

Determining Capital Improvement Projects

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Capital items such as computer equipment, roads and buildings make up the foundation on which economic and social prosperity is built. To ensure that this foundation is strong, township governments in Michigan should embrace capital improvement planning. The extra time and cost involved in undertaking this effort will pay off in future cost savings and efficient service delivery.

Local leaders—including every member of the township board—should be involved in developing and implementing cohesive and rational capital improvement plans. These plans allow local units of government to guide the capital investments of their community with a long-term perspective.

Consider Two Things

There are two elements for a community to consider when undertaking a capital improvement program: (1) the capital improvement plan (CIP) and (2) the capital budget. The CIP is a non-binding, multiyear process that examines the needs and proposed capital improvements for a community. The capital budget *ideally* implements the projects specified in the CIP. The capital budget is in place for only one year as part of the normal budgetary process.

Each of these elements is a necessary component of township capital improvement planning. The CIP plans for future expenditures, while the capital budget allots actual dollars for current-year projects. However, to properly budget for necessary capital investments, the planning process must be completed in an organized fashion.

What is Capital Improvement Planning?

The capital improvement planning process is a form of strategic planning that allows a community to establish a construction

and/or maintenance schedule for priority activities. Townships are authorized under MCL 125.330 to adopt a CIP. Although townships were previously *required* by the Uniform Budgeting and Accounting Act (Public Act 621 of 1978) to develop a formal capital improvement process, that requirement was removed from the act by PA 493 of 2000. However, a capital improvement plan continues to be a useful tool for townships.

For townships that have adopted a master plan via a planning commission, the Township Planning Act, PA 168 of 1959, states that the township board must notify the planning commission of any changes in the CIP. If the planning commission disapproves such capital improvements, the township board, by majority vote, may override such a decision.

Approaches to Planning

There are three approaches to capital improvement planning: needs-driven, fiscal capacity and scenario planning. No one

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Frequently Asked Questions about Capital Improvement Planning

Q: What is our local government's definition of capital?

A: Each community must decide on its own definition of "capital." Generally, capital improvements are relatively expensive and last for longer than one year. Many local governments set a dollar amount to define capital projects, such as \$1,000.

Q: What are some examples of capital improvement projects?

A: Roads, township halls, recreation facilities, and water and sewer infrastructure.

Q: How far out will the plan address issues?

A: Typically, a capital improvement plan (CIP) is designed for a five- to six-year period. However, the township must feel comfortable, and select the appropriate time period that best suits its own needs.

Q: Will the local government designate a separate board to handle capital planning issues?

A: Yes, the local government unit should designate a capital improvement planning committee to handle the administrative process of constructing the CIP. The committee should include members of the township board, executive managers and department/agency officials.

Q: How will the public be included in the decision-making process?

A: The public will have input in two different ways. First, members of the public can speak directly to their elected officials and express their concerns and desires. Second, in some communities, it may be desirable to develop a citizens' capital budget advisory committee where interested citizens can play a role in developing the CIP.

Q: Will the capital budget be a separate document from the township's operating budget?

A: Yes. It is recommended that the capital budget be separate from the operating budget. If the capital budget is simply folded into the operating budget, important details and discussion may be foregone. The benefits of capital improvements last over multiple years, whereas the operating budget is designed to cover immediate, annual benefits.

Q: How does our CIP affect overlapping units of government?

A: Communities should, where possible, consider what other units of local government will be affected by their capital and infrastructure decisions. As plans are developed, a list should be maintained of the other impacted local units of governments and these units should be contacted as soon as feasibly possible.

Q: What is the relationship between capital improvements now and operating expenditures in the future?

A: A community that invests in capital improvements must be prepared to fund and maintain ongoing expenses related to those investments. For example, an investment in a new police or fire station will incur expenses immediately, as well as into the future.

approach works best for every community, and each township must assess its circumstances and characteristics to determine which approach to use.

1. Needs-Driven Approach

The needs-driven approach begins with township officials developing a list of desired/necessary capital projects. After the list has been developed and agreed upon, the township assesses the fiscal capacity to carry out projects. In this approach, the main focus of the planning process is on community need.

This approach may be best suited for smaller and rural communities. Given the more straightforward fiscal situation of small townships, it may be best to focus on community needs, and turn those needs into specific infrastructure and capital projects.

2. Fiscal Capacity Approach

Unlike needs-driven plans, this approach begins with an assessment of the township's financial capabilities. Once fiscal capacity has been determined, the list of possible capital projects is prioritized and ranked until resources are exhausted.

Larger townships, particularly those in metropolitan areas, are likely better off in first assessing fiscal capacity. Given the complexity of finances in larger, urban governments, the scope of fiscal resource availability is a better starting point.

3. Scenario Planning

Scenario planning is a hybrid approach, which identifies different combinations of capital projects that are possible given revenue availability. Different scenarios can be developed based on alternative economic, land use and demographic factors.

This approach is a good choice for almost any township government. However, it requires a substantial commitment of resources and time, and township leaders must be willing to set aside a good deal of time for envisioning future scenarios and the associated capital needs. This type of planning will place greater strain on staff resources. Once completed, however, the CIP is more flexible and more responsive to changing circumstances. The first two approaches will likely be biased toward the current status quo in the township.

The following describes the details behind using the scenario-driven approach to capital improvement planning.

Steps in the Scenario-Driven Approach

Step One: Establish the Administrative Process

→ Define "capital improvement"

→ Establish a CIP calendar

→ Set membership for CIP committee

If not already defined by the township, criteria for a "capital project" must be outlined. This is critical to helping involved parties determine what items and projects should be included in proposals. Generally speaking, capital improvements are expenditures on items that (1) last longer than one year and (2) are relatively expensive—at least \$1,000 or more.



There are several other elements in this first step. The development of a calendar will set deadlines for proposals and decisions. It ensures that the CIP is developed in an orderly, efficient manner. Establishing membership on the planning committee or task force is also critical. This group should include elected officials and members of township departments or agencies.

Step Two: Capital Asset Inventory

- *Compile a list of capital facilities*
- *Measure activity levels*
- *Develop inventory*
- *Create a depreciation schedule*

A capital asset inventory allows a community to determine current structural assets and needs for replacement, repair and maintenance. For those communities that have not yet undertaken this process, a series of steps should be followed to ensure complete, accurate coverage of local jurisdiction facilities and equipment.

The first element is to compile a list of capital facilities and equipment in use by the jurisdiction. This list will allow the CIP committee to assess replacement, repair or maintenance decisions. The community's financial audits, planning documents, transportation department documents, engineering studies and insurance documents may all be possible sources of capital items. Where possible, committee members should inspect and discuss conditions with appropriate field staff or managers.

Next, the activity level being provided at each township facility or department should be measured. Activity levels measure the use or activity that occurs at a given facility or on a certain piece of equipment.

The final capital asset inventory list should include name, location, condition and activity level. Once the list has been compiled, local officials should develop depreciation schedules for jurisdiction facilities and equipment. These schedules will allow planners to determine the optimal timing of replacement and to establish repair schedules so that capital equipment can be maintained for its useful working life.

Step Three: Forecast Demand for Capital Items and Services

- *Forecast population and employment*
- *Use forecasts to determine areas of interest*

To create a useful CIP, township officials must take time to carefully assess the future capital needs of a community. First, it might be helpful to forecast population and employment for the township. These two factors are the most likely sources of demand for new capital. Further, demographic shifts such as an aging population may in itself require new capital projects such as a senior center. If possible, these forecasts should be classified by geographic region within the township. Some communities may have already undertaken this type of forecasting; others may need to engage in a forecasting exercise. Economic and demographic forecasts must go hand-in-hand.

In terms of population migration, communities must focus on several different groups whose migration decisions are driven by different factors. Working-age people are generally driven primarily by economic and labor force conditions, with secondary consideration given to recreational and leisure opportunities. Retiree migration is often driven by access to recreation, health care facilities and public safety, and less tied to the state of the local economy.

Economic forecasts should outline the specific industries that are expected to grow or decline over the next five to 10 years. The employment forecast should be subdivided into base and non-base industries. A base industry is one that exports goods and services to other regions and communities. Traditionally, these have been industries such as manufacturing, agriculture and mining. Today, new base industries include retail and health care services, high-tech information firms and others. Population growth that is tied to the local economy will be initially stimulated by the growth of base or export industry. Often, a local university or college may be able to assist in undertaking this type of analysis.

Using these forecasts, the CIP committee develops a list of **areas of interest** where demand for capital items and services is expected to increase. These might include areas such as:

- Economic development
- Environmental and natural resource usage
- Public safety
- Maintenance and operational costs

Step Four: Analyze and Assess Fiscal Capacity

- *Create revenue and expenditure projections*
- *Use economic and demographic forecasts from step three*

For a township to undertake the capital improving planning process, it must be able to project forward the resources that will be available to finance the proposed projects. The complexity of this task is magnified by the fact that there are several potential

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sources of revenue for a particular capital project. Each source of revenue must be scrutinized to determine its use in financing any projects. Also, township officials must combine all financing sources to ensure that the total financing sources do not exceed or overburden total community fiscal capacity.

A fiscal forecast pro forma provides a snapshot of revenue and expenditure projections for the capital budget over a five- to six-year period as part of the capital improvement planning process. Each revenue source, whether bond, general fund transfer or other source, must be presented on the table.

The economic and demographic information developed in step three can be a useful tool in determining financial forecasts. For example, population growth may drive housing prices, leading to higher property tax revenues. Township officials can consult a local university or community college for experts who can assist with determining the relationship between future fiscal capacity and demographic and economic trends.

Step Five: Establish the Policy Process

- Establish objectives for the township
- Establish level of services standards that will be applied to proposals
- Determine how to use qualitative and/or quantitative data

The policy process establishes the method by which project selection will occur. Using the areas of interest developed in step three, the CIP committee begins by developing a clear, concise set of **objectives** for the township. These objectives are based on the committee's priorities as they relate to projected future demand.

For each objective, specific **level of service standards** must be defined. These standards define the *desired* outcome of capital projects within the township. Refer to the table below for examples of potential objectives and level of service standards. Note that each objective could have multiple standards.

OBJECTIVES	LEVEL OF SERVICE STANDARDS
Increase public safety	Emergency response time
Spur economic development	Increase retail business growth
Control governmental expenditures	Capital projects must "pay for themselves"
Develop a long-term planning perspective	Emphasis placed on long-term savings
Make enjoyment of natural resources more widely available	Increase number of park acres per 1,000 residents

There are two methods that the CIP committee can use to rank proposals: quantitative and qualitative. It is essential that whichever method is selected, it is clearly communicated to all involved parties. Regardless of whether qualitative or quantitative methods are used, there are several typical criteria for ranking capital improvement projects.

Qualitative criteria are used to rank or prioritize projects based on verbal or narrative descriptions of how well a given project meets a certain objective. For example, a highway proposal might be given a high rank for meeting the objective of

public safety by reducing a series of road hazards that had caused recent accidents. The major advantage of qualitative criteria is that they are relatively easy to create for officials and staff. A major disadvantage, however, is that it may be difficult to rank projects based on descriptions.

Under the **quantitative** method, numerical rankings are given to different projects as to how well they achieve an objective. For example, the highway improvement proposal mentioned above may rank as a "5," on a scale of 1-5, in the category of public safety. This signifies that it is among the highest rated capital project for that objective. At the same time, the highway improvement may rank low relative to economic development importance. Its overall score may be in the middle of the pack.

The major disadvantage of quantitative criteria is that they require extra work to determine and apply an acceptable ranking system. Further, it is often difficult for people to rank projects; they may consider *all* projects critical or important. The major advantage is that it provides a slightly more objective ranking system and projects can be easily prioritized based on their relative score. If quantitative data is to be used on the policy process, it should be announced early to allow for data submission by the appropriate departments.

In either case, these criteria serve as the basis for prioritizing and ranking projects. But, ranking projects is only the beginning of the process.

Step Six: Develop Specific Format for Project Proposals

- Create a template for project proposals

In this step, the CIP committee needs to develop a specific set of instructions or guidelines for elected officials, departments and agencies to submit proposals. The committee itself can make some recommendations for specific capital projects, but generally recommendations will be forthcoming from officials, and department and agency heads. A specific template should be developed so that all projects submitted to the committee can be judged on a set of common criteria.

This template should include categories and level of service standards that have been developed in step five to rank project proposals. The CIP committee must provide a format for parties to submit requested information such as project description and location, construction and operational timeframe, department ranking or priority, and possible sources of revenue. The template should also include items such as



the CIP calendar and time-frame, population and employment forecasts, and asset inventories. Having a standardized form will allow for easier analysis by the CIP committee.

Step Seven: Project Ranking
→ Use criteria developed in step five to rank projects received from step six

Once proposals have been developed, the CIP committee must apply the ranking system developed in step five to each project. This will

assist them in preparing the final CIP and capital budget for review from the full legislative body. See the example below for further clarification on the ranking process.

Step Eight: Prepare Capital Improvement Plan and Capital Budget for Review and Approval by Full Township Board

→ Capital project recommendations and information to board

When all projects have been ranked according to the established process, the CIP and capital budget can be developed and sent for review to the township board. The CIP process provides transparency to the budgeting process, and supports a long-

term perspective for capital investments. (*Editor's Note: For information on financing capital improvements, refer to the June 2005 Michigan Township News cover story, or visit MTA's Web site, www.michigantownships.org, to download a PDF of the article.*)

Improving Your Township

Properly developing, monitoring and implementing a capital improvement plan leads to better, more qualified decision-making by township officials—for the betterment of their community and residents. All board members should play an active role in staying committed to a capital improvement plan.

Improvement planning keeps the township board focused on the needs of the community, and demonstrates to residents that the board has their best interest in mind at all times. Keeping residents involved and informed about capital improvements may also lead to improved community support to various projects—and help the township provide the services and programs community members want *and need*.

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Ranking Capital Improvement Projects

Parks and open space have become an important component of a community's quality of life and its ability to attract new residents and businesses. Because of the expense of obtaining access to new park space, it generally falls in the category of capital purchase.

As part of step three, the township may have identified access to park space as an **area of interest**. Specifically, the process identified that there should one acre per 1,000 residents in the township. The existing or actual level of service being provided may be .5 acres per 1,000 residents. Thus, based on its strategic plan, the community desires to obtain access to an additional .5 acres per resident. In this community of 10,000 residents, this means the township needs a total of five new acres of park space.

If the cost of another acre of park space is \$15,000, the township will require \$75,000 for five acres. There is also the ongoing maintenance cost of \$2,500 per acre annually, or \$10,000 annually to maintain the new five acres of park space. All of these factors will play a role in the township board prioritizing among projects, including the park capital project.

The second project before the board is an overhaul of the township hall heating, cooling and ventilation system (HVAC),

which is beginning to age. The total cost is \$100,000 to purchase and install the system. However, the HVAC system will lower operation costs by \$5,000 a year, due to increased efficiency.

Imagine that the township has decided that reducing operation costs and improved service delivery (defined in step five of our process) are the two objectives / level of service standards upon which to decide capital projects.

Based on our criteria, the HVAC system will rank higher than the park space on the criterion of impact on operating costs. The impact on township service delivery is unclear, but depends on the actual condition of the current HVAC system—can it be repaired or in what ultimate shape is it in? While it is desirable to have more open space, the board may decide to first purchase the new HVAC system because of its impact on operating costs and use any remaining capital funds for park space purchases. Ultimately, the park space may be purchased over a longer period of time.

With the above information, different scenarios could be examined. Of course, other factors may be important in the decision between these two projects, such as access to state grants or funding.