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CAPITAL BUDGET FROM A LOCAL GOVERNMENT PERSPECTIVE

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In this analysis, I examine the impacts of a capital budget plan on a local government unit, focusing on the process involved in creating, developing, and implementing a capital budget, despite its difficulties. Through a recent survey, capital expenditures account for twenty percent of local government spending in the United States, therefore certifying the need for careful analysis of current and future spending. This analysis documents a systematic plan for local government units to follow for the implementation of the capital budget process, linking it to the municipality's strategic goals, and also describes the various methods for funding the proposed plan.

INTRODUCTION

One of the most vital functions of local government is to construct and maintain the public works infrastructure within their jurisdictions. Without this network of capital investments including roadways, bridges, sanitary sewers, water mains, and other essential public facilities, a wide range of negative impacts are likely to be felt by the residents and commercial enterprises which rely on local governments for their physical well-being and economic prosperity. Part of the challenge for local municipalities and administrators is that some organizations have not changed their capital budget processes since the 1970's back when Pac-Man was eating pellets and ghosts on a daily basis. This is due to the fact that most budgetary tasks are viewed as a chore and are mechanically administered instead of proactively constructed each year. In most communities, the process has been well-established and any proposed change or reform is likely to formulate resistance among participants. But, the current problem with capital investments and budgets is the rising public demand for more and better services while also facing larger budget shortfalls and wider budget gaps. These budgets routinely fall prey to short term solutions that

diminish established project planning, goals, and strategic initiatives of the organization. These short term strategies are commonly achieved through across-the-board spending reductions, the elimination of luxury items, restrictions on employee hours, and in some cases, layoffs (Finz et. al., 11). A successful solution to preventing this type of short term reaction is to plan for the future by developing a capital budget plan that examines an organization's assets and determines the best way to provide maintenance for these assets, while also expanding their possibilities and budgeting for their financial impact on the organization and the community.

RESEARCH OBJECTIVE

During the past decade, direct capital expenditures accounted for about twenty (20) percent of total annual spending at the local level, compared to thirteen (13) percent at the state level (Sekwat, 15). Current public administrative research has proven that local governments need to provide a separate operating expenditure plan and a separate capital budget, including a multi-year capital improvement plan, in order to keep focused on their strategic initiatives. The proposed way to implement a successful capital budget process, including at the local government level, is by implementing the following steps:

- Creation of an inventory of capital assets
- Development of a financing plan
- Development of a capital improvement plan
- Development of a multi-year CIP
- Implementation of a capital budget plan

This research is used to analyze the capital budget process through a local government perspective, using interviews and analysis with the Village of Spring Lake, Michigan and the current village manager, while also reviewing research in the field regarding local government processes in relation to developing capital budgets. The Village of Spring Lake conducts various steps to propose their capital budget projects and implement their capital improvement plan from year to year. Upon interviewing the Village Manger, Ryan Cotton, one begins to realize the time and resources that are involved in developing and approving a plan each year. The Village of Spring Lake, which originated in 1869, is a community of approximately 2,514 residents located by the lakeshore of West Michigan, just east of Grand Haven, Michigan. The village has total revenues for capital projects of approximately \$50,000 each year from property taxes and real property taxes, excluding the assistance of grants. The village is governed by a council-manager form of government and takes direction and approval from the village council on all major spending and funding decisions.

A local government, such as the Village of Spring Lake, has a property tax base, which is the assessed value of parcels, or properties, that are located within the given jurisdiction. This assessed value may increase through expansion, by developing vacant land and adding these parcels to the tax rolls, and/or appreciation of those parcels occurs when the value of the existing properties increase (Finz et al., 12). This property tax base is what is used to pay for their capital budget projects besides the government grants that they applied for to fund specific projects. So, what can the government unit invest in, that will add to their tax base, increase their earning potential, and yet improve the quality of life for its residents?

A municipal organization must determine which capital budget projects should be focused on to improve the quality of life in their community. Should the organization focus on public capital investment in commercial areas, such as pedestrian-friendly commercial corridors that could entice more businesses to relocate and add to the tax base? Or would investment in residential areas provide an incentive to homeowners to invest in their properties, while giving commercial areas a customer base? The goal of the plan is to maximize the utility of the funding and increase the wealth of stakeholders, in this case, the citizens of Spring Lake, Michigan. The construction of a 2004 capital budget project in the Village of Spring Lake, which strengthened the center of their government center, provided and renovated a well-known village landmark and completed an outstanding strategic goal of administrators and citizens.

The municipality must know if citizens are willing to be risky with their investments by getting to know the preferences of their citizens before implementing a capital improvement plan, otherwise increased taxes or public support will not be available when it is needed to continue the plan. These are just some of the many decisions that a local government must face when determining where to focus their capital improvement funding (Johnson, 6).

So what exactly is a capital expenditure?

Capital expenditures for local municipalities are long-term commitments, which require analysis using a long-term perspective by administrators, and should provide benefits for multiple years. A capital expenditure results in the acquisition or increased value of a capital asset (e.g. land, land improvements, infrastructure, equipment) and usually involves projects with expenditures over a certain amount, usually \$2,000, that will provide benefits for more than a certain period of time, which is typically one year (Hattery and Wilcox, 6). As shown in Appendix B, examples of the Village of Spring Lake's capital expenditures include the River Street Sidewalk project, the way-finding sign program, and the Skate Park at Central Park. These projects usually provide benefits to all citizens of the municipality, which make it easier to fund using property taxes or when requesting a tax increase to fund

them. So, where does the money come from to fund capital projects? Most local governments structure their capital budget so that taxes levied on property are included in capital receipts, as well as income from natural resources, such as marina use, as in the case of the Village of Spring Lake, which can be earmarked for capital projects. Proceeds of borrowing, estate and death duties, depreciation allowances, sales of property, capital grants, and surpluses from the current budget are all other sources of capital receipts as well (Premchand, 8). The various methods to finance a capital budget project can be found later in this analysis as well.

What exactly is a capital budget?

According to A. Premchand, author of “Capital Budgets: Theory and Practice”, capital budgets have multiple objectives-as instruments of compensatory fiscal policy, as windows on the net worth of public bodies, and as vehicles of development, particularly in the area of economic infrastructure (1). The capital budget is the “blueprint” of needed spending for the current or first year in the capital plan as part of the municipality’s annual budget based on current revenue projections for the municipality. This brings capital planning into reality (Hattery and Wilcox, 6). Experience shows that in the absence of capital budgets, there has been a proliferation of borrowing avenues, or resort to borrowing without due consideration of the sustainability aspects (or intergenerational equity), and inadequate maintenance of assets and an overall poor management and performance of major projects (Premchand, 1).

The capital budget was first developed in the 1940s and has slowly spread to local governments in the United States, which in recent surveys, administrators have said that fifty-six (56) percent of cities in this country use a separate capital budget. So, why are capital budgets created or needed? Annual budgets in local governments are usually made using a short-term perspective, reacting to the current economic situation, state and federal government funding assistance, which can become problematic for capital expenditures. Capital expenditures and assets are irreversible and require difficult decisions and approvals in order to reduce their risks and increase their success towards a municipality’s economic development opportunities. Many politicians also provide input in the decision making process for capital budgets because these investments rarely find their way on the politician’s accomplishment list, which allow them to get re-elected, as quoted in *Newsweek* by E.S. Savas, former assistant secretary for Housing and Urban Development “Have you ever seen a politician presiding over a ribbon cutting ceremony for the improvement of a sewer line?”(Finz, 12).

BASIC STEPS TO SUCCESSFULLY IMPLEMENTING A BUDGET

According to Robert W. Johnson, author of “Capital Budgeting,” there are five basic steps to the administration of capital investments which includes planning, evaluation, decision making, control and examination. But, before any of these steps can be implemented, a well-thought out process and policy must be put in place by the organization to lay the ground work for a successful capital investment program. This includes establishing a procedure and policy, a facility master plan, and a capital improvement plan, which is part of the planning stage.

Step 1: Planning

An organization must first need to define who is responsible for developing the capital budget and who is involved in the decision making process. In local municipalities, this usually falls on the City Manager or the City Treasurer. Key financial policies need to be developed that affect the capital budget which include the percent of the annual budget to be committed to capital improvements, limits on the size of annual debt service, and limits on total debt outstanding (Hattery and Wilcox, 7). Other capital budget procedures specify how long the plan will cover, usually five to six fiscal years, a definition of what a capital project is, and the policy should include the construction of a capital budget calendar that clearly demonstrates expectations of the administrators to each of the departments in the organizational structure. Below in Figure 1, the budget calendar is shown from the Village of Spring Lake, Michigan:

FIGURE 1: Budget Calendar for the Village of Spring Lake, Michigan

Fiscal Year 2004/2005

1/20/04	Budget worksheets given to department heads
2/12/04	Budget team meeting at 9am
2/26/04	Proposed police budget to police commission
3/04/04	Budget team meeting at 9am
3/15/04	Council budget workshop at 5pm
4/01/04	Budget team meeting at 9am
4/19/04	Council budget workshop at 5pm
4/22/04	Final police budget to police commission
5/03/04	Final budget to Village Council
5/17/04	Set public hearing on budget
6/07/04	FY 2004/2005 budget adopted by Council

Capital expenditures usually require a definition in the budgeting process due to classification purposes, which usually entails defining these purchases as objects over \$2,000, which have a useful life past one year. This classification can range anywhere from \$2,000 for smaller government units up to \$50,000 for large units. They are usually termed as “assets” and are irreversible, usually around for many years, and this is where mistakes in decisions may become costly, therefore a capital improvement plan is usually recommended to avoid this situation.

Capital Improvement Plan

A capital improvement plan is a multi-year summary of capital projects, approved and unapproved, that details how and when human resources and money could be expended for the next five to six fiscal years. This is a more modern plan that combats the “bottom up” approach or “wish lists” of departments within the municipality. The plan allows leaders to identify interconnections among projects, achieve standardization and cost savings, while viewing the overall picture of capital needs and available resources. It also allows leaders to observe if the project can reach strategic goals through phased, prioritized investments, and provide a framework and an ongoing process to prioritize and manage future, capital requests for all users (Walters and Nokels, 78). Linking the capital requests to already approved strategic goals from the governmental unit’s strategic plan is always recommended since it shows how those goals could be maximized. The capital improvement plan should also have the following goals:

- Identify and evaluate the needs of capital facilities
- Determine cost estimates for each project submitted
- Determine potential sources of funding for such projects
- Adopt policies for implementing capital improvement construction
- Anticipate and pre-plan projects with an emphasis on seizing opportunities for partnerships and alternative funding.

The development of this plan requires an investment of significant time and resources. It should identify present service characteristics of facilities including coverage, quality, and cost per unit of service, otherwise known as efficiency, while also identifying proposed levels of service characteristics that it hopes to achieve as well. A SWOT analysis could also be conducted which would relay current environmental trends, population growth projections, regulatory changes, and economic trends currently affecting the governmental unit. The identification of financial resources may be done to document sources of external assistance, projected growth in present revenue base, and the potential for direct cost recovery for individual projects, and possible sources of credit.

However, it costs less than fixing the mistakes that often occur under traditional capital planning approaches (Walters and Nokels, 78). This plan allows municipalities to become proactive versus staying in a reactive state, which is how most local governments operate, especially when state and federal funding is continually being cut in slow economic times. In order to become more proactive, the government unit should also develop and keep an up-to-date accurate facilities master plan.

Facilities Master Plan

Many local municipalities do not have an adequate up-to-date inventory of existing capital infrastructure facilities, including the date of construction, replacement costs, and the asset’s current conditions, which can be found in the example below:

FIGURE 2: Asset Inventory Example

Asset ID#	Asset	Built or Acquired Date	Condition of Asset	Usage (light, moderate, heavy)	Size/ Qty	Replacement Cost
1						
2						
3						
4						
5						

From this analysis of investments, the municipality can examine the areas of greatest need with respect to their existing infrastructure programs and possibilities for adding potential capital investment project plans. This type of plan can be created with the help of the municipality’s public works department as well as the treasurer so that accurate data can be kept on each structure and reviewed annually. There are many different computer software programs on the market today that can assist in this type of plan.

Step 2: Evaluation

The capital budget process is usually started by a dreaded announcement from the finance department that a plan for next year is due in four weeks. This step creates an initial wish list of projects, while many lack justification. This is usually referred to as the “bottom up” process.

Departments should “sell” their projects by drawing a direct correlation between the strategic objectives and the capital plan. But, there should also be guidelines set by the administration to determine what gets included and how these items get prioritized and evaluated (Panico, 28). A sample “Capital Budget Proposal Form” can be found in Appendix A of this report, which shows how a project can be submitted using a formalized process and a summary page explaining the project, including illustrations and maps, outlined estimated costs, funding sources by year, how the funds would be used, and the maintenance costs associated with project.

A cross-departmental capital improvement plan team should also be created for reviewing all capital project requests for timing and cost considerations, compiling life-cycle costs, and preparing preliminary capital improvement plan recommendations to the strategic budget process. This helps to identify the most critical projects which should be funded in the financial plan (Clifford, 3). This team should include at least one person from the administration, council, building infrastructure team, and the treasurer of the municipality, while it also may include members of the public as well.

Too many organizations place little to no focus on determining the human effort required to execute the capital plan. Projects are often forced into the workload assuming that they can be absorbed, based on the notion that people are generally underutilized. It would be ideal to communicate the expected resource magnitude of the capital plan so that the potential impacts can be understood in advance, such as project management, down resources, and infrastructure demands (Panico, 29). As an example, this could a project proposal that includes the development of a new structure in the municipality, which ultimately will require staffing and maintenance and should be accounted for in the capital budget proposal.

Step 3: Decision Making Assessing Project Risk

Determining project risk should not be a task included at the eleventh hour; rather it should be confronted up front when deciding the pros and cons of a particular project. Such determining factors should include (Applegate and Matthews, 51):

- the state of the economy, both local and national, and also changes in interest and exchange rates, which can have serious implications for the financing of such projects.
- Sufficiency of project staffing which may impede the delivery of projects on time and within budget.
- Effectiveness of project management systems, including channels of management authority, which can hamper project monitoring and construction oversight.

- Accuracy of financial records and reports, as well as loose monitoring of contractor financial controls
- Sufficiency of insurance which may lead to gaps in property and casualty loss coverage, while insurance premiums may be excessive given the actual project risk.

If the above procedural and management issues are not addressed at the beginning of a capital budget project, they have the potential of affecting the outcome and contributing major differences between budgetary intent and outcome (Premchand, 14).

Steps 4 and 5: Project Monitoring Controls and Examination

Project controls are necessary to ensure that the underlying cost and schedule data are sufficient and reliable, that on-site construction status is observed and documented, and that the architects, engineers, and the contractors are addressing technical issues. If a project lacks these controls, it could easily accumulate a mountain of change orders escalating project costs (Applegate and Matthews, 50). Evaluating project and budget performance is the most neglected aspect of capital investment in organizations. This is mostly due to time and resources that are required to implement such a task, but the benefits far outweigh the problems. The evaluation, or post audit, may improve future procedures and decisions concerning capital investments as well as their implementation. An evaluation also allows the organization to review continuing investments, such as multi-year projects, so information about its success or failure can be learned before the end of the long term project, which may lead to terminating the capital investment. No organization wants a project to finish that will only damper the budget for years to come. A post audit also aides in management training for young officers in the organization since it provides them with economic analysis experience and exposes them to many different areas of the organization. This would be a great opportunity to involve volunteers or graduate students for smaller organizations such as the Village of Spring Lake, Michigan, in which has been the focus of this research, due to its limited amount of resources. A post audit evaluation can provide an organization with measurements of the benefits that were promised at the beginning of the project, which will also show patterns of certain departments that promise the world and the projects that do not reach their full potential.

How much money is wasted during the last fiscal quarter because a greater importance is placed on meeting poorly established spending forecasts than on assuring optimum value for dollars spent? One type of audit procedure should include a report to see what percentage of funds were spent per quarter or how many projects out of the total were completed to date to see how many projects are being pushed through at the end of the year. This would give an

overview of how the finances for capital budgets are being spent and if there is proper management control over the funds relating to these projects. There are many items that can be included in a project control checklist for the purpose of project monitoring. These items can be found below:

- Cost and schedule processes, procedures, and management systems as defined and documented
- Appropriate contractor selection methods established and correctly applied, taking advantage of competitive bidding opportunities where possible
- Assessment of project design and related costs
- Management approved contract scope that matches project design and functional requirements
- Master project schedule with milestones and completion dates
- Project work-breakdown structure as developed, assigned budgetary and schedule authority guidelines
- Project budgeting process implementation
- Processes to analyze contractor billings
- Documented control processes
- Procedure to assess in detail the status of site conditions on a periodic basis

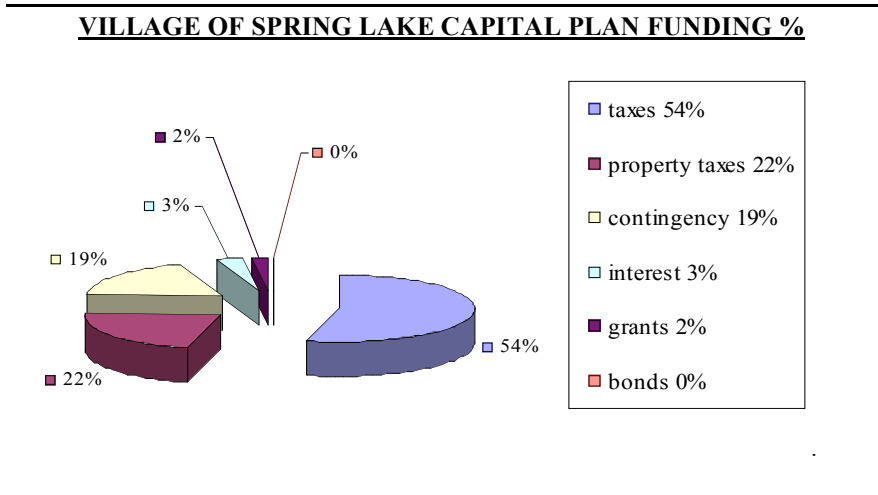
About one out of every three projects is over budget or behind schedule (Applegate and Matthews, 50). Surprises that have been documented in previous capital projects include project completion delays, excessive change order charges, direct labor overcharges, inappropriate workers' compensation insurance fees, duplicate payments due to poor project monitoring, and remedial work. Most of these problems could be avoided if the owner better understood the project risk and applied appropriate construction project controls, while monitoring the project before, during, and after a project is completed.

FINANCING THE CIP

There are a variety of ways municipal governments pay for their capital investments and expenditures, while diversifying their methods to cope with financial constraints. Traditional methods include the municipal bond market, revenue bonds, special assessment bonds, tax increment bonds, lease-purchase agreements, sales taxes, user fees, income taxes, and impact fees. Non-traditional financing options include zero-coupon bonds, variable-rate bonds, put-option bonds, federal grants, state grants, and also public-private approaches such as tax-exempt lease purchases and privatization (Sekwat, 17). Shortfalls in the municipal bond market in the late 1970s and 1980s made non-traditional methods of capital financing attractive to municipal governments (Sekwat, 18). The most common method for the local government unit is general taxes and sales taxes to finance capital investments. Below in Figure 3, the sources of

funding are shown that were used in the Village of Spring Lake's 2004 Capital Budget plan.

Figure 3: Village of Spring Lake, Michigan 2004 Funding Sources for Capital Projects



General obligation bonds are primarily used by governments to finance large municipal projects, such as infrastructure improvements. These type of bonds require voter approval and should typically benefit all citizens of the municipality if they are selected as the appropriate financing method. When the city sells a general obligation bond, the purchaser is lending money directly to the city. The amount of the bond, plus interest, is repaid through property taxes in order to retire the debt.

Capital grants can also be used, which matches government money, usually with strings attached, and dispersed from federal funds and requires application for consideration. This poses a problem since smaller municipalities do not have experienced grant writers on staff, nor the labor and staffing to complete such requirements. This option could be utilized more fully by requesting the help of volunteers to write government grant applications, which is what the Village of Spring Lake, Michigan has done in order to secure funding for their 2004 Village Hall Renovation project.

Government units also face local statutes, either in the local charter or in the state constitution, that impose debt limitations on financing options. The amount of dollars that a local government can finance for public improvements generally depends on the current level of operating expenditures, cost recovery of the proposed asset, and the potential revenue generation of the proposed

project, while one option may be to get assistance from additional tiers of government to help support the cost.

The most popular budgeting techniques at local governments disposal range from net present value (NPV), internal rate of return (IRR), benefit-cost ratio (BCR), payback period (PBP), and an accounting rate of return (ARR). Most governmental units use benefit-cost ratio and the payback period approach since they are simple, versatile, and flexible to use, while they can also be used in conjunction with other ethical, legal, or political considerations.

Best Practices in Capital Budgeting

Governments usually like to use “tried and true” methods when implementing changes to their capital budget process. Careful analysis of any change should be required to minimize policy failure and to make sure the proposed change will work for that individual unit of government. Before any changes are made, the government unit should ask themselves the following four basic budgeting and management questions (Calia, 1):

1. How will the accomplishment of goals and objectives be measured?
2. How will the goals and objectives be accomplished?
3. What goals and objectives are to be accomplished?
4. What resources will be used to achieve those goals and objectives?

To aide in such determinations, capital budget software, such as P3, could be of use which allows anyone using it to determine if construction activities and capital projects will overlap and affect each other. This information will be key as managers and designers establish schedules, so that multiple jobs are not scheduled in one location, helping to eliminate problems in service delivery, etc. This could severely impact construction costs and schedules, for example, when a road improvement is scheduled the same week as an annual parade or the week that school is about the start.

CONCLUSION

All of these factors must be considered when implementing a capital budget and making sure it runs successfully. The budget is only, in itself, a plan, therefore it is up to the management and administration of the local government unit to make sure it is running according to plan and within its fiscal resources. By implementing the five steps given by Robert Johnson (planning, evaluation, decision making, control, and examination), an administration can provide the best possible management plan to ensure a successful operation and manage its resources effectively.

Appendix A: Sample Capital Budget Proposal Form

Please complete this form for projects with a one-time construction related cost of \$_____ or more and will benefit the community for more than _____ years. Please keep in mind that proposals must be approved by the Mayor and the Council, cannot serve a private purpose, should be linked to the strategic goals of the City, and should have an equal accessible benefit to all citizens. One project per form; please make additional copies if necessary. Deadline for proposal submittals is February 1, 2005.

Name of Department: _____

Contact Name: _____

Phone Number: _____

Email Address: _____

Name of Proposed Project: _____

Location of Project: _____

Description of Project: _____

Justification for Project and how it links to City Strategic Goals: _____

Proposed Construction Date Needed: _____

Actual or Anticipated Funding Source(s): _____

Potential Capital Return (if any): _____

Phase	FY05	FY06	FY07	FY08	FY09	FY10	Total
Land Acquisition							
Planning/Design							
Engineering/Architectural Fees							
Construction							
Other (specify)							
Other (specify)							
Annual Operating and Maintenance Costs Anticipated							
Total							

For questions or concerns, please contact your City Treasurer or Assistant City Manager.

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