

INTRODUCTION TO CAPITAL IMPROVEMENTS PROGRAMMING

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Planners often hear the complaint that their plans sit on shelves gathering dust and are not implemented and some planners may make this complaint themselves especially for plans that call for public investment. An effective tool to avoid this situation is provided by capital improvement planning. Public expenditures are also important in implementing comprehensive plans so a good understanding of capital improvement planning process can help planners address a common complaint. In addition, capital improvement budgeting and finance should be important because of the impact these expenditures have on the planning profession themes for community and economic development and environmental planning, among other things. An increased reliance on local resources to finance new expenditures is now the norm as state and federal funding has steadily declined over the last couple of decades so that an understanding of local financing mechanisms available—which can be part of the discussion of capital improvement planning—is important for planners. Finally, new state and federal regulations impacting municipalities' service provision is also challenging planners and municipal officials at the local level to think of how to meet new regulatory standards while providing quality infrastructure services in the face of growth. The Capital Improvement Program, or CIP, is a tool to help effectively and efficiently address these needs.

This chapter gives a general overview Capital Improvement Program and will seek to provide a basic understanding of basic elements that can be part of the CIP. To facilitate continued provision of adequate public facilities that support the quantity and quality of desired growth, the CIP is an important tool in the planner's toolbox. It is important for planners to have a general understanding of this topic and this chapter provides this generalist approach. Planners more deeply engaged in CIP programs should seek additional guidance from other sources.

Definitions

Some definitions are a good way to start. The effective plan for the provision and extension of public facilities is often called the Capital Improvement Program (CIP). The CIP is a multi-year schedule of public physical improvements that "sets forth proposed expenditures for systematically constructing, maintaining, upgrading, and replacing a community's physical plant." (Bowyer, 1993). Typically, the schedule covers a period of five or six years though this can vary by community. The first year of the CIP is typically called the capital budget. It includes the projects that are to be appropriated by the governing body that year.

A capital improvement can be defined as an item that is larger in size, expensive, and permanent and one that represents an infrequent expenditure for new and expanded facilities or nonrecurring major repair of an existing facility. A good definition included in

the APA guide on Capital Improvement Programs cites the city of Lexington's definition: a major, nonrecurring expenditure that includes one or more of the following:

1. Any acquisition of land for a public purpose;
2. Any construction of a new facility or an addition to, or extension of, such a facility;
3. A nonrecurring rehabilitation or major repair of all or a part of a building, its ground or a facility, or of equipment, provided that the cost is \$25,000 or more than the improvement will have a useful life of **10** years or more.
4. Purchase of major equipment with a cost—individually or in total—of \$25,000 or more, which have a useful life of five years or more.
5. Any planning, feasibility, engineering or design study related to an individual capital improvement project or to a program that is implemented through individual capital improvement projects. (Bowyer, 1993)

Examples of capital improvements include construction of a new public library, major renovation of streets, water and sewer line installation, and park and recreation facilities renovation. In smaller communities, larger expenditures, such as the acquisition of new patrol cars for the police department, may also be considered a capital improvement. Generally, capital improvements have a longer useful life. Also, capital improvements should not include expenditures that can be financed by operating expenditures. Many municipalities adopt a definition of a capital improvement—similar to the one from Lexington noted above—so that departments making requests can determine if their request fits into the CIP or some other category for funding. This also helps to have the same standards apply for projects to be placed on the CIP and can help in the prioritization process for a municipality. The CIP process can be an important process by which a community can prioritize projects and identify funding for these priorities in the same way a municipal budget prioritizes the community's needs. Starting off with the same definition can ensure that projects are on an equal keel when the prioritization of each year's CIP begins.

Elements of a Capital Improvement Program

In addition to a good definition for capital improvements, several other elements are generally a part of a Capital Improvement Program. These include:

1. A statement of the community's fiscal planning policies;
2. A fiscal assessment of the community, and its ability to accommodate additional growth;
3. An assessment of current and future facilities needs based on anticipated growth;
4. Identification and thorough description of specific capital projects and facilities needed to serve anticipated levels of development within the community;
5. Prioritization of identified capital projects and facilities, and;
6. Matching of prioritized projects to potential sources of funds to form an effective program of implementation.

The first two elements noted help to ensure that the CIP is a realistic document that identifies potential funding sources and limits it from becoming a "wish list" of items the

community or its department would like to have. The budget and fiscal realities help to make the projects selected and their costs reasonable for a community and therefore make it easier to implement and to show results. This element is particularly important in communities with more limited resources as the citizen's faith in the municipality can depend on results borne out of the CIP and where managing the municipalities' debt is more important. This, of course, ties in to a municipalities' credit worthiness and its ability to issue bonds and other debt to pay for necessary capital improvements. If the CIP is not based on sound projections for future growth, it may be impossible to provide capital facilities when or where they are actually needed. This is important for planners to be involved in as most planning department have their pulse on the developments that will necessitate capital improvements. Data on subdivision development and the timeline for rooftops to be occupied in the near future can be critical in the discussions with other direct service departments and can help to make the CIP easier to implement with appropriate timing or phasing of projects. Shortcomings in the preparation of these elements can render a CIP less useful and diminish its value as a planning resource and as a management tool for fiscal and capital improvements. Needless to say, adequate attention has to be provided to each element of the CIP process.

From the planning perspective, the CIP can be a key tool in implementing the municipality's comprehensive plan. As this is often the primary task of a planning department, the CIP and those working on this from other departments can be allied in implementing the comprehensive plan and the elements that necessitate significant financial resources. These elements can include: 1) Transportation/Thoroughfare Plans; 2) Public Facilities; and, 3) Private Uses of Land. The municipality's CIP acts as one of the principal implementation tools for comprehensive plan elements necessitating capital funding. The CIP specifically addresses both how and when transportation elements and other public facilities are to be funded and constructed.

In addition, the key elements of a CIP can be garnered from the comprehensive planning process. For example, the population projections of the comprehensive plan should be the basis for the CIP's growth projections. This important relationship between the comprehensive plan and the CIP also gives added credibility to both documents and ensures that consistency with the figures resonates internally amongst partner departments. This is necessary for several reasons. It ensures that projects will be located where they will best serve anticipated development. It ensures that new facilities such as streets or water or sewer lines will be adequately "sized" to support projected future growth and will not have to be replaced prematurely. And, both the quantitative and locational growth projections of the comprehensive plan should be used to adequately assess the financial and physical capability of the community to support new growth. Without this foundation, an effective CIP cannot be developed.

Foundation for a CIP Process

In addition to including good population projections from which to make timing decisions for capital improvements, there are several other important factors to ensure a good CIP process. The key consideration is internal coordination between departments working on the CIP and communication with all departments of a municipality. Too often

the responsibility for preparing a CIP is delegated to one person or department, with a resulting lack of participation by all operations that are affected by the CIP. It is important that the management or administration of the city establish a process in which all affected departments share in the responsibility for identifying projects and priorities in the CIP. This enhances the effectiveness of the CIP as a comprehensive, multi-year implementation tool and avoids common but embarrassing problems. For example, it is not at all uncommon for a city to plan for the construction of a new street without properly considering the need to replace a water or sewer line under the street that may be nearing the end of its useful life. The involvement of all operating departments will enhance the ability to identify and coordinate interrelated projects.

A related consideration for a good CIP process involves having shared definitions for all the partner departments and a shared set of assumptions. This provides consistency for consideration and helps in the prioritization process. Early in the CIP process, a common set of definitions and assumptions needs to be developed. Questions to address before the CIP process begins include the following issues:

- A. How long is the CIP period? Will it be four, five or six years?
- B. Based upon the CIP period, what assumptions should be used for inflation of construction cost estimates?
- C. What procedures should be used for estimating costs of construction? In addition to anticipated inflation, what are appropriate levels of contingency funds? If final designs and formal cost estimates have not been completed, who is responsible for estimating the cost?
- D. What categories of cost should be included? For example: 1) Right-of-way acquisition; 2) Design fees (including contract administration, testing and inspection fees); 3) Construction Cost; 4) Equipment Cost; 5) Utility Relocation; 6) Cost of furnishings; 7) Land Betterments, and; 8) Miscellaneous.
- E. What criteria should be included in the cost of a project? Typically "soft" costs, such as the need for additional staffing and other operational costs are not included in the CIP. However, this assumption needs to be clearly stated at the beginning of the process.

Finally, the regional considerations should be incorporated as a foundation element so that the CIP considers what else is occurring in the region with regards to capital infrastructure. Many of the public facilities planned in the CIP have regional impacts and influences, such as water treatment and disposal facilities, landfills and highways. For this reason, the CIP program should be coordinated with the future development plans of state and regional agencies, such as the Texas Department of Transportation, or regional water and sewer districts. The city's plans should complement plans for larger regional capital projects, both in timing and the actual design of the facilities. For example, arterial street improvements should anticipate proposed highway widening where that arterial street intersects a state highway. In addition, the city may choose to coordinate the construction of the arterial street with that of the highway, possibly even entering into an inter-governmental agreement with the highway department to administer the construction of the arterial street. In this same vein, the capital infrastructure plans of adjacent municipalities and/or counties also have to be considered. An effective CIP program will consider the construction plans of adjacent municipalities or counties. In urban areas,

there are often opportunities for adjacent cities to participate with one another in the coordinated construction of perimeter facilities. This is usually accomplished through joint planning at the CIP level and the execution of interlocal agreements to coordinate funding and construction schedules. (Texas Local Government Code)

The CIP Process

To develop a thorough and effective CIP, a city should consider a process that addresses six significant steps.

1. Defining eligible projects. The first step in any CIP process is the definition of eligible projects. The definition, as stated previously, helps to start all potential projects on the same level. This also will help to start providing project identification information. This will start to describe the project to be considered for inclusion in the CIP. The baseline information requested of departments submitting projects for the CIP can include:

- a) Project identification information such as: Project name and location; Project Description; Project location map
- b) Project data such as: Project type; Budget status; Funds available; Date last reviewed and updated, etc.
- c) Construction Data such as: Estimated timing for design and construction; Cost allocation (design, ROW land acquisition, construction, equipment, materials, utility relocations, furnishings, land betterment, and other costs);
- d) Funding information such as: potential funding sources to consider given the project type such as general fund, revenue bonds, grants, lease purchase and other.

2. Identifying potential interrelated projects and opportunities to economize by aggregating these projects. Once a complete list of eligible projects has been developed, it is important that all projects be reviewed in the context of the entire list. While this can be a formidable task, the use of a project listing on a computer database can simplify the process. For example, inclusion of a locational description for each project allows the staff to focus on all projects that are proposed in the same geographical area and look for opportunities to include separate projects into the same construction program, thus "linking" projects together.

3. Developing a priority ranking system. Ranking systems can be objective or subjective in nature, but should reflect the relative importance of the project to the stated goals of the comprehensive plan. The issue of prioritization has already been raised elsewhere in this article. However, there are at least two issues to address early in the priority ranking process. First, who is to do the ranking? Many cities develop a committee which reviews the projects and assigns a ranking based upon a set of criteria. This can be done by an **individual or** department, but care should be taken to avoid a "myopic" review of what probably constitutes a wide range of identified projects. Secondly, the criteria for ranking should be formalized. Criteria for assigning priorities may include:

- 1) Correction of public hazards;
- 2) Elimination of existing deficiencies in minimum levels of service;
- 3) Maintenance of levels of service as growth occurs; and,
- 4) Increase of existing level of service to desired levels of service. (Government Finance Officers of America, "Capital Budgeting and Financing," p. VII-6.)

4. Developing and coordinating potential funding sources and assessment of city's capacity to service additional debt. An integral part of any CIP is the assessment of the financial condition of the city, its ability to service existing and additional debt, and identification of potential sources of revenue to pay for needed additional capital improvements. Usually, this assessment is prepared by the chief financial officer of the city and should provide the foundation for the proposed CIP. Sources of funds are categorized by "Pay-as-you-go" type funds, and debt. Pay-as-you-go funds typically include: Taxes; User Fees; Grants; Special Assessments; and, Developer Fees and Private Contributions. Traditional debt instruments include general obligation bonds, revenue bonds (which can be paid for through impact fee revenues, user fees or certain special assessments such as Public Improvement Districts and Tax Increment Financing Districts), and lease-purchase agreements.

5. Preparing the Capital Budget. Based upon the prioritized list of needed improvements and the assessment of sources and availability of funding, the next step in the process is the preparation of the CIP budget. The CIP budget identifies the facilities that are programmed (to be constructed) in the next fiscal year. Upon preparation, the CIP budget is presented to the governing body for ratification, and becomes the official and legal policy of the city.

6. Implementation. The final step in the CIP process is the implementation of the CIP budget. This can be a very intense and involved process, depending upon the amount of advance work and preparation that has been undertaken. For instance, if detailed construction plans for approved projects have not been prepared as a part of the project identification process, these designs must now be completed. Upon completion of construction plans, the projects must be advertised for bids. The process for awarding bids will differ depending upon the source of funding for the project. (See Texas Local Government Code - Chapter 212, Sub-chapter C; Chapter 252; and, Chapter 271, Sub-chapter B.) Upon receipt of bids, the bids must be analyzed and the project awarded to the lowest, responsible bidder. Then contracts must be negotiated and executed, and the project constructed. Clearly, the entire CIP process, from project identification to construction, is long and complicated, and should be approached in a planned and coordinated fashion.

Documenting and Evaluating the CIP Process

As in any planning process, communication is an important aspect of CIP planning. The results of the CIP process must be effectively communicated to the citizens and decision-makers of the community. Fortunately, modern personal computers and database programs have greatly simplified the process of preparing and updating the information necessary in the CIP. Typically, decision makers are most interested in identifying projects by: 1) area of the city; and, 2) type of project (i.e., public buildings, streets, water and sewer). With a database, potential projects can be sorted under these categories by priority and or estimated cost to give the public and decision-makers access to a wide range of considerations.

Finally, as the CIP budgeting process continues over several years, it is quite valuable to create a process of "archiving" those projects that have been considered, funded and constructed. This gives a city a record of accomplishments and the ability to identify and document its progress in "building the city". Capital improvement programming is one of the most effective tools for implementing the comprehensive plan. In a changing urban environment, planners in the future will have an even greater need to pay increasing attention to this tool. "A number of converging factors have created a need for creative thinking in public finance; changing conceptions of the roles of the federal, state and local government; devolution of responsibility from the federal to the local level; tax reform; federal deficits; and the particular problems faced by communities that are either old and declining in resources or new and rapidly growing." - *International City Management Association, The Practice of Local Government Planning Second Edition, 1988, p. 471*

A sensible, methodical CIP process will assist Texas cities in achieving their plans for the future.

