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Synopsis

1) User fees are charges that governments assess to users for various goods and services. The North Carolina General Statutes authorize a local governmental unit to engage in and charge for various activities. Subject to these statutes, any service that can be divisible into units and is delivered to an identifiable user may be appropriate for user fee financing. See Exhibit A for a listing of the statutory authority to engage in and charge for user fee activities.

2) One advantage of charging user fees is that user fees help defray the cost of providing services. In addition, user fees link the benefit of services to the users of the service, reducing reliance on property taxes. Also, user fees are charged to those who utilize the services regardless of whether they live inside the taxing district. User fees can be a mechanism for allocating limited resources.

3) There are disadvantages to user fees as well. Some local governing boards are reluctant to use them because the fees are not always popular with potential voters. Unlike property taxes, user fees are not deductible from State and federal taxes. In addition, low-income users may be unable to pay for services that have user fees associated with them.

4) When setting a user fee, there are several steps a unit should follow. First, a feasibility study will need to be conducted to determine the appropriateness of charging user fees for a given good or service. Next, a cost analysis will be needed as a basis for any pricing decisions. Finally, based on the determined cost and other factors, the unit will price the service.

5) The cost analysis should consider both direct and indirect costs. Direct costs are those costs that can be specifically identified with a certain good or service. Indirect costs are not specifically assignable to a specific service and may need to be allocated to the service on a systematic and rational basis.

6) The cost of a good or service is not the only information that should be considered when making a pricing decision. Market conditions, public benefit, and demand elasticity should all be analyzed. Demand for a good or service is elastic when a price increase of some percentage causes demand to decrease by a larger percentage. Three pricing strategies available to a unit are average unit pricing, marginal cost pricing, and monopoly pricing. The option selected by the unit will depend on the unit's pricing assessment of these other variables.

7) An activity is correctly accounted for within an enterprise fund if: 1) the governing body intends to recover the costs primarily through user fees and the activities are financed and operated in a manner similar to a private enterprise, or 2) if the governing body feels that the periodic measurement of revenues, expenses, and/or net income is appropriate for capital maintenance, public policy, management control, or other purposes. Fund expenses should be classified in the correct fund by allocating shared costs between the appropriate funds. The accrual basis of accounting should be used with enterprise funds.

8) Deposits, late fees, and disconnection of service are collection devices used by public enterprises to ensure that bad debt write-offs are minimized.

Introduction

User fees are charges that governmental units assess to users for various goods and services. Though user fees are typically associated with utilities, local governments utilize user fees for a large range of goods and services. Subject to the General Statutes, any service that is divisible into units and is delivered to an identifiable user may be appropriate for user fee financing. As local governments are forced to look for additional revenue sources, user fees can be increasingly attractive alternatives to increased property taxes.

Governmental units should understand the difference between public goods and private goods and the implications of this difference for user fees. A good or service that does not directly benefit individual users is a public good. Examples of public goods include national defense and law enforcement. The nonexclusive nature of a public good means that certain citizens cannot be excluded from the benefits of the good. All citizens benefit from the existence of these public goods and all would suffer if they lapsed. The benefits to individual users of public goods are not measurable; therefore, user fees would not be feasible. These types of services, because of their nature, are typically financed with general tax levies. On the other hand, private goods or services are those that directly benefit individual users and are divisible into identifiable service units that can be charged to users. Many goods and services have characteristics of both public and private goods; the two are not mutually exclusive. The distinctions between public and private goods should be viewed as a spectrum with goods located at various points along the spectrum. Those goods and services that can be identified as private are the ones for which user fees are appropriate and often desirable.

The Advantages of User Fees

There are advantages to charging user fees. User fees can help defray the cost of providing services. Indeed, many services would not be available if not for user fees. Even when the percentage of user fees to total budgeted revenues is small, the projected user fee revenue may be significant at the decision-making level. The fate of an entire program may hinge on its ability to support itself with user fees.

In addition, user fees link the benefit of services to the users. By charging the individuals who specifically benefit from the services being provided, the reliance on property taxes and other taxes to pay for the costs of providing these services is reduced. Thus, user fees enhance equity among citizens since only the users of services pay for them and generally the fees increase as an individual's usage of the services increases. User fees also can function as a mechanism for allocating scarce resources. Free goods or services are often viewed by the public as limitless and may be used carelessly as a result. When charged for these services, the users often become more aware of their usage and subsequent waste.

The Disadvantages of User Fees

There are obstacles to charging user fees as well. Local governing boards may be reluctant to charge user fees, preferring to finance activities with general tax revenues because user fees are not always popular with the potential users. User fees do not receive the same favorable treatment on State and federal income tax returns as do deductible local property taxes. In addition, the public often feels that general tax revenues should cover the costs of providing certain services. In particular, resistance to user fees may be encountered for services that previously had been financed with general revenues.

Another disadvantage of charging user fees is the cost of collection. Typically, the cost of collection for $1 of revenue collected is less for major tax sources than for user fees. If collection costs are judged to be too high based on the revenue benefit gained from charging for the service, the governmental unit may decide to finance the services with general tax revenues.

In addition, some services, by their nature have a public benefit that cannot be overlooked. This "spillover of benefits" to nonusers will raise public resistance to user fees. Animal control, health immunizations, and solid waste control are just some examples of services that may be financed with user fees but also benefit the general public.

Finally, user fees may cause certain services to be inaccessible to the poor. The public often considers user fees to be a regressive tax on low-income users. A regressive tax is one in which the lower income users pay a larger percentage of their income for a service than higher income groups. Traditionally, regressive taxes have been met with public resistance.

Despite their disadvantages, increases in existing user fees or the institution of new fees may encounter less resistance than property tax increases. In addition, in times of fiscal stress, the revenues from user fees are less likely to be diverted to general uses than are other revenues. Indeed, G.S. 159-13(b)(14) states that no appropriations may be made from a public service enterprise or utility fund to any fund other than the appropriate debt service fund unless the total of all other appropriations within the fund equal or exceed the amount that will be required during the fiscal year, as shown by the budget ordinance, to meet operating expenses, capital outlay, and debt service on outstanding utility or enterprise bonds or notes. This statute and other legal requirements often earmark user fees, protecting them from being consumed by general revenue shortfalls.

Overview of User Fees

There are several basic steps that a local government should follow to develop user fees. First, the unit needs to conduct a feasibility study to identify the appropriateness of charging user fees for a given good or service. The local government should review any statutory or other restrictions on fees. (See Exhibit A of this section for a list of the statutory references granting units the authority to engage in and charge for various activities.) One issue local officials should address is whether it is possible to identify the users of the service. If the answer is "yes", then user fees may be appropriate.

If a governmental unit decides to charge user fees or to review the validity of existing fee levels, a cost analysis should be performed. Neither a sophisticated cost model nor a cost accounting system is needed to accomplish this task. Reviewing activities and related costs, using estimates as necessary, provides the unit with the basic tools for making critical pricing decisions. The costing of goods or services is not an exact science. There is never one right or wrong estimate. Since two services may not be performed the same way by any two units, there are many options that can be used to cost services. Because no activities of a unit are stagnant, the assumptions made in the cost analysis should be evaluated periodically.

After the cost analysis is complete, the next step is to determine a price for the good or service. When setting a price, the unit is limited to a test of reasonableness. Charges set high enough to cover operating expenses (including depreciation expenses), debt service, and capital outlay are considered to be reasonable. Besides the cost of

the service, a governmental unit also should consider consumer demand for the service and any public benefits associated with the service when setting prices for potential users.

For municipalities and counties, there are a substantial number of North Carolina General Statutes regulating public enterprises. G.S. 160A-311 through 338 governs municipal public enterprises. G.S. 153A-274 through 299.6 apply to county public enterprises. G.S. 160A-311 defines municipal public enterprises as electric power generation, transmission and distribution systems; water supply and distribution systems; sewage collection and disposal systems and facilities; gas production, storage, transmission, and distribution systems; public transportation systems; solid waste collection and disposal systems and facilities; cable television systems; off-street parking facilities and systems; airports; and structural and natural stormwater and drainage systems. G.S. 153A-274 defines a county public enterprise as the same as those of the municipalities except that counties cannot operate electric systems; gas production storage, transmission and distribution systems; or cable television services. G.S. 160A-314 empowers municipalities with the ability to fix and enforce rates for public enterprises. G.S. 153A-277 gives those same powers to counties. Various other statutes authorize counties and municipalities to engage in and charge for recreation, art galleries and museums, auditoriums, coliseums, and convention centers. Local governments can only engage in and charge for specific activities allowed by the General Statutes of North Carolina.

Costing of User Services

Once a unit decides to charge a user fee for a particular good or service, the next step is to perform a cost analysis. The cost of a service is not the only variable that the government should consider; however, sound cost analysis is a starting point for informed decision making. Cost analysis defines the service that is to be analyzed and then, using available expense/expenditure and volume information, establishes the cost of providing it. An effective cost analysis does not require a cost accounting system. At a minimum, the cost of an activity or service should include:

1) the funds directly expended for a particular activity, and

2) some allocated portion of indirect overhead expenses, such as depreciation on the buildings used to house support services, space costs of data processing activities, and accounting time utilized to provide the service.

The following discussion provides an overview of the governmental cost accounting process. For specific rate analysis and cost accounting studies, a local unit may wish to contact their CPA for assistance and advice.

Defining the Service

The first step of cost analysis is to select and define the service to be costed. To be costed, a service needs to be observable. Different observers must be able to agree on what is being done, by whom, and for whom. In addition, the service should be exclusive. That is, the personnel performing the service cannot do something else simultaneously. Finally, the service needs to be homogeneous, i.e., tasks necessary to perform the service should be basically the same each time the service is provided.

Selecting the Unit of Measurement

Next, identify the unit of measurement for the service being costed. An appropriate unit of measurement is one that is easily monitored and obviously related to the service. For example, if the service in question is a sanitary landfill operated by a county, then the unit of measurement could be the tonnage deposited into the landfill by users. For a water and sewer system, the obvious unit of measure is the gallons of water used.

After identifying the unit of measurement, the next step is to determine how to measure the volume of the services supplied. For a water system, the quantity of gallons of water could be obtained from water usage meters. For emergency medical services, the unit of measure would be the number of transports; which could be obtained from service records. Each service provided will have a different unit of measurement depending on the characteristics of that individual service. The unit of measurement and the volume of services will become the focal point of developing the cost analysis.

Utilizing Expense/Expenditure Information

The last ingredient in cost analysis is expense/expenditure information. Traditionally, governmental accounting focuses on accounting to demonstrate compliance with applicable laws and regulations. While the need to comply with these reporting requirements is indeed foremost, government managers have other information requirements that may not be satisfied by meeting the compliance reporting requirements. Cost analysis extends beyond compliance reporting to analyze the operations of a unit. For meaningful cost analysis, expenses/expenditures may need to be further organized by "cost centers". A cost center is the lowest level at which a service can be linked with the cost of providing that service.

At this point, several specific cost components should be considered. Direct costs are those costs that can be specifically assigned to a given service. For example, both the wages of an employee engaged in performing the service in question and the maintenance costs of any vehicles utilized by the service are direct costs. Direct costs are the most obvious and easily identifiable costs.

The second component of service costs is indirect costs. Indirect costs are those costs that are not specifically assignable to a particular service or cost center. If a service benefits from a particular function, the costs associated with that function are an indirect cost of the service and some portion of that function's cost should be allocated to the service. Some examples of indirect costs are accounting and data processing support services, depreciation on buildings used to house support services, or managerial support. The focus of governmental funds is on the measurement of sources and uses of current financial resources; therefore, such funds do not recognize depreciation expense. Nevertheless, units costing services of the general fund may allocate some estimated portion of depreciation for assets utilized in the generation of the service. Such an approach is often referred to as a "full-cost" basis of costing. Since indirect costs cannot be specifically identified with any one service, they will need to be allocated to the service in some way.

Allocation is the systematic and rational distribution of the costs of indirect activities to appropriate goods or services. The allocation base chosen by a local government should be the common denominator that best measures the cost of indirect activities benefiting the goods and services being provided by the unit. The allocation base chosen for

one service may not be appropriate for another. An allocation procedure should be consistent with management objectives for a specific service. Some allocations are simple. Rent can be split based on square footage. Data processing can be allocated based on the time spent at certain tasks. Property insurance can be allocated based on a valuation of assets covered. Other indirect cost allocations are not so simple. Accounting support or management do not easily lend themselves to allocation. For such items, an estimated distribution or allocation base may have to be devised. These "best-guess" allocations can be based on the percentage of cost center expenses/expenditures to total expenses/expenditures; the number of employees in a given function to total employees; department payroll amounts to total payroll; or any other proportion which is deemed appropriate by the unit. The important point to note concerning allocations is that they are only estimates. As long as the underlying assumptions are valid and the unit's management agrees on which base to choose and how to apply it, the use of allocations is an acceptable and necessary practice. After an allocation base is selected, then there are several allocation methods that local governments can use to allocate indirect costs to goods and services. See Exhibit E of this section for a discussion of allocation methods.

Once total direct costs are known and appropriate indirect costs allocated, the cost per unit should be computed, using the volume of service explained in the section "Selecting the Unit of Measurement." An example of the cost analysis process that a local unit might use is included in Exhibit B of this section. Units also may wish to contact their certified public accountant for specific costing questions and rate analysis. After the cost per unit is calculated, then pricing decisions can be addressed and forecasting or budgeting work completed. Cost analysis has an additional benefit of providing a thorough working knowledge of the unit and its activities. Understanding the service cost, its components, and its variants is just as beneficial as knowing the actual cost. This understanding is the basis for informed, effective decision making.

Pricing of User Services

Setting a price for user fees should only be done after the governmental unit has defined the service and determined its cost. A unit of government has several pricing options from which to choose: average unit pricing, marginal cost pricing, or monopoly pricing. The choice will depend on the program being priced and the government's purpose in providing the service. Whatever pricing option is selected,

the rates should be set at a level that allows the system to be self-supporting. Many times the unit's taxpayers are not the same as the users of a particular service; therefore, the equity of taxpayers' financing certain services with general tax revenue subsidies may be questioned if user fees are set too low.

Before a unit can select the appropriate pricing option, several other points also must be addressed. First, the governing body should determine whether the good or service is available from other sources, either public or private. For instance, a municipality that is operating an electric system may have private electric companies in the area whose presence will affect the municipality's pricing decisions.

Second, the unit should consider the extent to which the service benefits the general public. Even though there are many services for which user fees can be identified and collected, some items by their nature are more beneficial to the public than others. For example, public health services have an undeniable public benefit. In addition, these services may not be utilized by the public if fees are excessive. Therefore, it may be detrimental to the public good if fees for these services are set too high. It may be more beneficial to charge a nominal fee for these services. In contrast, the benefits of water and sewer service are probably limited to those individuals who are directly involved; therefore, user fees that cover all costs may be appropriate for these services.

Next, the unit should consider the effect that any fee changes will have on the demand for the good or service. When a price increase of a given percentage causes a larger percentage decrease in the demand for a service, the demand is "price elastic". If demand is price elastic, then any revenue increase resulting from a fee increase will be more than offset by a revenue decrease from the reduced quantity. If a service is considered an "extra" by the public or if there are other possible sources, then a high fee may reduce demand and total revenues will drop. Indeed, some services may not be purchased at all if the fee rises to a level that the public views as excessive.

Finally, the governmental unit should consider any limits on rate structures that may be set by statute. For example, G.S. 153A-277(a) allows a county to establish and revise rates for the services of public enterprises. These charges can vary for the same class of service within different areas of the county and also according to the class of service. Also according to G.S. 153A-277(a), the county may adopt a different rate schedule for services provided

outside the county. G.S. 160A-314(a) affords these same powers to municipalities. In addition, according to G.S. 153A-264, if a county or municipality operates or makes contributions to the support of a library, any resident of the county or municipality is entitled to free use of the library. Other statutes may apply to various other types of user fees. The local governmental unit should review the applicable statutes before setting prices for any user services.

After a local unit has determined the level of fees that it will charge for a given service, the board should formally adopt the rates in the minutes. Such rate adoptions and any subsequent rate revisions are legally independent from the adoption of an annual budget. However, once rates or fees have been adopted or revised, the unit should amend its budget as appropriate.

Average Unit Pricing

One pricing option available to a local government is average unit pricing. In average unit pricing, the average cost of the service provided is covered by user fees. All costs tend to be recovered under this option, which has the objective of covering costs and assuring that only the users are financing the service. Under this option, a governmental unit could expect to break even. That is, revenues should be approximately equal to expenses. This option is probably the most appropriate for public enterprises that are financed with user fees.

Marginal Cost Pricing

Another option available to a local government is marginal cost pricing. If the unit's objective is to encourage utilization of a service or to subsidize the cost of providing the service, then marginal costing may be an appropriate option. Marginal costs are variable costs such as direct labor or materials that vary in the same proportion that usage levels vary. Fixed costs are the costs incurred by a unit whether or not any activity occurs. Building rent or premiums for property insurance are examples of fixed costs which do not normally vary with usage levels. Under marginal cost pricing, the total costs of providing the service are further analyzed into marginal costs and fixed costs. Fixed costs are considered to be "sunk" or nonrecoverable. The only portion of the service cost that a unit operating under this option would attempt to recover from users would be the variable or marginal costs associated with that service. Since fixed costs are disregarded, the activity will always operate at a loss that

should be approximately equal to the fixed costs of providing the service. Thus, the activity will need to be subsidized by other sources. Local governments utilizing this option should be aware that all funds should be self-supporting. Unless the users of the service in question are also the taxpayers or unless the taxpayers as a group are benefiting in some way from the service being provided, the use of this option may not be appropriate. Such a pricing strategy would be appropriate for programs with a public benefit in which the unit wants to encourage use, such as health immunizations or animal control. Lower fees will tend to encourage the increased usage that is desirable for these services. This level of pricing also may be appropriate if resources are being underutilized and the local officials want to establish a price that will encourage the use of existing assets.

Monopoly Pricing

The last pricing option is monopoly pricing. Under monopoly pricing, the unit sets fee levels at a price that will allow some level of profitability. Using monopoly pricing, the governmental unit will charge the price that the market will bear, as any private business would. A municipal electrical system has a monopoly within its service area, but it usually will keep its prices in line with what private power companies charge in the surrounding areas. Thus, there is some competition. The objectives of this policy are to maximize the revenues received from the service or to allocate scarce resources. If the resources are extremely valuable and the government wants to limit usage, this option may be appropriate. For example, during a drought, water usage levels could be rationed by charging higher fees to discourage waste. A unit may select monopoly pricing to accomplish this goal. Of course, the unit should always consider the price elasticity of demand for the service when setting fees at this level. Also, prices that are set at the monopoly pricing level may violate the test of reasonableness to which governmental units are limited when setting their prices; therefore, this pricing strategy should be used cautiously and only in unusual circumstances. Use of this pricing option may cause potentially large fund balance or fund equity amounts to accumulate over time, which is not consistent with the concept of having an enterprise function as a nonprofit activity. Since taxpayers and service users are not necessarily equivalent groups, it is not appropriate for either group to subsidize the other.

Accounting for User Fee Financed Activities

Activities that are financed through user fees are most frequently perceived as being accounted for within enterprise funds, even though some user fees are placed in the general fund. NCGA Statement 1 indicates that enterprise funds should be used by local governments to account for operations:

a) that are financed and operated in a manner similar to private enterprises - where the intent of the governing body is that the costs (expenses, including depreciation) of providing goods or services to the general public on a continuous basis be financed or recovered primarily through user charges; or

b) where the governing body has decided that the periodic determination of revenues earned, expenses/expenditures incurred, and/or net income is appropriate for capital maintenance, public policy, managerial control, accountability, or other purposes.

The key point in the first statement is the intent of the governing body. If it is the intent of the unit to finance or recover costs primarily through user fees, then that activity may be appropriately accounted for within an enterprise fund. Partial financing by user fees may or may not be accounted for in an enterprise fund, depending on whether the governing body intended that the costs be financed through user fees. It is that intent, not the actuality of any results, that determines classification. The fund type should remain stable whether or not costs are actually being financed through user fees. Classification of fund type should be consistent from year to year depending on the governing body's intentions. This intent is strictly a judgement issue that is decided by the governing board, finance officer, and manager at the time a determination is made to charge user fees.

The other situation in which an enterprise fund should be utilized is where the periodic determination of revenue, expense, and net income is appropriate. Unless the activity in question meets either criteria a) or b) above, the service is more appropriately accounted for in some other fund besides an enterprise fund.

User Fees Accounted for in Enterprise Funds

Since enterprise fund activities are similar to commercial businesses, they should follow financial reporting standards similar to commercial organizations. These standards require that full accrual accounting be used and that revenues be recorded when they are measurable and earned. If an enterprise fund has provided services to customers, it has "earned" the revenues for these services and should record the associated revenues and receivables, even if the customers have not yet been billed. Two areas of concern relating to user fees that are accounted for in enterprise funds, unbilled revenues and fund reimbursements, are discussed below.

Unbilled Revenues - If a unit of government does not accrue unbilled revenues and receivables for enterprise operations at the end of a fiscal year, significant understatement of revenues can occur if these items are substantial. For example, assume that a municipality has an electric system and uses cycle billing for its operations. Electric meters are read on the 5th, 15th, and 25th of each month and the bills are distributed three days later. At June 30th, electric service has been provided for 25, 15, and 5 days, respectively, for these three cycles, none of which has been billed to customers. The service that has been provided but not billed could represent a significant amount of unrecorded receivables. Since services have been provided to customers, the unit has "earned" the revenues for the electric service and should record a revenue and a receivable for these unbilled services. The amount recorded as an adjustment will be the total amount of unbilled revenues and receivables. Receivables for individual customers will not be recorded for the unbilled services since the individual amounts are not known. The total amount of revenues and receivables for this adjustment need not be exact, but can be based on estimates. These estimates can be obtained by analyzing historical data on usage and making adjustments for differences in conditions in the current fiscal year. The estimates can be verified for accuracy in July when the actual bills are mailed. The adjusting entry can then be reversed at the beginning of the next fiscal year and the normal billing process continued. Failure to record revenues and receivables for unbilled enterprise services can cause a local government unit's financial statements to be misleading and not comparable with other units of government.

Reimbursement of Other Funds/Proper Allocation of Costs - For accounting purposes, one fund will often incur

expenses/expenditures that are in actuality those of another fund. When these expenditures occur, the fund that paid the expenditures will need to be reimbursed by the other fund to which the expenditures/expenses apply. Reimbursements are not transfers to other funds and should not be treated as such. If reimbursements are not accounted for correctly, local officials could make decisions based on misleading information. Many units of government have personnel and facilities that are utilized in both general government and enterprise operations. For these units, expenditures/expenses should be allocated appropriately between funds, otherwise amounts reported in the financial statements may be misstated. A reimbursement involves an expenditure/expense being initially charged to one fund when part or all of it should be charged or allocated to another fund. When the fund in which the expenditure/expense was originally made is repaid, this is a reimbursement. A reimbursement is accounted for by reducing the expenditure/expense in the fund in which the transaction was initially recorded and increasing the expenditure/expense in the fund to which part of the charge is being allocated. (Reimbursements should be used for shared costs and not applied to internal service funds which account for the financing of goods and services provided by one department to other departments on a cost-reimbursement basis.) The purpose of a reimbursement is to allocate the costs of shared services appropriately between the funds involved.

In contrast, a transfer involves the movement of resources from one fund to another fund for the purposes of supplementing the resources of a fund. Transfers must be approved by a unit's governing board in the budget ordinance, while reimbursements do not necessarily require board approval unless the adjustment would cause the fund's budget to be overexpended. Both reimbursements and transfers move resources, but reimbursements directly affect the expenditures/expenses recorded while transfers do not directly affect expenditures/expenses.

These concepts are highlighted in the following illustration. In this example, assume that all costs related to four employees in a finance department are $100,000 and that 60% of their time is spent on general fund activities and the remaining 40% is used in water and sewer fund activities. If the $100,000 expenditure is initially recorded in the general fund, the general fund is absorbing the entire cost, while the water and sewer fund has no costs charged to it. If the water and sewer fund transfers $40,000 to the general fund (40% of the $100,000 cost), both funds would have the appropriate amount of resources (cash); however, problems would remain. Because no adjustment of

expenditures/expenses has been made in either fund, water and sewer fund expenses would be understated by $40,000, while general fund expenditures would be overstated by $40,000. This situation properly should be handled as a reimbursement and not a transfer by reducing expenditures in the general fund and increasing expenses in the water and sewer fund by $40,000. Although the finance office was used in this illustration, other shared services such as purchasing, personnel, data processing, the manager's office, etc. should be accounted for in the same manner. Local officials should develop realistic estimates to allocate costs for shared services between appropriate funds. It is not necessary to have exact amounts to develop these estimates. Close approximations will be adequate; however, they should be based on a reasonable allocation basis (number of employees, percentage of time, square footage, etc.).

Because utility customers and property taxpayers are not necessarily the same groups of people, it is important for tax and user fee equity to ensure that the general fund and each enterprise fund are self-supporting. This means that the utility customers should not subsidize general government operations and property taxpayers should not subsidize utility services. Proper allocation of the costs of shared services is necessary to accurately determine that operations are self-supporting. It is a local governing board's decision whether resources should be moved from one fund to another through transfers; however, transactions that should be recorded as reimbursements should not be reflected as transfers.

Flexible Budgeting - A fixed budget is a budget developed without any regard for levels of activity. In a fixed budget, expenses are presumed to be the same for all levels of usage. When planning activity, fixed budgeting is limited because it may not be very realistic. Obviously, as activity levels change, certain expenses such as supplies used in the service or temporary labor required will change. Even though an annual budget will need to be adopted for the unit to comply with G.S. 159-8, the governmental unit may wish to also utilize activity-based flexible budgets for planning and management purposes. In flexible budgeting, expenses are defined as either variable or fixed, depending on the nature of the expense. Total fixed expenses will not change as activity levels change, whereas total variable expenses will change. Based on the differing activity

levels presumed in the budgetary analysis, separate revenue and expense budgets are prepared for each level of service activity. That is, the budget is "flexed" to predict the effect of different levels of activity on revenues, expenses, and, ultimately, net income.

For example, assume that a water and sewer authority is developing flexible budgets at several assumed activity levels. In the flexible budget, the variable costs such as employee labor or water treatment supplies would vary based on the total water usage. The unit cost of the variable expenses would be estimated based on a cost analysis similar to the discussion above. Assuming certain activity levels, the authority would build the flexible budget by multiplying the estimated unit cost by the assumed activity levels. Revenues also would vary depending on the same water usage estimates that the authority used to determine total variable costs. Fixed costs, on the other hand, would be the same in all the budgets prepared by the authority, regardless of activity levels. The particular flexible budget that the authority viewed as the most probable outcome would then be adopted as the annual budget as required by G.S. 159-8. The other budgets are a planning tool, often called a "what-if" analysis, that would be utilized by the authority's management.

User Fees Accounted for in Other Funds

The utilization of user fees is not always associated with enterprise funds. Unless the local government intends to finance an activity primarily through the charging of fees and the activity resembles a private enterprise, or the governing body has determined that income measurement is appropriate for capital maintenance, public policy, management control, or another purpose, then the activity is not suited to enterprise fund accounting. The user fee revenues and the related expenditures would be accounted for in some other fund, most often the general fund. To facilitate meaningful cost analysis, the expenditures associated with a particular service could be segregated into departments or separate account groups within the fund (e.g. the general fund or a special revenue fund). The related revenues also may be accounted for in separate groups of accounts.

Billing and Collection of Utility Fees

The Billing of Utility Fees

Note: This section applies specifically to the billing for water and sewer systems, gas production systems, and electric systems. Certain portions of this section may be applied to other services being provided by a unit for a fee to a customer base. The collection procedures included here will apply to any user fee collections.

New or Modified Accounts - For all customer accounts, a service address, billing address, current telephone number, social security number, and deposit amount should always be on file. The unit should have a standard application for service which the customer should complete in full before service begins. See Exhibit C of this section for a sample customer application that could be utilized by a local governmental unit. (Note: The unit should have internal controls in place to prevent the public from connecting to the water system without notifying the unit. For more details on these required controls, refer to the discussion entitled "Cycle Billing" included in this section.) For new accounts, billing schedules and rate information should be explained to the customer. A deposit should be collected at the same time the application is accepted for a new account. In addition, G.S. 160A-317(a) authorizes a municipality to require an owner of improved property that is located within the city limits or within a reasonable distance of any water and sewer collection owned or leased by the city to connect the owner's premises with the line and to fix charges for these connections.

Cycle Billing - When governmental units utilize cycle billing, the utility's customer base is divided into several different sectors or zones. The utility meters in each sector are read and the customers whose meters are located in that sector are billed at the same time. Different sectors of the customer base are billed at different times during the month. For instance, one sector may be billed on the 5th of the month, the next on the 10th, a third sector may be billed on the 15th. Cycle billing reduces billing, meter reading, and collection costs because the customer billing activity is spread throughout the month, reducing work time required at peak periods. Cash flows also are more evenly spread throughout the month.

To accomplish cycle billing, the service area should be separated into sections. The number of sections will depend on the size of the customer base and the area served. Each section will be billed in a different cycle of the billing

period. Next, each section may need to be further divided into meter reading routes. Each route will need to be of a size that can be read in one day with minimal walking and backtracking. As the route is read, both disconnected meters as well as connected meters should be read to detect system leakage or misuse. After the route is completed, the information should be returned to the office for prompt billing.

Local governments have several options relating to meter reading technology. The manual log book remains the least expensive and most commonly utilized option. With appropriate internal controls regarding the log book and the reading forms, the manual book is quite acceptable. Other available technology will allow readings to be called into the office on a radio so that they can be billed immediately. Local governments also can utilize handheld meter reading devices that already contain customer account information. The meter reader enters the usage information into the device and returns it to the office. The data keyed into the handheld device can then be downloaded directly into the local government's computer for billing. Obviously, the type of meter reading technology utilized by a local government is dependent on the size of its customer base and its financial resources.

The billing for each route should be accomplished as quickly as possible, usually within three business days after the meters are read. Meter readings that vary significantly from average usage or that look unusual in some way may need to be reread prior to billing. The unit should have an established policy on how to handle customer questions about meter readings. The format of the utility invoices should be detailed enough for customers to understand the charges. For instance, electric kilowatts or gallons of water used should be shown clearly. Payment information and due dates also should be indicated. See Exhibit D for an example of an invoice that a local government may use. The governmental unit will need to decide whether to have a minimum billing policy and the amount of the minimum bill, if appropriate.

Final Billing - Certain policies should be developed by the local governmental unit to protect against losses when a customer discontinues service. Service should be discontinued on the date indicated by the customer. When service is disconnected, a final meter reading should be taken and the account billed for all usage. At this point, the governmental unit has two options. First, the customer deposit on file can be applied against all outstanding balances. If the customer still owes the unit money, an

invoice for the balance should be sent immediately. If the deposit on file is more than the outstanding balance, the customer is due a refund and should be sent a check for any difference. The transaction should be explained in a manner that the customer can understand. The other option available to the unit is to bill the customer for the full amount of the balance due for service and return the customer's deposit after all outstanding balances have been paid. In practice, the latter is often used because of its simplicity.

According to G.S. 116B-15, any customer deposits, advances, tolls, or other property held to secure payment for utilities that are unclaimed for five or more years are considered abandoned property and will be subject to the unclaimed property requirements. Under G.S. 116B-15, customer refunds also shall be presumed abandoned if they have not been claimed within five years after the date they became payable. Prior to November 1st of each year, units that, as of the preceding June 30th, were holding property with a value of $50 or more that appeared to be abandoned property, should mail a notice of this property to the last known customer address. The statement should describe and show the value of the unclaimed property and indicate that the property will be released to the owner upon satisfactory proof of ownership. All unclaimed customer deposits, regardless of the amount, are subject to the custody and control of the State. On or before March 1st, the local government will need to file a report accounting for all escheatable property with the Escheats Office within the Department of the State Treasurer. A check in the amount of the property listed should accompany the report (Form ASD-21).

Collection of Utility Service Fees

Because of the initially large capital outlays and the ongoing expenses of operations and maintenance required for utility enterprises, timely payments for services rendered are imperative. Public enterprises are occasionally financed with revenue bonds. The most distinguishing feature of revenue bonds is that the principal and interest of the debt is repayable with the revenues generated through operations of the enterprise for which the bonds are sold. High bad debt losses and poor cash flows could endanger a unit's ability to repay this debt. Collections of fees for some services can be completed at the time the services are rendered, simplifying the billing and collection process. To help minimize bad debt losses for other services, each unit should have a collections policy that addresses deposits, late payments, service disconnections, and

write-offs of delinquent accounts. According to G.S. 160A-314(b), a municipality has the power to collect delinquent public enterprise accounts by any remedy provided by law for the collecting and enforcing of private debts. In addition, municipalities may specify by ordinance the order in which partial payments are to be applied among the various enterprise services that may be covered on a bill for services. G.S. 153A-277(b) provides these same powers to the public enterprises of a county.

Deposits - The simplest, most cost effective way for a unit to avoid bad debt losses is to require all customers to leave a deposit with the unit before any services are supplied. The deposit amount should be determined by the unit and developed in conjunction with a cut-off policy for delinquent accounts. For example, if a unit allows two months' delinquency before discontinuing service, then three months of service actually will be outstanding when service is disconnected. A policy that requires less than three months' average bills would expose the unit to a possible bad debt loss. Whatever amount the unit elects to hold in customer deposits, the funds should be deposited daily in accordance with G.S. 159-32. Moneys received from customers for deposits are not revenue but a liability and should be recorded in the accounting records as such. The subsidiary ledger of customer deposits should be reconciled with the general ledger on a regular basis and any differences resolved.

Late Fees - Another incentive to encourage timely payments is to charge customers a late fee; however, there are some additional billing and collection costs associated with this practice. Basically, there are three methods used to calculate late fees. First, a fixed fee can be charged at a specific dollar amount per billing period. The second option is to charge a set percentage of the overdue amount at the end of each period. The third and most commonly utilized option is to charge late fees to delinquent customers for the larger of a fixed dollar amount or a set percentage of the overdue amount. For larger commercial customers, the percentage of delinquent amount option probably will be the most effective because the fixed or flat fee will not normally be high enough to discourage late payments as intended. The customer should always be allowed enough time to pay the current charges for service before any late fees are assessed.

Disconnection of Service - The discontinuation of service to delinquent accounts is usually the last resort for units because of the time and expense involved. G.S. 160A-314(b) allows a municipality operating a public enterprise to

discontinue service to any customer whose account remains delinquent for more than 10 days. G.S. 153A-277(b) gives that same authority to counties. If a decision is made to not disconnect an outstanding account because a deposit that is adequate to cover any past due charges is on file, the situation should be monitored to ensure that the customer's outstanding balance does not increase to an amount greater than the deposit. When service has been disconnected, it should not be reconnected until all past due charges, late fees, disconnection charges, and reconnection charges have been paid. If a deposit is not being held, the unit should require one before service is reconnected. Of special note, some customer disconnections could cause life-threatening situations. For example, certain medical equipment demands constant electricity or water flow. The unit should make every effort to identify these cases and pursue collections through means other than service disconnection.

Write-offs of Bad Debts - Unfortunately, bad debt losses will occur and should be accounted for appropriately. In the case of accounts receivable, FASB Statement 5 requires that an allowance for uncollectible receivables be accrued when the uncollectible amount is probable and can be reasonably estimated. Accepted practice is to offset the allowance account against total accounts receivable for financial reporting purposes. Actual write-offs are charged to the allowance account. All bad debt write-offs should be approved by the finance officer and the Board. The local unit should have a policy of reporting all bad debt write-offs to a credit bureau. These customers may later be forced into paying these delinquent amounts to clear off their credit records.

In addition, strong internal controls are extremely important in the sensitive area of bad debt write-offs. The collection-related duties of accounts receivable collection and the handling of the cash receipts, should be separated if possible. In a small unit, board members may need to be involved to accomplish adequate segregation of duties. For additional suggestions to increase internal controls in the accounts receivable function, consult Section 80, Internal Controls, of this manual.

User Fees - Other than Utilities

Besides water and sewer systems, gas production systems, and electric systems, the General Statutes afford local governments the authority to engage in and charge for numerous other activities. Some of these activities and areas of concern are discussed in this section.

Emergency Services

G.S. 153A-250 authorizes a municipality or a county to grant franchises to ambulance operators. According to the statute, municipalities may operate or contract for ambulance services if:

1) the county in which the municipality is located has adopted a resolution authorizing the municipality to do so, or

2) the county has not, within 180 days after being requested by the municipality to do so, provided for ambulance services within the municipality.

As soon as possible after the services are rendered, the local government should invoice the patients for emergency services. The governing board may want to set a policy determining how often this billing is done. In most units, miscellaneous billing such as emergency service transport, medication, and associated services is handled in the finance or accounting department using work orders that should be completed at the time the service is rendered. For control purposes, the service tickets that the emergency service personnel complete should be sequentially numbered and all the ticket numbers should be accounted for to ensure that each service provided has been billed. Accounts receivable collections also should be handled by the same department, but preferably by a different person. The governing body should adopt a policy on how to handle any billings and reimbursements for those people who are unable to pay for services.

Solid Waste Collection and Disposal

The 1989 Session of the North Carolina General Assembly enacted the Solid Waste Management Act of 1989. One of the sections of this Act (amending G.S. 130A-309.08) specifies that each county and municipality will determine its full cost for solid waste management within its service area, inform users of the full cost of solid waste management, and may charge user fees for disposal of solid wastes and the initiation of recycling programs. To implement these requirements, the Act encourages counties and municipalities to use an enterprise fund to account for solid waste management activities.

New environmental restrictions and requirements for reducing the solid waste stream have caused costs for solid waste

management to increase dramatically; therefore, an accurate assessment of solid waste costs is essential. Use of an enterprise fund to account for solid waste operations, although currently optional, will assist counties and municipalities in fulfilling their responsibilities in G.S. 130A-309.08. As stated previously, because enterprise funds use full accrual accounting for financial reporting (budgeting would still be on the modified accrual basis), they are accounted for in the same way as commercial businesses. Generally accepted accounting principles allow the use of an enterprise fund for an activity if the operation is similar to a private business and the governing body intends to recover costs primarily through user fees or if the governing board decides that a determination of revenues, expenses, and net income is needed. Utilization of an enterprise fund allows the full costs of solid waste management to be determined and disclosed to citizens and users. Further, local officials can analyze whether costs are being fully recovered through user fees. An enterprise fund may be used to account for both solid waste collection and disposal (landfills). Enterprise funds also are appropriate if a county or municipality has privatized solid waste operations by contracting with a private firm to manage or provide solid waste disposal services. Even if solid waste collection and disposal has been privatized, local officials still need information on the costs of operations and adequacy of user fees to recover these costs. Consequently, enterprise fund accounting would still be appropriate.

Counties are authorized to engage in solid waste and disposal services by G.S. 153A-274, 153A-275, and 153A-292. According to G.S. 153A-292(a), the board of county commissioners may establish solid waste collection and disposal facilities in areas outside the corporate limits of a municipality. Both counties and municipalities may establish joint collection and disposal facilities. G.S. 153A-292(b) allows the board of county commissioners to impose a fee for the collection of solid waste, not to exceed the costs of collection.

Fees for the availability and use of a disposal facility that has also been provided by the county may be imposed by the board of county commissioners. Disposal fees, which should be imposed only on users, should be based on a schedule that is applied uniformly throughout the county and should not exceed the cost of operating the facility. Availability fees may not exceed the costs of providing the facility and may be imposed on any improved property in the county that benefits from the availability of the facility. Both the availability and disposal fees of a disposal

facility may be based on the combined costs of the numerous disposal facilities that a county may provide, such as recycling, composting, and incineration as well as landfills. Also, according to G.S. 153A-293, a county may adopt an ordinance providing that any fee imposed under G.S. 153A-292 may be billed and collected with property taxes. If the ordinance also states that the delinquent fees can be collected in the same manner as delinquent real property taxes, then the fees are a lien on the real property described on the bill that includes these fees. G.S. 160A-314.1(b) affords these same powers to a municipality.

A local governmental unit operating a landfill will often have an onsite weighing service. As solid waste is brought to the landfill, the waste is weighed and then buried. At the time the waste is weighed, a work order is generated for billing purposes. The customer name, complete billing address, an explanation of the charges, and the total amount of the bill should be included on the work order. Customers should be asked to sign these work orders, and they should receive a copy indicating that an invoice is pending and will follow shortly. These work orders will then be turned over to the accounting or finance office for prompt billing. Accounting or finance will be responsible for any accounts receivable collections required. As with any billing documents, the work orders should be sequentially-numbered and all the forms accounted for to ensure billing completeness and accuracy.

As a matter of policy, minimal cash should be received at the landfill site, and any cash received should be deposited daily in accordance with G.S. 159-32. Customers should always be given receipts for these cash payments. The date of the payment, the customer from whom the payment was received, and the associated work order number should be referenced on the customer's receipt. These receipts should be sequentially numbered and controlled in the same manner as the service tickets. For more information on appropriate internal controls, see Section 80, Internal Controls, of this manual.

Recreation and Cultural Activities

G.S. 160A-353 and G.S. 160A-488(a) authorize both counties and municipalities to engage in and charge for recreation, art galleries, and museums. G.S. 160A-489 authorizes municipalities to establish and support public auditoriums, coliseums, and convention centers. Because the debt service

payments on these facilities are often quite large, user fees may not be adequate to provide for debt service payments. General tax revenues often subsidize the operations and the debt service payments of these facilities. According to G.S. 153A-263, both counties and municipalities can operate and support public libraries. G.S. 153A-264 entitles any resident of a county or municipality that operates or contributes support to a public library to the free use of the library, making user fees inappropriate for libraries.

Structural and Natural Stormwater and Drainage Systems

G.S. 160A-312 authorizes a municipality to acquire, construct, or establish stormwater and drainage systems that are public enterprises. Before rates or fees are established for such systems, G.S. 160A-314(a1) requires the council or commissioners to hold a public meeting on the matter. Stormwater and drainage rates may vary based on whether the property served is residential, commercial, or industrial; the size and use of the property; the surfaces on the property; the quality and quantity of runoff from the property; and other factors that may affect the storm drainage system. The rates may not exceed the local government's cost of providing a stormwater and drainage system. G.S. 153A-275 and 277(a1) affords these same powers to counties.

Cemeteries

Only municipalities can establish and operate cemeteries according to G.S. 160A-341. G.S. 160A-347 authorizes municipalities to create perpetual care trusts with any revenues realized from the sale of cemetery lots located in the municipal cemetery or revenues resulting from the operation of municipal cemeteries. This trust fund should be held and administered by the municipality for the purpose of perpetually caring for and beautifying the municipality's cemeteries. The principal of the trust should be held intact and the income used to maintain the cemetery. Moneys held by perpetual care trust funds should be physically separated from other municipal funds and in no case can be appropriated by, lent to, or in any manner used by the municipality for any purpose other than the perpetual care of municipal cemeteries.

Exhibit A

Authority to Engage in and Charge for Activities for Which User Fees Are Appropriate

Activity	Authority to Engage G.S.	Authority to Charge G.S.
	Counties	
Water Services	153A-275	153A-277(a)
Sewer services	153A-275	153A-277(a)
Solid waste services	153A-275	153A-277(a)
	153A-292(a)	153A-292(b)
Structural and natural stormwater and drainage systems	153A-275	153A-277(a1)
Off-street parking	153A-275	153A-277(a)
Airports	63-3	63-53(3)
	63-49	153A-277(a)
	153A-275	
Bus lines	153A-275	153A-277(a)
Ambulance services	153A-250(b)	153A-250(b)
Recreation	160A-353	*160A-356
Art galleries and museums	160A-488(a)	*160A-488(b)
		153A-445(a)(4)
Auditoriums, coliseums, and convention centers	160A-489	*160A-489
		153A-445(a)(7)
	Municipalities	
Water services	160A-312	160A-314(a)
Sewer services	160A-312	160A-314(a)
Electrical services	160A-312	160A-314(a)
Gas services	160A-312	160A-314(a)
Solid waste services	160A-312	160A-314(a)
	160A-192(a)	160A-192(a)
	160A-317(b)	160A-317(b)
		160A-314.10
Structural and natural stormwater and drainage systems	160A-312	160A-314(a1)
Off-street parking	160A-312	160A-314(a)
	160A-302	160A-301(b)
		160A-302
Airports	63-2	63-53(b)
	63-49	160A-314(a)
	160A-312	
Bus lines	160A-312	160A-314(a)
Cable television systems	160A-312	160A-314(a)
Ambulance services	153A-250(c)	153A-250(c)
Cemeteries	160A-341	160A-348
Recreation	160A-353	*160A-356
Art galleries and museums	160A-488(a)	*160A-488(b)
Auditoriums, coliseums, and convention centers	160A-489	*160A-489

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* Indicated Statutes do not specifically authorize user fees. Interpretation of these statutes has led to units charging fees for these services.

EXHIBIT B

COST ANALYSIS - SOLID WASTE SERVICES - LANDFILL ENTERPRISE FUND

Carolina County operates a landfill disposal site whose two primary activities are solid waste disposal and various recycling programs. The activities are accounted for in an enterprise fund because the county intends for the user fees associated with the operation of these services to be the primary means of financing. The following is an example of a possible costing analysis that the county could use to cost these services. The analysis is strictly an example to supplement the discussion in the text. Numerous assumptions and allocations have been adopted that may or may not be valid in a local government's particular situation. The actual expenditures for the illustration have been drawn from the Carolina County illustrated financial statements included in the Audit Manual for Governmental Auditors in North Carolina. The Enterprise Funds' Combining Statement of Revenues, Expenses, and Changes in Retained Earnings (Statement 12), and the Landfill Fund's Statement of Revenues, Expenses, and Changes in Retained Earnings (Statement 14) for the fiscal year ended June 30, 19X1 were utilized in the example and are included in this exhibit.

A) Direct Expenses:
(See Statements 12 and 14 of the Carolina County illustrated financial statements.)

Each of the two activities conducted at the landfill site has a cost center associated with it. The direct operating expenses associated with each activity are itemized below. In addition, depreciation expenses for the entire Landfill Fund were $50,241 for the fiscal year ended June 30, 19X1. Based on a detailed analysis of the fixed assets records, $21,900 of the expense was determined to be directly associated with the solid waste activity and $1,100 with the recycling activity. The remainder of the depreciation expense was applicable to the general administrative expenses and will be allocated to the cost centers.

EXHIBIT B

Operating Expenses:

	Solid Waste	Recycling	Totals
Salary & benefits	$ 58,121	$ --	$ 58,121
Supplies	7,062	144	7,206
Repairs & maint.	18,401	10	18,411
Other	2,294	1,200	3,494
Total expenses	85,878	1,354	87,232
Depreciation	21,900	1,100	23,000
Total Direct Expenses	$107,778	$2,454	$110,232

B) Indirect Expenses:

Administrative expenses:	
Salary and benefits	$ 19,531
Supplies	2,488
Other expenses	2,014
Total administrative expenses	24,033
Depreciation - administrative services	27,241
Total Indirect Expenses	$ 51,274

C) Volume of Services:
(Computation is based on 19X1 revenue information contained in Statement 14 and existing pricing.)

Solid waste revenue - 19X1	$178,268
Divided by: rate charged per ton of waste (assumed)	15
Volume (in Tons) of Service Units Processed in 19X1	$ 11,885

EXHIBIT B

D) Allocation of Indirect Expenses:

Carolina County elected to allocate indirect activities within the Landfill Fund based on the landfill employees' average time spent supporting each activity. Based on employee payroll records, the time spent on solid waste services activity was an average of 98% of the total time. The total amount of indirect expenses that will be allocated to the solid waste cost center is 98% of total administrative expenses. NOTE: Any allocation method is acceptable as long as it is systematic and rational.

Total administrative expenses	$51,274
Multiplied by: Estimated percentage of employee time consumed by the solid waste activity	98%
Solid Waste Portion of Administrative Expenses	$50,249

E) Unit Cost of Solid Waste Services:

Direct costs	$107,778
Indirect costs	50,249
Total cost of services	$158,027
Divided by: Volume of waste processed in 19X1 (computed in Section C of this exhibit)	11,885
Unit Cost per Tonnage of Waste	$13.30

EXHIBIT B

Statement 12

CAROLINA COUNTY, NORTH CAROLINA
LANDFILL FUND
COMBINING STATEMENT OF REVENUES, EXPENSES, AND
CHANGES IN RETAINED EARNINGS
For the Year Ended June 30, 19X1
With Comparative Actual Amounts for the Year Ended June 30, 19X0

	Landfill Fund	Water and Sewer Fund	Totals 19X1	Totals 19X0
Operating revenues:				
Charges for services	$ 180,721	$ 780,108	$ 960,829	
Water and sewer taps	-	12,100	12,100	
Other operating revenues	100	530	630	
Total operating revenues	180,821	792,738	973,559	
Operating expenses:				
Administration	24,033	85,562	109,595	
Finance	-	33,715	33,715	
Water treatment plant	-	76,870	76,870	
Raw water pump station	-	23,949	23,949	
Water distribution	-	33,172	33,172	
Sewage collection	-	27,026	27,026	
Primary waste treatment	-	35,532	35,532	
Secondary waste treatment	-	5,869	5,869	
Landfill operations	87,232	-	87,232	
Depreciation	50,241	200,963	251,204	
Total operating expenses	161,506	522,658	684,164	
Operating income	19,315	270,080	289,395	
Nonoperating revenues (expenses):				
Interest earned on investments	917	5,043	5,960	
Interest on long-term debt	-	(101,012)	(101,012)	
Net nonoperating revenues (expenses)	917	(95,969)	(95,052)	
Net income	20,232	174,111	194,343	
Add depreciation on contributed capital	31,860	130,889	162,749	
Increase in retained earnings	52,092	305,000	357,092	
Retained earnings - July 1	290,069	414,469	704,538	
Retained earnings - June 30	$ 342,161	$ 719,469	$ 1,061,630	

EXHIBIT B

Statement 14

CAROLINA COUNTY, NORTH CAROLINA
LANDFILL FUND
STATEMENT OF REVENUES AND EXPENDITURES --BUDGET
AND ACTUAL (NON-GAAP)
For the Year Ended June 30, 19X1
With Comparative Actual Amounts for the Year Ended June 30, 19X0

	19X1			19X0
	Budget	Actual	Variance Favorable (Unfavorable)	Actual
Revenues:				
Operating revenues:				
Solid Waste charges	$ -	$ 178,268	$ -	$
Recycling	-	2,453	-	
Other operating revenues	-	100	-	
Total	172,200	180,821	8,621	
Nonoperating revenues:				
Interest earned on investments	800	917	117	
Total revenues	$ 173,000	$ 181,738	$ 8,738	$
Expenditures:				
Landfill administration:				
Salaries and employee benefits	$ -	$ 19,531	$ -	$
Supplies	-	2,488	-	
Other operating expenditures	-	2,014	-	
Total	25,000	24,033	967	
Landfill operations:				
Salaries and employee benefits	-	58,121	-	
Supplies	-	7,206	-	
Repair and maintenance	-	18,411	-	
Other operating expenditures	-	3,494	-	
Total	98,000	87,232	10,768	
Budgetary appropriations				
Capital outlays	50,000	46,559	3,441	
Total expenditures	$ 173,000	$ 157,824	$ 15,176	

Reconciliation from budgetary basis (modified accrual) to full accrual:

Total revenues	$ 181,738
Total expenditures	(157,824)
Excess revenues over expenditures	23,914
Capital outlays	46,559
Depreciation	(50,241)
Net Income	$ 20,232

EXHIBIT C

APPLICATION – UTILITY SERVICE

APPLICATION FOR WATER SERVICE

Date of Applicaton: _____

Name of Customer: _____ Cut On Date: _____

Service Address: _____ Zip Code _____

Billing Address: _____ Zip Code _____

Moving From: _____ Cut Off Date: _____

Type of Service (check):			Used For (circle one):	
Water Only	_____	Inside City	Residential	Industrial
Water & Sewer	_____	Outside City	Commercial	Other

Is plumbing complete and ready for water to be turned on? YES NO (circle one)

If no, what work is required before turn on? _____

I hereby apply for service as checked above at the address shown and agree to abide by the rules and regulations governing such service.

Signed: _____ Signed: _____

Property Owner or Lessee

****THIS SECTION FOR USE BY THE WATER DEPARTMENT****

Customer's Deposit Required:	_____	Tap Fee:	_____
Check Number & Date:	_____	Size Tap:	_____
New Location- Account Number:	_____	Old Location- Account Number:	_____
Date Cut On:	_____	Date Cut Off:	_____
Meter Number:	_____	Meter Number:	_____
Reading:	_____	Reading:	_____

Work completed by: _____

EXHIBIT D

SAMPLE INVOICE - UTILITY BILLING

Office Copy-->

RETURN TO
ANYTOWN, NC
Water Department

	Month of:
Pres. Read.	
Prev. Read.	
Consumed	
Amt. Water	$
Sewer	
Other	
Total Due	$

Cashier's Copy-->

Postcard Bill-->

Reverse Side of Postcard Bill-->

ANYTOWN, NC
Water Department

Please Enclose This Stub When Paying By Mail

Payable at the Town Clerk- Treasurer's office by the 10th of the month. If payment is not made by the 20th of the month, service will be disconnected and a fee of $25.00 may be charged before service is resumed.

You may obtain a schedule of rates at the Town Clerk's office.

NO SECOND NOTICE WILL BE GIVEN

Bring this notice with you when paying at offfice.

Exhibit E

Methods Utilized for Cost Allocation

Expenses are accumulated in two different types of departments or cost centers. First, there are the revenue-producing departments that contribute directly to the good or service being produced. The other departments are service departments, which provide services to productive departments but have no physical output of their own. The activities of service departments are indirect activities. Service departments provide services to revenue-producing departments and funds, but they also provide services to other service departments. This exhibit discusses three methods of allocating service department expenses to revenue-producing departments:
1) the direct method, 2) the step-down method, and 3) the double step-down method. The distinguishing feature between these three methods is whether service department expenses are allocated to other service departments before the total expenses of all service departments are ultimately allocated to revenue-producing departments or funds. The results obtained by each method are different; therefore, a single allocation method should be adopted by a unit and used consistently between accounting periods. All of the methods utilize the following steps:

1) Determine departmental budgeted or actual expenses.

2) Choose an allocation base (An allocation base is the common denominator that best measures the services rendered to other departments).

3) Allocate service department expenses depending on the allocation base and the allocation method selected.

4) Apply the resulting total expenses of revenue-producing departments to final products or services.

The direct method allocates the expenses of each service department to revenue-producing departments without regard to services provided to other service departments. Even though this method is widely used, it is the least accurate.

The step-down method does recognize the services rendered between service departments. With this method, the expenses of service departments are distributed both to other service departments and to revenue-producing departments. This method is not completely accurate because after a particular service department's expenses have been distributed, that department is "closed"; therefore, it does not receive any additional allocations from other service departments. The order in which departments are closed should be considered carefully; those service departments that receive the least amount of services from other departments should be closed first. Because of its simplicity and more realistic approach, the step-down method is used often.

The double step-down method is more difficult to apply than the other two methods because it utilizes linear algebra. Computer programs are available to help facilitate these computations, which can become complicated if more than two service departments are to be allocated. Basically, the double step-down method is the same as the step-down method discussed above except that service departments are not closed after the first distribution. The service department first allocated can receive additional distributions from other service departments as they are allocated. Additional amounts allocated to service departments that have already had their costs distributed also will need to be allocated until all service department expenses have been distributed to a revenue-producing department. The double step-down method recognizes the interdependence of the various service departments of a public entity. For example, the Finance Department of a municipality may serve the Water Department,

Exhibit E
(continued)

the Sewer Department, and the Maintenance Department. In addition, Finance receives janitorial services from the Maintenance Department.

To illustrate these three allocation methods, assume that a municipality has the four departments indicated below, two service departments and two revenue-producing departments. Using this data and other information needed for each allocation method, sample computations are presented.

Service Departments:	Direct Expenses
Finance (Department includes five employees and a total of 10,400 hours)	$100,000
Maintenance (Department includes four employees and a total of 8,320 hours)	50,000
Revenue-Producing Departments:	
Water Operations	250,000
Sewer Operations	100,000
Total Direct Expenses	$500,000

1. Direct Method

The allocation base selected for Finance and Maintenance departmental expenses was employee time spent on each function. Data for the allocation was obtained from time records maintained by employees on a daily basis. Assume that Finance Department personnel spent 6500 hours and 2600 hours performing services for Water Operations and Sewer Operations, respectively and that Maintenance Department employees spent 4992 hours performing services for the Water Operations Department and 1664 hours performing services for the Sewer Operations Department. Allocated departmental expenses would be computed as follows:

Departmental Expenses for Water Operations - Direct Method:

Direct Water Operations Expenses		$250,000
Allocated Finance Expenses ($100,000 X 6,500/9,100)		71,429
Explanation of Computation:		
Total Direct Finance Expenses	$100,000	
Multiplied by: Time spent on Water Operations by Finance Department employees	6,500	
Divided by: Total available hours of Finance Department employees	9,100	
Allocated Maintenance Expenses ($50,000 X 4,992/6,656)		37,500
Total Expenses - Water Operations		$358,929

Exhibit E
(continued)

Departmental Expenses for Sewer Operations - Direct Method:

Direct Sewer Operations Expenses		$100,000
Allocated Finance Expenses ($100,000 X 2,600/9,100)		28,571
Explanation of Computation:		
Total Direct Finance Expenses	$100,000	
Multiplied by: Time spent on Sewer Operations by Finance Department employees	2,600	
Divided by: Total available hours of Finance Department employees	9,100	
Allocated Maintenance Expenses ($50,000 X 1,664/6,656)		12,500
Total Expenses - Sewer Operations		$141,071

Final departmental totals, after all the allocations are complete, are as follows:

	Finance	Maintenance	Water	Sewer	Total
Total Costs	$100,000	$50,000	$250,000	$100,000	$500,000
Finance Allocation	(100,000)		71,429	28,571	
Maintenance Allocation		(50,000)	37,500	12,500	
Total Departmental Expenses	$ 0	$ 0	$358,929	$141,071	$500,000

2. Step-Down Method

In this example, assume that Finance department expenses will be the first service department expenses to be distributed based on employee time sheets as follows:

	Hours	Percentage
Maintenance	1,300	12.5%
Water Operations	6,500	62.5
Sewer Operations	2,600	25.0
Finance Distribution	10,400	100.0%

After the Finance expenses are distributed, then Maintenance expenses are allocated to the Water and Sewer Operations departments based on employee time sheets at 75% and 25%, respectively. The computation for the departmental allocations follows:

Exhibit E
(continued)

Departmental Expenses for Maintenance - Step-Down Method:		
Direct Expenses for Maintenance		$50,000
Allocated Finance Expenses ($100,000 X 1,300/10,400)		12,500
Explanation of Computation		
Total Direct Finance Expenses	$100,000	
Multiplied by: Time spent on Maintenance Department activities by Finance Department employees	1,300	
Divided by: Total available hours of Finance Department employees	10,400	
Total Maintenance Expenses		$62,500
Departmental Expenses for Water Operations - Step-Down Method:		
Direct Expenses for Water Operations		$250,000
Allocated Finance Expenses ($100,000 X 6,500/10,400)		62,500
Allocated Maintenance Expenses ($62,500 X 75%)		46,875
Explanation of Computation:		
Total Maintenance Expenses after Allocation of Finance Expenses	$62,500	
Multiplied by: Percentage based on Maintenance Department employee time sheets	75%	
Total Expenses - Water Operations		$359,375
Departmental Expenses for Sewer Operations - Step-Down Method:		
Direct Expenses for Sewer Operations		$100,000
Allocated Finance Expenses ($100,000 X 2,600/10,400)		25,000
Allocated Maintenance Expenses ($62,500 X 25%)		15,625
Total Expenses - Sewer Operations		$140,625

Exhibit E
(continued)

Therefore, final departmental expenses, after completed allocations are:

	Finance	Maintenance	Water	Sewer	Totals
Total Cost	$100,000	$50,000	$250,000	$100,000	$500,000
Finance Allocation	(100,000)	12,500	62,500	25,000	
Maintenance Allocation		(62,500)	46,875	15,625	
Total Departmental Expenses	$ 0	$ 0	$359,375	$140,625	$500,000

3. Double Step-Down

In this last example, assume that Finance expenses are distributed in the same proportions as in Example 2 above. In addition, based on employee time records, Maintenance Department expenses are distributed as follows:

	Hours	Percentage
Finance	1,664	20%
Water Operations	4,992	60%
Sewer Operations	1,664	20%
Maintenance Expense Distribution	8,320	100%

Using algebraic equations, the total Finance expenses, after the allocations are completed, will be:

$$F = 100,000 + .20M$$

In the equations, "F" equals total Finance expenses and "M" equals total maintenance expenses. The total maintenance expenses will be determined by solving the following second equation:

$$M = 50,000 + .125F$$

Substituting the second equation into the first, the new equation becomes:

$$F = 100,000 + .20(50,000 + .125F)$$

Next, solve the algebraic equation to determine the value of "F".

$$F = 100,000 + 10,000 + .025F$$

$$F - .025F = 110,000 + .025A - .025F$$

$$.975F = 110,000$$

$$.975F/.975 = 110,000/.975$$

$$F = \$112,821$$

Exhibit E
(continued)

After the value of "F" is computed, then the value of "M" can be determined by substituting the known value of "F" into the second equation as follows:

M = 50,000 + .125F

M = 50,000 + .125(112,821)

M = 50,000 + 14,103

M = 64,103

Once the total amounts of finance and maintenance expenses have been determined, the next step is to allocate these total costs out to the Water and Sewer Operations Departments based on finance and maintenance employees' time records. The allocation computation follows:

Departmental Expenses for Water Operations - Double Step-Down:

Direct Expenses - Water Operations	$250,000
Allocated Finance Expenses ($112,821 X 6,500/10,400)	70,513
Allocated Maintenance Expenses ($64,103 X 4,992/8,320)	38,461
Total Water Operations Expenses	$358,974

Departmental Expenses for Sewer Operations - Double Step-Down:

Direct Expenses - Sewer Operations	$100,000
Allocated Finance Expenses ($112,821 X 2,600/14,400)	28,205
Allocated Maintenance Expenses ($64,103 X 1,664/8,320)	12,821
Total Sewer Operations Expenses	$141,026

Exhibit E
(continued)

Therefore, under the double step-down method, the departmental expense totals are as follows:

	Finance	Maintenance	Water	Sewer	Totals
Total Direct Costs	$100,000	$50,000	$250,000	$100,000	$500,000
Finance Allocated Costs	(112,821)	14,103	70,513	28,205	
Maintenance Allocated Costs	12,821	(64,103)	38,461	12,821	
Departmental Expenses	$ 0	$ 0	$358,974	$141,026	$500,000

The method of allocation that the local government utilizes should be decided by the unit's management and governing body. While the direct method is easy to apply, it may be inaccurate if several service departments are providing services for each other. The double step-down method is the most accurate; however, it is difficult to use. The step-down method may be a good compromise. The step-down method recognizes some of the interaction between the various service departments of a local government, but does not involve the more complex mathematical computations of the double step-down method.

Once the total departmental expenses of the revenue-producing departments have been determined, then these expenses are utilized by the local government to complete a costing analysis. A discussion of the cost analysis process is included in the text, and an example is in Exhibit B of this section of the Policies Manual.