



County Technical Assistance Service

Published on e-Li (<https://eli.ctas.tennessee.edu>)

November 15, 2019

Capital Budgets

Dear Reader:

The following document was created from the CTAS electronic library known as e-Li. This online library is maintained daily by CTAS staff and seeks to represent the most current information regarding issues relative to Tennessee county government.

We hope this information will be useful to you; reference to it will assist you with many of the questions that will arise in your tenure with county government. However, the *Tennessee Code Annotated* and other relevant laws or regulations should always be consulted before any action is taken based upon the contents of this document.

Please feel free to contact us if you have questions or comments regarding this information or any other e-Li material.

Sincerely,

The University of Tennessee
County Technical Assistance Service
226 Capitol Blvd. Suite 400
Nashville, TN. 37219
615-532-3555 phone
615-532-3699 fax
ctas@tennessee.edu
www.ctas.tennessee.edu

Table of Contents

Capital Budgets.....	3
What is a Capital Improvements Plan?	3
Definitions for Capital Budgets.....	4
Advantages of a Capital Improvements Plan (CIP)	5
Disadvantages of a Capital Improvements Plan (CIP).....	5
Legal Authority for a Capital Improvements Plan (CIP)	5
Reasons for a Capital Improvements Plan (CIP)	5
Factors Creating the Need for a Capital Improvements Plan (CIP)	6
The CIP Cycle.....	7
Basic Steps of Establishing a CIP and Policy Considerations	7
CIP Steps 1 - 5	8
CIP Steps 6 -10	9
CIP Steps 11-16	9
Summary of Steps to Establish a CIP and Policy Considerations.....	11
Budgeting and Accounting for Capital Improvements	11
Flow of Money	11
Capital Accounting by Sub-Funds	12
Encumbrances.....	13
Accounting Procedures for Capital Improvement Projects	13
Capital Funding Sources and Debt Financing.....	13
Bonds Issued Under Local Government Public Obligations Act of 1986.....	14
General Obligation (G.O.) Bonds	14
Capital Outlay (C.O.) Notes.....	14
Bond Anticipation Notes	15
Revenue Bonds.....	15
Refunding Bonds - General Obligation and Revenue	15
Grant Anticipation Notes.....	15
Tax (Revenue) Anticipation Notes	15
School Bonds	16
Tennessee Local Development Authority Loans	16
Economic Development Bonds	17
Industrial Development Corporations	17
Industrial Building Bond Act of 1955.....	18
Industrial Building Revenue Bond Act	18
Federal Loans.....	18
Lease/Purchase Agreements	18
Other Bonds	19
Capital Construction Management.....	19
Construction Manager/Owner's Representative.....	19
Project Budget.....	20

Capital Budgets

Reference Number: CTAS-1696

Capital projects include purchases of land, buildings, and equipment; construction of buildings, roads, and bridges; renovation of buildings; and other such improvements that last for many years. Just as in the business world, governmental financing of capital projects involves short-term financing in the form of notes and permanent financing in the form of long-term notes or bonds. In some rare cases, counties levy taxes to fund capital projects. Regardless of the type of financing, the county legislative body must authorize the funding of such projects. Once the method of financing the capital project is approved, the county legislative body must establish a means of paying the principal and interest on the debt created. This process involves establishing of a debt service fund (sometimes referred to as a debt retirement or sinking fund) and imposing a tax or taxes, frequently the property tax or local option sales tax, to retire the debt.

The Tennessee State Funding Board requires counties issuing debt after January 1, 2012 to adopt a written debt management policy that must contain certain minimum requirements. This guidance is intended to guide counties in complying with the State Funding Board's requirement. The minimum topics required are-

- debt,
- transparency and disclosure,
- conflicts of interest,
- costs, and
- professionals.

Several steps are involved in initiating a capital project, often beginning with an architect or engineer. When a county decides that a capital project is necessary, the county legislative body may adopt a resolution authorizing funds to contract with an architect, engineer, or consultant service to prepare preliminary plans and cost estimates. According to T.C.A. § 62-2-107, all contracts for construction and maintenance exceeding \$50,000 must be under the supervision of a licensed architect or engineer.

Unless the county has the staff and expertise, the services of a financial advisor or bond fiscal agent may be helpful. T.C.A. § 9-21-110. An agent of this type can be of assistance to the county in preparing financial statements, legal opinions, and proper resolutions, in advertising the sale of the notes or bonds, in assisting the county in the timing of the issue, and in seeking bids for issuance. Financial advisors, bond placement agents and underwriters are required to file with the county an estimate of the cost of any debt issuance, including financial advisory fees and related fees and costs before the placement agent or underwriter enters into a bond purchase agreement or bond placement agreement with the county. T.C.A. § 9-21-151. If a county wishes to engage the services of a financial advisor, it is recommended that the county use a Request for Proposals (RFP); CTAS staff can assist the county with preparation of the RFP and solicitation of proposals.

If the county authorizes funding of bonds or notes without the assistance of a financial advisor, the county should call upon the director of local finance in the state comptroller's office or the CTAS county government consultant to provide assistance with the necessary resolutions to authorize the funding. CTAS staff may help the county in the planning stage to determine the projected cost of a debt retirement plan and projected funding sources to retire the debt.

There are many statutes authorizing both long-term notes and bonds, as well as short-term financing notes. Counties must review their financing requirements to determine which type of bonds or notes would be best for the capital project being considered. However, before considering any bond or note issue, counties are urged to seek the assistance of a financial advisor, the director of local finance in the state comptroller's office, or the CTAS county government consultant for the area.

What is a Capital Improvements Plan?

Reference Number: CTAS-1697

What is a capital improvements plan (CIP)? Why implement a capital improvements plan? Initially, local governments are required by the state or federal government or pressured by citizens to provide a service which entails purchasing or constructing what is known as a capital asset or improvement. These capital improvements are generally buildings, equipment, and land which have high costs and long lives.

Capital improvements are often used to provide new services or as a replacement for existing services. Due to the large expenses and long expected asset life, the local government should develop a plan for additions and replacement of the capital assets. Investments in capital improvements are generally expensive and in most cases the local government will issue debt to pay for capital improvements. The related debt will be paid for over a number of years in a debt service operating budget. Capital improvements generally are accounted for in a capital improvements budget as opposed to the annual operating budgets.

Operating Budget

The operating budget is an annual budget developed and approved by local government for receipt and expenditures of funds that generally have a life expectancy timeframe of less than one year. These funds are revenues, received from federal, state, and local sources and expenditures for the various services provided by the government. The expenditures would include salaries, supplies and materials, interest and principal on outstanding debt, and other current period (fiscal year) operating expenses. This budget would account for revenues and expenditures for a 12 month period referred to as a fiscal year.

Capital Improvements Budget

The capital improvements budget is a finance plan and program to purchase or contract for capital improvements—land, buildings, and other capital improvements that are considered large expenses and have a long life expectancy. Generally the funding for these capital improvements comes from the issuance of debt by bonds or notes and in some cases other revenues such as property tax and operating transfers. Generally a capital improvement budget exceeds 12 months and always extends to the completion of a specific project.

Definitions for Capital Budgets

Reference Number: CTAS-1698

- Capital Improvements—Facilities and equipment that are either required by law or necessary for public interest. Generally expensive and have long useful lives. Includes land, buildings, and equipment.
- Capital Improvements Plan (CIP)—A multi-year document used to identify needed additions and replacement improvements to your capital assets.
- Capital Improvements Financing—The mechanism that is used to provide funds to purchase improvements to your facilities. Generally funds are provided by long term bonds/notes or additional funding from recurring or excessive revenues in operating budgets.
- General Obligation (G.O.) Bonds—Debt created by local governments in the form of bonds not exceeding 40 years. Bonds are backed by the full faith and credit of the local government. Most G.O. bonds do not exceed 30 years.
- Capital Outlay Notes—Debt created by local governments not exceeding 12 years.
- Bond Anticipation Notes—Debt that does not exceed two years. Used for the purpose of delaying the issue of long term bonds in anticipation of better market conditions.
- Local Government Pools—Funds borrowed by a local government organization which is then loaned to local governments.
- Fixed Asset Accounting—An organized process of maintaining the inventory and historical costs of the capital assets of the government.
- Financial Advisor—A consultant used to assist the local government in understanding their financial plan and financial needs.
- Construction Manager—A person or firm used to assist the local government in overseeing a capital project. The manager can be an outside firm or an employee of the local government.
- Owner's Representative—Similar to a construction manager; however, generally is engaged earlier in the project's development and assists in the project's initial planning and scheduling and with the procurement of construction contracts.
- Capital Project Fund—An accounting system used to account for the revenues and expenses of the capital projects.

Advantages of a Capital Improvements Plan (CIP)

Reference Number: CTAS-1699

Some of the major advantages of a CIP are—

1. A CIP creates orderly and systematic planning for the acquisition, financing, and use of capital improvements.
2. An organized CIP provides for a more effective evaluation of alternatives and solutions than the crisis-decision process.
3. A CIP allows for a more in-depth consideration of hidden costs which affect the operating budgets.
4. A CIP provides for funding of projects on a priority basis and keeps a governmental unit within its financial bounds.
5. A CIP can provide for stable payments and tax rates over a period of time.
6. Since a CIP requires different kinds of information and involves multiple-fiscal years for project completion, a CIP developed at a different time than the operating budgets will provide for a better understanding of needs and alternatives.
7. A good CIP will promote better planning and installation or construction since the acquisition will be before the crisis time.

Disadvantages of a Capital Improvements Plan (CIP)

Reference Number: CTAS-1700

The main disadvantage of a CIP is that it requires time and effort of local government officials and staff. However, a large number of local governments in the United States feel that the effort and time is necessary to properly and efficiently manage the local government and its services.

Legal Authority for a Capital Improvements Plan (CIP)

Reference Number: CTAS-1701

Under general law each operating department is required to prepare and submit an annual operating budget to the county mayor on or before April 1 of each year or on another date specified by the county legislative body (T.C.A § 5-9-402). There is no statutory requirement for a capital improvements budget. However under the County Powers Relief Act of 2006 public chapter 953 (T.C.A § 67-4-2901) a county could be required to adopt a Capital Improvement Plan. This law is activated if a county desires to levy a tax on the privilege of residential development known as a county schools facilities tax (T.C.A § 67-4-2904). In summary, the law states a county is required to adopt a capital improvement program before passing the school facilities tax. Further the Tennessee General Assembly has recognized the needs for county governments to understand and begin documenting their infrastructure needs and has put into law public acts 1996 public chapter 817 codified as T.C.A. § 4-10-109—Inventory of Public Infrastructure Needs.

Recommended Practice: Complete and annually review the [TACIR's Public Infrastructure Needs Inventory Form](#).

Reasons for a Capital Improvements Plan (CIP)

Reference Number: CTAS-1702

One of the primary reasons for a CIP is that the stakes are high because the projects are usually very large and very expensive. A second reason is that decisions made will impact the county financially for years. A third reason is that spending will vary from year to year because needs vary from year to year. A fourth reason is that the asset service life is long and should meet the citizens' needs for the life expectancy of the asset. A secondary reason for a CIP is that the implementation of the projects will take time because of potential financing and purchasing or construction time.

In summary, reasons for a CIP include:

1. Projects are large and expensive
2. Debt financing is often used and extends for years

3. Spending varies from year to year
4. Decisions have impact for years
5. Implementation takes time and happens in stages

As of 2008, 91 of the 95 counties in Tennessee were in debt. This indebtedness is the result of capital improvements made within those counties. As of 2008, at least sixteen counties have a specific revenue source that annually funds a capital improvement fund(s). This is an increase of seven additional counties since 2006. Both of these statistics confirm that capital projects will continue to be a part of the annual operations of counties and should be considered in the overall planning process of a county's finances.

It is highly recommended that a county develop a Capital Improvement Plan.

Factors Creating the Need for a Capital Improvements Plan (CIP)

Reference Number: CTAS-1703

Initially, the local government is required by the state or federal government or pressured by citizens to provide a service. To provide these mandated services, buildings, equipment, and land must be purchased by the local government. Since these capital improvements do not last forever, local government should develop a plan to replace them or make necessary additions on a timely basis when they are needed. What factors create the need for capital improvements?

Physical Obsolescence—The physical quality of a capital improvement will deteriorate over a period of time. Buildings usually last from 30 to 50 years while equipment will last from 5 to 10 years. Land should last forever. Since this physical obsolescence can be projected, the local government should have a plan to replace or restore the item when it reaches the time and condition for replacement or restoration.

Functional Obsolescence—In many cases, buildings and equipment become functionally obsolete before they become physically obsolete. For example, a three story school building may be a sound physical structure, but it does not meet the requirements of handicapped children and fire safety. To correct these deficiencies may not be cost-effective since the building will have to be replaced before the debt created to fund the improvements is paid. Another example would be that a building may be 35 years old and require \$2 million to renovate with the new debt retirement over a 20 year period. At the end of 10 years, less than half the debt will be paid, but the local government will have a 45 year old building with a state or federal mandate requiring the replacement.

Sometimes the population shifts from one area to another in the same local government jurisdiction resulting in the land location and improvements being functionally obsolete to best serve the people. Some equipment may have a life of more than 10 years; however, the maintenance cost may be too expensive compared to a new replacement or new equipment may result in greater productivity. Whenever an item is basically sound physically but not economically, a governmental service would be functionally obsolete.

Population Growth—Because of population growth in many counties and cities, capital improvements must be added to adequately provide services. Working closely with local planning departments, local governments can analyze and project population growth which can be used to project future capital improvement needs. Also, data in the county property assessor's office, local electric departments, and school attendance records will provide information relative to population growth and its location. A state or federal mandate has often created issues related to functional obsolescence or population type issues such as reduction in pupil teacher ratios.

State and Federal Mandated Services—When the state or federal government mandates new services or the expansion of current services, the local government must plan for required capital improvements. Examples of such mandates are kindergarten education, elementary guidance counselors, ambulance service, sanitation landfills, and jail standards including additional courts, accessibility for the handicapped, bus safety standards, reduction in teacher pupil ratios, and many others.

Citizens' Pressure for Optional Services— In many cases local citizens demand optional services such as libraries, parks, civic centers, ambulance services and fire protection.

Changes in the Economic Base—The change from an agriculture and industrial economic base to a high technology base will require local governments to expand capital improvements to attract businesses. These improvements will include facilities for re-training citizens and providing facilities for management by high tech businesses. The results of a recent survey by the University of Tennessee as published in the Business Location Determinants in Tennessee indicate that local governments must prepare the

community to compete for new businesses. Of the fifteen major determinants, five would be the responsibility of the local government:

<u>Factors Essential in Choice of Location</u>	<u>Responsibility</u>
1. Existing production facilities	Business
2. Less union influence	State
3. Right to work laws	State
4. Pro-business of state government	State
5. Worker productivity (training, experience, & ability)	Local*
6. Access to current markets	Location
7. Skilled work force (training, experience, & ability)	Local*
8. Availability of credit	Business
9. Low taxes	State & Local
10. Open new markets	Business
11. Cheap and available energy	Location
12. Government support for building construction	Local*
13. Quality of life	Local*
14. Water supply	Location
15. Cheap and available land	Local*

*All of the Local responsibilities either directly or indirectly are affected by capital improvements.

The CIP Cycle

Reference Number: CTAS-1704

The following graph depicts the CIP Cycle. The steps are identifying a need, structuring a plan, securing funding for a project, purchasing or constructing a project, monitoring the construction, giving public recognition, and finally using the asset.

Basic Steps of Establishing a CIP and Policy Considerations

Reference Number: CTAS-1705

We have identified 16 steps to developing a CIP and various policy considerations within these steps. The ultimate goal for a CIP is the establishment and maintenance of credibility among departments, elected officials, and the public.

1. Study Committee of Legislative Body and Department Heads
2. Authorization Establishing the CIP
3. CIP Committee
4. Coordinator and Staff Assignments
5. Annual Calendar for CIP Preparation
6. CIP Forms
7. Public Involvement

8. Needs Analysis—Capital Investment Records
9. Consolidate Capital Improvement Project Schedule
10. Prioritizing Projects
11. Financial Analysis and Impact
12. CIP Committee’s Report and Recommendations to CLB
13. Legislative Body Consideration and Adoption
14. CIP Financial Plan
15. Implementation, Monitoring, Follow-up, and Final Inspection
16. Use the Asset

The steps are explained on the following pages.

CIP Steps 1 - 5

Reference Number: CTAS-1706

Step One—Study Committee of Legislative Body and Department Heads

Starting the process, the legislative body could appoint a committee of its members, elected officials, and local government staff to formulate a basic plan and resolution authorizing the capital improvements plan.

Step Two—Authorization Establishing the CIP

The county legislative body should authorize the capital improvements plan. This authorization is by an approved resolution. [Sample Authorizing Resolution](#).

Step Three—CIP Committee

Since local government usually involves many elected officials and various agencies, it is recommended that a committee be established with the authority to set policies and implement procedures for the CIP. The committee could be made up of legislative body members and key department heads.

Step Four—Coordinator and Staff Assignments

A person should be assigned the task of coordinating the CIP and sufficient staff should be assigned to assist the coordinator in administering the CIP.

Step Five—Annual Calendar for CIP Preparation

Below is a suggested annual calendar for preparing the capital improvement program and submitting it for approval.

<u>MONTH</u>	<u>ACTIVITY</u>
September 1	Distribute CIP manual, forms, and computer work sheets
September 15	Briefing session for all departments
October 1 to November 15	Each department prepares information
November 15	Each department submits CIP requests
December 1	Consolidate all requests into a master plan
December 15	CIP committee reviews and prepares recommendations
Jan. 1 to Jan. 31	CIP committee presents CIP to legislative body for review
Feb. 1 to Feb. 28	Legislative body holds hearings for department heads and public
March 1 to March 31	Master plan developed with modifications
March 31	Legislative body approves plan and funding
April 1	Departments begin implementing plan

CIP Steps 6 -10

Reference Number: CTAS-1707

Step Six—CIP Forms

In order to analyze the cost and priority of each capital improvement project request submitted, a form should be developed itemizing the major factors to be considered. [Sample CIP Request Form](#); the top portion or front of the form provides detailed cost and description and the bottom or back of the form provides a means to evaluate and set a priority for each project.

Step Seven—Public Involvement

The degree and amount of public involvement will depend on local conditions; however, if the project will result in a major tax increase, it is recommended that the public be involved from the beginning of the planning and evaluation. It seems that the more knowledge a person has of the problem, the more likely he or she will respond positively to a solution. The public's involvement can be achieved by issuing a [Public Survey](#).

Step Eight—Needs Analysis—Capital Investment Records

How can you make an intelligent decision unless the facts are available relative to quantity, quality, and age of facilities and equipment? Few local governments have historically maintained adequate records of capital improvements, and of these only several have all the facts readily available for use in planning the replacement of buildings and equipment. This section of your plan should show how a records and information systems could be maintained. The threshold dollar amount may vary from government to government depending on the policies they have established.

Step Nine—Consolidated Capital Improvement Project Schedule

A schedule for consolidating all capital improvement requests for the year showing the estimated cost and possible funding sources is suggested. This schedule could be used as the master listing of all projects for evaluation by the CIP Committee and legislative body. A schedule for presenting all projects closed out during the last fiscal year and all current projects is also suggested.

Step Ten—Prioritizing Projects

No perfect system has been developed for evaluating and prioritizing capital improvement projects; however the county legislative body should develop a system of prioritization which would include issues related to safety, legal, education, value of life, and conveniences.

CIP Steps 11-16

Reference Number: CTAS-1708

Step Eleven—Financial Analysis and Impact

After developing a capital improvements plan or receiving a request for capital improvements, the CIP committee and local legislative body must determine how much the local government can afford and how it will pay for the improvement. This section of your plan should discuss the logical steps in analyzing current debt requirements and funding sources. CTAS's Debt Management Workshop class discusses issues related to the county's current operating debt payments and projects future payments in a multi-year budget plan.

Public hearings and news articles seem to be the most used means of communicating with the public, but regardless of the means, the information should be correct and complete. Credibility should never be compromised by intentionally misleading the public or providing inaccurate information.

Step Twelve—CIP Committee's Report and Recommendations to Legislative Body

When all the input and documents from department heads, staff, and public have been analyzed, a report and recommendations should be given to the legislative body.

Step Thirteen—Legislative Body Consideration and Adoption

The legislative body's task is to weigh the necessity of the projects with the availability of funds and the amount of tax increase, if needed. After serious deliberations and consideration of all the facts, the adoption process of the legislative body involves three phases:

Phase One. CIP Document—The first phase is the adoption of the CIP multi-year planning document, with tentative approval of project scheduling in the second year and thereafter. It must be clear to the legislative body that the CIP document is a planning document with budget authorization and funding included in the second and third phases.

Phase Two. Capital Budget and Financing—In this phase, a capital budget is approved for various capital project funds for different departments. This authorization is for new projects to begin in the current or ensuing fiscal year, and the budget format would be similar to an operating budget except using different account numbers. Once this budget is approved, the department may begin bids and signing contracts for the projects authorized by the capital budget. A second part of this phase is to authorize funding either by issuing capital outlay notes and/or bonds. Once the capital outlay notes or bonds are approved, the local government may issue the notes or bonds immediately using a financial advisor, in most cases, or the local government may borrow temporary cash by either issuing revenue (tax) anticipation notes or bond anticipation notes. The borrowing of temporary cash is similar to construction loans used by private businesses.

Phase Three. Capital Improvement Included in Operating Budgets—In-lieu of authorizing separate capital budgets using capital project funds, the legislative body may approve the purchase of capital improvements in the operating budget for the specific department. Usually this is done when the amount of expenditure is small, and/or when funding is from accumulated funds or excess revenues in the operating budget. In some cases when the expenditure is small, capital outlay notes will be issued and the proceeds placed in the operating budget. If the expenditure is authorized in an operating budget, then the department must wait until the operating budget is approved, or a specific resolution for the expenditure is approved by the legislative body.

Step Fourteen—CIP Financial Plan

Capital funding sources include

Pay-As-You-Go

- Annual Revenue – Local Taxes
- Reserves - one time revenue as one time transfer
- Earmarked Revenue
- Special Assessments
- Impact Fees
- Grants/Donations

Debt

- General Obligation Bonds
- CON – Capital Outlay Notes
- Revenue Bonds
- Capital Leases
- Special Obligation Bonds
- Loan Pools

For additional information, see the [Capital Funding Sources and Debt Financing](#) page in e-Li.

Step Fifteen—Implementation, Monitoring, Follow-up and Final Inspection

This may be the most important step since it determines the quality of the project which in some cases could last fifty years or longer. The success of this step and project lies mainly with the department head or official; however, it should be a joint effort of the legislative body, CIP Committee, and the department head. The general areas of concern in this step, which determine the success and quality if properly and extensively managed, are the following:

1. Complete and clear specifications
2. Proper bidding and awarding of the contract
3. Complete contract with surety bond requirements
4. Constant monitoring of specifications and contract with inspection of projects
5. Monthly reporting of project progress and financial condition
6. Encumbrance (obligation) accounting, for the contract and change orders
7. Final inspection and approval by the department head, CIP Committee, and other officials responsible for the operation

Step Sixteen—Use the Asset

Finally, after all is done, the asset is ready for use.

Summary of Steps to Establish a CIP and Policy Considerations

Reference Number: CTAS-1709

A number of software packages are available to assist the local government in establishing and maintaining a Capital Improvement Plan. By implementing new accounting standards over the last number of years, counties have better and more accessible data related to their capital assets. With the use of fixed asset accounting and related software, along with insurance policies and the schedule of the insured capital assets, local officials have a baseline start on what assets are in use by the county, the age of the assets, and the intended use of the assets. A county would need to make certain that their insured assets are correctly identified and dated, and then evaluate their future life expectancy.

The process establishing a CIP program and related policy considerations vary from local government to local government based on capital improvement future needs, prior capital needs met and procedures used to meet those needs. A program identified and periodically reviewed assists the county leaders in keeping the policy makers aware of issues, needs, and considerations related to capital improvement and asset management.

Recommended Practice: Develop a CIP program by reviewing insured and inventoried assets, accounting general ledger records, and performing a simple walk around evaluation of assets and services provided by the government.

Budgeting and Accounting for Capital Improvements

Reference Number: CTAS-1710

The budget and accounting structures differ for operating budgets and capital budgets. The comptroller of the Tennessee treasury issues a uniform chart of accounts for county governments. Operating budgets include the General Fund and Fund account (101), Special Revenue Funds (111-149), and Debt Service Funds (151-159).

Capital project funds include funds for education, highways, and other general needs. These fund numbers are 171 through 189. The [How a County Budget is Organized](#) graph is a pictorial representation of the accounting structure for county governments. As such, the county government is like one company with multi-independent companies operating to create the one company. These individual companies are referred to as funds. The diagram shows the funds that have annual revenue must adopt annual budgets. Whereas capital project funds may not have annual revenue and thus annual budgets are not required. However, project budgets are highly recommended. Any issuance of debt represents approval for a project budget. If a county does put annual revenue in a capital projects fund, annual budgets must be approved.

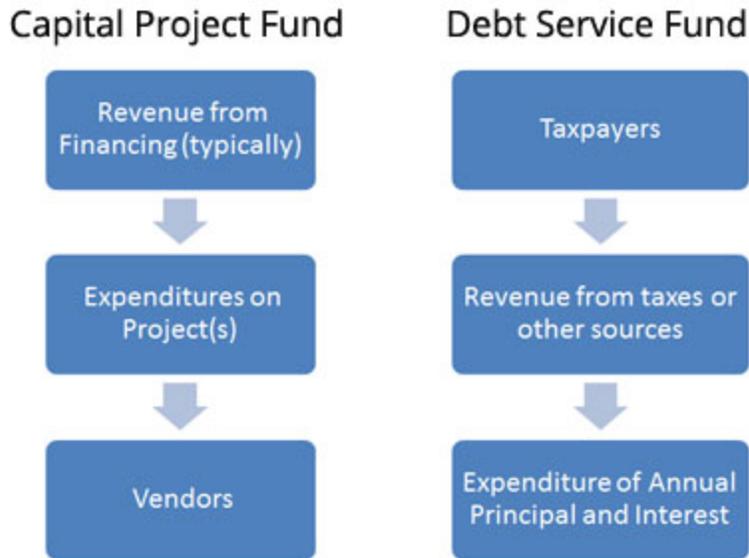
Revenue and expenses also differ for these two budgets. Annual county revenue can contribute to all funds, mainly general, special revenue and debt service. However, capital project funds are generally funded by debt, such as capital outlay notes (CON), bonds, and grants.

Flow of Money

Reference Number: CTAS-1711

One common misconception when budgeting capital projects is the difference in the flow of money between capital funds and debt service funds. Almost always revenue for debt service will come from property taxes and other county money. As we have already noted, most money for capital projects funds are borrowed from financial institution (banks) by capital outlay notes and bonds are deposited into the respective capital project fund.

The outflow of money from debt service funds and capital project funds is also different. The outflow of money from the debt service fund is to pay back the bank for the expenditures of annual principal and interest. The outflow of money from the capital projects fund is for the expenditures on projects such as paying the vendors.



Capital Accounting by Sub-Funds

Reference Number: CTAS-1712

Accounting for capital projects begins with fund number 171. The [Accounting for Capital Projects](#) diagram shows an example of accounting for capital projects by sub-funds within Fund 177. For each fund number, there is a balance sheet, statement of revenues, and statement of expenditures. Within this fund there can be sub-funds noted by three letters or numbers. Each sub-fund will also have a balance sheet, statement of revenues, and statement of expenditures. This allows for appropriate organization and documentation when maintaining the capital projects budget. Sub-fund accounting allows the managers of each project to have a separate accounting for their project and allows a separate reporting of the project to department heads, county commission, school boards, and the public. Sub-funds are often used to help insure the cost credibility of each project by not commingling funds from different projects. It is recommended that counties consider using sub-fund accounting for large individual projects and smaller projects by yearly sub-funds. Various examples are as follows:

1. A county has fire marshal deficiencies in various schools that total \$2 million dollars—the county may consider establishing a FIR sub-fund for all fire marshal improvements in their schools.
2. A county is building a new high school estimated at \$50 million dollars and a new middle school estimated at \$25 million dollars—the county may establish a HS sub-fund with \$50 million and MS sub-fund with \$25 million.
3. A county has a group of 20 small projects, some of which may take two years to complete. The total estimated cost of these projects is \$500,000 dollars. The county may establish a sub-fund 009 for these 20 projects noting that they are 2009 projects. Then the next year have a group of 2010 projects sub-fund 010. During this next year the county could still have 009 open and 010 open. A further recommendation would be that a small sub-fund be closed after the second year and any remaining funds be used for the new sub-fund year, such as 2011 or sub-fund 011.

Recommended Practice: Establish sub-funds within a Capital Project Fund if your county has a number of separate projects.

Recommended Practice: If your county has a number of capital improvement grants, you should consider establishing a Capital Project Fund and related sub-funds for the grants.

Encumbrances

Reference Number: CTAS-1713

An encumbrance is an obligation of a contract of the county's money to a vendor. Counties may have encumbrances for capital projects that will take years to complete. However, counties should encumber all of that money for the current budget year.

Accounting Procedures for Capital Improvement Projects

Reference Number: CTAS-1714

The local government accounting department should use a fund accounting system with general accounting, budgetary, and encumbrance features in order to account for capital projects.

When a contract is awarded, it should be encumbered against the authorized appropriations (budget), and when "change orders" are authorized, these should also be reflected in the accounting records. The procedures used should reflect the original approved amount for the project as a budget, the amount of contract as encumbered and any change orders for additional encumbrances, the amount paid to-date, the amount unpaid, and the unencumbered amount (available budget). Since capital projects often exceed the fiscal year, a manual accounting generally is required to reestablish the available budget and encumbrances after a fiscal year has been closed. The accountants may need to discuss specific posting with their auditors.

Status reports for the Capital Project Fund and related sub-funds should be prepared and distributed to the appropriate department heads and local legislative bodies as needed.

At stake in this process is the credibility for future projects.

Recommended Practice: File Capital Project Fund and sub-fund financial reports with the county legislative body at least quarterly for inclusion in the commission minutes. Financial credibility is at stake.

Capital Funding Sources and Debt Financing

Reference Number: CTAS-1715

When dealing with funding a capital projects program, the government should consider available funding sources. Potential sources available would be 1) annual revenue, 2) an unexpected surplus of funds a county may have from a prior year, 3) earmarking certain revenues for capital projects such as park and recreation fees, 4) impact or user fees which would be specific revenues for a specific project, and 5) grants and/or donations and debt related instruments. Most capital projects use debt related instruments to fund the projects. These instruments consist of 1) capital outlay notes (CON), 2) revenue bonds, 3) capital leases, 4) special obligation bonds, and 5) general obligation bonds. The predominant debt instruments are capital outlay notes and general obligation bonds.

It is a recommended practice that governments establish a debt financing policy which considers per capital debt ratios, multi-year debt service budgets, fund balance policies, and other ratios and statistics related to debt management. Below are various terms and definitions which the government agency should be aware.

Limit on Amount of Outstanding Debt

Since nearly all services rendered by the county are required by the state and require sizeable investments in capital improvements, counties are not limited as to the amount of indebtedness. T.C.A. § 9-21-103. However, when a county's debt ratio of outstanding debt to property values exceeds the state average or a national standard recognized by firms who trade municipal bonds, the county may pay a higher interest rate or be unable to issue additional bonds. When a county faces this problem, the county's financial advisor can offer alternatives to fund proposed projects.

Bonds Issued Under Local Government Public Obligations Act of 1986

Reference Number: CTAS-1720

This act is codified in T.C.A. §§ 9-21-101 through 9-21-1017. Its purpose was to consolidate statutes pertaining to debt obligations of the county and to provide a uniform and comprehensive statutory framework authorizing any local government to issue long-term debt to fund costly capital improvement projects.

Authorized purposes for issuing notes and bonds are listed under T.C.A. § 9-21-105(20). Also, any local government may issue general obligation bonds under this act for certain unfunded pension obligations if approved by the state funding board after receiving a recommendation by the state director of local finance. T.C.A. § 9-21-127. The powers of local governments are described in T.C.A. § 9-21-107. All interest income received by investors buying notes or bonds issued under this act is generally exempt from federal income taxes, and by statute, exempt from all state, county, and municipal taxation except inheritance, transfer, and estate taxes. T.C.A. § 9-21-117. However, there are federal restrictions regarding earnings from borrowed funds, so it is important for counties to consult with a financial advisor regarding these arbitrage regulations.

All notes issued under this act must first be authorized by resolution adopted by the county legislative body and then approved by the state director of local finance, a division of the state comptroller of the treasury. Before the director of local finance will approve notes, the county must adopt a balanced budget, which must also be approved by this same director. T.C.A. §§ 9-21-403, 9-21-404.

The bonds and notes that can be issued under the Local Government Public Obligations Act are described on the pages below.

General Obligation (G.O.) Bonds

Reference Number: CTAS-1716

G.O. bonds are usually issued for buildings and other major improvements when the life of the capital improvement will last longer than 12 years. Depending on the amount to be issued in a calendar year and current Internal Revenue Service regulations, the bonds may be exempt from federal income tax. The estimated rate of interest will be from four percent to six percent at the time of the writing of this publication. The rate will also depend on maturity of the issue and the credit rating of the issuer.

Upon the issuance of a general obligation (GO) bond, the county pledges the full faith, credit, and unlimited taxing power of the county as to all taxable property in the county or a designated portion of the county. T.C.A. § 9-21-201. These bonds may be issued with a maturity of up to 40 years; however, investors usually prefer 15 to 20 years. T.C.A. § 9-21-213(a). Counties are generally mandated to provide various services and are given the power to provide funding for these services, with certain restrictions. Under this act, registered voters may petition the county for an election on the issuance of the proposed bonds. T.C.A. § 9-21-207. Also, the county legislative body may hold a voluntary election. T.C.A. § 9-21-208. Refer to T.C.A. §§ 9-21-101 through 9-21-216 or T.C.A. §§ 49-3-1001 through 49-3-1007 for school bonds.

Capital Outlay (C.O.) Notes

Reference Number: CTAS-1721

Capital outlay notes are used by local governments to fund many types of capital improvement projects. The notes may be issued initially for a period not to exceed the end of the third fiscal year following the fiscal year in which the notes were issued, then renewed for two more such periods not exceeding three years each with the approval of the state director of local finance. At least one-ninth of the original principal amount of these notes must be retired each year, unless this requirement is waived by the state director of local finance. T.C.A. § 9-21-604. Notes also may be issued for more than three but no longer than the 12th fiscal year following the fiscal year in which the notes were issued. T.C.A. § 9-21-608. Issues of 12-year notes totaling less than \$2 million may be sold at competitive sale or through the informal bid process described in the statute; notes totaling more than \$2 million must be sold by competitive sale. T.C.A. § 9-21-608. A major advantage of issuing capital outlay notes is that the service of a fiscal advisor may not be needed. The notes are subject to the same restrictions as G.O. bonds for exemption from

federal income taxes. These notes may be issued under T.C.A. §§ 9-21-601 through 9-21-610 depending on the maturity.

Bond Anticipation Notes

Reference Number: CTAS-1722

If the market conditions are not favorable to issue G.O. bonds, a local government may issue bond anticipation notes not to exceed two two-year terms. These are obligations of the local government just like other bonds and notes; however, when the G.O. bonds are issued and the proceeds are received, these notes will be retired from the G.O. proceeds. These notes are subject to the same restrictions as G.O. bonds for exemption from federal income taxes. These notes are similar to construction loans in the business world. Using these notes allows the county time to wait for better interest rates or marketing conditions. These notes may be issued under T.C.A. §§ 9-21-501 through 9-21-505.

Revenue Bonds

Reference Number: CTAS-1723

If the capital improvement is for income producing services, such as water and sewer, the local government should consider the issuance of revenue bonds. When revenue bonds are issued, the income or revenues from the project are pledged to secure the debt. The debt will be retired from revenues or income from the user charges. These bonds may be issued under T.C.A. §§ 9-21-301 through 9-21-316.

Refunding Bonds - General Obligation and Revenue

Reference Number: CTAS-1724

When general obligation or revenue bonds are issued at high interest rates, they will have a callable feature allowing the county to recall the unpaid bonds or notes. In order to have funds to recall these bonds or notes, the county may issue refunding bonds. These bonds use the same pledge for security and replace the original issue with a lower rate of interest. By issuing the refunding bonds at a lower rate of interest, the county will save by paying less interest over the remaining term of the issue. T.C.A. §§ 9-21-901 through 9-21-1017.

Grant Anticipation Notes

Reference Number: CTAS-1725

Whenever the county has a contract to receive a grant from the federal or state government, the county can issue grant anticipation notes of up to three years, or for longer specified periods with the approval of the state director of local finance, secured by the funds to be received under the grant. T.C.A. §§ 9-21-701 through 9-21-705.

Tax (Revenue) Anticipation Notes

Reference Number: CTAS-1726

Whenever cash flow is not sufficient to meet current expenses, which usually occurs as a result of inadequate accumulated fund balances, the county may issue revenue anticipation notes, subject to the approval of the state director of local finance. An important point: These notes must be paid off by June 30th of the fiscal year in which they are issued. This requirement insures against the approval of a deficit budget. T.C.A. §§ 9-21-801 through 9-21-803.

School Bonds

Reference Number: CTAS-1731

While bonds for school capital purposes can be issued under the Local Government Public Obligations Act, many school bonds are issued under the authority of the school laws. T.C.A. §§ 49-3-1001 through 49-3-1110. These bonds can be issued for almost any school capital project: to purchase property, to erect or repair school buildings, to furnish and equip school buildings, and to refund, call, or make payments of principal and interest on previously issued bonds, as well as to contribute or make grants to state education facilities within the county or in neighboring counties. T.C.A. § 49-3-1004. They may also be issued for the purchase of buses. T.C.A. § 49-3-1006.

These bonds are general obligation bonds, backed by the full faith and credit of the county and by its taxing authority. T.C.A. § 49-3-1005. Only one resolution of the county legislative body is necessary to authorize the issuance of this type of bond. T.C.A. § 49-3-1002. School bonds are not subject to a referendum upon petition as are general obligation bonds under the Local Government Public Obligation Act; however, the county legislative body has the authority to call for a referendum by resolution to ascertain the will of the people regarding the issue. T.C.A. § 49-2-101(5). But, since the county is required to provide public education according to state laws and regulations and is frequently under a mandate to correct deficiencies, such a referendum may serve no real purpose.

School bonds may be issued for a period of up to 40 years; however, market conditions often dictate that the bonds mature in 15 to 20 years.

The law requires counties containing city schools or special school districts to distribute the proceeds from a bond issue for school capital purposes on an average daily attendance basis, unless a tax district outside the city or special school district is established. T.C.A. §§ 49-3-1003, 49-3-1005. If a tax district is not established, city systems and special school districts are entitled to a proportional share of the proceeds of a school bond issue, or they may waive their rights to such a share. T.C.A. §§ 49-3-1003, 49-3-1005. If a tax district is established so that the school bonds are payable only from funds collected outside the city or special district, then the city or special school districts do not share in the proceeds. T.C.A. § 49-3-1005(b)(2). The same sharing rules now apply to capital outlay notes and bonds issued for school capital purposes under the Local Government Public Obligations Law. However, the disposition of proceeds of any capital outlay notes issued prior to January 15, 1998, without sharing is valid unless the disposition was challenged in court before January 15, 1998. T.C.A. §§ 9-21-120, 9-21-129.

Users of a project or school credit bond project financed pursuant to the Tennessee State School Bond Authority Act (T.C.A. § 49-3-1201 *et seq.*) are prohibited from making any changes to a project or program that would affect the tax-exempt status of the bonds or notes unless the change is approved by the office of state and local finance in the office of the comptroller and the Authority. Failure to get prior approval renders the change void. T.C.A. § 49-3-1207.

Tennessee Local Development Authority Loans

Reference Number: CTAS-1727

The Tennessee Local Development Authority (T.C.A. § 4-31-101 *et seq.*) – made up of the governor, secretary of state, state treasurer, comptroller of the treasury, and commissioner of finance and administration – has statutory authority to borrow money in the name of the state and on the credit of the state, allowing it to lend funds to local governments for the following purposes:

1. Correctional facilities. T.C.A. §§ 4-31-102(5), 4-31-401 through 4-31-415.
2. Construction of sewage treatment works. T.C.A. §§ 4-31-102(5), 4-31-401 through 4-31-415.
3. Waterworks. T.C.A. §§ 4-31-102(5), 4-31-401 through 4-31-415.
4. Energy recovery facilities. T.C.A. §§ 4-31-102(5), 4-31-401 through 4-31-415.
5. Solid waste resource recovery facilities. T.C.A. §§ 4-31-102(5), 4-31-401 through 4-31-415.
6. Agriculture development. T.C.A. §§ 4-31-201 through 4-31-206.
7. Industrial development. T.C.A. §§ 4-31-301 through 4-31-308.
8. Rural fire protection equipment. T.C.A. §§ 4-31-501 through 4-31-516.
9. Airports. T.C.A. §§ 4-31-601 through 4-31-615.
10. Health facilities. T.C.A. §§ 4-31-201(5), 4-31-401 through 4-31-415, 4-31-701 through 4-31-711.

In order to borrow from the state, a local government is required to pledge its allocation of state-shared taxes to the state for the annual interest and principal payments in case the county defaults on its obligation to pay.

The Tennessee Local Development Authority, in conjunction with the Tennessee Department of Education, is authorized to develop an enhancement program whereby the authority lends funds to eligible local governments for education capital outlay purposes. Each local government issuing debt under this program, as well as any local education agency for which such debt is issued, is empowered to assign or pledge to the authority for the repayment of the loan available local capital outlay funds, including the state share of the capital outlay portion of the nonclassroom component of BEP funding.

Users of capital projects financed by the Tennessee Local Development Authority, such as counties, are prohibited from making any changes to a project or program that would affect the tax-exempt status of the bonds or notes unless the change is approved by the office of state and local finance in the office of the comptroller and the Authority. Failure to get prior approval renders the change void. T.C.A. § 4-31-120.

Economic Development Bonds

Reference Number: CTAS-1732

There are several statutes that provide for commercial or industrial development within counties through the issuance of county bonds. Counties may use the Local Government Public Obligations Act to issue such bonds. T.C.A. § 9-21-101 *et seq.* However, counties frequently use the authority granted to industrial development corporations or through the Industrial Building Bond Act of 1955.

Industrial Development Corporations

Reference Number: CTAS-1733

Most bonds for economic development at the city and county level are issued under the authority of industrial development corporations. The statutory authority for this type of bond issue is T.C.A. §§ 7-53-101 through 7-53-311. It is important to note that the Federal Tax Reform Act of 1986 limited the use of economic development bonds, which exempt interest from federal income taxation. See also T.C.A. §§ 9-20-101 through 9-20-106 for the state law on allocation of private activity bonds.

A county may authorize an industrial development corporation through a resolution of the county legislative body. T.C.A. §§ 7-53-201 through 7-53-204. Then the county legislative body appoints at least seven directors to the county-sponsored board who are responsible for authorizing all industrial development bonds and notes. T.C.A. § 7-53-301. An officer of a municipality, city manager, or other comparable chief administrative officer of a municipality may serve on the board of directors of a joint industrial development corporation, however, no other employee is eligible to serve.

The county is not liable for the principal or interest on any bonds issued through the corporation; however, the county may pledge its full faith and credit as surety on a bond issue, provided three-fourths of the county's voters approve the pledge. T.C.A. § 7-53-306. The pledge cannot exceed 10 percent of the total assessed valuation of the property of the county. T.C.A. § 7-53-307. Additionally, industrial development corporations may secure debt or obligations of their lessees. T.C.A. § 7-53-302.

After the corporation is established, a business or manufacturer desiring to move to the county or expand its facilities there contacts the industrial development board, usually through an attorney. Normally this contact is made after the business has a commitment from a financial institution to authorize the issuance of notes or bonds. Then, with the approval of the financial institution, a trustee is set up to receive the proceeds from the issue and to disburse the funds for the intended purpose. Once the project is completed, the borrower business makes regular payments to the trustee to amortize the principal and interest. The reason for issuing the bonds through a nonprofit governmental corporation is that the interest income to the lender is tax exempt. This feature will reduce the cost to the business for interest expense.

The business seeking the loan may borrow the principal through the corporation as a loan, or it may lease the property through the corporation. T.C.A. § 7-53-101. If the business borrows the principal through the industrial development corporation, then the property is owned in the name of the business, and property taxes are paid by the business as with any other commercial or industrial taxpayer. If it is a lease arrangement, the ownership of the property may be transferred to the business upon payment of the outstanding debt. In a lease arrangement through the corporation, the business does not pay real property taxes since the property is owned by the tax-exempt industrial development corporation, although the county may receive payments in lieu of property taxes. T.C.A. § 7-53-305.

Industrial development bonds may be issued for almost any industrial or business purpose as long as it complies with federal Internal Revenue regulations and T.C.A. § 7-53-101(13), and with the allocation limitation established by the state Department of Economic and Community Development under federal guidelines for income tax exempt bonds.

Industrial development corporations are required to maintain an aggregate listing of current debt, including conduit debt obligations and to file the listing with the state funding board at the end of each fiscal year. Industrial development corporations must also file notice of default on any debt obligations with the state funding board within 15 days of the default. T.C.A. § 7-53-304.

Industrial Building Bond Act of 1955

Reference Number: CTAS-1734

Bonds issued under this act are general obligation bonds of the county for which the full faith and credit and unlimited taxing power of the county are pledged in the event that rental income from the business is not sufficient to retire the debt. T.C.A. § 7-55-111. Before the bonds are issued, however, they must be approved by a three-fourths majority of the county's registered voters. T.C.A. § 7-55-107. The authority for this type of bond issue is found in T.C.A. §§ 7-55-101 through 7-55-116.

Industrial Building Revenue Bond Act

Reference Number: CTAS-1735

This act, found in T.C.A. §§ 7-37-101 through 7-37-116, allows the county to issue industrial bonds by pledging only the rental income from the business. Although there is no liability to the county, the voters must approve the issue by a three-fourths majority.

Federal Loans

Reference Number: CTAS-1728

Loans may be available to some local governments from various federal agencies, such as Farmers Home Administration. The local government is advised to check to see if such loans are available because the interest rates may be lower than the general market.

Lease/Purchase Agreements

Reference Number: CTAS-1729

Local governments may contract for the purchase of capital improvements using a contract, lease, or lease/purchase arrangement. T.C.A. § 7-51-901 *et seq.* The conditions and interest rates should be checked closely since the plan may cost more than the issuance of notes or bonds. Also, follow restrictions as prescribed in the state law authorizing the use of such agreements. Contracts should contain a "funding out" clause in the event funds are not appropriated in subsequent years. Leases for capital improvement property cannot exceed 40 years or the useful life of the project and must be approved by the county governing body. T.C.A. §§ 7-51-902 through 7-51-904. If the term of any lease exceeds five years, public notice of the meeting at which the project will be discussed must be given at least seven days prior to the meeting. T.C.A. § 7-51-904.

Recommended Practice: Use of Lease/Purchase Agreement should be carefully considered and generally not used.

Other Bonds

Reference Number: CTAS-1730

There are many other statutes that authorize the county to issue bonds. The list below includes many of them:

1. Airports. T.C.A. §§ 42-5-101 through 42-5-205.
2. Conservation of Natural Resources and Public Recreation. T.C.A. §§ 11-21-101 through 11-21-109.
3. Drainage Projects. T.C.A. §§ 69-6-101 through 69-6-1303.
4. Electrical Plants. T.C.A. § 7-52-103.
5. Electric Power Acquisition (revenue bonds). T.C.A. §§ 7-34-102, 7-34- 104.
6. Fords, Ferries and Bridges. T.C.A. §§ 54-11-101 through 54-11-308.
7. Forestry Land. T.C.A. §§ 11-23-101 through 11-23-105.
8. Garbage and Disposal Services. T.C.A. § 5-19-111.
9. Highways. T.C.A. §§ 54-9-101 through 54-9-212.
10. Housing Projects. T.C.A. §§ 7-60-101 through 7-60-217; T.C.A. §§ 13-20-501 through 13-20-614.
11. Hospitals, Metropolitan Government. T.C.A. §§ 7-57-101 through 7-57-404.
12. Levees. T.C.A. §§ 69-5-101 through 69-5-108.
13. Libraries. T.C.A. §§ 10-3-101 through 10-3-111.
14. Medical Arts Buildings. T.C.A. §§ 68-11-605 through 68-11-615.
15. Public Building Authority. T.C.A. §§ 12-10-110 through 12-10-122.
16. Recreational Land Facilities. T.C.A. §§ 11-24-103 through 11-24-110.
17. Road Improvement Districts. T.C.A. §§ 54-12-101 through 54-12-426.
18. Solid Waste Disposal. T.C.A. §§ 68-211-901 through 68-211-925.
19. Transportation System (Transit). T.C.A. §§ 7-56-101 through 7-56-109.
20. Transportation System (Rail). T.C.A. §§ 7-56-201 through 7-56-213.
21. Urban Type Public Facilities (Sewer lines, incinerators, water pipelines, and docks). T.C.A. § 5-16-106.
22. Veterans Memorials. T.C.A. §§ 58-4-208 through 58-4-218.
23. Voting Machines. T.C.A. § 2-9-111 (State Financing: T.C.A. § 2-9-112).
24. Water Supply and Waste Treatment. T.C.A. §§ 68-221-101 through 68-221-1015.
25. Watershed Districts and Projects. T.C.A. §§ 69-7-101 through 69-7-149.

Consult with a financial advisor because legal and market conditions will dictate the best method of financing the project.

Capital Construction Management

Reference Number: CTAS-1717

The project has finally been funded and its time to go to your purchasing department to requisition work to be done. Make sure you follow your local purchasing procedures and laws regarding the hiring of engineering professionals, construction managers, and contractors. Credibility is at stake when purchasing.

For information on purchasing procedures for hiring engineering professionals and construction managers, view the [Purchasing](#) topic in e-Li.

Construction Manager/Owner's Representative

Reference Number: CTAS-1718

Credibility and the availability of money are the two most important factors in current and future capital improvement plans. By credibility we mean that the project was needed, accounted for in a manner that everyone understood the cost, and that the project was completed on a timely basis meeting the scope of the proposed contract. By scope of the proposed contract we mean that the county received the quality of work for which they contracted. Therefore, when dealing with millions of dollars, it is advisable to hire a construction manager or supervisor to be an overseer and liaison to architects, contractors, and the county.

The construction manager also insures the quality of construction and helps in understanding the need for change orders and the process to get change orders approved. The construction manager should keep detailed notes of the construction process. Construction managers, engineering departments, and contractors often use Gantt Charts to reflect the timeline of projects. It is highly recommended that Gantt Charting be used in construction projects. A Gantt chart is a bar chart depicting the beginning and end date of a project, all related major (and some minor) components of the project, and how those components may interface. For example, a Gantt chart would show that excavation must take place before concrete forming and preparation for concrete pouring, but rough-in plumbing and rough-in electrical must also be completed before concrete pouring. Each component would have start and finish dates.

An Owner's Representative is an option in lieu of the use of a Construction Manager. An Owner's Representative is a person or firm who works with the county officials in some of the first steps in planning the project. The Owner's Representative becomes the county advocate for identifying the project characteristics and objectives, selecting and performing site analysis, preparing budgets and related budget controls, insuring proper procurement and identifying work scope and scheduling. If engaged at the beginning of a project, the Owner's Representative can assist in insuring that contract documents are "owner friendly" and can focus on critical preconstruction activities.

The main players in construction management are the architects, contractors, planners, engineers, and the construction manager/owner's representative. The construction manager/owner's representative focuses attention and provides work assessment on the project at hand. He/she will also incorporate quality control and provide alternate configurations of design if needed. A construction manager can be a construction management firm, a government staff member, or an outside individual hired to help oversee the project and report the day to day activities to the appropriate government official(s). A county should consider a construction manager/owner's representative when managing a capital improvement project. The county should demand Gantt charts for large capital improvement projects from their construction manager/owner's representative.

Recommended Practice: Have a Construction Manager/Owner's Representative overseeing your capital projects.

Recommended Practice: Gantt chart your capital projects.

Project Budget

Reference Number: CTAS-1719

There are several things to know in the management of a construction capital project as it relates to the budget. Was debt issued to fund the project? If so were the bonds or notes sold at a discount? Were debt issuance expenses considered? When will cash funds be available? Were contingencies and changes orders budgeted? Was interest earning anticipated? The answers to these questions are beneficial in knowing how much money is or will be available and when.

The capital project budget should include costs for bond issuance, architecture, engineering, land, and furnishings if applicable. The capital budget and accounting should be what is referred to as "Turn Key." Turn Key means all costs to start the project and costs up until the government can use the new assets. The builder locks the door (turns the key) and hands the owner the keys. In some instances the county has started a capital project out of their operating budget with the intent to repay these expenses back to the operating budget once money is borrowed. The accounting department needs to insure that proper accounting is made to incur all cost in the capital projects fund for historical and correct accounting purposes. This budget should have all accounting set up to properly segregate funds such as the retainage account. If a county anticipated a capital improvement project and will be spending funds exploring their options, it is recommended to go ahead and establish the capital projects fund and expend money from the capital project fund instead of from an operating fund.

Recommended Practice: Establish your Capital Project Fund during the planning stage of the project, making sure all costs associated with the project have been captured.

Source URL: <https://eli.ctas.tennessee.edu/reference/capital-budgets>

