# Coping with Growth

# Programming Capital Improvements

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WREP 30 October 1980

Providing public services within the constraints of limited financial resources is a problem that all communities face—especially communities experiencing rapid population growth. The planning and improvement of public facilities for water supply, sewage treatment, parks and recreation, transportation, housing, health care, education, and other facilities are of particular concern to residents and officials.

Capital improvements programming is one financial management technique for the planning of community facilities. By looking beyond year-to-year budgeting to determine what, when, where, and how future improvements should be made, capital improvements programming enables officials to avoid unplanned capital expenditures.

The following definitions are included as a basis for the discussion of programming capital improvements that is contained in this publication.

*A capital expenditure* is a major nonrecurring project or facility expected to provide service beyond the annual budget cycle period. Some examples of capital expenditures might be a sewage treatment plant, a fire station, or street lights.

A *capital program* is a plan for capital expenditures to be incurred over a fixed period of time, and the projected resources to finance it. The time period may be adjusted to coincide with the development schedule.

A *capital budget* is a more detailed plan of specific projects and financing to be adopted with the annual operating budget.

*Capital improvements* are major projects requiring the expenditure of public funds over and above annual operating expenses. Expenditures may be for purchase, construction, or replacement of the physical assets of the community. The purchase of land needed for community use is a capital improvement, as is acquisition or construction of facilities such as:

| | | |
|---|---|---|
| airport | police station | street/road improvement |
| courthouse | sanitary landfill | traffic lights |
| drainage system | bridges | street lights |
| fire station | sidewalks | water treatment plant |
| clinic | sewage treatment plant | hydrants. |
| library | | |
| park | | |

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# What is programming capital improvements?

*Programming capital improvements* is the presentation and updating of a proposed schedule of public works and related equipment to be built or purchased by a local government during a specific period of time—usually 5 years. It covers a jurisdiction's entire range of public facility and service requirements. All anticipated future projects are listed in the program in order of construction priority, with cost estimates and the anticipated means of financing each project.

A capital improvements program is based upon a jurisdiction's comprehensive plan (or objectives as defined by the local government) and upon proposals submitted by various officials, departments, and citizen groups. The land acquisition and construction activities of all neighboring and overlapping jurisdictions (municipalities, counties, school districts, and other special districts) should be included or at least considered in the capital improvements program.

Three- to six-year plans, with the first year reflecting the annual capital improvements plan, are generally considered to be most suitable. Two years is too short a period for effective programming, because planning and financing major facilities usually takes a longer period of time; a period of seven years or more may project the program too far into the future to be of practical value. Five-year periods are used in the examples included in this publication.

### The benefits

A systematic approach to planning capital projects provides some important advantages:

- **Focusing on community goals, needs, and capabilities.** Capital projects should reflect community objectives, anticipated growth, and financial capabilities. By planning ahead for projects, those that are needed or desired the most will be constructed first.

- **Serving wider community interests.** Developed with citizen input, the capital improvements program keeps the public informed about future community construction plans. Although the capital improvements program is not set in concrete, it helps reduce pressures on local officials for projects that appear far down on the priority list. In addition, knowing about plans for future community physical needs and financial ability of the local government helps private investors estimate future tax loads and service costs.

- **Wise use of the taxpayer's dollar.** Advance programming of public works on an orderly basis will help avoid costly mistakes. The program will guide local officials in making sound annual budget decisions. In addition, a listing of anticipated future construction projects may encourage the selection of needed land well in advance of actual construction and permit its acquisition at lower costs.

- **More efficient administration.** Coordination of capital improvements programming among city, county, and special districts can reduce scheduling problems, conflicts, and overlapping of projects and governmental functions. In addition, work can be scheduled more effectively when it is known in advance what, where, and when projects are to be undertaken.

- **Intergovernmental and regional cooperation.** Capital improvements programming offers public officials an opportunity to plan the location, timing, and financing of needed improvements in the interest of the community as a whole. Furthermore, because many public services and facilities do not stop at jurisdictional boundaries, planning and cooperation among the various agencies and governments through a capital improvements program could help reduce costs, duplication of effort, and public inconvenience.

- **Maintaining a stable financial program.** Abrupt changes in the tax structure and bonded indebtedness may be avoided when construction projects are spaced over a number of years. Where there is ample time for planning, the most economical means of financing each project can be selected in advance. Keeping planned projects within the financial capacity of the community helps to preserve its credit rating and makes the area more attractive to business and industry.

- **Federal or state grant-in-aid programs.** There are many federal and state programs that a local government may draw upon for planning, construction, and financing capital improvements. The preparation of a capital program improves the local government's chance of obtaining such aid.

### Its role in jurisdictional planning and management

A local government's capital improvements program affects and is affected by both internal activities, such as budgeting and planning, and external relationships with overlapping and neighboring jurisdictions.

- **Annual capital budgeting.** Local governments that already have an annual capital budget, or are in the process of developing such a budget, will note similarities between the capital budget and the capital improvements program. In the preparation of both documents, information is collected from various departments and financial officials, combined into a document of proposed expenditures under the direction of the chief administrator, and submitted to the governing body for final consideration and adoption. The only significant differences between the annual capital budget and capital improvements program is that the latter involves projections for several years into the future, as opposed to a 1-year period, and should take into account the capital projects of other governmental units in the area. Once the capital improvements program is adopted, the relationship between the two budgets should be evident: the first year of the capital improvements program should be the basis for preparing the annual capital budget. Capital improvements programming thus becomes a continuing part of the local government's budgeting and management procedure.



- **Fiscal capacity.** A realistic capital improvements program reflects the financial capabilities of the jurisdiction. Local trends in taxation, assessment, public expenditure, debt limits, and long term impacts of capital projects are all important for the development and evaluation of a capital improvements program.

- **Long range planning.** Capital improvements programming should be based on long range physical planning and financial projections. Many communities have prepared a comprehensive or master plan for the future physical development of the community. Primary objectives of these plans are to identify and analyze the major forces that might influence the growth and change of the community; to set realistic goals for the future development of the community; and to establish requirements for public facilities. Like zoning and subdivision control, a capital improvements program is a means of implementing the comprehensive plan.

  Where a comprehensive plan exists, the basic facts and projections needed for sound capital improvements programming are readily available. The plan will provide criteria to guide decisions on project selection and the assignment of priorities. Where such planning has not yet been undertaken, land-use, population, and related studies should be made.

  It is not necessary to have a comprehensive physical development plan or a long-range financial plan before programming can begin. However, local jurisdictions that already possess such information will have a head start in the programming process.

- **Other governmental units.** Capital improvements programming affords a basis for ordering the complex relationships among neighboring and overlapping jurisdictions. In many cases, the local government will have to deal with special authorities and special districts that have the power to finance their activities through tax levies or revenue bonds backed by user charges. Although each city, county, or special district may develop its own capital improvements program, there is a growing recognition that on such matters as streets, highways, schools, parks, and water and sewer facilities, there is a need to coordinate planning among all the agencies affected by a capital project. A capital improvements program should refer to capital facilities planned by other governmental units serving the jurisdiction. Planners in a local government should be aware of what other governmental units and planning bodies are doing and what they propose to do, and thus design their own program to avoid duplication of services provided to the entire community. Usually, the coordination of capital improvements plans for the region as a whole depends on voluntary and informal agreements between various units of government.

### Participants in the programming process

Responsibility for developing a capital improvements program varies from jurisdiction to jurisdiction, depending upon the form of government, level of staffing, and other local conditions. Activities that might be typical for the main participants in the programming process are described below.

- **Chief executive.** The chief executive of the jurisdiction—the mayor, city manager, county manager, or special district administrator—usually assumes responsibility for development of the program. He/she is involved in the formulation of the capital improvements policy and may recommend projects for inclusion in the program. The degree to which the chief executive participates in capital programming depends to a great extent upon the local government structure and the legal assignment of powers by statute, charter, and ordinance. For example, the role of the chief executive will vary substantially among council-manager, commission, weak mayor-council, and strong mayor-council forms of government.

- **Planning agency.** The task of preparing the capital improvements program may be assigned to the local planning agency when such a staff is available, although ultimate responsibility is vested in the chief executive of the jurisdiction. Land-use information and plans for future development of a community form the basis for capital improvements programming. Because one of the planning agency's responsibilities is to set forth basic goals and guidelines for future development of the city or the county, the planning staff is in a unique position to coordinate capital improvements programming.

- **Program coordination.** If the local government does not have a planning agency—or if the planning agency is not staffed to perform the coordinating role—preparation of the capital improvements program may be assigned to an interdepartmental committee composed of key staff personnel from finance, budgeting, and public works departments. Under other local conditions, the program may be prepared by a special committee of the council, which might include the chairmen of public works, finance, and other committees with an interest in the program, as well as representatives of various key departments.

  Good program coordination requires working with department heads and other officials in the jurisdiction who will be involved in the process and, where appropriate, with other governmental units and planning bodies in the area.

Certain facts must be at the coordinating body's disposal: a complete inventory of existing facilities, their condition, and their capacity; any existing policies for the future physical development of the community; basic data concerning the ability of the community to pay for planned improvements; and priorities of the community's residents.

Under any organization, it is important for citizens to have access to the procedure. This can be accomplished with the capital improvements advisory committee.

• **Operating departments.** The primary responsibility of the operating departments in the programming process is to initiate project requests. These requests are prepared on standard forms, with information about why various projects are needed, and how the projects relate to other programs and long range aspirations.

• **Finance officer.** The finance officer is responsible for: 1) the financial analysis and projections needed as a background for capital improvements programming; 2) review of the implications of both the capital and the operating budgets of the individual project requests; and 3) determining the best possible means of financing each project. If the finance department staff is too small to assume these tasks, the planning agency may gather much of the needed financial data.

• **Governing body.** The jurisdiction's legislative body and citizens should participate in the establishment of goals and procedures for capital improvements programming. Ultimate responsibility for the adoption, modification, or rejection of the program lies with the governing body. Individual representatives of the legislative body may also become directly involved in the preparation of the program as

Capital Improvements Program
Departmental Priorities for Project Proposals

Department Public Works Department

1. Project title Main Street Resurfacing location downtown Moscow
description Resurface of Main Street--3-inch asphalt

2. Project title Sewer Plant location west of city
description Additional settling ponds

3. Project title Well no. 8 location southeast town
description Drill well and attach pump

4. Project title Street sweeper location entire city
description Purchase street sweeper to be used throughout the city

5. Project title Oil-burning heater location city shop
description Provide oil burning heater to burn waste oil drained from trucks and cars

*Figure 1. Sample list of proposed capital improvement projects submitted by operating departments of the local jurisdiction or others to the capital improvements program coordinator.*



members of the planning commission or a special capital improvements committee.

Capital improvements programming usually is most successful when it has been made mandatory. The governing body or chief executive should assign specific responsibilities for annual preparation of the program, establish general policy and procedures to be followed, and provide a schedule for completion of the various stages. These may be formalized in the city or county charter, administrative budget calendar, or by ordinances or resolution.

• **Citizen's advisory committee.** A citizens' advisory committee, representing the jurisdiction as a whole, may be established to assist in developing the overall program. Such a group can be particularly helpful in getting public support for bond issues needed to put various aspects of the program into effect. Usually appointed by the governing body, the advisory committee might include representatives of civic, business, labor, and other organizations.

• **Consultants.** Lacking skilled planning personnel, small communities often seek the help of consultants in developing capital improvements programs. When the local government must undertake large-scale public works projects, a professional planner, engineer, or architect may also be called in for technical assistance. Consultants should be required to work within the framework of established community goals and under the direction of responsible local officials.

# The process

The major steps in programming capital improvements are:
1) submission of project proposals to the program coordinator;
2) evaluation of each project and selection of projects for inclusion in the program;
3) financial analysis of the jurisdiction's ability to pay for the projects and selection of the means to be used in financing them;
4) preparation of a proposed capital improvements program;
5) consideration and final approval of the program by the governing body;
6) public approval of financing arrangements for individual projects; and
7) annual review and revision of the program.

Each of the steps in the programming process is discussed below in greater detail.

## Submission of project proposals

Operating departments of the local government should be responsible for proposing capital improvement projects. In some localities, citizen organizations, church groups, charitable organizations, local chambers of commerce, union groups, and others have been invited to participate in this activity. Project proposals could also be initiated by the chief executive or members of the jurisdiction's governing body.

Each unit prepares a list, in order of priority, of capital projects it believes to be needed or desirable within the next 5 years (Figure 1). Guidance should come from the chief executive or governing body on criteria for evaluating projects and the general development goals of the community. The prioritized project proposal lists should then be submitted to the capital improvements program coordinator according to a predetermined schedule.

The program coordination staff then supplies each operating department, agency, organization, or individual with project description forms on which proposed projects are to be submitted (Figure 2). Certain information should be provided for each project:

—Name, description, location, and purpose of the project;

—Estimated costs for each project, including planning, land, construction, equipment, and other related costs;

—Impact of the new project on operating costs and revenue, including estimated annual costs of maintenance, additional personnel, and necessary equipment, as well as the anticipated revenue potential of the project;

—Schedule of construction phases and project expenditures;

—Justification and departmental priority of the project;

—Recommendations on how the project is to be financed, including any available grants from the state or federal government or other sources;

—Current status of the project, indicating preliminary planning, engineering, land acquisition, and construction.

A thorough inventory of existing facilities and services, an evaluation of their adequacy, and a statement of departmental objectives and priorities should be formulated. Without this type of information, projects listed may represent merely wishful thinking or the pressures of certain groups for pet projects.

The completed departmental project description forms should then be submitted to the capital improvements program coordinator.

## Project evaluation and determining priorities

After a list of capital improvement needs has been received from each department, the program coordinator may arrive at tentative priorities by classifying each project according to an established set of criteria. The criteria are often developed from the guidelines of the comprehensive plan, which inte-

## Capital Improvements Program
## Project Description

Department: Public Works Department

Project title: Main Street Resurfacing

Location: downtown Moscow

Project description: Matte seal with 3-inch overlay

Justification: Identified in comprehensive plan; important element of Downtown Revitalization

| Project status | | Land status | |
|---|---|---|---|
| —Preliminary estimate | | —Not yet acquired | |
| —Plans in preparation | | —Partly owned | |
| —Plans and specifications completed | $312,000 | —Jurisdiction owned | |
| | | —No land involved | x |

| Estimated costs | | Future operating budget impact | |
|---|---|---|---|
| —Engineering | $ 34,000 | —Personnel | |
| —Land acquisition | | —Operating/maintenance | |
| —Construction | 247,000 | —Other | |
| —Furniture and equipment | | | |
| —10 percent allowance for contingencies | 31,000 | | |
| Total cost | 312,000 | Total annual impact | none |

| Cost ($ thousands) | Prior | 1980 | 1981 | 1982 | 1983 | 1984 | Future | Total |
|---|---|---|---|---|---|---|---|---|
| —Planning/design | | 34,000 | | | | | | |
| —Land acquisition | | | | | | | | |
| —Construction | | 20,000 | 257,000 | | | | | |
| —Other | | | | | | | | |
| Total | | 54,000 | 257,000 | | | | | |

| Funding Sources | Committed | Total |
|---|---|---|
| —Local | 56,160 | |
| —Other (specify) Federal (Urban Development) | 256,000 | 312,000 |
| Total | 312,000 | 312,000 |

*Figure 2. Sample project description form for a proposed capital improvement project.*



grates the various functions of the jurisdictional unit and establishes goals, objectives, and policies.

A project evaluation form is completed for each proposed capital project (Figure 3). Some measure of interdepartmental cooperation should be used in preparation of these forms. One method would be to have the respective departments complete the forms, and the program coordination staff prepare a similar set of forms for the same projects. Review by a citizens' advisory committee would be important to maintain an open attitude toward the program.

Criteria for project evaluation might include:

- **Comprehensive plan** (consistency with the jurisdiction's comprehensive plan and programs). Some projects directly implement or facilitate the jurisdiction's comprehensive plan. Projects that adversely affect the plan—or that do nothing to actively implement the plan—would be rated 0.

- **Need** (alleviates identified problems or deficiencies). Projects addressing deficiencies or problems with the community would be rated 2, while projects serving only projected developments would be rated 0.

- **Extent of service** (service to a major segment of the population of the jurisdiction). How many citizens would be inconvenienced or harmed if the project were not constructed?

## Capital Improvements Program
## Project Evaluation Form

Project: Main Street Resurfacing (Part of Downtown Revitalization)

| Criteria | Supporting facts | Points* |
|---|---|---|
| Comprehensive plan | Identified in comprehensive plan. | 2 |
| Need | Important element for Downtown Revitalization. | 2 |
| Extent of service | Will improve service to downtown. | 1 |
| Public support | Strong support; Main St. is badly in need of repair. | 2 |
| Number of people served | Entire city. | 2 |
| Public health or safety | Smooth, well marked street will be safer for travel. | 2 |
| Efficiency of service | | 1 |
| Related projects | Part of program to upgrade all streets in downtown area. | 2 |
| Legal requirement | | 1 |
| Economic impact | No direct impact, but identifiable impact as part of Downtown Revitalization. | 1 |
| Revenue generated | Not appreciable. | 0 |
| Total | | 16 |

* 2 points—very important and highly relevant.
1 point —important and relevant.
0 points—no importance and not relevant.

*Figure 3. Sample project evaluation form for a proposed capital improvement project.*

• **Public support** (technical and political backing of the project). Some projects are suggested by or even demanded by local citizens. Such public support should be considered in terms of its strength, depth of understanding, and degree of activity. Is the project well-identified by the citizens? Does it have established voter appeal?

• **Number of people served.** Will a large number of people benefit from this project?

• **Public health or safety** (benefit to the environment, safety, and public health). This may only apply where public health or safety is a critical factor—a matter of necessity rather than of choice. For example, all street projects affect public safety; continual safety hazards, however, would make a specific street project virtually mandatory.

• **Efficiency of service** (cost/benefit relationship). Some projects can be expected to result in significant savings to the jurisdiction by eliminating obsolete or inefficient facilities, changing systems to improve efficiency, or adding facilities that substantially improve the quality of service to the public.

• **Related projects.** Many projects are essential to the success of other projects. In some instances, significant federal or state grants are involved, and the jurisdiction may be required to provide its matching share or forfeit the grant. Any regional projects or jurisdictional projects of regional significance would be mentioned here.

• **Legal requirement.** Many federal and state grants are contingent upon local participation, and such intergovernmental agreements are legal requirements that must be honored. Court orders and judgments concerning annexation, property-owner rights, environmental protection, and others are also legal requirements that may affect a project. It is advisable to have legal counsel involved in the process—the jurisdictional attorney, for example.

• **Economic impact** (effect of the project on the local economy). Will it add to the value of the surrounding area? Will it increase the valuations of local property?

Will rapid urban growth in the area of the proposed project increase the costs of land acquisition if the project is deferred?

Will the proposed project provide a service required for economic development of the community? What improvements would be of most value in attracting commercial and industrial firms?

• **Revenue generated.** Some projects may pay for themselves and therefore would not detract from the jurisdiction's financial situation.

After each project is evaluated individually and point assignments have been made for each of the criteria, the program coordinator prepares a list of proposed projects in order of priority.

# Financial analysis

The financial analysis is intended to provide an estimate of projected financial capacity, or the difference between expected recurring revenues and expected recurring expenditures. The analysis is, in essence, a cash flow projection, and helps predict how much debt the municipality might require in the future to finance capital projects.

Table 1. History of revenue sources ($ thousands) and sample projections.

| Year | Property taxes | Other taxes | Government aid | Licenses & fees | Other | Total revenue |
|---|---|---|---|---|---|---|
| | | | History | | | |
| 1 | $4,560 | $1,720 | $2,360 | $ 56 | $ 304 | $ 8,000 |
| 2 | 5,137 | 780 | 2,570 | 60 | 384 | 8,931 |
| 3 | 5,368 | 830 | 2,810 | 66 | 470 | 9,544 |
| 4 | 5,679 | 900 | 3,000 | 69 | 545 | 10,193 |
| 5 | 6,528 | 937 | 3,100 | 71 | 625 | 11,261 |
| 6 | 7,535 | 952 | 3,650 | 75 | 700 | 12,912 |
| 7 | 7,868 | 985 | 4,000 | 80 | 790 | 13,723 |
| 8 | 8,110 | 1,030 | 4,310 | 85 | 870 | 14,405 |
| 9 | 8,358 | 1,072 | 4,690 | 90 | 945 | 15,155 |
| 10 | 8,638 | 1,120 | 5,120 | 96 | 1,026 | 16,000 |
| | | | Projections | | | |
| 11 | 8,870[1] | 1,165[2] | 5,581[3] | 101[4] | 1,106[5] | 16,823 |
| 12 | 9,136[1] | 1,210[2] | 6,083[3] | 106[4] | 1,186[5] | 17,721 |
| 13 | 9,410[1] | 1,255[2] | 6,630[3] | 114[4] | 1,266[5] | 18,672 |
| 14 | 9,693[1] | 1,300[2] | 7,227[3] | 116[4] | 1,346[5] | 19,682 |
| 15 | 9,983[1] | 1,345[2] | 7,878[3] | 121[4] | 1,426[5] | 20,753 |

[1] Assume annual 3 percent increase in revenue from assessed valuation and assume change in assessed valuation.
[2] Assume other tax revenue grows by $45,000 per year.
[3] Assume government aid grows at the rate of 9 percent per year.
[4] Assume licenses and fees revenue grows by $5,000 per year.
[5] Assume other revenue grows by $80,000 per year.



Financial analysis includes analysis and forecast of revenues, expenditures, cash flow (expected available financial capacity), and funding sources.

## Revenues

It is recommended that a 10-year revenue history be used as a basis for projection. First, group recurring revenues into several categories (Table 1).

• **Property tax.** Property tax is the major source of revenue for most jurisdictions. Growth in the property tax base (assessed valuation) is of greatest concern. Adjustments must be made for changes in assessment ratio.

One of the objectives of analyzing property tax revenue is to determine the increase in the tax rate, if any, that would be required to finance future capital investments.

• **Other taxes.** Analyze the historical pattern of revenue from other taxes, which might include the jurisdiction's share of state sales tax, excise taxes, etc. Assume the same pattern of revenue would continue into the forecast period.

• **Licenses and fees and other nontax revenue.** Again, assume the same pattern as noted with respect to past revenues would continue into the forecast period.

• **Government aid.** Revenue from state and federal government aid seems to be growing. However, it is difficult to forecast the level of these revenues with a great deal of confidence, because they depend on the results of the legislative process. If officials are willing to continue seeking governmental aid, projecting increases at the historical growth rate can be justified.

• **Total revenue.** Total revenue is not projected directly. Major categories of revenue are forecast and then added for each year to arrive at a total revenue projection (Table 1). There are three reasons for this. First, analysis of individual categories of revenue may reveal trends useful in establishing financial policy. Second, overestimates in one revenue category may be offset by underestimates in another category. And third, more advanced projection techniques may become feasible for an individual category.

Long term debt is not included as a source of revenue.

## Expenditures

The first task in analyzing expenditures is to define major categories that are consistent over time. Expenditure projection is concerned with recurring expenses; any nonrecurring capital expenditures should be subtracted out so that only expenses that can be expected to continue remain.

Group expenditures into categories appropriate for the jurisdictional unit (Table 2). Expenditure categories should include objects of expenditure that tend to increase or decrease at similar rates.

• **Forecasting.** Since the capital improvements program will cover 3 to 6 years and cost estimates for the later projects should reflect the cost of undertaking the project at that time, a standard inflation factor can be used in cost estimates to account for

Table 2. History of expenditure patterns ($ thousands) and sample projections.

| Year | Public safety | Public works | Public education | Other | Total operating cost | Debt services | Total expenditures |
|---|---|---|---|---|---|---|---|
| | | | | History | | | |
| 1 | $ 700 | $ 840 | $ 4,180 | $ 1,580 | $ 7,300 | $ 700 | $ 8,000 |
| 2 | 760 | 890 | 4,195 | 1,600 | 7,445 | 1,486 | 8,931 |
| 3 | 810 | 952 | 4,580 | 1,615 | 7,957 | 1,587 | 9,544 |
| 4 | 865 | 1,012 | 4,985 | 1,635 | 8,497 | 1,696 | 10,193 |
| 5 | 925 | 1,075 | 5,430 | 1,660 | 9,090 | 2,171 | 11,261 |
| 6 | 990 | 1,146 | 5,923 | 1,681 | 9,740 | 3,172 | 12,912 |
| 7 | 1,065 | 1,220 | 6,456 | 1,699 | 10,440 | 3,283 | 13,723 |
| 8 | 1,140 | 1,290 | 7,037 | 1,730 | 11,197 | 3,208 | 14,405 |
| 9 | 1,220 | 1,380 | 7,670 | 1,770 | 12,020 | 3,135 | 15,155 |
| 10 | 1,308 | 1,468 | 8,361 | 1,776 | 12,913 | 3,087 | 16,000 |
| | | | | Projections | | | |
| 11 | 1,402[1] | 1,562[2] | 9,113[3] | 1,796[4] | 13,873 | 2,737[5] | 16,610 |
| 12 | 1,503[1] | 1,662[2] | 9,933[3] | 1,816[4] | 14,914 | 2,543[5] | 17,457 |
| 13 | 1,611[1] | 1,768[2] | 10,827[3] | 1,836[4] | 16,042 | 2,346[5] | 18,388 |
| 14 | 1,727[1] | 1,881[2] | 11,802[3] | 1,856[4] | 17,266 | 2,001[5] | 19,267 |
| 15 | 1,851[1] | 2,001[2] | 12,864[3] | 1,876[4] | 18,592 | 1,597[5] | 20,189 |

[1] Assume public safety expenses grow at 7.2 percent yer year.
[2] Assume public works expenses grow at 6.4 percent per year.
[3] Assume public education expenses grow at 9.0 percent per year.
[4] Assume other expenses grow at $20,000 per year.
[5] Derived from analysis of debt service requirements for outstanding debt.

Table 3. Sample estimated net cash flow ($ thousands).

| Estimated revenues, expenditures, and cash flows | Year 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|
| Operating revenue | $16,823 | $17,721 | $18,672 | $19,682 | $20,753 |
| Less operating expenditures | 13,873 | 14,914 | 16,042 | 17,266 | 18,592 |
| Gross cash flow | 2,950 | 2,807 | 2,630 | 2,416 | 2,161 |
| Less debt service | 2,737 | 2,543 | 2,346 | 2,001 | 1,597 |
| Net cash flow | 213 | 264 | 284 | 415 | 564 |
| Proposed new capital project requirements | ............ | ............ | ............ | ............ | ............ |
| New financing required | ............ | ............ | ............ | ............ | ............ |

inflation over time. This inflation factor should be compounded annually to obtain the cost of the project.

Using the 10-year history of expenditure patterns plus an inflation factor, rates of expenditure change can be estimated to predict future expenditures. Factors that change the rate of growth should be considered in the analysis.

As with total revenue projections, total operating expenditures are forecast by adding the projected figures for each category. In this way, overestimates in one expenditure category may be offset by underestimates in another category.

• **Debt service.** Debt service is a recurring expense. The amounts necessary to cover principal and interest must be calculated for each year of the forecast period. The terms of each bond issue should be reviewed to determine the annual cash outlay required to service each issue. By summing the cash requirements for all bond issues, the analyst can determine total debt service expense for each year of the forecast period. (Initially, the assumption is made that there will be no new bond issues during the forecast period. The objective of the overall financial analysis is to determine the jurisdiction's financial resources so alternative financial strategies can be tested. The size and timing of bond issues can be considered once financial resources have been estimated.

• **Leveraging.** Another technique that can be used to stretch local resources is leveraging. *Leveraging* is to use limited local resources to get the maximum total resources for the jurisdiction through grants, low-interest loans, matching funds, donations, or other funding sources. The leveraging ability of different capital improvement projects could influence their overall priority rating in the programming process.

### Cash flow

With jurisdictional revenues and expenditures estimated, the next step is to estimate available cash flows. Estimated revenue expenditures, gross cash flow, debt service charge, and net cash flow are shown in Table 3. New capital expenditures represents the annual amount necessary to pay for proposed capital projects. Subtracting the amount necessary for the capital program from the net cash flow yields an estimate of the amount of new financing required for each year.

### Funding sources

With an estimate of net cash flows, it is possible to evaluate the effects of the alternate levels of debt and appropriations from current revenues to finance the capital improvements program. One alternative is to finance the capital improvements program entirely from current revenues. A second alternative is to finance all capital projects by issuing bonds.

## Proposed capital improvements program

A draft of the proposed capital improvements program for the jurisdiction should be prepared by the program coordinator after the capital improvement projects have been described in detail, evaluated, and prioritized, and the financial analysis has been completed. With such information, the program coordinator is better prepared to develop a long range program that is acceptable to the jurisdiction's governing body.

The coordinator's report should contain a list of projects and the proposed timing of their construction, and a description and justification of each project. Financial data on the capital cost of the projects should also be included in the report, along with the source of funding for each project, estimates of the resulting maintenance and operation costs, and finally, the anticipated effect of the capital improvements program upon the tax rate and indebtedness of the community.

Projects recommended for the first year of the program should be presented in greatest detail to provide a basis for the upcoming annual capital budget. In addition, the text of the proposed capital improvements program may be supplemented effectively by maps showing the location of proposed and existing facilities, progress photos, and other visual displays.

### Review and adoption

The proposed capital improvements program is presented to the legislative body, together with recommendations from the chief executive of the jurisdiction. Where the program coordinator is independent of the chief executive, the proposed program may be submitted directly to the governing body. A copy of the proposed program should also be presented to the planning body if they have not prepared the plan. This is done to keep the capital improvements program and the long range comprehensive development plan in harmony.

Submission of the proposed program to the governing body should be followed by public hearings at which all interested citizens and civic groups may express their views. Department heads and the program coordinator may be called upon to explain certain aspects of the program at such meetings.

After the public hearings and further consultation with members of the executive branch, the governing body may decide to cancel, modify, or reschedule certain projects, or to add new projects. It may also choose to phase a project over a period of years.

The final capital improvements program should be adopted by resolution or ordinance. The first year of the program should be the basis for the upcoming capital budget.

The projects assigned to the remaining years of the program represent a legislative declaration of intent and facilitate the advance purchase of land and planning of financial resources. The remaining years can also signify the manner in which projects continuing beyond one year are to be executed.

### Public approval

No matter how well the capital improvements program has been prepared or how carefully it has been weighed and considered by the governing body, public approval and acceptance are vital to its success. This is especially true when a referendum must be held to authorize bond issues to finance the program. For this reason, it is especially important that the public be kept fully informed about the program as it develops and the benefits it will produce. If all explanations are left until the time for submission of a proposed bond issue to the public for a vote, the issue may be defeated and the program delayed.

Various methods of securing public confidence and understanding have been used. Newspaper articles, radio discussions, pamphlets accompanying tax bills and receipts, speeches at civic organizations, and public forums have all been effective. In some jurisdictions, citizens' advisory committees and civic organizations have been of great assistance in promoting public acceptance of the program and securing the necessary voter approval for funding. Often, such groups are active in the development and review process associated with the program.

### Annual revision

Capital improvements programming requires an ongoing budgeting process similar to operational budgeting. The capital improvements program should be reviewed, revised, and extended on an annual basis. Revision and flexibility is necessary to take into account changing needs and financial resources of the jurisdiction. Furthermore, annual revision gives new public officials, both elective and administrative, an opportunity to present their views with respect to what should be done and when.

Preparing the capital improvements program budget can require as much time as preparing operational budgets. In some governmental units, half the year is spent developing operational budgets, and the other half of the year is spent developing capital improvements budgets.

To bring the program up to date, progress and performance reports should be prepared annually by the individual departments for each project authorized in the past capital budget period. A final accounting should be provided to plan for similar project requests and to make recommendations about whether the remaining projects should be continued, revised, or eliminated. Project requests that were not included in the final capital improvements plan should be included in the appendix to the program being recommended by staff. This lets decisionmakers know which other projects were submitted, what the community needs are, and possibly if a project that was recommended should be plugged into the program.

Annual review and revision of the capital improvements program assures that the process will become a continuing part of the local jurisdiction's budgeting procedure. Such a review of the capital improvements program increases the likelihood that the program will be consistent with changing demands as well as changing patterns of cost, and that the jurisdictional unit will always have a current view of its projected capital needs.

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Many small communities do not have professional staff to do capital programming and will need to rely on outside sources. Some suggested sources of help for small communities are:

- League of Cities or Association of Cities
- League of Counties or Association of Counties
- Cooperative Extension
- Councils of Government (COG's)
- Private consultants.

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**A Western Regional Extension Publication**

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Henry Wadsworth, director, Oregon State University Extension Service. Other western state Extension directors include James W. Matthews, University of Alaska; Craig S. Oliver, University of Arizona; J. B. Kendrick, Jr., University of California; Lowell H. Watts, Colorado State University; Noel P. Kefford, University of Hawaii; James L. Graves, University of Idaho; Carl J. Hoffman, Montana State University; Dale W. Bohmont, University of Nevada; L. S. Pope, New Mexico State University; Clark Ballard, Utah State University; J. O. Young, Washington State University; and Harold J. Tuma, University of Wyoming. The University of Guam Extension Service, Wilfred P. Leon Guerrero, director, also participates. Extension invites participation in its programs and offers them to all people without discrimination.