STRATEGIC PLANNING IN LOCAL GOVERNMENT: THE BOZEMAN, MONTANA CAPITAL IMPROVEMENTS PROGRAM

by

Curtis Alan Shook

A professional paper submitted in partial fulfillment
of the requirements for the degree

of

Master of Public Administration

MONTANA STATE UNIVERSITY
Bozeman, Montana

November 1988

P378
Sh77
cop 2

APPROVAL

of a professional paper submitted by

Curtis Alan Shook

This professional paper has been read by each member of the graduate committee and has been found to be satisfactory regarding content, English usage, format, citations, bibliographic style, and consistency, and is ready for submission to the College of Graduate Studies.

11/18/88
Date

Robert L. Haines
Chairperson, Graduate Committee

Approved for the Major Department

11/18/88
Date

Gary W. Lee
Head, Major Department

Approved for the College of Graduate Studies

12/20/88
Date

Henry L. Parsons
Graduate Dean

STATEMENT OF PERMISSION TO USE

In presenting this professional paper in partial fulfillment of the requirements for a master's degree at Montana State University, I agree that the Library shall make it available to borrowers under rules of the Library. Brief quotations from this professional paper are allowable without special permission, provided that accurate acknowledgement of source is made.

Permission for extensive quotation from or reproduction of this paper may be granted by my major professor or, in his absence, by the Dean of Libraries when, in the opinion of either, the proposed use of the material is for scholarly purposes. Any copying or use of the material in this paper for financial gain shall not be allowed without my written permission.

Signature 

Date 11-25-88

ACKNOWLEDGEMENTS

I would like to thank the members of my graduate committee, Dr. Richard Haines, Dr. Kenneth Weaver, and Mr. Robert Taylor, for their time and assistance in this undertaking.

I give special thanks to Mr. John Evans, former City Manager of Bozeman, Montana; Amy Swan, former Finance Director for the City of Bozeman; and Mr. James Wysocki, City Manager of Bozeman, for their ability to take a raw recruit and help make him a capable municipal manager. I am deeply indebted to these individuals for leading me into my chosen career.

Special thanks are necessary to my wife, Lauren, for her constant support, and my parents-in-law, David and Barbara Sandlin, who helped us through a difficult time.

TABLE OF CONTENTS

	Page
APPROVAL	ii
STATEMENT OF PERMISSION TO USE	iii
VITA	iv
ACKNOWLEDGEMENTS	v
TABLE OF CONTENTS	vi
ABSTRACT	x
CHAPTER:	
1. INTRODUCTION	1
End Notes	4
2. ANALYSIS OF CAPITAL NEEDS IN BOZEMAN, MONTANA	5
Transportation: Streets and Roads	6
Transportation Needs Identification	7
Costs Associated with Upgrading Roads to Service New Subdivisions	7
Unpaved Streets	8
Street Maintenance	8
Water	8
Water Distribution	9
Conservation	10
Adequacy of the pipe system	10
Condition of the distribution system	10
Distribution system problems	10

TABLE OF CONTENTS--Continued

		Page
	Storm Drains	11
	Sanitary Sewers	11
	Expansion to New Service Areas	11
	Replacement of Existing Sewers	12
	Solid Waste	12
	Parks	13
	Park Acquisition	13
	Park Development	13
	Park Maintenance	13
	Police Protection	13
	Fire Protection	14
	Conclusion	14
	End Notes	16
3.	FRAMEWORK FOR A CIP	18
	The Capital Budget	19
	The Capital Improvement Process	21
	Step 1: Establish Administrative and Policy Framework	22
	Step 2: Inventory of Existing Facilities	23
	Step 3: Status of Current Projects	23
	Step 4: Financial Analysis and Programming	24
	Step 5: Evaluating Project Requests	24
	Developing Information and Criteria to Evaluate Capital Priorities	25
	Conformance to Community Goals	26
	Cost/Benefit Analysis	26
	Comparison with Capital Capabilities	26
	Conclusion	27
	End Notes	30
4.	STRATEGIC PLANNING AS A PROCESS	31
	Introduction	31
	Historical Perspective of Strategic Planning	32

TABLE OF CONTENTS--Continued

	Page
Private Sector Strategic Planning: The Example of General Electric	33
Strategic Planning: Private vs. Public Sectors	34
Public Sector Strategic Planning: The Example of Cuyahoga Community College	35
Successful Implementation of Strategic Planning	39
End Notes	41
5. STRATEGIC PLANNING: BOZEMAN'S CIP	42
Five Step Strategic Planning Process	43
Step 1: Establishing Goals and Objectives	43
Step 2: External Environmental Analysis	47
Step 3: Internal Resource Audit	50
Steps 4 and 5: Strategy Development and Implementation	54
Employee CIP Training Workshop	55
Post-Workshop Activities	56
End Notes	58
6. ASSESSING THE FIRST YEAR OF BOZEMAN'S CIP	59
Success of the CIP	59
First Year Problems with Bozeman's CIP	61
Recommendations to Fine Tune the First Year CIP Process	62
The Bozeman, Montana CIP: The First Five Years (1983-1988)	63
End Notes	66
BIBLIOGRAPHY	67

TABLE OF CONTENTS--Continued

Page

APPENDICES:

A. Bozeman City Map 73

B. The City of Bozeman Capital Improvements Program 75

C. City of Bozeman Fiscal Year 1983-84 Capital Improvements Program Report Questionnaires 82

D. City of Bozeman Fiscal Year 1983-84 Capital Improvements Program and Budget 90

ABSTRACT

The mass media is filled with reports of important changes in technology and rapid environmental change. The thrust of these arguments maintains that the American society has entered a postindustrial era that requires corresponding rapid development of planning theory and strategy to deal with these changes.

Management theory is struggling with new concepts to effectively deal with a rapidly changing environment. Strategic planning has been widely touted in the private sector as a management planning method that induces greater flexibility, more frequent planning updates, and review of environmental trends to aid management decisions in the optimum allocation of its resources.

Strategic planning has been successfully used in the private sector by such corporate giants as IBM and General Electric. However, public sector management faces many more constraints in its planning process than its private sector counterparts, because public policy is decided and shared by a multitude of interests.

The basic question this paper seeks to answer is whether strategic planning is a process adaptable to creating effective public policy in local government. This paper presents a case study demonstrating how strategic planning was used successfully to design and implement a capital improvement plan for the city of Bozeman, Montana.

CHAPTER 1

INTRODUCTION

Municipal public management in the 1980's will require innovative and proactive policy approaches to overcome reactive crisis management caused by declining revenues and rapidly changing environments. Tax revolts, grant cutbacks under New Federalism, high interest rates, bond rejection by voters, and attractive bank tax-exempt notes competing with municipal bond investments are principal contributors to declining local revenues.[1] Further, major expenditures in municipal budgets originate with state and federal mandates on police and fire protection, clean air, and water.[2] These mandates are costly additions to local budgets. They require extensive capital improvement and expert personnel to maintain operations in compliance with specific state and federal standards. Finally, these mandates frequently come to localities without enabling authority to raise new revenues beyond the overburdened property tax. The local governments of Montana have been further strapped by the loss of the business inventory tax, taken away during the 1981 Montana Legislative Session.

As a direct result of declining revenues, long-range capital improvements and capital planning have fallen to a pothole mentality. A study of national infrastructure improvement shows an overall decline in capital expenditures of 21

percent. It is feared that this decline in capital expenditure for expansion, maintenance, and improvement of bridges, roads, sewerage, and water facilities will jeopardize economic growth by its failure to provide adequate facilities for growth.[3] Bozeman, Montana is facing serious revenue problems in the absence of enabling legislation to broaden the tax base beyond the property tax. City management and officials of the City of Bozeman have become concerned over the state of the city's infrastructure, as is discussed in a report by city staff. A summary of this report is contained in Chapter 2.

Typically, traditional local planning has limited itself to zoning and land-use planning. A more appropriate long range response to managing change brought by community growth is to develop new programs adaptable to change. This requires a new strategy that both enhances traditional planning and fosters a search for new responses rather than just doing the same things better.[4] Because the effort and informational needs required to assemble a Capital Improvements Program (CIP) are extensive and cut across municipal departmental lines, the strategic planning process was chosen as the best comprehensive method to develop and implement the CIP in Bozeman.

Strategic planning has been characterized as "change management,"[5] "period planning," "macro goal setting,"[6] "contrived change," or "anticipatory management."[7] It can help focus on long range local trends to facilitate growth and development in an era of retrenchment. Strategic planning scans the political, economic and social environment to take advantage of change and

modify resource use to meet community goals by adding financial, environmental and social impact analysis to traditional analysis. Localities can then adopt more informed directions to generate new revenues, redirect expenditures and improve local service delivery.[8]

The purpose of this paper is to assess the use of the strategic planning process as a tool for managing capital improvements programming. Public policy and the distribution of resources is rarely based solely upon the most rational, efficient or desirable approach. Strategic planning is a tool for management to identify community goals in any given policy area, and it fashions a flexible decision making structure to the size and abilities of the community. This is to say that sometimes the best public policy is not necessarily or rationally the most efficient.

This paper is divided into six chapters. Chapter 1 is an introductory chapter. Chapter 2, *Capital Needs Analysis for Bozeman, Montana*, is a summary of an extensive inventory of present capital facilities of the City of Bozeman. Chapter 3, *Framework for a CIP*, presents a formal CIP model as suggested by experts in state of the art literature. Chapter 4, *The Strategic Planning Process*, explores a wide body of readings pertaining to strategic planning as a process applicable to solving complex local government problems. Chapter 5, *Strategic Planning: Bozeman's CIP*, discusses the strategic planning process used by the city management coordinating committee to modify the CIP model to local capabilities. The final chapter assesses the strengths and weaknesses of Bozeman's adopted CIP and reviews the CIP under current City government.

End Notes

[1]"The Decay that Threatens Economic Growth: Reagan's Plan to Spur Business Investment Could Be Jeopardized by a Lack of Vital State and Local Facilities," Business Week, 26 October 1981, p. 136.

[2]Thomas Miller and Michael Fix, "Federal Solicitude, Local Costs: The Impact of Federal Regulation on Municipal Finances," Regulations (July/August 1980): 29-30.

[3]"The Decay that Threatens Economic Growth," p. 139.

[4]William R. Dodge and Douglas C. Eadie, "Strategic Planning: An Approach to Launching New Initiatives in an Era of Retrenchment," Management Information Service Report 14, no. 9 (September 1982): 3.

[5]Ibid., p. 2.

[6]Michael H. Moskow, Strategic Planning in Business and Government (New York: Committee for Economic Development, 1978), pp. 8-10.

[7]William R. King and David I. Cleland, Strategic Planning and Policy (New York: Van Nostrand Reinhold Co., 1978), pp. 2-6.

[8]Dodge and Eadie, p. 1.

CHAPTER 2

ANALYSIS OF CAPITAL NEEDS IN BOZEMAN, MONTANA

The early 1980's saw numerous taxpayer revolts exemplified by Proposition 13 in California and Proposition 2-1/2 in Massachusetts that seriously affected local governments' ability to raise new resources from the property tax. There were also massive cuts in federal grants-in-aid to local governments.[1] Loss of revenues and fiscal stress tend to force local officials to trim back maintenance of local infrastructure in favor of maintaining municipal services. Such capital deferment has led to a crisis of infrastructure decay that can affect long range economic growth.[2]

The Urban Institute projects that maintenance of the urban infrastructure will cost over $660 billion in investment over the next 15 years.[3] This crisis has not abated in the late 1980's. The interstate highway system is in disrepair. Forty percent of the bridges are rated deficient or obsolete. Invisible infrastructures of water and sewer lines are over 100 years old and many localities do not seem to know the condition of their infrastructure.[4] In 1987, a survey of city and county officials reported that 46 percent of respondents said they had "serious maintenance problems," with only eight percent stating the infrastructure was in good condition.[5]

The City of Bozeman in 1983 was being faced with decline in its infrastructure and restricted sources of revenue. Further, the City was undergoing tremendous subdivision growth to compensate for a housing shortage. The fiscal impact of this growth was bound to affect the cost of operating municipal services. At the same time, the city manager was convinced that the City's capital facilities and infrastructure were severely lacking and would adversely affect positive growth in the community.

Prior to 1983, Bozeman had not had a growth management plan. Various professional studies conducted for Bozeman and input provided by the city manager and department heads during interviews with the author provided an important sketch of the consequences of growth. In a memo to the city manager, the author analyzed the conclusions of a series of consultant reports regarding long range plans of City departments and the comments of top City department heads. The following eight city services were specifically recognized as "essential" services which are most heavily impacted by rapid growth: (1) transportation (streets and roads), (2) water, (3) storm drainage, (4) sanitary sewer, (5) solid waste, (6) parks, (7) police protection, and (8) fire protection.[6]

Transportation: Streets and Roads

Four subcategories are discussed in this section, identified as follows: (1) transportation needs identification, (2) costs associated with upgrading roads to service new subdivisions, (3) unpaved streets, and (4) streets maintenance.

Transportation Needs Identification

The Bozeman Transportation Plan identified over $10 million in major committed and planned urban street improvements. These were immediate and essential improvements based on traffic projections through the year 2000 and inspection of network problem areas within the city of Bozeman. At the same time, Bozeman anticipated only $5.7 million in federal urban highway funds spaced over the years to 2000. The transportation plan recommended another $7 million in short and long range improvements in the urban fund category beyond what was budgeted.[7]

Costs Associated with Upgrading Roads to Service New Subdivisions

Street design, construction, and development are influenced by proposed land use and the access needs of adjacent land development. The City can decline to approve new subdivisions where access is lacking. In most cases, the City has upgraded streets adjacent to subdivision development. The City can require than the developer construct arterials and collector streets not in the subdivision, but it has not generally been required in the past. Arterials and collectors have been built by the City to service areas as they are subdivided and developed.[8]

Unpaved Streets

The city has several miles of unpaved, substandard streets in its northeast and southcentral areas (refer to Appendix A, map of Bozeman). As these streets serve residential areas, they should be given priority to upgrade them to current standards. Construction of these roads will be costly because existing water and utility lines will have to be replaced prior to paving.

Street Maintenance

In addition to new construction and widening of appropriate arterials, maintenance of the existing network is continuous and costly. Street maintenance is the third largest operating expenditure of the City. The City provides such transportation related services as street cleaning, snow removal, street maintenance, and traffic signals/controls. These activities require costly vehicles and equipment to keep the present road system in repair.

Several large projects are needed to maintain present arterials. Further, if the City continues to add additional sections of road through annexation, the roads must be added to the maintenance list and will contribute significant new maintenance costs.

Water

A potential problem for Bozeman was its lack of available water. With a population of 23,000 in 1982, diversion registered 8,138 acre feet. (An acre foot

is equal to 325,000 gallons.) The City had a deficit of 1,572 acre feet and was forced to purchase this amount of water from the Middle Creek Association. This water may not be available in a given year because of drought or other causes.

Under continued growth, at a population of 30,000, Bozeman would show a water deficit of 3,651 acre feet. At a population of 40,000, the deficit would be 6,877 acre feet.

The City is attempting to eliminate this deficit by increasing its water capacity by acquiring rights to additional acre feet from several sources: the Middle Creek Application, the Lichtenberg Acquisition, and a program to enhance the capacity of Hyalite Reservoir.[9] This deficit prompts serious questions regarding Bozeman's ability to annex new land because present consumption outstrips reliable yield capacity of the City's water system. This 1982 water deficit figure does not include the number of housing units in subdivisions that could tap into the system from developments that have received final plat approval or residentially zoned areas that the City has annexed, but which have not yet been subdivided.

Water Distribution

Water distribution can be divided into four concerns: (1) conservation, (2) adequacy of the pipe system, (3) condition of the distribution system, and (4) distribution system problems.

Conservation. The City could conserve additional acre feet per year through consideration of water collection sources such as a proposed two million gallon reservoir west of Highland Boulevard and a pretreatment storage area to hold diversion from Hyalite.

Adequacy of the pipe system. Increased water consumption by annexation will require the replacement of small, older pipes by larger transmission lines. Specific areas and needs will require further study of many factors. Tap-ins to the system create the need for larger transmission lines, hence higher fees. This cost of annexation is spread to all users including those on fixed incomes.

Condition of the distribution system. In conjunction with proposed shortages and in the interest of the general efficiency of the water distribution system, pipes must be kept in constant repair from leaks. Metering is now being undertaken; however, it was suggested by both the city engineer and the water superintendent that independent studies are necessary to determine both the availability of water and sources of leakage.

Distribution system problems. Some areas of town have inadequate transmission lines to support recent growth. These areas must be identified and improvements charted. Further, several annexed areas of the city are now without water distribution lines and seriously hamper fire fighting efforts. Fire fighting in these areas would require use of two trucks, one as a pump station, or water tanker trucks, which provide only limited fire fighting capacity. Finally, in some areas, water pipes are stretched to and dead-ended in remote areas.

These pipes do not provide full circuit pressure and require extra maintenance costs by their remoteness to central systems.[10]

Storm Drains

In the upcoming years, the City faces possible state/federal mandates to install storm water treatment facilities. Facilities should be built to handle normal water runoff and exceptional seasonal or emergency runoff measured in flood years. Choosing the optimum facility size for such treatment is imperative for bond considerations, operations costs in future years, environmental factors, and future growth trends.

Development affects filtering and retention of groundwater. These effects and the chemical makeup of water runoff require further impact study.

Sanitary Sewers

Two factors to be discussed here are: (1) expansion to new service areas, and (2) replacement of existing sewers.

Expansion to New Service Areas

Expansion of the sewerage system to some areas east and south of the city will be expensive to construct, operate, and maintain because of the topography and need for pump lift stations. Service areas should be reevaluated and more strictly defined. A Utilities Service Area Master Plan is needed to define the impact of extension of utilities into various areas.

Service expansion will require coordination of major trunk lines to fit future needs. The City could be pressured to extend sewer service to county subdivisions where deteriorating site systems are presenting a health problem.[11]

Replacement of Existing Sewers

Parts of Bozeman are now operating on deteriorating and obsolete six inch collection systems. These areas must be identified and updated for efficient collection and ability to enhance the development of new housing. The extent of needed sewer replacement will require further study and the cost of upgrade needs to be included in the wastewater connection and user fee system.[12]

Solid Waste

Bozeman must define the useful life and unused capacity of its landfill. The addition of new customers will shorten the useful life of the landfill, which is now estimated at 10 years.

Rate structure, new equipment needs, alternatives to landfilling, new land acquisitions, and City involvement in garbage/refuse collection are all areas of solid waste management that need scrutiny. In 1983, the landfill was operating at a deficit. At the same time, a major capital expense for solid waste disposal was on the horizon.[13]

Parks

Three major areas of concern under the category of "parks" are: (1) acquisition, (2) development, and (3) maintenance.

Park Acquisition

An acquisition policy must be based on centrality, linkage to the present system, and child safety from traffic. A firm policy is necessary to determine acquisition needs. This policy should reflect present park inventories, demographic projections, and development trends.

Park Development

Consideration of linear park development and coordination of all public units concerned with recreational areas will need to be addressed.

Park Maintenance

The cost of upkeeping existing and newly dedicated park land will need to be evaluated, along with the consideration of noxious weed control.[14]

Police Protection

Personnel and equipment for patrol activities are presently deemed insufficient to adequately protect the community. Police patrol is a primary component of public safety. New subdivisions and annexations will require new expenditures to maintain current patrol levels.

Increased patrol responsibilities impact the following areas: manpower, equipment, space, communications, training, and operations. A recent report analyzing the impact of the six annexation requests currently under consideration indicates expenditures in excess of $30,000 to maintain existing police service levels to these new areas.[15]

Fire Protection

Analysis of City personnel and equipment shows the City to be unable to adequately protect the community from fire hazard. The City does not have fire trucks that could fight multistory fires at the dormitories at Montana State University. Further, a study must be done to determine if the extension of the water distribution system to developing areas is providing adequate pressure to fire plugs. Finally, in the past, the City annexed subdivisions where no formal water systems or fire plugs exist.[16]

Conclusion

Bozeman's commitment to environmental and aesthetic quality requires a comprehensive examination of the interrelated effects of growth on City services. Serious questions have been raised and are continuing to be raised over city utility capacities and service to present Bozeman residents.

One important example of this is that Bozeman presently does not own enough water to serve customers within its system. This situation is further

compounded by the (as yet undetermined) number of consumers that will be added from developments in approved subdivisions or zoned housing areas that have been annexed but not subdivided.

The focus of concern in transportation, water, sewer, and solid waste services is the effect increased population will have on the city infrastructure. There is a need for expansion and replacement of existing city systems to restore adequate capacity. To do this, a study of future needs must be undertaken under a Master Utility Plan that defines service areas. To regard each of these utilities as separate services would be a serious mistake; hence, there is a need for a strategic plan.

Communities that maintain local infrastructures to provide a positive growth environment and a stable economy are highly competitive as locations form new business and commercial interests. New businesses provide job opportunities and a stable tax base for an expanding locality like Bozeman. A CIP is a proactive way to coordinate infrastructure improvements under a schedule that matches available resources. Yet even the most powerful, professionally packaged CIP will fail if it is beyond the external capabilities of a community or the internal capacity of local personnel.

Chapter 3 will discuss the formulation of the capital budget and a framework for a CIP.

End Notes

[1]"The Decay that Threatens Economic Growth: Reagan's Plan to Spur Business Investment Could Be Jeopardized by a Lack of Vital State and Local Facilities," Business Week, 26 October 1981, p. 136.

[2]Charles H. Levine et al., The Politics of Retrenchment: How Local Governments Manage Fiscal Stress (Beverly Hills, CA: Sage Publishing, 1981), p. 14.

[3]"The Decay that Threatens Economic Growth," p. 136.

[4]William Thorton and Donald Ulrich, "Special Report: 'Infrastructure Needs Analysis Limits Reactive Management,'" American City and County 102, no. 5 (May 1987): 38.

[5]Ken Anderberg, ed., "Financial Headaches," American City and County 102, no. 1 (November 1987): 34.

[6]John M. Evans, Bozeman City Manager, personal interview with author, 5 January 1983.

[7]Richard Holmes, Bozeman Director of Public Works, personal interview with author, February 1983.

[8]John Moss, Bozeman Director of Planning, personal interview with author, February 1983.

[9]Neil Mann, Bozeman Assistant City Engineer, personal interview with author, February 1983.

[10]Ibid.

[11]Ibid.

[12]Ibid.

[13]Richard Holmes interview.

[14]Michael Aune, Bozeman Recreation Director, personal interview with author, February 1983.

[15]George Tate, Bozeman Police Chief, personal interview with author, February 1983.

[16]Lee Lewis, Bozeman Fire Chief, personal interview with author, February 1983.

CHAPTER 3

FRAMEWORK FOR A CIP

Previous chapters have discussed factors in the decline of municipal revenue sources. In an environment of reduced revenues it is important that local officials develop fiscal strategies and long range plans to carry out current service levels and funding of capital items. Without maintenance of local infrastructure, the result can be "deterioration of the quality of life and a decline in economic development."[1] This chapter will set out an administrative framework to implement a CIP in Bozeman, Montana.

A critical part of long range municipal management is the adoption and consensual approval of a CIP. Capital improvements planning requires an informed blending of short and long term capital outlays. Reactive capital planning causes inadequate services, major financial burdens, and expensive alteration for present and future taxpayers. In short, errors in capital investment can be irretrievable and disastrous to the economic lifeblood of a community.[2]

While it is important to continue to provide basic services in a recession economy, it is also imperative that public officials maintain long range plans. Public facilities (buildings, streets, water and sewer lines, electrical connections, and land use plans) are a factor in a stable local economy. Well planned and

maintained public facilities are a lure to new private sector investment, providing new jobs and enhancing the tax base. Long range capital planning can be a future hedge against revenue shortfalls and/or commitments to crisis planned projects that have short term usefulness requiring additional expense.

A CIP, then, recognizes the permanent nature of facility expenditure and is an informed, aggressive search for the optimum quality and mix of short and long range plans to achieve community goals. Capital expenditure involves fixed assets -- the purchase of physical items and facilities of considerable expense that have long term use. The capital budget provides for capital expenditures.[3]

The Capital Budget

The capital budget is a separate, secondary budget used to pay for fixed assets in use and of benefit for more than one year. It is different from the operating budget because it spreads costs and benefits of public facilities among present and future beneficiaries.[4]

A capital budget incorporates major, nonrecurring expenses as part of a long term plan for fiscal management. Sound capital improvement programs require extensive revenue, expenditure, and debt management forecasting to avoid costly mistakes in community growth objectives. The capital budget indicates that extent to which investments are made with current expenditures for public facilities.

The capital budget is advantageous in many respects. It provides a way to account for inventory, assets, and the usefulness of public goods. It forces future forecasting and a needs analysis for a stable investment program. The capital budget encourages efficiency from waste and overlap by providing a future plan based on the past and improves grant opportunities by its sound financial planning. Finally, the capital budget provides the municipal taxpayer with an easy source to relate expenditures to tangible public goods.[5]

The capital budget, however, can also become a problem in its lack of unity with the operating budget. Detached from the operating budget, it might become a receptacle for political plums or suffer from its lack of annual scrutiny. Mistakes in capital budgeting can be costly and disastrous to a community. Further, information and time requirements are extensive and require intensive hands-on analysis. Finally, the capital budget can be used to finance any expenditure considered to provide future benefit.[6]

Capital budgets must include methods of separating operating and capital expenditures that adequately express the fiscal policies of the community. Two criteria, cost and frequency, can be used to determine the classification. One method would classify any expense (for example, $500) as a capital expense. Another would set a limit of the useful life of equipment (for example, three years) with any exceeding considered capital expense. Probably a mixture of these two methods, separating major repair needs from minor operating needs, is

desirable. Capital expenditure should not include operating salaries or supplies, but only major nonrecurring items.[7]

Where the future revenue picture is murky, debt management suggests strict care must be used in shifting current expenditures to the capital budget. The capital improvement process is a carefully planned method to consensually choose capital programs and structure an effective capital budget.

The Capital Improvement Process

Long range planning requires an annual update of planned operations for the five year capital programs. The main intent of the long range capital program is to design guidelines for future action. Long range planning facilitates activities that help anticipate problems before they occur; specifies objectives; details actions necessary to meet objectives; anticipates financial needs; establishes a framework to measure program success; provides a reference point for winning grant monies; and provides a basis for technological, intermediate, and personnel productivity.[8]

The capital improvement process is a way of developing rational and structured long term capital programming and budgeting. It is a process of blending political, social, and economic components toward public consensus into a long range CIP. A recent handbook created as a model for CIP's in small cities suggests the following five steps as a guideline to establishing a CIP process:[9]

Step 1: Establish Administrative and Policy Framework

It is necessary to establish a central coordinating committee comprised of representatives from community growth interests for central project evaluation, funding, and implementation of decisions (for example: city manager, finance director, director of public works, superintendent of schools, city commission member, development representative, two citizen members, and police or fire representative).

Each segment provides input according to different dynamics. City management and staff will be concerned with administrative and budgetary implications. Line department managers will be interested in getting approval for new items. The city commission will adopt, modify, or reject the proposal according to social and political implications. Citizen members will be interested in the environmental and tax implications of new projects. Drawing upon the abilities of all sectors assures a much higher rate of success in developing a workable CIP.[10]

This core committee will then be responsible for determining a framework from which to judge social and economic impact of capital projects. This committee must determine the types of expenditures to include in the capital program. All items must have a cost over $500, be a nonrecurring expense, and have a useful life beyond one year. Further, the committee must produce a five year projects schedule that will balance projected costs of the CIP with available

revenue sources. Finally, it must produce a CIP calendar that sets out a schedule for submitting, review, and formation of the CIP.

Step 2: Inventory of Existing Facilities

The coordinating unit compiles a comprehensive capital inventory report which identifies all city facilities and assets by existing records. Once all inventory is compiled, the committee should undertake a needs analysis on renewal, replacement, expansion, or retirement of existing facilities according to age, condition, use, and improvement target date. During this stage it is important to seek input from department heads on capital items, as they work in the field and have a working knowledge of capital needs. This is done through use of the capital project request form.

The capital project request forms (Appendix C) should contain broad, initial information to measure conformance to community goals, cost/benefit analysis, and capacity to fund improvements. The forms used for the Bozeman CIP were adapted from models provided by the Municipal Finance Officers Association and tailored to the Bozeman program.[11]

Step 3: Status of Current Projects

This information is used as a report to review approved projects and as an update to the five year plan. Further, it can be used as a method to determine project fund balances for reallocation in the capital budget.

Step 4: Financial Analysis and Programming

Financial analysis entails determining the capital investment capability of the municipality by forecasting revenues, expenditures, and debt over a six year time frame (capital capability = revenue - expenditures - debts).

Financial programming of the capital budget will take into consideration current debt management/ability to bond, the impact on local tax revenues, and estimates of intragovernmental aid to be received.

Step 5: Evaluating Project Requests

The committee should develop a form to evaluate project requests. This capital project request form can be used by the various departments to justify the need of a particular item and to identify the possible impact of a particular project. The capital request form should require a statement of all relevant costs and benefits of a project. This will force the initiator to analyze how essential a request is. Department heads and line managers are the usual initiators of requests for capital projects. Their experience and guidance is a valuable asset in developing capital improvement projects that enhance the municipal physical plant.

The nature of each capital request will determine the types of cost factors likely to be involved. Analysis of cost must include but should not be limited to: (1) construction costs, which would include the costs of land acquisition, land development, actual construction, and future debugging; (2) equipment costs,

which would include the costs of acquiring new equipment, repair and maintenance costs after purchase, and the cost of replacing the item after its useful life; and (3) personnel costs, which would take into consideration those project requests which may trigger the need to hire additional personnel, thereby adding further salary and benefit costs to a project.

In analyzing project benefits, several questions can be applied. Will the improvement generate fees, user charges or other public benefits? Is it self-supporting? Is it eligible for state or federal aid? How will the request conserve community resources? Will it generate economic growth? What are the social and environmental benefits? How does the project contribute to public health, welfare, or safety? What social, cultural, or aesthetic values will be enhanced? Does the project provide recreational benefits? A more complete listing of cost/benefit criteria is offered in Appendix C, Form B.

Developing Information and Criteria to Evaluate Capital Priorities

The first section of this chapter sets out a framework for instituting a capital improvement process as a precursor to a concrete plan. This section will attempt to define relevant criteria for the individual evaluation of projects.

The following criteria served as a basis for the evaluation of project requests. Each project was analyzed for its conformance to community goals, costs/benefits, and the ability to fund the improvement.

Conformance to Community Goals

Capital requests were evaluated as to conformance to community objectives, anticipated growth, and financial capabilities as set out in City Commission Resolution 2249 which adopted the CIP (Appendix B).

Cost/Benefit Analysis

Rarely are government services measurable or quantifiable in dollars and cents. Service delivery is measured by the direct benefit to citizens and their perception of service efficiency. Because of this, cost/benefit analysis is not a terminal criterion. Its strict dollars and cents application is a failure as a sole evaluator of public policy because of the wide range of nonquantifiable benefits available to the public. Because public goods are nonexclusionary, their value is rarely measurable by demand only. Yet cost/benefit analysis, as imperfect as it is, can identify overtly bad projects and high risks, and can provide relevant questions to determine intangible factors.

Comparison with Capital Capabilities

Projects that conform to community long range goals and provide a favorable balance of benefits and costs must be subjected to debt management analysis for consideration of time frame project years, capital capability, and choice of funding vehicle. These decisions will come in conformance to the long range projections of revenue, expenditures, and debt. In this manner, each project will be integrated into the overall CIP with great care.

Conclusion

The current realities of proposed federal grant-in-aid cutbacks from $88 billion to $30 billion will have a tremendous impact on local governments. While a cut of this magnitude is politically infeasible, deep cuts for community development are certain at a time when local revenue sources are drying up. Many localities are reaching their legal property tax ceiling and do not have authority to create new revenue sources.

In an era of reduced revenues, local governments must reassess their financial management of both operating and capital budgets. Municipal financial independence and flexibility can be lost, and capital programs with them, where current fiscal and productivity declines or expenditure deferral trends have not been analyzed.[12]

A CIP forces the entire community to examine its current fiscal trends for declines in its tax base, excessive debt demands on future revenues, or dependence on outside sources for operating revenues. Once financial trends have been historically examined, capital capability will be known for integration with community development objectives. These will generally be set out in the master plan.

Local priorities will vary according to community objectives and will be strongly affected by state and federal policies. Two important factors in

prioritizing are perceived need and the timing of the project. Four rating categories could be used on the capital project form to determine priority.

(1) Critical: First priority to complete existing projects, maintain established programs, or meet legal or expansion needs.

(2) Essential: Second priority to replace unsatisfactory facilities or anticipate needs.

(3) Desirable: Third priority projects needed for proper expansion or department operation.

(4) Acceptable: Projects for ideal operation that can be postponed without detriment to service delivery.[13]

It is imperative, however, that priorities take into consideration short term replacement and preventive maintenance plans along with capital requests for new long term facilities or operations. Public facilities are historically valuable and too costly to replace because of neglect. The demands of time and information in the CIP are extensive; however, the benefits of an organized CIP are immense.

Communities that maintain local infrastructures provide a positive environment and stable economy that will remain highly competitive as attractive locations for new business and commercial growth. This will become increasingly important in providing new job opportunities and a stable tax base in a continually expanding locality such as Bozeman. The CIP provides a positive and proactive method to strengthen a community's vitality.

Chapter 4 will explore a wide body of literature regarding the process of strategic planning and will set out a model for strategic planning that was used by the management coordinating committee to implement the CIP.

End Notes

[1]James L. Mercer et al., Managing Urban Government Services (New York: American Management Association, 1981), pp. 46-47.

[2]Lennox L. Moak and Albert M. Hillhouse, Local Government Finance (Chicago, IL: Municipal Finance Officers Association, 1975), pp. 100-104.

[3]Robert D. Lee and Ronald W. Johnson, Public Budgetary Systems, 3rd ed. (Baltimore, MD: University Park Press, 1983), p. 254.

[4]Ibid., p. 255.

[5]Moak and Hillhouse, pp. 98-99.

[6]Lee and Johnson, p. 257.

[7]Ibid., pp. 254-259.

[8]William H. Davidson, Global Strategic Planning (New York: John Wiley & Sons, 1982), p. 314.

[9]Municipal Finance Officers Association, A Capital Improvement Programming Handbook (Athens, GA: University of Georgia Press, 1978), pp. 2-4.

[10]Moak and Hillhouse, pp. 101-102.

[11]Municipal Finance Officers Association, p. 60.

[12]Municipal Finance Officers Association, Is Your City Heading for Difficulty? A Guidebook for Small Cities (Chicago, IL: Author, 1978), pp. 3-15.

[13]City of Manhattan, Kansas, CIP Policy Manual, City Council, Manhattan, Kansas, June 1979.

CHAPTER 4

STRATEGIC PLANNING AS A PROCESS

Introduction

Strategic planning is a sophisticated type of long range planning developed and tested by the private sector over the last two decades.[1] It is just now being introduced into the public sector as a method of gaining the most rational approach to environmental change that politics will allow. The lack of recognition of external political factors is witnessed in the poor success of other long range, comprehensive planning systems in the public sector. Past comprehensive planning systems such as Planning, Programming Budget System, Zero-Based Budgets, and traditional Line Item Budgets were designed to distribute additional revenues and/or find new, more efficient ways to do the same things.[2] However, government is undergoing a drastic environmental change. Local governments in the 1980's, and particularly localities in Montana that rely heavily on property tax revenues, will face declining revenues and/or cutbacks in service levels.

The intent of this section is to provide a short historical perspective on the private sector applications of strategic planning. Public sector peculiarities and modified applications of strategic planning will then be discussed. Finally, this

section will provide a discussion of a model suggested by several public administrators who are in the forefront of public sector applications of strategic planning. A subsequent section will provide an application of this model as a planning process guiding the development, adoption, and implementation of the Bozeman CIP.

Historical Perspective of Strategic Planning

Strategic planning derived its roots among the largest Fortune 500 companies as a method of dealing with the complex nature of modern organizations and rapid changes in technology which have revolutionized the business environment.[3] Professor H. Igor Ansoff cites three periods in the development of planning. The first period, "The Mass Production Era," from 1900 to 1930, emphasized the development of efficiency in production. The second period, "The Mass Marketing Era," from 1930 to 1950, began long range planning attuned to consumer needs. The third and current period, referred to as "The Post Industrial Era," post 1950, is characterized by rapid development in technology.[4] Strategic plans have been given various titles by different companies. Some appropriate examples are as follows:

(1) IBM: *Period Planning*

(2) Ford: *Horizon Scanning*

(3) Manufacturer's Hanover: *Five-Year Plan*

(4) General Electric: *Macro Goal Setting*[5]

Private Sector Strategic Planning: The Example of General Electric

General Electric, as an example, is divided into 44 different Strategic Business Units (SBU's), with each developing or updating its own strategic business plan every year. The following is a timetable of its major steps:

(1) January to February: Review of environmental trends to pinpoint problems, opportunities, and strategic issues. Corporate and SBU level issues are combined in planning guidelines for the year.

(2) February to June: SBU general managers, together with their planning and functional staff, formulate or update the business strategic plan.

(3) June to September: Each business' strategic plan involving significant change is reviewed for validity, consistency, and effectiveness in coping with environmental conditions.

(4) September: The priorities for resource allocation are reviewed at the corporate level and consideration is given to alternate objectives or strategies. Guidelines on short term operating goals are set.

(5) October to December: SBU's prepare their operating plans and detailed budgets.

(6) December: Final budget reviews are made and the total corporate budget tested for consistency with overall strategic priorities.[6]

General Electric's planning program gained its first practical usage in 1971. The stated goals of the company's program are to help management to be alert to environmental change; to identify, develop, and allocate resources in support of objectives; to identify broad business problems and opportunities; and to develop a management system that helps lead, motivate, and control the company's business.[7]

The company's long range goals and objectives are centrally generated in the higher echelons, while the SBU's provide the short run planning process to meet these goals. The arrangement fits well with the company's structure where specific product knowledge exists within each of the 44 units.

Strategic Planning: Private vs. Public Sectors

In the public sector, the strategic planning process is altogether different from the private sector. Moskow characterized strategic planning in the for-profit private sector as being a group decision limited to a select group of individuals. The planning process is usually private and confidential without any type of interference and under the strict measure of future profit.[8]

The public sector, on the other hand, is locked (rightfully) into the democratic process. Decision making and public policy are shared (sometimes adversarily) among the three branches of government, consultants with technical expertise, and citizen participation. The local government executive is usually less powerful; he/she must share decision making and bargain to get things accomplished. Legal and civil service constraints may further affect individual personnel and departmental cohesion, which in turn affects the ability to achieve a united organizational purpose. The bottom line of public policy is conformance to jurisdictional standards and equitable treatment of all citizens.[9]

The differences in planning between the public and private sectors are relevant ones. Each local government has different degrees of latitude in creating public policy. Because each is different, strategic planning in the public sector should be tailored to the specific realities of the jurisdiction. As noted in the ICMA Management Service Report in September 1982,

> The topic of strategic planning doesn't lend itself to our usual 'how-to' format with accompanying examples of communities that have successfully implemented the process, in that there aren't many readily available examples of local governments using the process.[10]

Public Sector Strategic Planning: The Example of Cuyahoga Community College

One reported example of strategic planning in the public sector is that undertaken at Cuyahoga Community College in 1980. Cuyahoga had undergone

a tremendous growth in enrollments in the early 70's, but enrollment had begun to decline in the late 70's. Long range planning at Cuyahoga was "preoccupied with the need to manage and control. . . . Formal planning . . . did not include charting new directions; rather a concern . . . for managing the institution's current activities."[11] A decline in state funding to the institution further exacerbated formal planning that "looked dangerously like management of decline."[12]

In 1980, Cuyahoga undertook a formal strategic planning process to promote organizational change and guide its resources toward innovative, new directions aimed at spurring institutional growth. This application of the strategic planning process and other literature on the subject indicate a five-step process to planning:

(1) Setting Organizational Goals and Objectives: Setting organizational goals and objectives in strategic planning is the function of the chief executive and top management. Basic to establishing new direction is full comprehension of what the business of an organization has been and currently is. Organizations cannot effectively know where they are going unless they know where they have been. Three questions must then be answered:

(a) What has been the purpose of our organization based on historical fact?

(b) What is our purpose based on present circumstances?

(c) What should our future purpose be, based on a desired future image?

(2) Environmental Analysis: This analysis gives consideration to external social, cultural, technological, economic, and political factors affecting policy implementation toward these goals.

(3) Internal Resource Analysis: This analysis evaluates strengths and weaknesses of different strategies. It would be futile to force an organization of tenured "technical types" into an aggressively entrepreneurial mode.

(4) Formulation of Strategies: This step allows the achievement of objectives based upon the above.

(5) Implementation of the Strategic Plan: Strategies are tailored to the technical abilities and political realities of the organization. Tactics and operational input are sought within the organization to sell strategic objectives. Then, money and personnel necessary to accomplish these objectives are put into the annual budget.[13]

The Cuyahoga Community College strategic plan set forth the following goals:

(1) Development of a comprehensive planning system.

(2) Development of new educational programs that would revive the college's enrollment.

(3) Examination of strategic alternatives for urban community services.

An environmental analysis established demographic economic, social, and political data bases relevant to the college. Further, general conditions and trends in local, state, and federal policy toward education were analyzed for their possible implications.

The third step, internal resource analysis, analyzed current operations in "personnel, management systems, service delivery technologies, and financing . . . as a means of assessing cost and technical feasibility of moving in new educational directions."[14]

Selection of objectives and targets was based on cost, feasibility, and return likely to be associated with each objective. Objectives were chosen on the strength of perceived success uncovered in the internal and external analysis. At Cuyahoga, 25 general objectives were identified, but only four emerged from Step 4. These four targets were:

(1) Initiating new thrusts in advanced technology delivery systems to deliver instructional programs to new populations both on and off campus.

(2) Attracting new students for whom the traditional educational cycle is too lengthy to facilitate timely entry or reentry into the job market or traditional methods of course scheduling are incompatible with employment of personal obligations.

(3) Identifying and implementing student development processes that will enhance current student retention, plus new student enrollment among sixteen to twenty-four-year-olds from blighted urban areas.

(4) Creating a comprehensive career assessment program to serve students, staff, vocation communities, and employees seeking to enhance or change their careers.[15]

Successful Implementation of Strategic Planning

Strategic planning is a three stage process of designing strategies (setting goals and objectives, environmental analysis, and internal analysis), adopting a plan (selecting objectives), and implementing it. Results obtained from the Cuyahoga experience and other literature suggest that care and sensitivity toward implementation are critical to strategic planning success. Many a rational and comprehensive plan has failed because an organization was unprepared, unable, or unwilling to make it successful.

King and Cleland suggest an implementation strategy that is introduced slowly into the organization, planned in advance to pinpoint organizational resistance, and built on the strengths of the organization. Finally, the implementation strategy should make it clear that a new importance is being given to planning.[16]

The consensus of the literature regarding success in implementing strategic plans appears to rest on several key aspects. First, an organization must have the technical ability to collect and analyze forecasting data. Second, the organization must have a budget system to tie together allocation requests and a computer system for data storage. Third, the chief executive must be actively involved in the process and top management must be committed to each plan. Fourth, training and development during the implementation stage integrates the

organization with planned purpose and can become the handmaiden of positive organizational change. Last, and most important, the degree and speed of implementing a strategic plan must reflect the organizational, environmental, and political constraints that face each organization.

The management staff of the City of Bozeman felt that the City had the capacity to use strategic planning to implement the CIP. The City was fully computerized to gather and store data and financial information. The computerized budgetary accounting system was managed by experienced data processors and had received good reviews by an outside audit firm. The computer would be able to list, track, calculate cost, and provide amortization schedules for approved capital projects. Most importantly, the city commission and city manager were committed to implementing a CIP.

Chapter 5 will discuss the five step strategic planning process that the CIP management coordinating committee undertook in developing, adopting, and implementing the Bozeman CIP. Special emphasis will be placed upon the final step, implementation, because of its importance in successfully establishing organizational change.

End Notes

[1]William R. Dodge and Douglas C. Eadie, "Strategic Planning: An Approach to Launching New Initiatives in an Era of Retrenchment," Management Information Service Report 14, no. 9 (September 1982): 3.

[2]Ibid., p. 2.

[3]John B. Olsen and Douglas C. Eadie, The Game Plan: Governments with Foresight (Washington, D.C.: The Council of State Planning Agencies, 1982), p. 1.

[4]Ibid., p. 13.

[5]Michael H. Moskow, Strategic Planning in Business and Government (New York: Committee for Economic Development, 1978), pp. 46-55.

[6]Ibid., p. 47.

[7]Ibid., p. 49.

[8]Ibid., p. 36.

[9]Dodge and Eadie, p. 7.

[10]Ibid., p. 1

[11]Douglas C. Eadie et al., "Incremental Strategic Planning: A Creative Adaptation," Planning Review 10 (May 1982): 10.

[12]Ibid., p. 12.

[13]Dodge and Eadie, p. 3.

[14]Eadie et al., p. 14.

[15]Ibid., pp. 14-15.

[16]William R. King and David I. Cleland, Strategic Planning and Policy (New York: Van Nostrand Reinhold Co., 1978), p. 327.

CHAPTER 5

STRATEGIC PLANNING: BOZEMAN'S CIP

This chapter will explore the five step strategic planning process, set out in Chapter 4, as it was used by the Bozeman management coordinating team to implement the CIP. The five steps which were outlined in the previous chapter are: (1) setting organizational goals and objectives, (2) external environment analysis, (3) internal resource analysis, (4) formulation of strategies to achieve objectives, and (5) implementation.

As stated in Chapter 4, the first step in establishing goals and objectives is to understand what the organization's business has been and what it currently is. Historically, the City of Bozeman did not have a recognized method or structure for departments to request capital improvements. Each department submitted requests piecemeal; hence, there was very little analysis of capital facilities being done on a comprehensive, long range basis.

The staff inventory of Bozeman's capital facilities discussed in Chapter 2 showed a disturbing lack of capacity to provide several key services. In light of this report, the city commission requested that City staff develop a CIP to analyze and address Bozeman's capital needs before services reached crisis. As in the private sector, the strategic planning group for the City included top management

staff consisting of the city manager, assistant city manager, public works director, finance director, and a management intern. Participation was limited to this group for the initial stages of establishing goals, administrative structure, and criteria for rating specific requests. The city commission declined representation in this original policy formulation group. It was planned to add citizen members to the coordinating committee to evaluate projects after the formal adoption of the CIP by the city commission.

Bozeman City Commission Resolution 2449 established Bozeman's first formal CIP. A statement of the general goals and objectives of the CIP are contained in the Resolution (Appendix B). The City Commission Resolution gave the city manager authority to undertake the CIP. The management team used the strategic planning process to design, analyze and implement the program into the organizational framework. This process is described below.

Five Step Strategic Planning Process

Step 1: Establishing Goals and Objectives

The adopted, stated goals of Bozeman's CIP and the concerns that prompted them are discussed in the following paragraphs.

Coordination of short and long term capital expenditures to offset limited financial resources was the first goal of the Bozeman CIP. The City of Bozeman received 37 percent of its total revenue from the property tax. Taxable valuation (the total value of property that is taxable) declined 14.2 percent in 1982 due

primarily to the elimination of the business inventory tax by the 1981 Montana Legislature. The value of a mill dropped from $23,154 in 1981 to $19,863 in 1983. This translates to an erosion of $3,291 per mill. Despite building additions that increased total taxable valuation, the loss of the business inventory tax translates into a property tax decline of over 10 percent of the City's fiscal year 1983-84 operating budget.[1]

At the same time, the City faced numerous requests for annexation and extension of city services to fringe areas. Extending branch systems to outlying areas located distant from the central utility mains is costly and should be coordinated under a Master Utilities Plan in the CIP.

The second goal of the CIP was to formalize a budget process that would force the City to assess revenues, expenditures, and debt trends on an annual basis. Fiscal insolvency and declining revenues were recognized as the major deterrent to the City's funding of capital improvements. In November of 1978, the City of Bozeman faced a financial crisis when it was discovered the City had a budget deficit extending well into six figures.[2] To compensate for this gross disparity, the City was forced to lay off 14 full time service employees and ask for a special eight mill levy increase to erase the general fund deficit created by this error.[3] One operation in the CIP requires the finance department to analyze five year historic trends of all revenue sources and expenditures to find the City's true capital expenditure capability.

The third goal was to provide a mechanism for citizens to participate in the long range planning process. Citizen participation was to be sought during the initial CIP review by the coordinating committee, during city commission discussion and approval of the CIP, and through public hearings held on appropriation of revenue sharing monies for items on the CIP. It was recognized by the coordinating committee that politically the sitting Bozeman City Commission was a champion of open government and would not permit the passage of any staff policy that had not withstood public scrutiny.

Further, staff felt that other long range planning tools, such as the 1972 Bozeman Area Master Plan, had failed in its intent to direct growth. It had failed because growth related community interest groups were not consulted for input during the formulation of the master plan. Without resolving conflicts among competing interests during the master plan policy formulation stages, the plan was left to individual interpretation, which became the source of haphazard growth and conflicts over zoning.

The CIP committee was committed to an open policy process that would deal with conflict over specifics during the formulation stages. This would allow a CIP built on consensus and force all groups concerned (City staff, City Commission, growth interests, and general citizenry) to "buy in" to the five year program.

The fourth goal of the CIP was to establish a five year program of capital improvements that encouraged personnel and service delivery productivity by

providing common objectives and a schedule of resources to accomplish stated objectives. During general budgeting, the City had never before considered the overall status of its capital facilities beyond an annual, and rushed, piecemeal basis. Each department had presented its requests for capital items as they pertained to the services each performed. Poor communication between departments caused inefficient scheduling of City personnel and equipment. In some cases, departments were duplicating job activities to acquire the same information. For instance, both water and fire personnel spent extensive time measuring water supply flows at different locations in town. This was not known prior to the CIP.

Management also recognized that the impact of the City's 1978 financial problems had nearly terminated capital improvements or equipment replacement. This affected the ability of employees to maintain or add to pre-1978 levels of service. It also affected morale. Employees were being asked to provide the same levels of service with fewer workers and declining equipment. Productivity was hurt in several ways. First, employees cannot work more efficiently or faster with outmoded and, in many cases, chronically broken down equipment. Second, it is hard for management to sell productivity to its employees if it does not have a concrete program and committed resources to achieve higher productivity.

The CIP attempts, through its individual project information requirements, to force management to develop a macro view of capital needs and interrelated services the City provides. It was anticipated that the CIP will encourage

productivity by eliminating duplication of services between departments, update equipment vital to maintaining services, and illustrate to employees that management is concerned with providing a quality work environment.

An active CIP enhances participation in federal or state grants-in-aid by maintaining a current justification and schedule for capital improvement needs of the community; success in obtaining many state and federal grants hinges on establishing priorities for capital projects based on the social and economic needs of the community and an accurate, up to date, financial analysis of local capital capability and debt structure. The CIP provides a method of collecting the information necessary to establish and update priorities for capital projects. It also requires an accurate appraisal of the locality's financial capabilities based on historical revenue, expenditure, and debt information. This information provides a basis for long range municipal financial programming that pinpoints sources for matching grant funds. Thus, a well maintained city infrastructure provides a positive environment for new business and commercial growth, promoting new job opportunities and a stable tax base in the city.

Step 2: External Environmental Analysis

The main intent of this step is to forecast trends and identify factors relevant to future operations. There are several sophisticated levels in forecasting techniques and many different methods of forecasting. These range from the least complex, brainstorming, to increasingly more vigorous processes such as

scenario building, expert group consensus, delphi techniques, and mathematic econometric models.[4]

In surveying the political environment, the coordinating committee recognized that different city commissioners desired a formal CIP for a variety of subjective reasons. These concerns would have to be addressed if the total program was to be accepted. The following is a list of these subjective concerns as perceived by the coordinating committee:

(1) Police and fire life safety services should be outfitted to safely combat chemical and hazardous waste catastrophes.

(2) Revenue sharing funds should be used for infrastructure improvement instead of general fund operations.

(3) Any issue regarding water study and water capital improvement should be explored.

(4) The City should have a capital program and budget accounting system separate from the general fund.

(5) The City should know its capital capability at all times (capital capability = revenues - expenditures - debt).

(6) The City should have a capital program to retrofit buildings and equipment for energy savings.

(7) All groups in the community should be permitted to input into the CIP.

The coordinating committee had neither the technical staff for system analysis nor the time to undertake a full blown environmental analysis. However, the staff spent several meetings brainstorming to identify relevant political, social, and economic environmental factors that might affect the success of the CIP.

The coordinating committee perceived that the most relevant social and economic factors to the City were:

(1) A steady, continued growth in population.

(2) Increases in annexation and subdivision requests.

(3) A stabilization of the mill rate, after the initial 1982-83 impact, due to the loss of the business inventory tax.

(4) Significant portions of the street system were unpaved and required attention.

(5) The City had to acquire new water sources to erase a current deficit in water consumption.

(6) Existing police and fire personnel levels were insufficient to adequately cover a growing Bozeman population.

(7) The City needed to replace major capital in all service equipment of 1950 vintage, which required a major capital expense.

(8) A voter defeat of self government and little anticipation of the State Legislature passing enabling legislation for general governments to exercise local tax options.

In short, it appeared Bozeman was facing sustained population growth and increased requests for city services. These services were at or near capacity, requiring new personnel and major equipment replacement to accommodate growth. At the same time, the City could not anticipate any new revenue sources and faced possible cuts in intergovernmental shared revenues.

The environmental analysis located many change factors related to the CIP. Taking the perceived political, social, and economic factors into account, the following targets of the CIP for the first year were to:

(1) Bring key life safety equipment up to par for maximum community protection.

(2) Collect a far ranging inventory of capital needs and establish a formal capital budget accounting cycle.

(3) Pinpoint all potential sources of revenue that could be locked into a five year schedule of capital project funding.

(4) Establish ongoing capital replacement programs for City equipment having a specific useful life.

(5) Establish an ongoing building maintenance fund for energy retrofit and building improvements.

(6) Determine water needs and acquire new water rights.

Step 3: Internal Resource Audit

The purpose of the internal resource audit is to inventory the internal strengths and weaknesses of the organization to develop an implementation

strategy for the new operation. The three main components of a resource audit are examinations of the operational, financial, and managerial capacities of the organization. The operational audit analyzes current service techniques. It then matches this analysis with the ability of each department to undertake a new operation and the extent to which a new operation can be successfully implemented. The financial component explores the financial condition of the organization and analyzes the current usage of organizational sources. The managerial component analyzes the organization's human resources. This analysis assesses the competence of top management, line management, technical staff, and nonmanagerial employees as to job skills, morale, attitudes, and work habits.

In conducting the internal resource audit, the management team broke down the City's departmental organizational chart, setting out the formal management structure. All departments were placed under five divisions. It was determined that each member of the management coordinating team would oversee development of the CIP for one division. The author was charged with the responsibility of pulling together and organizing the final product. The divisions and assignments are set out below:

(1) General Government: John Evans, City Manager

(2) Public Safety: Don Barrick, Assistant City Manager

(3) Public Works: Richard Holmes, Director of Public Works

(4) Culture and Recreation: Curtis Shook, Assistant to the City Manager

(5) Finance: Amy Swan, Finance Director

These individuals, in turn, would identify key people in each department who would be capable of preparing that department's list of capital improvement requests. The coordinating team felt that each department had capable staff who could understand and accomplish CIP reporting objectives. However, it was also felt that some department staff would have problems using cost/benefit analysis required in the CIP request forms.

In analyzing the internal strengths and weaknesses of the municipal organization, the coordinating committee decided that an in-depth analysis of the operation of each department would be impossible because of the lack of time and staff. The committee perceived that most departments were too busy carrying out current work programs to take on any new, extensive reporting responsibilities under the CIP. Further, it was felt that the request forms, in the first year, were somewhat unwieldy and would cause confusion among some department heads. In short, the committee decided that department heads would need help in filling out the reporting forms and developing a long range five year capital improvement list. Management, by example, would have to commit time and effort to put across to the departments its serious commitment to the CIP.

Financially, as noted earlier in this chapter, the City was just recovering from a severe crisis which had precipitated large reductions in force of City personnel. There were limited funds available. It was felt that concrete revenue sources to fund a five year program must be identified to produce a coherent program to maintain critical services. These funds would have to be "hard"

sources that would be earmarked for a program that would be set apart by vote of the city commission.

The revenue analysis was done by City Manager Evans and Finance Director Swan, assisted by the author. Initially, three possible sources of CIP funds were reviewed. These were the unexpended budgetary surplus, revenue or general obligation bonds, and general revenue sharing.

Through prudent budgetary management by the city manager, the City was coming out of its financial woes of 1977 through 1981, and an audited unexpected budget surplus of $51,714 was available for transfer to the CIP.[5]

Revenue sharing funds provided the next most accessible source for the CIP. Further, it provided a probable recurring source of revenue for the CIP where operational transfers of surplus could not be estimated. Management and the commission were concerned that the New Federalism under Ronald Reagan might discontinue revenue sharing. Because revenue sharing was a discretionary federal entitlement, the city commission was unanimous in its agreement that these funds not be budgeted for sunken operational costs creating recurring costs.

Revenue sharing funds were then estimated for inclusion in the CIP.[6] These funds were added to a pledge of an annual $52,000 appropriation from the operating budget to create an estimated CIP in fiscal years 1984 through 1988 of $533,525, $430,000, $430,000, and $430,000, respectively.[7]

Finally, the City was faced with funding controversial, expensive fire apparatus to service high rise dormitories at Montana State University. An aerial

ladder truck, at an estimated cost of $470,000, was deemed critical to life safety at Montana State University. With no State provision for payment in lieu of taxes, the City was faced with a critical life safety issue, without the ability to pay for the equipment. The staff recommended that a General Obligation Bond be placed on the ballot to fund this "critical, immediate need which cannot be met by current funding levels."[8]

Enterprise fund services of water, sewer and garbage are proprietary funds which produce revenues through user fees. The staff recommended that capital improvements for those services be plugged into an overall rate study. This study would be done by a consultant experienced in determining utility rate structures.[9]

Steps 4 and 5: Strategy Development and Implementation

The management team divided the CIP project task into two separate components. The first component was actual formulation of a five year capital budget and project priority schedule. The second component was passage of the CIP by the city commission.

Information gathered during the internal/external audit stages identified several potential problems in producing a quality CIP. Despite previewing the program for City employees, there was some resistance to the CIP as being a new, time consuming requirement thought up by management. Second, it was also perceived as a waste of time because employees were convinced that the City could not or would not budget funds for needed equipment.

The management coordinating team decided to take several steps to alleviate employee concerns over new responsibilities, time constraints, and whether the CIP was a fad that would not produce results. First, the city manager circulated an extensive memorandum outlining the structure and goals of the CIP and setting a CIP training workshop (Appendix D). Second, the city manager pledged help to departments from the city hall staff in preparing the CIP request forms.

Employee CIP Training Workshop

An employee inservice training workshop was held on July 28, 1983, to preview the CIP project request forms and to informally discuss any questions or concerns regarding the use of the information forms. Because the information forms contained cost/benefit analysis data rarely used by department heads, an example of a capital request was drawn up beforehand. A well respected department head was chosen to illustrate the simplicity of the forms to other department heads.

The management coordinating team spent several meetings discussing and revising the workshop presentation in order to make it as informal and interesting as possible. Originally, the workshop was to be presented as an informational session conducted by the City Manager, John Evans. As the agenda was discussed, the coordinating team decided to diversify the workshop presentation by including talks on the five different sections by different speakers. It was

hoped that this diversification would alleviate the monotony of one speaker and prompt questions to different personalities. Once the format of the workshop was decided, the city manager sent a memo to all department heads asking them to attend the Friday afternoon workshop. The workshop was specifically designed for Friday afternoon so that those in attendance could come to the presentation without having to return to work before the weekend break. All workshop planning reflected an attempt to make the presentation as open and thought provoking as possible.

The final portion of the workshop emphasized the willingness of the management staff to help each department, in an interview situation, to complete the required forms. This method was chosen to demonstrate management's commitment to the CIP project and to alleviate fears that the forms were confusing and time consuming. During the meeting, these concerns seemed to be paramount to the gathering of complete cost/benefit data for capital requests as outlined in Chapter 3.

Post-Workshop Activities

As administrative assistant, the author involved himself during the next weeks after the workshop in filling out capital request forms with individual department heads. Appointments were made respecting each department head's schedule and as an affirmation of the importance of their participation.

Individual capital requests were recorded on the capital request forms. Form B, the cost/benefit analysis form, was used to elicit explanations of field problem areas, which each request for capital improvement would solve. Using the cost sections of the form, estimates of the savings to be realized by each improvement in both personnel costs and materials were analyzed against the cost of continuing with the same equipment or operation.

Staff help in preparing capital forms was a major turning point in department acceptance of the CIP. Where previous years had produced one or two capital requests, the new program led to an average of five or six requests per department. The coordinating committee's strategy to encourage both short and long range requests was taken seriously by department heads in proportion to the help they received by City staff. This process was repeated for each City department.

All capital requests were then gathered on August 26, 1983, and reviewed by the coordinating committee in four separate meetings. Each capital request was analyzed according to the priorities established by the coordinating committee set out in the conclusion of Chapter 3. The committee prepared a report and recommended a time table for passage of the CIP by the city commission by memorandum from City Manager John Evans dated September 30, 1983. The city commission reviewed the CIP and held public hearings on its merits on October 31, 1983. The CIP was finally passed by the city commission and implemented on November 14, 1983.

End Notes

[1]John M. Evans, Bozeman City Manager, "1983-84 Budget Estimate," memorandum to Bozeman City Commission, June 1983, p. 1.

[2]Sam Gesko, "Costs 'Dried Up' City Finances," Bozeman Daily Chronicle, 22 July 1979.

[3]Sam Gesko, "Gesko Outlines Plans for Proposed Tax Hikes," Bozeman Daily Chronicle, 14 August 1979.

[4]Michael H. Moskow, Strategic Planning in Business and Government (New York: Committee for Economic Development, 1978), p. 40.

[5]John M. Evans, Bozeman City Manager, "Proposed Capital Improvements Program," memorandum to Bozeman City Commission, 30 September 1983, Schedule 1, p. 4.

[6]Ibid., Schedules 2, 3, pp. 5-6.

[7]Ibid., Schedule 4, p. 7.

[8]Ibid., Schedule 6, pp. 10-11.

[9]Ibid., p. 24.

CHAPTER 6

ASSESSING THE FIRST YEAR OF BOZEMAN'S CIP

This chapter will address the success of the CIP. It will also explore some of the problems with the process that surfaced during the course of its first year of use and make several recommendations to fine tune the CIP process for future use. Finally, the chapter will conclude with a review of the CIP, five years after its inception.

Success of the CIP

The CIP of Bozeman was successful on at least five major counts. First, it established a long range capital improvement project plan and identified revenue sources to carry out the plan. Previously, there had been no citywide, long range, comprehensive capital planning. Consequently, knowledge of critical, major expenditure capital improvements was unknown. No central source was responsible for charting these problems. Further, requests for capital items of any size were submitted as part of the operations budget. The five year plan identified critical capital needs, anticipated project costs, and the total City revenue picture was explored to match each project to form revenues. Second, Bozeman's CIP established a precedent for the city commission to adopt in

written fashion by resolution, goals, and objectives for one aspect of long range planning. The CIP made a convincing statement as to the priority of capital improvements by moving the expenditure of federal revenue sharing funds away from the operations budget into a newly formed capital budget. Third, the CIP coordinated operations within the CIP to the ability of City personnel to carry out assigned tasks. In this way, it was viewed positively and accepted as a productive method of operation by department heads and brought new equipment to departments where most capital requests had been cut in the past.

Fourth, the CIP showed results. A total of seven first year projects were approved, expending a total of $51,714, ranging from $1,000 to $10,000 in cost, set aside from the general fund for capital improvements.[1] Another 10 projects were approved from $160,394 in fiscal year 1983-84 revenue sharing funds.[2] A schedule of future projects and recommendations for funding these projects with future anticipated revenues were also features of the CIP.[3]

Finally, the strategic plan process used was a success in helping design, schedule, and implement the CIP, administratively within the organization and legislatively as evidenced by the appropriating ordinance. It is the author's belief that strategic planning can and should be used by local government, no matter what its size. It is only necessary that the manager analyze the organization's ability to be flexible and change its methods of operation. The implementation strategy chosen must fit the character and personality of the organization.

First Year Problems with Bozeman's CIP

As with any management program, the CIP needs adjustment to continue its viability. The capital improvements request forms were too long, needlessly complicated, and contained duplicated information. Without revision, it would have been only a matter of time before department heads would have ignored them. Notably, forms A, B, and C were condensed into one form without eliminating any information that the management coordinating committee used to prioritize requests for funding. We asked for too much information.

Another potential problem was that department heads were using ballpark estimates for project costs on the request forms. There are several dangers here. One is that, with inflation, final cost is generally higher than the appropriated amount. The second danger stems from the first. If the final cost-appropriation continues to be greatly different on a majority of requests, the city commission will correctly question management's credibility and the program itself. The City did have a central purchasing department, and it should have been used to gather more accurate costs for capital requests.

A third potential problem with the first year program was that the community at large, the school district, local development interests, and the city commission were not represented on the management coordinating committee when the five year CIP schedule was drawn up. It is doubtful that this would have had a drastic effect on the finished five year plan; however, the city commission was

highly interested and was extremely sensitive to receiving community input. Without some sort of external community input into the process, good projects might be unnecessarily delayed or become political footballs. Also, where vehicles or other expensive items were being ordered by various departments, a fleet bid might have realized savings over the car by car purchase method used in 1983.

Recommendations to Fine Tune the First Year CIP Process

A long range program of this nature can only survive through continued update and management commitment. Several things are key to this commitment. Management and the city commission must continue to fund the CIP with an increasing percentage of shared intergovernmental revenues. These funds should not be used for general operating budgets. Year round supervision of the CIP should be under the direction of one central source. At this time, cost/benefit forms were kept in one office, ongoing project records in another, and expenditure records in still another. An interviewer experienced in cost/benefit analysis should continue to help individual department heads complete the CIP request forms each year. Such a person can be a resource to busy department heads in filling out forms and a guarantee of accurate information to the coordinating committee. This also provides a link with city hall during capital budgeting in a one on one situation. Finally, one interviewer can develop a good sense of the total capital picture, finding overlapping requests, duplications of service,

interrelated operations and, most importantly, a glimpse of emerging long range shifts in the provision of services.

The Bozeman, Montana CIP: The First Five Years (1983-1988)

On its fifth year anniversary, the author interviewed Bozeman City Manager, Jim Wysocki, regarding successes and problems connected with the ongoing Bozeman CIP.[4]

The CIP had been a success for a number of reasons. It provided an administrative tool to undertake long range facility planning. The CIP tracks project requests over a five year period. The capital request form recorded projects over this period of time so that they were not forgotten or lost. Second, it provided a mechanism for the city commission to work with the City staff to prioritize important projects for the future. Further, it provided for a series of public hearings that educated the public as to the facility needs of the community. In short, the CIP process is a formal administrative and legislative tool that provides continuity in tracking projects. In five years the CIP has funded $1,638,452 in capital projects. Continued funding has allowed the program to move beyond equipment replacement to street construction and facility improvement.

A major problem currently facing the Bozeman CIP is the loss of general revenue sharing (GRS). A majority of the funds appropriated in the first five

years came from this source. General revenue sharing was phased out by the Ninety-Ninth Congress in October 1986. Eighty percent of all U.S. municipalities received funds from this source. The loss of GRS funds will have a tremendous effect on the ability to maintain capital improvements.[5]

Bozeman annually budgeted its GRS allocation of $314,000 strictly for capital improvements, supplemented by a $50,000 transfer. Additionally, in 1985, at the mayor's urging, $150,000 of gas tax revenue was transferred over a two year period into a newly created reserve fund earmarked for long term road improvements. These funds are still available.

The loss of GRS funds will diminish the Bozeman CIP from an average of $400,000 annually to, over time, small transfers from the general fund. The CIP will be severely cut back lacking new revenue sources. Several strategies are now being employed by the City as a remedy to GRS losses. The enterprise funds of water, wastewater, and garbage have been broken out separately and CIP projects in these utilities will be funded by increases in the user fees. Another strategy will be to have Montana cities lobby the legislature to provide either new, special purpose shared revenues (for example, gasoline tax) or local options enabling legislation to allow citizen approved special levies. Local options would allow Bozeman to capitalize on its large tourist visitation by levying some kind of tax against tourist related services. A final option to replace GRS funds would be to float bonds to cover the CIP.

On the whole, the CIP process appears to have taken hold in the City of Bozeman. By 1988, all staff who served on the initial CIP coordinating committee had left the City's employ. Yet the program and the procedures left behind have been used and continue to produce a high quality product.

End Notes

[1]John M. Evans, Bozeman City Manager, "Proposed Capital Improvements Program," memorandum to Bozeman City Commission, 30 September 1983, p. 8.

[2]Ibid., p. 15.

[3]Ibid., p. 23.

[4]Jim Wysocki, Bozeman City Manager, personal interview with author, 1 November 1988.

[5]Carol Dombroski, "Inside Washington" (editorial), American City and County 101, no. 11 (November 1986): 12.

BIBLIOGRAPHY

BIBLIOGRAPHY

Anderberg, Ken. "Editor's View: 'Don't Forget the Infrastructure.'" American City and County 102, no. 1 (November 1987): 4.

Anderberg, Ken, ed. "Financial Headaches." American City and County 102, no. 1 (November 1987): 32-37.

Aune, Michael, Bozeman Recreation Director. Personal interview with author, February 1983.

Catanese, Anthony J., and W. Paul Farmers, eds. Personality, Politics and Planning. Beverly Hills, CA: Sage Publications, 1978.

City of Manhattan, Kansas. CIP Policy Manual. City Council, Manhattan, KS, June 1979.

Davidson, William H. Global Strategic Planning. New York: John Wiley & Sons, 1982.

"The Decay that Threatens Economic Growth: Reagan's Plan to Spur Business Investment Could Be Jeopardized by a Lack of Vital State and Local Facilities." Business Week, 26 October 1981, pp. 136-154.

Dodge, William R., and Douglas C. Eadie. "Strategic Planning: An Approach to Launching New Initiatives in an Era of Retrenchment." Management Information Service Report 14, no. 9 (September 1982): 1-13. (Published by International City Management Association.)

Dombroski, Carol. "Inside Washington" (editorial). American City and County 101, no. 11 (November 1986): 12.

Eadie, Douglas C., Nolen M. Ellison, and Grace C. Brown. "Incremental Strategic Planning: A Creative Adaptation." Planning Review 10 (May 1982): 10-15.

Eckenfelder, Wesley W. Principles of Water Quality Management. Boston, MA: CBI Publishing, 1980.

Environmental Protection Agency. Municipal Sewage Treatment. Washington, D.C.: U.S. Government Printing Office, 1974.

Evans, John M. "1983-84 Budget Estimate." Memorandum from Bozeman City Manager to Bozeman City Commission, June 1983.

Evans, John M. "Proposed Capital Improvements Program." Memorandum from Bozeman City Manager to Bozeman City Commission, 30 September 1983. 31pp.

Evans, John M., Bozeman City Manager. Personal interview with author, 5 January 1983.

Gesko, Sam. "City Revenue, Not Services Limited." Bozeman Daily Chronicle, 12 August 1979.

Gesko, Sam. "The City Squeeze Is On." Bozeman Daily Chronicle. 21 July 1979.

Gesko, Sam. "Costs 'Dried Up' City Finances." Bozeman Daily Chronicle, 22 July 1979.

Gesko, Sam. "Gesko Outlines Plans for Proposed Tax Hikes." Bozeman Daily Chronicle, 14 August 1979.

Holmes, Richard, Bozeman Director of Public Works. Personal interview with author, February 1983.

King, William R., and David I. Cleland. Strategic Planning and Policy. New York: Van Nostrand Reinhold Co., 1978.

Lee, Robert D., and Ronald W. Johnson. Public Budgetary Systems. 3rd ed. Baltimore, MD: University Park Press, 1983.

Levine, Charles H., Irene Rubin, and George G. Wolohojian. The Politics of Retrenchment: How Local Governments Manage Fiscal Stress. Beverly Hills, CA: Sage Publishing, 1981.

Lewis, Lee, Bozeman Fire Chief. Personal interview with author, February 1983.

Mann, Neil, Bozeman Assistant City Engineer. Personal interview with author, February 1983.

Massura, Jim. "The Impact of Tax Reform." American City and County 101, no. 2 (February 1986): 82-90.

Matzer, John, Jr. Financing Strategies for Local Governments. Washington, D.C.: International City Managers Association, 1983.

Mercer, James L., Susan W. Woolston, and William V. Donaldson. Managing Urban Government Services. New York: American Management Association, 1981.

Miller, Thomas, and Michael Fix. "Federal Solicitude, Local Costs: The Impact of Federal Regulation on Municipal Finances." Regulations (July/August 1980): 29-36.

Moak, Lennox L., and Albert M. Hillhouse. Local Government Finance. Chicago, IL: Municipal Finance Officers Association, 1975.

Moskow, Michael H. Strategic Planning in Business and Government. New York: Committee for Economic Development, 1978.

Moss, John, Bozeman Director of Planning. Personal interview with author, February 1983.

Municipal Finance Officers Association. A Capital Improvement Programming Handbook. Athens, GA: University of Georgia Press, 1978.

Municipal Finance Officers Association. A Guidebook to Improved Financial Management. Athens, GA: University of Georgia Press, 1978.

Municipal Finance Officers Association. Is Your City Heading for Difficulty? A Guidebook for Small Cities. Chicago, IL: Author, 1978.

Olsen, John B., and Douglas C. Eadie. The Game Plan: Governments with Foresight. Washington, D.C.: The Council of State Planning Agencies, 1982.

The Public Works Journal (staff). 1982 Public Works Manual. Ridgewood, NJ: Author, 1982.

Tate, George, Bozeman Police Chief. Personal interview with author, February 1983.

Thorton, William, and Donald Ulrich. "Special Report: 'Infrastructure Needs Analysis Limits Reactive Management.'" American City and County 102, no. 5 (May 1987): 33-34.

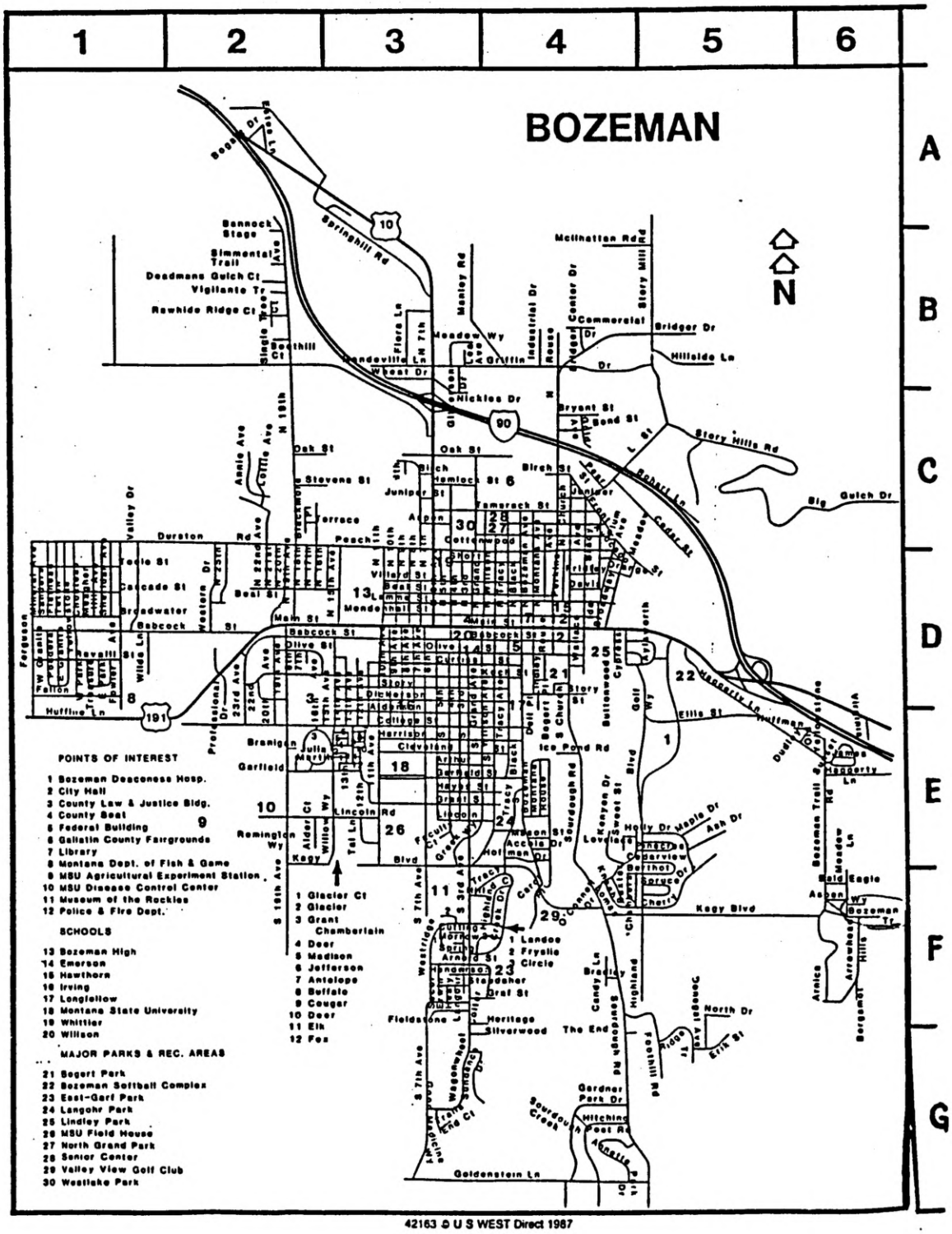
Washnis, George J., ed. Productivity Improvement Handbook for State and Local Government. New York: John Wiley and Sons, 1980.

Wysocki, Jim, Bozeman City Manager. Personal interview with author, 1 November 1988.

APPENDICES

APPENDIX A:

BOZEMAN CITY MAP


1
2
3
4
5
6
A
B
C
D
E
F
G
BOZEMAN
N
POINTS OF INTEREST
1 Bozeman Deaconess Hosp.
2 City Hall
3 County Law & Justice Bldg.
4 County Seat
5 Federal Building
6 Gallatin County Fairgrounds
7 Library
8 Montana Dept. of Fish & Game
9 MSU Agricultural Experiment Station
10 MSU Disease Control Center
11 Museum of the Rockies
12 Police & Fire Dept.
SCHOOLS
13 Bozeman High
14 Emerson
15 Hawthorn
16 Irving
17 Longfellow
18 Montana State University
19 Whittier
20 Willson
MAJOR PARKS & REC. AREAS
21 Bogert Park
22 Bozeman Softball Complex
23 East-Gort Park
24 Langohr Park
25 Lindley Park
26 MSU Field House
27 North Grand Park
28 Senior Center
29 Valley View Golf Club
30 Westlake Park
1 Glacier Ct
2 Glacier
3 Grant Chamberlain
4 Deer
5 Madison
6 Jefferson
7 Antelope
8 Buffalo
9 Cougar
10 Deer
11 Elk
12 Fox
1 Landoe
2 Fryalla Circle
Springhill Rd
Mcilhattan Rd
Commercial
Bridger Dr
Hillside Ln
Bryant St
Bond St
Story Hills Rd
Big Gulch Dr
Oak St
Birch St
Hemlock St
Juniper St
Tamarack St
Aspen
Durston Rd
Peach St
Babcock St
Main St
Olive St
Story St
Ellis St
Kagy Blvd
Lincoln Rd
Garfield
Harrison
Cleveland
Beall St
Cascade St
Tracy Ave
Rouse Ave
Grand Ave
Church Ave
Black Ave
Wallace Ave
Willson Ave
Rose Park Dr
Sourdough Rd
Highland Blvd
Ice Pond Rd
Golf Way
Buttonwood Cir
Hagerty Ln
Huffman
Maple Dr
Ash Dr
Holly Dr
Cherry
Eagle
Aspen Wy
Bozeman Tr
Bozeman Trail Rd
Baldwin Ln
Meadow Wy
Griffin Dr
Industrial Dr
Flora Ln
Manley Rd
Story Mill Rd
Center Dr
Wheat Dr
Nickles Dr
Cattle Ave
Annie Ave
Valley Dr
Western Dr
Broadwater
Fairway Dr
Fallon
Huffine Ln
Professional Dr
Bramigan
Julia Martin
Remington Wy
Alder Ct
Willow Wy
Tall Ln
Kagy
Tracy Dr
Hoffman Dr
Accolade Dr
Cascade Dr
Sourdough Creek
Fieldstone Ln
Heritage
Silverwood
Stonehaven
Stonebrook
Graf St
Westridge
Wagonwheel
Bennett Rd Ct
Medicine Rd
Goldenstein Ln
Gardner Park Dr
Hitching Post Rd
Acacia Ln
Candy Ln
Bradley
The End
North Dr
Erik St
Foothill Rd
Ridge St
Araica
Arrowhead Hills
Borgen St
Deaconess Dr
Bennett Ln
Bozeman Softball Complex
Bozeman High
Emerson
Hawthorn
Irving
Longfellow
Montana State University
Whittier
Willson
Bogert Park
East-Gort Park
Langohr Park
Lindley Park
MSU Field House
North Grand Park
Senior Center
Valley View Golf Club
Westlake Park
42163 © U S WEST Direct 1987

APPENDIX B:

THE CITY OF BOZEMAN

CAPITAL IMPROVEMENTS PROGRAM

RESOLUTION NO. 2449

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF BOZEMAN, MONTANA, ESTABLISHING A CAPITAL IMPROVEMENT PROGRAM (CIP) CONSISTING OF A SIX (6) YEAR PLAN AND PROVIDING POLICY FOR IMPLEMENTATION THEREOF.

WHEREAS, the City Commission recognizes that limited financial resources and increased demands for services require an informed blending of short and long term capital outlays; and

WHEREAS, a CIP will force the City to assess revenues, expenditures and debt trends to pinpoint conflicts and challenges to fiscal solvency on an annual basis; and

WHEREAS, a CIP promotes and provides for active community participation into long range planning, keeps the public informed and reduces funding pressures for new programs on public officials; and

WHEREAS, a CIP encourages personnel and service delivery productivity by providing concrete community objectives and a schedule of resources to accomplish them; and

WHEREAS, an active CIP enhances participation in Federal or State grants-in-aid by maintaining a current justification and schedule for capital improvement needs of the community; and

WHEREAS, a CIP will enhance the maintenance of the City infrastructure, leading to a stable economy which is highly competitive; and

WHEREAS, a well maintained City infrastructure provides a positive environment for new business and commercial growth promoting new job opportunities and a stable tax base in the City.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF BOZEMAN, MONTANA:

Section 1

That the following definitions shall be established for the purpose of the CIP:

A. Types of expenditures to include in the CIP:

1. Four distinct classes of capital items:

   a. Equipment;

   b. Land;

   c. Buildings;

   d. Improvements to land or buildings.

2. Types of acquisition, either recurring or nonrecurring:

   a. New;

   b. Improvement to existing capital;

   c. Replacement.

3. Cost limitations:
   a. Items costing less than $1,000 shall be budgeted in the annual operating budget under the capital classification, as individual items;
   b. A specific dollar amount shall be designated by the City Commission, to be transferred from the annual operating budget to the CIP fund, to accommodate capital items costing more than $1,000 but less than $10,000;
   c. Items exceeding cost of $10,000 shall be included the CIP.
4. Useful life: Items included in the CIP shall have a life expectancy of three years or greater.
5. Priorities for rating CIP requests:
   a. Critical: First priority, proposals to complete existing projects, maintain established programs or meet legal or expansion needs;
   b. Essential: Second priority, projects to replace unsatisfactory facilities or anticipate needs;
   c. Desirable: Third priority, projects needed for proper expansion or department operation;
   d. Acceptable: Fourth priority, projects for ideal operation that can be postponed without detriment service delivery;

e. Not Acceptable: Requests not in conformance with established community goals and/or funding capability.

6. Project duration:
   a. Short term project: A project that can be funded and completed in one (1) program year;
   b. Long term project: A project that necessitates multi-year funding and can be completed within five (5) years.
7. Future operating costs: Costs that will demand future operating budget funding considerations:
   a. Personnel staffing costs;
   b. Employee benefit costs;
   c. Maintenance costs;
   d. Utility costs;
   e. Specialized equipment or other minor capital costs;
   f. Materials and supply costs.

Section 2

Annual adoption of the CIP and appropriation of funds by the City Commission shall be completed not later than the second Commission meeting of the month of November each year.

Section 3

The City Manager shall annually submit to the City Commission a recommended plan for consideration by the third Commission meeting in the month of September each year.

Section 4

The City Manager shall promulgate instructions, forms, and time schedules for obtaining capital project requests from all departments, boards, and agencies of the City.

Section 5

Procedure to adopt the Capital Improvement Program: Upon receipt of the City Manager's recommended plan, the Commission shall:

a. Prioritize individual projects;

b. Prepare a tentative ordinance containing designated projects and appropriations to fund the CIP;

c. Fix a time and place for holding a public hearing upon the tentative CIP ordinance;

d. Give public notice of the public hearing by advertising in a daily newspaper; of general circulation within the city at least ten (10) days prior to the conduct of the public hearing;

e. Adopt the CIP ordinance not sooner than the next Commission meeting following conclusion of the public hearing.

PASSED, ADOPTED AND APPROVED by the City Commission of the City of Bozeman, Montana, at its regular session held on the 13th day of June, 1983, and effective thirty (30) days after said date.

_____
Mayor

ATTEST:

_____
Clerk of the City Commission

APPROVED AS TO FORM:

_____
City Attorney (6/13/83)

(NOTE: This document was retyped for inclusion in this research paper.)

APPENDIX C:

CITY OF BOZEMAN FISCAL YEAR 1983-84

CAPITAL IMPROVEMENTS PROGRAM

REPORT QUESTIONNAIRES

CITY OF BOZEMAN, MONTANA

CAPITAL PROJECT REQUEST
FOR EQUIPMENT PURCHASE OR MAJOR RENTAL

Department and Activity_____ Date Prepared_____

Contact Person_____ Phone Number_____

1. Project Title

2. Form of Acquisition
(check appropriate one)

_____Purchase _____Rental

3. Description

4. Purpose of Expenditure

( ) Critical to maintain present service
( ) Essential to improve present service
( ) Desirable to expand present service
( ) Acceptable to expand new service

5. Cost Quotation/s

	Per Unit	Total
Purchase price or annual rental	$	$
Plus: Installation or other costs	$	$
Less: Trade-in or other discount	$	$
Net purchase cost or annual rental	$	$

6. Useful Life of Equipment

7. Estimated Use of Requested Item(s)

_____ weeks per year. Appr. months (if seasonal)
For the weeks used, estimate:
_____ average days per week;
_____ average hours per day used.

8. Replace Items(s)

Item	Make	Age	Prior Year's Maint. Cost	Prior Year's Breakdown	Prior Year's Rental Cost
(1)					
(2)					
(3)					

9. Purchase Justification (Explain each check on back)

( ) Schedule replacement
( ) Replace obsolete/worn equipment
( ) Reduce personnel time
( ) Improve procedures/service
( ) Increase safety
( ) Expanded/new operation
( ) Interdepartment use
( ) Provide new service
( ) Reduce expenditures for contracted services
( ) Provide direct cost savings

10. Will this equipment require new personnel or material costs? If yes, explain.

11. Management Project Comments

Form A
CIP/1984

CITY OF BOZEMAN, MONTANA

CAPITAL PROJECT REQUEST

Department and Activity_____ Date Prepared_____

Contact Person_____ Phone Number _____

1. Project Title

3. Department Priority

4. Location

2. Purpose of Project Request Form (Check one)

( ) Add a new item to the program.

( ) Delete an item in a year already a part of the program.

( ) Modify a project already in the adopted program.

5. Description

6. Justification (attach Form B)

7. Cost and Recommended Sources of Financing

BUDGET F.Y.	TOTAL*	RECOMMENDED SOURCES OF FINANCING
Program year F.Y.		
Program year F.Y.		
Program year F.Y.		
Program year F.Y.		
Program year F.Y.		
Program year F.Y.		
TOTAL SIX YEARS		
After Sixth Year		

If adjusted for inflation, indicate adjustment percentage here: _____

*Interest cost not included.

8. Net Effects on Operating Costs (+ or -)

Direct Operating Costs

personnel: number _____

$ amount _____

purchase of services _____

materials & supplies _____

equipment purchases _____

utilities _____

other . . . _____

Subtotal ( )_____

Indirect Operating Costs

fringe benefits _____

general admin. costs _____

other . . . _____

Subtotal ( )_____

Total Operation Cost _____

9. Submitting Authority

Date_____

Submitted by_____

Signature_____

Position_____

10. Reserved

Form A
CIP/1983

CITY OF BOZEMAN, MONTANA

COST/BENEFIT
FACTOR OUTLINE

1. Cost Factors

   A. Direct Cost Savings: Does the improvement provide direct cost savings by reducing operating or maintenance costs?

   B. Future Cost Avoidance:

   C. Personnel Productivity: Will the request make more productive use of personnel or provide salary savings?

   D. Service Productivity: Will the request provide more effective or efficient service delivery?

   E. Time Frame: Projected useful life of this request.

   F. Service Demand: What is the anticipated demand for service from this improvement? Does demand justify funding?

2. Public Health, Welfare and Safety

   A. Health, Welfare and Safety: How will the request contribute to the above?

   B. Safety: Will the improvement increase equipment and/or personnel safety?

   C. Conservation: Will the request conserve property or other public resources?

3. Economic Development

   A. Economic Development: How will the request promote economic growth?

   B. Coordination: Does the request tie into any existing programs in other departments?

   C. Revenue Source: Will the request be self-supporting or bring in revenue to the city?

4. Other

   A. External Resources: In conjunction with this request, will the city be forced to use other resources and services it does not have? What will they cost?

   B. Legal Compliance: Is the request necessary for legal compliance or anticipated future compliance?

   C. Contracted Service: Can the requested project be contracted out at less cost?

CITY OF BOZEMAN, MONTANA

CAPITAL PROJECT REQUEST
FOR EQUIPMENT PURCHASE OR MAJOR RENTAL

Department and Activity_____ Date Prepared_____

Contact Person_____ Phone Number_____

1. Project Title

2. Form of Acquisition (check appropriate)

_____Purchase _____Rental

3. Number of Units Requested

4. Cost Quotation/s

	Per Unit	Total
Purchase price or annual rental	$	$
Plus: Installation or other costs	$	$
Less: Trade-in or other discount	$	$
Net purchase cost or annual rental	$	$

5. Purpose of Expenditure (check)

( ) Scheduled replacement
( ) Present equipment obsolete
( ) Replace worn-out equipment
( ) Reduce personnel time
( ) Expanded service
( ) New operation
( ) Increased safety
( ) Improve procedures, records, etc.

6. Number of Similar Items in Inventory_____

7. Estimated Use of Requested Item(s)

_____weeks per year. Appr. months (if seasonal)
For the weeks used, estimate:
_____average days per week.
_____average hours per day used.
Estimate useful life in years _____

8. Replace Items(s)

Item	Make	Age	Prior Year's Maint. Cost	Prior Year's Breakdowns	Prior Year's Rental Cost
1.					
2.					
3.					
4.					
5.					

9. Recommended Disposition of Replaced Item(s)

_____Possible use by other agencies _____Trade-in _____Sale

10. Submitting Authority

Submitted by_____ Date_____
(signature)

Position_____

11. Reserved

Form C
CIP/1983

CITY OF BOZEMAN, MONTANA

CAPITAL PROJECT REQUEST
FOR CONSTRUCTION AND/OR LAND ACQUISITION

Department and Activity _____ Date Prepared _____
Contact Person _____ Phone Number _____

1. Project Title

2. Status of Project (check appropriate)
- ☐ preliminary estimate
- ☐ survey in progress
- ☐ survey completed
- ☐ sketches or preliminary plans completed
- ☐ plans and specifications in preparation
- ☐ plans and specifications completed
- ☐ construction underway

3. Amount of Land (# acres/front ft./sq.ft.)

4. Easement Required Yes___ No___

5. Status of Land
_____ not yet acquired
_____ acquired

6. Easement(s)
____ not yet acquired
____ acquired

7. Land Costs (if any)
$_____ per acre/front ft./sq. ft.
$_____ total

8. Easement Cost
_____ per sq. ft.
_____total

9. Building Construction Costs (if any)
_____total sq.ft./cu.ft.
$_____per sq.ft./cu.ft.
$_____ total

10. Easement No. and Size
_____
_____

11. Public Works Construction	Total Linear Feet	$ Per Linear Foot	Total Cost	Additional Comments
Highway				
Sanitary sewer				
Storm sewer				
Water main				
Sidewalk				
Other (identify)				

12. Project Summary	Amount*	Fiscal Year	Recommended Sources of Funds	Methods Estimating
engineering/arch./legal				
land acquisition				
site preparation				
construction				
landscaping				
equipment and furniture				
other (specify)				
allowance for contingencies				
TOTAL PROJECT COST				

*Does not include interest cost unless indicated.

13. Submitting Authority
Submitted by _____ Date _____
(signature)
Position _____

14. Reserved

Form D
CIP/1983

CITY OF BOZEMAN, MONTANA

REVENUE SUMMARY PLANNER

(Supplement Attached)

REVENUE SOURCE Division/Department	Pay As You Go	Bond Issue	Installment Purchase	Joint Financing	Reserve Funds	Lease	User Fees	Tax Increment Financing	State and or Federal Aid	Trust Funds
Water Supply, Transmission & Distribution	X	X	X		X	X	X		X	
Water Treatment	X	X	X		X	X	X		X	
Sanitary Sewer Collection and Transmission	X	X	X		X	X	X		X	
Sewerage Treatment	X	X	X		X	X	X		X	
Storm Sewer Collection and Disposal		X							X	
Streets, Alleys and Arterials	X	X	X	X		X			X	
Library	X	X	X			X				X
Parks and Playgrounds	X	X	X	X		X	X		X	X
Swimming Pools	X	X	X	X		X	X		X	X
Cemeteries	X		X			X				X
Solid Waste Collection	X	X	X			X	X			
Solid Waste Disposal	X	X	X	X		X	X			
General Purpose City Buildings	X	X	X			X				
Police Division	X	X	X			X				

Form F CIP/1983

Financing Descriptions

1. *PAY AS YOU GO*. Financing of capital projects with current revenues. Paying cash instead of borrowing. Paid from the difference between revenues and expenditures-debt.
2. *BOND ISSUE*. Three types--General, Special and Revenue.
   General: Voter approved and assessed by annual property tax levy.
   Special: Assessed against the property benefited.
   Revenue: Income from user fees pledged to retire indebtedness.
3. *INSTALLMENT PURCHASE*. Payments/installments extending over a period of time not more than 5 years (MCA 7-5-4506).
4. *JOINT FINANCING*. By inter-local agreement, City-County
5. *RESERVE FUNDS*. Funds saved and accumulated in advance for capital projects. Earmark accounts funded from surplus and/or unanticipated revenue.
6. *LEASE*. May or may not have provision for purchase.
7. *USER FEES*. Applicable to utility and enterprise operations.
8. *TAX INCREMENT FINANCING*. For redevelopment purposes--additional taxes from new developments retire these bonds. Used in acquisition, relocation, demolition, and administration and site improvements.
9. *STATE-FEDERAL AID*. Grants, loans and shared revenue. (May require matching funds.)
10. *TRUST FUNDS*. Endowments, gifts or pledges to specific use.

CITY OF BOZEMAN, MONTANA

CAPITAL IMPROVEMENT PROJECT MONTHLY REPORT

Month: _____

(1) Project Title and Number:

(2) Project Manager:

Project Progress:	(2a) Start Date	(2b) Percent Complete	(2c) Estimated Completion	(2d) Scheduled Completion
A. Site Acquisition*				
B. Easement Acquisition*				
C. Planning*				
D. Contracting*				
E. Construction*				

(3) Project Budget

	(3a) Total	(3b) This Month	(3c) Prior Month
Budget			
Expended			
Encumbered			
Funds Remaining			

(4) Comments: All items A-E unless 100 percent complete.

*Tasks in project completion defined as follows:

A. Site Acquisition--This will include the decision process in determining the appropriate size of parcels as well as appraisal, negotiation, and other related activities.

B. Easements--Rights of way.

C. Planning--The preparation of preliminary and final plans and specifications.

D. Contracting--The formal bid process, including the execution of necessary contract documents.

E. Construction--From notice to proceed to completion of project.

Submitted by_____ Date_____

Form G
CIP/1983

APPENDIX D:

CITY OF BOZEMAN FISCAL YEAR 1983-84

CAPITAL IMPROVEMENTS PROGRAM

AND BUDGET

THE CITY OF BOZEMAN
411 E. MAIN ST P. O. BOX 640 PHONE (406) 586-3321
BOZEMAN, MONTANA 59715

July 22, 1983

TO: Department Heads
Division Heads
Administrative and Advisory Boards

FROM: John M. Evans, City Manager John Evans

RE: Capital Improvement Program
Implementation Instruction FY 1983-84

Enclosed please find a copy of Resolution No. 2449 establishing a Capital Improvement Program (CIP) for the City of Bozeman.

Forms for initiation of Capital Project Requests and CIP Administration have been developed and shall be used as follows:

(1) Form A. Capital Project Request--This is the initial request form for all capital items, i.e., all construction, land acquisition, equipment, and improvements to land or buildings exceeding $1,000 in cost.

(2) Form B. Cost/Benefit Factor Outline--This form is to be completed for all capital project requests. All questions applicable to the proposed project should be answered. The reverse side of the form may be used for additional space, as needed, to expand comments on any of these questions.

(3) Form C. Capital Project Request for Equipment Purchase or Major Rental--to be completed for all proposed equipment acquisitions.

(4) Form D. Capital Project Request for Construction and/or Land Acquisition--to be completed for: new construction, additions, or remodeling of existing facilities; land acquisition.

Forms to be Completed
by Requesting Department or Activity

Type of Expenditure Proposed	Form A	Form B	Form C	Form D
Equipment	X	X	X	
Land	X	X		X
Buildings	X	X		X
Improvements to Land or Buildings	X	X		X

(5) Form E. Management Recommendation--to be completed by management coordinating team.

(6) Form F. Revenue Summary Planner--reflects funding possibilities applicable to Divisions/Activities.

(7) Form G. Capital Improvements Project Monthly Report--for use in management of funded projects.

Following is the schedule for the FY 1983-84 CIP development:

August 26, 1983	Department/Division/Activity project requests due in the City Manager's Office;
September 19, 1983	City Manager submits a recommended Capital Improvement Program to the City Commission;
September 26, 1983	The City Commission establishes priorities for individual projects;
October 3, 1983	The City Commission prepares a tentative ordinance containing designated projects and appropriations to fund the CIP;
October 17, 1983	The City Commission conducts a public hearing on the tentative CIP ordinance;
November 7, 1983	The City Commission adopts the CIP ordinance.

A meeting is scheduled for Thursday afternoon, July 28, 1983, 1:30 p.m. to 4:30 p.m., in the meeting room of the Bozeman Public Library to discuss the CIP, its usage and answer any questions you might have on the enclosed material. Thank you in advance for attending.

Enclosure