

CHAPTER 5

CAPITAL IMPROVEMENT PROGRAM

The purpose of the Capital Improvement Program is to identify major planning, design, acquisition, renovation, and construction projects which are planned for the next five years so that they can be prioritized and coordinated. Capital Improvement Projects are large ticket items which are nonrecurring or very infrequent and do not include annual operation and maintenance items. Projects may be proposed by town departments, municipal boards, and other organizations such as the Shelburne Falls Area Business Association or the Shelburne Falls Fire District.

The Capital Improvement Program (CIP) is a useful planning tool to coordinate the many projects that are occurring in both communities and shared village center. This is particularly important for water, sewer and transportation projects. In addition, the Capital Improvement Program will help the towns anticipate funding needs in advance for important projects rather than react to emergencies. The Capital Improvement Program has been integrated into the Master Plan and a separate subcommittee of the Buckland-Shelburne Master Planning Committee was established to oversee its preparation.

Process for Creating the Capital Improvement Program

To create the Capital Improvement Program, a survey was sent out to all municipal departments, boards, and committees as well as other organizations that would potentially have Capital Improvement Projects such as the Shelburne Falls Area Business Association. Each was requested to fill out the forms shown on the following pages to identify Capital Improvement Projects anticipated over the next five years. The forms returned were then compiled and the results are contained in Figures 5-1 and 5-2. There is a composite CIP listing all projects and one for each town. For purposes of this survey, a Capital Improvement Project was defined as:

- Any acquisition of land for a public purpose (open space, aquifer recharge area, public drinking water supply, recreation area, public building site);
- Any construction of a new facility (e.g., a public building, water lines, playfield, etc.) or an addition to, or extension, of an existing facility;
- A nonrecurring rehabilitation (i.e., something which is infrequent and would not be considered annual or recurring maintenance) or major repair of a building, its grounds or related equipment provided that the cost is \$25,000 or more and the improvement will have a useful life of 10 years or more;
- Purchase of major equipment (i.e., items with a cost, individually or in total, of \$5,000 or more which have a useful life of five years or more); and
- Any planning, feasibility, engineering or design study related to an individual Capital Improvement Project or Program.

Figure 5-1: CIP Project Summary Form

**BUCKLAND/SHELBURNE CAPITAL IMPROVEMENT PROGRAM
FORM 1
PROJECT SUMMARY & DESCRIPTION**

Project Title: _____

Department/Municipal Board/Organization: _____

Contact Person: _____

Phone #: _____ **Date Prepared:** _____

Project Description: *(please provide basic information about the project such as location, size, acreage, floor area, capacity, equipment type, etc.)*

Please describe the primary objective(s) or purpose(s) of the project: *(Examples: to reconstruct deteriorating roads in town; to protect public drinking water supplies; to renovate an important public building; to permanently protect open space for public use; etc.)*

Please identify the primary benefits of the proposed project: *(Examples: improved public safety; reduction in operating & maintenance costs; resource conservation; expanded or improved facility, etc.)*

Please identify the project schedule, including any work already completed, and the fiscal year (July 1 - June 30) or years the project will take to complete: *(Example: Planning Study Completed - FY97; Design of project and preparation of Plans, Specifications & Estimates - FY98; Construction - FY99)*

Please identify whether the project is dependent upon or linked to another project or funding source and if so, identify the other project(s) or funding source and its relationship to this project: *(Examples: road reconstruction and associated sewer line replacement should be coordinated to occur at the same time; project is dependent on grant funding which is only available in the next fiscal year; etc.)*

Please note priority of project, total cost and basis of cost estimate: *(Explanation: Your department/board/organization has six Capital Improvement Projects. Prioritize them and list whether they are 1 of 6, 2 of 6, etc. on each project summary)*

Project Priority: ___ of ___ *Total Cost:* _____

Basis of Cost Estimate (circle one): (1) Cost of Comparable Facility/Equipment/Land; (2) Cost Estimate from Engineer, Architect or Appraiser; (3) Cost from Bids Received; (4) Preliminary estimate based on Unit Costs; or (5) Best Guesstimate.

Figure 5-2: CIP Program Summary Form

**FORM 2
PROGRAM SUMMARY OF PROJECTS & FUNDING**

Department/Municipal Board/Organization: _____

Contact Person: _____

Phone #: _____ **Date Prepared:** _____

For each project identify title, priority, cost and cost elements (please use the following codes: Planning/Design - P/D, Site Acquisition - SA, Site Improvement - SI, Construction - C, Purchase of Equipment - E, and Other - O), and total cost.

(Example: Project Title - Main Street Road Reconstruction, Project Priority - 1, FY98 Cost - \$50,000 P/D, FY99 Cost - \$500,000 C, Total Cost - \$550,000)

Project Title	Project Priority	FY98 Cost	FY99 Cost	FY00 Cost	FY01 Cost	FY02 Cost	Total
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

Overall, 80 projects were submitted totaling approximately \$17 million (see Tables 5-1, 5-2 and 5-3). The largest capital expenditures are related to school, road, water and sewer projects. For Buckland, the capping of their landfill is also a significant expenditure, \$1.3 million. However, the cost is being spread out over a 20-year period given a 0% loan obtained from the state. After each project potential funding sources are identified. A description of key funding sources and the probability of obtaining them is included at the end of this section. This will allow Buckland and Shelburne to assess the staff capacity needed to pursue and administer grant funding. Additional funding sources can be found in Appendix V. The next step will be for each community to prioritize their projects. This can be accomplished by evaluating projects according to specific criteria. Some of the commonly used criteria for evaluating and prioritizing projects are listed below.

Table 5-1: Capital Improvement Program Project Listing for Buckland, Shelburne and Water & Sewer Districts

Table 5-1: Capital Improvement Program Project Listing for Buckland, Shelburne and Water & Sewer Districts (cont.)

Table 5-2: Capital Improvements Program Project Listing for Buckland

Table 5-3: Capital Improvements Program Project Listing for Shelburne

Criteria for Prioritizing CIP Projects

- ❖ Risk to Public Health or Safety - Projects must address a clear and immediate safety or public health risk.
- ❖ Deteriorated Facility - An investment to reconstruct, rehabilitate or replace a deteriorated facility or equipment. This “deferred maintenance approach” provides for replacement of equipment or a facility only when it is worn out. This approach is the opposite of Systematic Replacement (see below).
- ❖ Systematic Replacement - An investment that replaces or upgrades a deteriorated facility or equipment as part of a systematic replacement program. Assumes the equipment or facility will be replaced at approximately the same level of service although some increase in size to allow for normal growth is included.
- ❖ Improvement in Operating Efficiency - An investment that substantially improves the operating efficiency of a department or reduces operating expenses.
- ❖ Coordination - An expenditure necessary to coordinate with another CIP project (e.g. a sewer or water main replacement with a road reconstruction project) or to comply with the requirements of a court order or changing federal or state regulations.
- ❖ Protection and Conservation of Resources - An investment in a project that protects natural resources at risk or restores impaired resources.
- ❖ New or Substantially Expanded Facility - An investment in the construction or acquisition of a new facility.
- ❖ Fiscal Impact - The projected fiscal impact (positive, neutral or negative) expected to be generated by a project.
- ❖ Equitable provision of services - An investment that serves the special needs of a segment of the population deserving special attention (e.g. elderly, disabled, low and moderate income persons).

Capital expenditures which would benefit from close coordination are water and sewer infrastructure and road construction projects. Road repair projects can be negatively impacted by the replacement of water and sewer mains. This is particularly challenging as all three are funded by different sources and are managed separately. Road projects are undertaken by the towns typically using Chapter 90 funds. Water and sewer projects are completed by special purpose districts established to build, operate, and maintain those public services within the village center. The Shelburne Falls Fire District (the “Fire District”) provides water to 783 households and serves a population of approximately 2,200. The water distribution system was initially constructed in 1911 and only approximately 20% of the system has been upgraded. An engineering study is needed to create a long-term plan for systematically replacing undersized or leaking water mains.

Unfortunately the Fire District does not have funding to undertake such a study since fees collected only cover operation and maintenance costs. However, it would be valuable to obtain funding to complete such a study since it would allow better coordination with road projects. The lead time typically needed by the Fire District to design and raise funding for water main replacement is a minimum of two years. Road projects are often identified and completed in a shorter cycle, so quarterly or semiannual meetings between the Select Boards, Road Superintendents and Fire District staff would be highly beneficial to coordinate projects.

The water supply capacity currently exceeds demand given the recent addition of a new public water supply well. It was less expensive to drill a new well than to build a surface water filtration plan for the reservoir. The reservoir now serves as an emergency back up. Currently demand is estimated to be approximately 70% of capacity (210,000 gpd/310,000 gpd DEP Permit).

The wastewater treatment system for Shelburne Falls serves approximately 2,200 residents and two schools. The annual budget of \$193,000 comes from sewer user fees based on water usage at a rate of \$2.84/100 cubic feet of water. The wastewater treatment collection system was built in 1875. Many of the lines still in use today are clay pipes that are 80 – 100 years old. This is about the maximum length of their life cycle and they need to be replaced. As a result, there are problems with water infiltration into the collection system that reduces the available capacity of the wastewater treatment plant. Several sewer line replacement projects have recently been completed and this will improve the available capacity of the system. However, approximately 40% of the collection system needs to be systematically replaced. The next section of the collection system scheduled for replacement is along Conway Street in Buckland starting at the Town Hall. Future projects are being planned by the Sewer Commissioners, the decisionmaking body for the wastewater treatment district.

The wastewater treatment plant is currently operating at 92% of capacity. A wastewater treatment facility is required by the Massachusetts Department of Environmental Protection to initiate plans for expansion when the influent loading rates reach 80% of the facility's design capacity for 90 days. Consequently, an engineering study is underway to review the condition of the wastewater treatment plant. This \$25,000 study will provide recommendations about the status of the system and future needs and is expected to be completed in June 1999. Recently purchased equipment for cleaning the lines has a TV camera to monitor the condition inside the lines. This information should assist in prioritizing lines for replacement. No substantial increase in the area served is expected.

Funding Sources available to support Capital Improvement Projects other than property tax revenues are varied. A summary of the major sources of funding for CIP projects and a best effort to estimate the competitiveness of the various programs are presented below. Additional information on these and other grant programs can be found in Appendix V.

Funding Sources for CIP Projects

The Massachusetts Preservation Projects Fund (MPPF) has recently been reconstituted by the state and may be used for rehabilitation, restoration and general preservation projects for buildings and structures on the National Register in public or non-profit ownership. Municipalities and non-profits can apply for pre-development funds of between \$5,000 and \$30,000 for studies such as the preparation of architectural plans and specifications, historic structure reports, or archeological investigations. Development funds of between \$7,500 and \$150,000 are available for general construction, building code compliance, and barrier free access. Acquisition funds are available for State Register Properties that are imminently threatened with inappropriate alteration or destruction. This is a 50% matching grant program. Funding from this program has been successfully used for restoration of stained glass windows in a public library, slate roof repair of a town building, rehabilitation of a town-owned barn, and restoration of an historic town hall. The state also offers a 50% matching **Survey and Planning Grant** that can be used for placing eligible properties on the National Register or for local education initiatives. Both of these programs are highly competitive.

The Enhancements Program of the **Intermodal Surface Transportation Efficiency Act (ISTEA)**, and the **Transportation Equity Act for the 21st Century (TEA-21)**, its newly reauthorized version, is administered through the regional planning commissions. Under this program federal and state funding has been provided to historic preservation projects that are transportation-related. It too is a matching program, but the town's share is 10% of the total project cost. This program is moderately competitive and currently gives higher priority to construction and implementation projects. Grant amounts typically range from \$50,000 to \$150,000. Funding can be used for scenic easements, streetscapes, pedestrian trails, bikeways, and restoration of historic transportation structures among other items.

The Community Development Block Grant (CDBG) program funds a wide range of public facilities and infrastructure such as replacement of water and sewer lines. The maximum amount for a single municipal applicant is \$750,000 for one infrastructure or public facilities project as long as it can be completed within a 14-month grant cycle. CDBG funds can also be used to fund housing rehabilitation through weatherization and code compliance for income-eligible communities and for low-to-moderate income property owners. Other eligible activities include façade improvements and handicap accessibility. This program is competitive and success depends on the ability of the project to benefit low and moderate income populations, address serious threats to public health or safety, or to eliminate blight.

Public Works Economic Development is a grant program which funds the design, construction or reconstruction of roads, streets bridges, curbing, sidewalks, lighting systems, traffic control, drainage systems associated with municipal economic development activities. The maximum grant amount is typically \$1 million and is highly competitive.

Community Development Action Grant (CDAG) funds economic development projects on publicly owned or managed property including work on buildings, streets, sidewalks, rail spurs, utility distribution systems, water and sewer lines, parks, site preparation and improvements and demolition of existing structures. CDAG funding is limited to 50% of the total project cost and the applicant must demonstrate a matching financial commitment from public and private sources. Grant amounts are variable (typically in excess of \$100,000) and are highly competitive.

The Massachusetts Board of Library Commissioners administers state and federal grant programs for libraries. The FY2000 grant round funded a variety of different activities including upgrades for computer hardware and software. To be eligible for these grants, an applicant must be a member of a regional library system and have an approved long-range plan on file with the Massachusetts Board of Library Commissioners that meet their requirements. The closing date for the FY 2000 grant round was December 17, 1998. Future years grant round information can be obtained from Sandy Souza, Grants Manager (617-267-9400).

SELF-HELP Program provides reimbursement for the purchase of conservation or passive recreation land. Reimbursement ranges from 52-70% of the costs based on the community's equalized valuation per capita decile rank.

This concludes the CIP section. Specific projects have been incorporated into the recommendations of other sections. As mentioned previously, the next step is for the towns to prioritize projects and assess staff capacity for writing and administering grants. The towns may wish to pool resources with the Shelburne Falls Area Business Association to maintain staff capacity for writing and administering grants and overseeing projects.

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