system;

* limited financial resources to hire an outside consultant;

* authority personnel will likely resist the introduction of reporting requirements (however, authority board members and municipal officials should welcome the reports);

* lack of staff resources within the Bureau of Urban Renewal to collect and aggregate information on projects for reports on the program as a whole, and to provide assistance and respond to problems indicated in reports;

* inasmuch as the plans for projects currently in execution do not specify economic development objectives in quantitative terms, reporting on these projects will be limited to actual outputs unless objectives are established for the uncompleted portions of projects.

Complementary/Supporting Actions:
* revision of the program and requirements for the project plan from a focus on the physical development of land to a concern for achieving economic development objectives.

**RECOMMENDATION:** ESTABLISH A PROCESS REPORTING SYSTEM USING MILESTONE CHARTS

Milestone charts should be required as components of the project plan in order to indicate task responsibilities, and forwarded to DCA on a quarterly basis as a vehicle for monitoring the accomplishment of project tasks. Milestone charts can be prepared from the "work packages" of activities that are identified in network diagrams and the estimated times and costs to complete these work packages.

**Expected Benefits:**

* a clear assignment of responsibility for accomplishing project tasks;
* a simple method for identifying who has failed to perform activities, which tasks have stalled a project, and which actions are upcoming;
* milestone charts should represent commitments from all project participants to accomplish specific tasks and, thereby, serve as documents for holding people accountable for performance;
* an easy to use reference for focusing the attention of the numerous actors involved on a project on necessary activities.

**Costs:**

* if work packages are identified to prepare network diagrams, little additional effort is required to employ milestone charts.

**Actions Required:**

* amend rules and regulations to require milestone charts as part of the project plan, and as one method for redevelopment authorities to report to DCA;
* prepare a simple milestone chart;
* provide instruction to authority and DCA personnel;
* notify redevelopment authorities of the introduction of milestone chart reporting.

**Time Horizon:**

* Immediate

**Constraints:**
* project participants in local, state, and federal government may resist committing themselves to milestone chart targets.

Complementary/Supporting Actions:
* requiring the use of network diagram methods;
* introduction of quarterly exception and financial reporting.

RECOMMENDATION: ESTABLISH A SYSTEM FOR EXCEPTION REPORTING

In addition to quarterly reporting on task performance by redevelopment authorities with milestone charts, separate "exception reports" should be submitted on a quarterly basis which identify only those activities that are behind schedule, and provide a narrative account of the reasons for the failure to meet the schedule, proposed corrective actions to deal with the delays, and assistance requested from DCA.

Expected Benefits:
* focuses the attention of authority and DCA personnel on the problems during execution;
* provides information needed by the Bureau of Urban Renewal to explain the reasons for project delays to top managers, the Development Cabinet, legislators, and the press.

Costs:
* time and effort of redevelopment authority personnel to complete forms;
* staff time required to prepare a format for exception reports.

Actions Required:
* amend rules and regulations to require exception reports as part of the quarterly reporting requirements for redevelopment authorities;
* prepare format for exception reports;
* notify authorities of the introduction of exception reporting.

Time Horizon:
* Immediate

Constraints:
* authority personnel will likely resist introduction of exception reporting;
* Bureau of Urban Renewal lacks sufficient staff to respond to all problems.
Complementary/Supporting Actions:

* introduction of quarterly milestone chart and financial reporting;

* monthly exception reporting is the basic reporting method employed for DCA communication with the Governor's office.

RECOMMENDATION: INTRODUCE QUARTERLY FINANCIAL REPORTING

Redevelopment authorities should be required to report to DCA on a quarterly basis on project finances, through a format based on the project expenditures budget and the costs for work packages of activities. The report should include the following items:

(a) budgeted expenditures by category and on a per unit and/or "work package" basis;
(b) actual expenditures by category and on a per unit and/or "work package" basis; and
(c) estimated and actual land disposition proceeds in total and on a per parcel or per acre basis.

In addition, quarterly financial statements should be submitted to DCA. The above financial reports should also be required components of redevelopment authority annual reports.

Expected Benefits:

* reporting of project expenditures in relation to work packages of activities will enable DCA personnel and local officials to assess whether budget targets are being met from the start of project execution, and identify the sources of discrepancies between actual and budgeted amounts; with the current method of reporting comparisons between planned and actual expenditures in the reports of the State Auditor, which presents total figures for expenditure categories without indicating the extent of work accomplished, the closeness of actual expenditures to the budget cannot be judged until all work covered by a category is completed, or the amount budgeted for a category has been surpassed;

* quarterly reporting will enable DCA and local officials to quickly focus attention on budget overruns;

* DCA will be able to adjust the level of state aid payments to reflect actual project costs during the execution period, and thereby avoid the problem of major adjustments at the time of project completion.

Costs:

* staff time to prepare a format for financial reporting and review and act on reports submitted by authorities;

* effort from DCA to convince authority personnel of the need for reporting.
Actions Required:

* amend rules and regulations to require financial reporting as part of the quarterly reporting by redevelopment authorities to DCA; current regulations (see p. 149) require quarterly preparation of a trial balance and financial statements, but do not require the reporting of this or any other financial information to DCA;

* prepare format for financial reporting;

* notify redevelopment authorities of the introduction of financial reporting and provide instruction in completing forms.

Time Horizon:

* Immediate

Constraints:

* authority personnel will likely resist introduction of financial reporting;

* Bureau of Urban Renewal lacks sufficient staff to thoroughly review all reports;

* project plans for current projects in execution do not indicate work packages of activities; however, project plans contain unit costs for site improvements, acquisition, and relocation in various sections.

Complementary/Supporting Actions:

* introduction of quarterly milestone chart and exception reporting.

RECOMMENDATION: USE A FIRM QUESTIONNAIRE FOR REPORTING ON PROJECT EFFECTIVENESS

As a required condition for the disposition of land to firms in state-assisted industrial parks, a questionnaire prepared by DCA should be completed by businesses and forwarded to DCA by redevelopment authorities as a component of the semi-annual reporting on project effectiveness. The firm questionnaire should obtain information for a variety of purposes:

(a) to assess the "net" economic benefits of projects to the Commonwealth (ex. information on the prior location of firms, planned expansion of the number of employees, kind of employment offered by firms, extent of export orientation of firms);

(b) to investigate which factors are important to location decisions and, therefore, are critical for the success of project marketing;
(c) to develop a data base on factors influencing economic development in the Commonwealth.

Refer to appendix G for a sample questionnaire.

Expected Benefits:

* collect information essential for assessing the net benefits of projects;
* assemble a data base on economic activity in the Commonwealth using DCA's position of leverage;
* obtain information which can help to improve marketing efforts at all projects, and the location and character of future projects.

Costs:

* staff time in preparing the questionnaire and the expense of printing the form;
* staff time necessary to work with the information provided through the questionnaire.

Actions Required:

* prepare and print questionnaire;
* notify redevelopment authority personnel of the introduction of the questionnaire;
* amend rules and regulations to require the submission of a firm questionnaire for each firm locating in a state-assisted industrial project.

Time Horizon:

* Immediate/Medium Term

Constraints:

* firms will likely resist providing information requested in the questionnaire;
* authority personnel will likely object to the introduction of the requirement for the questionnaire;
* Bureau of Urban Renewal lacks sufficient staff resources to aggregate and analyze the information supplied in questionnaires.

Complementary/Supporting Actions:

* revision of the program and requirements for the project plan from a focus on physical development to a concern for achieving economic development objectives;
* introduction of requirements for semi-annual reporting on the effectiveness of projects in achieving objectives.

RECOMMENDATION: REQUIRE REDEVELOPMENT AUTHORITIES TO SUBMIT ANNUAL REPORTS

Pursuant to Section 52 of Chapter 121B of the General Laws, DCA should demand the submission of annual reports by redevelopment authorities and specify the required contents for such documents. The minimum components for annual reports should include the following:

* an updated project summary similar to the introduction of the revised project plan: problem addressed by project, proposed strategy, key actors, historical context of problem and project, and costs and benefits of project;
* a statement of goals, objectives, and measures of effectiveness similar to the comparable section of the project plan;
* a narrative account of activities during the previous year, activities planned for the upcoming year, and the current status of project;
* a one page report on the amount and characteristics of land available in project, which also serves as marketing material that is transmitted to the Department of Commerce and Development for promotion activities through the Business Contact Program;
* updated fiscal and economic impact analyses of each project: an economic analysis of social costs and benefits, an analysis of municipal costs and revenues, and an analysis of state costs and revenues;
* an updated network diagram of activities with the critical path identified;
* effectiveness reporting requirements, including a comparison of actual and planned outputs over the year and cumulatively to date;
* updated milestone charts indicating task progress;
* an exception report which highlights activities that are behind schedule;
* requirements for financial reporting, including a comparison of actual and budgeted expenditures over the year and cumulatively and certified annual financial statements; and
* a statement on past litigation, litigation in process or pending, and possible future litigation.

The requirement for submitting annual reports should be extended from redevelopment authorities to cover any local public body with responsibility for implementing a state-assisted industrial project.

Expected Benefits:

* availability of current information on the status and impact of projects collected in a single document appropriate for communicating to the public, the press, and local officials;
collection of annual information in a standardized format which will facilitate preparation of an annual report on the entire program for the Secretary, the Governor, and the legislature;

serves as basic information source by which local officials and residents can demand accountability from the redevelopment authorities.

Costs:

staff time required to prepare format, modify rules and regulations, and review annual reports.

Actions Required:

amend rules and regulations by requiring and specifying the contents of annual reports in a new section on reporting to DCA;

notify redevelopment authorities of the new requirements for annual reports;

prepare a sample format for annual reports.

Time Horizon:

Immediate/Medium Term

Constraints:

authority personnel will likely resist new requirements for annual reports;

dependency of revised annual report on other recommendations.

Complementary/Supporting Actions:

introduction of a variety of reporting requirements which form the components of the revised annual report;

revision of the program and requirements for the project plan from a focus on physical development to a concern for economic development objectives.
REPORTING TO LEGISLATURE

Management Control: Programming & Reporting and Analyzing Performance

Findings:

Despite the enactment of a wide variety of state measures which bear directly on economic development, and a much greater number which are indirectly related to economic development, the Massachusetts legislature lacks any systematic method for evaluating the impact of these measures or comparing the usefulness of various actions.

For example, with respect to depressed area development, the General Court has enacted the Urban Job Incentive tax program, the Chapter 121B state-aided industrial land development program, the Chapter 121C Economic Development and Industrial Corporation vehicle, the Chapter 121A urban development corporation mechanism, and, most recently, the Community Development Finance Corporation. Of these measures, only the Community Development Finance Corporation statute contains a requirement for reporting to the legislature.

Legislative committees cannot assess the merits of legislative initiatives or, more importantly, compare the net benefits from actions directed at accomplishing similar objectives, without information on the performance of measures. As a result of the failure to report to the legislature on the effectiveness of Chapter 121B industrial park projects, legislators, as well as personnel within state government, have formed inaccurate judgements on the desirability of the program on the basis of crises during the development phases of projects, rather than economic development outcomes.

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RECOMMENDATION: ALL ECONOMIC DEVELOPMENT LEGISLATION SHOULD CONTAIN PROVISIONS REQUIRING REPORTING TO THE LEGISLATURE ON PERFORMANCE

All legislation establishing economic development programs, organizations, or tax incentives should include a provision requiring periodic reporting to the legislature on performance, in a manner that facilitates comparisons of the costs and benefits of different legislative initiatives. Although the methodologies for calculating the benefits from economic development related activities allow for wide variations in results as a consequence of differing assumptions, the introduction of performance reporting requirements should lead, over time, to the development of standard assumptions and techniques. Whereas the requirement for reporting on economic development impacts may be initially restricted to explicit economic development activities, the requirement should be extended in the future to include all programs directly or indirectly related to economic development (ex. highway expenditures, construction of community colleges).

Expected Benefits:

* in lieu of a program budget in state government, performance reporting may allow for comparisons among economic development programs;
* force operating units to think in terms of performance;
* require the collection of information necessary for assessing the net benefits from programs.

Costs:

* time, effort, and expense of collecting, analyzing, and presenting the information to the legislature;
* personnel with requisite skills.

Actions Required:

* identification of all economic development legislation;
* amend statutes to require performance reporting to the legislature;
* development of information systems within agencies;
* development of standard reporting format.

Time Horizon:

* Medium/Long Term.

Constraints:

* resistance of line agency and local personnel;
* difficulty of collecting information from private sources;
* lack of sophisticated methods for assessing "net" economic benefits; i.e. distinguishing additional economic activity from development that would have occurred without programatic action;
* lack of expertise within line agencies for establishing an adequate information collection system and undertaking analyses.

Complementary/Supporting Actions:

* recent interest nationally in "sunset" legislation.
REVIEW PROPRIETY OF STATE PAYMENTS

Management Control

Findings:
As noted in Table 2 and the accompanying notes, and in more detailed notations in some of the project cases in this report, the current levels of annual state payments for a number of projects are improper in relation to the state share of net project cost specified in the ledger. In addition, in a number of instances, the project cases indicate that different figures for the approved net project cost are presented by various sources for project information: DCA ledger, report of State Auditor, DCA Chapter 121B Industrial Park Survey Questionnaire completed by redevelopment authorities, and case summaries prepared by the Center for Community Renewal Studies at U. Mass.-Amherst.

An examination of the histories of DCA payments on projects in the ledger reveals that, in a few cases, DCA subtracted planning advances from the first annual payments due on projects, rather than from the state shares of the net project costs, before computing the level of annual state payments, which is the procedure specified in Section 57 of the statute.

RECOMMENDATION: CONDUCT FINANCIAL REVIEWS OF ALL PROJECTS RECEIVING STATE PAYMENTS TO DETERMINE THE PROPER FIGURES FOR THE STATE SHARE OF NET PROJECT COST AND ANNUAL STATE PAYMENTS

Using the information in Table 2, the cases, the financial assistance agreements, and the DCA ledger, assess the propriety of the current state payments for the 12 industrial projects receiving state aid, and make appropriate corrections. Examine the current annual state payments and the total state payments to date, check the most recent report of the State Auditor, and project the total state payment over a twenty year period.
Table 2
Chapter 121B Subsidies For State-Assisted Industrial Park Projects

<table>
<thead>
<tr>
<th>Location: Name</th>
<th>State Share of Net Project Cost</th>
<th>Annual State Payment</th>
<th>State Payments to Date (period)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atteboro Industrial Park</td>
<td>None: returns exceed costs</td>
<td>-</td>
<td>No planning or execution subsidy</td>
</tr>
<tr>
<td>Brockton Industrial Park</td>
<td>$284,750 (estimate '69)</td>
<td>$14,237.50</td>
<td>$113,900.00 ('69-'76)</td>
</tr>
<tr>
<td>Fitchburg Industrial Park</td>
<td>$553,679 (estimate '75)</td>
<td>$27,033.95</td>
<td>$67,067.90 ('75-'76)</td>
</tr>
<tr>
<td>Gardner Industrial Park</td>
<td>$511,314 (estimate '75)</td>
<td>$25,565.70</td>
<td>$82,420.36 ('75-'76)</td>
</tr>
<tr>
<td>Holyoke Millrace South Project</td>
<td>$981,837 (estimate '75)</td>
<td>$35,241.29</td>
<td>$66,943.29 ('76)</td>
</tr>
<tr>
<td>Lawrence Industrial Park</td>
<td>$600,681 (actual; amended 8/71)</td>
<td>$30,034.01</td>
<td>$360,408.12 ('63-'76)</td>
</tr>
<tr>
<td>Methuen Industrial Park</td>
<td>None: returns equal costs</td>
<td>-</td>
<td>$74,418.00 (plan. advan. not recaptured)</td>
</tr>
<tr>
<td>New Bedford Maritime Terminal</td>
<td>$175,227.50 (estimate '63)</td>
<td>$8,761.37</td>
<td>$131,420.55 ('63-'76)</td>
</tr>
<tr>
<td>New Bedford Industrial Park</td>
<td>$1,204,052 (estimate; amended '71)</td>
<td>$60,202.60</td>
<td>$528,854.35 ('66-'76)</td>
</tr>
<tr>
<td>New Bedford North Terminal Bulkhead</td>
<td>$1,451,000 (estimate '71)</td>
<td>$72,550.00</td>
<td>$435,300.00 ('71-'76)</td>
</tr>
<tr>
<td>Northampton Millyard Industrial Park</td>
<td>$623,047 (estimate; amended '75)</td>
<td>$29,052.35</td>
<td>$158,209.40 ('73-'76)</td>
</tr>
<tr>
<td>Palmer Industrial Park</td>
<td>$1,792,250 (estimate '74)</td>
<td>$85,117.55</td>
<td>$385,251.65 ('74-'76)</td>
</tr>
<tr>
<td>Peabody Centennial Industrial Park</td>
<td>$890,714.90 (being revised)</td>
<td>$40,703.62</td>
<td>$76,642.50 ('74-'76)</td>
</tr>
<tr>
<td>Wilmington Eames Street Industrial Park</td>
<td>None: returns exceed costs</td>
<td>-</td>
<td>$44,837.00 (plan. advan. not recaptured)</td>
</tr>
<tr>
<td>Woburn Industrial Park</td>
<td>$1,683,763 (estimate '69)</td>
<td>$84,188.15</td>
<td>$673,495.20 ('69-'76)</td>
</tr>
<tr>
<td>Totals</td>
<td>$10,752,315.40</td>
<td>$512,688.09</td>
<td>$3,159,168.20 (through '76)</td>
</tr>
</tbody>
</table>

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Notes to Table 2

(a) In all cases, except for Lawrence, the State Share of Net Project Cost, which is the basis for the computation of annual state subsidy payments over a 20 year period, is derived from an estimate of the future project costs minus an estimate of the future proceeds from land disposition projected at the time of project approval. The dates for the above estimates suggest the degree of likelihood that variation exists between estimated and actual net project costs. The Bureau of Urban Renewal should request a legal opinion as to whether the Commonwealth has any obligation to contribute one-half of the actual rather than the estimated net project cost (examine language in financial assistance agreement). With the legal opinion as a guide, DCA should set policy with respect to whether annual state subsidy payments are to be based on actual net project costs and the circumstances under which this will be the case. In the event DCA has no legal obligation to base annual subsidy payments on actual net project costs, the Bureau of Urban Renewal may decide to revise payments upward to reflect actual costs in return for actions on the part of Redevelopment Authorities to foster state economic development objectives (ex. requiring firms moving to parks to hire unemployed persons as a condition of the land disposition agreements; accepting requirements for reporting information to DCA). In any case, for the purpose of collecting the necessary information for assessing the costs and benefits of projects, DCA should revise all project budgets and financing plans on the basis of actual costs and land sale proceeds.

(b) Figures for the State Share of Net Project Cost may not equal the Annual State Payment multiplied by 20 years for some projects and in total because planning advances have sometimes been subtracted from the State Share of Net Project prior to the computation of the level of the annual subsidy payment.

(c) Figures for State Payments to Date may not equal the Annual State Payment multiplied by the number of years of payments because planning advances are sometimes included. Planning advances should either be subtracted from the first annual payment (in which case the State Payments to Date will equal the Annual State Payment multiplied by the number of years of payments) or subtracted from the State Share of Net Project Cost prior to the computation of the annual payment (in which case the State Payments to Date will include the planning advance).

(d) Brockton: Due to higher than expected land disposition proceeds and lower actual project costs than in the original budget, the actual net project cost is less than the original projection and, therefore, the state share of the net project cost estimated in '69, which is the basis for the current level of annual subsidy payments, is greater than 1/2 of the actual net project cost. Refer to the "Note on Net Project Cost" in the case summary for a more detailed account.

(e) Gardner: The DCA ledger indicates a figure of $511,314 as the state share of the net project cost whereas the report of the State Auditor lists $411,315 as the state share (audit for period ending 8/31/76). The financial assistance agreement and project financial plan should be examined to determine the correct state execution subsidy. The $31,288.96 state planning advance to Gardner was neither subtracted from the state share of the net project cost prior to computing the level of annual state payments nor subtracted from the first annual payment as is customary. Thus, if annual state payments are continued at their current level over a 20 year period, the total state subsidy payment will exceed the state share of net project cost by the amount of the planning advance. Therefore, DCA should adjust the current annual payment to reflect the prior planning advance: $511,314 state share - (2 annual payments of $25,565.70 + $31,288.96) = $428,893.64 / 18 years = $23,827.42 annual payment.
Notes to Table 2 (continued):

(f) Holyoke: The current annual state payment of $35,241.29 will result over a 20 year period in a total state share of the net project cost of $736,527.80 (20 X $35,241.29 plus $31,702 planning advance). The DCA ledger indicates an annual payment of $47,506.75 in order to cover the state share of $981,837 called for in the financial assistance agreement and the approved project financing plan. Refer to the "Note on State Payments" in the case summary for more detailed account. The State Auditor recommends in the audit for the period ending 10/31/76 that DCA revise the financing plan and the level of the annual state payment.

(g) Methuen: Inasmuch as the project proceeded without a municipal or state execution subsidy, the ethics and legality of the development process are challengeable on a number of grounds, and the Authority has refused to comply with DCA requests for information over an extended period of time, DCA should consider requiring the Redevelopment Authority to repay the $74,418 planning advance to the Commonwealth. Refer to the case summary for more detailed information on the project.

(h) New Bedford Maritime Terminal: The original 1963 estimate of the net project cost was never revised on the basis of actual costs and revenues. In addition, the State Auditor has not audited the project because the Redevelopment Authority delegated responsibility for the project to the New Bedford Harbor Development Commission. Therefore, DCA should obtain the information necessary to establish the actual net project cost from the Harbor Development Commission in order to assess the propriety of the current level of annual state payments and the actual costs of the project. Furthermore, DCA should request that the State Auditor prepare a final audit for the project inasmuch as the project has been completed.

(i) New Bedford Industrial Park: When the net project cost for this project was amended in 1971 and a new state share of $1,204,052 was established, the level of annual state payments was set by dividing the $1,204,052 by 20 years of payments without accounting for the lower level of annual payments between '66-'71 (a lump sum adjustment payment is the customary method). If the five payments of $33,527.75 from '66-'71 had been properly subtracted from the amended state share and the remainder divided by 15 years, the level of the annual payment would have been $69,094.22. Therefore, if payments of $60,202.60 are continued over the remaining years of the 20 year period, the total state share of the net project cost will total only $1,070,677.40 and the Commonwealth will be legally obligated to pay an additional lump sum payment of $133,374.60 in order to fulfill the terms of the financial assistance agreement with New Bedford. Hence, the level of the annual state payment should be revised. The annual payment level corrected for year 1977 is $75,022: $1,204,052 state share minus $528,854 in payments '66-'76 = $675,198 ÷ 9 remaining years = $75,022/year; no planning advance.

(j) Palmer: The net project cost and state share will likely change if the sale of the entire property to a single developer is cancelled. In addition, the present net project cost should be $100,000 less, the state share should be $50,000 less, and, therefore, the level of the annual state payments should be $82,617.55. Refer to the "Note" in the case summary for a more detailed account.

Furthermore, the state share of the net project cost includes the payment of one-half of an estimated $1,556,500 in interest costs on project bonds as a consequence of the disaster relief context of the project. At this point in time, DCA should assess the actual interest costs on the $2,200,000 in bonds issued for the project. If the current developer remains with the project, DCA should revise the state share and level of annual payments to reflect the actual bond interest costs and the accurate disposition proceeds for the property.
Notes to Table 2 (continued):

(k) Peabody: The project cost is being revised to account for six years of delay and the imminent receipt of an EDA grant.

(1) Wilmington: Inasmuch as the Town of Wilmington expects to reap a financial gain of approximately $194,000 from the assembly and disposition phase of the project, DCA should consider requiring the repayment of the $44,837 state planning advance. See the case summary for more detailed information on the project.

(m) Woburn: The original 1969 estimates of the net project cost and the state share have not been revised to reflect actual costs and revenues. Inasmuch as almost all of the site improvements have been completed and more than 50% of the project land has been sold, information should be available to prepare a more accurate revised project financial plan.
Compare the projected total of state payments with the approved state share of the net project cost indicated in the most recent financial assistance agreement, the project financing plan, the DCA ledger, the most recent report of the State Auditor, and the Chapter 121B Industrial Park Survey Questionnaire.

The annual state payment for the following projects should be revised to accurately reflect the approved state share of the net project cost: Gardner, Holyoke, New Bedford Industrial Park, and Palmer.

If the various sources for project information noted above provide differing figures for the approved net project cost and state share, DCA personnel should correct these sources on the basis of the amounts specified in the most recent financial assistance agreements.

Expected Benefits:
* avoid need for large lump sum corrective payments at the end of 20 year period;
* correct improper state payments and avoid legal actions against the Commonwealth.

Costs:
* approximately three days of staff time.

Actions Required:
* review of financial information;
* notice to redevelopment authorities of revised payment levels and accurate figures for approved net project cost and state share;
* correct sources of project information.

Time Horizon:
* Immediate.

Constraints:
* limited staff time.

Complementary/Supporting Actions:
* recommendations on revising state payments to reflect actual net project costs.

RECOMMENDATION: DCA SHOULD COMPLY WITH LANGUAGE OF STATUTE BY SUBTRACTING PLANNING ADVANCES FROM STATE SHARE OF NET PROJECT COST BEFORE CALCULATING STATE PAYMENT RATHER THAN SUBTRACTING PLANNING ADVANCE FROM FIRST ANNUAL PAYMENT
UPDATE NET PROJECT COSTS

Management Control: Operating and Accounting & Reporting and Analyzing Performance

Findings:

DCA has failed to collect current information on actual project costs and land disposition proceeds, compare actual costs with budgeted costs, and revise financial agreements and the level of annual state subsidy payments on the basis of actual net project costs. The reports of the State Auditor, which compare actual and planned project budgets by the totals for budget categories, are normally prepared at two year intervals and do not indicate how planned and actual net project costs differ for individual project tasks. DCA has neither collected current information, nor reviewed state audit reports, to closely monitor the differences between the planned and actual net project costs in order to revise the level of annual state subsidy payments.

Due to DCA's neglect of its proper monitoring function, annual state payments for all projects receiving a state execution subsidy, except for Lawrence, are based on estimates of the net project cost which have not been updated to reflect actual experience (see Table 2). As a result, some projects are being subsidized at a rate which will provide more than the one-half of net project cost called for in the statute, and some projects are receiving state payments at a level below one-half of actual net project costs.

Whether or not DCA has a legal obligation to base state payments on actual net project costs is unclear from the language of the statute and rules and regulations. On the one
hand, Section 57 of Chapter 121B of the General Laws states that "contracts [for financial assistance] shall provide for a state grant-in-aid equal to one half of the net cost of each project...", and the section of the rules and regulations on project financing includes the following language:

B. State Funds

The State Grants Fund is...payable in twenty installments which are made on an annual basis. The payments are made based on the estimated net project cost until the project is completed. When the project has been closed out, an adjustment, either higher or lower, will be made to correct the Commonwealth's share and a revised annual payment will be processed for the remaining years.

On the other hand, Section 57 of the statute also states that "the department ... may adjust the annual payment upon final determination of the net project cost of each approved project" (emphasis added) and the General Introduction section to the rules and regulations indicates that "(t)he Department may adjust the annual payment upon final determination of the net project cost" (emphasis added). Moreover, whereas Section 54 of Chapter 121B, which deals with state aid for federal Title 1 projects, clearly requires adjustments to be made in the level of state payments to reflect actual costs, no such language can be found with reference to projects only receiving state aid.

If DCA is legally obligated to adjust underfunded projects to reflect actual net project costs, and to complete all payments within 20 years, some projects will require sizable additions to current payment levels. If adjustments to reflect actual net project costs are deferred until the completion of projects, as called for in the Statute and rules and regulations, these projects will demand substantial lump sum adjustments.
However, DCA is protected from payment increases in excess of authorized funds because the statute clearly indicates that state payments will not exceed one million dollars in any one year, and all payments are contingent upon legislative appropriations. Nevertheless, even with the legal limit on the obligations of the Commonwealth, the question of whether or not DCA has a legal obligation to adjust payments on the basis of actual net project costs remains. In addition to the legal issue, DCA must consider as a matter of policy whether or not payments should be based on actual net project costs, and the conditions under which payments will be raised.

Whereas DCA's legal obligation to increase payments to reflect actual net project costs is clouded, the statute states clearly in Section 57 that "(t)he total state grant-in-aid for any approved project shall not exceed one half of the net cost of project." Therefore, in the cases of those projects currently receiving annual subsidy payments which will result in a total state subsidy greater than one half of the net project cost, DCA appears to be obligated to reduce the level of annual payments. Nevertheless, DCA should consider whether or not redevelopment authorities should be penalized for reducing the net project cost below the original estimate.

**RECOMMENDATION:** COLLECT CURRENT INFORMATION ON ACTUAL PROJECT COSTS AND LAND SALE PROCEEDS IN ORDER TO UPDATE THE PROJECTIONS OF NET PROJECT COSTS

Whether or not DCA bears any legal obligation to revise state payments to reflect actual net project costs, or chooses to do so as a matter of policy, current information on actual project costs and revenues should be collected in order to assess the costs and benefits of individual projects and the program as a whole, and compare the actual with the planned budgets.
Information should be collected through the introduction of the quarterly financial reporting requirements recommended in this evaluation, and the adoption of the recommended modifications to the reports prepared by the State Auditor.

Expected Benefits:

* obtain information necessary to assess the costs and benefits of projects for judging the merits of the program, identifying desirable types of projects, and reporting to the Development Cabinet, the legislature, and the public;

* ability to compare budgeted with actual net project costs, and isolate the sources of differences;

* ability to meet any legal obligation or effect a policy to base state subsidy payments on actual net project costs.

Costs:

* see RECOMMENDATION: INTRODUCE QUARTERLY FINANCIAL REPORTING REQUIREMENTS

Actions Required:

* see RECOMMENDATION: INTRODUCE QUARTERLY FINANCIAL REPORTING REQUIREMENTS

Time Horizon:

* Immediate.

Complementary/ Supporting Actions:

* see RECOMMENDATION: INTRODUCE QUARTERLY FINANCIAL REPORTING REQUIREMENTS

RECOMMENDATION: DETERMINE WHETHER OR NOT TO REVISE STATE SHARE OF NET PROJECT COST AND ANNUAL STATE PAYMENTS ON BASIS OF ACTUAL NET PROJECT COSTS, AND THE CONDITIONS FOR UNDERTAKING REVISIONS

The Bureau of Urban Renewal should obtain a legal opinion on whether DCA has any obligation of law to base state payments on actual, rather than estimated, net project costs. The provisions of the statute and rules and regulations and language of the financial assistance agreement should be examined. With the legal opinion as a guide, the Bureau should establish policy with respect to the conditions under which increases or reductions in state payments will be made.

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RECOMMENDATION: REVISE THE STATE SHARE OF NET PROJECT COST UPWARD IN RETURN FOR ACTIONS BY REDEVELOPMENT AUTHORITIES TO PROMOTE STATE ECONOMIC DEVELOPMENT OBJECTIVES

If DCA is under no legal obligation to increase state subsidy payments for projects being paid at a rate below one half of the net project cost, the Bureau of Urban Renewal should revise payments on the basis of actual net project costs on the condition that redevelopment authorities take specific actions determined by the Bureau to promote state economic development objectives. Examples of such actions might include:

* negotiating land disposition prices with firms on the basis of performance objectives (ex. allowing for a reduced price for firms agreeing to hire a specific number of unemployed persons);

* including performance clauses in land disposition agreements (ex. number of jobs, hiring of unemployed persons, hiring of local residents, use of training programs, number of "primary labor market" quality jobs);

* establishing an employment program for the project directed at the training and hiring of unemployed local residents;

* disposing of some percentage of the project land to out-of-state firms;

* accepting a non-relocation regulation which prohibits the movement of firms out of depressed areas in the state to locations in the project.

Expected Benefits:

* obtain leverage to promote economic development objectives which are captured more by the state than the municipality;

* institute non-relocation regulation in order to insure that projects do not subvert state economic development objectives by allowing firms to move out of needy communities.

Costs:

* time and effort to update net project costs and negotiate conditions with redevelopment authorities;

* expense of higher state payments.

Actions Required:

* collect current information on the actual project costs
and land disposition proceeds, estimate a new net project cost, and calculate the revised level of the annual state payment;

* review each project currently receiving payments at a level less than that required to meet one half of the actual net project cost, to assess what actions the redevelopment authorities should be required to take as a condition for the increase in state payments; refer to the cases in this report.

Time Horizon:

* Medium/Long Term.

Constraints:

* limited staff time available to collect and analyze information;

* resistance of redevelopment authorities to the setting of terms for increases in state payments;

* a lack of incentive for redevelopment authorities to care whether the municipalities receive higher payments from the Commonwealth;

* limited expertise of redevelopment authority personnel for executing actions required by DCA as conditions for an increase in payments;

* limited amount of funds remaining under $1 million per year authorization.

Complementary / Supporting Actions:

* collection of current information on actual costs and land disposition proceeds in order to assess costs and benefits of projects and program;

* introduction of quarterly financial reporting requirements.

RECOMMENDATION: REDUCE LEVEL OF ANNUAL STATE PAYMENTS TO REFLECT ACTUAL NET PROJECT COSTS ONLY IF:

(1) A REDEVELOPMENT AUTHORITY REFUSES TO COMPLY WITH NEW DCA REQUIREMENTS OR FAILS TO TAKE ACTIONS RECOMMENDED BY DCA TO ADVANCE A PROJECT; OR

(2) CURRENT LEVEL OF STATE PAYMENTS WILL COVER MORE THAN 100% OF NET PROJECT COST.

As noted above, the Chapter 121B statute appears to limit the state subsidy to no more than one half of the actual net project
cost. However, if a legal opinion finds that DCA is not required to fund projects on the basis of actual net project costs, DCA may decide not to reduce state payments because: (a) redevelopment authorities might be penalized for efficiency in reducing costs and/or obtaining higher than estimated disposition prices; and (b) DCA has been at fault in not monitoring costs and revenues. On the other hand, a policy of not reducing state payments to reflect actual net project costs may lead redevelopment authorities to overestimate costs and underestimate expected land disposition proceeds, in project planning and encourage authority personnel to dispose of land to the highest bidder rather than on the basis of economic development objectives.

In order to maintain an incentive for efficiency, and mitigate any disincentive for disposing of land on the basis of maximizing economic development objectives, state payments should not be reduced to reflect actual net project costs only if redevelopment authorities are complying with DCA requests for information, following DCA suggestions for achieving economic development benefits, and cooperating with DCA efforts to assist in marketing. However, in the case of projects receiving state payments which will total more than the entire net-project cost, state payments should be reduced because redevelopment authorities are under little pressure to perform efficiently and effectively.

Expected Benefits:

* maintain a financial incentive for efficiency;
* obtain leverage for gaining the cooperation of redevelopment authorities in complying with reporting requirements, following DCA suggestions for achieving economic development objectives, and improving marketing efforts;
* maintain local financial participation on projects in order to provide local pressures for efficiency and effectiveness.

Costs:

* payments above one half of actual net project cost.

Actions Required:

* collect information on actual project costs and land disposition proceeds, project new net project cost, and compare with current level of state funding;
* review each project currently receiving payments at a level greater than that required to meet one half of the actual net project cost to assess what actions the redevelopment authorities should be required to take as a condition for not having payments reduced; refer to cases in this report.
Time Horizon:
* Medium/Long Term

Constraints:
* limited staff time available to collect and analyze information;
* resistance of redevelopment authorities to the setting of terms for avoiding reductions in state payments;
* a lack of incentive for redevelopment authorities to care whether the municipalities receive lower payments from the Commonwealth;
* limited expertise of redevelopment authority personnel for executing actions required by DCA as conditions for avoiding decreases in payments.

Complementary/Supporting Actions:
* collection of current information on actual costs and land disposition proceeds in order to assess costs and benefits of projects and program;
* introduction of quarterly financial reporting requirements.

RECOMMENDATION: AMEND LANGUAGE OF STATUTE AND RULES AND REGULATIONS TO ALLOW FOR INTERIM REVISIONS TO ANNUAL STATE PAYMENTS PRIOR TO PROJECT COMPLETION

As noted above, the rules and regulations and statute refer only to revisions to state payments at the time of project completion. In addition, they specify a twenty year term for the payment of the state subsidy on a project. However, due to the considerable length of time usually required to complete a project, a revision of the state share of the net project cost at the time of completion often calls for prohibitively large payments in order to limit the payment period to the required twenty years. In general, the longer the period is prior to the revision of the state share, the greater is the dollar impact on the remaining annual state payments. Thus, as the total annual commitment for the funding of projects approaches the $1 million annual authorization limit, DCA will have little ability to revise payments on the basis of actual net project costs.

Therefore, in order to base current payments on a more realistic basis, and lessen the need for large revisions at the time of project completion, the statute and rules and regulations should be amended to allow for periodic revisions to the level of annual state payments and the financial assistance agreement. Inasmuch as the recommended financial reporting requirements will provide current information on costs and land disposition proceeds on a per activity, per "work package", and per acre basis, DCA will be able to revise projections of the net project cost as a project progresses.
Expected Benefits:

* establish annual state subsidy payments on a current basis;
* avoid the need for large shifts in annual payment levels late in the 20 year payment period;
* induce redevelopment authorities to provide current information;
* authorize current funding levels.

Costs:

* time and effort of staff;

Actions Required:

* amend Section 57 of Chapter 121B and "Project Financing" section of the rules and regulations.

Time Horizon:

* Medium Term

Constraints:

* possibility that request to amend statute will precipitate broader questioning from legislators about the program.

Complementary/Supporting Actions:

* other recommendations on revision of state payments to reflect actual net project costs.
POLICY ON RECAPTURE OF PLANNING ADVANCES
FOR PROJECTS NOT ENTERING EXECUTION

Management Control: Programming

Finds:

In the cases of six proposed industrial park projects and a number of proposed commercial and residential projects which did not advance beyond the planning stage, DCA provided planning advances which were not recaptured when the projects failed to enter into execution. Table 3 lists the six industrial projects and indicates that a total of $272,587.25 was advanced for the six projects.

The section of the rules and regulations on "Project Financing" contains the following language with respect to the recapture of planning funds in such cases;

4. Repayment of Advance
   If a project has been rejected locally for which a Planning Advance has been given, those monies advanced must be returned to the Commonwealth within a one year period.

The rules and regulations make no reference to the recapture of planning funds for projects which are rejected by DCA, or fail to enter into execution due to insufficient state funds.

Despite the clear requirement for the return of planning advances for projects rejected at the local level, DCA has neither requested nor received the advances for the six industrial projects noted above. Although DCA appears to have a legal right and an obligation to demand repayment, three factors may impede DCA's ability to recapture these advances at the present time: (a) a long period of time has passed for some projects without DCA attempting to recapture the advances; (b) DCA issued close-out letters on a couple of these projects in 1975, which indicated
Table 3
Chapter 121B Planning Advances For Industrial Park Projects Which Never Reached Execution Stage

<table>
<thead>
<tr>
<th>Location</th>
<th>Project Name</th>
<th>Date of Planning Approval</th>
<th>State Planning Advance</th>
<th>Unexpended Balance Due State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fitchburg</td>
<td>Airport Industrial Park</td>
<td>9/69</td>
<td>$55,965.00</td>
<td>?</td>
</tr>
<tr>
<td>Haverhill</td>
<td>Route 495 Industrial Park</td>
<td>7/68</td>
<td>$45,108.75</td>
<td>?</td>
</tr>
<tr>
<td>New Bedford</td>
<td>Wholesale Distribution Center</td>
<td>11/66</td>
<td>$31,185.00</td>
<td>$408.98 (as of 8/75)</td>
</tr>
<tr>
<td>New Bedford</td>
<td>Air Industrial Park</td>
<td></td>
<td>$38,587.50</td>
<td>$3,644.21 (as of 8/75)</td>
</tr>
<tr>
<td>North Adams</td>
<td>South Branch Industrial Park</td>
<td>4/72</td>
<td>$40,775.00</td>
<td>?</td>
</tr>
<tr>
<td>Southbridge</td>
<td>Southbridge Industrial Park</td>
<td>4/72</td>
<td>$60,966.00</td>
<td>?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total $272,587.25</td>
</tr>
</tbody>
</table>

Notes:

(a) Inasmuch as the funds provided by the Commonwealth for planning purposes were not grants but advances to be subtracted out of state execution subsidy payments, DCA appears to have a legal right to require repayment of these advances by the municipalities. However, a legal opinion should be obtained with respect to: (1) the impact of the long delay of DCA without requesting repayment; and (2) the obligation of municipalities to assume the liabilities of Redevelopment Authorities which are defunct. Nevertheless, DCA may decide as a matter of policy not to attempt to recapture these planning advances (a legal opinion on such an action should be requested). As a point of information, the reports of the State Auditor on these projects indicate in a number of cases that the municipalities failed to provide their required 25% share of the resources for planning. In such instances DCA must consider the possibility that state funds were obtained on the false representation that a project was seriously contemplated when in fact it was not. In any case, DCA should establish a policy and a course of action to resolve the status of these projects. It is recommended that DCA request final "close-out" audits of these projects from the State Auditor and require repayment of unexpended planning funds to the Commonwealth.
that the projects could not be considered at that time due to insufficient state execution subsidy funds; and (c) uncertainty with respect to the legal obligations of municipalities to assume the liabilities of defunct redevelopment authorities. In addition, if DCA bears no legal obligation to require repayment at the present time, the Bureau of Urban Renewal may decide as a matter of policy not to attempt to recapture these funds because of DCA's tardiness in requesting repayment and the probability of hostile reactions at the local level.

Nevertheless, the approximately one quarter of a million dollars advanced for the six industrial park projects (in addition to amounts advanced for commercial and residential projects) represents a considerable sum of money which could be used to support other worthwhile projects. Moreover, the reports of the State Auditor on these projects indicate that in a number of instances the municipalities failed to provide their required 25% share of the resources for planning and, in some of these cases, DCA has no evidence of the completion of a planning document. Thus, in some cases, DCA should consider the possibility that state planning advances were obtained on the false representation that a project was seriously contemplated when in actuality it was not. The local advance of 25% of the costs for planning, and the requirement for the recapture of funds for projects rejected locally, are the only formal checks to prevent the advance of planning funds under false pretenses. Nevertheless, DCA will have a difficult time proving deception and using such an argument to demand the repayment of advances.

In addition to failing to recapture planning advances for
projects rejected locally, DCA has not requested the repayment of the unexpended balances of the planning advances for these six projects as required by the rules and regulations. The section on "Project Financing" in the rules and regulations states the following:

If receipt of an approved project expenditures budget is not anticipated, any balance of Planning Advance Funds remaining upon completion of the LPA's planning expenditures shall be promptly remitted to the Department.

Table 3 indicates that relatively small sums of unexpended planning advance funds remain in the accounts of at least two projects. Inasmuch as final close-out audits have not been prepared for these six projects, the books on these projects remain open, and final restitutions have not been made to DCA.

RECOMMENDATION: FORMALLY CLOSE-OUT PROJECTS WHICH RECEIVED PLANNING ADVANCES BUT DID NOT ENTER INTO EXECUTION

(1) DCA should request a legal opinion on its right and obligation to recapture planning advances for projects not entering into execution, considering the three factors noted above.

(2) All projects which have received planning advances, but have not entered into execution, should be identified. The amounts of the planning advances, and the unexpended balances for these projects, should be determined by consulting the DCA ledger and the latest audit report. Final close-out audits for these projects should be requested from the State Auditor.

(3) With the legal opinion as a guide, and the available financial information on these projects assembled, DCA should establish a policy with respect to the recapture of funds. DCA may decide to demand repayment only from those municipalities which failed to advance the required 25% local share of expenses.

(4) DCA should formally close-out each project after the final audits have been completed by sending letters to the redevelopment authorities and municipal officials setting forth the required payments and actions. In all cases the unexpended balances from the advances should be recaptured. If DCA decides not to demand the recapture of an advance, a copy of the completed planning document should be obtained for the DCA files as a condition of avoiding repayment.
DCA should amend the rules and regulations to include provisions on the status of planning advances in the event of DCA rejection of a project, or a lack of sufficient state execution subsidy funds.

Expected Benefits:

* recapture of planning advances which can be used for other worthwhile projects;
* formal close-out of projects from the active files;
* clarification of the status of planning advances in the cases of projects rejected by DCA or not funded by DCA due to insufficient funding.

Costs:

* time and effort required to request final audits and review each project;
* possible ill will of redevelopment authorities and local officials if either the planning advances or the unexpended balances of advances are recaptured.

Actions Required:

* obtain legal opinion on DCA's rights and obligations;
* amend rules and regulations;
* request final audits from the State Auditor;
* review finances of each project;
* notify redevelopment authorities and local officials;
* obtain copies of planning documents.

Time Horizon:

* Immediate/Medium Term

Constraints:

* possible lack of adequate staff resources at the Office of the State Auditor to undertake final audits soon;
* resistance of redevelopment authorities and local officials.

Complementary/Supporting Actions:

* establishing policy on recapture of advances for projects moving into execution without state subsidy.
POLICY ON RECAPTURE OF PLANNING ADVANCES FOR PROJECTS IN EXECUTION WITHOUT STATE AID

Management Control: Programming

Findings:

In two cases, Methuen and Wilmington, DCA advanced planning funds, the projects moved into the execution phase without the need for additional state financial assistance, and the planning advances were not recaptured by DCA. The 121B statute states that planning advances shall be repaid out of state execution payments, but makes no reference to projects not receiving such aid. The rules and regulations also fail to address such a situation.

In Methuen, the project property was sold for the cost of acquisition, not including the planning expenses funded by the state advance. In the case of Wilmington, the town is expected to gain approximately $194,000 from the assembly and disposition of the project land if the $44,000 planning advance is not returned to DCA. The circumstances surrounding the Methuen project suggest that the development process can be challenged on legal and ethical grounds. See the project case for a detailed account.

RECOMMENDATION: REQUEST A LEGAL OPINION ON WHETHER OR NOT DCA CAN RECAPTURE PLANNING ADVANCES ON PROJECTS WHICH MOVE INTO EXECUTION WITHOUT THE NEED FOR ADDITIONAL STATE AID AND ESTABLISH POLICY WITH RESPECT TO SUCH CASES

Obtain a legal opinion on DCA's right and obligation to recapture planning funds from projects in execution which do not require additional state aid. The language of the statute, rules and regulations, and planning advance agreement should be reviewed. If DCA has the authority, but no obligation, to demand repayment of planning advances, policy should be established with respect to such cases, and the language of the rules and regulations and planning advance agreement should be amended to clearly reflect that policy. In addition, a provision should be added to the statute which sets forth unequivocally the rights and obligations of redevelopment authorities and DCA in such situations.
RECOMMENDATION:  DCA SHOULD REQUIRE THE REPAYMENT OF PLANNING ADVANCES WHEN THE PROCEEDS FROM PROPERTY DISPOSITION EXCEED DEVELOPMENT COSTS

However, inasmuch as the statute and rules and regulations do not set forth planning advance recapture provisions for such cases, DCA may not want to apply this policy to the Wilmington project. Nevertheless, if DCA has the right, but no obligation, to request repayment of the planning advance, the Bureau of Urban Renewal may want to establish terms for not requesting the repayment of the advance which will serve to promote state economic development objectives. Refer to the project case for recommended actions to help achieve valued development objectives.

RECOMMENDATION:  DCA SHOULD REQUIRE THE REPAYMENT OF PLANNING ADVANCES SO THAT MUNICIPALITIES AND THE COMMONWEALTH SHARE EQUALLY IN SUBSIDIZING A PROJECT

Thus, for cases in which the proceeds from land disposition do not cover all project costs, including planning expenses, the Commonwealth should bear one half of the net project cost, in keeping with the basic formula of the statute.

However, if DCA has the right to demand repayment, the Bureau should consider recapturing all of the planning funds in the case of Methuen, because of the lack of cooperation exhibited by the redevelopment authority and the questions noted in the case concerning the ethics and legality of the development process. DCA staff should ascertain the actual net project cost for the project.

Expected Benefits:

* determination of whether or not DCA has the right and/or obligation to recapture planning funds from projects in execution which do not receive execution assistance;

* possible recapture of planning funds;

* DCA may gain leverage for persuading redevelopment authorities to take actions to further state economic development objectives;

* establish future policy on the recapture of planning advances.

Costs:

* staff time and effort.

Actions Required:

* request legal opinion on issue from DCA legal affairs;
* with the legal opinion as a guide, DCA should establish policy with respect to the recapture of planning funds;
* amend the rules and regulations, planning advance agreement, and Chapter 121B statute to reflect the policy on recapture;
* examine the Wilmington and Methuen projects and determine a course of action with respect to each.

Time Horizon:
* Medium Term.

Constraints:
* resistance of redevelopment authorities and municipal governments in Wilmington and Methuen to return of planning advance funds, or to DCA's terms for not demanding a return of funds;
* difficulty of amending language of statute without precipitating a broader inquiry of the program by legislators.

Complementary/Supporting Actions:
REDESIGN LEDGER

Management Control: Operating and Accounting

Findings:

The official repository for information on the history of state payments to projects, the approved net project cost, and the approved state share of the net project cost, is the DCA ledger book. Information is entered manually on simple lined ledger paper which contains no printed or written headings for recording specific types of information. The dates of payments, payment figures, and calculations of balances are difficult to read. The top of the page presents the name of the project, the municipality, the net project cost, the state share, and, sometimes, the amount of the planning advance. Arithmetic errors and computational mistakes, such as failing to list and subtract the planning advance prior to computing the annual state payment, are evident.

RECOMMENDATION: A NEW FORMAT SHOULD BE DESIGNED FOR THE LEDGER

The new format should be designed to include the following information: dates of project approval and amendments to project financial plan; net project cost; state share of new project cost; annual state payment; amendments; state payments each year; total payments to date; and the balance. If possible, a computerized operation should be employed to supplement the manual system. In the absence of a computer system, a second ledger should be maintained in order to protect against theft, loss, and mutilation.

Expected Benefits:

* uniform maintenance of information;
* protection against theft, loss, or mutilation;
* improved legibility;
* collection of additional information.

Costs:

* time and effort to prepare new format and transfer information;
* time of staff person to transfer information to computer.

Actions Required:
* prepare new ledger format;
* obtain computer services.

Time Horizon:
* Immediate/Medium Term

Constraints:
* unavailability of computer services.

Complementary/Supporting Actions:
* review of finances on all projects.
Findings:

The Office of the State Auditor, pursuant to Section 52 of Chapter 121B, periodically audits redevelopment authorities. Audit reports are prepared on an irregular basis of from one to two years and are issued from five to ten months after the closing day of the audit period.

Considerable variation exists in the scope of audit activities, the format used to present information, and the level of detail of the information presented. No standard format is employed for presenting basic "Statistical Data" on projects (ex. location; project area; proposed land uses; estimated net project cost). This lack of consistency creates the impression that the auditor presents whatever information is provided by redevelopment authorities, rather than collecting the same data for all projects.

Whereas some reports present detailed balance sheets and a comparison of approved cost estimates with actual project costs, many reports offer simplified balance sheets with little information, and no comparison of actual and planned costs. Moreover, inasmuch as the comparison of actual and planned expenditures is presented by budget category without any indication of unit costs or costs for "work packages" of activities and the amount of work completed, the comparison is of limited use for monitoring projects until a budget category has been exceeded or the project is completed.

The contents of the audits cover the general requirements for "fiduciary" auditing which involves the accuracy of information and an accounting of the use of funds. However, although the auditor
may look for authorizations from the redevelopment authority board for hiring, rates of pay, and the award of contracts, the auditor does not search for DCA approvals of contracts and expenditures of over $1,000, which are required by the rules and regulations. In addition, the audits do not include an assessment of compliance with the rules and regulations with respect to such items as land disposition, leasing, acquisition, and the letting of site preparation contracts. For example, although the auditor has, in a few instances, checked whether the payments to contractors are proper, and land disposition prices close to the appraisals, the audits did not report on the propriety of the land disposition process (ex. proper advertising) or the contractor bidding and selection process.

Inasmuch as the scope of audit activities is limited to fiduciary concerns, audit reports do not address "operational" or "performance" auditing issues such as the efficiency and effectiveness of activities. In order to review performance aspects of projects, the auditor would need information on costs, the accomplishment of activities, and the achievement of objectives, which is not currently collected and reported by redevelopment authorities.

Despite the above shortcomings, the reports of the state auditor are a source of critical information on the terms of disposition agreements, the accuracy of annual state payments, project costs, problems, and the status of projects, which would not otherwise be available to DCA. The weaknesses of the reports can largely be attributed to DCA's failure to introduce proper reporting requirements, provide the State Auditor with a useful format and questions for conducting audits, and utilize the reports which are prepared.
In the case of New Bedford, the audit reports on the redevelopment authority have failed to include projects which have been delegated to other local public bodies. As a result, the Commonwealth has almost no information on the status of these projects, and no unit of state government has examined the propriety of the use of state funds.

**RECOMMENDATION:** WORK WITH THE OFFICE OF THE STATE AUDITOR IN DEVELOPING A STANDARD SCOPE OF ACTIVITIES, CONTENT, AND FORMAT FOR AUDIT REPORTS ON CHAPTER 121B PROJECTS

The Bureau of Urban Renewal should identify questions to be addressed by audits, and the information which should be obtained to respond to those questions. The Bureau should decide for itself how audit reports can be most useful for control purposes, and approach the State Auditor's Office with suggestions for changes to the current reports. The contents of audits should be correlated with the information to be obtained through the new reporting system. Recommended additions to the report might include the following: a standard format for statistical information; a list of items to be reviewed for DCA approval; and a list of activities to be reviewed for compliance with the rules and regulations. A format should be developed for comparing the actual with the planned budget, which includes land disposition proceeds as well as costs, and is based on unit costs and revenues and the costs of "work packages" of activities. This format should be the same as the one used for the new financial reporting requirement.

DCA should also pursue with the State Auditor the possibility of gradually expanding audit functions to include the concerns of performance auditing. With the adoption of new mechanisms for the reporting of information to DCA, and the introduction of new "output oriented" requirements for the project plan, the auditors will have specific efficiency and effectiveness issues to examine.

In order to provide a complete audit document and eliminate the present need to consult prior audit reports for a full history of project activities, the most recent audit report should incorporate the narrative information from earlier reports. In addition, the Bureau of Urban Renewal should request that audits be prepared for projects which are controlled by local public bodies other than redevelopment authorities.

**Expected Benefits:**

* redevelopment authorities will be required to provide standard information;

* auditor will monitor for compliance with rules and regulations;
* audit reports will serve clearly defined purposes;
* DCA personnel will understand and use audit reports.

Costs:
* staff time and effort required to determine recommended changes and negotiate with Office of State Auditor.

Actions Required:
* establish recommendations for changes to audit reports;
* contact Office of State Auditor.

Time Horizon:
* Medium Term

Constraints:
* possible staff limitations at the Office of State Auditor to assume added performance auditing functions.

Complementary/Supporting Actions:
* new reporting requirements.
ROUNDING OFF FINANCIAL FIGURES

Management Control

Findings:

Financial computations and record keeping involving the financial data in the project plan and the ledger are unnecessarily complicated, cumbersome, and prone to error due to the practice of carrying figures to the penny. Many examples of arithmetic mistakes can be found in the calculations and recordings of the net project cost, the state share of the net project cost, and the annual state execution subsidy payments in the DCA ledger, the reports of the State Auditor, and the project plans. Inasmuch as DCA lacks such basic information as the current costs and revenues of projects, the use of figures carried to the cent presents a distorted impression of the accuracy of the numbers used.

RECOMMENDATION: BARRING ANY LEGAL RESTRICTIONS, DCA SHOULD ADOPT A POLICY OF ROUNDING ALL FINANCIAL FIGURES TO THE NEAREST $10

DCA should request a legal opinion on the adoption of such a policy.

Expected Benefits:

* fewer arithmetic errors;
* fewer mistakes in transferring or copying financial information;
* greater ease in completing and checking computations.

Costs:

* none

Actions Required:

* request a legal opinion;
* amend rules and regulations;
* notify redevelopment authorities;
* request approval from Administration and Finance;
* amend ledger and financial assistance agreements.
Time Horizon:
  * Immediate

Constraints:
  * possible legal obstacles;
  * possible resistance of Administration and Finance.

Complementary/Supporting Actions:
  * financial reviews of all projects and revisions to present state payment levels.
Management Control: The Control Structure

Findings:

Although DCA has responsibility for approving every site clearance and project improvement expenditure, and redevelopment authority supply or equipment purchase or rental of $1,000 or greater, contracts for real estate services (appraisals and LUM studies), the survey and planning budget, and the project financing plan, the Bureau of Urban Renewal does not maintain accounts of standard costs for project activities as a basis for judging estimates and actual project costs. Inasmuch as most redevelopment authorities and municipal governments have little other development experience with which to compare the costs of Chapter 121B project activities, contracts are usually awarded without the aid of any comparative cost control mechanism for assessing the reasonableness of expenditures. In the opinion of the former director of the 121B program, the level of payments for project goods and services have been consistently inflated, especially for planning and other consultant services.

Although the rules and regulations require public bidding for site clearance and improvement work, in many instances too few contractors are capable of undertaking the work, or are interested in submitting bona fide bids, to create the conditions for an effective competitive
bidding process. The Final Project Report must contain a statement on site clearance and improvements which includes unit cost estimates for each site improvement, the quantities involved, and an explanation of the basis for unit prices. However, without cost accounts based on historical and/or current market costs, DCA cannot assess the legitimacy of the estimated costs. Competitive bidding is not required for the award of consultant contracts. For all consultant services other than planning (for which no contract award process is specified), the regulations indicate that the consultant is to be chosen by the redevelopment authority from a list of names approved by DCA, and a narrative justification for the selection is to be provided to DCA.

In addition, DCA's authority and responsibility for the control of project costs are not clearly defined by the regulations. Although the statute and the rules and regulations specify that DCA must find the project financial plan sound as one of the six conditions for project approval (the only condition dealing with project expenditures), the regulations do not set forth criteria for making that finding, or DCA's role in approving individual expenditures. Whereas the regulations call for DCA approval of contracts for site clearance and improvement work, redevelopment authority purchases of equipment, and real estate services, the language of the regulations does not specifically refer to DCA approval of the amounts of the contracts. The regulations
state that fees for real estate services shall be "based on prevailing rates in the community for equivalent services", and require evidence of local prevailing rates and a statement on the basis for the selection of the consultant. However, there is no specific provision which declares that DCA shall make a determination that the amounts are reasonable. In addition, the regulations do not describe how contracts for planning consultant services are to be awarded or require DCA approval of such contracts.

RECOMMENDATIONS: COST ACCOUNTS SHOULD BE MAINTAINED ON THE FOLLOWING ITEMS:

* planning services for each of the components of the survey and planning application and the final project report;
* appraisal reports;
* LUM studies or other economic feasibility studies;
* site clearance work (unit costs);
* various site improvements (unit costs);
* legal assistance services;
* management and maintenance of acquired property;
* acquisition expenses: preparation of contracts for acquisition appraisals, option negotiations, title searches, etc.;
* redevelopment authority staff salaries.

The cost accounts should contain actual project expenditures for these items on past projects and average costs for these items based on historical costs adjusted for inflation. In addition, DCA should conduct an annual survey to determine current costs for these items in the private market.
**Expected Benefits:**
* increased capability for DCA and redevelopment authorities to assess the proper costs for activities;
* improved cost control by DCA.

**Costs:**
* time and effort of DCA staff in preparing a format for the cost accounts, assembling the data, and performing the annual survey of market costs.

**Actions Required:**
* see costs.

**Time Horizon:**
* medium term.

**Constraints:**
* unavailability of historical data.

**Complementary/Supporting Actions:**
* introduction of new efficiency reporting requirements.

**RECOMMENDATION:**
THE RULES AND REGULATIONS SHOULD BE AMENDED TO CLEARLY REQUIRE DCA TO MAKE A DETERMINATION THAT ALL PROJECT EXPENDITURES OF $1,000 OR GREATER ARE REASONABLE

**Expected Benefits:**
* clarify DCA's responsibility and authority in cost control;
* increase DCA's attention to cost control.

**Costs:**
* staff time and effort to maintain cost accounts for making comparative judgements on estimated and actual project costs, and review all project expenditures of $1,000 or greater.

**Actions Required:**
* amend rules and regulations by noting DCA's role in approving expenditures;
* set up and maintain cost accounts on project activities.

**Time Horizon:**
* medium term.
Constraints:
* resistance of redevelopment authority personnel to an increase in DCA's review powers;
* inadequate staff resources to establish cost accounts and expeditiously review project expenditures.

Complementary/Supporting Actions:
* introduction of efficiency reporting requirements.
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<th>Municipality</th>
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<td>Phil Corbett 725-3342</td>
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* indicates Chapter 121B State-aided industrial parks
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<td>Paul Saunders</td>
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PART III

CHAPTER 121B INDUSTRIAL LAND DEVELOPMENT PROJECT CASES
PART III

CHAPTER 121B INDUSTRIAL LAND DEVELOPMENT PROJECT CASES

* ATTLEBORO
* BROCKTON
* FITCHBURG
* GARDNER
* HOLYOKE
* LAWRENCE
* METHUEN
* NEW BEDFORD (3)
* NORTHAMPTON
* PALMER
* PEABODY
* WILMINGTON
* WOBURN
Location: ATTLEBORO
Project Name: Attleboro Industrial Park
Size: 150 acres
Type: Industrial
Reuse: 
Net Project Cost (Financial Gain): ($1,300,000) approximate amount by which disposition proceeds will exceed total costs of project development
State Payments to Date: -0-
City Financial Gain: $1,300,000 estimated gain exclusive of tax revenues; can be viewed as return for donation of municipal property for project; approx. $1,000,000 obtained up to present time has been invested by Authority to provide income for operations.
Status: All of project property has been assembled and all site improvements have been completed. As of 4/77, approximately 64% of park land had been sold to firms. Project has provided substantial net positive fiscal flows to city and net additional jobs from expanding local firms and out-of-area firms moving to park locations.
Model Aspects: * Principally an intra-community industrial relocation project: Industrial park project was developed to serve expansion needs of firms located near congested Central Business District; most of firms which have moved to park have come from locations within Attleboro.

* A substantial amount of municipally owned tax title property was utilized for the project: approximately 2/3 of land used for park was municipal property which was transferred to Redevelopment Authority for a nominal payment.

* No state or municipal execution subsidy required: proceeds from land disposition exceed project development costs; total proceeds from disposition of approximately 64% of project property, less costs for site improvements which have been financed mostly out of proceeds from land sales, have amounted to approximately $1,000,000; it is estimated that when property disposition has been completed and all development-costs have been incurred, disposition proceeds will exceed project development costs by at least $1,300,000; inasmuch as City of Attleboro donated 108 acres of municipally owned property for 150 acre project, financial gain from development of
ATTLEBORO

project can be viewed as a return for municipal property; however, Authority has retained $1,000,000 for investments which provide income to pay for ongoing operations.

* Project in a heavily industrial city of modest size which has experienced long term growth but contains mostly jobs offering somewhat low average annual wages: population of city grew steadily from 1920 to 1970, including an increase from 23,809 persons in '50 to 32,907 persons in '70, but has remained stable since 1970; manufacturing jobs account for approx. 73% of total city employment ('74 DES) and almost 18,000 manufacturing jobs in Attleboro rank city ninth in Commonwealth; Attleboro does not suffer from serious fiscal or unemployment problems and income statistics indicate that city population is more prosperous than those of Bristol County and Commonwealth; nevertheless, overall average annual wage in city ($8,216 in '74: DES) and average annual wage in manufacturing ($8,674 in '74: DES) are somewhat low compared with figures for other cities in Commonwealth.

* Executive Director and Board members of Redevelopment Authority initiated project as members of local Industrial Development Commission: Authority Executive Director and Board members had participated in successful development and marketing of a smaller industrial park without state involvement (i.e. no use of eminent domain powers, state planning advances, or execution subsidies) as members of local Industrial Development Commission.

* Development Strategy: land parcels are sold by Redevelopment Authority to individual firms.

Program Components:

state:

* Eminent domain powers: eminent domain powers were used to acquire only a couple of small parcels; need for use of eminent domain powers was only reason application was made to DCA.

* No state advance of planning funds; No state execution subsidy.

* Project was made possible by construction of I-95 by Commonwealth; project was initiated after state completed work on I-95 which passes along a border of park.
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* No assistance provided by DCA with respect to development activities or coordination with other state agencies; DCA management control and project management weaknesses have limited benefits achieved by project; Failure of DCA to establish an adequate information system for regular reporting of data on status and impacts of projects has limited ability of DCA to monitor and assist project and Commonwealth to assess merits of and improve design and operation of program; Absence of a "non-relocation" regulation allows firms to move from high priority development areas to locations in park and, thus, allows project to subvert state economic development objectives; inasmuch as Attleboro's employment problem is not a matter of high levels of unemployment but of a concentration of low wage jobs, firm selection criteria and an employment program, which have not been established, are required to insure that public employment objectives are met through hiring of local under- and unemployed residents in "primary labor market" quality jobs; absence of an information system for reporting on project impacts has deprived DCA of data on previous locations of firms which have moved to park and number and characteristics of persons employed by these firms at present and in past; since project has resulted in significant positive net economic development benefits, lack of detailed information on impacts is especially unfortunate; without a detailed analysis of project costs and benefits, state legislators and policy makers in executive branch of state government formulate inaccurate views of program based on crises during development phases rather than economic outcomes; failure of DCA to establish a "non-relocation" regulation to prohibit movement of firms out of high priority development areas, such as New Bedford, Fall River, or Brockton, may have allowed project to subvert state economic development objectives.

municipal:

* Limited amount of municipal infrastructure investment: city spent approximately $75,000 for some initial utility improvements; remaining project site improvements, by far most of project infrastructure, were financed entirely from proceeds of land sales.

* Redevelopment Authority in-house planning: executive director of Authority prepared project plan.
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Actors:

* City of Attleboro: assumed $75,000 cost of initial site improvements and donated 108 acres of municipal property.

* Attleboro Redevelopment Authority: was formed in order to undertake industrial park project; Board and staff personnel are members of local Industrial Development Commission which initiated project; four members of Board are bankers; executive director has maintained a personal commitment to project; in addition to preparing project plan, executive director has assumed responsibility for all phases of development and marketing; Authority prepares an annual report which indicates fiscal impact of project as well as activities occurring during year; additional activities of Authority have included: assistance on a federally funded solid waste disposal study; assistance to local industry on meeting anti-pollution regulations; work related to creating a regional water district; and obtaining free land fill to improve grading of industrial park; Authority has accumulated approximately $1 million from proceeds of land sales which has been invested to supply income for operating expenses.

* Industrial Development Commission: conceived of project after successfully completing a smaller industrial park without state involvement; formed Redevelopment Authority with City approval in order to utilize eminent domain powers; provided funding for staff of Authority and planning expenses.

* DCA: has played a minor role in past; DCA has exhibited a "hands-off" attitude toward project because no state planning or execution subsidy funds have been required; see above section on DCA under program components for comments on DCA's past role.

Performance

Process Measures:

Note: Due to limited project records at DCA and lack of an adequate information system for reporting on status of projects, little information is available on project development process.

* Implementation Process: project execution phase was approved in 3/66; executive director has been responsible for preparing project plan, supervising development activities, and marketing park; although plan prepared by executive director lacked
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proper DCA format and qualities of a professional presentation, it reflected clear and detailed thinking about project; at time of first contact with DCA, following activities had already occurred: plan was completed; acquisition prices had been negotiated with a local firm; disposition negotiations had begun with three other local firms; city had authorized transfer of 108 acres to Redevelopment Authority; costs of an access road and utilities had been determined; standards for park design, landscaping, and maintenance had been prepared; and city had committed $75,000 for initial improvements; although original project plan called for a 7 to 10 year land absorption period, recession of early seventies brought land sales to a halt; at present time, all of project property has been assembled and all site improvements have been completed; as of 4/77, approximately 64% of park land had been sold to firms.

Effectiveness Measures:

* Fiscal Need: tax burden in Attleboro, as measured by tax rate on equalized value, is significantly lower than median average for Mass. cities ($43.20 for Attleboro compared to $48.10 median in '76) and has remained stable over a number of years, except for a recent sharp rise in '77 (real estate tax rate per $1,000 AV increased by $8.50 in '77); city experienced a steady increase in population from 1920 to 1970 but has experienced a levelling off of population since '70; only 57.5% of city's housing units were built prior to 1939 according to 1970 Census; Attleboro is a major industrial center in Commonwealth, despite its modest size, with manufacturing jobs accounting for approx. 73% of total city employment ('74 DES); position of Attleboro in I-95 Boston to Providence corridor has proven to be an attractive location for industry; concentration of jewelry industry in Attleboro and nearby Rhode Island communities strongly suggests presence of agglomeration economies which serve to maintain that industry in city; on a negative fiscal note, Attleboro has neglected to improve and replace old bridges, roads, and city facilities; a major renovation of city sewer system is underway; costs of these necessary physical improvements will increase demands on city tax base; nevertheless, local fiscal need is a weak basis for justifying state assistance and a public industrial park project in Attleboro.
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* Employment Need: as indicated above, Attleboro's economy is dominated by manufacturing: approximately 77% of all manufacturing jobs (approx. 56% of all city employment in '74: DES) consist of employment in two industry categories of electrical machinery (approx. 43.2% of manufacturing employment in '74: DES) and jewelry (approx. 34% of manufacturing employment in '74: DES); Texas Instruments is largest employer with more than 6,000 employees (approx. 37% of manufacturing employment in '74: DES; 27% of all city employment) and Balfour and Swanks are principle employers in jewelry; unemployment rate in city is consistently below state average (4.6% in 1/77 compared with a state figure of 7.6%); general prosperity of residents is indicated by a comparison of percentages of city's population in lowest two income groupings and city per capita income with figures for Bristol County and Commonwealth (1970 Census): incomes under $3,000 = A 5%, B 8.6%, Mass. 6.4%; incomes $3,000-$5,999 = A 10.0%, B 15.1%, Mass. 11.8%; per capita income = A $3,385, B $2,938, Mass. $3,425; however, overall average annual wage for all city employment is somewhat low ($8,216 in '74: DES) and average annual wage for manufacturing is relatively low ($8,674 in '74: DES); jewelry industry offers a low average annual wage ($7,994 in '74: DES) and electrical machinery firms provide a modest average annual wage ($9,132 in '74: DES); therefore, state assistance and a public industrial park project can only be justified on basis of employment need if land is marketed to firms offering "primary labor market" quality employment and an employment program is established to insure that under- and unemployed local residents are hired.

* Net Municipal Fiscal Flows: Project has provided substantial net positive fiscal flows to Attleboro; city expects to gain approximately $1,300,000 from assembly and disposition of project property; as of 11/74 park was contributing $252,281 per year in taxes to city as compared with a pre-park real estate tax payment of $350 per year from property; as remaining land is sold this return will increase significantly; in addition, considerable industrial development has occurred outside of park boundaries as a consequence of roads and utilities brought to area for project; as of 11/74 this induced development had resulted in an additional $59,301 in annual taxes to Attleboro; total net increase
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of $311,000 in annual taxes traceable to project translated into a tax rate reduction of approximately $1.50 in 1974; furthermore, although no information is available on reuse of space vacated by expanding local firms which have located in park, one objective of project was upgrading of CBD after manufacturing firms move to park.

* Employment Impacts: due to lack of an adequate information system for reporting on impacts of projects, detailed information is not available on number of new jobs that have been added to state and local economy from firm expansions, business start-ups, or out-of-state firms moving to park due in part to advantages of park location, or characteristics of persons employed by these firms; nevertheless, local firms have expanded to locations in park and retention of these firms within Attleboro has allowed for physical access to jobs for unemployed city residents; however, absence of a "non-relocation" regulation which prohibits movement of firms out of high priority development areas may have allowed project to subvert state economic development objectives by permitting such moves; in addition, inasmuch as public employment objectives are served by project only if park is marketed to firms offering "primary labor market" quality jobs to under- and unemployed persons, absence of firm selection criteria based on employment impacts and a public employment program have limited employment benefits from project; an appropriate employment program might consist of targeting of manpower training funds to project, inclusion of performance clauses on hiring of unemployed as part of disposition agreements, and establishing referral relationships between firms and vocational education programs.

* Growth of the State Economy: if in-state firms have expanded, businesses started-up, or out-of-state firms located in park due in part to increased efficiency from advantages particular to park and Attleboro, such as excellent highway transportation resources, availability of low wage labor, or presence of agglomeration economies related to jewelry or electrical machinery industries, project has contributed to state economic growth; without more detailed information on kinds of firms located in park and reasons for location decisions of firms, it is difficult to assess contribution project has made to economic growth; however, evidence of
expansion of local firms to park, and original justification for project as an effort to provide space for local firms seeking to move out of inefficient, congested space in CBD, suggest that project has succeeded in promoting growth; nevertheless, without more detailed information, effect of agglomeration economies or other park advantages in contributing to growth cannot be assessed.

* Evidence of Agglomeration Economies: concentration of jewelry industry in Attleboro and nearby Rhode Island communities strongly suggests that agglomeration economies are present; if park land has been sold to firms in jewelry or jewelry related businesses, project has contributed to strengthening these economies which provide aggregate economic benefits to state economy by enabling local expanding firms, firm start-ups, and/or out-of-area firms in jewelry and related industries to locate in Attleboro and has promoted growth by providing modern space to these firms which was not available.

* Induced Effects: considerable industrial development has occurred outside of park boundaries as a consequence of roads and utilities brought to area for park project.

* Increased Diversity of the Local Economy: lack of detailed information on firms which have located in park precludes an assessment of whether project has achieved its potential for increasing diversity of Attleboro's economic base.

The Attleboro Industrial Park project was conceived of and initiated by members of the local Industrial Development Commission. The Commission had acquired a successful "track record" with the development of a smaller industrial park in Attleboro without state assistance of any kind. The need for the use of eminent domain powers precipitated the formation of the Redevelopment Authority and the application to DCA. The project was undertaken to serve the needs of a particular market: local firms located near the congested central business district which needed expansion space. Three local firms were committed to moving to the park even before DCA was first contacted about the project. All of the available evidence indicates that the Board members and the Executive Director of the Redevelopment Authority have been skilled, dedicated, and honest. In order to remedy the current lack of information on the impacts from
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the project, a questionnaire has been sent to the Authority.

Judgement:

The City of Attleboro does not warrant state assistance and a public industrial development project on the basis of local fiscal or unemployment problems. However, the project may have been justified on the basis of a potential for achieving public employment and state growth objectives, evidence of agglomeration economies, a need to diversify the local economy, a potential for positive net municipal fiscal flows, and a potential for induced development. In addition, the recourse to eminent domain powers to assemble the property suggests that private development of the site may not have been possible. The absence of an information system for reporting on the impacts of the project has seriously limited the ability of DCA to assess the outcomes of the project. Nevertheless, it appears that the project has provided substantial positive fiscal flows to Attleboro and employment benefits to local residents, and has contributed to the growth of the state economy. By providing modern industrial park space within Attleboro, the project has enabled unemployed local residents to have physical access to jobs and has enabled jewelry and jewelry related firms to locate and expand in Attleboro where they can take advantage of agglomeration economies not available at other locations. Nevertheless, the absence of firm selection criteria based on employment and other economic development objectives, the failure to establish an explicit public employment program to insure that under- and unemployed local residents are hired by firms offering "primary labor market" quality jobs, and lack of a "non-relocation" regulation to prohibit the relocation of firms out of high priority development areas to park locations, have limited the employment and other benefits derived from the project. For a project in a community not suffering from fiscal and unemployment needs to serve publicly valued economic development objectives, steps must be taken to manage the project with reference to specific objectives.

In summary, the key factors which have contributed to the general success of the project include: a large amount of municipally owned property, a competent and dedicated Redevelopment Authority Board and Executive Director, the construction of a major interstate highway, a local market of
expanding firms (which may or may not be related to agglomeration economies), and a desirable location.
Location: BROCKTON
Project Name: Brockton Industrial Park
Size: 188 acres
Type: Industrial
Reuse: 
Net Project Cost: $569,500 (original budget estimate 1/69)
State Share: $284,750 (one-half of estimated net project cost; principal only)
City Share: $284,750 (one half of estimated net project cost not including bond interest costs which are entirely borne by city.

State Payments to Date:

Note on Net Project Cost: $190,000 of city's share of net project cost consists of estimated cash value of municipal property donated for project. Actual project costs to 6/76 have been $124,190 below project budget estimate and actual disposition proceeds from land sales have been $112,508 greater than budget estimate. As a result, current net project cost is $332,801 or $236,698 below projected net project cost. Because $190,000 of net project cost to 6/76 represents estimated value of municipally owned land donated for project, actual cash net project cost is $142,801. Inasmuch as Commonwealth has paid $113,900 to city in eight equal installments since 1969, city is currently assuming a cash net project burden of only $28,901 (ignoring any interest costs borne by city on funds initially advanced by Brockton for development expenses). Furthermore, in light of fact that Redevelopment Authority is not currently assuming any additional project costs for administration or marketing efforts, state payments of $14,237.50 in years '77 and '78 will eliminate any local cash share of net project cost, and payments beyond '78 will represent net positive cash flows to city. Moreover, any additional sales of remaining land parcels will serve to decrease net project cost and, therefore, more quickly eliminate local cash share of net project cost and provide positive net cash flows to Brockton. These calculations assume that Commonwealth will maintain annual payments at their current level and no additional costs will be incurred by Authority for project. Thus, if no additional land is sold, no additional costs are incurred, and Commonwealth pays entire $284,750 original estimated state share of net project cost in annual payments through 1987, city will receive $141,948 from state beyond all net cash project costs. In effect, city would be paid $141,948 by state for donation of municipally owned land for project. Thus, Brockton's share of actual net project cost would consist of a non-cash subsidy equal to difference between $190,000 estimated value of donated land and $141,948 from state,
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whereas Commonwealth would subsidize project with $284,750 in cash. Of course, if $190,000 over estimates value of municipal land donated for project and/or additional land is sold (which is likely at some time in future even without additional marketing efforts), Brockton may end up receiving net positive "transfer payments" from Commonwealth as a consequence of development of this project.

Status:

Approximately 75% of park property has been sold to firms. However, due to low labor intensity of some uses (warehousing, distribution) and poor quality of jobs offered by firms, project has not achieved its potential for providing positive employment benefits. Failure to establish firm selection criteria based on employment objectives, specify uses in disposition agreements with firms, and insure firm hiring of unemployed are attributable to weak project management by DCA, Redevelopment Authority, and Industrial Development Commission. No marketing efforts are currently underway or planned for remaining land in park.

Model Aspects:

* Project developed entirely on donated city owned property: property had been a wetlands area used for a city dump; estimated value of property was included as a cost of project and, therefore, city donation of land was originally intended to serve as part of municipal share of net project cost.

* Redevelopment Authority delegated responsibility for development of project to local Industrial Development Commission: pursuant to Section 50 of Chapter 121B, Brockton Redevelopment Authority delegated its functions for planning, development, and marketing of project to Industrial Development Commission and continued to serve merely as a conduit for state payments.

* Project in a major "economically depressed" urban center: city had been a major manufacturing community as largest shoe producing center in nation; with post-World War II flight of most of shoe industry city had little other industry to build on; city now manifests "depressed" area characteristics of chronic high unemployment, high real estate taxes, and general physical decline; Brockton is sixth largest city in Commonwealth and continued population growth may move city past New Bedford and Fall River into fourth position; city has experienced an overall employment shift from relatively high wage manufacturing
jobs to large numbers of relatively low wage jobs in service sector industries and a shift within manufacturing portion of economy to lower wage jobs; this change in composition of economic base, which has increased proportion of "secondary labor market" quality jobs in city, accounts for simultaneous occurrence of high unemployment, a large population increase, relatively high family incomes, and an increasing city fiscal burden from added demands on city services.

* Development Strategies: (a) parcels are sold by Industrial Development Commission to individual firms; no information is available on whether any other strategies are used.

Program Components:

state:

* No eminent domain powers: all property for project was donated by city; land had been used as a city dump.

* No state planning advance: there is no evidence that DCA advanced any funds for survey and planning phase of project.

* State execution subsidy.

* Feasibility of project a consequence of construction of State Route 24 by Commonwealth; project property is divided into two large sections by an "interstate quality" express highway also known as Fall River Expressway; Route 24 runs directly from Fall River to Boston, passing through Brockton and connecting with Rt. 128 13 miles north of Brockton; highway funding was provided by Federal Highway Administration and Mass. Department of Public Works.

* Failure of DCA to properly monitor and manage project with reference to state and local economic development objectives has resulted in low employment benefits from project and improper levels of state assistance payments, and has contributed to present project standstill; future progress and greater achievement of economic development objectives will depend largely on ability of DCA to assist Authority or some other local public body in formulating and executing a marketing strategy for project; lack of DCA monitoring of a comparison of actual project costs with original estimated budget, has allowed project to come almost to point where annual state payments provide net positive cash
flows to city - i.e. city will soon not be assuming any cash subsidy for project but will be receiving cash revenues from Commonwealth; failure of DCA to insist on firm selection criteria based on quality and number of jobs provided by businesses locating in park, and review disposition agreements to insure that reuse with respect to employment objectives is specified, has allowed for land sales to firms with low labor intensity uses and poor employment quality and for firms to substitute low labor intensity uses for verbally agreed upon high labor intensity uses; absence of an adequate reporting system has deprived DCA of information needed to compare actual with estimated costs and assess impacts from project; current state of project inactivity is partly attributable to failure of DCA to provide marketing assistance and general support, despite investment of a considerable amount of funds of Commonwealth in a project with potential to achieve valued state economic development objectives (state is actually assuming entire net project cost for this project); therefore, DCA should require that local officials in Brockton determine which public body shall assume responsibility for marketing of remaining land in park and should assist that body with marketing in following ways: help to formulate firm selection criteria based on assets of park and desired quality and labor intensity of firm employment; assess whether access to Rt. 24 from park should and can be improved with federal, state, or local funds; help local public body establish an employment program for park, with assistance of Dept. of Manpower Development, by targeting of manpower training funds, improving of transportation to park for inner city residents, and requiring firms locating in park to hire some unemployed persons; and obtain cooperation of Dept. of Commerce and Development in marketing park through its business contact program and out-of-state promotional activities and helping to target public sources of business capital to park (ex. MIMIA, MBDC, SBA, etc.)

municipal: * Municipal expenditures: total city share of net project cost (principal only) was originally projected to be $284,750; however, see above introductory "Note on Net Project Costs."

defederal: * Partial funding for highway necessary for feasibility of project.
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Actors:

* City of Brockton: advance of up-front development expenses; see introductory "Note on Net Project Costs" for discussion of city subsidization of project.

* Brockton Redevelopment Authority: Authority was formed in 11/57; Authority has been active with a federally and state aided low/moderate income housing and commercial urban renewal project since 1970 and with a residential/commercial Central Business project subsidized with state urban renewal funds and federal Community Development Block Grant funds since 1974; little information is available in DCA files on role of Authority in initiating and managing industrial park project; Authority delegated responsibility for planning, developing and marketing project to local Industrial Development Commission; at present, park does not receive any attention from Authority staff despite absence of marketing activity from Industrial Development Commission; Authority Executive Director views industrial park project as a failure and is not interested in any attempts to generate positive benefits from remaining land; director considers poor access to adjacent Rts. 24 and 123 as a major liability for future marketing efforts; Authority has recently been engulfed in controversy over its CBD project so it is unlikely that Executive Director will find time or inclination for working on industrial park.

* Industrial Development Commission: at present time, no information has been obtained on nature of activities of local Industrial Development Commission with respect to planning, development, and marketing functions delegated by Authority to Commission for this project; DCA also lacks information on current status of Commission but it is known that no marketing efforts with respect to park are now underway.

* DCA: see above section in program components.

* Dept. of Public Works: responsible for construction of Rt. 24 which was essential for development of project.

* Dept. of Commerce and Development: in order to help future marketing of park to achieve state and local economic development objectives, DCD should provide marketing assistance through its
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business contact program and out-of-state promotional activities and lend support for targeting of public sources of business capital to park (ex. HMIA, MBDC, CDFC, SBA, etc.).

* Dept. of Manpower Development: in order to insure that future marketing of park will achieve desired employment objectives, and as a boost to marketing effort, DMD should assist local public body to develop an employment program for hiring and training of unemployed by park firms; ingredients for such a program might include: targeting of manpower training funds (ex. CETA, TAP); requirements for firms locating in park to hire under- and unemployed persons; improvement of transportation from inner city to park; ongoing training relationships established with local Vocational schools; and identification of target industries based on existing skills of local residents and quality and labor intensity of jobs offered by firms.

Performance

Process Measures: * Implementation Process: little information is available from DCA files on activities during planning and execution phases; critical dates suggest that project moved at a decent pace through all phases of development; survey and planning application was approved in 10/66; DCA did not advance funds for planning and it is not known how plans were prepared; project execution phase was approved in 2/69; all site improvements have been completed and acquisition presented little problem because all land was municipally owned; marketing probably began in 1972; approximately 50 out of 188 project acres remain unsold at present time; most of sold property was disposed of in '72 and '73; only two minor sales occurred between 7/74 and 6/76; actual project costs to 6/76 have been $124,190 below budgeted costs and all improvements have been completed; total disposition proceeds to 6/76 have exceeded original estimated returns by $112,508; combined effect of these two factors has been to reduce net project cost from a projected $569,500 to an actual $332,801; at present, no active marketing effort is being undertaken to promote sale of remaining acreage.

Effectiveness Measures: * Fiscal Need: Brockton clearly warrants state assistance and aid and a public project on basis
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of fiscal need; tax burden in Brockton, as measured by tax rate on equalized value, is substantially higher than median average for Mass. cities and has increased considerably and steadily over a number of years, especially recently; $54.20 in '76 and $61.00 in '77; prior to World War II, city was major shoe producing center in nation, but it lost most of that industry to Maine and southern communities which offered cheaper labor during post-war period; local political domination by shoe producers limited development of other industries prior to war; city consistently has one of highest unemployment rates in Commonwealth; physical decline in some older neighborhoods is evident; concentration of unemployed and low wage earners has led to increased demands on city services; despite these growing problems, however, Brockton remains an attractive community in which to live and continues to account for 57% of jobs (with only 49% of people) in a densely populated and major employment SMSA in Commonwealth.

* Employment Need: despite evidence of many "depressed area" characteristics, Brockton manifests other features which, at first glance, appear to suggest a city of greater prosperity: (a) substantial population growth (an increase of 33,060 persons, 53%, from 1955 to 1975, including an increase of 6,648 persons from '71 to '75); (b) a median income level almost equal to figure for its Metropolitan Area; and (c) percentages of city population in lowest two income groupings are higher than percentages for SMSA but almost equal to percentages for Commonwealth as a whole (1970 Census: incomes under $3,000 = B 6.6%, SMSA 5.7%, Mass. 6.4%; incomes $3,000-$5,999 = B 11.9%, SMSA 10.7%, Mass. 11.8%); however, these statistics reflect a high number of multi-income families which are a result of predominantly low wage employment offered by industry mix in city; prior to World War II, almost entire work force was employed in shoe industry or in firms supplying needs of shoe industry; in 1929, sixty shoe producers employed 30,000 workers; when shoe firms left city, little other industry remained due to prior discouragement of other industries by shoe manufacturers who controlled city government; manufacturing now accounts for approximately 24% of city employment, with wholesale and retail trade contributing approx. 34% and service firms approx. 19% of city's jobs (1974: DES); approx. 24% of manufacturing jobs are in relatively low wage and declining leather and leather products
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firms ($8,500 average annual wage in city: '74); in addition, even lower paying textile and apparel firms ($6,995 average annual wage in city: '74) have recently replaced many leather firms in old mill buildings in Brockton and now account for approx. 25% of manufacturing employment as well; moreover, strong growth of wholesale and retail trade and services in Brockton has, with exception of wholesale jobs (only 14% of these two sectors), increased number of jobs paying below average annual wage in city (DES: '74 average annual wages in city = all employment $7,900, all manufacturing $8,500, retail $5,241, wholesale = $10,354, services = $7,167); as a consequence of this shift from manufacturing to services, Brockton now manifests highest percentage of total employment in wholesale and retail trade of any Major Labor Market Area in Commonwealth (approx. 34% compared with next highest Boston at approx. 28%) and second highest percentage of employment in all services (approx. 62% compared with Boston at 71%); however, whereas Boston leads all areas in high paying Finance, Insurance & Real Estate service sector, with 9% of total employment, Brockton just beats out New Bedford for last place with 4% of total employment in this service sector; these shifts in total employment mix, and mix within manufacturing, largely account for simultaneous occurrence of population growth, high unemployment, increased fiscal burdens from greater demands on city services, and relatively good family incomes in Brockton; Brockton's new jobs manifest characteristics of what has been termed a "secondary labor market," which include low pay, absence of job security, high turnover, lack of advancement opportunity, no unionization, poor working conditions, etc.; with shift to these lower paying jobs and rise in cost of living, families have been forced to rely on more than one wage earner or more than one job for principal wage earner (thus accounting for relatively high median family income level in city); secondary labor market qualities of these jobs encourage workers to move frequently between unemployment and welfare and employment status; this high rate of job turnover results in high unemployment rates while, at same time, offering ready availability of employment which attracts unemployed migrants seeking jobs; studies have statistically linked total levels of welfare payments, unemployment rates, and prevalence of
multi-income families with jobs offering "secondary labor market" quality employment; one recent study has also found a stronger relationship between "sub-employment" (i.e. secondary labor market employment) and crime than between degree of unemployment and crime; therefore, although growth of textile, apparel, food processing, retail, and selected service employment is now hailed by some as marking a recovery for Brockton, increases in relative proportion of these jobs with secondary labor market qualities will actually serve to worsen Brockton's fiscal and employment problems; if jobs added to city pay less than current average annual wage and encourage migration, growth will not achieve economic development objective of higher per capita income, but will reduce that measure of economic well being; statistical evidence indicates that Brockton's economic mix is adverse relative to its SMSA: (a) although Brockton contributes 57% of jobs in SMSA, almost 31% of SMSA employment is accounted for by manufacturing jobs (which pay more than other sectors on average) compared with only 24% for City of Brockton; and (b) Brockton accounts for 80% of textile and apparel, 60% of leather, 64% of service, and 60% of wholesale and retail trade in SMSA (these low wage sectors account for 60% of SMSA employment), but only 22% of higher paying jobs (approx. $11,500 average annual wage) in growing primary metal, fabricated metal products, and machinery (ex. electrical) industry groups in SMSA; therefore, in light of detrimental shift of employment mix in Brockton, state assistance and aid and a public industrial park project have been justified only if park has been marketed to firms offering "primary labor market" quality employment and a program to employ under- and unemployed persons has been initiated.

* Net Municipal Fiscal Flows: although detailed figures have not been collected, project definitely has resulted in positive net fiscal flows to city; up to present time, project has cost city only $28,901 in cash for net project cost subsidy, donation of municipally owned land valued at $190,000, and modest amount of interest costs on advances of initial development expenses; property, which had been a city dump, was not contributing tax revenues prior to project and it
is unlikely that unimproved 188 acres could have been readily sold for $190,000 or a private park as large as this project would have been developed; 75% of project property was quickly marketed and has been contributing substantial tax revenues to city; as Commonwealth continues to pay originally estimated state share of net project cost in annual installments, Brockton's fiscal returns from project will improve (see introductory "Note on Net Project Costs"); furthermore, if remaining land is sold, additional annual tax revenues will flow to city.

* Employment Impacts: as a result of DCA, Redevelopment Authority, and Industrial Development Commission Project management weaknesses, park has not achieved its potential for meeting employment needs of state and community which justified undertaking of project; neither DCA, Authority, nor IDC required that disposition agreements with firms specify uses in order to insure that desirable numbers of jobs and job quality would result; consequently, largest firm to locate in park, Knapp Shoe Co., has built a warehouse, retail outlet, and a large parking lot on land purchased in park, rather than factory which had been promised in a verbal agreement; Knapp has retained its factory in New Hampshire while locating a warehouse in Brockton in order to maintain its long established national trademark and bring distribution closer to major market areas; lack of firm selection criteria and limited review by DCA and Authority allowed additional low labor intensity warehousing and distribution uses to locate in park; absence of firm selection criteria related to state and local economic development objectives has allowed much of park property to be sold to firms offering "secondary labor market" quality employment; location of these firms in park violates original rationale for project and serves to worsen fiscal and employment problems in Brockton while utilizing scarce prime modern space which might have been used to lure firms with more desirable employment impacts; Brockton and park offer a number of features which should be attractive to industrial concerns; park is situated at junction of state Routes 24 and 123, close to I-95 and 13 miles south of Rt. 128 on direct "interstate quality" Rt. 24; Brockton is located within one of most densely populated areas in country and suppliers and major market areas are within easy reach; various major port facilities are close and easily accessible: Boston 21 miles, Fall River 31 miles, New Bedford 33 miles, Providence 31 miles, and
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New York City 210 miles; good rail, trucking and airport services are available within or near Brockton; specialized business services of Boston area are readily accessible; city offers low wage and skilled labor; despite generally negative shift in Brockton's industry mix, city has been able to attract firms in fabricated metal products, machinery (ex. electrical), and printing and publishing manufacturing groups which provide jobs of good pay and quality and has experienced growth in transportation, communications, and utilities sector which also generally offers "primary labor market" quality employment (Brockton manifests higher percentage of total employment in this sector of any Major Labor Market Area in state); nevertheless, potential of park for attracting desirable firms has not been realized and evidence indicates that this is largely attributable to poor project management; in addition, until recently, inner city residents have lacked physical access to jobs in park due to inadequate public transportation.

* Increased Diversity of Local Economy: although manufacturing, wholesale and retail trade, and selected services each contribute significant portions to Brockton's total employment, shift in industry mix from better paying manufacturing to lower paying jobs in these three sectors demonstrates a need for efforts to attract higher quality manufacturing jobs to city; devastating impacts from concentrating and increasing number of "secondary labor market quality" jobs have been previously discussed in above section on employment need; thus, although project would be justified if it attracted "primary labor market quality" firms to Brockton, project has not achieved this objective.

* Growth of the State Economy: aggregate state economic benefits will have been achieved to degree: (a) firms in park are expanding local firms, start-ups, or out-of-state firms which have located in park due to availability of cheap labor or other advantages particular to Brockton (ex. agglomeration economies related to concentration of leather production, labor skills, low wage labor, proximity to suppliers or markets, urbanization economies which aid "incubation" of small firms, etc.); (b) space vacated by local firms which move to park is filled by other firms because of these same local advantages; and (c) achievement of local fiscal and employment objectives reduces fiscal
demands on Commonwealth (by reducing expenses: welfare, unemployment compensation, city aid, etc.) and, thereby, need for taxes which impair competitive position of state for business in general; inadequate information on firms located in park is available for assessing aggregate benefits of types a and b; nevertheless, evidence that low labor intensity uses, such as warehousing and distribution, have been located in park suggests that aggregate state growth benefits of types a and b have been minimal (i.e. limited local firm expansion of employment, goods, and services, no business start-ups, and little addition to employment and "production" of goods and services from out-of-state firms); relatively low number of jobs in park and absence of an explicit public employment program to insure hiring of unemployed persons have also led to limited state economic growth benefits of type c; moreover, evidence that some firms in park offer "secondary labor market" quality employment suggests that project may have provided dis-benefits by increasing concentration of low wage, high turnover jobs which serve to increase in-migration of poor, raise unemployment rate, add to demands on municipal services, and, thereby, augment fiscal pressures on state; however, project has provided positive fiscal returns to city which contribute to state benefits of type c; nevertheless, despite good potential of project for achieving state economic growth benefits of all three types, project which has been developed up to present has not provided these positive benefits.

* Evidence of Agglomeration Economies: continued concentration of leather production in Brockton (approx. 25% of total manufacturing employment) suggests that agglomeration economies related to this industry may be present in city; however, dominance of leather, textile, and apparel industries (approx. 50% of manufacturing employment) may be accounted for more simply by presence of cheap mill space and a low wage labor force; nevertheless, recent growth of small firms (average 15 employees/firm) in machinery (ex. electrical) industry group which offer relatively high wages ($11,100 average annual wage: '74) suggests that combination of cheap space, low wage labor, and availability of services, suppliers, and resources in Brockton may be providing for "incubation" support for fledgling firms in this growth sector for Commonwealth; however, inadequate information is available on firms located in park to judge whether project has contributed to economic growth by enabling small firms to take advantage of these
BROCKTON

Judgement:
economies; moreover, these purported economies are too weakly supported by evidence to be considered a valid basis for justifying project.

* Induced Effects: no evidence of additional development resulting from project.

Narrative:
No further information is available to add to that which has already been presented.

The City of Brockton warranted state assistance and aid and a public development project because of serious and growing fiscal and employment needs, the potential for employment and local fiscal benefits, a need for increasing the diversity of the economic base, the potential for adding to growth of the state economy, and features, such as good transportation resources, a strategic location, and continued economic activity in the city, which suggested that the project could be marketed. As a community manifesting the characteristics of a "depressed" urban center, Brockton offered the potential for achieving state and local economic development objectives related to growth and distribution. The site consisted of property wholly owned by the city and was strategically located adjacent to a new major state highway. Due to these attractive features and the absence of an assembly problem, the land might have been sold at auction by the city for a privately developed industrial park ($550,000 in site improvements for 188 acres would not have been prohibitive for a private project) but public objectives might not have been well served by private development of this industrially developable land which is an asset in short supply in Brockton.

Although detailed information on the effectiveness of the project in meeting state and local development objectives has not been collected, the existing evidence garnered from interviews, observation, and a file search indicates that the project has failed to achieve these objectives, despite the disposition of 75% of the park land, due largely to weaknesses in public program design and DCA project management. In particular, the absence of reuse restrictions in disposition agreements to insure desired labor impacts, the failure to seek and select firms offering "primary labor market" quality employment (note: the rules and regulations do not require disposition to the highest bidder if other objectives are to be achieved through sale to a lower bidding firm),
and the lack of an explicit employment program to provide jobs, training, and transportation services to the under- and unemployed, have limited or eliminated any net employment benefits from the project. The neglect of record keeping at DCA and lack of an information system for the regular collection of data on project impacts have limited the ability of DCA to effectively monitor and assist projects (if that is what DCA had wanted to do) and the Commonwealth to assess the merits and improve the design of the program. The inadequacy of the existing information collection devices (ex. state audit reports) has been more problematic in the case of Brockton due to the delegation of responsibility for project development by the Redevelopment Authority to the Industrial Development Commission. Thus, there is no evidence that DCA ever approved of the disposition agreements for this project as required by the program rules and regulations in order for DCA to fulfill its minimal regulatory functions. The current state of project inactivity is partly attributable to DCA's adoption of a "hands-off" attitude which limited the state's role to regulatory functions and left the local personnel to develop the project with whatever resources they could obtain on their own. Despite the merits, even the necessity, of a "local initiatives approach" to program management in a state of strongly independent local communities, such as Massachusetts, DCA's total neglect of support and monitoring functions has deprived local actors of information resources and coordination assistance in dealing with other government units which only DCA can provide. Moreover, DCA adopted its minimal role despite the investment of substantial amounts of state funds in a project which offered good potential for achieving valued state and local economic development objectives.

Disposition of the remaining approx. 50 acres in a manner which serves to achieve development objectives will depend largely on the ability of DCA to assist a local body in formulating and executing a marketing strategy based on desired objectives. In particular, the low quality of employment offered by Brockton's current industry mix and the worsening shifts in that mix, demand that the marketing strategy focus on firms which can provide jobs with annual wages higher than the current mean average annual wage and "primary labor market" quality characteristics. The addition of more low wage jobs not only fails to improve conditions in Brockton, but serves to increase
BROCKTON

the unemployment rate, the burdens on city services, and the level of in-migration of the poor. For these reasons, public development of a park on this site was preferable to sale of the land for private development. However, as a result of the failures of project management by the public bodies involved, the public objectives which warranted a public project have not been achieved.
Location: FITCHBURG
Project Name: 231 Industrial Park
Size: 94.2 acres; 72.3 developable acres
Type: Industrial
Reuse: proposed: 75% light industry; 25% research
Net Project Cost: $3,020,000 (audit) or $2,919,358 (ledger) or $3,004,158 (questionnaire)
State Share: $ 553,679
City Share: $ 654,321 (audit) or $ 553,679 (ledger) or $ 638,479 (questionnaire)
EDA Grant: $1,812,000
State Payments to Date: $ 67,067.90 ('75-'76: 2 payments of $27,033.55 plus $13,000 planning advance)
Status: All site improvements have recently been completed. Marketing efforts have begun with assistance of a $12,000 grant from EDA for hiring of full time marketing services.
Model Aspects:
* Grant from federal Economic Development Administration (EDA) to fund site improvements: $1,812,000 award was approved in 3/75; conditions on receipt of grant include a "non-relocation" regulation which prohibits relocation of firms from other communities to park project; therefore, project market is limited to expanding local firms, business start-ups; and branch plant expansions of out-of-area firms; all EDA funds have been received.

* Project in an economically "depressed" urban center: city was a major manufacturing community but has experienced a long term gradual decline and recent (post-1970) loss of 1/3 of its industrial jobs (loss of 4,000 out of 12,000 manufacturing jobs); city is located in somewhat isolated and economically "depressed" Rt. 2 corridor region.

* Grant from federal Economic Development Administration to obtain assistance on a fulltime basis to market project: marketing assistance is funded with $12,000 out of $1,812,000 grant; marketing services are provided through a contract with Fitchburg Office of Economic Development.

* Local Development Corporation is available to acquire land and construct industrial buildings utilizing SBA 502 financing for lease or sale to qualifying firms.

*Development Strategies: (a) land parcels are to be sold by Redevelopment Authority to individual firms; and (b) land parcels may be sold to Local Development Corporation which purchases and builds on parcels utilizing SBA 502 financing and leases or sells structures to qualifying firms.
FITCHBURG

Program Components:

state:

* No eminent domain powers: five of six parcels in project area were acquired through negotiation and city exercised option held on sixth parcel to purchase 64 acres for $100,000 from Weyerhouser Corp.; all six owners were pleased to dispose of unimproved and unused property, despite its location at junction of Rts. 2 and 31; although eminent domain powers were not employed, property was declared open blighted land so that public takings could have proceeded if necessary; property contained swamp, a brook, and one residence which had to be acquired.

* State planning advance: $13,000 was advanced by DCA in 1974 for preparation of an Environmental Impact Report required by state Office of Environmental Affairs; however, DCA did not advance funds for survey and planning because of a shortage of funds in 1973, but agreed to reimburse city for 75% of planning expenses as provided for by statute through annual payments during project execution phase.

* State execution subsidy.

* No state infrastructure investment was associated with project; however, state plans to construct I-190 from Worcester area up to Leominster, with Rt. 2 interchange situated near eastern corner of Fitchburg rather than western corner where industrial park is located; although I-190 construction will improve transportation services for project, unfavorable location of park relative to new interchange may result in private industrial park development adjacent to I-190 in Fitchburg or Leominster which will draw market away from public park project.

* Successful completion of project largely dependent on ability of DCA to assist Redevelopment Authority in formulating and executing a marketing strategy directed at achievement of state economic development objectives, to secure commitments from departments within Executive Office of Economic Affairs on targeting resources to boost park marketing effort, and to obtain from Office of State Planning policy guidelines and an economic development plan directing state investment of resources in Rt. 2 corridor communities; weak
FITCHBURG

marketability of project demands coordination of state tools to target development to park; targeting of public sources of business capital, manpower training programs, and Dept. of Commerce and Development promotion activities may enable project to achieve valued state economic development objectives; in past, problems have arisen because DCA has not provided technical and coordination assistance: (a) failure of DCA to review grant application to EDA has resulted in grant funding only adequate for construction of utilities above ground, despite requirements of program regulations and project plan for underground installation; (b) DCA did not inform Authority of need for a permit from Office of Environmental Affairs to move a creek, so that action was undertaken in violation of state regulation; and (c) lack of DCA coordination of activities with Dept. of Transportation Planning has resulted in poor siting of industrial park relative to proposed I-90 interchange (highway might have been planned with interchange near project or project might have been developed at a site near proposed interchange).

* Municipal expenditures: $1,000,000 urban renewal bond was issued for a 10 year term in 1976 at a 5.3% interest rate ($1.5 million total bonding projected); city will bear all of interest expense of bond; city has provided $60,500 for planning expenses, $102,000 or $172,785 for acquisition expenses, and $2,367 for relocation payments; total city share of net project cost (principal only) is projected to be $654,371 (audit) or $638,479 (questionnaire) of $553,671 (ledger); furthermore, city will bear project costs equal to amount of estimated disposition proceeds (approx. $519,000) until such time as land is sold.

* Extension of city sewerage system to project area by municipal Dept. of Public Works.

* EDA grant: grant of $1,812,000 approved in 3/75 has been received in full.

* City of Fitchburg: advance of most of up-front planning and development expenses, and assumption of costs of municipal execution subsidy, bond interest, bonding for extension of city sewerage line to project area, and carrying project costs equal to amount of estimated disposition proceeds until actual land sales.
Fitchburg

* Fitchburg Redevelopment Authority: formed in 1/64; employs a full time executive director for development and marketing; engaged in a federally aided Neighborhood Development Program (NDP) project from 7/72 to 6/73; approximately 3/4 of $472,016 in project costs were paid by HUD and remaining 1/4 by city; activities included creation of two off-street parking lots and two tot lots, separation of some storm drains and sewerage lines, and replacement of some water mains, streets, and sidewalks.

* Fitchburg Dept. of Public Works: extended city sewerage system to project area.

* Fitchburg Industrial Development Commission: full time executive director of local commission is available to assist firms interested in locating in park in securing funding for plant and equipment.

* Fitchburg Office of Economic Development: is providing marketing services to project through a $12,000 EDA funded contract with Authority.

* Local Development Corporation: is available to acquire land and construct buildings utilizing SBA 502 financing for lease or sale to qualifying firms.

* DCA: limited role assumed up to present has contributed to numerous problems; no assistance was provided by DCA to Authority when application was made to EDA for grant; project marketing will depend upon ability of DCA to provide assistance to Authority.

* EDA: provided grant for site improvements and retaining full time marketing services.

* Office of State Planning: should provide guidelines and an economic development plan for investment of state resources in "Rt. 2 corridor" communities; Ayer to Greenfield corridor is isolated from major transportation corridors for flow of economic activity (ex. NY/Hartford I-86 corridor); state resources have gone into communities in this corridor, ex. Fitchburg State College, I-190 construction, etc., without a plan analyzing what can and should occur in region.
FITCHBURG

**Dept. of Commerce and Development:** should provide marketing assistance through business contact program and out-of-state promotional activities and lend support for targeting of public sources of business capital to park (ex. MIMIA, MBDC, CDFC, SBA, etc.).

**Office of Environmental Affairs, Environmental Impact Review Section:** required preparation of an Environmental Impact Report for project.

**Dept. of Transportation Planning:** has planned for construction of I-190 without considering industrial park projects; proposed I-190/Rt. 2 interchange location will not help project much and may serve to draw limited market away from state assisted project.

**Performance Process Measures:**

* Implementation Process: planning and development stages have been completed in relatively rapid fashion; survey and planning application was approved by DCA in 9/73, execution stage began in 2/75 with DCA approval of EIR and Final Project Report, and acquisitions and site improvements were completed by 5/77; EDA grant was received in 2/75; all six parcels were acquired between 4/17/75 and 6/11/75, five through negotiated settlements and one pursuant to a city option on property; contract for public works was executed in 4/76 and construction completed by 9/76; Redevelopment Authority attempted to form a project area committee but little interest was expressed by area residents; only family living on site relocated through own efforts to nearby location; minor opposition to project arose from environmentalists concerned about relocation of a brook and from mayor who complained to newspapers because of his fears about a need to raise tax rate; however, environmentalists were satisfied after preparation of EIR and mayor signed all necessary approvals; Fitchburg DPW completed extension of city sewerage system to project area in timely fashion; although project was not delayed by DCA, program mismanagement was evident when DCA misplaced site improvements contract sent by Authority for approval (contractor was given go ahead from Authority without DCA approval and DCA approved contract after work was completed), failed to notify Authority of need for a permit to move a brook, and did not review grant application to EDA to insure that grant covered cost of placing site
FITCHBURG

utilities underground as required by regulations and project plan; at present, all site improvements have been completed: brook straightened and swampland filled with dirt from on site hill, access road to front of each parcel and two cul-de-sacs built, railroad spur constructed off Boston and Maine line, and power lines, streak lights, and sewerage lines installed; active marketing efforts have begun.

* Planning: city advanced $60,500 for all survey and planning expenses (except EIR) because of a shortage of state funds; firm of Anderson-Nichols prepared project plan and EIR; two alterations to plan were approved by DCA as "minor plan changes": (a) an extension of project boundaries from 92 to 94 acres in order to accommodate an access road from a city street; and (b) a change of allowed reuses from specific items such as research and testing, light manufacturing, etc. to simple designation of industrial reuse.

* Marketing: active marketing efforts have recently begun; a $12,000 EDA grant is partly financing services of a full time marketing person from Fitchburg Office of Economic Development; a committee of five prominent local citizens has been formed to sell prospective park clients on assets of city and park location; analyses identifying industries likely to be attracted to city have been prepared by executive director of Industrial Development Commission and by EDA computer package; full-time IDC executive director is also available to assist firms with their capital needs; Local Development Corporation is available to construct space to suit needs of qualifying firms with SBA 502 financing; as a condition of receipt of EDA grant, project must comply with "non-relocation" regulation which prohibits movement of firms from other communities to park; therefore, marketing will be limited to local expansions, start-ups, and branch plants of out-of-area firms; marketing promises to be difficult due to a number of factors: (a) isolation of city in "depressed" Rt. 2 corridor relative to primary state economic corridors and centers, (b) poor siting of park relative to proposed location of I-190, (c) competition from private parks in Fitchburg (95 acres), and Leominster (60 acres) and state assisted park in Gardner, (d) proximity to New Hampshire with its lower tax burden,
Effectiveness Measures:

* Fiscal Need: tax burden in Fitchburg, as measured by tax rate on equalized value, is slightly below median average for Mass. cities but has increased significantly from '76 to '77; substantial loss of industry since 1970 has weakened tax base even more than is currently reflected by tax rate (lag before owners of industrial property stop paying real estate taxes); despite loss of 1/3 of 12,000 manufacturing jobs since 1970, manufacturing continues to account for almost 50% of city's employment; in addition, Fitchburg accounts for nearly 50% of firms and jobs in heavily industrialized Fitchburg-Leominster SMSA which serves as economic center for North-Central Mass.; however, whereas economy of adjacent Leominster has improved with concentration of plastics industry, Fitchburg has experienced industrial flight which has resulted in abandoned plants
and disinvestment in housing stock; nevertheless, high wage jobs in fabricated metal products, paper and allied products, and machinery (ex. electrical) industry groups now account for 62% of industrial employment in Fitchburg; thus, Fitchburg warrants state assistance and aid on basis of fiscal need; fiscal strain is evident and promises to grow worse; on other hand, city remains important economic center for North-Central Mass. region and manufacturing continues to dominate employment; presence of privately developed park in city suggests that private investors perceive of a market demand for modern industrial space; however, availability of private park and willingness of property owners to sell to Authority suggest that land assembly is not a problem for private developers.

* Employment Need: "depressed area" characteristics of city also qualify Fitchburg for state assistance and aid on basis of employment need; unemployment rate in city is consistently 2 to 3 percentage points higher than state average (11.1% in 3/76); lack of economic opportunity has led to migration from city and a loss of population; impoverishment of community is evident from a comparison of percentages of city population in lowest two income ranges compared with SMSA and State figures in 1970 Census and from per capita income comparisons: incomes under $3,000 = F 8.4%, SMSA 7.0%, Mass. 6.4%; incomes $3,000-$5,999 = F 15.2%, SMSA 12.7%, Mass. 11.8%; per capita income = F $2,992, SMSA $3,152, Mass. $3,425; thus, state assistance and aid and public development initiatives are justified on basis of local employment need.

* Net Municipal Fiscal Flows: probability of positive net fiscal flows to city from project is highly uncertain given negative marketing factors faced by project and high cost of project to city despite EDA grant: interest on $1,000,000 bond, approx. $650,000 city share of net project cost, carrying of estimated $519,000 in costs equal to projected disposition proceeds until time of land sales, and municipal expense from extension of sewerage system; however, if project achieves a moderate rate of absorption through concentrated state efforts, it is likely that project will result in a modest positive net fiscal flow over life of project.
FITCHBURG

* Growth of State Economy: availability of modern space in park may allow out-of-area firms to locate branch plants in Fitchburg to obtain efficiency advantages of low wage skilled labor; in addition, to extent that industrial flight has resulted from unavailability of modern horizontal space, park may allow for local firm expansion that otherwise would not occur in the city (land costs in public park are lower than in private park); a judgement on whether project contributes to growth of state economy must await evidence of local firm expansions, start-ups, or location of branch plants of out-of-area firms; location of project in area of high unemployment should serve to promote employment objectives of state and, thus, contribute to state economic growth by reducing fiscal demands on Commonwealth (through lower welfare costs; local aid, etc.) and, thereby, need for taxation which impairs competitive position of state for business in general.

* Employment Impacts: in light of high levels of local unemployment and population migration from city due to lack of employment opportunities, project should provide positive employment benefits if land can be marketed; compliance with EDA "non-relocation" regulation prohibiting relocation of firms from other communities to park will prevent project from resulting in a "zero sum" transfer of jobs that doesn't add to total employment; relative isolation of Fitchburg suggests that jobs will not be taken by outside commuters; however, if Authority is not somewhat selective in marketing project to firms which offer "primary labor market" quality jobs, addition of firms with "secondary labor market" quality jobs to city may serve to perpetuate or worsen low per capita income (addition of jobs paying less than current average income and induced in-migration), high unemployment rates (from high job turnover rate typical of such firms), dependency on public assistance payments (high job turnover syndrome), burdens on city services, and overall decline of residential and business fabric of city; therefore, in order to achieve employment impacts which serve state economic development objectives, marketing strategy should include criteria for firm selection on basis of employment impacts and an employment program should be initiated to insure that unemployed are hired and trained by park firms;
FITCHBURG

approx. 62% of industrial employment in Fitchburg is accounted for by high wage jobs in fabricated metal products ($10,500 average annual wage; 23% of manufacturing employment in '74: DES), paper and allied products ($13,000 annual wage; 21% of employment in '74: DES), and non-electrical machinery ($12,500 annual wage; 18% of employment in '74: DES) and city manifests a high overall average annual manufacturing wage ($10,750 in '74: DES); low wage jobs in retail ($5,400 average annual wage in '74: DES) and selected services ($6,000) reduce overall average annual wage in city; presence of skilled low wage labor force should provide opportunity for attracting jobs of higher quality than current average; if measures suggested here to achieve desirable employment impacts are taken, project would be justified on basis of potential employment impacts.

* Evidence of Agglomeration Economies: although Fitchburg does not manifest particular agglomeration concentrations, dominance of plastics industry in adjacent Leominster suggests that economies for this industry group may be present; location of plastics or plastics related firms in park may strengthen this agglomeration and availability of efficient modern space may allow local Leominster firms to expand that otherwise would not for lack of efficient local space; nevertheless, higher and rising oil prices have dampened growth of plastics industry; however, off-shore oil may provide somewhat of a counter force to boost plastics in Mass.

* Increased Diversity of the Local Economy: inasmuch as a variety of industry groups are well represented in Fitchburg and manufacturing continues to account for a large portion of city employment, project cannot be justified on basis of increasing local economic diversity.

* Induced Effects: no evidence of a potential for induced development resulting from project.

Narrative: Project area of 94.2 acres was open blighted land with swampy conditions, a meandering brook, and only one residential structure. The site is situated at the junction of state routes 2 and 31. Access to the project area is good. No zoning change was required for the project and an industrial project for the site conformed with the Fitchburg Comprehensive Plan of 1969. The
FITCHBURG

property has become an attractive physical area with the completion of site improvements. Nevertheless, the economic decline of the city and stagnation of the region suggest that the project will face formidable marketing problems. In order for the project to achieve state economic development objectives, resource commitments and cooperation from various state government units must be applied to the marketing effort. At the present time, however, the state lacks guidelines and an economic development plan for the Rt. 2 corridor communities. Despite the absence of state policy for the region the state is currently expending resources in Fitchburg on state college expansion and, through DCA, on a neighborhood improvement program and housing for the elderly. Without an overall state policy for the region, program managers are reluctant to make decisions with respect to resource commitments and expenditures may be wasted for lack of necessary complementary actions.

Judgement:

The Fitchburg 231 Industrial Park project can be justified on the basis of the local fiscal need, the local employment need, the potential for employment benefits, and some evidence that the project is marketable. However, the net fiscal flows from the project to the city may be negative and the willingness of property owners to sell to the Redevelopment Authority suggests that private assembly of land was not a problem. Nevertheless, the high cost of infrastructure development would probably have precluded competitive private market development of the site. The development of another industrial park in Fitchburg by private interests indicates that some people perceive of a potential demand for modern industrial space in a city containing many vacant older mill structures. Despite the industrial decline experienced by Fitchburg, the city manifests a high percentage of high wage and state growth industries. If DCA can provide the necessary marketing assistance to the project, positive employment impacts should follow from successful marketing. Due to the considerable effort required from DCA and units within the Executive Office of Economic Affairs to market the project, policy guidelines and an economic development plan from the Office of State Planning on the Rt. 2 corridor communities generally, and this project in particular, would help to mount a marketing effort which has potential for achieving valued state economic development objectives.
FITCHBURG

Inasmuch as marketing efforts are now beginning, DCA should attempt to define its role in discussions with Redevelopment Authority personnel. Firm selection criteria and an employment program for the park should be established as soon as possible. DCA staff should explain the land disposition rules and regulations to Authority personnel and urge that performance objectives be included in disposition agreements whenever possible. DCA should obtain a copy of the Authority's grant application to EDA for its files.
<table>
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<tr>
<th>Location:</th>
<th>GARDNER</th>
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<tbody>
<tr>
<td>Project Name:</td>
<td>East Gardner Industrial Park</td>
</tr>
<tr>
<td>Size:</td>
<td>140 acres; 108 disposable acres</td>
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<tr>
<td>Type:</td>
<td>Industrial</td>
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<tr>
<td>Reuse:</td>
<td>proposed: 20% heavy industry; 70% light industry; 5% warehousing; 5% distribution</td>
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<td>Net Project Cost:</td>
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<td>State Share:</td>
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<tr>
<td>City Share:</td>
<td>$ 511,314 (ledger) or $ 391,785 (audit) or $ 391,785 (U. Mass. summary); does not include bond interest costs which are borne entirely by city</td>
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<tr>
<td>EDA Grant:</td>
<td>$1,026,900 (audit) or $926,974 (U. Mass. summary)</td>
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<tr>
<td>State Payments to Date:</td>
<td>$ 51,131 ('75-'76: 2 payments) plus $31,288.96 planning advance</td>
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**Status:** Although planning and development phases of project have extended for a decade, all of project property has been acquired and all site improvements have been completed. Marketing efforts for project began in 1976. Due to weak marketability of industrial land in Gardner, DCA should assist Authority in formulating a market strategy and obtaining resources of units within Executive Office of Economic Affairs to augment marketing activities.

**Model Aspects:**

* Grant from federal Economic Development Administration (EDA) to fund site improvements: grant was approved in June 1973; conditions on receipt of grant include a "non-relocation" provision which prohibits relocation of firms from other communities to park; therefore, project market is limited to expanding local firms, business start-ups, and branch plant expansions of out-of-area firms; all EDA funds have been received; as a consequence of delays and other problems which have increased project costs, EDA grant is considered essential for continuation of project.

* Project in small economically stagnant city in "depressed" Rt. 2 corridor: park has been developed on only property which could accommodate a needed rail spur; Gardner is a somewhat isolated community of approximately 20,000 persons which makes it one of smallest cities in Commonwealth.

* Local Development Corporation available to acquire land and construct industrial buildings utilizing SBA 502 financing for lease or sale to qualifying firms.
GARDNER

* Development Strategies: (a) land parcels are to be sold by Redevelopment Authority to individual firms; (b) land parcels are to be leased by Redevelopment Authority to individual firms; and (c) land parcels may be sold to Local Development Corporation which purchases and builds on parcels utilizing SBA 502 financing and leases or sells structures to qualifying firms.

Program Components:

state:

* Eminent domain powers.

* State planning advance; $31,288.96 in state funds was advanced for planning; advance was not subtracted out of first annual execution payment to city as is customary and was not subtracted out of state share of net project cost before annual state payment was calculated.

* State execution subsidy.

* Successful completion of project largely dependent on ability of DCA to assist Redevelopment Authority in formulating and executing a marketing strategy directed at achievement of state economic development objectives, to secure commitments from units within Executive Office of Economic Affairs on targeting of resources to boost park marketing effort, and to obtain from Office of State Planning police guidelines and an economic development plan directing state investment of resources in Rt. 2 corridor communities; weak marketability of project at an isolated location in a generally depressed region demands coordination of state tools to target development to park; targeting of public sources of business capital, manpower training programs, and Dept. of Commerce and Development promotion activities may enable project to achieve valued state economic development objectives.

* No state infrastructure investment directly related to project development; however, state plan to construct I-190 from Worcester to Leominster will affect project; although construction of I-190 will improve transportation services for park, unfavorable location of project relative to proposed I-190 and Rt. 2 interchange may result in private industrial park development adjacent to I-190 in Fitchburg or Leominster which will draw market away from Gardner project.
GARDNER

municipal:  
* Municipal expenditures: $750,000 urban renewal 
  bond was issued for a 15 year term in 1975 at a 
  7.2% interest rate; city will pay all of interest 
  expense of bond; in addition, city has provided 
  $19,000 for some acquisition expenses and $2,600 
  for planning expenses out of general local revenues; 
  total city share of net project cost (principal 
  only) is projected to amount to $511,314 (ledger) 
  or $391,785 (audit).

federal:  
* EDA grant: grant of $1,026,900 approved in 6/73 
  for site improvements has been received in full.

Actors:
  
* City of Gardner: advance of most of up-front 
  development expenses and assumption of costs of 
  municipal execution subsidy, all bond interest 
  expenses, and foregone real estate tax revenues 
  ($262 in '66).

* Gardner Redevelopment Authority: was formed in 
  1966 to develop an industrial park at only avail-
  able site in city able to accomodate rail spur 
  demanded by expanding local firms; executive 
  director also serves in that role for Local De-
  velopment Corporation attempting to market an 
  industrial park developed with private resources 
  20 years ago; executive director has held a full 
  time job with LDC since 1960 and a job with 
  Redevelopment Authority since its formation in 
  1966.

* Gardner Industrial Development Corporation: 
  Local Development Corporation headed by Redevelop-
  ment Authority Executive Director is available 
  to acquire land from Authority and construct 
  buildings utilizing SBA 502 financing for lease 
  or sale to qualifying small businesses.

* DCA: has played a limited role up to present 
  time; DCA did not assist Authority in applying 
  to EDA for a grant; project marketing will 
  largely depend upon ability of DCA to provide 
  active assistance to Authority.

* EDA: has provided a grant for site improvements.

* Office of State Planning: should provide guide-
  lines and an economic development plan for invest-
  ment of state resources in "Rt. 2 corridor" communi-
  ties; Ayer to Greenfield corridor is isolated 
  from major transportation corridors for flow of 
  economic activity; state resources have gone into 
  communities in this corridor without a plan 
  analyzing what can and should occur in region.
GARDNER

* Dept. of Commerce and Development: should provide marketing assistance through its business contact program and out-of-state promotional activities and lend support for targeting of public sources of business capital to park (ex. MIMIA, MBDC, CDFC, SBA, etc.).

* Conservation Commission: had to issue an approval for project regarding likely environmental impacts.

* Department of Natural Resources: held up approval of a permit for approximately one year.

* DPW: refused for a long while to accept an easement over Route 2 layout for water and sewer construction and only accepted easement after considerable pressure was brought to bear.

* Division of Water Pollution Control: held up a certificate on adequacy of sewerage treatment plant.

Performance

Process Measures: * Implementation Process: project implementation has been subject to many delays during planning and execution stages; survey and planning phase was approved by DCA in 10/66 but execution approval was not granted until 8/71; as a result of delays, original $920,000 city bonding commitment was insufficient to meet project expenses; therefore, Authority applied to EDA for a grant to finance site improvements; however, EDA approval was delayed for two years when personnel were transferred to Pennsylvania for one year to provide emergency assistance in aftermath of hurricane Agnes; an amendment to state environmental law required Authority to re-apply for an environmental permit through local Conservation Commission; due to internal mismanagement, contractor for sewer lines and access roads completed work in two years at a cost of approx. $1,270,000 although original contract called for a one year construction period and a cost of approx. $1,228,000; costs of public facility construction were significantly greater than original planning estimates because unstable condition of ground required a new pile design and excavation of full width of roads; Mayor of Gardner held up bond issue for 18 months because he feared that taxes would have to be raised to service debt; all of EDA grant has been received by Authority and site preparation work has been completed.
* Planning: numerous difficulties delayed project during planning phase: (a) absence of state guidelines on what constitutes open blighted land led local bond counsel to refuse to authorize bond issue for project; (b) DCA Commissioner rejected project because town lacked a zoning ordinance; (c) planning proceeded when Supreme Court decision was cited which indicated that absence of a zoning ordinance was insufficient grounds for rejection of a project but DCA's planning consultant, nevertheless, rejected finished project plan due to lack of a zoning ordinance; (d) Department of Natural Resources held up approval of a Hatch Act permit for a year; (e) Dept. of Public Works refused to grant an easement over Rt. 2 layout for sewer and water construction and finally capitulated only after considerable pressure was brought to bear on Commissioner; and (f) Division of Water Pollution Control held up a certificate on sewage treatment plant over a disagreement with consulting firm that had designed plant; over course of planning several different consultants were used: Lordwood Assoc. determined project contours, Whitman and Howard was plagued by internal problems and was unable to fulfill its obligations, and John Brown Assoc. completed planning work and assisted through execution stage.

* Marketing: Authority Executive Director markets both private non-profit and state-aided industrial parks; 20 acres remain available in private park despite 20 years of active marketing; marketing efforts for state assisted project began in 1976; although no firms have purchased parcels at this time, three firms are currently negotiating in earnest; Authority responds to inquiries by providing information on local labor market, recreation and educational facilities, availability of transportation and utilities, and excellent waste disposal and water supply; all inquiries are followed up with phone calls and letters; local banks cannot supply industrial financing but tax exempt industrial revenue bond-int is available for firms that qualify; target industries that have been identified by Authority include metalwork, pharmaceuticals, electronics, and woodworking; Authority claims that it stresses industries which are compatible with existing skills of labor force; Authority advertises in "Wall Street Journal," "American Industrial Properties Report," and other periodicals which reach
GARDNER

eastern and national markets; slow progress of marketing private non-profit park suggests that isolation of Gardner seriously limits marketability of state-assisted project; thus successful marketing of state assisted project is largely dependent on assistance from DCA; a marketing strategy should be based on assets of park, such as a skilled low wage labor force and a high quality water supply; close proximity to New Hampshire with its lower tax burden represents a serious constraint for project; a DCA assistance strategy should encompass both Gardner and Fitchburg project only 6 miles away in order to insure that competition between two projects is not mutually damaging.

Effectiveness Measures:

* Fiscal Need: tax burden in Gardner, as measured by tax rate on equalized value, is about equal to median average for Mass. cities and has increased slightly in recent years: $47.50 in '70 to $48.20 in '76; since many major capital improvements have recently been completed, such as a water supply system, a new sewerage treatment plant, extensive recreational facilities, and a new high school, capital expense pressures on taxes should moderate in future; Gardner has retained a strong manufacturing base which accounts for approx. 62% (DES: 1974) of jobs in city; historical "Chair City of the World" title continues to accurately reflect concentration of furniture and fixtures industry group which accounts for approx. 46% (DES: 1974) of city's manufacturing jobs; although city has lacked economic vitality, stability of manufacturing in-mill buildings has prevented severe fiscal strain; thus, while there is a definite need to lower fiscal burden in Gardner a modest degree, fiscal need is a weak basis for justifying public industrial development in city.

* Employment Need: despite continued dominance of manufacturing and concentration of furniture industry in Gardner, city regularly exhibits high rates of unemployment (11.7% in 3/76); although significant percentages of Gardner's workers engage in production of firearms, fabricated structural metal products, and office and store machines and devices, in addition to furniture, city has not experienced economic growth; city population has remained stable since 1930 near 20,000 persons; inasmuch as annual births substantially exceed deaths there has been a continual annual out-migration from city; thus,
evidence of a lack of employment opportunities and a normally high unemployment rate suggest that public development efforts are warranted on basis of employment need; in addition, isolation and stagnation of local economy, limited resources of local banks, and absence of private development activity indicate that private parties would not have developed an industrial park without public support; on other hand, continued presence of a substantial manufacturing base suggests that a park may be marketable with proper state support.

* Net Municipal Fiscal Flows: probability of positive net fiscal flows to city from project is highly uncertain given above negative marketing factors; despite grant from EDA, project will cost city interest expense on $750,000 bond, a small amount of annual foregone tax revenue from property since 1966 ($262 in 1966), and $400,000 to $500,000 in a municipal subsidy; achievement of positive net fiscal returns will depend upon ability of DCA and Redevelopment Authority to muster resources and cooperation of other state government units and design a marketing strategy; successful marketing effort which attains a moderate rate of absorption is likely to produce modest positive net fiscal flows to city.

* Growth of State Economy: in light of continued concentration of furniture industry which suggests presence of agglomeration economies, and absence of private development of modern industrial park facilities in Gardner, project may allow for expansion of local firms and location of business start-ups and out-of-area branch plants in furniture related and other businesses that otherwise would not have occurred; development of project on only site in city capable of accommodating rail service may provide increased efficiency advantages which will precipitate growth from these same sources; in addition, availability of modern space in park may allow out-of-area firms to locate branch plants in city to obtain efficiency advantages of excellent water supply and low wage skilled labor; however, a judgment on whether project contributes to growth of state economy cannot be made apriori but must await evidence of expansion of local firms, business start-ups, and location of out-of-area firm branch plants in park; location of project in an area of high unemployment should serve to promote public employment objectives and, thus, contribute to state
GARDNER

economic growth by reducing fiscal demand on Commonwealth (through lower welfare costs, local aid, etc.) and, thereby, need for taxation which impairs competitive position of state for business in general.

* Employment Impacts: in light of high level of local unemployment and population migration from city due to lack of employment opportunities, project should provide positive employment benefits if land can be marketed; compliance with EDA "non-relocation" regulation prohibiting relocation of firms from other communities to park will prevent project from resulting in a "zero sum" transfer of jobs that doesn't add to total employment and allowing for movement of firms out of other high priority development areas; relative isolation of Gardner suggests that jobs will not be taken by out-of-city commuters; however, if Authority is not somewhat selective in marketing project to firms which offer "primary labor market" quality jobs, addition of firms with "secondary labor market" quality jobs to city may serve to perpetuate or worsen low per capita income (addition of jobs paying less than current average income and induced in-migration of poor), high unemployment rates (from high job turnover rate typical of such firms), dependency on public assistance payments (high job turnover syndrome), burdens on city services, and general decline of residential and business fabric of city; therefore, in order to achieve employment impacts which serve state economic development objectives, marketing strategy should include criteria for firm selection on basis of employment impacts and an employment program should be initiated to insure that unemployed persons are hired and trained by park firms; presence of skilled low wage labor force should provide opportunity for attracting jobs of higher quality than current average; however, weak marketability of site does not offer much public leverage for "stick" approach - i.e. requiring firms locating in park to hire unemployed as a condition of land disposition; nevertheless, if measures suggested here to achieve desired employment impacts are taken and achieve some degree of success, project will be justified on basis of employment impacts.

* Evidence of Agglomeration Economies: concentration of furniture industry in Gardner suggests that agglomeration economies of some sort are present; if project allows for expansion of
GARDNER

local firms, start-ups, and/or location of out-of-area firm branch plants in furniture related businesses, which only had option of less efficient space, project will serve to strengthen agglomeration economies and promote economic growth.

* Increased Diversity of the Local Economy: with approximately 61% of Gardner's employment consisting of manufacturing, and approx. 46% of manufacturing employment accounted for by furniture industry, project can be justified as an attempt to broaden local economic base; heavy dependence of city on furniture industry leaves local government and residents of city very vulnerable to shifts in that one industry.

* Induced Impacts: Gardner is one of smallest cities in Commonwealth; although academic debate continues over what constitutes a minimum threshold size for an urban center to prosper, there is little doubt that small size and isolation of Gardner limit services and resources available for industry; if Gardner loses population, city may pass a minimum threshold size for maintenance of services and provision of physical, capital, and labor resources essential for continued operation of local manufacturing firms; on other hand, employment expansion which results from project may push city past threshold needed for additional services and resources which will spur additional employment growth; however, as should be obvious from this discussion, issues of threshold urbanization economies are far too uncertain to justify development of a public project.

In 1955 the Florence Stove Company closed operations in Gardner leaving many residents unemployed. Private citizens responded by raising $350,000 for the development of an industrial park through a non-profit Local Development Corporation and the construction of a speculative industrial building. After unsuccessful efforts to market the park and building over a few years, the City of Gardner assumed responsibility for promoting the park in 1960 and hired the current executive director of the Redevelopment Authority to direct the promotion drive. Soon thereafter, the building was sold, a second structure was built and leased, and a third building was constructed by a firm which purchased a parcel in

Narrative:
the park. SBA 502 funds were utilized to construct two of these buildings. In attempting to market the park, it was learned that local industry demanded rail facilities which were not available at the park. The Gardner Redevelopment Authority was formed in 1966 to respond to this need for a modern park with rail facilities. Due to the poor grades of the available land in Gardner, which has the highest elevation of any city in the Commonwealth, only one site was identified which could accommodate a rail spur. Delays which beset the project during the planning and execution stages extended the development process for a decade. The delays also resulted in increased project costs which were prohibitive for the city to assume. Therefore, the Authority applied for and received a grant from EDA for the funding of site improvements. Although the mayor resisted the project for fear of increasing property taxes, local business and general community support was strong enough to prevail upon the mayor and obtain his cooperation.

The East Gardner Industrial Park is justified on the basis of employment needs, potential employment benefits, a need for diversification of the local economy, a potential for strengthening agglomeration economies, the absence of private industrial park development, the unmet demand for park land with rail facilities, and some evidence that the project can be marketed. However, in order for the project to achieve desired economic development objectives, DCA must provide assistance to the Authority in formulating a marketing strategy based on the assets of the area, such as a low wage skilled labor force and a high quality water supply, and firm selection criteria related to the quality of employment desired, and secure the resources and cooperation of units within the Executive Office of Economic Affairs which are needed to market the project and achieve economic development objectives (i.e. targeting of public sources of business capital, manpower training programs, and Dept. of Commerce and Development business contact program and promotion activities). Due to the considerable effort required from state government in dealing with an uncertain market situation, policy guidelines and an economic development plan from the Office of State Planning, related to this project and the investment of state resources in other Rt. 2 corridor communities would help to mount a marketing effort which has the potential for achieving valued state economic development objectives.

Judgement:
<table>
<thead>
<tr>
<th>Location: HOLYOKE</th>
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<tbody>
<tr>
<td>Project Name: Millrace South Urban Renewal Project</td>
</tr>
<tr>
<td>Size: project area: 51.5 acres</td>
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<tr>
<td>area of development: 12.5 acres</td>
</tr>
<tr>
<td>Type: Industrial</td>
</tr>
<tr>
<td>Reuse: proposed: 100% light industry</td>
</tr>
<tr>
<td>Net Project Cost: $1,963,674 (original budget estimate 6/30/75)</td>
</tr>
<tr>
<td>State Share: $981,837 (one-half of estimated net project cost; principal only; however, current level of annual payments is calculated on basis of a $736,527.80 state share)</td>
</tr>
<tr>
<td>City Share: $981,837 total grant value: $799,127 cash plus a non-cash grant-in-aid valued at $182,710 (one-half of estimated net project cost not including bond interest costs which are borne entirely by city)</td>
</tr>
<tr>
<td>State Payments to Date: $66,943.29 ('76: 1 payment of $35,241.29 plus prior $31,702 planning advance)</td>
</tr>
<tr>
<td>Note on State Payments: Current annual state payment of $35,241.29 will result over 20 years in a total state share of $736,527.80 (20 X $35,241.29 = $704,825.80 plus $31,702 planning advance). Ledger calls for an annual payment of $47,506.75 in order to cover state share of $981,837 specified in financial assistance agreement and approved project financing plan. State Auditor notes that net project cost should be reduced because actual survey and planning costs of $21,801.92 fell below approved budget of $42,270. Nevertheless, a reduction of net project cost by $20,468.04 cannot account for current level of annual state payments. State Auditor recommends in audit for period ending 10/31/76 that DCA revise financing plan and level of annual state payment.</td>
</tr>
<tr>
<td>Status: Although project area consists of 51.5 acres, development site has been limited to 12.5 acres due to excessive expense of developing entire area as originally planned. All project property has been acquired and demolition activity is underway. No other site improvements have begun. One firm has completed renovation work on two mill buildings which it currently leases and intends to acquire. Due to reduced size of project and considerable city expense, Holyoke may not receive positive net fiscal benefits from project unless project spurs development of remaining land in project area. Development of project must be more closely coordinated with activities of DPW related to construction of I-391 through project area.</td>
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</table>
HOLYOKE

Model Aspects:

* Some renovation of old mill buildings for industrial uses: Northeast Wire Co. has undertaken with its own resources substantial renovation work on two old structures which it currently leases and intends to acquire; however, Holyoke residents and officials doubt that any potential exists for reuse of existing buildings and unique millraces (such as for industrial power) and have generally favored demolition of present structures; demolition work on project site began in 11/76 but has not been completed.

* Some municipally owned tax title property used for the project: at one point, Redevelopment Authority delayed project in order to allow some tax delinquent property to revert to city ownership so that land could be obtained for project at a nominal cost.

* Project in a medium sized "economically depressed" urban center: city was once a major manufacturing center with a diversified economic base but has experienced a long term gradual economic decline; Holyoke was known at one time as "Paper City of the World" as a result of concentration of paper industry; city was first planned industrial center in nation due to a 60 foot drop in Connecticut River which allowed industrialists to channel river's flow through canals to power mills; population of Holyoke has declined steadily since 1920, including a drop from 54,661 persons in '50 to 46,790 in '75; city suffers from problems of high real estate taxes and consistently high levels of unemployment; vital statistics on city residents reveal a high proportion of elderly people, a recent in-migration of a large Puerto Rican population, and a relatively poor total population compared with populations of SMSA and Commonwealth; nevertheless, manufacturing continues to account for approx. 45% of total city employment (DES '74), including large numbers of high wage jobs in state growth industries, and signs of a possible economic recovery are evident.

* A Local Development Corporation is available to acquire land and construct industrial buildings utilizing SBA 502 financing for lease or sale to qualifying firms.

* Development Strategies: (a) land is cleared and parcels are sold by Redevelopment Authority to individual firms; (b) land parcels with existing mill structures are sold by Authority.
HOLYOKE

Authority to individual firms; and (c) a real estate agent is employed to assist in development and marketing.

Program Components:

state:

* No use of eminent domain powers: sole privately owned parcel was purchased through a negotiated settlement for $412,500, even though owner owed real estate taxes to city; remainder of project site was municipally owned land donated to project; estimated value of donated municipally owned property and foregone municipal real estate taxes on privately owned land were included as part of project costs and serve as a non-case grant-in-aid in meeting part of city's share of net project cost.

* State planning advance: a comparatively modest $31,702 was advanced by state for planning; planning expenses were reduced due to utilization of a planner from Planning Board for much of work; despite relatively low planning budget of $42,270, actual costs for survey and planning amounted to only $21,801.92.

* State execution subsidy.

* Project feasibility considerably enhanced by the construction of interstate 391 by the state: proposed new highway will pass through project area and on/off ramps will be built within 100 yards of site; highway funding is being provided by Federal Highway Administration and Mass. Department of Public Works.

* Future progress and eventual success of project depend largely on ability of DCA to coordinate efforts with Department of Public Works: highway construction in project area will not be completed for at least five years (highway is currently in preliminary design phase); phasing of development of project and construction of site improvements must be closely coordinated with construction of highway with respect to both timing and placement; at present time, Redevelopment Authority does not have preliminary site plans of DPW and project plan does not take into account timing and siting of highway construction; placement and design of entrance and exit ramps are critically important to marketability of industrial project; up to present time, DCA has not provided technical assistance or coordination services to project.
* Municipal expenditures; 20-year urban renewal bonds totalling $2,095,000 were issued in 1976 at a 7 1/4% interest rate; total city share of net project cost (principal only) is projected to equal $981,837; financing plan calls for city to assume $799,127 in cash plus a non-cash grant-in-aid of $182,710 which consists of donated municipally owned land valued at $68,750 and foregone real estate taxes of $113,960 owed on privately owned land acquired for project; in addition, city will bear entire cost of interest expenses on bonds issued for project.

* City government in-house planning; local Planning Board provided services of a planner to Redevelopment Authority.

* City of Holyoke: assumption of costs of municipal execution subsidy and interest on bonds.

* Holyoke Redevelopment Authority: in addition to state-aided Millrace South industrial project, HRA has been active with four federally and state-aided urban renewal projects; three of these projects are in process of being closed-out by Dept. of Housing and Urban Development; a proposed state-aided central business district project was voted down by City Council; in addition to an Authority Executive Director and Director of Administration, city Community Development Administrator directs activities of Redevelopment Authority.

* City of Holyoke Development Administrator: aggressive individual directs federal community development funding, city planning, and Redevelopment Authority activities; will play a key role in determining future of project.

* DCA: has played a limited role up to present time; in future, must provide technical assistance in marketing, assessing fiscal impact of project, and coordinating project activities with DPW.

* DPW: is responsible for constructing critical interstate highway through project area.

**Performance**

**Process Measures:**

* Implementation Process: project was approved for survey and planning phase in 3/73 and for project execution phase in 6/75; subsequent delays
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have resulted from (a) a desire to wait until some of property was acquired by city through tax title process in order to save on acquisition expenses, and (b) poor planning work; although project area consists of 51.5 acres, development site has been limited to 12.5 acres due to great expense of developing entire area as originally planned; at present time, all land for project has been acquired and demolition activity is underway; no other site improvement work has begun; Northeast Wire Co. has completed renovation work on two mill buildings which it leases and intends to purchase.

* Planning: major portions of original plan were inadequate and had to be prepared a second time because of deficient engineering designs, a failure to accurately identify sewerage lines, and a lack of attention to future construction of a highway through project area.

* Marketing: Redevelopment Authority is confident that property disposition will proceed well; Northeast Wire Co, is presently leasing two buildings that it intends to purchase; Authority has advertised throughout New England and has received a large number of inquiries; nevertheless, marketing may prove to be difficult because of problems with size and configuration of parcels and uncertainty related to construction of Rt. 391.

* Fiscal Need: tax burden in Holyoke, as measured by tax rate on equalized value, is slightly greater than median average for Mass. cities and has increased over a number of years, with a substantial rise from '76 to '77; long term decline of industry and loss of population have seriously weakened tax base; in addition, increasing relative impoverishment of population has increased demands on city services; according to 1970 Census figures over 77% of all of housing units in city were built prior to 1939 (as compared to a 55% figure for SMSA); fire has become a frequent occurrence in city; brick tenement buildings constructed over a hundred years ago continue to serve as shelter for many of Holyoke's poor; many of massive mill buildings which line canals in city's industrial center now stand empty; thus, Holyoke warrants state assistance and aid and a public industrial development project on basis of fiscal need.
* Employment Need: despite steady decline of industry in Holyoke since 1920, manufacturing continues to account for approx. 45% of total city employment (DES '74); jobs in historically dominant paper and allied products industrial category account for a large proportion of manufacturing employment (approx. 22% in '74: DES) and provide good wages ($9,900 average annual wage '74: DES); in addition, city manifests a large number of high wage jobs in non-electrical machinery industrial category ($11,244 average annual wage; 18% of manufacturing employment in '74: DES) which is a growth sector for Commonwealth; nevertheless, overall average annual wage for all city employment is low ($7,950 in '74: DES) and average annual wage for manufacturing is relatively low ($8,960 in '74: DES); unemployment rate in Holyoke is consistently higher than state average (5.3% in 3/70; 11.0% in 3/76); general impoverishment of residents is strikingly evident from a comparison of percentages of city population in lowest two income groupings and city per capita income with figures for Springfield-Chicopee-Holyoke SMSA and Commonwealth (1970: Census): incomes under $3,000 = H 11.0%, SMSA 6.8%, Mass. 6.4%; incomes from $3,000 to $5,999 = H 15.8%, SMSA 12.8%; Mass. 11.8%; per capita income = H $2,933, SMSA $3,225, Mass. $3,425; in addition, a mostly poor Puerto Rican population of approx. 6,000 persons has recently migrated to city and is steadily increasing; therefore, state assistance and aid and public industrial land development can be justified in Holyoke on basis of employment need; in addition, presence of a significant number of high wage manufacturing jobs suggests that project can be marketed to firms offering "primary labor market" quality jobs; moreover, two private industrial parks in city, Holyoke and Springdale Industrial Parks, have been filled to capacity and a third, Holyoke "91 Industrial Park, has had success in disposing of property.

* Net Municipal Fiscal Flows: Holyoke will not forego any real estate tax revenue during development of project because all of property used for project was either municipally owned or severely tax delinquent; nevertheless, and despite prospect of a favorable market situation in Holyoke in near future, a project as small as one contemplated may not return more to city in tax revenues than substantial costs of city share of net project cost and interest expenses on bond issue; in addition, whereas
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disposition price to Northeast Wire Co. is approx. $15,000/acre, net project cost was based on total disposition proceeds of $281,576 or $22,526/acre; if Authority does not receive projected disposition proceeds, net project cost will increase; however, $182,710 of city share of net project cost consists of two non-cash grants-in-aid, one of which represents an amount of delinquent real estate taxes owed on land acquired for project which city would probably never have collected; due to uncertainty of probably fiscal impacts of project, DCA should conduct a fiscal impact analysis of project to assess sensitivity of project's fiscal impacts to changes in costs, revenues, and land area.

* Employment Impacts: although we do not know how many new jobs will result from firm expansions and start-ups as a result of project or characteristics of those persons likely to be employed, features of project, such as excellent highway transportation (adjacent to new I-391, close to I-91 and Mass. Turnpike), low wage labor, resources of a major SMSA, and agglomeration economies related to concentration of paper and printing industries, should provide economic advantages which contribute to growth, and in-city location of project provides under- and unemployed local residents with physical access to jobs; however, in order to insure that public employment objectives are met through hiring of under- and unemployed city residents in "primary labor market" quality jobs, firm selection criteria and an explicit employment program should be established; an employment program might include targeting of manpower training funds to project, inclusion of performance clauses on hiring of unemployed as part of disposition agreements, and establishing referral relationships between firms and vocational education programs; due to lack of an adequate information system for reporting on project impacts, detailed information is not available on employment impacts from expansion of Northeast Wire Co. on site.

* Growth of the State Economy: if in-state firms expand, businesses start-up, or out-of-state firms locate in project due in part to increased efficiency from advantages particular to site and Holyoke, such as highway transportation, low wage labor, or agglomeration economies related to paper and printing industries, project
HOLYOKE

will contribute to state economic growth; thus, if a firm moved to site in order to use mill-races as a power source project would contribute to state economic growth; up to present time, Northeast Wire Co. has expanded employment on site; however, without more detailed information on reasons for location decision of firm, it is difficult to assess whether project has made a unique contribution to that growth; small size of available parcels will rule out movement of major production facilities to site.

* Induced Effects: possibility of future redevelopment of property within project area but not currently included in development project has influenced owners to maintain their properties and keep up with tax payments to city; in addition, demolition of fire hazardous structures and renovation of two buildings in project area have served to stabilize land prices and stir local business interest in general area; however, likely long-term consequences from these perceived changes in attitude cannot be judged at present time; moreover, impact of highway on industrial activity in area should be greater than renewal project; on a further note, industrial project may contribute somewhat to increase chances for development of a multi-million dollar commercial project in Holyoke which has been proposed by a wealthy local resident with a desire to build a unique multi-media and urban architectural showpiece; however, link between two projects appears to be tenuous at best.

* Evidence of Agglomeration Economies: concentration of employment in two industrial categories of paper and allied products and printing, publishing, and allied (approx. 50% of manufacturing employment or 22.5% of total employment in city in '74: DES) suggests that agglomeration economies related to these industries may be present in city; historical dominance of paper industry in Holyoke, once known as "Paper City of the World," lends support for this supposition; thus, if project is marketed to firms in these industrial categories agglomeration economies may be strengthened and growth may occur which otherwise would not for lack of suitable modern space within Holyoke; inasmuch as jobs in paper and allied products category offer relatively high wages ($9,913 in '74: DES) but firms in printing, publishing, and allied category provide low wages on average ($7,954 in '74: DES), care should be taken in marketing to firms in latter category.
**HOLYOKE**

* Increased Diversity of the Local Economy: inasmuch as a variety of industry groups are well represented in Holyoke and manufacturing continues to account for a large portion of city employment, project cannot be justified on basis of increasing local economic diversity.

**Narrative:**

In 1973 the Holyoke City Council directed the Redevelopment Authority to pursue the idea of an industrial park project. A survey of industrial development sites which had been made over a decade before had identified the Millrace South site as a prime candidate for development. By 1973 the site consisted mostly of vacant old mill structures which posed serious fire hazards. Strong support for the project has been evident from the public, the press, businessmen, and local officials.

**Judgement:**

The City of Holyoke warrants state assistance and aid and a public industrial development project on the basis of local fiscal and employment needs, a potential for achieving employment and state growth benefits, evidence of agglomeration economies, a high probability of induced development, and factors, such as the superior highway transportation available at the park and the successful marketing of private parks in Holyoke, which suggest that demand exists for the project. As a community manifesting many of the characteristics of a "depressed" urban center, Holyoke offers an opportunity for achieving state and local economic development goals related to growth and distribution. In light of the need for substantial and costly infrastructure investment, the difficult demands of land assembly, and a lingering uncertainty concerning the demand for industrial space within the City of Holyoke, it is doubtful that development of this potential scope would occur by the private sector with the construction of the highway as the single inducement.

The good potential of the Holyoke area for future economic growth and the impending construction of Route 391 through the project area suggest that the small project can be marketed. However, in order for the project to provide net positive fiscal returns to the city and the Commonwealth, it appears that the entire original project area must be developed in some fashion (this may result as a by-product of the smaller project).
HOLYOKE

Future project progress will benefit considerably from strong DCA assistance with marketing and the coordination of project activities with DPW. In addition, DCA should prepare a fiscal impact analysis of the project to assess the sensitivity of positive fiscal benefits to changes in key project parameters. Furthermore, in order to insure that public employment objectives are met through the hiring of under- and unemployed city residents in "primary labor market" quality jobs, firm selection criteria and an employment program should be established.

The rejection on the part of the residents and officials of Holyoke of the existing mill buildings and unique millraces as resources which might be creatively put to good advantage may represent a short-sighted view which will limit the benefits derived from these structures. With the advent of the energy crisis and the prognosis of a long term worsening of the shortfall between energy needs and availability, the federal government has recently begun to study the potential for small scale hydro-electric power generation. The millraces represent a clean, existing, and virtually costless source of power in the highest energy cost region of the nation. Therefore, a study of the potential for the industrial use of the millraces should be undertaken prior to eliminating the millraces and mill structures. Holyoke and the Commonwealth of Massachusetts may be passing up a unique opportunity for achieving economic advantages and substantial notoriety. DCA staff should pursue this notion with officials in Holyoke and state personnel in the Offices of State Planning and Energy Policy.
Location: LAWRENCE
Project Name: Lawrence Industrial Park
Size: 130 acres
Type: Industrial
Reuse: some manufacturing, some distribution, some warehousing
Net Project Cost: $1,201,361 (actual; budget amended 8/71)
State Share: $600,681 (one-half of net project cost; principal only)
City Share: $600,681 (one-half of net project cost not including bond interest costs which are borne entirely by city)
State Payments to Date: $360,408 ('63-'76: 12 payments = 6 payments of $26,160.25, 5 payments of $30,034.01, and 1 payment of $53,276.57; no planning advance; net project cost amended in 1971)
Status: All development work was completed and all of property in park was sold to industrial firms by end of 1969. Park has achieved significant fiscal and employment benefits for city and Commonwealth. However, park has failed to achieve its full potential due to weaknesses of program design and project management.
Model Aspects:

* Project successfully developed and marketed in a major "depressed" urban center: city was a major manufacturing community as one of largest textile centers in nation prior to World War II; most of that textile industry moved into Southern states during '50s; population declined from 80,536 persons in '50 to 66,915 persons in '70; city now manifests "depressed" area characteristics of continually high unemployment and high real estate taxes but some signs of an economic recovery are evident.

* Principally an intra-community industrial relocation project: 100% of land in park has been disposed of and most of firms which have located in project have been expanding local businesses; all of firms which have moved to park have been in-state concerns.

* Post-completion project monitoring and economic development assistance to project firms is provided by local Economic Development and Industrial Corporation.

* Development Strategies: (a) majority of park land was sold to a single redeveloper who marketed parcels to individual firms; and (b) a small number of parcels were sold by the Redevelopment Authority to individual firms.
**LAWRENCE**

* Additional features of model are not known due to absence of project records at DCA and City of Lawrence; project was completed in 10/66; Redevelopment Authority was dissolved.

**Program Components:**

**state:**

* Eminent domain powers?

* No evidence of state planning advance; No technical and coordination assistance provided by DCA; No evidence of state infrastructure investment.

* State execution subsidy.

**municipal:**

* Municipal expenditures: municipal bond(s) of at least $1,200,000 (actual amount unknown) were issued; total city share of net project cost was $600,681 (principal only); original project budget was amended in 8/71 to reflect actual project costs; city also bears all of interest costs on bonds for project; it is not known if additional municipal expenditures or donation of municipally owned land contributed to development of project.

**Actors:**

* City of Lawrence: provided funding of unknown magnitude.

* Lawrence Redevelopment Authority: nothing is known about reasons for formation, staffing, public support, efficiency of implementation process, or composition and capability of board.

* Lawrence Economic Development and Industrial Corporation: EDIC organized pursuant to Chapter 121C of General Laws monitors project and provides assistance to firms selling and purchasing property in park.

* DCA: no assistance was provided in past; DCA's failure to obtain cooperation of other state agencies has been cited as having been a problem for project; current Director of Community Development in Lawrence claims that DCA staff have lacked expertise and have failed to help with project development, that program regulations fail to reflect renewal process, and that payment method is overly complex and prone to delay.
Performance

Process Measures:

* Implementation Process: project was approved in 8/60, completed (i.e. 100% of land sold; most of it to a single redeveloper who marketed parcels to firms) in 10/66, and completely marketed to businesses by '69; it was first project approved by DCA under Chapter 121B statute and only project approved until New Bedford Maritime Terminal in 1963; due to lack of records and unavailability of anyone connected with development of project, no information has been obtained on project initiation, planning process, or efficiency of execution and marketing phases; DCA files contain no information on use of eminent domain powers, ownership status or prior condition of property, or extent of infrastructure investment in project; current city Community Development Director claims that DCA was inept and that project success is attributable to dedication, skill, aggressiveness, and cooperation of city personnel; relatively short 9 year period from concept to project completion to marketing of all of land to businesses indicates that project was a success in terms of process of development (therefore, absence of project records is an even greater loss and additional investigation may be worth effort).

* Planning: nothing is known about contents of plan, how and whether a plan was prepared, who prepared plan, or how planning was funded; there is no evidence of state advances of planning funds.

* Marketing: no information is available regarding original conception of a market for project; all of park land has been sold to individual firms; however, some firms are holding vacant land for future expansion; most of firms which have located in park were locally expanding businesses but some firms relocated from other parts of state; most of project property was sold to a single redeveloper who marketed parcels to firms; uses present in park include manufacturing, distribution, and wholesaling; some commercial interests have sought parcels in park but city development office has rejected a mix of uses; some of parcels have changed hands over time which has resulted in some decrease in labor intensity of park use.
Effectiveness Measures:

* Fiscal Need: Lawrence clearly warrants state assistance and aid on basis of fiscal need; city is an old industrial center which manifests many characteristics of a "depressed community": a 21% loss of population from 1945 to 1970, consistently one of highest unemployment rates in state, relatively high percentages of population in lowest two income ranges. (1970 Census: incomes under $3,000 = Law. 9.1%, Mass. 6.4%; incomes $3,000-$5,999 = Law. 14.7%, Mass. 11.8%), 80% of housing units built prior to 1939, youth delinquency problems, and 1/6 of population consisting of mostly poor Spanish speaking people; city was once one of major textile mill centers in nation but suffered from exodus of most of these firms to South during 1950s (15,525 jobs lost out of 17,167 total textile jobs in '50); fiscal picture in Lawrence is bad and growing worse: approx. $2.2 million in uncollected taxes, high equalized tax rate (but far below Boston, Cambridge, & Chelsea), and a $20/$1,000 AV tax rate rise in 1977; in addition, City plans to start construction on a new $20 million high school in '78.

* Employment Need: "depressed area" characteristics of City also qualify Lawrence for state assistance and aid on basis of employment need; unemployment rate in City is consistently one of highest in State ('60 = Law. 4.33%, Mass. 4.19%; '70 = Law. 4.46%, Mass. 3.82%; '75 = Law. 13.95%, Mass. 11.2%); during '60s, highly trained portions of work force experienced high unemployment; four leading industry groups in Lawrence (leather, textile mill products, rubber products, and apparel), which account for 55.5% of manufacturing employment in city (DES: 1974), offer relatively low paying and "secondary labor market" quality jobs (i.e. high turnover, low pay, low security, etc.); however, despite a general industrial decline, Lawrence has retained a large manufacturing base (approx. 52% of total employment) and has attracted some jobs in high wage, state growth industry groups of fabricated metal products ($10,100 average annual wage '74) and non-electrical machinery ($12,000).

* Net Municipal Fiscal Flows: although detailed annual information has not been collected by either City or DCA, project has definitely resulted in substantial positive net fiscal benefits to city; whereas property provided approx. $20,000 annually to city in taxes before project, tax payments to Lawrence from project property totalled approx. $660,000 in '75; in addition, unused land currently held by firms for future expansion.
needs will increase fiscal returns to city at some time in future.

* Employment Impacts: lack of data on increased employment from expansion of firms which moved to park, on residence and characteristics of workers employed in park, and on reuse of space vacated by expanding local firms, precludes a precise assessment of employment impacts from project; nevertheless, in general, employment impacts from park appear to meet state economic development objectives; in-city location of park provides for physical access to jobs for under- and unemployed city residents; firms which might have expanded out of City have been able to remain in close proximity to "needy" labor force; park may have precipitated expansion of local firms which find positive advantages in a Lawrence location and, therefore, would not have expanded to sites out of Lawrence; in-state firms from out-of-area have located in City where employment needs are greatest; some of these out-of-area firms may have been able to expand employment only because of availability of cheap labor in City; in addition, although information on status of park property prior to project is not available, Lawrence is a 6.75 acre land-scarce community and it is unlikely that firms locating in park would have been served by private market development at this or any other sites in city; however, turnover of some parcels in park has decreased employment impact from project by substituting low labor distribution and warehouse uses for manufacturing; in addition, no reuse restrictions were placed on park redeveloper and a number of original firms purchased parcels for warehousing and distribution uses; City Community Development Director claims that project has not resulted in as many jobs as had been hoped; moreover, no explicit public efforts were made to seek or require "primary labor market" quality businesses for park or to establish programs for providing training and job access to unemployed; failure to restrict reuse and to provide for hiring of unemployed has significantly reduced positive project employment benefits below potential level of such benefits; an estimated 620 jobs are located in project.

* Growth of the State Economy: aggregate state economic benefits have been achieved to degree: (a) firms in park have expanded or started-up because of availability of cheap labor or other advantages particular to Lawrence (ex. agglomeration economies of some type, labor skills, superior highway access, etc.); (b) space vacated by local firms which have moved to park
has been filled because of these same local advantages; and (c) achievement of local fiscal and employment objectives has served to reduce fiscal demands on state (welfare, unemployment compensation, city aid, etc.) and, therefore, need for increased taxes which would mar competitive position of Commonwealth for business as a whole; due to absence of an adequate information system for reporting on project impacts, information is not available for assessing in a convincing fashion whether any of three types of growth benefits have occurred; nevertheless, rapidity of park marketing and attraction of out-of-area firms suggest that state has received aggregate benefits of first type, and achievement of positive fiscal and employment impacts from project in a city with considerable need indicates that benefits of third type have also been accomplished; no information is available with respect to second type of benefit; however, evidence that low labor intensity uses, such as warehousing and distribution have been located in park suggests that state growth benefits have been limited; in addition, absence of an explicit public program to insure hiring of unemployed persons has probably served to limit benefits of third type; in summary, despite good potential of project for achieving state economic growth benefits of all three types, project failed to fulfill its potential due to weaknesses at project management.

* Evidence of Agglomeration Economies: although information is not available on markets or supplies of firms located in park, continued concentration of textile, leather, and apparel industry groups (approx. 43% of manufacturing firms and jobs: DES 1974) in Lawrence suggests that agglomeration economies of some sort may be present; ease of marketing 130 acre park reinforces suspicion that agglomeration economies may be at work for some firms; however, this evidence is far from persuasive on matter.

* Increased Diversity of the Local Economy: inadequate information has been collected to assess whether firms which have located in park have added to diversity of local economic base; however, lack of reuse restrictions on disposition of parcels in park significantly weakened likelihood that project would meet diversification objectives; because land for industrial
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park development is limited in Lawrence, failure to maximize potential for using park to meet local needs is all more significant.

* Induced Effects: no evidence of additional development resulting from project.

The Lawrence Industrial Park was the first project approved pursuant to Chapter 121B. Neither DCA nor the now defunct Redevelopment Authority maintained records on the project which are available at the present time. In addition, no one directly connected with the project is presently working in Lawrence or for DCA. Therefore, little is known about the reasons for the project or its development history. The project was approved in 1960, the property was completely disposed of by the Redevelopment Authority in 1966, mostly to a single redeveloper, and the developer completed parcel dispositions by 1969. Despite the "depressed" character of the City of Lawrence, the project was marketed over a relatively short period of time. Lawrence remains a major manufacturing center and indications of renewal potential and economic attractiveness are evident. Although the Central Business District continues to lack vibrancy, an early downtown renewal effort has resulted in new buildings and an attractive park area. Lawrence accounts for approximately 37% (DES: 1974) of the firms and employment in the heavily industrial Lawrence-Haverhill SMSA. Machinery and electrical machinery employment now account for 20% of the manufacturing jobs in Lawrence. Major firms such as Honeywell, General Tire, ITT, and Malden Mills have moved into and renovated old mill space and Gillette, Raytheon, and Hewlett-Packard are providing jobs to Lawrence residents after moving to neighboring Andover. Interstate highways 495 and 93 pass by Lawrence providing easy access to the interstate network. Thus, although Lawrence exhibits many "depressed area" characteristics, various features of the city suggest that state interventions to assist in industrial development, such as the 121B industrial park project, have a potential for success. Nevertheless, one major factor which continues to impede economic renewal in Lawrence is the close proximity of the city to New Hampshire with its more favorable tax burden.
Judgement:

The City of Lawrence warranted state assistance and aid because of serious employment and fiscal needs, a potential for achieving positive fiscal and employment impacts, a need to diversify the local economy, evidence of agglomeration economies, a potential for adding to growth of the state economy, and features, such as good highway transportation and continued economic activity in the city, which suggested a market potential for the project. As a "depressed" community, Lawrence offered the state an opportunity for meeting economic development objectives related to growth and distribution. The successful development and marketing of the project demonstrated that an industrial land development project could be marketed in a depressed community and suggested that the unavailability of modern industrial space was a constraint which contributed to the economic decline of the city (the case did not, of course, demonstrate that a project could be marketed in any depressed community). Private developers and/or sources of finance had apparently considered Lawrence to be too risky for industrial park development or had experienced assembly problems or costs which precluded competitive development. The limited availability of suitable land for an industrial park in Lawrence was an additional reason for the need for public action.

Although detailed information on the effectiveness of the project in meeting state economic development objectives has not been collected, the existing evidence indicates that benefits from the project include substantial positive net fiscal flows to the city, employment benefits for the unemployed, employment growth, net positive fiscal flows to the state, and the distribution of employment to a needy community. Nevertheless, the park has not achieved its maximum potential benefits because of weaknesses in public program design and project management. In particular, the absence of reuse restrictions on land in the park, the failure to seek firms offering high quality employment, and the lack of a public program to provide jobs to the unemployed, have resulted in less than optimal employment benefits. Finally, the inadequate record keeping at DCA and failure to establish an information system for the collection of data on project impacts have severely limited
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the ability of the Commonwealth to assess the merits of the program and DCA to design a more effective program. The neglect of these matters on the part of DCA reflects a serious and gross failure at program management which has consistently undermined state industrial and urban development efforts. Inasmuch as the Lawrence Industrial Park resulted in significant positive net economic development benefits, the absence of detailed data on project impacts is especially unfortunate. Without a detailed analysis of project costs and benefits, state legislators and personnel in the executive branch of government formulate inaccurate views of the program based on crises during development phases rather than economic outcomes.
Location: METHUEN
Project Name: Methuen Industrial Park
Size: 245 acres; 150 acres developed
Type: Industrial
Reuse: 0- land was sold to a redeveloper for cost of acquisition.
Net Project Cost: $74,418 planning advance (has not been recaptured by state)
State Share: -
Town Share: -
State Payments: Project has been completed and all land has been sold to firms. Industrial Park has provided substantial positive fiscal benefits and has added a large number of new jobs to town. However, as a result of a number of local and state project management weaknesses, net benefits from project have been limited and project may not have been justified.

Model Aspects:
* No state or municipal execution subsidy required: land was assembled through use of eminent domain powers and subsequently sold to a single redeveloper for cost of acquisition.
* Solely a land assembly project: all project land was disposed of in raw condition without any infrastructure improvements.
* Project in a relatively prosperous and growing community; population increased from 24,477 persons in '50 to 35,456 in '70; manufacturing employment has grown steadily and private industrial park development has been strong; town has not experienced fiscal or unemployment problems; income statistics on population indicate that town is comparatively more prosperous than SMSA and Commonwealth; nevertheless, town manifests a very low overall average annual wage due to a high percentage of low wage jobs in retail and selected services categories which is a result of "suburban" character of town and a very low average annual wage in manufacturing.
* Park land was marketed to major firms including Nabisco, Columbo Dairy, and Raymers Express.
* Project was initiated by local businessmen.
* Development Strategy: land in park was sold to a single redeveloper who marketed parcels to individual firms.
METHUEN

Program Components:

* Eminent domain powers: a variety of criteria were cited to qualify for use of eminent domain, including diversity of ownership, uncertain title, improper size and shape of lots, inadequate access to rear tracts, inadequate streets and utilities, swamp and soil conditions, and a history of failed private attempts to assemble; however, a DCA consultant questioned legality of use of eminent domain by noting that individual parcels were of sufficient size (10 to 62 acres) for private development and by claiming that, since local growth was not impeded by condition of property, project merely represented a way to increase tax base.

* State planning advance: $74,418 in state funds advanced for planning was not recaptured when project proceeded without execution assistance.

* No state execution subsidy; No state infrastructure investment associated with project.

* Failure of DCA to perform regulatory role adequately and manage project with reference to state economic development objectives reduced public benefits from project and resulted in a development process of questionable legality; Redevelopment Authority initiated eminent domain takings prior to receiving DCA project approval (which is illegal); sale of assembled property to single redeveloper for acquisition price without requiring developer to produce specific amounts of public benefits indicates either that property was not worth more assembled than in parcels, and thus was not a legitimate candidate for use of eminent domain, or, more likely case, that town did not receive appropriate compensation for property and developer gained financial advantage of public assembly; there is no evidence that DCA approved of disposition price or was kept informed of activities during disposition process; it appears that developer may have been lined up prior to initiation of project and "public knowledge" and bidding requirements of disposition process were not fulfilled; failure of DCA to promulgate a "non-relocation" regulation prohibiting movement of firms out of needy communities to publicly assisted project may have allowed for flight of firms from high priority development areas (however, no information is now available on prior locations of firms located in park).
METHUEN

municipal:

* Municipal expenditures: town provided $26,306.25 to Redevelopment Authority for planning and administrative expenses which was not recaptured upon sale of land to redeveloper; town also advanced $153,313.15 to Authority for acquisition expenses which was recaptured from proceeds of sale of land to redeveloper; in addition, town built a new water storage tower as part of project to serve firms in park and add to town capacity.

Actors:

* Town of Methuen: advance of acquisition funds, funding of some administrative and planning expenses, and construction of water tower.

* Methuen Industrial Development Commission: local businessmen and bankers initiated project as members of Commission.

* Methuen Redevelopment Authority: was formed in 1966 to undertake industrial park project; executive director serves as a consultant on an hourly basis.

* DCA: failed to properly execute regulatory functions; there is no evidence that DCA approved of disposition agreement or monitored disposition process to insure "public knowledge" and compliance with regulations; DCA back-dated letter of project approval to avoid legal challenges to Authority's premature initiation of eminent domain process; no cooperation agreement between town and Authority was executed; correspondence and entries in DCA file end in 7/71 after project was approved by DCA.

* Water Commissioner: required construction of new water tower for project.

Performance

Process Measures:

* Implementation Process: approval for survey and planning phase was given in 5/67 and project approval was granted in 7/70; DCA files provide little information on planning and execution phases of project; no project plan is on file with DCA; planning expenses noted in audit indicate that a plan was prepared by consultants; due to lack of staff at time, DCA retained a planning consultant to review project plans; Authority proceeded with eminent domain takings prior to receipt of DCA approval which is legally required; DCA back-dated approval letter a few months in order to avoid legal problems with
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premature use of eminent domain; DCA approved project despite lacking necessary legal documentation of local approvals; 150 acres acquired through eminent domain for $153,313.15 were disposed of to a single redeveloper in raw condition for cost of acquisition; land parcels were subsequently sold to Nabisco, Columbo Dairy, and Raymers Express Terminal; approximately 100 acres remain within perimeter of project area for future development by Authority; no correspondence from the Authority is in DCA file for period since DCA approved project; last file entry is dated 7/71.

Effectiveness Measures:

* Fiscal Need: although original project approval was partly based on a supposed need for balancing local tax base, health of Methuen fiscal affairs compared with other Mass. communities should not have justified state assistance on basis of fiscal need; tax rate in Methuen has remained stable over a number of years and tax rate on equalized value is among lowest for municipalities in state; although wholesale and retail trade, and selected services account for most local jobs, with approximately 39% and 29% of town employment respectively ('74 DES), manufacturing employs approx. 16% of Methuen's workers in stable industries and has been growing; private industrial land developers have been active in Methuen and two large private industrial parks, one of 175 acres and one of 600 acres, have been developed; town population has increased by 68% since 1930 compared with an increase of 14% in SMSA over same period; during decade of '60s Methuen experienced a net in-migration of 5,137 people; Methuen is largely a residential community and most working residents commute to jobs in surrounding communities (a working population of approx. 16,000 residents and only 6,000 local jobs in '74); overall, population growth and vigorous private market activity have provided Methuen with a solid tax base.

* Employment Need: although decline of textiles in Greater Lawrence Area included substantial losses in Methuen, town has been able to attract firms in electrical machinery and food industry groups; percentages of town population in lowest two income groupings are low compared to SMSA and state figures (1970 Census): incomes under $3,000 = Meth. 6%, SMSA, 6.8%, Mass. 6.4%; incomes $3,000-$5,999 = Meth. 9.9%, SMSA 12.0%, Mass. 11.8%; town medium income of $9,739 (1970 Census) was considerably higher than those of SMSA = $8,746 and state = $8,607; unemployment rate in Methuen
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is consistently below state average; therefore, Methuen does not appear to warrant state assistance or public industrial development initiatives on basis of local employment need; however, town manifests a very low average annual wage ($5,700 in '74: DES) due largely to high percentages of employment in low wage categories of retail trade and selected services; nevertheless, inasmuch as Methuen is principally a residential community with a majority of its working force commuting to jobs in other communities, most of these low paying service jobs appear to represent voluntary part-time and secondary employment (i.e. housewives in middle income families, students, etc.) rather than "involuntary" employment of primary wage earners; however, in addition to low wage service jobs, town manifests a very low average annual wage in manufacturing sector ($7,500 in '74: DES) due to high percentages of manufacturing jobs in low wage categories of electrical machinery, food, and apparel; many of employees in these jobs are probably reverse commuters from Lawrence, Haverhill, and Lowell; thus, project in Methuen might have been justified on basis of employment need only if under- and unemployed persons were provided with "primary labor market" quality jobs; close proximity of town to high unemployment areas of Lawrence (12.1% in 3/76), Lowell (10.1% in 3/76), and Haverhill (13.5% in 3/76) may allow for physical job access for under- and unemployed persons; however, special public efforts necessary to fulfill this potential, such as targeting job training programs to project, attracting and providing transportation for unemployed persons, and obtaining employment commitments from firms locating in park, were never initiated; attractive location (Rts. 93 and 495), large size of parcels, low cost of land, and desirable features of park might have provided necessary leverage needed by state and Redevelopment Authority to achieve employment objectives through such actions; sale of entire property to a single redeveloper for cost of acquisition might have been justified if performance provisions related to hiring of unemployed persons had been included in disposition agreement (rules and regulations allow for sales to other than highest bidder if public benefits are maximized).
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* Net Municipal Fiscal Flows: although detailed information is not available, net fiscal flows from project have been substantial due to following: there was no need for a local execution subsidy since land was sold for cost of acquisition, modest municipally funded administrative and planning expenses amounting to $26,000 were incurred as entire property was sold to redeveloper in unimproved condition soon after assembly was completed, and redeveloper disposed of land to major firms in a short period of time; in addition, remaining undeveloped 100 acres within boundary of project area offer potential for future additional tax revenues; nevertheless, sale of project land to redeveloper for cost of acquisition, without meeting regulations on disposition process or obtaining DCA approval of disposition, suggests that redeveloper received benefits of assembly process achieved with public purpose powers which should have been captured by town and state (property should be worth more assembled than in individual parcels); therefore, although town has received substantial positive net fiscal benefits from project, Methuen should have received even more benefits (either through a higher disposition price or a commitment of developer to public objectives); moreover, there is a high probability that private development would have occurred on property without public intervention and town would have received most of tax returns currently attributable to project.

**Employment Impacts:** although detailed information on number, salary levels, and characteristics (i.e. residence, ethnicity, etc.) of employees in park is not available, employment by major firms in park has definitely added substantial numbers of jobs to Methuen; however, because Methuen does not manifest characteristics of a depressed community and special public efforts to insure hiring of under- and unemployed by firms offering "primary labor market" quality employment were not instituted, park probably has had a limited impact on meeting state employment objectives; in addition, although no information exists on where firms in park were previously located (if anywhere), absence of a state "non-relocation regulation" which would prohibit movement of firms out of high priority development areas to park locations adds to uncertainty with regard to net employment benefits.
from project; thus, although project has netted many new jobs for Methuen, considerable uncertainty remains with respect to whether or not project has been justified on basis of employment impacts; moreover, if private development would have occurred without public intervention, net employment benefits to town from project may be negligible.

* Growth of the State Economy: lack of information on prior location and previous size of firms now located in park precludes a definitive assessment of net state economic growth from project due to expansion of firm employment, movement of out-of-state firms into Commonwealth, business start-ups, and reuse of vacant space; if this highly marketable park has proven attractive to firms because of greater efficiency in transportation, modern space, or access to inputs or markets, project may have been justified as contributing to growth of state economy; however, legitimate questions with respect to legality of use of eminent domain powers and development process for this project suggest that private development at site would have occurred without public intervention: site was well located for highway access without requiring additional state highway investment, property consisted of relatively large size parcels of from 10 to 62 acres, all of land was sold at cost of acquisition to a single developer, disposition process was not conducted with full "public knowledge," available evidence indicates that DCA never approved of disposition process or price, and it appears that redeveloper may have been connected with project from time of its conception; good probability that private development would have occurred without public action indicates that project cannot be justified on basis of growth of state economy; moreover, failure of DCA to utilize opportunity presented by highly attractive park to promote employment objectives of state has limited fiscal benefits of project to state (through lower welfare costs, municipal aid, etc.) and, therefore, impact of project on reducing state taxing needs which partly determine competitive position of Commonwealth for business in general.

* No Evidence of Agglomeration Economies: although Lawrence–Haverhill SMSA manifests various sorts of agglomeration economies related to concentration of specific industries, no connection is apparent between firms which have
located in park and any particular agglomeration advantage.

* Increased Diversity of the Economic Base: although project was initially advanced as an effort to expand and broaden local tax base, and Methuen suffered from loss of textile firms during '50s, fiscal strength of Methuen indicates that local economic diversity is a weak basis for project acceptance.

* Induced Effects: there is no evidence of additional development resulting from project.

Narrative: No additional information on the development of this project is currently available.

Judgement: Although the Methuen project was developed without any need for state or municipal execution subsides and successfully marketed, and the major firms locating in the park have provided substantial numbers of new jobs to the town, a sufficient number of questions have arisen with respect to the original basis for the project, the legality of the development process, the net employment impacts to the state and the town, the fiscal needs of the town, and whether those persons most in need gained access to jobs, to place in doubt the desirability of the Methuen project. In order for a project in a municipality without fiscal or employment problems to serve state economic development objectives, unique public objectives for the project must be formulated and the state, through DCA, must play an active role in managing resources and activities to accomplish those objectives. Thus, for a highly marketable site in Methuen, project objectives might include: disposition of a target percentage of land to out-of-state firms; requirements for firms locating in the park to hire the unemployed; disposition to firms providing "primary labor market" quality employment; and a priority for firms which better satisfy state import-substitution goals or are export businesses highly input interdependent with the state economy. State initiatives which should be part of the project might include an employment program to provide job access and training to the unemployed and state government efforts to promote the park to out-of-state firms. The failure of DCA to design the program and manage projects with an output orientation directed toward the achievement of state economic development objectives has meant that projects like Methuen have not proven
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justified in execution. In addition, the absence of an adequate information system for reporting project impacts has deprived DCA and the Commonwealth of an ability to assess the costs and benefits of projects and the merits of the program.

The apparent failure of DCA to properly fulfill its regulatory role with respect to the Methuen project highlights a number of management failures at the state level and specific problems with the design of the program. The authority of DCA with respect to projects not receiving execution subsidies is weakly defined. In the past, DCA personnel have adopted a "hands off" attitude with regard to such projects, believing that state intervention would not be welcomed at the local level and that the state had little authority over projects not receiving execution subsidies. In support of an opposing view, one can argue that the execution subsidy is only one of several components of a program and not any more significant to the program than the other components. In the case of Methuen, the state has provided planning funds to the project and authorized the use of state powers of eminent domain by the local authority. The state retains the legal authority over the use of eminent domain powers and state government has an obligation to insure that the public purposes which warrant the use of such powers are fulfilled when these powers are employed. The Methuen Redevelopment Authority utilized eminent domain powers under questionable circumstances and disposed of the property to a single redeveloper at project cost without obtaining DCA approval of the disposition price or agreement or complying with the regulations on "public information." The potential for abuse of eminent domain powers at the local level is great because of the large differences in financial gains which can result from public as compared with private market land assembly. Moreover, in addition to the components of the Chapter 121B program, projects frequently depend on state assistance in the form of public works projects, such as bridges and highways. In order for these investments to serve public goals, close supervision and active assistance from DCA is required. In addition, DCA concern for project objectives is necessary to insure that public goals are not being subverted by projects; for example, by encouraging the flight of industry out of high priority development areas into industrial parks.
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in more prosperous communities. However, DCA has never been provided with the staff with the expertise necessary for providing project assistance and managing the program with respect to economic development objectives. Moreover, the design of the program, as delineated in the legislation and rules and regulations which are based on the federal urban renewal program, reflects an input focus concentrating on the development parcel and a corresponding regulatory role for DCA rather than a concern for publicly valued outputs. In addition, DCA experiences difficulty exerting control over projects because of the limited sanctions available to apply against Redevelopment Authorities for non-cooperation and DCA's failure to establish an information system for supplying information needed for effective management control. In general, DCA relies on periodic audits by the State Auditor, threats of investigation by the Attorney General's Office, and informal verbal cajoling and political pressure to exercise control. However, the state audits deal only with financial records and do not consider performance objectives, plan compliance, or compliance with the rules and regulations. DCA currently lacks a reporting system for monitoring the activities of Redevelopment Authorities in these matters. Although annual reports are required by statute, DCA has not enforced the requirement, developed a format for reporting information, or used the reports that have been submitted. If projects were more dependent on DCA for assistance, and Authorities would automatically be more dependent if projects were concentrated in depressed communities, DCA might have more leverage for exercising control. In any case, in order for the program to achieve publicly valued objectives, DCA must play an active role in providing assistance and managing resources and activities across units of state government, as well as aggressively monitoring the development process for compliance with the rules and regulations. If the regulations are considered to be too cumbersome, they should be revised and not simply ignored.
<table>
<thead>
<tr>
<th>Location:</th>
<th>NEW BEDFORD</th>
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</table>

<table>
<thead>
<tr>
<th>I Project Name:</th>
<th>Maritime Terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size:</td>
<td>2 acres</td>
</tr>
<tr>
<td>Type:</td>
<td>Industrial</td>
</tr>
<tr>
<td>Reuse:</td>
<td>large freezer-warehouse which receives waterborne shipments of frozen fish and meat</td>
</tr>
<tr>
<td>Execu. Approval:</td>
<td>5/13/63</td>
</tr>
<tr>
<td>Net Project Cost:</td>
<td>$350,455 (original budget projection)</td>
</tr>
<tr>
<td>State Share:</td>
<td>$175,227.50 (one-half of originally estimated net project cost; principal only)</td>
</tr>
<tr>
<td>City Share:</td>
<td>$175,227.50 (one-half of originally estimated net project cost not including bond interest costs which are borne entirely by city)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EDA Grant:</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Payments to Date:</td>
</tr>
</tbody>
</table>

| Status: | Little information is available on history, current status, or effectiveness of project. Development work has been completed and all of land has been sold to a fish freezer company. Project has provided substantial employment and fiscal benefits. |

<table>
<thead>
<tr>
<th>II Project Name:</th>
<th>New Bedford Industrial Park</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size:</td>
<td>295.8 acres</td>
</tr>
<tr>
<td>Type:</td>
<td>Industrial</td>
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<tr>
<td>Reuse:</td>
<td></td>
</tr>
<tr>
<td>Plann. Approval:</td>
<td>1962</td>
</tr>
<tr>
<td>Execu. Approval:</td>
<td>5/13/65</td>
</tr>
<tr>
<td>Net Project Cost:</td>
<td>$2,408,104 (1971 amended budget projection)</td>
</tr>
<tr>
<td>State Share:</td>
<td>$1,204,052 (one-half of amended estimate of net project cost; principal only)</td>
</tr>
<tr>
<td>City Share:</td>
<td>$1,204,052 (one-half of amended estimate of net project cost not including bond interest costs which are borne entirely by city)</td>
</tr>
</tbody>
</table>

| State Payments to Date: | $528,854 ('66-'76: 5 payments of $33,527.75 and 6 payments of $60,202.60; no planning advance; net project cost amended in 1971) |

| Status: | Little information is available on history, current status, or effectiveness of project. Development work has been completed and most of land has been sold. Park has provided substantial employment and fiscal benefits. |

<table>
<thead>
<tr>
<th>III Project Name:</th>
<th>North Terminal Bulkhead</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size:</td>
<td>19 acres</td>
</tr>
<tr>
<td>Type:</td>
<td>Industrial</td>
</tr>
<tr>
<td>Reuse:</td>
<td>no land has been sold</td>
</tr>
<tr>
<td>Plann. Approval:</td>
<td>1965</td>
</tr>
<tr>
<td>Execu. Approval:</td>
<td>7/11/67</td>
</tr>
<tr>
<td>Net Project Cost:</td>
<td>$2,902,000 (original budget projection)</td>
</tr>
<tr>
<td>State Share:</td>
<td>$1,451,000 (one-half of originally estimated net project cost; principal only)</td>
</tr>
</tbody>
</table>
City Share: $1,451,000 (one-half of originally estimated net project cost not including bond interest costs which are borne entirely by city)

EDA Grant: $1,451,000 (one-half of originally estimated net project cost not including bond interest costs which are borne entirely by city)

State Payments to Date: $435,300 (’71-’76: 6 payments of $72,550; no planning advance)

Status: Little information is available on history of project. Development work has been completed but no land has been sold. Several firms have expressed interest in property but recessionary economy and uncertainty with regard to dependability of old New Bedford-Fairhaven bridge have inhibited marketing (project located north of bridge and bridge must open to allow passage of vessels carrying water-borne cargo). Site is a prime candidate for location of service and support activities for Georges Bank oil exploration and development.

Model Aspects: * Many features of these project models are unknown due to absence of adequate project records at DCA and delegation of responsibility for projects by Redevelopment Authority to local public bodies; information has been requested from these public bodies through questionnaires.

* Redevelopment Authority delegated responsibility for development of all three projects to local public bodies: pursuant to Section 50 of Chapter 121B, New Bedford Redevelopment Authority delegated its functions for planning, developing, and marketing of these projects to local public bodies and continued to serve merely as a conduit for applying for and receiving state aid; New Bedford Industrial Development Commission assumed responsibility for "Industrial Park" and "North Terminal Bulkhead" projects and New Bedford Harbor Development Commission developed "Maritime Terminal" project; due to absence of adequate records at DCA, little information is available on circumstances of initiation of projects.

* Projects are in a major "economically depressed" urban center: New Bedford is fourth largest city in Commonwealth and suffers from problems of fiscal strain and continually high levels of
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unemployment; city was major whaling port in nation in mid-19th century and a leading textile center until 1930s; New Bedford has relied on fishing industry which has been declining until recently to support local economy since flight of textiles; city has undertaken a number of major urban renewal projects since mid-1960s; a few federally and state aided industrial projects have recently served to increase diversity and size of economic base.

* Two projects are waterfront industrial developments: Maritime Terminal and North Terminal Bulkhead projects were developed on blighted waterfront property north of New Bedford-Fairhaven bridge.

* Development Strategies: (a) parcels have been sold by local public bodies to individual firms; (b) a parcel has been leased by a local public body to an individual firm (Maritime Terminal); no information is available on whether other strategies have been used.

Program Components:

state:

* Eminent domain powers?

* No evidence of state planning advances for any of three projects.

* State execution subsidy: state shares which were calculated from original budget estimates have not been revised on basis of actual costs.

* State provided funding for construction of an arterial street and Rt. 18/I-195 interchange which are essential for marketability of Maritime Terminal and North Terminal Bulkhead projects; Marketability of North Terminal Bulkhead project is constrained by undependability of old New Bedford-Fairhaven bridge which must open to allow waterborne cargo to reach site and uncertainty as to whether DPW will replace bridge; road improvements were part of two urban renewal projects developed with federal, state, and municipal funds; state DPW was responsible for construction of road projects and is responsible for operation and decision on replacement of bridge.

* Inadequate record keeping at DCA and lack of an appropriate information system for regular reporting of data on project status and impacts
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have limited ability of DCA to effectively monitor and assist projects and Commonwealth to assess merits of and improve design and operation of program; Future disposition of North Terminal Bulkhead property can be aided with DCA assistance on marketing and coordination with DPW on replacement of New Bedford-Fairhaven bridge; since responsibility for these projects was delegated by Authority to local public bodies, DCA does not receive even limited amount of information on project status and comparison of budgeted and actual costs normally provided in periodic reports of state auditor; thus, DCA does not have any information on actual net project costs of two projects which have completed development and disposition and, therefore, is unaware of propriety of current level of annual state subsidy payments; in addition, no unit of state government exercises any oversight or monitoring control over these projects, despite considerable investment of state funds and regulatory responsibility of DCA; furthermore, absence of an adequate information system has denied Commonwealth detailed information on two projects which apparently have had beneficial economic outcomes from point of view of state economic development objectives.

Municipal expenditures: total city shares of net project costs (principal only) were estimated as follows: Maritime Terminal = $175,227.50; New Bedford Industrial Park = $1,204,052; and North Terminal Bulkhead = $1,451,000; in addition, city bears all of interest costs on bonds issued to finance projects; due to absence of an information system for reporting comparisions between actual and budgeted project costs, DCA does not know if, by how much, or in what direction original projected net project costs, which are basis for current levels of annual state payments, vary from actual net project costs; however, it is virtually certain that some variation exists; state auditor does not report on these projects in periodic audits of Authority because responsibility for projects was delegated to two local public bodies; DCA lacks any information on whether or when bonds were issued for these projects or amounts or terms of such bonds; information is also not available on whether any of property used for projects had been municipally owned; city assumed costs of unknown magnitude in connection with highway projects essential for development of these three projects.
* Partial funding for urban renewal projects which included highway improvements which are essential for feasibility of these three projects.

* City of New Bedford: has provided funding of uncertain magnitude; no information is available on whether municipally owned land was donated, real estate tax revenue was foregone during development phases, or any other costs not otherwise accounted for were incurred by city.

* New Bedford Redevelopment Authority: was formed in 10/60; Authority delegated responsibility for planning, developing, and marketing three projects to local public bodies formed for purpose of industrial development activities; no information is available in DCA fines on role of Authority, if any, in initiation and management of these projects; Authority has apparently served merely as a conduit for applying for and receiving state aid; during Mayor Harrington's reign of mid- and late sixties and under administration of executive director Howard Baptista during that period and into early '70s, Redevelopment Authority aggressively pursued and undertook a variety of large federally and state aided urban renewal projects which are currently completing a close-out process which is projected to end by 1979; four major projects were undertaken with a public investment of approx. $70,000,000 divided among federal, state, and municipal sources; projects include: (a) a waterfront industrial project which has been successfully marketed to fishing industry related firms and includes a housing development and extensive street work; (b) a central business district project which encompasses industrial, commercial, and residential development as well as major street work; (c) a housing project consisting of considerable rehabilitation and new construction activity; and (d) a neighborhood development project which includes some land clearance and housing rehabilitation; with end of federal categorical grant programs and change to present Community Development Block Grant program New Bedford receives substantially less funding than previously; however, full completion of present projects will provide considerable activity for Authority over next few years; Authority received strong support from all sectors of community, but that support waned as city assumed greater than anticipated costs for large number of projects; Authority also applied for and received planning advances from DCA for two proposed
state-aided industrial projects which were never pursued by Authority beyond planning stages: $38,587 for an Air Industrial Park (of which $3,644.21 remains unspent by Authority) and $31,185 for a Wholesale Distribution Center (of which $408.98 remains unspent by Authority); former executive director Baptista was found guilty of embezzling federal funds and has been incarcerated for his crime; present executive director Henry Horne has seen no need for more active involvement by Authority with marketing of North Terminal Bulkhead project.

* New Bedford Harbor Development Commission: assumed functions of Authority with respect to planning, developing, and marketing Maritime Terminal project; no information is currently available on activities of NBHDC during these phases; a questionnaire has been sent to Paul Saunders, Director.

* New Bedford Industrial Development Commission: assumed functions of Authority with respect to planning, developing, and marketing Industrial Park and North Terminal Bulkhead projects; no information is currently available on activities of NBIDC during these phases; a questionnaire has been sent to Fred Rueben and Fred Cusick.

* Southeastern Regional Planning and Economic Development District (SRPEDD): responsible for reviewing and approving projects; responsible for preparation of Dec. 20, 1976 "New Bedford-Fairhaven Route 6 Bridge Corridor Planning Study Report" which includes analyses by Craig L. Moore of Center for Business and Economic Research at U. Mass. of economic development prospects for New Bedford Harbor and constraints on development of North Terminal area presented by existing bridge; city and SRPEDD have a history of hostile relations.

* DCA: see above section in program components; has not been a party to discussions between City of New Bedford and DPW over replacement of New Bedford-Fairhaven bridge even though present bridge constrains marketing of state-aided North Terminal Bulkhead project.

* Dept. of Public Works: responsible for construction of arterial street and Rt 18/I-195 interchange which are essential for feasibility
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of two projects; responsible for operation of New Bedford-Fairhaven bridge and decision on replacement; City of New Bedford and DPW are currently engaged in discussions with regard to establishing bridge replacement as a DPW priority.

Performance

Process Measures: * Implementation Process: little information is available from DCA files on activities of all three projects during their planning, execution, and marketing phases; Maritime Terminal project, when approved for execution in 5/63, was only second project approved by DCA pursuant to Chapter 121B statute; all project improvements were completed and entire property was sold to a single company for a large fish and meat freezer-warehouse; although project is located north of old New Bedford-Fairhaven bridge, company claims that bridge does not hinder current operations which depend upon receipt of waterborne cargo shipments and is not expected to be a problem with future increases in cargo shipments unless bridge becomes fixed in a closed position over an extended period of time; planning phase for New Bedford Industrial Park project was approved sometime in 1962 and execution approval was given in 5/65; all site improvements have been completed and most of property has been sold; planning phase for North Terminal Bulkhead project was approved sometime in 1965 and execution approval was granted in 7/67; although site development work has been completed, no land has been sold as yet; several firms have expressed interest in site, including two foreign automobile manufacturers considering a staging area and parts distribution center for imported vehicles and a company proposing a scrap-iron processing and exporting enterprise; according to various memoranda prepared by Craig L. Moore of Center for Business and Economic Research, U.Mass., as appendices to a recent report entitled "New Bedford-Fairhaven Route 6 Bridge Corridor Planning Study Report," some businesses likely to be interested in site, such as two just noted, will find that current width of New Bedford-Fairhaven bridge presents a severe constraint which precludes use of modern economical wide body ships; nevertheless, Moore concludes that present bridge width does not in general represent a major obstacle to marketing of North Terminal Bulkhead property because most
industries likely to locate in area use cargo vessels which can be accommodated by current bridge and no need for a general cargo facility is expected in light of a projected decline in overall waterborne shipments through port of New Bedford; he notes that both companies now receiving bulk of cargo shipments north of bridge, including storage-freezer firm in Maritime Terminal, find no problems with current capacity of bridge; in separate analyses examining bridge capacity as a constraint on North Terminal development Moore concludes that: (a) fishing industry is not likely to move north of bridge due to current plans to reconstruct two better situated piers and expected modest growth in fleet over next decade; (b) coal mining in southeastern New England offers little potential for adding to demands on New Bedford harbor; and (c) a variety of factors indicate that a Containerized Cargo facility will not be located in New Bedford; however, in an analysis of potential for harbor development related to oil exploration and development in Georges Bank, Moore states that New Bedford is in a good position to benefit from long term service and supply activities (as a result of proximity to lease sites, port and marine facilities, truck and rail services, machine shop facilities, favorable labor situation, and tendencies of oil companies to favor multiple staging areas and fishing ports) and North Terminal area is a prime site for location of such activities (expansion area, rail linkages, sufficient draft, etc.); nevertheless, although size of ships which would be used for such activities can be accommodated by present bridge, potential of bridge opening breakdowns and delays as a result of increase in traffic serves as a deterrent to location of Georges Bank related activities in North Terminal area; in summation, Moore judges that undependability of bridge is a serious constraint for any development likely to increase number of bridge openings, whether or not related to Georges Bank; DPW has not considered bridge replacement to be a top priority but negotiations are now underway between DPW and City of New Bedford on matter.

Effectiveness Measures:

* Fiscal Need: New Bedford clearly warrants state assistance and aid and public initiatives for industrial development on basis of fiscal need; tax burden in city, as measured by tax rate on equalized value, is about equal to median average for Mass. cities and has generally
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increased since 1966, with exception of sharp
decreases in '75 and '76 (accompanying large
increases in state aid) which will be largely
offset by steep tax increases in '77 and '78
(a $20 tax rate increase is projected for fiscal
year '78); city was major whaling port in
nation in mid-19th century (10,000 seamen manning
ships at its peak) and since flight of most
textile firms, city has relied on a fishing
industry which declined steadily until 1970;
however, due to weak service sector in New Bed-
ford, income from fishing has not greatly
multiplied local economic activity; city con-
sistently manifests one of highest unemployment
rates in Commonwealth; city population has declined
from 102,477 in '60 to 100,345 in '75 and, thus,
New Bedford has experienced a net out-migration
of residents; city has undertaken a number of
major urban renewal projects since mid-'60s which
have added significantly to tax rate as a result
of new debt service demands but haven't yet
reached completion point when additional tax
revenues will flow to city; physical decline in
some older neighborhoods is evident while histori-
cal restoration efforts and a new downtown com-
cmercial street appear promising; concentration of
unemployed and low wage earners in city has led
to increased demands on city services (New Bed-
ford spends largest fraction of budget on police
and fire expenditures--20% of any of six largest
cities in Commonwealth--six cities average 17%
and rest of state 12% -- but lowest fraction--1%--
on health and hospitals--six cities average 11%
and rest of state 4%).

* Employment Need: "depressed area" character-
istics of New Bedford also qualify city for state
assistance and aid on basis of employment need;
unemployment rate remains consistently 1.5 to
4.5 percentage points higher than state average:
'60 = NB 6.45%, Mass. 4.19%; '70 = NB 5.44%, Mass.
3.82%; '75 = NB 14.59%, Mass. 11.2%; 4/75 un-
employment rate of 15% was highest in state and
one of highest in nation; New Bedford's economy
proved to be extremely vulnerable during recent
recession; rates of unemployment have been con-
sistently high despite a slight decline in popu-
lation and a continual net migration of persons
out of city; despite net loss of approx. 8,200
manufacturing jobs since '50 (approx. 26%), in-
cluding a net loss of approx. 1,318 manufacturing
jobs between '70 and '74 (approx. 6%), New Bedford
remains a heavily industrialized city (approx. 55% of total employment consists of manufacturing jobs) and accounts for approx. 81% of total employment in a heavily industrialized SMSA (approx. 50% of jobs in manufacturing); however, although manufacturing employment usually pays higher wages than services, New Bedford manifests a relatively low average annual wage of approx. $7,700 ('74: DES) due to concentration of low wage manufacturing industries and a low wage mix of service industries; three low wage industry groups of apparel ($5,876 average annual wage: DES '74), electrical machinery ($6,613 average annual wage), and textile mill products ($7,718 average annual wage) account for respectively approx. 33%, 9.7%, and 9.5%, or approx. 52%, of total manufacturing employment; moreover, composition of manufacturing employment has been worsened by steady shift since '50 of increases in apparel jobs ('50-'74 gain = 2,695; '70-'74 gain = 281) accompanied by decreases in low but higher paying textile mill products jobs ('50-'74 loss = 9,145; '70-'74 loss = 725); in addition, New Bedford had next to lowest percentage of total employment in service sectors of eight Major Labor Market Areas in Commonwealth in '73 (approx. 45% was well below state average of 62%); moreover, average annual wage for service sector jobs in New Bedford LMA was lowest in state at $5,950 in '73; New Bedford also manifested highest percentage of seasonal service jobs (26.2%) in '73 of all LMAs; seasonal sensitivity and low average annual wage of services in New Bedford are attributable to high percentage of retail trade in service sector; New Bedford LMA had lowest percentage of total employment in normally high wage finance, insurance, and real estate service sector (approx. 3%) and next to lowest percentage of total employment in normally high wage transportation, communications, and utilities service sector (approx. 4%) of all major Labor Market Areas in Commonwealth and these sectors averaged unusually low annual wages of approx. $7,600 and $9,800 respectively (DES '74); employment in transportation, communications, and utilities service sector has grown by only 68 jobs from '60 to '74 while number of jobs in finance, insurance, and real estate service sector has grown steadily but slowly for a net increase of 562 or 70% over period; wholesale and retail trade employment in New Bedford dropped by 1,250 jobs between '70-'74, after a gain of 1,604 over period '60 to '70; from preceding analysis, it comes as no surprise to find that percentages of New Bedford SMSA's population (dominated by city) in lowest two income groupings in '70 Census were much higher than state averages and median and per capita incomes for SMSA
compared unfavorably with state figures: incomes under $3,000 = SMSA 10.3%, Mass. 6.4%; from $3,000-$5,999 = SMSA 17.3%, Mass. 11.8%; median income = SMSA $7,145, Mass. = $8,607; per capita income = SMSA $2,872, Mass. $3,425; in an economic base analysis of New Bedford, Craig L. Moore, et al. of Center for Business and Economic Research, U. Mass., found that New Bedford exhibited one of lowest ratios of service jobs to manufacturing jobs (1.22 or approx. 6 service jobs for each 5 manufacturing jobs) among a comparison of 17 SMSAs similar to New Bedford in terms of size and presence of a port; weakness of service sector tends to lower multiplier effects through local economy of earnings from fish industry which, though actually accounting for only 4.6% of manufacturing employment and 2.7% of total employment, contributes production with value equal to 14% of total dollar value of goods and services in city and jobs with high average annual wages (approx. $10,864: DES '74); limited number of high quality service jobs also serves to limit attractiveness of city for industry; although central business district urban renewal project which is nearing completion will likely add to numbers of high quality service jobs, it is certain that number of such jobs created will not be enough to replace lost manufacturing jobs; evidence indicates that New Bedford cannot rest its hopes for future on becoming a regional service center; large and increasing dependence of New Bedford on apparel and other low wage industries suggests two problems for local economy: (a) employment offered by these industries manifests characteristics of what has been termed a "secondary labor market" which include low pay, absence of job security, high turnover, lack of advancement opportunities, no unionization, poor working conditions, etc.; jobs with these qualities have been linked to high rates of unemployment (from higher participation rates resulting from entrance of second and third family wage earners into labor market; from high job turnover due to combination of unattractiveness of jobs relative to welfare and unemployment compensation and ready availability of these jobs which allows for shifts between employed and unemployed status), high levels of welfare payments (as workers shift status), and greater demands on municipal services (as a consequence of low earnings, high unemployment, welfare-employment syndrome, etc.); and (b) apparel industry is
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labor intensive and very competitive and, therefore, highly sensitive to wages; imports have accounted for a steadily increasing share of domestic sales and sales are responsive to cyclical fluctuations in consumer spending; hence, although growth of apparel industry is generally viewed as desirable by business and municipal leaders, an increase in relative proportion of New Bedford's jobs with such secondary labor market qualities will actually serve to worsen New Bedford's fiscal and employment problems and continued concentration of apparel industry will serve to increase vulnerability of New Bedford's economy to changes in apparel demand or competitive position of U.S. or New England (Craig L. Moore estimates that apparel is responsible for approx. 32% of city's export income); in general, if jobs added to city pay less than current average annual wage (such as apparel, electrical machinery, or low paying services), growth will not achieve economic development objective of higher per capita income but will reduce that measure of well being as it induces in-migration of unemployed seeking jobs; consequently, in light of documented employment problems in New Bedford, state assistance and aid and public industrial park projects are justified only if parks are marketed to firms offering "primary labor market" quality employment and employment of under- and unemployed persons is achieved.

Note: Average annual wage figures presented here from Mass. Dept. of Employment Security data for 1974 may be somewhat misleading since they are mean averages which may be skewed by large numbers of part-time or part-of-year workers in retail trade, apparel, and other low wage industries. Nevertheless, it is believed that in case of New Bedford, average annual wage figures derive mostly from "forced" part-time employment rather than "voluntary" part-time employment of housewives, students, etc. and, therefore, accurately reflect negative qualities of "secondary labor market" jobs.

* Net Municipal Fiscal Flows: although detailed figures have not been collected, Industrial Park and Maritime Terminal projects have apparently resulted in positive net fiscal returns to city, whereas North Terminal Bulkhead project may or may not provide positive fiscal flows depending upon speed of future disposition of land and eventual reuse; Maritime Terminal project was developed and sold within a relatively short time
period and estimated city share of net project cost was a modest $175,227.50; although city share of estimated net project cost for Industrial Park project was $1,204,052, most of project property was sold rapidly and project is large; however, due to absence of an information system for reporting comparisons between actual and budgeted costs, DCA does not know if, by how much, or in what direction original estimated net project costs, which are basis for current annual state payments, vary from actual project costs; in addition, DCA lacks information on whether bonds were issued for projects or amounts or terms of such bonds, on whether municipally owned property was used for projects, and on whether and how much city tax revenue would have been paid on sites in absence of projects; nevertheless, inasmuch as land for Maritime Terminal and Industrial Park projects was contributing modest tax revenues to city before projects, and annual tax revenue received in '75 from Maritime Terminal project property was $492,609.86 and from Industrial Park property was $322,437.50, projects have provided substantial net positive fiscal flows to New Bedford; $1,451,000 city share of estimated net project cost for North Terminal Bulkhead project would represent a large municipal burden if accurate; as with any project, longer city carries this expense, as well as project costs equal to estimated disposition proceeds, prior to disposition, lower will be eventual net fiscal returns from project when taxes and expenses are discounted to their present values at start of project; in light of high estimated city cost and uncertainty with respect to other city expenses and eventual disposition proceeds, time, and reuse, an accurate judgement on likely fiscal returns from this project cannot be made; nevertheless, if city continues to bear costs without disposing of property for a few more years, project will probably not return positive fiscal benefits to city.

* Employment Impacts: Redevelopment Authority executive director has indicated that Maritime Terminal and Industrial Park projects have provided substantial employment benefits to New Bedford; however, whether or not these projects have achieved their potential for meeting employment needs of state and city cannot be accurately assessed without more detailed information on types of jobs and characteristics of employees in projects, i.e. private firms can provide poor jobs; previous analysis of New Bedford's employment needs concluded that public projects are justified on basis of employment need only if jobs of "primary labor market" quality are provided to under- and unemployed
persons; location of any firms offering "secondary labor market" quality employment in projects has probably served to worsen New Bedford's fiscal and employment problems while occupying scarce city space needed for attracting high quality jobs; although detailed information has not been collected, movement of freezer-storage facility to Maritime Terminal suggests that project provided employment paying wages comparable to those of existing food processing industry in New Bedford which, at approx. $8,200 (DES '74), is slightly higher than approx. $7,700 (DES '74) average annual wage in city; substantial numbers of new jobs of unknown quality have resulted from Industrial Park project; despite "depressed area" characteristics of New Bedford's economy previously discussed, city has shown promise for attracting good paying jobs in rubber ($10,259 average annual wage in '74; DES; steady growth since '50 with 703 net new jobs added '50-'74 and 54 net new jobs added '70-'74), primary metals ($11,102 in '74; 198 net new jobs added '50-'74 and 42 net new jobs added '70-'74), and fabricated metals ($9,125 in '74; 180 net new jobs added '50-'74 but 225 net jobs lost '70-'75); New Bedford offers a number of features which should be attractive to industrial concerns: a number of vocational schools and a "labor relations climate" considered desirable by industrialists; low wage labor; skilled labor; integrated transportation system including a commercial airport which offers regularly scheduled flight service, buses, interstate highways through city, railroads, trucking, and a deep-water harbor with good docking facilities; and easy access to major market areas such as Boston (51 miles), Providence (31 miles), and New York City (210 miles); after a long term decline in fish catches, New Bedford has experienced steadily increasing catches since '71 and annual catch value records since '75; New Bedford remains largest catch port on east coast and enforcement of 200-mile fishing limit on foreign vessels will add significantly to fishing activity in New Bedford; projections based on enforcement of 200-mile limit on foreign fleets and improved fishery management efforts to restore stocks of depleted species indicate a 59% increase in New Bedford tommage and a doubling of current value of catch through port of New Bedford by 1985; since current local fleet operates at about 50% of capacity, only a
NEW BEDFORD

modest expansion of New Bedford's fleet is expected over next decade; thus, Craig L. Moore, in an analysis of expansion of fishing industry, concludes that estimated fleet expansion needs will be served by reconstruction of two piers and, therefore, North Terminal area is not likely to be needed for fishing vessel use; on other hand, North Terminal site is a prime property for location of new fish processing enterprises; Moore also discounts possibility that coal development in Southeastern New England will lead to increased demands for harbor space and feasibility of location of a Containerization Cargo facility in North Terminal area; however, Moore finds that New Bedford and North Terminal area are prime candidates for location of service and support activities for Georges Bank offshore oil development; he notes that a service and supply base which provides modest benefits over a long time period is preferred to short term construction related activities which provide high dollar flows (construction jobs are unlikely to go to local residents whereas city residents can be trained for longer term and good quality supply and service jobs; limited space available in New Bedford will require a choice between these two uses); Moore also indicates that undependability of existing New Bedford-Fairhaven bridge in face of increasing demands for openings presents a serious constraint for location of oil development related functions at North Terminal (although width of current bridge is not a constraint); however, magnitude of recoverable deposits of oil and/or gas in Georges Bank area, if any, will not be known until drillings are underway in earnest in '78 and '79; without opportunity for large economic benefits from location of long term oil related support activities or other major enterprises which would be constrained by present bridge, bridge replacement may not be warranted; benefits possible from industrial development in North Terminal area should be weighted against cost of new bridge; Moore indicates that businesses currently located north of bridge which depend upon receiving waterborne cargo shipments do not find bridge to be a problem; no analysis was found which considered how recent designation of port as a foreign-trade zone will effect demand for space in North Terminal area; inasmuch as foreign-trade zone status allows for foreign goods to be stored, processed, and delivered before duties are paid, care should be
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taken by DCA, Redevelopment Authority, and Industrial Development Commission to insure that labor intensive uses are located in North Terminal Bulkhead site; in summary, North Terminal Bulkhead property appears to offer good potential for achieving valued state and city economic development objectives; however, in order for that potential to be realized, firm selection criteria based on provision of adequate numbers of primary labor market quality jobs should be established and public programs to insure that under- and unemployed city residents are hired should be initiated.

* Increased Diversity of the Economic Base: inasmuch as "secondary labor market" quality jobs account for approx. 50% of New Bedford's manufacturing employment and a dominant percentage of total city employment and have been growing as a proportion of city's economic base, efforts to attract higher quality manufacturing jobs to city are warranted; in addition, concentration of apparel industry (approx. 33% of manufacturing employment) suggests that city is highly vulnerable to shifts in an industry which is extremely sensitive to changing production costs and quality of producers throughout world as well as U.S. government policies on apparel imports; negative impacts to New Bedford from concentrating and increasing number of "secondary labor market" quality jobs has been discussed previously in above section on employment need; since precise information is not available on firms which have located in Industrial Park project, an accurate assessment of project success at increasing local economic diversity cannot be advanced; executive director of Authority has indicated that park has significantly increased diversity of local economy; location of freezer-storage facility in Maritime Terminal project adds to food processing industry (assuming firm did not move from another city location) which is well represented in city but offers average annual wages which are slightly higher than average annual city wage; North Terminal Bulkhead project offers potential for attracting business activity which will diversify local economic base.

* Growth of the State Economy: aggregate state economic benefits will have been achieved to degree: (a) firms in park are expanding local firms, start-ups, or out-of-state firms which
have located in park due to advantages particular to New Bedford (ex. cheap labor, waterfront site, harbor facilities, agglomeration economies related to apparel production or marine or fishing activities, labor skills, proximity to suppliers or markets, etc.) and to project (low cost land, large assembled site, waterfront location, transportation facilities, etc.); (b) space vacated by expanding local firms is filled by other firms seeking these same advantages of a New Bedford location; and (c) achievement of local fiscal and employment objectives reduces fiscal demands on Commonwealth (by lowering expenditures: ex. welfare, unemployment compensation, city aid, etc.) and, thereby, need for increased taxation which would impair competitive position of state for business in general; information available on firms located in Industrial Park is inadequate to accurately assess any of these three types of aggregate growth benefits from that project; however, project has evidently benefitted state economy by providing net positive fiscal flows to New Bedford and by inducing out-of-area firms to locate in a center of high unemployment; although detailed information on freezer-storage firm located in Maritime Terminal is not available, it appears that project has added to state economy by providing an assembled and developed waterfront property which is a scarce resource for inducing development to occur that otherwise would not take place; any assessment of achievement of state growth objectives by North Terminal Bulkhead project must await disposition of property.

* Evidence of Agglomeration Economies: increasing concentration of apparel production in New Bedford (approx. 33% of total manufacturing employment) suggests that agglomeration economies related to this industry may be present; however, this phenomenon may be more simply accounted for by availability of cheap mill space and low wage labor force; concentration of firms related to marine and fishing activities may provide economies of some type to other firms; however, it is difficult to identify firms that locate due to economies from concentration of harbor related firms as opposed to simple needs or advantages of a harbor location.

* Induced Effects: no evidence of additional development resulting from projects.

Narrative: No further information is available to add to that which has already been presented.
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Judgement:

The City of New Bedford warranted state assistance and aid and public industrial development projects on the basis of serious and growing fiscal and employment needs, the potential for employment and local fiscal benefits, a need for increasing the diversity of the local economic base, the potential for adding to growth of the state economy, and features, such as unique harbor resources and an advantageous location with respect to markets and suppliers, which suggested that the projects could be marketed. As a community manifesting the characteristics of a "depressed" urban center which nevertheless offered the potential for economic renewal, New Bedford presented an opportunity for achieving state and municipal development objectives related to growth and distribution. However, due to the lack of information on the prior status of the properties used for the projects and the circumstances attendant to the initiation of the projects, no assessment can be advanced as to whether or not private development would have occurred without public actions and whether private development would have resulted in more or less desirable economic development outcomes.

The failure of DCA to establish an adequate information system for reporting on the actual costs and impacts of projects has deprived DCA of the data necessary to monitor and assist projects and assess the effectiveness of projects in achieving their goals. Since responsibility for these projects was delegated by the Redevelopment Authority to two other local public bodies and the state auditor has, as a result, not audited the books on these projects, DCA lacks the information needed to execute even its minimal regulatory functions. Although DCA may, as a policy choice, want to continue annual subsidy payments at their current levels even if actual project costs have been less than the original budget estimates, as a financial incentive for local bodies to complete projects on time and under budget, DCA should still maintain accurate accounts of actual costs and subsidies in order to assess whether benefits are exceeding costs and insure that municipalities are not receiving positive net cash flows through state payments greater than the total municipal share of the net project cost. Therefore, it is recommended that DCA request of the state auditor and the Redevelopment Authority that the
books of these three projects be subjected to audit as specified by statute and DCA establish an appropriate information reporting system.

DCA's neglect of the reporting of project impact information has also denied DCA and the Commonwealth the data which is necessary to examine the benefits from these projects. Inasmuch as two of these projects in New Bedford may have resulted in substantial positive net economic development benefits, the absence of data is especially unfortunate. Without a detailed analysis of project costs and benefits, state legislators and personnel in the executive brange of state government formulate inaccurate views of the program based on crises during development phases rather than economic outcomes. Questionnaires on all three projects which were sent to the appropriate public bodies have not been returned as of yet.

Disposition of land in the North Terminal Bunkhead project in a manner which serves to maximize economic development objectives can be aided by DCA with assistance in formulating a set of firm selection criteria based on employment objectives and encouraging DPW to establish the replacement of the New Bedford-Fairhaven bridge as a top priority if the potential economic benefits warrant such an action. Due to the dominance of low quality jobs in New Bedford's economy, project land should only be marketed to firms which offer jobs with average annual earnings higher than the current mean average annual wage in New Bedford and "primary labor market" characteristics and agree to hire an adequate number of under- and unemployed city residents. The addition of low wage jobs would contribute towards increasing the unemployment rate and demands on city services and inducing the in-migration or stopping the out-migration of the poor. Public industrial development projects have been found to be justified in New Bedford only if they provide good jobs to under- and unemployed city residents.

Although New Bedford needs additional service jobs, especially in the higher paying services, and services are expected to grow, the extreme comparative weakness of the service sector suggests that New Bedford cannot survive as a regional service center but must continue to rely on manufacturing.
Location: NORTHAMPTON  
Project Name: Millyard Industrial Park  
Size: 108.35 acres; 88 disposable acres  
Type: Industrial  
Reuse: Proposed: 50% light industry; 5% office; 10% warehousing; 10% distribution; 10% assembly; 10% service; 5% research  
Net Project Cost: $1,246,094 (budget estimate amended 3/75)  
State Share: $623,047 (one-half of estimated net project cost; principal only)  
City Share: $623,047 (one-half of estimated net project cost not including bond interest costs which are borne entirely by city)  
State Payments to Date: $158,209.40 ('73-'76: 2 payments of $17,659.05, 1 payment of $51,838.95, and 1 payment of $29,052.35 plus prior $42,000 planning advance)  
Status: All of project property has been acquired and all site improvements, except for electricity installation, have been completed. 5.7 acres have been sold to two firms. After months of negotiations on a disposition agreement with a development corporation for sale of all of remaining land, deal recently collapsed when prospective developer failed to raise limited amount of necessary up-front cash. Authority has a full time marketing director who functions as both an executive director and a real estate agent.  
Model Aspects:  
* Initiated principally to serve as an intra-community industrial relocation project; local industrialists asked city to develop an industrial park because they needed expansion space and claimed that industrially zoned land large enough for a modern industrial park development was not available; inability of a local firm, Multi-color of Florence (a village within Northampton), to find suitable expansion space was impetus for forming Redevelopment Authority and seeking an appropriate site and state aid for development.  
* Project in a stable city of modest size which has not experienced difficult unemployment or fiscal problems but relies heavily on low wage service sector employment.  
* A Local Development Corporation is available to acquire land and construct industrial buildings utilizing SBA 502 financing for lease or sale to qualifying firms.  
* Development Strategies: (a) majority of park land was to be sold to a single developer who
NORTHAMPTON

would market parcels to individual firms; (b) land parcels have been sold by Redevelopment Authority to individual firms; and (c) a real estate agent has been retained on a fee and commission basis to market project.

Program Components:

state:

* Eminent domain powers; most of land was owned by a potato farmer and a potato processing plant was located on property; 16 parcels have been acquired for $678,322 (plus an estimated $80,000 in outstanding court cases).

* State planning advance; $42,000 was advanced by state for planning.

* State execution subsidy.

* No state construction of infrastructure directly related to development of project.

* DCA has provided little assistance to project in past; Future success at marketing park to serve public economic development objectives can be aided considerably by assistance from DCA in formulating and implementing a marketing strategy; due to dominance of low wage service employment in Northampton, park will achieve public employment objectives only if property is sold to manufacturing firms offering "primary labor market" quality employment and an employment program is established to provide local residents with jobs in park (i.e. to insure that good jobs are not filled by immigrants); now that disposition of all of remaining property to a single developer will not proceed, DCA should assist Authority in establishing firm selection criteria based on desired job impacts and assets of site and Northampton, developing performance specifications regarding job impacts for inclusion in disposition agreements, and obtaining cooperation of other units of state government for marketing effort and designing an employment program.

municipal:

* Municipal expenditures: 20 year urban renewal bonds totalling $1,250,000 were issued in 1970 at a 6.2% interest rate; total city share of net project cost (principal only) is projected to equal $623,047; in addition, city will bear entire cost of interest expenses on bonds issued for project and cost of carrying project costs equal to amount of estimated disposition proceeds ($391,260) until such time as land is disposed.
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* City of Northampton: advance of most of up-front development expenses and assumption of costs of municipal execution subsidy, a minimal amount of foregone real estate tax revenues during period land is held by Authority, and carrying project costs equal to amount of estimated disposition proceeds until land is sold by Authority.

* Northampton Redevelopment Authority: was formed in order to undertake industrial park project; in order to save on expenses, an executive director has never been hired; progress of project has been dependent upon activities of a full-time secretary, donated time of Chairman of Board, and, since 4/76, services of a marketing director retained on a fee and commission basis; secretary resigned in 11/75; with approval of City of Northampton and DCA, Authority entered into an agreement with Walter J. Murphy on 6/11/76 to retain him as a marketing director responsible for both administrative functions of an executive director and marketing strategy and disposition responsibilities of a real estate agent; in addition to industrial park project, Authority received a planning advance of $57,000 from DCA in 1974 and completed planning work for a proposed state-aided downtown renewal project known as "Pleasant River Project" which never received state or local approval.

* DCA: has played a minor role up to present time; technical assistance has not been provided except for a recent effort to redraft a disposition agreement; see above section on DCA under program components for comments on future role of DCA.

* Dept. of Manpower Development: should assist in formulating and implementing an employment program for park: ex. establishing customized manpower training programs through TAP or a CETA sponsor, solving worker transportation problems, establishing training and employment referral relationships with vocational education schools and programs, etc.

* Dept. of Commerce and Development: should assist by promoting park to in-state (through business contact program) and out-of-state firms and helping to target public sources of business capital to park (ex. MIMIA, MBDC, SBA, CDFC, etc.).
* Implementation Process: delays have resulted from court cases over eminent domain takings and inadequate and untimely planning work by consultant; project was approved for survey and planning phase in 4/68 and for project execution in 12/69; at present time, all project land has been acquired by Authority, although final acquisition costs remain unsettled, and all site improvements, except for electricity installation, have been completed; actual cost of project improvements exceeded original budget by $191,491 ($524,091 actual compared with $332,600 budgeted).

* Planning: planning consultant firm, Lordwood Associates, lacked technical engineering expertise and proper number of staff for satisfactory performance; inability of firm to adequately plan for drainage problems caused a long delay; contractors experienced difficulty following designs for site improvements; parcel configuration proved to be unacceptable for marketing.

* Marketing: Redevelopment Authority has been unsuccessful at marketing despite continuous efforts since 1972, except for sale of two small parcels to local firms (a 3.7 acre parcel in '74 and a 2 acre parcel in '76); supposed demand from local firms which precipitated project has not materialized; professional quality advertising has been used to promote project in a variety of mediums such as newspapers, real estate journals, industrial show displays, mailings to firms, etc. but an individual to direct marketing efforts on a full time basis was not obtained until 6/76; initial park marketing effort was directed at science-research types of firms which might find educational resources and academic climate of area attractive; although Mass. has experienced growth of these types of firms, recessionary economy during period of park marketing dampened growth in these areas; a market analysis was prepared for park by Prof. Odiorne, Dean of Business School at U. Mass., in 7/75 but efforts to attract firms in six industrial categories identified in his report proved fruitless; marketing director is currently directing his attention at expanding firms within a 50 mile radius of project; recently, after a number of months of negotiations on a disposition agreement with a newly forming development corporation, Mega Corp., which had agreed to purchase all of remaining property,
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deal collapsed at moment of final agreement because developers were unable to raise limited amount of necessary up-front capital; agreement between Authority and marketing director calls for combination of administrative functions with marketing responsibilities in a single position and provides for an annual consultant fee of $15,000 as well as a percentage commission on sales (agreement was approved by DCA in 6/76); in a letter to State Auditor in 12/76, Authority Chairman states that two positions have been combined in order to save on expenses and compensation method has been adopted in order to provide a performance incentive; as a result of policies of Authority, State Auditor notes that a situation could arise in which marketing director and an outside broker could both receive a commission for sale of same parcel of land.

Effectiveness Measures:

* Fiscal Need: tax burden in Northampton, as measured by tax rate on equalized value, is somewhat lower than for most Mass. cities and has remained relatively stable over a number of years (approx. $41 in '76); city has not experienced fiscal strain due to stabilizing influence on local economy exerted by major educational and health institutions; employment in city is dominated directly and indirectly by presence of Veteran's Administration and Cooley Dickinson Hospitals, Smith College, and nearby (9 miles) University of Mass. campus at Amherst (as well as several smaller educational institutions); growth of student body at U. Mass from 7,000 to 25,000 students over past decade has added significantly to housing demand in Northampton; tax rate has increased only modestly despite construction of two new schools and a new sewage treatment plant and increases in number of municipal employees; thus, fiscal need is a weak basis for justifying state assistance and aid and a public industrial development project.

* Employment Need: as suggested above, service sector jobs account for a large majority of jobs in Northampton (DES '74: approx. 73% in all services; 35% in selected services; 30.5% in wholesale and retail trade); manufacturing accounts for approx. 24% (DES '74) of total city employment; however, although jobs in selected services category offer low wages (DES '74: $7,181 average annual wage), employment in major educational and health institutions provides features,
such as job security, internal advancement opportunities, fringe benefits, etc., which distinguish these service jobs from typically "secondary labor market" quality service employment; in addition, stability and growth of employment in institutions contributes toward stabilizing other service employment in city; thus, in contrast to other cities with high percentages of employment in low wage service categories, such as Brockton, which suffer from high rates of unemployment and severe demands on city services, unemployment rate in Northampton is consistently two or three percentage points below regional and state averages (3.1% in '70; 6.7% in '76) and there is no evidence of fiscal strain; in addition, institutions provide large amounts of "export" income to city from out-of-area students and hospital patients who come to city on a temporary basis for services; this export income then "multiplies" local economic activity as it is spent and respent; nevertheless, overall average annual wage in city is very low (DES '74: $7,506) and manufacturing jobs also offer relatively low, if somewhat higher average annual wages (DES '74: $9,303); a comparison of 1970 Census income statistics for city population with SMSA and State figures indicates that, although city has a lower percentage of very poorest households, city population is generally worse off: incomes under $3,000 = N 5.8%, SMSA 6.8%, Mass. 6.4%; incomes $3,000-$5,999 = N 13.7%, SMSA 12.8%, Mass. 11.8%; per capita income = N $3,002, SMSA $3,225, Mass. $3,425; in addition, availability of low wage employment has recently attracted a Puerto Rican population of approx. 1,000 persons; therefore, although Northampton does not suffer from severe employment problems, and is unlikely to in future, dominance of low wage service industries has provided limited employment opportunities for residents; thus, employment need may be an adequate basis for justifying state assistance and aid and a public industrial park project only if land is marketed to manufacturing firms offering "primary labor market" quality employment and an employment program is established to insure that under- and unemployed local residents are hired.

* Net Municipal Fiscal Flows: project property had been providing limited tax revenues to city before acquisition by Redevelopment Authority; however, in light of slow progress of marketing, higher than budgeted project expenses for some items, and significant project costs assumed by
Northampton, city may be somewhat pressed to gain positive net fiscal flows from project (when annual revenues and expenses are discounted back to start of project); nevertheless, if recent deal with a single developer for all of remaining property had been consumated, city would have earned substantial positive net fiscal flows; if marketing proceeds in future at a modest absorption rate, city will probably receive positive net fiscal flows; if remaining 82 acres are sold for a price near to $8,000/acre obtained on prior sales of two small parcels (82 X $8,000 = $656,000), disposition proceeds will greatly exceed estimated $391,260; two firms which have located in park currently pay approximately $13,500 in annual real estate taxes; thus, it is still likely that project will bring significant positive fiscal flows to city.

* Growth of the State Economy: if original basis for project had proved valid, and expanding local firms which lacked alternative sites for expansion (private developers found city too risky or land assembly too difficult for development of a modern industrial park) had moved to park, project would have provided positive aggregate economic benefits to state economy; although detailed information has not been collected on two small firms which have located in park, it appears that these two firms were expanding local businesses and park has contributed somewhat to growth; if in-state firms expand, businesses start-up, or out-of-state firms locate in park due in part to advantages offered by park, project will contribute to state economic growth; features such as large size of park, attractive physical resources (rail, airport, scenic beauty, etc.), excellent highway access (I-91 borders park and Mass. pike is only 14 miles away), low land costs, educational resources of region, and desirable characteristics of area as a place to live, may make park a suitable location for a major out-of-state firm seeking a site in region; unless public efforts are initiated to insure that project achieves its potential for employing under- and unemployed persons, park will not serve to reduce state fiscal demands in that manner (i.e. lower welfare costs, reduced state aid to cities, etc.) and, thereby, need for taxation which impairs competitive position of Commonwealth for business in general.
* Employment Impacts: in order for project to achieve state employment objectives in a city dominated by low wage service jobs, park must be marketed to manufacturing firms offering "primary labor market" quality employment and public efforts to provide jobs to under- and unemployed local residents are necessary; in addition, since DCA has not promulgated a "non-relocation" regulation, firms may move out of high priority development areas, such as Springfield and Holyoke, to park locations and, thereby, subvert economic development objectives; due to absence of an adequate information system for reporting on project impacts, detailed information is not available on employment impacts of two firms currently located in park; however, although project presents good potential for achieving state economic development objectives, necessary components for effective project management, such as an employment program, firm selection criteria, performance clauses for disposition agreements, and a "non-relocation" regulation, have not been established.

* Increased Diversity of the Local Economy: due to extremely high proportion of service jobs in Northampton, successful marketing of park to manufacturing firms should increase diversity of local economy.

* No Evidence of Agglomeration Economies.

* Induced Impacts: no evidence of additional development resulting from project.

The Northampton Redevelopment Authority was formed at the request of local industrialists for the purpose of undertaking an industrial park project to serve local expanding firms. However, as implementation delays beset the project, public support for the effort waned and the local press took aim at the Authority. By the time the land for the project had been acquired and developed, demand for space from local firms was no longer evident and the national recession limited the possibility of attracting companies from outside of the state. A recent attempt to dispose of all of the remaining property to a single development entity failed after agreement on disposition terms had been reached because the prospective purchasers were unable to raise the required capital. This experience has indicated that, on the one
hand, some private interests view the property as marketable, while on the other hand, the project is considered risky. The assets of the industrial park include: (a) a physically attractive setting; (b) completion of all utility and site improvement work except for electricity; (c) a strategic location with respect to national markets; (d) immediate access to the interstate highway network; (e) close proximity to numerous educational institutions (major colleges and universities as well as junior colleges and vocational schools); and (f) a skilled low wage labor force. Negative marketing factors include proximity to New Hampshire with its more favorable tax structure and an inability to guarantee a supply of natural gas.

Judgement:

The City of Northampton does not warrant state subsidization of and support for an industrial park on the basis of severe fiscal or employment problems, the presence of local agglomeration economies, or a potential for induced development. If local firms had needed expansion space which was not available on the private market, the project would have been justified on the basis of local and state growth objectives. Due to the high proportion of low wage service jobs in Northampton, the project may be justified on the basis of a potential for achieving positive employment impacts and a need to increase the diversity of the economic base. In addition, the park offers potential for adding to growth of the state economy by contributing to the expansion of local firms and serving as a site for major out-of-state firms.

It is doubtful that the entire project can be marketed solely to local firms within an acceptable period of time given the limited industrial base of the area and a sluggish economy. However, the attractive features and large size of the project may enable the state to achieve growth objectives by successfully promoting the property to major out-of-state firms. In order to achieve these gains for the Commonwealth, DCA should obtain the assistance of the Department of Commerce and Development in promoting the park to major firms considering locations in the region. In addition, DCA should prepare a fiscal impact analysis of the project to assess the sensitivity of positive net fiscal flows to delays in marketing.
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In order for the Millyard Industrial Park project to achieve the positive employment benefits which largely justify the project, DCA should: (a) promulgate a "non-relocation" regulation to prohibit the movement of firms out of high priority development areas to parcels in the park; (b) assist the Authority in formulating and executing an employment program for the park, with the cooperation of the Dept. of Manpower Development, in order to provide under- and unemployed city residents with good jobs; (c) assist the Authority in establishing firm selection criteria based on desired employment impacts and the assets of the park and Northampton; (d) work with Authority in drafting job performance clauses for disposition agreements; and (e) obtain the cooperation of the Dept. of Commerce and Development in bringing public sources of business capital to focus on the project in order to enhance marketing efforts and gain leverage for the measures to achieve employment objectives.
<table>
<thead>
<tr>
<th>Location:</th>
<th>PALMER</th>
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<tbody>
<tr>
<td>Project Name</td>
<td>Palmer Industrial Park</td>
</tr>
<tr>
<td>Size:</td>
<td>164.2 acres; 151.79 disposable acres</td>
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<tr>
<td>Type:</td>
<td>Industrial</td>
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<tr>
<td>Reuse:</td>
<td>proposed: 40% light industry; 15% assembly; 10% heavy industry; 10% office; 10% research; 5% service; 5% warehousing; 5% distribution</td>
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<tr>
<td>Net Project Cost:</td>
<td>$4,529,500 (original budget estimate 4/74)</td>
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<tr>
<td>State Share</td>
<td>$1,792,250 (includes one-half of estimated $1,556,500 interest costs on urban renewal bonds)</td>
</tr>
<tr>
<td>Town Share</td>
<td>$1,792,250 (estimate includes one-half of estimated $1,556,500 interest costs on urban renewal bonds)</td>
</tr>
<tr>
<td>EDA Grant:</td>
<td>$945,000 for public facility improvements; additional Technical Assistance Grant of unknown magnitude</td>
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State Payments to Date: $345,251.65 ('74-'76: 3 payments of $85,117.55; plus prior $89,899 planning advance)

Note: State and town shares of project costs are likely to change with upcoming reformulation of project resulting from cancellation of prior sale of most of project property to a single developer. In addition, the above net project cost approved for project should have been $100,000 less: first, $200,000 should be added to net project cost because the sale price to the developer was $600,000 rather than the $800,000 listed in the financial plan ($200,000 difference represents escrow funds paid by developer which would revert to Authority, one half of principal plus accrued interest, if developer failed to achieve number of jobs in park by specified date agreed to in contract but otherwise would be returned with all interest to the developer); second, $300,000 should be subtracted from net project cost because disposition agreement with developer calls for three $100,000 grant payments to town which were not included as part of the listed disposition price.

Status: Although most of site development work has been completed and entire property has been sold to a developer, project activity is at a standstill due to refusal of developer to agree to conditions of EDA grant. EDA is withholding approx. one-half of grant funds which are needed to complete remaining site work pending compliance of developer with requirements or cancellation of disposition agreement with developer. Administrative funds for Redevelopment Authority have been exhausted and no staff are currently employed to work on project. Board has recently requested assistance from DCA in mediating current impasse. No land has been sold to individual firms. Indictments are pending against developer and town project consultant.
Model Aspects:

* Project initiated as a disaster relief effort to rebuild local economy in aftermath of a major fire which caused substantial job loss: 1968 fire destroyed many old textile and paper mills in Bondsville village within Palmer which eliminated 482 jobs (approx. 4,100 total employees in Palmer); with a 16% local unemployment rate, town was declared a federal disaster area and Economic Development Administration offered assistance; on recommendation from EDA, town hired a consultant who learned of applicability of state-aided industrial renewal program and prepared and submitted an application to DCA for assistance.

* In an exception to general policy as a consequence of disaster relief situation, DCA approved inclusion of bond interest costs in determination of Commonwealth's share of net project cost: letter from DCA indicating policy change was written in 7/70 but budget including estimated interest costs was not approved until 4/74.

* Grant from federal Economic Development Administration (EDA) to fund public facilities improvements: $945,000 grant was approved in 10/72; conditions on receipt of grant include a "non-relocation" provision which prohibits relocation of firms from other communities to park, and a "non-profiteering" provision which limits return to "middle-man" developer of entire property; compliance with first provision limits project market to expanding local firms, business start-ups, and branch plant expansions of out-of-area firms; EDA stopped payment of grant in 1975 after $486,262 had been received by Authority because developer who purchased entire property in 1974 refused to sign non-profiteering agreement and a required industrial park covenant (which commits subsequent purchasers in park to civil rights and non-relocation provisions) and to re-execute non-relocation and civil rights statements which had been part of original disposition agreement; EDA has a general policy of objecting to strategy of sale of entire park to a single developer who markets parcels to individual firms because of a concern that benefits on federal grant subsidy would not be captured by town or business firms (Chapter 121B program does not require sale of property to highest bidder and it is doubtful that there are enough developers with access to capital to provide for a competitive bidding situation in any case); EDA officials claim that they were never informed of sale to a single developer and DCA personnel were either not aware of EDA policy or saw no need to inform EDA of proposed sale; in
light of current non-cooperation of developer, EDA is requesting that sale agreement be terminated as a condition for release of remaining EDA funds.

* Grant from EDA to fund major feasibility study on industrial development in town: study was undertaken prior to Authority application for DCA survey and planning funds to identify a development site and assess feasibility of an industrial park project.

* Project in small industrial town situated in rural area: population of approx. 11,600 persons has been growing slowly but steadily since 1950 (9,533 persons); town has long been a manufacturing center as a consequence of availability of river water power (2 principal rivers); Palmer continues as a location for manufacturing because of proximity to resources and services of Springfield-Holyoke-Chicopee center and presence of Mass. Turnpike interchange at town.

* Land disposition agreement with single developer marketing entire park relates disposition price to developer performance in bringing jobs to park: 200 jobs are required by 3/1980 or unsold property will revert to Authority at no cost; 750 jobs are required by 3/1984 or one-half of $200,000 escrow fund plus accrued interest will revert to Authority; this is only example of a performance oriented disposition agreement in state-aided urban renewal program.

* A Local Development Corporation is available to acquire land and construct industrial buildings utilizing SBA 502 financing for lease or sale to qualifying firms.

* Development Strategies: all land in park has been sold by Authority to a single developer for marketing of parcels to individual firms; however, objections from EDA, failure of developer to agree to EDA conditions, and indictment of developer – for bond forgery, and town consultant – for conflict of interest, will probably lead to cancellation of sale; in future, Redevelopment Authority will most likely sell parcels to individual firms.
Program Components:

state:

* Eminent domain powers: all twenty-three parcels in development plan have been acquired, including nine parcels outside of project area to be used to improve access to park; to 4/76, three parcel acquisitions have been settled with owners, including one parcel donated by Town of Palmer, for a cost of $2,651; twenty parcels remain unsettled with pro tanto payments totalling $221,351 made on sixteen of these parcels; land damage litigation proceedings are pending against Authority on twelve unsettled parcels.

* State planning advance: $89,899 in state funds was advanced for planning; amount was subtracted out of total state share of net project cost when level of annual state payments was computed, rather than out of first annual state payment as is customary.

* State execution subsidy: due to fire disaster DCA made an exception to normal policy by including one-half of estimated bond interest costs as part of state share of execution subsidy.

* No state infrastructure investment was directly associated with project development.

* Failure of DCA to accurately review and actively monitor project and coordinate activities with other state government units, regional planning commission, and EDA has contributed to delay and controversy; Future progress of project is largely dependent on ability of DCA to mediate a settlement between EDA, Redevelopment Authority, Selectmen, and developer, and assist Authority in formulating and executing a marketing strategy directed at achievement of state economic development objectives; DCA inaccurately calculated net project cost and, therefore, state share of execution subsidy, by not carefully reviewing terms of disposition agreement: neglect of $300,000 in grants to town from developer and inclusion of a $200,000 escrow payment as part of disposition proceeds, even though funds will be returned to developer upon satisfactory performance pursuant to terms of disposition agreement (DCA has not modified assistance agreement to account for these errors which were noted in state audit reports); DCA approved planning funds for project despite objections raised as to soundness of project by Regional Planning Commission and State Water Resources Commission through A-95 review process required for all
federally-funded capital projects; this commitment and expenditure of state planning funds provided major leverage for forcing approval of project execution on EDA and state A-95 clearing-house over a variety of objections: water pollution, environmental impacts on green belt and residential community, costs and benefits, truck traffic congestion, etc.; failure of DCA to coordinate activities with other units of state government and Regional Planning Commission contributed to delays during approval process and development of animosity between Authority and these actors; DCA gave little consideration to objections raised to project despite its own requirements for reviewing environmental impacts, potential for DCA to work out a compromise among conflicting parties because state aid was a necessary and sufficient ingredient for undertaking project, and resulting appearance of conflict between state agencies which creates inter-agency hostility and suggests that all state goals are not accepted as valid (i.e. environmental protection); although there is some uncertainty as to seriousness of interest expressed by Miller Brewing Co. in park location, DCA did not provide or obtain from other state agencies promotional assistance for advocating advantages of Mass. location to a major out-of-state firm considering a move to Commonwealth; quality of water at site and size of property could have accommodated needs of a brewery which cannot be satisfied at many industrial locations; whereas promotional efforts were left to developer and consultant in Palmer, New York State wooed Miller to a site in that state with helicopter rides and meetings with representatives of Governor and key state business leaders; although ultimate location decision may have been based on such factors as availability of resources, proximity to markets, taxes, and features of site, there is little doubt that Commonwealth lacked a mechanism for responding in a sophisticated manner to a major firm interested in moving to a state location; DCA's lack of knowledge of EDA requirements and/or monitoring of project for compliance with EDA requirements led DCA to approve of disposition of entire park to a single redeveloper in violation of EDA policy and without obtaining developer commitment to EDA conditions; subsequent dispute between EDA and Authority and developer, as a consequence of these failings, has led to a chain of events which have brought project to a standstill over past 18
months; until very recently, DCA has not intervened in an attempt to settle dispute and advance project, despite large commitment and annual payments of a state execution subsidy to project (largest state subsidy to any state-aided renewal project) and DCA's position as a neutral but interested party to dispute; DCA can and should play an active role in mediating dispute; it now appears that EDA will require withdrawal of developer from project and assumption by Redevelopment Authority of marketing of parcels to individual firms as conditions for release of withheld funds; DCA should make its own position with respect to future of project clear and mediate a settlement among all parties so as to minimize litigation which could tie up project indefinitely; in addition, DCA should assist Authority in replanning project to preserve more environmentally valuable land along river and in formulating and executing a marketing strategy; ingredients for a marketing strategy directed at achieving state and local economic development goals might include criteria for selection of firms with desirable job impacts, targeting of public sources of business capital and manpower training funds to project, funding of a full time marketing person through an EDA grant, town Community Development funds, state discretionary EDA 304 funds, some other funding source or on a contingency basis, and marketing assistance from Dept. of Commerce and Development through business contact program and promotion activities to out-of-state firms.

* Municipal expenditures: approx. $2,200,000 in urban renewal bonds have been issued by town; since DCA has made exception of including interest costs on bonds as part of net project cost, town will assume only one-half of an estimated $1,556,000 in interest costs; town has provided $50,900 from general municipal revenues for preparation of a town master plan required by DCA for approval of state-aid, preparation of application for EDA grant, and rental of office space; to 4/76, town had advanced a total of $2,575,000 for execution stage of project; total town share of net project cost (principal and interest) is projected to be $1,792,250; furthermore, if developer is forced to withdraw from project and town returns disposition proceeds, Palmer will bear project costs equal to amount of estimated disposition proceeds ($600,000) until such time as land is disposed of.
federal:

* EDA grants; a grant of $945,000 was approved in 10/72 for public facilities improvements; $486,262 has been released to Authority up to present time with remainder being withheld pending a resolution of dispute concerning developer; a technical assistance grant of unknown magnitude was approved in 11/69 to prepare a major feasibility study on industrial development in town.

Actors:

* Town of Palmer: advance of most of up-front development expenses and assumption of costs of municipal execution subsidy (1/2 of principal and interest expense of net project cost after deduction of EDA grant), a minimal amount of foregone real estate tax revenues (if sale to developer is cancelled and Authority assumes ownership of property until individual parcels are sold), donation of one parcel of municipally owned land, and carrying costs equal to amount of estimated disposition proceeds until land is sold by Authority.

* Palmer Redevelopment Authority: pursuant to EDA requirements for applying for grant funds, an Overall Economic Development Program Committee (OEDPC) was formed in 1/69, four months after fire, in order to establish a set of development goals; after OEDPC recommended development of an industrial park, Palmer hired a consultant, at suggestion of EDA, to prepare detailed work for application for a technical assistance grant to fund a feasibility study and subsequent application for a project public facilities grant; after consultant discovered that state-aided urban renewal program could be used for an industrial park on "blighted open land," Palmer Redevelopment Authority was formed in early 1970 by a vote of town meeting in order to qualify for state assistance; Authority was composed of individuals previously active in OEDPC and became vehicle through which EDA and DCA funds were sought; however, town consultant retained responsibility for preparing applications to EDA and DCA; after DCA approved application for survey and planning funds and agreed in 7/70 to pay one-half of net project cost (contingent upon EDA approval), and town meeting voted by a slim margin in favor of an industrial park bond issue in 6/71 after two prior rejections, Authority hired former Chief of Planning for EDA in New England as executive director; director proved to be effective and competent but left Authority as a result of personality conflicts with some members of Authority Board; a tense and hostile relationship developed between Authority and
Board of Selectmen despite strong support from Selectmen during planning and approval stages; second executive director hired by Authority advised against turning developer's down payment over to Selectmen despite a prior promise by Authority to do this made at time of town meeting approval of project; Board of Selectmen have refused to release $114,000 owed to Authority to complete engineering and construction work on needed rail spur; Authority has received unfavorable press coverage as a result of delay of project since 1975 and general public support has waned as a result of failure of Authority to satisfy expectations; recently, only citizen willing to run for a vacant seat on Authority Board was a vocal opponent of project; due to absence of a cash flow as a result of current stalemate between EDA, Board of Selectmen, and developer, Authority released its most recent Executive Director and secretary in summer of 1976 and closed down its office; since that time, however, renewed interest in dealing with current problems has emerged, and members of Authority Board have asked for assistance from DCA in mediating an agreement among all parties.

* Palmer Board of Selectmen: project was endorsed strongly by Board of Selectmen in three town meetings called to approve an industrial park bond issue; however, a tense and hostile relationship has prevailed between Selectmen and Authority over most of period of project execution; Selectmen have refused to release $114,000 due to Authority for engineering and construction work on a rail spur required in agreement with developer; EDA requested in 5/76, as one of four conditions for release of funds, that Selectmen and Authority review and approve in writing all land sales by developer for compliance with non-profiteering formula suggested by Authority.

* Palmer Town Meeting: town meeting voted in 11/70 not to fund industrial park despite promotional efforts by Authority and support from Selectmen and Finance Committee; defeat has been attributed to fiscal conservatism of town's people, inter-village jealousy within Palmer, and opposition of local industry which feared that wage pressures would result from additional firms; project's supporters lobbied for approval at 6/71 town meeting over intervening six months and loss of two of town's largest employers over period raised unemployment rate to 18%; despite these factors and continued support of town committees, park
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proposal was defeated once again on 6/5/71; however, four days later Selectmen called a special town meeting for 6/21/71, and second largest town meeting vote ever recorded approved a bond issue by a slim seven vote margin.

* Lower Pioneer Valley Regional Planning Commission: until advent of industrial park project, Palmer had never dealt with Regional Planning Commission; in accordance with its A-95 review powers, established by federal edict in 1969, which required that state agencies and regional planning agencies review all federally funded capital projects and offer non-bidding opinions, Commission staff commented adversely in 4/70 on Palmer's application to EDA; items questioned by Commission staff included adequacy of level of detail in proposal, rationale for site selection, pollution impact on water quality in a recently improved river, visual and noise impacts on surrounding residential areas, impact of increased truck traffic on three mile road through a residential area between park and Mass. Turnpike, cost of park to town, destruction of a green belt along river front, and lack of an effort to integrate project with other development; town consultant reacted vigorously by disputing substance of these objections and rebuking Commission for failing to raise these issues during prior year and one-half application planning process; despite Commission objections, DCA approved a survey and planning advance and a project execution grant, contingent upon EDA project approval, and EDA was prepared to approve project subject to a town vote committing local share of funds and an adequate plan for sewage treatment; however, federal legislation was passed which provided Regional Planning Commissions with power to require preparation of Environmental Impact Statements for federally aided projects; eager to force a re-evaluation and a change in use of industrial park project, Commission requested a ruling from Environmental Protection Administration relative to Palmer project which had already received tentative approval; EPA ruled that Commission could require an EIS and EDA agreed; when Authority re-submitted application to EDA in 11/71, with amendments related to water system and other problems raised earlier, Commission reiterated its past objections and added questions concerning size of project, demand for industrial space, lack of development controls, and availability of services for park; although Authority tried to meet objections of Commission in order to avoid time and expense of an EIS, Commission continued to
object to project in order to force a change in use for site; Selectmen and Authority proceeded to solicit support of Congressional Representatives; on 8/10/72, at a meeting attended by area Congressman, a representative from Senator Brooke's office, PRA, LPVRPC, Selectmen, and EDA (but no representative from DCA), Director of Commission conceded that park might help to alleviate unemployment problem in area and, outnumbered 25 to 1, agreed in writing to drop objections to project; project was then approved by DCA and EDA without need for an EIS; whereas project was supported by local officials as an attempt both to create jobs and add to local tax revenue, Regional Planning Commission had pressed for a decentralized solution to unemployment which would not have provided equivalent property tax benefits to town; Commission entered into planning process too late to achieve compromises over its concerns for recreation space and environmental impacts; EDA Technical Assistance Grant had been approved without knowledge of Commission.

* Consultant to Town of Palmer: after a local OEDPC had determined that an industrial park was needed, town hired a consultant, at suggestion of EDA, to prepare grant applications; Dr. Ronald Stinnett of Washington Group, Inc. was hired in 6/69, eight months after fire, for a fee of $30,000; he helped to form a site selection committee to choose best location for a park and prepared and submitted an application to EDA for a Technical Assistance Grant to fund a major industrial feasibility study; Stinnett discovered state-aided industrial renewal program and recommended that town form a Redevelopment Authority in order to receive assistance; consultant prepared project funding applications which were submitted to EDA — for a public facilities grant, and to DCA — for a planning advance, on 4/1/70; when Regional Planning Commission raised objections to project, Stinnett vigorously contested substance of objections and criticized Commission staff for failing to attend meetings during application planning process; however, since Stinnett's contract with Town of Palmer contained a provision for an additional stipend based on amount of federal and state money brought to town, he had an incentive to push ahead with project and a disincentive to delay project or alter scope or character of project which might reduce or jeopardize federal and state funds; after all final project approvals were received from EDA and DCA in 10/72, Stinnett found a developer who tried unsuccessfully to interest Miller Brewing
Co. in park location; when this developer failed to meet payments on options he held on property, a close friend of his picked up options and a disposition agreement was soon entered into between new developer and Authority; Stinnett's incentive contract which related compensation to amount of federal and state dollars received by town may account for failure to include developer's projected $300,000 grant to Palmer as part of disposition proceeds and, thereby, increase state aid by $150,000; Stinnet has been indicted for receiving a finder's fee of $125,000 from developer in addition to his salary from Authority, and on a conflict of interest charge for serving as Vice President of Palmer Industrial Park, Inc. which is responsible for promoting park for developer.

* DCA: see section in program components above.

* EDA: in aftermath of disastrous 1968 fire, EDA offered to assist town in efforts at rebuilding its industrial base; in order to qualify for assistance, EDA required that town form a local committee to establish development goals; after Committee determined that an industrial park should be developed, EDA recommended that town hire a consultant to prepare necessary applications for aid; upon receiving an application from consultant, EDA approved of a grant to fund a major industrial feasibility study which was completed and submitted to EDA in 1/70; however, EDA refused to release a copy of study for a number of months and, thus, deprived Regional Planning Commission of information necessary for assessing economic feasibility of project; consultant submitted an application for a public facilities grant to EDA in 4/70; Regional Planning Commission exercised its non-binding A-95 review powers by raising a number of objections on project application to EDA; nevertheless, EDA was prepared to approve application on conditions that town vote its share of project funds and an adequate plan for sewage treatment be prepared; when Regional Planning Commission subsequently received a ruling from EPA agreeing that Commission could require preparation of an EIS according to a new federal law, EDA agreed; when project application was resubmitted to EDA in 11/71 with amendments reflecting previously noted issues and approval of town bonding, Commission continued to object to project; at a meeting of major parties to dispute, except DCA, with Congressional Representatives, EDA officials sympathized with town's wish to avoid preparation of an EIS; after Regional Planning Commission agreed in writing to EDA to drop its
objections, EDA awarded a grant of $945,000; EDA personnel had not been swayed by Commission's objections that project was not in best interests of town; approx. one year after Authority had executed a disposition agreement with a single developer for entire property in park and EDA had advanced approx. one-half of grant funds, EDA expressed disapproval of sale to single developer; evidence is unclear as to whether EDA had ever been informed of disposition at time of sale, but EDA stopped further payments pending receipt from developer of signed statements on civil rights, non-relocation, park covenants extending civil rights and non-relocation provisions to future purchasers, and non-profiteering which EDA required to fulfill its responsibilities; EDA has a general policy against sales to middleman developers in order to insure that benefits of public subsidies accrue to municipality and manufacturing firms rather than to developer; developer claims that he signed first two of these statements as part of disposition agreement and he refuses to re-execute these agreements or sign other two statements; EDA insists strongly on non-relocation prohibition as a necessary regulation required by statute which insures that projects lead to additional jobs rather than simply transfer employment or encourage plant piracy; EDA has indicated to Authority that non-relocation covenant remains with property indefinitely so that project will continue to meet economic development objectives which justified a public subsidy; EDA also insists that profit of developer be limited by formula to insure that public subsidy benefits business firms rather than middleman; hence, in a letter dated May 28, 1974 EDA specified four conditions for release of withheld portion of grant funds: civil rights agreement signed by developer, non-relocation assurance signed by developer, industrial park covenant signed by developer which commits future owners of park property to first two assurances, and agreement on a formula for non-profiteering signed by developer, Authority and Board of Selectmen; as a consequence of developer's refusal to comply with these conditions, EDA officials have recently indicated that withdrawal of developer and assumption of marketing of parcels to firms by Authority will precipitate release of funds.
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* Dept. of Commerce and Development: DCD should have been contacted by DCA to provide marketing assistance to Authority when Miller Brewing Co. was considering locating in park; Commonwealth lacks a sophisticated mechanism for responding to opportunities for attracting major firms to Commonwealth locations; with regard to future marketing efforts in Palmer, DCD should provide marketing assistance through its business contact program and out-of-state promotional activities (water quality is a major asset for park) and lend support for targeting public sources of business capital to park (ex. MIMIA, MBDC, CDFC, SBA, Farmers Home Admin., etc.).


Performance Process Measures:

* Implementation Process: despite various delays during planning phase, project implementation proceeded in a rapid fashion from initial project conception through to marketing to a single developer; project delays since disposition of park land to developer have resulted from refusal of Board of Selectmen to release funds for engineering and construction work on rail spur, weak market demand, loss of Authority staff, and dispute with EDA over required conditions for sale of property to single developer and non-cooperation of developer with respect to these conditions; fire occurred in 10/68; town formed an Overall Economic Development Program Committee in 1/69; committee report recommending an industrial park was completed by 3/69; consultant was hired by town in 6/69; EDA Technical Assistance grant for feasibility study was awarded in 11/69; industrial feasibility study which identified project site, target industries, and necessary improvements was completed in 1/70; Redevelopment Authority was formed in early 1970 in order to apply for state aid; town hired a consultant firm to draft a master plan as required for receipt of state renewal assistance; on 4/1/70 consultant submitted an application for a public facilities grant to EDA and an application for a state planning advance to DCA; pursuant to A-95 review process, Regional Planning Commission raised objections to application to EDA during 4/70; despite Commission's objections, which were non-
binding on both EDA and DCA, DCA approved application for a planning advance and committed itself to approval of an execution subsidy, contingent upon EDA approval, in 10/70, and EDA approved of project subject to town approval and a plan for sewage treatment; however, in 11/70, town meeting voted not to fund project; even after unemployment rate in town rose to 18% as two major employers closed down operations, town meeting failed to approve project on 6/5/71; however, a strong effort to bring out vote at a special town meeting called for 6/21/71 succeeded in gaining town approval by a 7 vote margin; Authority hired an executive director and retained planning and engineering consultants to prepare a final project report; however, with a change in federal environmental law, Regional Planning Commission achieved power to require an EIS; when revised application was submitted to EDA by Authority in 11/71, Regional Planning Commission once again raised objections; in 12/71 state A-95 clearinghouse approved project subject to resolution of problems raised by Regional Planning and Water Resources Commissions; attempts to resolve differences with Planning Commission proved fruitless, because Commission was interested in forcing a change in proposed property use; however, when Congressional Representatives were asked to intervene, and a meeting of all interested parties was held in 8/72, Planning Commission agreed to drop its objections and requirement for an EIS; EDA and DCA both approved project in 10/72; construction of improvements began in 10/73; a financial assistance agreement was negotiated with DCA on 4/16/74; on July 15, 1974, almost entire property was sold to a single developer, J.B. Williams of Memphis, Tennessee; site construction work, except for a rail spur, was completed in 1975; developer failed to make a $100,000 payment due to Authority on 8/1/15 according to disposition agreement because Authority failed to complete a rail spur as required by disposition agreement; Authority lacked funds for completing rail spur because Selectmen were refusing to pay $114,000 due to Authority for that purpose, and EDA was withholding payment of almost half of grant pending developer execution of civil rights, non-relocation, industrial park covenant, and non-profiteering statements; approx. one year after property disposition, EDA personnel had objected to sale of property to a
Effectiveness Measures:

* Fiscal Need: Project was supported by citizens and local officials partly as an attempt to restore tax revenue lost as a result of major fire in 1968 and closing of two major firms in 1971; nevertheless, tax burden in Palmer, as measured by tax rate on equalized value, is significantly lower than median average for Mass. cities even though it increased significantly from '72 to '73; Palmer has remained an industrial center with approx. 56% of town's jobs in manufacturing (DES: '74); in '74, 36 manufacturing firms were located in Palmer employing an average total of 2,011 employees; good rail facilities, interstate highway access (an interchange of Mass. Turnpike is located at Palmer), and close proximity to Springfield continue to make town an attractive location for industry; in addition, town serves as a bedroom community for some Springfield commuters and this helps to boost local fiscal strength; thus, despite loss of major employers in town, fiscal need is a weak basis for justifying state assistance and a public project in town.

* Employment Need: during 1971 when project was approved at town meeting, Palmer had an unemployment rate of 18%; however, just prior to fire in '68, town manifested an unemployment rate of 3.6%, which was below state average; with loss of 482 jobs as a result of fire in a town with approx. 4,100 total workers, and 2,000 total manufacturing employees, unemployment rate increased from 3.6% to 8%; thus, it appears that
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many workers who lost their jobs reside in rural communities near to Palmer; a comparison of percentages of town's population in lowest two income groupings with SMSA and State percentages indicates that Palmer's residents fare slightly better than those of SMSA as a whole and about same as population of Commonwealth as a whole; town population has grown slowly but steadily from 9,533 persons in '50 to 11,680 persons in '70 and net in-migration has occurred; however, these figures on relative prosperity of Palmer's citizens may be somewhat deceiving because they include commuters to Springfield and neglect impact of job losses in Palmer on nearby rural communities; report of committee formed after fire to define development objectives, offered view that Palmer needed an industrial park in order to maintain its industrial character and avoid becoming a bedroom community; therefore, in light of severe job losses incurred by town, importance of manufacturing in Palmer for nearby rural communities, and attractiveness of town as a location for manufacturing, project may be justified on basis of employment need.

* Net Municipal Fiscal Flows: at present time, probability of positive net fiscal flows to town from project is somewhat uncertain given current project standstill and possibility of extended litigation; however, a number of factors indicate that town will reap positive fiscal benefits from project: town experienced only one or two years of foregone taxes between time of acquisitions and disposition to developer; EDA grant and DCA assumption of one-half of net principal and interest costs (largest DCA grant ever for a state-aided project) limit town execution subsidy to an estimated $1,792,250; and park has a good market potential due to its large size, high quality of water supply, and advantageous location with respect to highway access and rail facilities; however, if sale to developer is cancelled and Authority assumes responsibility for marketing project, town will forego real estate taxes and assume costs equal to amount of estimated disposition proceeds ($600,000) until such time as property is sold; therefore, achievement of positive net fiscal flows will depend upon ability of DCA and Authority to formulate and execute a marketing strategy, including securing of resources and cooperation of other units of state government in marketing effort.
Growth of State Economy: availability of a high quality water supply almost attracted an out-of-state brewery to locate a major facility on site; water quality may serve to attract out-of-state firm branch plant, or allow for start-ups or firm expansion that otherwise would not occur; aside from superior quality of water and transportation resources, however, it is difficult to see how public project will contribute to state economic growth except for meeting employment needs of persons who otherwise would represent a fiscal drain on state and, thereby, increase taxes which would dampen growth.

Employment Impacts: in light of loss of major employers in town from '68-'72 and consequent high rate of unemployment, project should provide employment benefits if land can be marketed; compliance with EDA's "non-relocation" regulation prohibiting relocation of firms out of other communities to park location will prevent project from resulting in a "zero sum" transfer of jobs that doesn't add to total employment and allowing for movement of firms out of other high priority development areas, such as Springfield and Holyoke, in opposition to state development objectives; however, in order to maximize positive employment benefits an employment program should be initiated to insure that unemployed persons are hired by firms moving into park; despite attractive features of Palmer as a location for manufacturing, there is little evidence to suggest that private industrial land development will occur without public initiatives.

Maintain Diversity of the Local Economy: although approx. 56% of Palmer's employment consists of manufacturing, approx. 19% of wholesale and retail trade, and approx. 13% of services, threat of a long term shift from a manufacturing base to bedroom community status suggests that project is justified as an effort to maintain diversity of local economic base.

No Evidence of Agglomeration Economies.

Induced Impacts: no evidence of induced development resulting from project.
The fire which destroyed the 100 year old Bondsville mill complex in Palmer was the nation’s most costly industrial fire of 1968. Federal and state agencies immediately offered to assist in any industrial rebuilding effort. However, the small Town of Palmer was ill-equipped to deal with the disaster. Palmer had no zoning, no master plan, no institutions for economic development, and no experience in attracting new industry. Although DCA offered aid, its failure to lend active assistance, coordinate all parties, and carefully monitor the project, contributed to violations of EDA requirements, improper state funding commitments, and hostility among the various parties involved with the project.

The late entry of the Regional Planning Commission into the planning process seriously limited its ability to incorporate concerns for open space and recreation use or change the site of the project to better serve environmental needs. EDA had awarded a grant for a feasibility study without informing the Commission or other state agencies. After the grant was awarded, and DCA followed with the advance of planning funds, the Planning Commission had little opportunity to alter the project in a constructive manner so it adopted a posture of opposition. EDA subsequently established a process for informing state and regional agencies of possible applications by requiring applicants to fill out a "notice of intent" prior to filing applications. In the future, DCA should arrange to receive such information from the area EDA office on a regular basis in order to monitor EDA activity with respect to state assisted projects and other industrial park developments in the Commonwealth. In addition, in order to provide for closer coordination and cooperation between DCA and other state and regional agencies, an A-95 type review process should be established for state assisted projects which do not receive federal support.

DCA exhibited little concern for the objections raised to the project by the Regional Planning Commission and the State Water Resources Commission despite its own obligation for reviewing environmental impacts and the evidence of considerable local opposition from two town meeting rejections of the project and the final slim
vote margin of approval. Moreover, DCA was the only actor capable of mediating conflicts among all of the parties since state aid was a necessary and sufficient condition for the project to proceed and DCA's position in state government allowed for influence with other state government units and the Regional Planning Commission. From this experience it appears that DCA's "hands off" attitude, and abdication of project approval responsibility to EDA and other actors, was a major project management failure which contributed to project delay, inter-actor hostilities, and the current stalemate situation. In addition, the failure of the Authority to include $300,000 in part of the disposition price had the effect of inappropriately increasing the state share of the net project cost by $150,000. These issues indicate that DCA cannot expect local officials and Authority members to represent the interests of the Commonwealth and a more active role for DCA is necessary to assure that state expenditures are proper and achieving their intended purposes.

The Palmer Industrial Park project can be justified on the basis of employment needs, potential employment benefits, a need for maintaining the diversity of the local economy, a potential offered by superior water quality to add to growth of the state economy, and evidence that the project can be marketed. However, the town does not suffer from fiscal problems and the choice of a site for the park may not be justified due to negative environmental impacts. In order for the project to achieve desired economic development objectives, DCA must mediate the current impasse and assist the Authority in formulating and executing a marketing strategy.
Location: PEBODY
Project Name: Centennial Industrial Park
Size: 296 acres; 250 disposable acres
Type: Industrial
Reuse: proposed: 85% light industry; 5% office;
5% distribution; 5% service
Net Project Cost: $1,781,429.80 (being revised)
State Share: $ 890,714.90 (being revised; one half of estimated net project cost less EDA grant; principal only)
City Share: $ 890,714.90 (being revised; one half of estimated net project cost less EDA grant, not including bond interest costs which are borne entirely by city)
EDA Grant: $2,666,559 (pending; for initial portion of project)
State Payments to Date: No annual subsidy payments have been made pending revision of project budget estimates; $76,642.50 was advanced for planning.
Status: After six years of delay causing problems, the process of property acquisition which began at the end of 1976 is almost completed and site improvement work and marketing efforts are expected to begin in the fall of 1977.
Model Aspects:
* Project of major proportions situated at one of most attractive remaining Rt. 128 industrial locations is to be designed, marketed, and maintained as a "first class" park for "blue chip" companies: 296 acre industrial park, with approx. 250 disposable acres, is located at junction of Rt. 128 and I-95, adjacent to a Boston and Maine rail line; site is only 18 miles from Boston on U.S. 1; these and other features (such as low real estate tax rate and low land disposition prices) provide Commonwealth with a rare opportunity for attracting major out-of-state firms and promoting state employment objectives; however, project effectiveness with respect to state economic development objectives will depend largely on ability of state government, primarily but not exclusively DCA, to successfully manage project.

* Grant from federal Economic Development Administration (EDA) to fund site improvements: although grant has not yet been approved, every indication suggests that approval is imminent; project will be developed in two phases reflecting division of large site into two approximately equal portions of about 150 acres; grant for initial portion amounts to $2,666,559; conditions on receipt of grant include a "non-relocation" provision which prohibits relocation of firms from other
PEABODY

communities to park; therefore, potential market for project is limited to expanding local firms, business start-ups, and branch plant expansions of out-of-area firms.

* Project in generally prosperous and growing community: population of city has grown from 22,645 persons in '50 to 45,503 persons in '75 or by 100% over period Boston Metro. Area population increased by 14%; Peabody has attracted significant numbers of jobs in high wage, state growth industries of fabricated metal products, machinery (ex. electrical), and chemicals and continued concentration of leather industry (approx. 30% of manufacturing employment in '74) provides substantial numbers of well paying jobs ($10,484 average annual wage '74: DES); large number of low wage service sector jobs, mostly retail and selected services, appear to employ "voluntary" part-time workers (ex. housewives, students, etc.), secondary family wage earners from middle income families, or non-residents because statistics indicate that city population is relatively prosperous.

* A Local Development Corporation is available to acquire land and construct industrial buildings utilizing SBA 502 financing for lease or sale to qualifying firms; low cost SBA financing for plant and equipment is available through Essex County Economic Development Corporation.

* Development Strategies: (a) land parcels are to be sold by Redevelopment Authority to individual firms; and (b) land parcels may be sold by Authority to Local Development Corporation which purchases and builds on parcels utilizing SBA 502 financing and leases or sells structures to qualifying firms.

Program Components:

state:

* Eminent domain powers: several residents of project area contested Redevelopment Authority takings in court by disputing finding of blight; although Authority experienced little difficulty arguing and winning its case, protracted litigation was time consuming and costly; although project execution phase was approved in 10/69, property acquisition did not begin in earnest until 12/76 due to a variety of problem delays; all project property is expected to be acquired by fall of 1977.
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* State planning advance: $76,642.50 in state funds was advanced for planning.

* State execution subsidy: amount is being revised due to delays and receipt of EDA grant.

* Project dependent upon state construction of a connector road and bridge linking park to adjacent Route 128; Redevelopment Authority has experienced considerable delay from DPW with road and bridge development process; however, Authority breached original agreement with DPW in 1970 by failing to meet deadlines for planning work because of other problems.

* Future of project will benefit considerably from active DCA assistance with marketing and DCA coordination efforts with DPW; Project effectiveness in achieving state economic development objectives is largely dependent on DCA's ability to require and assist with formulating an employment program for park with cooperation of Department of Manpower Development; in order for project to achieve its potential for attracting major firms and, thus, contribute to growth of state economy, DCA should assist Authority by: (a) helping to formulate a marketing strategy and firm selection criteria based predominantly on attracting major out-of-state firms offering large numbers of high quality jobs, (b) bringing public sources of business capital and manpower training resources to focus on project by coordinating activities with units within Executive Office of Economic Affairs, and (c) obtaining cooperation of Department of Commerce and Development in promoting site to major firms; in addition, timely completion of access road and related bridge by DPW, which are essential for project success, can be aided by DCA coordination efforts; in order for project to fulfill its potential for achieving state employment objectives, DCA and Authority, with assistance of Dept. of Manpower Development, should formulate and implement an employment program for project to provide jobs for under- and unemployed persons from nearby communities; elements of such an employment effort might include: (a) using leverage afforded by attractive property to require firms to hire unemployed persons as a condition of sale (rules and regulations allow for sale to other than highest bidder if public objectives are to be served), (b) establishing training and employment referral relationships with vocational education schools in nearby communities, (c) targeting
manpower training funds to park, and (d) providing for transportation needs of workers in nearby depressed urban centers; in past, DCA has limited its role to passive regulatory functions; Redevelopment Authority recently requested assistance from DCA on marketing and coordination with DPW.

* Municipal expenditures: City of Peabody has advanced funds to Authority on an "as needed" basis for planning, engineering contract, acquisition (46 parcels for estimated $1.631 million), relocation ($188,650 estimate), and administrative costs in anticipation of issuing $2.3 million in bonds; however, total city share of net project cost (principal only) is unknown pending revision of project budget estimates in light of extended project delays since preparation of original budget and receipt of EDA grant (DCA requested budget revision some months ago but has not yet received changes); in addition to assuming one-half of net project cost less EDA grant (assuming revised estimates prove accurate), city will pay entire cost of interest expenses on bonds issued for project; furthermore, city will bear project costs equal to amount of estimated disposition proceeds until such time as land is disposed (disposition proceeds originally estimated to equal approx. $4,275,000).

* EDA grant: grant of $2,666,559 for site improvements is likely.

* Administrative grant from the Essex County Economic Development Corporation: Area Local Development Corporation pledged up to $20,000 in 1/3 matching funds for administrative costs associated with project.

* City of Peabody: advance of most of up-front development expenses and assumption of costs of municipal execution subsidy, all bond interest, foregone real estate tax revenues during period between acquisition and disposition ($34,750 in '77), and carrying project costs equal to amount of estimated disposition proceeds until actual land dispositions.

* Peabody Redevelopment Authority: formed in 3/65; in its only major activity other than industrial park since formation, Authority completed planning phase for a proposed federally-
aided downtown renewal project which was rejected by a vote of City Council on 4/29/71; according to report of state auditor, Authority board has expended a great deal of time and effort in determining a format for conducting meetings, researching abilities and salaries of administrative staff, reviewing contract awards, and rescinding contracts and previous votes of meetings; audit report also notes that a good deal of dissension has plagued Board and Board membership has changed often; several problems during planning and execution phases of industrial park project have resulted in disputes between Authority and other actors: at one point, city officials objected that project did not conform to general city plan and zoning map, relocation difficulties led to court battles with site residents, and objections of Planning Board to project resulted in dismissal of Authority executive director in 11/75; most recent executive director resigned over a dispute with Board regarding his future status; as a result, Authority is currently seeking a new executive director.

* Local Planning Board: objected to declaration of project area blight; disagreements between Planning Board and Authority led to ouster of Authority executive director in 11/75.

* Conservation Commission: due to presence of wetlands in project area, local Conservation Commission had to approve of project before grant application would be accepted by EDA; Commission has required that some land remain undeveloped to preserve a small wetlands environment.

* Essex County Economic Development Corporation: area Local Development Corporation is able to channel low cost SBA loan assistance for plant and equipment to qualifying firms which choose to locate in park.

* DCA: DCA has played a limited regulatory role up to present; DCA did not assist Redevelopment Authority in applying to EDA for grant funds; state personnel have not discussed project with EDA personnel and DCA does not have a copy of application submitted to EDA (therefore, DCA has not checked application contents for compliance with state rules and regulations); see above section on DCA under program components for recommendations on future role of agency.
PEABODY

* Dept. of Public Works: responsible for construction of highway access road and bridge essential for project; Authority claims that DPW has delayed development process but Authority breached original agreement with DPW in 1970; Authority and DPW are close to reaching a new agreement on construction of road and bridge; Commonwealth shares cost of construction with federal government.

* Dept. of Commerce and Development: should assist by marketing project to major out-of-state firms and helping to target public sources of business capital to project (ex. MIMIA, MBDC, SBA, etc.).

* Dept. of Manpower Development: should assist in formulating an employment program for project to provide job access for unemployed with firms in park: ex. customized manpower training programs through TAP or CETA sponsor, solving worker transportation needs, establishing training and employment referral relationships with vocational education schools and programs, etc.

* EDA: is providing a grant for site improvements; EDA personnel have never contacted DCA staff concerning grant application.

* Federal Highway Administration: providing funding for road and bridge construction and must make a determination as to whether projects will cause a minor or major impact on environment.

Performance

Process Measures: * Implementation Process: project implementation has been substantially prolonged by a great number of problems during planning and execution stages; survey and planning phase was approved in 6/67 but execution approval was not granted until 10/69; in addition to delays, Authority encountered problems which included hostility from city officials and Planning Board members, staff problems, legal problems with consultant contracts, acquisition difficulties, and problems in negotiating interim financing; due to many delays, execution activities related to acquisition, engineering, financing, and relocation did not get underway until 1976; approval of EDA grant is expected shortly; grant application to EDA was delayed for six months while local
Conservation Commission considered impact of project on wetlands in project area; an agreement between Authority and DPW on construction of necessary access road and bridge is now reaching final form; as a result of extended project delays to date and imminent receipt of a grant from EDA, DCA has requested and received a revised marketability study from Authority and has requested, but not yet received, a new project budget; acquisition activity is currently proceeding well and is expected to be completed, along with all remaining relocation and engineering tasks, by fall of 1977; site improvement construction is expected to begin near end of 1977; marketing efforts are expected to begin as soon as improvements are under way.

* Planning: following difficulties delayed project during planning phase: (a) project did not conform to general plan and zoning map of city (a condition of DCA approval); (b) Authority spent considerable time attempting to find a planning consultant acceptable to both DCA and Authority after DCA rejected initial choice of Authority; and (c) DCA demanded revisions to final project plan submitted for approval.

* Execution: delays which occurred during execution phase were more severe than those of planning phase: (a) in 1970, Authority failed to meet planning deadlines agreed to with DPW, so DPW cancelled agreement on timing of construction of essential access road and bridge and subsequently delayed further work on these projects for five years; (b) protracted litigation ensued when residents of project area unsuccessfully contested finding of blight in a court action; (c) other residents of project area successfully challenged adequacy of project relocation plan, which had been approved by DCA, through court action and Authority was forced to prepare a new relocation plan; (d) during entire litigation period (1969 through 1975) from various court challenges, city was unable to issue bonds to pay for development expenses; (e) without bond monies, funds for administrative expenses of Authority were soon depleted and interim financing was obtained which added interest costs to project; (f) Planning Board objected to declaration of blight and forced
PEABODY

dismissal of Authority executive director; and 
(g) until Jan. 1977, Authority was unable to 
find a suitable site for relocation of pig farm 
as required by relocation plan.

Effectiveness 
Measures:

* Fiscal Need: tax burden in Peabody, as 
measured by tax rate on equalized value, is 
significantly lower than for most Mass. cities 
and has remained stable over a number of years: 
$39.60 in '70 and $41.70 in '76; in addition, 
a major school building program has recently 
been completed, private real estate development 
activity continues in city, and an expansion of 
North Shore Shopping Center and construction of 
a new Sears, Roebuck & Co. store promise to add 
to city's tax base; consequently, Peabody does 
not warrant state assistance and aid and a public 
industrial development project on basis of fiscal 
need.

* Employment Need: Peabody has been known as 
"Leather City of the World" and leather firms 
continue to be primary employers in city, supplying 
30% of jobs in manufacturing at good wage levels 
($10,484 average annual wage in '74: DES); 
manufacturing is predominant business activity 
in city and accounts for approximately 40% of 
total employment (with high overall average annual 
Wage of $10,590 in '74: DES); as leather in-
dustry continues to decline in importance, lost 
jobs are being replaced by new employment oppor-
tunities; 100-plus acre Peabody Industrial Center 
and smaller new industrial sites have been filled 
by firms attracted to modern facilities located 
adjacent to Rt. 128; Peabody has attracted 
significant numbers of high wage manufacturing 
jobs in industries which are growing in Common-
wealth as a whole: fabricated metal products 
($9,471 average annual wage in '74: DES), machin-
ery ex. electrical ($10,975), and chemicals and 
allied products ($13,185); unemployment rate in 
city is consistently below rate for state and 
rates for most of other cities in Commonwealth; 
general prosperity of residents is suggested by 
comparison of percentages of city population in 
lowest two income groupings with Boston Metro. 
Area and State figures from 1970 Census: incomes 
under $3,000 = P 4.7%, B.M.A. 6.1%, Mass. 6.4%; 
from $3,000-$5,999 = P 8.2%, B.M.A. 10.8%, 
Mass. 11.8%; thus, despite concern of Peabody 
residents over a recent high rate of unemployment
(8.1% in 3/76), Peabody's unemployment and underemployment problems are not as severe as those of other cities in Commonwealth and private market activity appears to be strong enough to provide for a favorable transformation of economic base; nevertheless, due to a very large number of low wage retail jobs (approx. 33% of total city jobs; $5,011 average annual wage '74: DES) and substantial number of low wage jobs in selected services category (approx. 13% of total city jobs; $5,947 average annual wage '74: DES), Peabody manifests a relatively low overall average annual wage ($7,881 in '74: DES); however, in light of generally favorable statistics on incomes of residents of Peabody, it appears likely that bulk of these low paying jobs employ "voluntary" part-time workers (ex. housewives, students, etc.), secondary family wage earners from middle income families, and non-residents of Peabody; therefore, Peabody does not warrant state assistance and aid or a public industrial park development on basis of local employment need; nevertheless, highly attractive features of park property, such as low real estate taxes, comparatively low land costs, and excellent transportation resources, may provide Commonwealth with needed leverage for promoting public employment objectives; in addition, highly marketable industrial land in Peabody project is within close proximity to north shore communities which suffer from more critical unemployment problems: (3/76) Lynn 10.5%, Salem 10.2%, Beverley 8.2%; thus, state efforts and a public project in Peabody may be warranted on basis of employment need only if explicit initiatives to provide jobs to unemployed are included as part of project.

* Net Municipal Fiscal Flows: despite likelihood that city will bear a substantial expense for project even with EDA grant, factors such as large size of project, good market potential of site, and low amount of annual tax revenues foregone by city between time of acquisition and disposition of land ($34,750 in '77), indicate that project will provide considerable net positive fiscal flows to city if it is successfully marketed; project delays which have been experienced up to present have not been costly because tax revenues continued during period and only minimal expenses were incurred; due to presence of pig farm, need for access road
to Rt. 128, extremely difficult topography, and need for costly infrastructure improvements, it is doubtful that, even with attractive location of property, private development would have proceeded on such a large scale in absence of a public project; however, it is highly probable that some private industrial development would have proceeded on property if access road alone was initiated by public sector; therefore, "net" fiscal flows to city from project should be reduced somewhat to account for private development that would have occurred with only a highway project, although probably not enough to eliminate significant net fiscal flows to city from project.

* Growth of the State Economy: if project even partially fulfills its potential for providing sites for out-of-state "blue chip" companies interested in a regional location, it will contribute to state economic growth; in addition, location of park near intersection of Rt. 128 and I-95 may provide more efficient space for expanding in-state firms than is otherwise available, and, thereby, enable expansion to occur that would not without project; furthermore, if project achieves its potential for promoting employment objectives of state through hiring of under- and unemployed persons in "primary labor market" quality jobs, park will reduce fiscal demands on Commonwealth (through lower welfare costs, local aid, etc.) and, thereby, need for taxation which impairs competitive position of State for business in general.

* Employment Impacts: Redevelopment Authority will be seeking major firms offering "primary labor market" quality jobs; desirable features of park may attract such firms; proximity of park to areas of high unemployment should provide needy persons with physical access to job sites; however, in order to insure that jobs are made available to those persons who will provide for maximization of state employment objectives, an employment program must be designed and established for park; elements of such a program might include focusing of state's "Training Assistance Program" to project, establishing a different "customized manpower training program" for park with a CETA sponsor, requiring firms locating in park to hire a specific number of unemployed persons as a condition of land disposition, linking vocational education programs
PEABODY

to park or to individual firms in park, solving transportation needs of unemployed persons from depressed urban centers, etc.; if Authority complies with EDA regulation prohibiting relocation of businesses from other communities to park, project will not attract firms and jobs out of high priority development areas as privately developed "128" park projects have done; in summary, project offers tremendous potential for achieving positive employment impacts, but explicit public efforts must be made to provide job access to those most in need.

* Increased Diversity of the Local Economy:
although Peabody has a strong manufacturing base, declining leather industry continues to dominate composition of manufacturing employment; project should assist with transition of Peabody economy by bringing to city industries other than leather and, thereby, increasing diversity of local economic base.

* Induced Impacts: construction of access road to Rt. 128 will probably stimulate additional private development in area.

* No Evidence of Agglomeration Economies: if project is marketed to major firms, it is not likely that area economies, other than general "urbanization" economies, will play much of a role in attracting firms; however, if firms in leather industry or firms which sell to or buy from leather firms move into park, project may serve to strengthen agglomeration economies and contribute to economic growth related to these economies.

Narrative:
Adjacent to the Chapter 121B state-aided Centennial Industrial Park in Peabody is a smaller industrial park which was developed by the City of Peabody without any state or federal assistance on municipally owned property. From their experience with the first park, city officials learned that: (a) the area was highly attractive to industry; and (b) major firms like Gillette were interested in the area but the parcels in the first park were too small for their needs. The state-aided project may achieve its potential for attracting "blue chip" firms if the park is well designed, strict standards for maintenance and landscaping are enforced, and the initial disposition of parcels
PEABODY

to firms, which establish the character of the park, are selective. The large size of the available parcels, superior transportation features of the park - easy access to good rail, air, and ocean transport services and immediate proximity to the junction of Rt. 128 and I-95, low cost of the land (approximately 1/2 the cost of competing park property: $20,000/acre versus $40,000/acre and up), and closeness to Boston are park features which should guarantee park marketability. The presupposition of park desirability has been reinforced by the receipt of numerous inquiries from interested firms before active marketing efforts have begun. For example, a division of Gulf and Western Industries has expressed serious interest in the park. The "non-relocation" provision of the EDA grant is a desirable restriction which will lead the project to better achieve state economic development objectives by precluding the movement of firms out of depressed areas into the park. The major question with respect to the future marketing success of the project is the performance of the national economy.

Judgement:

State assistance and aid and a public industrial park project in Peabody are not justified on the basis of local fiscal or employment needs, a need to diversify the local economy, the presence of agglomeration economies, or a potential for induced development. A project in prosperous Peabody can only be justified on the basis of a potential for contributing to aggregate state growth through the attraction of major out-of-state firms and a potential for meeting state employment objectives by providing "primary labor market" quality jobs to under- and unemployed state residents.

Although there appears to be some legitimate question as to whether or not the project site is "blighted," the area contains difficult terrain that requires costly site improvements. Despite the excellent location of the property, it is doubtful that a private developer would undertake as large and costly a project, even if the 128 access road and bridge were constructed. However, some private development would probably occur on the site without a public industrial park project if the access road existed. In any case, private development would not offer the same potential for fostering public economic
development objectives. Nevertheless, in order for the project to fulfill this potential, an explicit strategy for firm selection and an employment program to provide under- and unemployed persons with access to and skills for jobs are necessary. The attractiveness of the Peabody industrial park presents the Commonwealth with a rare opportunity for considering which firms most satisfy state growth and employment objectives and instituting an employment program to achieve valued objectives. The project area is a prime site which the Commonwealth can promote to major out-of-state companies that will find the cost of land in the park significantly lower than in comparable parks. In order to attract such high quality firms, the project must be intelligently, professionally, and tastefully managed. In order to serve public purposes, the project must be managed with reference to state economic development objectives.

The requirement of the local Conservation Commission to preserve a wetlands area in the park might be turned to good advantage if the scenic value of that portion of the property can be improved, possibly with assistance from a unit within the Executive Office of Environmental Affairs. DCA should provide assistance to the project by helping the Authority to formulate a marketing strategy, coordinating highway and bridge construction activities with DPW, and obtaining the cooperation of units within the Executive Office of Economic Affairs for marketing efforts directed at out-of-state firms, focusing public sources of business capital to the project, and implementing an employment program.

Inasmuch as marketing is expected to begin in the fall of 1977, DCA should begin now to define its role with respect to the project in discussions with Redevelopment Authority personnel. The Peabody Redevelopment Authority currently lacks a precise marketing strategy for attracting major firms. If parcels are initially marketed to firms which construct physically unattractive buildings or cut-up large parcels, the future potential of the project for obtaining major firms might be impaired. In addition, DCA should obtain a copy of the Authority's application to EDA in order to insure that its contents comply with state rules, regulations, and policies.
<table>
<thead>
<tr>
<th>Location:</th>
<th>WILMINGTON</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Name:</td>
<td>Eames Street Industrial Park</td>
</tr>
<tr>
<td>Size:</td>
<td>39.6 acres; 30 disposable acres</td>
</tr>
<tr>
<td>Type:</td>
<td>Industrial</td>
</tr>
<tr>
<td>Reuse:</td>
<td>proposed: 75% light industry; 15% research; 10% assembly</td>
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<table>
<thead>
<tr>
<th>Net Project Cost (Financial Gain):</th>
<th>($150,000) estimated amount by which disposition proceeds will exceed total costs of project development</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Payments to Date:</td>
<td>$44,837 advance of planning funds (have not been recaptured by state)</td>
</tr>
<tr>
<td>Town Financial Gain:</td>
<td>$194,000 estimated gain if state does not recapture planning advance (exclusive of tax revenues)</td>
</tr>
<tr>
<td>Status:</td>
<td>All of project property has been disposed of to a single redeveloper on a lease/purchase basis. Redeveloper has sold two parcels to firms. Project is currently at a standstill because redeveloper lacks funding for constructing an interior road and town refuses to pay for road. Disposition agreement runs until end of 1977.</td>
</tr>
</tbody>
</table>

**Model Aspects:**

* No state or municipal execution subsidy required: the proceeds from land disposition exceed project development costs; total proceeds from disposition of project property are expected to equal $375,000 and total project development costs are expected to amount to no more than $225,000; therefore, "net project cost" is expected to be a net financial gain of approximately $150,000; Redevelopment Authority has executed a lease/purchase agreement with a redeveloper for all of property in park at a disposition price of $375,000 and has received $139,232 from sale of approx. 8.5 acres by redeveloper to two firms; total project costs to 9/76, which cover almost all of project expenses anticipated, were $215,074; this figure includes $44,837 advanced by Commonwealth for planning; thus, if state does not recapture planning advance, town stands to gain approx. $194,000 from land assembly and disposition ($375,000 - $225,000 + $44,000); however, in event redeveloper fails to complete infrastructure improvements and successfully market property, town may not receive full $375,000 disposition price agreed to in lease/purchase agreement; however, inasmuch as Authority has received $139,232 from sale of 8.5 acres (approx. $16,500/acre), eventual disposition of remaining 22 acres will certainly return more than $85,768 ($225,000 -
$139,232) required for Authority to cover all costs and repay $44,000 state planning advance; moreover, terms of lease/purchase agreement executed in 6/75 call for redeveloper to make annual payments of $9,000 (only $7,092 paid to 9/76); since Town of Wilmington donated 30 acres of municipally owned land for 40 acre project, financial gain from development of project can be viewed as a return for municipal property.

* Solely a land assembly project: all project land was disposed of by Redevelopment Authority without any infrastructure improvements; original estimate of $650,000 for improvements was considered to be too severe a burden on town finances.

* Mostly municipally owned tax title property and streets used for project; 18 of 40 acres in project were owned by town as a result of tax foreclosure and an additional 12 acres consisted of streets owned by town.

* Project is in a generally prosperous, growing, and largely residential community; population of town has grown from 7,039 persons in '50 to 17,102 persons in '70 or by 143% over a period Boston Metropolitan Area population increased by 14%; many residents of town commute to jobs in surrounding communities; however, Wilmington has attracted significant numbers of jobs in high wage, state growth industry groupings of non-electrical machinery, instruments, and chemicals and overall average annual wage of town employment is high; statistics on resident incomes indicate relative prosperity; private industrial land development activity has been strong and is expected to continue due to advantageous location of town.

* Board of Redevelopment Authority is composed of members of local Chamber of Commerce who initiated project.

* Development Strategy: land in park has been disposed of on a lease/purchase basis to a redeveloper who markets parcels to individual firms.

Program Components:

state: * Eminent domain powers: powers of public land assembly were employed to clear title; for a number of years businessmen who had sought to develop site for industrial purposes had been frustrated by an inability to establish clear title to some of property.
State planning advance; $44,837 in state funds were advanced for planning; advance has not been recovered by DCA despite prospect of substantial net financial gains to town.

No state execution subsidy.

No state infrastructure investment has been directly related to development of project; however, DCA can advance project from its present standstill by securing funding for construction of a necessary interior access road; inability of redeveloper to raise financing for construction of an access road to open up interior of park and refusal of town to supply needed funds have prevented development and marketing of remaining 22 acres held by redeveloper on a lease/purchase basis; if town and Authority agree, Commonwealth might provide a loan for construction of road which could be secured by land disposition proceeds from sales made possible by existence of road; funding for road loan might be obtained from DPW, federal Urban Systems monies, or other economic development funding sources; DCA could use loan as leverage for: (a) revising disposition agreement to include performance provisions, such as specifying types of firms that are able to locate in park and number of jobs to be provided to unemployed persons; and (b) obtaining cooperation of redeveloper and Authority for establishing an employment program for park.

Active DCA management control and assistance efforts are required in order for project to achieve state economic development objectives; failure of DCA to create an adequate information system for reporting of data on status and impacts of project has limited ability of DCA to monitor and assist project and Commonwealth to assess merits of and improve design and operation of program; absence of a state "non-relocation" regulation comparable to EDA prohibition allows firms to move from high priority development areas to locations in park and, thus, allows project to subvert state economic development goals; inasmuch as Wilmington does not exhibit fiscal and employment needs, a need for diversifying local economy, or evidence of agglomeration economies, a public industrial development project is only warranted on basis of its potential for achieving state growth and employment objectives; however, failure of DCA to require and assist in formulating an employment program for hiring of unemployed state residents has weakened justification for project; absence of an information system for reporting on project impacts has deprived DCA of data on previous locations of two firms which have moved to park and number and characteristics of persons employed by these two firms at present and in past; in addition, due to absence of a
reporting system for providing information on status and actual costs of project, DCA has not been aware of problem with access road or extent of financial gain to Wilmington (which may indicate that town should return planning advance to DCA); in this case, lack of information has especially limited DCA's ability to exercise management control responsibilities because absence of state execution subsidy has deprived DCA of its primary instrument for achieving authority (i.e. cut-off of state payments); although DCA adopted a "hands-off" attitude with respect to projects not receiving execution aid (partly due to difficulty of exerting control) and local personnel welcomed that approach, state planning funds and eminent domain powers have been used for project and state government has an obligation to insure that public purposes are served by such projects; moreover, project may subvert state economic development objectives by attracting firms out of high priority development areas and DCA is required by Chapter 121B rules and regulations to exercise regulatory control over project and serve as a check on criminal actions; in order for project to achieve its full potential for achieving publicly valued economic development objectives, DCA should: (a) attempt to revise disposition agreement with redeveloper to include performance provisions specifying a minimum of jobs to be provided to unemployed persons and firm selection criteria based on quality and intensity of labor use; (b) attempt to promulgate and enforce a "non-relocation" regulation in order to prohibit relocation of firms from depressed communities to parcels in park; (c) develop an employment program for project, with assistance of Department of Manpower Development and cooperation of Redevelopment Authority, to provide under- and unemployed residents of Lowell, Lawrence, and other nearby communities with access to and skills for jobs in park; (d) attempt to secure funding for a loan for construction of an access road in order to advance development and marketing of project and gain leverage for initiating other actions; (e) obtain cooperation of Department of Commerce and Development in promoting project to in-state and out-of-state firms and bringing public sources of business capital to focus on project in order to enhance marketing efforts and gain leverage for other actions; and (f) create an information system for reporting of status and impacts of projects.

* Municipal advance of development funds; town advanced $175,000 to Redevelopment Authority for project expenses during land assembly phase.
* Donation of municipally owned property; Wilmington contributed 30 of 40 project acres; financial gain which is expected by town can be viewed as compensation for donation of municipal property.

* Town of Wilmington: advanced development expenses and donated municipally owned property.

* Chamber of Commerce: initiated project and formed Redevelopment Authority.

* Wilmington Redevelopment Authority: was formed in 6/66 in order to undertake industrial park project; Authority has never hired an executive director; a member of Chamber of Commerce has directed project efforts on a part time basis without receiving monetary compensation.

* DCA: has played a minor role in past; DCA has exhibited a "hands-off" attitude toward project because no state execution subsidy was required; however, when an impasse was reached in negotiations between Authority and redeveloper, a lease/purchase agreement was successfully adopted at suggestion of DCA; see above section on DCA under program components for comments on DCA's past and future roles.

* Department of Manpower Development: should assist in formulating and implementing an employment program for park: ex. establishing customized manpower training programs through TAP or a CETA sponsor, solving worker transportation problems, establishing training and employment referral relationships with vocational education schools and programs, etc.; however, ability to "tie" an employment program to park is largely dependent upon ability of DCA to persuade or require redeveloper to accept employment performance objectives.

* Department of Commerce and Development: should assist by promoting park to in-state (through business contact program) and out-of-state firms and helping to target public sources of business capital to park, if these actions serve to persuade Authority and redeveloper to adopt employment performance objectives.

Performance Process Measures:

* Implementation Process: approval for survey and planning phase was given in 11/66 but plan was not completed until 6/70; absence of a full-time salaried executive director contributed to prolonging development process; initial contact with DCA was made in 3/66 and lease/purchase agreement with redeveloper was executed in 6/75; process of acquiring 10
Effectiveness Measures:

* Fiscal Need: tax burden in Wilmington, as measured by tax rate on equalized value, is significantly lower than for most Mass. cities (approx. $35 in '75) and has remained stable over a number of years; town is very much a residential community with a large middle income working population which commutes to nearby communities; however, private industrial land development activity has been strong over past decade and is expected to continue due to advantages of town location (ex. "Wilmington Office and Industrial Park" with 200-plus acres); manufacturing now contributes approx. 57% of jobs in town (5,689 jobs in '74: DES) and on average offers high annual wages ($10,300 in '74: DES); project was initially justified in 1966 as an effort to increase local tax base;
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although a public industrial development project may have been warranted in 1966 on basis of fiscal need, it appears that private market activities have been strong enough to eliminate that need.

* Employment Need: as indicated above, although Wilmington has been, and continues to be, home of commuters, town has experienced considerable manufacturing growth; in '58 town employment and payrolls were almost tripled by advent of Research and Advanced Development of Avco Corp.; more recently, Wilmington has attracted significant numbers of jobs in high wage, state growth industry groups of non-electrical machinery (33% of total manufacturing employment; $10,000 average annual wage in '74: DES), instruments (11% of man. employ.; $11,335 annual wage in '74); and chemicals and allied products (7% of man. employed.; $13,000 annual wage in '74); overall average annual wage for all employment in town is very high ($10,400 in '74: DES); jobs in selected services category represent approx. 15% of total town employment and offer unusually high wages ($14,000 average annual wage in '74: DES) and normally low wage jobs in retail sector are relatively well paying ($6,597 average annual wage in '74: DES); general prosperity of residents is suggested by a comparison of percentages of town population in lowest two income groupings with Boston Metro. Area and state figures from 1970 Census: incomes under $3,000 = W 4.6%, B.M.A. 6.1%, Mass. 6.4%; from $3,000-5,999 = W 5.5%, B.M.A. 10.8%, Mass. 11.8%; thus, Wilmington does not warrant state assistance and a public industrial park development on basis of local employment need; nevertheless, proximity of Wilmington to high unemployment areas of Lowell (4/76: 10:1%) and Lawrence (4/76:12.1%) may allow for job access for those most in need; thus, a public project in Wilmington may be warranted on basis on employment need only if explicit initiatives to provide jobs to unemployed are included as part of project.

* Net Municipal Fiscal Flows: net fiscal benefits to Wilmington from project are likely to be substantial: project utilized mostly non-revenue producing municipally owned property, town advanced only a modest sum for project development as a consequence of not adding park infrastructure prior to disposition, disposition
agreement calls for a higher price than originally estimated, town has received $139,232 from sale of 8.5 acres, and remaining acreage should be highly marketable due to desirable features and location of park; town expects to gain financial benefits of approx. $194,000 ($150,000 if $44,000 is returned to state) from assembly and disposition phase of project; at present time, two firms which have located in park are contributing approx. $17,000 annually in taxes from land which previously provided almost no tax revenues.

* Growth of the State Economy. clearing of title through public assembly process has enabled development of this highly marketable property to proceed; if in-state firms expand, businesses start up, or out-of-state firms locate in park due in part to increased efficiency in highway transportation at site, project will contribute to state economic growth; however, unless public efforts are initiated to insure that project achieves its potential for employing under- and unemployed persons, park will not serve to reduce state fiscal demands in that manner (i.e. lower welfare costs, reduced local-aid, etc.) and, thereby, need for taxation which impairs competitive position of Commonwealth for business in general; due to absence of detailed information on two firms which have moved to park, it is not known whether these two firms have added to employment in state or provided jobs to unemployed persons.

* Employment Impacts: achievement of state employment objectives is apparently dependent upon state's ability to provide access to jobs for unemployed residents of Lowell, Lawrence, and other communities; in addition, absence of a "non-relocation" regulation allows for firms to move out of high priority development areas to park locations and, thereby, result in negative employment impacts; due to lack of an adequate information system for reporting on project impacts, detailed information is not available on employment impacts of two firms currently located in park; although project presents great potential for achieving positive employment impacts, public initiatives necessary to insure achievement of public objectives have not occurred; inasmuch as entire property has been disposed of by Authority to a redeveloper, it may be difficult to implement previously discussed corrective actions.
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* No Evidence of Agglomeration Economies.

* Induced Effects: no evidence of additional development resulting from project.

* Increased Diversity of the Local Economy: although project should increase manufacturing base of community, private market activities have been accomplishing this without public projects; however, when project was just conceived in 1966, strength of private industrial development activity was much less evident.

Narrative:

The Chamber of Commerce in Wilmington initiated this project in 1966 because the land was almost totally unutilized, industrially zoned, close to good highway transportation, and adjacent to a rail line, and private attempts to develop the site were stymied by an inability to establish clear title to some of the property. The limited industrial base of Wilmington at the time contributed to high per capita real estate taxes. Members of the Chamber pushed the town to form a Redevelopment Authority in order to seek state assistance for the planning and developing of the park. As a result of the high cost of site improvements necessary for the project, the Authority decided to sell the entire assembled property in unimproved condition to a single redeveloper. Citizen support for the project was strong because of the immediate and long term fiscal gains to the town.

Judgement:

Public intervention was warranted in this case because title problems precluded private development of an unused and highly attractive industrially zoned property. Wilmington's limited industrial base and high per capita real estate taxes at the time of project initiation suggest that publicly assisted industrial development was an appropriate course of action.

However, although the utilization of public land assembly powers to clear title may contribute to state economic growth by allowing development to proceed on this highly attractive property, the project may not achieve public economic development objectives due to the changing economy of Wilmington and DCA weaknesses at project management. State assistance and a public industrial project in Wilmington are not justified on the basis of local fiscal or employment needs, a need to diversify the local economy,
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the presence of agglomeration economies, or a potential for induced development. A project in prosperous Wilmington can only be justified on the basis of a potential for contributing to aggregate state growth and a potential for meeting state employment objectives. Hence, the absence of a state regulation prohibiting the relocation of firms to the park from other "needy" Massachusetts communities allows for firms to move without expanding and, therefore, without adding to state economic growth, and for firms to leave those areas suffering most from unemployment and fiscal strains and, therefore, worsen state employment problems. In order to insure that public purposes are served and not subverted by the project, DCA should attempt to establish a variant of EDA's "non-relocation requirement" which would prohibit firms from relocating out of "needy" communities to a project in another community assisted with state funds, state eminent domain powers, or state technical assistance. In addition, since DCA has failed to require actions to insure that the project will employ currently unemployed persons, the Wilmington project will not meet state employment objectives.

In summary, in order for the Wilmington project to achieve its full potential for achieving publicly valued economic development objectives, DCA should: (a) attempt to revise the disposition agreement with the redeveloper to include performance provisions specifying a minimum number of jobs to be provided to unemployed persons and firm selection criteria on quality and intensity of labor use; (b) attempt to promulgate and enforce a "non-relocation" regulation; (c) develop an employment program for the project with the assistance of the Dept. of Manpower Development and the cooperation of the Redevelopment Authority; (d) attempt to secure funding for a loan for construction of an access road in order to advance the development and marketing of the project and gain leverage for initiating other actions; (e) obtain the cooperation of the Dept. of Commerce and Development in promoting the project to in-state and out-of-state firms and bringing public sources of business capital to focus on the project in order to enhance marketing efforts and gain leverage for other actions; and (f) create an information system for the reporting of the status and impacts of projects.
<table>
<thead>
<tr>
<th>Location:</th>
<th>WOBURN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Name:</td>
<td>Woburn Industrial Park</td>
</tr>
<tr>
<td>Size:</td>
<td>230 acres</td>
</tr>
<tr>
<td>Type:</td>
<td>Industrial</td>
</tr>
<tr>
<td>Reuse:</td>
<td></td>
</tr>
<tr>
<td>Net Project Cost:</td>
<td>$3,367,526 (original budget projection)</td>
</tr>
<tr>
<td>State Share:</td>
<td>$1,683,763 (1/2 of originally estimated net project cost; principal only)</td>
</tr>
<tr>
<td>City Share:</td>
<td>$1,683,763 (1/2 of estimated net project cost not including bond interest costs which are borne entirely by city)</td>
</tr>
<tr>
<td>State Payments to Date:</td>
<td>$673,495.20 ('69-'76: 7 payments; annual payment of $84,188.15 with $74,483.43 planning advance subtracted from first payment)</td>
</tr>
<tr>
<td>Status:</td>
<td>All of project property has been acquired and all public improvements, except for a bridge and a road, have been completed. Approximately 50% of disposable park land has been sold. 95 industrial firms with their 2,227 employees are located in park. Although project has added a large number of jobs to Woburn and has contributed to state economic growth, local and state project management weaknesses have limited benefits of project. DCA should assist Authority by persuading DPW of importance of construction of a bridge on an access road to Rt. 128.</td>
</tr>
<tr>
<td>Model Aspects:</td>
<td>* Large project situated at one of most attractive industrial locations in Commonwealth: 230 acre industrial park is located at junction of Rt. 128 and I-93, adjacent to a Boston and Maine Rail line; site is only 10 miles from Boston along direct I-93 route.</td>
</tr>
<tr>
<td></td>
<td>* Project in a prosperous and growing community; population has grown from 20,492 persons in '50 to 35,329 persons in '75, despite loss of 2,077 persons between 1970 and '74; approx. 8,800 jobs were added to local economy from '50 to '74, including approx. 3,000 manufacturing and approx. 5,000 service jobs (approx. 2,800 total jobs were added '70-'74); continued growth is projected due to advantageous location of city.</td>
</tr>
<tr>
<td></td>
<td>* Park marketed to a great number of small and medium sized firms: with approximately 50% of project land sold, park contains 95 industrial firms employing from 2 to 300 persons each for a total of 2,227 park employees; only limited effort has been directed at attracting out-of-state or out-of-area firms; a reliance on a &quot;word-of-mouth&quot; marketing approach has led to dispositions to primarily regional firms; park may be</td>
</tr>
</tbody>
</table>

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providing relatively cheap, modern and efficient space to small marginal firms and, thus, serving as an "incubation" facility for small firms that otherwise might not survive.

* Some land parcels sold by Authority to speculative developers for construction of multi-tenant industrial buildings for lease to small firms.

* Urban renewal bonds issued by city for terms of four years: two bond issues totaling $3,760,000 were sold with four year terms at request of mayor in order to minimize long term interest expenses to city; burden of bonds on tax rate over four years contributed to defeat of mayor; practice conflicts with principle of paying for capital projects with long run returns from projects; nevertheless, at present, all bonds have been retired and no longer represent any burden on town tax revenues and temporary tax increase from bond servicing did not slow economic development of Woburn.

* Development Strategies: (a) land parcels are sold by Authority to individual firms; and (b) land parcels are sold by Authority to speculative builders of multi-tenant industrial structures.

Program Components:

state:

* Eminent domain powers: 50 acquisitions were completed with land damage legal actions initiated in five cases; owner of a pig farm on site successfully challenged relocation plan which had been approved by DCA resulting in delay and higher acquisition costs.

* State planning advance: state advanced $74,438.43 for planning.

* State execution subsidy.

* State construction of a bridge over a railroad line on access road to interstate highway essential to project development: bridge was originally included as part of project expenses but plan underestimated bridge cost by 90% so Authority turned to state DPW for assistance; due to slow DPW development process, bridge construction has not begun and truck traffic now flows through a residential area; bridge will be funded by DPW and Federal Highway Administration; absence of bridge has weakened marketability of project.
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*Active DCA management control and assistance efforts are required for project to achieve state economic development objectives; Past failure of DCA to manage project with reference to economic development objectives and provide technical, marketing, and coordination assistance has resulted in implementation delays and suboptimal development impacts; absence of a state "non-relocation" regulation comparable to EDA prohibition has allowed for movement of firms out of high priority development areas to park locations, thereby subverting state development goals; failure of DCA to require and assist in formulation of an employment program for hiring of unemployed has lessened employment benefits from project; DCA neglect of enforcement of suitable design and construction standards for project has weakened physical attractiveness of project and, thereby, reduced good park potential for attracting out-of-state firms; failure of DCA to coordinate activities with DPW has delayed completion of essential bridge which is needed for park marketability and to eliminate truck traffic flows through a residential area; lack of attention by DCA to developing an information system for reporting of project status and impact information has deprived state of data for monitoring implementation activities and assessing benefits and costs of projects; failure of DCA to establish appropriate format for detailing project financial structure and monitoring changes in that structure has allowed Authority to cut back on site improvements in order to compensate for higher than anticipated acquisition costs without DCA's awareness and, thereby, diminish park attractiveness for out-of-state firms; despite these past problems which can be related to inadequate DCA program management, Authority director believes that DCA should divest itself of all activities not part of a minimal oversight role; he claims that DCA lacks staff to expeditiously and competently review appraisals, plans, and marketability studies; he claims that rules and regulations are cumbersome and reflect a lack of confidence in ability and honesty of Redevelopment Authority boards and staffs; he questions whether state employees are any more honest than local people; nevertheless, experience suggests that in order for project to achieve publicly valued economic development objectives DCA must: (a) help to formulate a marketing strategy with Authority to attract out-of-state firms interested in a
regional location in order to achieve state growth objectives, and establish criteria for firm selection based on quality and intensity of labor use; (b) use leverage provided by desirable location and low land costs of project to implement an employment program directed at hiring unemployed from nearby communities; (c) obtain cooperation of Dept. of Commerce and Development in marketing project to major out-of-state firms; (d) bring public sources of business capital and manpower training funds to focus on project by coordinating activities with units within Executive Office of Economic Affairs; (e) coordinate activities with DPW to insure timely completion of bridge; (f) promulgate and enforce a "non-relocation" regulation which prohibits movement of firms from other communities to project; and (g) work with Authority to update physical plan for park considering assets and constraints of remaining less attractive sites.

municipal:

* Municipal expenditures: two bond issues totaling $3,760,000 were sold in 1970 with four year terms; city has retired all bonds and paid all interest expenses on bonds; in addition, city advanced $25,702.72 out of general revenues for local share of survey and planning expenses and assumed an approximately $829,000 cost for construction of a street out of municipal DPW funds; total city share of net project cost is projected to be $1,683,763 (principal only); in addition, city assumes entire cost of bond interest expense; however, city will also bear project costs equal to amount of estimated disposition proceeds ($3,032,000) until such time as land is sold ($1,101,801 received to 9/76 from disposition of approximately 50% of land) and amount by which proceeds fall short of estimate; this assumes gross project costs will equal estimated $6,399,526 (gross project costs to 9/76 were only $4,386,016); furthermore, by adopting short bond period, city also assumes some cost from advancing $1,683,763 estimated state share of net project cost which Commonwealth pays in $84,188.15 annual installments over 20 years.

federal:

* Federal Highway Administration is funding most of costs for construction of necessary bridge.

Actors:

* City of Woburn: advance of development expenses and state share of net project cost and assumption of municipal share of project execution subsidy and bond interest expenses.
* Woburn Redevelopment Authority: Chairman of Authority has held position since formation of Authority in 1962; Board predominantly composed of prominent local businessmen - company president, business executives, accountant, postman; initial effort of Authority was preparation of a city master plan entitled "Community Renewal Program for the City of Woburn"; pursuant to plan, Woburn City Council authorized Authority in 1966 to develop an industrial park at subject site; staff consists of a full-time executive director and a full time assistant; Authority has maintained a low profile in city with little contact with Chamber of Commerce or city government; Authority proposed a federally subsidized downtown project which was rejected by local citizens.

* DCA: in past, its limited role in providing assistance and weaknesses of program management have contributed to delays and limited achievement of state economic development objectives; future marketing and effectiveness of project are largely dependent on ability of DCA to assist in formulating a marketing strategy based upon state economic development objectives, coordinate activities of other state agencies, establish a "non-relocation" regulation, and assist Authority in examining physical assets and constraints of remaining parcels in park.

* Department of Commerce and Development: should assist in marketing project to out-of-state firms.

* Department of Public Works: responsible for construction of a highway access road bridge essential for marketing project and drawing truck traffic off of residential streets.

* Department of Manpower Affairs: should assist in formulating an employment program for project to provide job access for unemployed with park firms: ex. manpower training (TAP), requiring firms to hire a certain percentage of unemployed, solving worker transportation needs, etc.

* Federal Highway Administration: providing funding for bridge construction needed for project; had to make a determination as to whether bridge caused a major or a minor impact on environment.
Performance:

Process Measures: * Implementation Process: project implementation has been subject to delays and problems during planning and execution stages; survey and planning phase was approved in 8/66 and project execution was approved in 6/69; whereas original plan called for a five year execution phase, completion of project development, except for bridge and one road, and disposition of approximately one-half of land has taken nine years and disposition of remaining project property is expected to require an additional three years; project planning was delayed when a second plan had to be prepared because original plan had failed to account for property topography by ignoring presence of a large hill in project area; numerous problems have plagued project during execution: (a) owner of a pig farm on site successfully contested DCA approved relocation plan in court, and, thus, forced Authority to prepare a new relocation plan, order new appraisals for pig farm, and continue negotiations with owner, (b) over this extended period Authority incurred unanticipated expenditures managing property ($129,000 compared with $78,000 budget), (c) presence of pig farm, with piles of garbage from refuse collection business operated from site, caused fires, stench, and a physical eyesore which seriously impaired ability of Authority to market remainder of property (in addition, pig farm owner would confront strangers with a hostile manner and firearms), (d) as a result of delays, total acquisition costs were approx. 65% greater than originally estimated ($2,720,001 compared with a $1,848,000 budget; pig farm was acquired for $426,000 compared with an initial appraisal of $160,000), and (e) construction of a key bridge over railroad for direct truck access to Rt. 128 has been delayed by slow moving DPW planning and development process despite Authority funding of costs for preparation of three alternative designs for bridge in an effort to expedite process (cost of bridge was originally included in project budget but underestimation of expense by 90% led Authority to seek DPW assistance; DCA has never attempted to coordinate activities with DPW or argue for priority for bridge project); since Authority did not want to seek City Council approval for an increase in project costs, grading and site preparation improvements were cut back to compensate
for higher than budgeted acquisition expenses (actual Site Clearance and Improvement expense to 9/76 was $308,000 compared with a budget of $1,792,586); without an adequate information system to report this change, DCA was not able to examine possible impact of these cutbacks; reduction in improvements has lowered physical attractiveness of project and, thereby, reduced marketability of park to higher quality firms; a positive factor which has enhanced implementation process has been timely design and development work of city public works department in completing project site improvements; as a result of four year term of urban renewal bonds issued for project, city experienced a rise in tax rate over period of debt service; at present time, acquisitions and public improvements have been completed and 60 to 70 acres remain available for disposition.

* Planning: Authority spent approx. $100,000 for a new site plan study because original plan had failed to take account of a hill in middle of park site and firm demand was primarily for small parcel sizes rather than large and medium sizes originally designed; Authority continues to incur expenses as parcel boundaries are redrawn to meet firm demands; Authority staff lacks necessary expertise to prepare plan changes.

* Marketing: original project plan was based on a projected market of Research and Development firms which were locating along Rt. 128 belt during late 1960s; with cutback of NASA funded R&D and recessionary economy this demand evaporated; Authority has not directed marketing effort to out-of-state or out-of-area firms but has relied on "word-of-mouth" advertising to promote project to area firms; a few newspaper adds directed at national market drew little response; Authority does not rely on a prepared information kit or a committee of prominent citizens to market project, but prefers a "soft sell" approach which concentrates on direct negotiation with individual firms; Authority asks for a formal statement of interest from developer describing nature of business and contemplated uses for parcel which is reviewed by Board for approval; Authority will reject, and has rejected, low employment warehousing uses and outside storage facilities, but will accept distribution uses; if a firm is interested in a purchase, agreement
can be reached in a short period of time; executive director has recently complained that compliance with bidding requirements specified in rules and regulations would eliminate such rapid dispositions; however, director apparently misunderstands actual advertising requirement which does not preclude negotiations with firms but only requires public advertising before a deal can be closed; director claims that one firm was forced to locate in another park because Authority could not complete disposition process in short enough time period; past marketing success is attributed to excellent location of park and need for expansion space by local firms; nevertheless, marketing has been slow considering superior location of park and promotional practices of Authority appear to be partly to blame; factors which detract from project marketability include limited rail access in park, uneven topography, and physically unattractive buildings constructed in project area by speculative developer prior to designation of area for a park; project competes somewhat with two adjacent privately developed parks (one by Cabot, Cabot & Forbes) which offer higher disposition prices and more attractive physical settings, and market mostly to major high quality firms seeking large parcels; in contrast, most of firms locating in Authority park have been small businesses from local area; director expects to continue marketing predominantly to local firms; nevertheless, project has attracted some out-of-state and major firms: (a) Globe Ticket Co. relocated from Cambridge or Boston to park with its approx. 100 employees by employing Carlson Corp. as a turn-key developer to acquire property and construct a building, and (b) major HVAC firm with home offices in Pitts- burg, which had contract for Boston's Hancock Tower, located in park; Cambridge Tire Co. was interested in opening a major retail outlet in park but pulled out rather than go through process of obtaining a local zoning permit; continued neglect of out-of-state and major firms by Authority may prolong disposition period and reduce possible benefits from project; a marketing report prepared by U. Mass. Center for Community Renewal Studies, which identifies target industries and a marketing strategy directed at out-of-state firms, has not been utilized by director because he believes local demand is increasing with economic recovery; director claims that IDFA and SBA financing are available to firms locating
in park and at least one firm has used industrial revenue bonding for financing of plant construction.

* Fiscal Need: tax burden in Woburn, as measured by tax rate on equalized value, is somewhat lower than median average for Mass. cities and has generally decreased over last few years: $56 in '70, $39.20 in '76 (but a rise to $45 in '77); two large industrial parks, including one privately developed park, a number of smaller parks, and three new major hotels have considerably increased city tax base; in addition, city center has experienced renewed commercial activity; Woburn manifests a broad and growing tax base; consequently, Woburn does not warrant state assistance or aid or public industrial development efforts on basis of fiscal need.

* Employment Need: although Woburn has declined as a major leather and shoe city, advantageous location of city with respect to highway and rail transport and close proximity to Boston, has provided for a beneficial transformation and growth of manufacturing and local economy; manufacturing accounts for approx. 39% (DES: 1974) of employment in Woburn with approx. 64% of manufacturing employment consisting of generally high quality jobs in electrical machinery, machinery (ex. electrical), chemicals, and fabricated metal products industry groups; many firms in these groups are high technology businesses which offer superior employment opportunities; unemployment has not been a major problem in city although rate reached 8.3% in 3/76; population of Woburn has increased by 92.5% since 1930 (to 37,407 persons in '70) compared with an increase of 26.8% for Boston Metro. Area over same period; prosperity of residents is evident from a comparison of percentages of city population in lowest two income groupings with Boston Metro. Area and State figures from 1970 Census: incomes under $3,000 = W 3.9%, B.M.A. 6.1%, Mass. 6.4%; from $3,000 - $5,999 = W 7.8%, B.M.A. 10.8%, Mass. 11.8%; normally modest or low wage selected services sector, which added 2,483 jobs between '70 and '74, manifests a high average annual wage ($10,284 DES: '74) and overall average annual wage in city in 1974 was a high $10,252 according to Dept. of Employment Security data; thus, Woburn does not warrant state assistance and aid and public industrial development efforts on basis of local employment need.
* Net Municipal Fiscal Flows: despite considerable expense of project to City of Woburn, large size of project, tremendous market potential, relatively small amount of foregone annual tax revenues ($32,984 before project), and completion of most of development work and successful disposition of approx. 50% of property up to present time indicate that project will net considerable positive financial flows to city; park currently returns approx. $700,000 annually to city which is sufficient to provide city with positive fiscal benefits when annual costs and revenues are discounted to year of initiation of project; due to presence of a pig farm and garbage dump, sand and gravel pits, and refuse land-fills, and difficult topography of unimproved area, it is doubtful that, even with attractive location of property, private redevelopment would have proceeded at this scale without a public project (owner of pig farm would probably not have sold land for less than an exhorbitant price, if at any price); nevertheless, it is highly probably that some private development would have occurred on property without public actions; one developer had constructed nine speculative industrial buildings in area prior to park designation; therefore, "net" fiscal flows to city from project should be reduced somewhat to account for private development that would have taken place, although probably not enough to eliminate significant positive net fiscal flows from project.

* Employment Impacts: although project has increased number of jobs in Woburn - approx. 2,227 jobs are currently in park, a number of factors indicate that employment benefits from project for Commonwealth have fallen far short of park's potential; however, due to absence of an adequate information system for reporting project impacts to DCA, a precise assessment of employment impacts from project cannot be made; despite attractive features of park for serving as location for major out-of-state firms, as evidenced by clientele in adjacent Cabot, Cabot and Forbes park, Woburn project has been marketed primarily to small local firms, many of which do not offer "primary labor market" quality employment; moreover in order for project in city not suffering from local employment problems to serve state economic development objectives related to employing under- and unemployed persons, explicit public strategies and programs, which were not initiated in this instance, were necessary to
provide jobs, training and transportation to needy persons from communities within commuting distance; furthermore, absence of a state "non-relocation" regulation has allowed firms to move out of high priority development areas to park and, thereby, subvert public development goals; nevertheless, firms in park may have provided jobs to some previously unemployed persons; in addition, jobs have been added to Commonwealth by location of some out-of-state firms and expanding local firms in park, which presumably find park space more efficient than alternative locations; moreover, marketing of modern industrial space to many small firms (2 to 20 employees) on a lease basis in multi-tenant buildings appears to be serving a previously unmet "incubation" need for start-up firms which would otherwise rely on older less efficient space; however, if this contention is accurate, project has failed to maximize its potential as an incubation park by not planning for special service needs of such firms (ex. capital); in summary, project has probably resulted in positive employment benefits for state but employment impacts have been much less favorable than those potentially derivable from project; in addition, due to DCA weaknesses at project management, project has contributed to decline of more needy communities by allowing movement of firms out of those communities into park locations; inasmuch as private industrial development would probably have occurred on some of property without public action, a publicly assisted project was only warranted if public economic development goals were maximized; attractiveness of site and low cost of land provide leverage needed to foster valued public objectives, such as jobs for unemployed; in order to better fulfill that potential through future dispositions of land, DCA should promulgate a "non-relocation" regulation, require an employment program for providing job access for unemployed, obtain assistance of Dept. of Commerce and Development in marketing park to out-of-state firms, and assemble data to test incubator hypothesis and formulate a strategy for strengthening this function if evidence supports contention.

* Growth of State Economy: by providing more efficient space, i.e. superior transportation resources and a modern horizontal layout, which allowed some firms to expand that otherwise would not have, project has contributed to growth of state economy; in addition, by providing
"incubation" space to small firms, project may have enabled firms to start-up or continue in business that otherwise could not have survived; however, neglect of out-of-state market has reduced growth benefits from project below potential presented by highly marketable park; nevertheless, location of a few out-of-state firms has added new firms and employment to state economy; although one cannot know if such firms would have located in Commonwealth in any case, availability of low cost and strategically located land certainly adds to State's ability to attract and retain such firms; failure of DCA to utilize rare opportunity presented by highly attractive park to promote employment objectives of state has limited fiscal benefits of project to state (through lower welfare costs, city aid, etc.) and, therefore, impact of project on reducing state taxing needs which partly determine competitive position of Commonwealth for business in general.

* Increased Diversity of the Local Economy: economy of Woburn is well balanced with manufacturing (39%), wholesale and retail trade (30%), and services (18%) each contributing substantial numbers of jobs and manufacturing employment distributed among a variety of industry groups.

* Induced Impacts: although Authority claims that private development of adjacent industrial parks and nearby commercial concerns was stimulated by public project, it is more probable that private actions were motivated solely by attractive highway transportation features of location; nevertheless, construction of bridge for highway access may allow for some additional private development to occur.

* No Evidence of Agglomeration Economies.

Narrative:

The Woburn Industrial Park was initiated pursuant to the master plan for the city which the Woburn Redevelopment Authority had commissioned soon after its formation. Private interest in the site for industrial uses had been evident and the prime location at the junction of Rts. 128 and 93, adjacent to a major rail line, suggested that an industrial park would be feasible. The stated goals of the project were the creation of jobs and the expansion of the local tax base. The presence of a pig farm and garbage dump, sand and gravel pits, and refuse landfills on the property were serious deterrents to private
development of a large industrial park on the site. Nevertheless, a local developer had constructed 9 speculative buildings in the area prior to the park designation and additional private development would most likely have occurred without the public initiative, although not on the scale of the public project. The speculative multi-tenant industrial buildings constructed by the private developer prior to the park designation do not conform to the design standards for the park, and, thus, detract from the physical attractiveness of the property. In addition, the physical appearance of the project has suffered because the Authority cut back on site improvements in order to compensate for higher than anticipated acquisition expenses and established lax design and construction standards because of the weak market demand during the recent recessionary period. While the Authority has generally received the support of local citizens and the city government, the present mayor was elected on an anti-renewal platform as a result of opposition which arose against the previous mayor after the tax rate was increased in order to pay off the urban renewal bonds over a four year term. The previous pro-renewal mayor had decided upon this unusual four year bond term in order to minimize long term interest costs to the city.

Judgement:

Although private development would probably have occurred on the site without a public project, state assistance and a public initiative may have been justified because the difficult physical terrain and presence of noxious uses required considerable site improvement work and the property was costly to acquire and difficult to assemble and, therefore, a project of the scope of the public effort would most likely not have emerged. Moreover, the attractiveness of the property offered rare potential for promoting public economic development objectives related to employment. In addition, inasmuch as public construction of a highway access bridge is necessary, a public project designed to achieve public economic development objectives may have been warranted to maximize the social benefits from the bridge expenditure. Nevertheless, a public project in Woburn was not justified on the basis of local fiscal or employment needs and the project which has been developed cannot be justified on the basis of employment impacts, increased diversity of the local economy, growth of the
state economy, agglomeration economies, or induced impacts. In order for the project in prosperous Woburn to serve state economic development objectives, a strategy for firm marketing and selection directed at attracting out-of-state and "primary labor market" quality firms, an employment program for providing the unemployed with access to and skills for jobs, and a "non-relocation" regulation prohibiting the movement of firms out of high priority development areas to the project were necessary. The failure to undertake such actions has seriously reduced the benefits from the project despite the increase in jobs which has resulted from local firm expansions and some out-of-state firm moves to the more efficient location. In addition, small firms may have benefited from "incubation" space efficiencies which have supported business start-ups and small firm survival in modern, small leased space.

The low cost of land in the site and superior locational features should have provided the needed leverage for managing the project with reference to state economic development objectives. The lax design and construction standards for the park and allowance of speculative multi-unit industrial buildings have limited the attractiveness of the park for major firms. In addition, the absence of a supportive framework for small firms has limited the ability of the park to serve as an incubation facility.

The past failures of DCA to manage the project with reference to state economic development objectives and provide technical, marketing, and coordination assistance have contributed to the delays in implementation and sub-optimal development. Active DCA assistance must be provided at this point to achieve publicly valued objectives: (a) helping to formulate a marketing strategy and firm selection criteria, (b) assisting in designing and implementing an employment program with the cooperation of the Dept. of Manpower Affairs, (c) obtaining marketing assistance from the Dept. of Commerce and Development, (d) bringing public sources of business capital and manpower training funds to focus on the project, (e) coordinating activities with DPW to accomplish the timely completion of the bridge, (f) promulgating a "non-relocation" regulation, and (g) working with the Authority to update the physical plan.
SOURCES OF INFORMATION FOR PROJECT CASES

For All Cases

(1) DCA Ledger:
   approved net projects cost; approved state share of
   net project cost; state planning advance; annual
   state payments made; amendments to net project cost
   and state payments.

(2) Fiscal Year 1977 Budget for Chapter 121 B:
   annual state payments budgeted for all projects.

(3) Audit Reports On Redevelopment Authorities
    Prepared by Office of the State Auditor:
    project acreage; estimated gross project cost; city,
    state, and federal share of project cost; litigation;
    brief historical accounts; receipt of planning advance
    and execution funds from state; funds provided by
    municipality; miscellaneous statements on project
    activities; days of critical actions; approval and
    receipt of federal funds; costs of contracts entered
    into by Redevelopment Authority; information on
    status of project; financial statements; comparison
    of planned with actual expenditures by budget cat-
    egories; principal expenditures over period of audit;
    terms of lease and/or sale agreements; use of
    eminent domain powers.

(4) Chapter 121 B Industrial Park Survey Questionnaires
    (received for eight projects; extent of information
    provided varied):
    reuse; acreage; development strategy; available
    acreage; amounts and terms of bonding; completion
    of activities; sources of project financing; other
    public improvements associated with development of
    project; firms which purchased property; availability
    of SBA 502 Local Development Corporation; Redevelopment
    Authority assistance to firms in obtaining capital;
    taxes received from property prior to project and
    currently; disposition price of property; assistance
    needs from DCA.

(5) Project Summaries Prepared from File Information
    and Interviews by Students from MIT or Univ. of Mass.:
    project history; project status; miscellaneous information
    on problems and impacts; circumstances of project
    initiation; dates of project approvals; condition
    of land prior to project; use of eminent domain powers;
highway construction; factors contributing to success or failure.

(6) Municipal and SMSA Monographs or Profiles Prepared by Department of Commerce and Development:

population change; income information; age of housing; economic history; composition of economic base
(Department of Employment Security data on employment by sector, composition of manufacturing employment, average annual wages in industries and sectors);
tax rate; information for figuring equalized value
tax rate; educational facilities in area; transportation resources and services; available industrial land in parks; composition of regional economic base.

tax rate on equalized value; tax rate trend; basic changes in economy; major influences on economic base; major recent developments; unemployment rate.

Individual Projects

Attleboro: personal file search; annual reports of Redevelopment Authority; no questionnaire.


Fitchburg: received questionnaire.

Gardner: received questionnaire.

Holyoke: received questionnaire.

Lawrence: received questionnaire; Bergstrom, "Strategies...", for information on changes in unemployment rate, changes in equalized tax rate, and changes in composition of manufacturing employment.

Methuen: no questionnaire.
New Bedford: no questionnaire; Bergstrom, "Strategies..." for information on changes in unemployment rate, changes in equalized tax rate, and changes in composition of manufacturing employment; Craig Moore, et al., "New Bedford-Fairhaven Route 6 Bridge Corridor Planning Study Report," III, Dec. 20, 1976, Southeastern Regional Planning and Economic Development District, for analyses of economic base, off-shore oil development impact, fishing industry, coal development, feasibility of containerization facility, and constraint presented by current bridge for development.

Northampton: received questionnaire.

Palmer: received questionnaire; Nicholas Brand and David Heflich, "Palmer: Industrial Development and the A-95 Process," in The Land Use Controversy In Massachusetts: Case Studies And Policy Options, ed. Lawrence Susskind, Special Commission on the Effects of Growth Patterns on the Quality of Life in the Commonwealth of Massachusetts, 1975, for detailed account of history of project.

Peabody: received questionnaire.

Wilmington: received questionnaire.

Woburn no questionnaire; informational booklet prepared by Woburn Redevelopment Authority in 9/76 for information on actual expenditures compared with budget, bond issues, and firms in park; Bergstrom, "Strategies..." for information on changes in unemployment rates, changes in equalized property tax rate, and changes in composition of manufacturing employment.
APPENDIX

(A) SAMPLE PROJECT DESCRIPTION AND LAND USE PLAN FROM ACTUAL PROJECT PLAN

(B) SAMPLE PROJECT DESCRIPTION FROM ACTUAL ENVIRONMENTAL IMPACT STATEMENT

(C) SAMPLE DESCRIPTION OF PROJECT OBJECTIVES AND EXPECTED BENEFITS FROM ACTUAL ENVIRONMENTAL IMPACT STATEMENT

(D) SAMPLE TIMETABLE OF PROJECT ACTIVITIES FROM ACTUAL ENVIRONMENTAL IMPACT STATEMENT

(E) COPY OF DCA CHAPTER 121B INDUSTRIAL PARK SURVEY QUESTIONNAIRE W/ COVER LETTER

(F) COPY OF DCA CHAPTER 121B INDUSTRIAL PARK REAL ESTATE TAX SURVEY QUESTIONNAIRE AND LETTER TO MUNICIPAL OFFICIALS W/ COVER LETTER

(G) COPY OF DRAFT QUESTIONNAIRE FOR SURVEY OF FIRMS IN STATE-ASSISTED INDUSTRIAL PARKS
II. Description of Project

A. Boundaries of Urban Renewal Area

The boundaries of the urban renewal area are shown on the Project Boundary and Property Map which accompanies this plan in a separate map folder, and are described in Enclosure No. 1, Boundary Description.

B. Urban Renewal Plan Objectives

1. To eliminate a blighted open area
2. To remove impediments to land disposition and development
3. To broaden the city tax base
4. To increase employment opportunities
5. To provide adequate access to the area by constructing a new street
6. To install improvements and utilities to adequately service the area
7. To provide development parcels for relocating and new industries
8. To provide an attractively planned and controlled development which will assist and encourage the orderly growth and expansion of the City of Fitchburg.

C. Types of Proposed Renewal Actions

1. A number of actions are proposed to transform the present blighted open area into an industrial park. All land within the project area is proposed for acquisition and redevelopment.

2. There is only one (1) structure in the project area and that is an occupied single-family residence. It is planned to relocate the family and demolish the structure.

3. Wyman's Brook which meanders through the project area will be relocated along Route 2, lowlands will be filled and the area will be graded and landscaped to accommodate parcels of land suitable for industrial development.

4. Project improvements are proposed to provide necessary services to the project area. An access road to the area from Princeton Road will provide frontage to all parcels. Water service will be provided from the present 20" water line located in the Fifth Mass. Turnpike. The City is planning to construct a sewer line to a point on Princeton Road opposite the location of the proposed access road to the industrial
park. A gravity sewer in the access road through the park will provide sewage to all parcels and will connect with the sewer line in Princeton Road. These sewer lines will carry sewage to a new treatment plant which will be completed in the near future (current estimate is December 1974). Storm drainage and surface water runoff will be accommodated by a closed drainage system and an open channel drainage system which conform to the topography and needs of the area.

5. The project area will be developed in two phases. The eastern portion of the area, a total of approximately forty-nine (49) acres, will be developed in Phase I. The major actions during this phase will be the relocation of Wyman's Brook, excavation of the highlands as fill for low lying areas, the construction of the retention pond, construction of approximately 2800 linear feet of the industrial road with all utilities, and the preparation of approximately 42.5 acres of land for industrial development. The western portion of the area, a total of approximately forty-five (45) acres will be developed in Phase II. This area is dominated by a large hill which if rough graded to a level plateau as a project cost would be very expensive. Current plans are to leave the area generally in its natural state and to construct the industrial road, with all utilities, through the area in a manner which would require minimum excavation and embankment. Further major actions during Phase II would be predicated upon the development of the Phase I area and requirements of developers who wish to develop the Phase II area.

I. Land Use Plan

A. Land Use Map

Land use and street layout shall be as shown on the Preliminary Disposition Plan which accompanies this report in a separate map folder.

B. Land Use Provisions and Building Requirements

1. Statement of Permitted Land Uses - permitted land uses within the project area shall include the following:

a. Research, experimental or testing laboratories.

b. Office buildings, including insurance buildings.

c. Manufacturing of precision instruments, tool and die, dental, medical and optical equipment, electrical or electronic instruments.

d. Light non-nuisance manufacturing, and manufacturing which is incidental to research and experimental laboratories, subject to a license by the City Council after a determination as to the effect upon the neighborhood and the City at large.

e. Service buildings, built and maintained by one or more of the permitted uses, containing either or all of the following uses: restaurant, drug store, bank or other similar services primarily for the use of employees of the permitted uses.
f. Any use similar to a permitted use which is not otherwise prohibited by Zoning Ordinance.

g. Any accessory use approved by the FRA and completely hidden from the abutting streets, tracts or lots, by appropriate screening or fencing.

h. Any permitted use approved by the City Council through amendment of the Zoning Ordinance, with subsequent approval by the FRA as a compatible and appropriate use for the Industrial Park.

NOTE: Land use for trucking terminals, wholesaling, warehousing or contractor's yard are specifically prohibited except when such use is clearly accessory and subordinate to a permitted use.

2. Additional Regulations, Controls or Restrictions

a. Building and Site Use Standards - all parcels and buildings within the 231 Industrial Park shall conform to the following standards:

(1) Minimum Lot Area: Two (2) acres.

(2) Minimum Lot Frontage: Two hundred (200) feet.

(3) Minimum Setback Requirements: Fifty (50) feet from any street or property line, except that the setback from the Fifth Massachusetts Turnpike may be reduced to twenty (20) feet if necessary to accommodate a railsiding.

(4) Building Coverage: The minimum and maximum amount of land covered by all buildings constructed on a lot shall be as follows:

   (a) Minimum lot coverage - fifteen (15) percent

   (b) Maximum lot coverage - forty (40) percent

(5) Maximum Floor Area: The maximum floor area for all buildings on a lot shall not exceed fifty (50) percent of the lot area.

(6) Building Height: No building or structure shall exceed two (2) stories or thirty-five (35) feet in height.

(7) Outside Storage: Any outside storage approved by the FRA shall be enclosed by an opaque fence or site obscuring screening, either of which shall be not less than six (6) feet, nor more than ten (10) feet in height. Outside storage shall be located in an area not visible from any public roadway, including Route 2. Equipment or materials stored in a storage area shall not extend above the top of the fence or screening.

b. Parking and Loading Standards

(1) Parking

   (a) Off-street parking spaces shall be provided in an amount sufficient to serve each use or reuse approved for the Park and so located to provide safe and convenient access. Parking
III. DESCRIPTION OF PROJECT

A. TYPE OF PROJECT

The 231 Industrial Park is proposed for location of the following commercial and industrial facilities:

1. Research, experimental or testing laboratories.

2. Office buildings, including insurance buildings.

3. Manufacturing of precision instruments, tool and die, dental, medical and optical equipment, electrical or electronic instruments.

4. Light non-nuisance manufacturing, and manufacturing which is incidental to research and experimental laboratories, subject to a license by the City Council after a determination as to the effect upon the neighborhood and the City at large.

5. Service buildings, built and maintained by one or more of the permitted uses, containing either or all of the following uses: restaurant, drug store, bank or other similar services primarily for the use of employees of the permitted uses.

6. Any use similar to a permitted use which is not otherwise prohibited by Zoning Ordinance.

7. Any accessory use approved by the Fitchburg Redevelopment Authority and completely hidden from the abutting streets, tracts or lots, by appropriate screening or fencing.

8. Any permitted use approved by the City Council through amendment of the Zoning Ordinance, with subsequent approval by the Fitchburg Redevelopment Authority as a compatible and appropriate use for the Industrial Park.

Further restriction is placed on land use for trucking terminals, wholesaling, warehousing or as a contractor's yard. These are specifically prohibited, except when such use is clearly accessory and subordinate to a permitted use.
The building and site standards are:

1. Minimum Lot Area: Two (2) acres.

2. Minimum Lot Frontage: Two hundred (200) feet.

3. Minimum Setback Requirements: Fifty (50) feet from any street or property line, except that the setback from the Fifth Massachusetts Turnpike may be reduced to twenty (20) feet if necessary to accommodate a railsiding.

4. Building Coverage: The minimum and maximum amount of land covered by all buildings constructed on a lot shall be as follows:
   (a) Minimum lot coverage - fifteen (15) percent
   (b) Maximum lot coverage - forty (40) percent

5. Maximum Floor Area: The maximum floor area for all buildings on a lot shall not exceed fifty (50) percent of the lot area.

6. Building Height: No building or structure shall exceed two (2) stories or thirty-five (35) feet in height.

7. Outside Storage: Any outside storage approved by the Fitchburg Redevelopment Authority shall be enclosed by an opaque fence or site obscuring screening, either of which shall be not less than six (6) feet, nor more than ten (10) feet in height. Outside storage shall be located in an area not visible from any public roadway, including Route 2. Equipment or materials stored in a storage area shall not extend above the top of the fence or screening.

8. The arrangement of buildings, parking and loading areas, open spaces and landscaping shall be designed to provide an attractive appearance.

9. A minimum of twenty (20) percent of any parcel area shall be retained without building or pavement improvements.

10. All land not improved with buildings or pavement shall be appropriately landscaped or left in a natural state, if adequate.

11. Insofar as possible, parking areas shall contain landscaping to the extent of five (5) percent or more of their areas.
B. PROJECT OBJECTIVES AND BENEFITS

Objectives of the Fitchburg Redevelopment Authority include elimination of a blighted open area, removal of impediments to land disposition and development, broadening the City's tax base, increasing employment opportunities, providing development parcels for relocating industries and new industries, and providing planned and controlled development which will assist and encourage orderly change or growth.

Aside from the large net income through taxes resulting from the project during and after the term of the municipal bond, the project will increase employment with the spinoff of increased spending money.
D. TIMETABLE

Development plans for the project area are flexible. It will either be developed in two phases or as an entity. Phase I roads and utilities is expected to begin in Spring 1975 and be completed by Fall 1975. Phase II will be developed as disposition of Phase I parcels occur. If developed to an entity, construction of all roads and utilities is expected to begin in Spring 1975 and be completed by Spring 1976.

According to the Land Use and Marketability Study - 231 Industrial Park, prepared by Ralph S. Foster Company, Inc. a minimum of 40,000 square feet will be constructed annually in the industrial park. This estimate was then applied to the minimum amount of floor space that can be constructed during Phase I (15% land coverage on 42.8 acres of land) under the project controls, and resulted in an estimate of seven years to develop the Phase I area. The Fitchburg Redevelopment Authority considers this estimate to be conservative and estimates that the entire industrial park, which could accommodate a maximum of 1,292,000 square feet of floor space (40% land coverage on 74.2 acres of land) will be developed in ten to twelve years.
Dear

Once again the Department of Community Affairs is seeking the cooperation and assistance of local Redevelopment Authorities by requesting information through a survey questionnaire of industrial park projects. As in the case of the previous questionnaire, the information is being collected as part of our study of state-aided urban renewal being conducted with the assistance of the MIT Department of Urban Studies and Planning and the University of Massachusetts Center for Community Renewal Studies. However, in this instance, we hope that Redevelopment Authorities will recognize that the desired information is directly related to assisting you in more successfully marketing your projects.

The enclosed questionnaire has been designed to collect the minimum information necessary to accomplish a number of separate objectives. First, information provided by Redevelopment Authorities will be used to complete questionnaires of the Economic Development Administration in order for Redevelopment Authorities to receive computer print-outs which will identify the specific types of firms likely to be attracted to the features of individual industrial parks. This industrial location service will enable Redevelopment Authorities to target marketing efforts toward particular industries. Second, information obtained through the questionnaire will be used to devise marketing strategies for parks with the methodology being developed at the University of Massachusetts. Third, some of the requested information will be placed in the state-wide data bank on available industrial property being developed by consultants at the Department of Commerce and Development. Fourth, the questionnaire will supply information needed by DCA to assess the current status and economic impact of projects and identify the kinds of assistance which would prove most helpful to Redevelopment Authorities.

Next we have made every effort to keep the questionnaire as short as possible. In addition, we have completed parts of the questionnaire on the basis of information previously collected from the files and the prior interview and questionnaire. Please correct any information which is incorrect.

We feel that the information being requested is essential for DCA to lend worthwhile assistance to Redevelopment Authorities in marketing and for formulating improvements to the 121B program. The economic information obtained will enable DCA to set the state-aided industrial park program within the larger setting of state economic development efforts.
A member of the study team will be contacting you in the near future in order to determine whether you are having any difficulty interpreting the questionnaire or obtaining the requested information. If you have any questions, suggestions or comments regarding the study, please contact Jero Nesson or myself at 727-7180.

Thank you for your efforts in this matter.

Sincerely,

JOHN P. SAWYER, JR.
Director
Bureau of Urban Renewal
INDUSTRIAL PARK SURVEY QUESTIONNAIRE

INSTRUCTIONS: The information collected through this questionnaire will be used to assist Redevelopment Authorities in marketing efforts by obtaining the EDA locator service and employing the marketing methodology developed by the U. Mass. Center for Community Renewal Studies; will be placed in the state-wide industrial property data bank and will be analyzed to suggest improvements to the 121B program.

The questionnaire is divided into a number of sections which are labeled by headings which identify the type of information requested. Please expand on answers which you feel are inadequately covered by the answer categories presented in the questionnaire. More specific or explanatory information is always welcomed. When you are unsure about an exact number answer do your best to estimate the likely figure and indicate that you have made an estimate. Please fill out a separate questionnaire for each industrial park sponsored by your Redevelopment Authority. Please provide an answer to every question and correct all inaccurate information which appears in the questionnaire.
INTRODUCTION

A1. Name of your industrial park: ________________________________

____________________ city/town ________________________________

A2. Date questionnaire is being completed: _________________________

A3. Name of individual completing questionnaire: _____________________

Title of individual: ____________________________________________

A4. Check the current or eventual primary use of your industrial park:

___ general (mixed use park without a predominate use)

___ research

___ technology

___ office

___ exclusive industrial district

___ other, describe __________________________________________

Estimate what percentage of the park's use will be in the following categories upon completion of the park:

___ % heavy industrial ___ % office

___ % light industrial ___ % warehousing

___ % assembly ___ % distribution

___ % service ___ % research

___ commercial/retail ___ % other, explain ________________________
5. How many total acres are in the development? _______ acres
   How many total acres will be sold or leased? _______ acres
   How many parcels will have been sold or leased when the park is completed? _______ parcels

5. Check the category or categories which most accurately describe (s) the strategy used to develop your park:
   ___ individual land parcels sold by the Redevelopment Authority to firms
   ___ individual land parcels sold by the Redevelopment Authority to small speculative builders
   ___ individual land parcels leased by the Redevelopment Authority to firms and/or speculative builders
   ___ all land in park sold to a single redeveloper who markets parcels to individual firms
   ___ all land in park leased to a single redeveloper who sub-leases parcels to individual firms
   ___ describe any other arrangement

7. At the present time, how many acres remain unsold and unleased? _______ acres

    Please list the sizes of available individual parcels and indicate if the parcels can be subdivided:

<table>
<thead>
<tr>
<th>PARCEL</th>
<th># ACRES</th>
<th>CAN BE DIVIDED INTO THE FOLLOWING PARCEL SIZES</th>
<th>or ANY SIZES</th>
</tr>
</thead>
</table>
| parcel 1 | ______ | acres; ; ; ; | | 3
| parcel 2 | ______ | acres; ; ; ; | | 3
| parcel 3 | ______ | acres; ; ; ; | | 3
| parcel 4 | ______ | acres; ; ; ; | | 3
| parcel 5 | ______ | acres; ; ; ; | | 3
| parcel 6 | ______ | acres; ; ; ; | | 3
| parcel 7 | ______ | acres; ; ; ; | | 3
| parcel 8 | ______ | acres; ; ; ; | | 3
| parcel 9 | ______ | acres; ; ; ; | | 3
| parcel 10 | ______ | acres; ; ; ; | | 3
| parcel 11 | ______ | acres; ; ; ; | | 3
| parcel 12 | ______ | acres; ; ; ; | | 3
| parcel 13 | ______ | acres; ; ; ; | | 3
| parcel 14 | ______ | acres; ; ; ; | | 3
| parcel 15 | ______ | acres; ; ; ; | | 3
| parcel 16 | ______ | acres; ; ; ; | | 3
| parcel 17 | ______ | acres; ; ; ; | | 3
| parcel 18 | ______ | acres; ; ; ; | | 3

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B1. In what year did you first offer parcels for sale or lease? 19

If you have not yet started active marketing, when do you expect to? month 19

B2. For each year please indicate which of the following activities took place or will take place:

Activities to Note: $ value of renewal bonds floated; # and $ value of property acquisitions; beginning of site preparation work; completion of site preparation work; beginning of construction of public works associated with park (examples: DPW bridge; water tower; highway access road; etc.); completion of construction of public works; $ value of relocation payments.

YEAR ACTIVITIES
*0 19
1 19
2 19
3 19
4 19
5 19
6 19
7 19
8 19
9 19
10 19
11 19
12 19
13 19
14 19
15 19

*Year 0 is the year prior to any acquisition by the Redevelopment Authority.

B3. What were the terms of the urban renewal bond financing?

1st issue: year issued 19 ; amount $ ; interest rate %; years to maturity ;

2nd issue: year issued 19 ; amount $ ; interest rate %; years to maturity ;

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B4. What other sources of financing were used to develop the park?

source 1: local municipal general expenditures
use: ____________________________ amount: $

source 2: ____________________________ amount: $

source 3: ____________________________ amount: $

B5. Please fill in the following information for each year:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>SIZES OF PARCELS SOLD</th>
<th>NAMES OF FIRMS MOVING IN + OR OUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
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<tr>
<td>5</td>
<td></td>
<td></td>
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<td>6</td>
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<td>7</td>
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<td>11</td>
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<td>12</td>
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<td>13</td>
<td></td>
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<tr>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*NOTE: If park land disposed of to single redeveloper or to speculative builders indicate initial disposition and subsequent sales/leases of redeveloper (s) to individual firms.

B6. Has a marketing study ever been prepared for your park which identifies the specific types of industries most likely to prefer the locational features of your park? yes___ no___

Who prepared the study? __________________________________________

Is it available on request? yes___ no___

When was the study prepared? _______________________________________

How was it used? _________________________________________________

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B7. Does the Redevelopment Authority have any criteria for favoring or rejecting particular types of industries? _yes__no_

If yes, what are these criteria?
characteristics of favored firms: ____________________________________________

characteristics of rejected firms: ____________________________________________

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C. PHYSICAL CHARACTERISTICS OF PARK

Note: The information requested in this section is needed in the specified form in order to obtain the EDA industrial location service.

C1. Please check the utilities available and indicate the relevant quantity measure and cost of each:

<table>
<thead>
<tr>
<th>UTILITY</th>
<th>QUANTITY</th>
<th>INDUSTRIAL RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>gas</td>
<td>max. diam. of supply inches</td>
<td>cents/the rm</td>
</tr>
<tr>
<td>elec.</td>
<td>name of utility co.</td>
<td>highest primary voltage</td>
</tr>
<tr>
<td>water</td>
<td>max. main diam. inches</td>
<td>cents/gal.</td>
</tr>
<tr>
<td></td>
<td>excess capacity over peak demand</td>
<td>gal/day</td>
</tr>
<tr>
<td>sewage</td>
<td>max. main diam. inches</td>
<td>$/mo.</td>
</tr>
<tr>
<td></td>
<td>treatment capacity</td>
<td>mil.gal/day</td>
</tr>
<tr>
<td></td>
<td>excess capacity treatment plant</td>
<td>mil.gal/day</td>
</tr>
<tr>
<td>coal</td>
<td>available: yes no</td>
<td>$/ton</td>
</tr>
<tr>
<td>oil fuel</td>
<td>available: yes no</td>
<td>cents/gal.</td>
</tr>
</tbody>
</table>

C2. Please check the facilities available for the transportation of materials:

<table>
<thead>
<tr>
<th>FACILITY</th>
<th>CLARIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>roads within park</td>
<td>access size (width)</td>
</tr>
<tr>
<td>navigable waterways</td>
<td>river access (miles)</td>
</tr>
<tr>
<td></td>
<td>port access (miles)</td>
</tr>
<tr>
<td>rail sidings</td>
<td># in park</td>
</tr>
<tr>
<td>rail terminal</td>
<td>access (miles)</td>
</tr>
<tr>
<td>material transport</td>
<td>access (miles)</td>
</tr>
<tr>
<td></td>
<td>mtrls. transported</td>
</tr>
<tr>
<td>parking</td>
<td>spaces/sq. ft. of bldg.</td>
</tr>
<tr>
<td>airports</td>
<td>distance (miles) freight pass.</td>
</tr>
<tr>
<td>highways</td>
<td>miles to interstate access</td>
</tr>
<tr>
<td></td>
<td>miles to junction of interstates</td>
</tr>
</tbody>
</table>

C3. What is the maximum allowable building coverage on a parcel? _______%
C4. Does (will) the Redevelopment Authority strictly enforce:

* unified facade treatment  yes  no
* landscaping standards  yes  no
* constr. material standards  yes  no

D. HUMAN RESOURCES (check)

D. Availability of vocational and technical education:

located within commuting distance  yes  no
available to high school students  yes  no
available to adults  yes  no

D2 Availability of state and federal manpower training programs:

any program conducted in area since '62  yes  no
available in area last year  yes  no

D3. Educational institutions:

available within community

Jr. College  yes  no
4-Yr. College  yes  no
Grad. Institution  yes  no

available within commuting distance (45 minutes one-way)

Jr. College  yes  no
4-Yr. College  yes  no
Grad. Institution  yes  no

E. COMMUNITY SERVICES AND ASSISTANCE

E1. Size of police force  # of officers

E2. Community fire insurance rating

E3. Industrial building fire insurance rating

E4. Assistance available to new industry through the Redevelopment Authority:

industrial bonds:  IDFA;  EDIC;  other

# of industrial bonds approved in last five years

industrial zoning:  strict;  lenient

Redevelopment Authority assistance in making contact with sources of capital for financing plant and equipment:

SBIC (specific)  
SBA 502 Local Develop. Corp.
introductions to local bankers
introductions to Chamber of Comm.
other
F. FISCAL AND ECONOMIC IMPACTS

F1. Please provide the following information for each year:
(estimate year if you are uncertain)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>ASSESSED VALUE OF ALL TAX PAYING PARK LAND</th>
<th>TAX RATE</th>
<th>$1,000 AV PRICE OF LAND</th>
<th>DISPOSITION</th>
<th>EST. # SQ. FT. OF BUILDING CONSTRUCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 19</td>
<td>$__________________</td>
<td>$________</td>
<td>$/acre.</td>
<td>sq.ft</td>
<td></td>
</tr>
<tr>
<td>1 19</td>
<td>$__________________</td>
<td>$________</td>
<td>$/acre.</td>
<td>sq.ft</td>
<td></td>
</tr>
<tr>
<td>2 19</td>
<td>$__________________</td>
<td>$________</td>
<td>$/acre.</td>
<td>sq.ft</td>
<td></td>
</tr>
<tr>
<td>3 19</td>
<td>$__________________</td>
<td>$________</td>
<td>$/acre.</td>
<td>sq.ft</td>
<td></td>
</tr>
<tr>
<td>4 19</td>
<td>$__________________</td>
<td>$________</td>
<td>$/acre.</td>
<td>sq.ft</td>
<td></td>
</tr>
<tr>
<td>5 19</td>
<td>$__________________</td>
<td>$________</td>
<td>$/acre.</td>
<td>sq.ft</td>
<td></td>
</tr>
<tr>
<td>6 19</td>
<td>$__________________</td>
<td>$________</td>
<td>$/acre.</td>
<td>sq.ft</td>
<td></td>
</tr>
<tr>
<td>7 19</td>
<td>$__________________</td>
<td>$________</td>
<td>$/acre.</td>
<td>sq.ft</td>
<td></td>
</tr>
<tr>
<td>8 19</td>
<td>$__________________</td>
<td>$________</td>
<td>$/acre.</td>
<td>sq.ft</td>
<td></td>
</tr>
<tr>
<td>9 19</td>
<td>$__________________</td>
<td>$________</td>
<td>$/acre.</td>
<td>sq.ft</td>
<td></td>
</tr>
<tr>
<td>10 19</td>
<td>$__________________</td>
<td>$________</td>
<td>$/acre.</td>
<td>sq.ft</td>
<td></td>
</tr>
<tr>
<td>11 19</td>
<td>$__________________</td>
<td>$________</td>
<td>$/acre.</td>
<td>sq.ft</td>
<td></td>
</tr>
<tr>
<td>12 19</td>
<td>$__________________</td>
<td>$________</td>
<td>$/acre.</td>
<td>sq.ft</td>
<td></td>
</tr>
<tr>
<td>13 19</td>
<td>$__________________</td>
<td>$________</td>
<td>$/acre.</td>
<td>sq.ft</td>
<td></td>
</tr>
<tr>
<td>14 19</td>
<td>$__________________</td>
<td>$________</td>
<td>$/acre.</td>
<td>sq.ft</td>
<td></td>
</tr>
<tr>
<td>15 19</td>
<td>$__________________</td>
<td>$________</td>
<td>$/acre.</td>
<td>sq.ft</td>
<td></td>
</tr>
</tbody>
</table>

*NOTE: Year 0 is the year prior to any property acquisition by the Redevelopment Authority.

F2. Please note any private investment which has taken place outside of the park boundaries as a result of the development of the park:

- item: __________________________ Est. $: __________________________
- item: __________________________ Est. $: __________________________
- item: __________________________ Est. $: __________________________
- item: __________________________ Est. $: __________________________

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6. COMPETITION

G1. Estimate how many industrial parks and how much acreage is available in the market which directly competes with your park:

<table>
<thead>
<tr>
<th>Park</th>
<th>Location</th>
<th>Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

G2. How much is land selling for in the market which directly competes with your park:

Range from: $/acre to $/acre

G3. How much would you have to charge for land in order to attract clients? $/acre

G4. Please add any comments concerning the competitive position of your park or the need for a state-aided park in the first place:

__________________________
__________________________

G5. What kinds of marketing assistance from DCA would you find helpful:

<table>
<thead>
<tr>
<th>Assistance</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to manpower training funds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information on sources of capital for plant and equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to capital for plant and equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Info. on the Mass. economy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
H. BUSINESS CHARACTERISTICS

H1. Please provide the following information on firms located or planning to locate in the park:

<table>
<thead>
<tr>
<th>Firm Name</th>
<th>Address</th>
<th>Contact</th>
<th>Title</th>
<th>Phone #</th>
<th>Est. # sq. ft. space</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(3)</td>
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<td>(4)</td>
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<td>(5)</td>
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<tr>
<td>(6)</td>
<td></td>
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<tr>
<td>(7)</td>
<td></td>
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</tr>
</tbody>
</table>

THANK YOU FOR YOUR TIME AND EFFORT
Dear

As part of the questionnaire on Chapter 121B Industrial Park projects recently sent to you, we requested information on the annual assessed value of tax paying project property and the municipal real estate tax rate over the period of project life (Question F1.). Comments from Redevelopment Authority Directors regarding this question have indicated that there may be some confusion with respect to the information requested and a need to rely on local assessors' and treasurers' offices for the data.

Concerning the nature of the information, we are seeking the actual real estate taxes paid to the community over the relevant period. If the Redevelopment Authority arranged to make in lieu of tax payments or to forego taxes on Authority owned property the actual taxes received by the municipality will not be equal to the tax rate multiplied by the total assessed value of the property in the project. As parcels were sold to private owners who paid full taxes on improved property the total actual taxes for the project would change. In addition, taxes on parcels sold would be prorated for the tax year. Another reason for a discrepancy between expected and actual taxes would be tax delinquency on the part of private owners; especially likely with respect to private owners prior to acquisition by the Redevelopment Authority. In any case, we are most interested in finding out the actual year by year tax payments to the municipality.

With respect to the second concern voiced by Directors, we have prepared the enclosed sample request form to be forwarded by the Redevelopment Authority to the local assessor and/or treasurer. Please add an appropriate description(s) of all of the project property in the space allotted; whether street addresses or plot numbers. You may want to attach a map of the project area.

We hope that you can appreciate the essential nature of the

March 25, 1977

The Commonwealth of Massachusetts
Executive Office of Communities and Development
100 Cambridge Street - Room 1404
Boston, Massachusetts 02202

EL S. DUKAKIS
GOVERNOR
AM G. FLYNN
SECRETARY

727-7765
requested information for estimating the fiscal impacts of projects. For projects which haven't yet sold any land or haven't completed sales we will be projecting future tax returns to the municipality. If tax credits were included as part of the net project cost we will note that the state is paying 1/2 of those foregone taxes in its annual project payments.

In a related matter, we would like to add a question to the questionnaire. The additional question is numbered E5 and it reads as follows:

Please indicate if the following types of financial assistance have been used by firms in your park and, if so, by approximately how many:

<table>
<thead>
<tr>
<th>#</th>
<th>EDIC Industrial Revenue Bonds</th>
<th>EDA loan</th>
</tr>
</thead>
<tbody>
<tr>
<td>___</td>
<td>IDFA Industrial Revenue Bonds</td>
<td>EDA guarantee</td>
</tr>
<tr>
<td>___</td>
<td>SBA loans</td>
<td>SBIC</td>
</tr>
<tr>
<td>___</td>
<td>others</td>
<td></td>
</tr>
</tbody>
</table>

Thank you once again for your cooperation.

Sincerely,

Jero Nesson,
Urban Renewal Coordinator
Dear

As part of a study of state-assisted Chapter 121B industrial park projects we are assembling information on local real estate tax payments from projects in order to assess the fiscal impacts of projects. The local Redevelopment Authority is supplying related information on project costs and impacts.

The enclosed one page questionnaire outlines the information needed from your office. We are seeking the actual real estate taxes paid to the community from all of the project property over the life of the project. For a number of different reasons the taxes actually received by the municipality may not equal the tax rate multiplied by the total assessed value of the property in the project. First, the Redevelopment Authority may have arranged to make in lieu of tax payments or to forego taxes on Authority owned property. Second, taxes on property sold may have been prorated for the tax year. Third, private owners may have been tax delinquent before selling property to the Authority or after purchasing property from the Authority. In any case, we are most interested in finding out the actual year by year tax payments from the property to the municipality.

Please note that year 0 is the year prior to any project property acquisition by the Redevelopment Authority.

If you have any questions, suggestions or comments regarding the study, please contact me at 727-7180.

Thank you for your prompt efforts in this matter.

Sincerely,

[Signature]

Jero Nesson,
Urban Renewal Coordinator

An Equal Opportunity Employer
Project Property Description:

Please provide the following information for each year:

*NOTE: Year 0 is the year prior to any acquisition of property by the Redevelopment Authority for this project.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>ASSESSED VALUE OF ALL TAXPAYING PARK LAND</th>
<th>TAX RATE/ $1,000 AV</th>
<th>ACTUAL TAXES PAID FOR ALL PROJECT LAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
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<td>4</td>
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<tr>
<td>5</td>
<td></td>
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<td></td>
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<td>6</td>
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<td>12</td>
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<td>13</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

An Equal Opportunity Employer
A. INTRODUCTION/GENERAL

A1. Date of completion of questionnaire: _______________________

A2. Title of individual completing questionnaire: ________________

A3. Name of firm: (optional) ___________________________________

A4. Please describe the products made and/or services offered by your firm operating at this industrial park location:

________________________________________________________________________
________________________________________________________________________

A5. In what year was your firm founded?: ______________________

A6. (a) Is your firm incorporated? __ yes ___ no ___
        (b) Is stock sold to the general public? __ yes ___ no ___
        (c) Is this a privately held corporation? __ yes ___ no ___
        (d) other, please specify ________________________________

A7. (a) Is this company partly or wholly owned by some other company? __ yes, wholly ___ yes, partly ___ no ___
        (b) Where is the head office of this firm located?
            city, state ________________________________________

A8. From the attached list of Standard Industrial Classification Codes find the two digit (example: 34 - Fabricated Metals) and three digit (example: 344 - Fabricated Structural Metal Products) numbers which most accurately describe your firm's business activity at this industrial park location:

          2 digit SIC Code: __________________
          3 digit SIC Code: __________________

A9. Does your firm rent or own space in the park?(check):

        rent __ own __

        If space is leased, what is your annual rent?(optional):

        __________$/sq. ft.

A10. What is the floor area of your park facility?: ________ sq. ft.

How much of the above area is allocated to the following uses:

        office __ % or number of sq. ft. ______
        warehouse __ % or number of sq. ft. ______
        assembly __ % or number of sq. ft. ______
        manufacture __ % or number of sq. ft. ______
        other ____________ __ % or number of sq. ft. ______
A11. Roughly what percentage of your firm's total expenditures at this location are devoted to research and development at the present time? 

A12. About what proportion (percent) of your firm's current sales from this location is made up of products or services which were not available on the market 10 years ago?: 

B. LOCATION DECISIONS

B1. In what year did your firm begin operations in the park? 

B2. Did you personally make the decision to locate in the park or were you responsible for making the recommendation to locate in the park?: (check) yes ___ no ___

B3. Please check the descriptive item which best characterizes your firm's park occupancy:

___ firm started at location in industrial park
___ space in park obtained solely for expansion activities of firm (no move from other location involved)
___ firm moved to park from:
   ___ prior location in same city or town
   ___ prior location in Mass. city or town of ______
   ___ prior location in same metropolitan area as park
   ___ prior location in New England state of ______
   ___ prior location in other U.S. state of ______
   ___ other location, please specify ______

B4. If your firm moved or expanded from another location, please indicate on the following chart what your reasons were for leaving or not expanding at your prior site: (Beside each reason CIRCLE the number best indicating the DEGREE OF IMPORTANCE of each reason for your location decision.)

<table>
<thead>
<tr>
<th>Very Important</th>
<th>Important</th>
<th>Of No Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

* required expansion space not available at present location 1 2 3
* required expansion space difficult and/or costly to assemble at present location 1 2 3
* required 1-story layout not available at present location 1 2 3
* consolidation of space not possible at present location 1 2 3
* cost of space too high at present location 1 2 3
* desired more attractive space 1 2 3
* desired more attractive physical setting 1 2 3
* required more parking space for employees 1 2 3
* required more parking space for vehicles 1 2 3
### LABOR

- *cost of unskilled labor too high at present location* 1 2 3
- *cost of skilled labor too high at present location* 1 2 3
- *poor performance of unskilled labor at present location* 1 2 3
- *poor performance of skilled labor at present location* 1 2 3

### BETTER PROXIMITY TO:

- *competitors* 1 2 3
- *business services* 1 2 3
- *skilled labor* 1 2 3
- *unskilled labor* 1 2 3
- *customers and markets* 1 2 3
- *raw materials and intermediate goods* 1 2 3

**transportation facilities such as:**
railroad siding; water frontage; highway distribution point; airport; etc.
please specify

**utilities such as:**
water; power; fuel; machine repair services; etc.
please specify

### TAXES

- *real estate taxes too high at present location* 1 2 3
- *other city or state taxes too high at present location* 1 2 3

**please specify**

### ENVIRONMENT

- *quality of life conditions at park location better than at present location:* desirable residential living areas; acceptable commuting distance; superior quality of public schools; housing in affordable price ranges; etc.

**please specify**

- *too much crime and vandalism at present location* 1 2 3
- *other, please specify* 1 2 3

### B5. Would your firm have located in this park if land or space costs were:

<table>
<thead>
<tr>
<th>Percentage Higher</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>40%</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>60%</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>80%</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>100%</td>
<td>yes</td>
<td>no</td>
</tr>
</tbody>
</table>

492
B6. What other locations did your firm consider before locating in this park?:


B7. Why was this park picked over other sites?:


B8. Which of the following marketing strategies did the Redevelopment Authority employ and which of these did (would) your firm find useful and/or persuasive?:

<table>
<thead>
<tr>
<th>Provided</th>
<th>Useful</th>
<th>Persuasive</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Detailed information on the local labor force</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) Detailed information on sources of financing for plant and equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) Access to labor training programs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) Information on the city or town</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e) Introductions to other local businessmen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(f) Introductions to local bankers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(g) Information on the quality of life in the area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(h) Detailed information on the availability and cost of utilities and fuel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Detailed information on transportation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B9. How did your firm learn of the availability of space in the industrial park?


B10. Did your firm locate in the park due to any of the following university related benefits of the location? (check)

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Opportunity for consulting assistance from faculty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) Graduate level programs or university research related to your firm's activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) Availability of university library or computer services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) Continuing education programs which could improve the skills of your employees</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C. EMPLOYMENT

C1. Does the number of fulltime employees at your park facility vary depending upon time or season of the year? In other words, is employment seasonal?: yes ___ no ___
C2. On the average how many people work at your park facility during a business week including all hourly and salaried personnel and yourself?
   fulltime _________persons
   parttime _________persons

If seasonal: Jan.- ___full April- ___full
   Mar. ___part June ___part
   April- ___full Oct.- ___full
   June ___part Dec. ___part

C3. Do you have a high quit rate among your employees at the park location?: (check) yes ___ no ___
   How does your present quit rate compare with prior or other locations?:
   present quit rate: higher ___ lower ___ same ___

C4. What is the basic composition of your work force in the park?:

   Percent or Number
   male _______  _______
   female _______  _______
   white _______  _______
   minority _______  _______
   professional-managerial _______  _______
   professional-technical _______  _______
   skilled _______  _______
   unskilled _______  _______

C5. Please estimate how many persons working in your facility are in the following wage or salary categories:

   Annual Weekly Percent Number
   Below $4,999 Below $96 _______  _______
   $5,000 - $6,999 $97 - $134 _______  _______
   $7,000 - $8,999 $135 - $173 _______  _______
   $9,000 - $10,999 $174 - $211 _______  _______
   $11,000 - $13,999 $212 - $269 _______  _______
   $14,000 and Above $270 and Above _______  _______

C6. Are there any significant problems attracting employees to your firm?:
   ___skilled, specify__________________________________________
   ___unskilled, specify__________________________________________
   ___professional, specify________________________________________

E. LINKAGES

E1. Roughly what proportion (percent) of the deliveries to your facility are from suppliers located in the following areas?:
   ___% same city or town
   ___% within radius of 20 miles
   ___% within radius of 60 miles
   ___% other within Massachusetts
   ___% New England
   ___% Rest of U.S.  494
   ___% Foreign
E2. Roughly what proportion (percent) of your shipping and receiving involve the following modes of transportation:

<table>
<thead>
<tr>
<th>Mode of Transportation</th>
<th>Proportion (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REA, UPS &amp; Parcel Post</td>
<td>____________</td>
</tr>
<tr>
<td>Railroad</td>
<td>____________</td>
</tr>
<tr>
<td>Trailer Trucking</td>
<td>____________</td>
</tr>
<tr>
<td>Aircargo</td>
<td>____________</td>
</tr>
<tr>
<td>Small or Van Trucks</td>
<td>____________</td>
</tr>
<tr>
<td>Water Trans.</td>
<td>____________</td>
</tr>
<tr>
<td>other, ____________</td>
<td>other, ______</td>
</tr>
</tbody>
</table>

E3. Roughly what proportion (percent) of the total sales of products and/or services from this park facility are to the following kinds of buyers:

<table>
<thead>
<tr>
<th>Kind of Buyer</th>
<th>Proportion (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other manufacturers</td>
<td>____________</td>
</tr>
<tr>
<td>Consumers directly</td>
<td>____________</td>
</tr>
<tr>
<td>Wholesalers</td>
<td>____________</td>
</tr>
<tr>
<td>State Government</td>
<td>____________</td>
</tr>
<tr>
<td>Retailers</td>
<td>____________</td>
</tr>
<tr>
<td>Federal Government</td>
<td>____________</td>
</tr>
</tbody>
</table>

Roughly what proportion of sales go to buyers from the following geographical areas?:

<table>
<thead>
<tr>
<th>Geographical Area</th>
<th>Proportion (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>same city or town</td>
<td>____________</td>
</tr>
<tr>
<td>within 20 mile radius</td>
<td>____________</td>
</tr>
<tr>
<td>60 mile radius</td>
<td>____________</td>
</tr>
<tr>
<td>other within Mass.</td>
<td>____________</td>
</tr>
</tbody>
</table>

F. INDUSTRIAL PARK SERVICES

F1. There are many services and physical offerings which may be available to occupants of an Industrial Park. Beside each of the listed attributes please indicate with check marks whether or not the item is (was) available and whether or not this is (was) (would be) important to your firm:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Available</th>
<th>Important To Firm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preconstructed buildings available for immediate occupancy</td>
<td>yes no</td>
<td>yes no</td>
</tr>
<tr>
<td>Maintenance programs for park aesthetics</td>
<td>yes no</td>
<td>yes no</td>
</tr>
<tr>
<td>Library facilities</td>
<td>yes no</td>
<td>yes no</td>
</tr>
<tr>
<td>Computer facilities</td>
<td>yes no</td>
<td>yes no</td>
</tr>
<tr>
<td>Park owned small conference facilities</td>
<td>yes no</td>
<td>yes no</td>
</tr>
<tr>
<td>Hotel-restaurant complex in close proximity to the park</td>
<td>yes no</td>
<td>yes no</td>
</tr>
<tr>
<td>Shopping mall complex in close proximity to the park</td>
<td>yes no</td>
<td>yes no</td>
</tr>
<tr>
<td>Available financing for plant and equipment</td>
<td>yes no</td>
<td>yes no</td>
</tr>
</tbody>
</table>

G. LOCATION PREFERENCES

G1. If your firm were to expand, would you consider an in-city location?:

Yes no

If yes, which of the following conditions would have to be present in order for you to locate in such a site?

- close to major highway access point
- industrial park setting
G2. Would your firm be interested in locating in a well engineered rehabililated multi-story in-city structure if:

* space costs were the same as suburban space: yes __ no __
* space costs were 25% less than suburban: yes __ no __
* space costs were 50% less than suburban: yes __ no __
* space costs were 100% less than suburban: yes __ no __

Under no circumstances would be interested: __

G3. What would you say are the major advantages and disadvantages of an in-city location:

Advantages ________________________________

Disadvantages ______________________________

G4. What would you say are the major advantages and disadvantages of locating your firm in Massachusetts?:

Advantages __________________________________

Disadvantages __________________________________

Thank you very much for your time and effort.