Above the Line or Below the Line, Not All Expenses are Equal

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Abstract

The subject of this paper is the different treatment of direct and indirect operating expenses and the effect on bond security and credit quality. The concept of operating expenses and priority of payment are linked with full cost accounting techniques used by many systems. Also discussed will be the impact on solid waste systems of the new accounting and financial statement model finalized by the Governmental Accounting Standards Board (GASB), in June 1999. Bond security structures have demonstrated that not all expenses are created equal. There are some expenses that may be payable after debt service. There are expenses, such as debt service on vendor bonds, that are payable as an operating expense, and are senior to the payment of debt service on net revenue bonds. Some systems have recovered indirect costs ahead of debt repayment and others have recovered these costs after payment of debt service, increasing available funds for coverage of debt service. For some systems, this additional coverage has led to higher credit ratings when coupled with conservative financial projections and sound bond security covenants.

Topics

Accounting Enhances Bond Security[1]

Solid waste systems have financed construction, expansion and improvements to solid waste system facilities through the use of debt issued in the fixed income municipal market. While other types of debt, such as general obligations may be issued, solid waste systems are generally financed with solid waste revenue bonds. The bonds are usually issued by a separate solid waste authority or agency and can also be issued by a municipal government for their public works or solid waste department. Financial operations are reported in separate financial statements. Self-supporting solid waste system debt issued by a public works or solid waste department report financial operations through a separate enterprise fund. Debt is usually repaid from "net system revenues. Revenues, expenses and net income are accounted for through generally accepted accounting principles. A complete discussion is found in Appendix I for enterprise fund accounting and in Appendix II for details of new accrual accounting regulations enacted in June 1999. Appendix III highlights full cost accounting.

Bond Security The pledge of revenues available to repay debt is governed by the legal documents, such as the bond ordinance, resolution or indenture and related contracts and agreements that underpin the collection and disposal of waste as well as operation of system facilities. Bond security provisions are assessed in relation to competition, the impact of regulatory changes, collection and disposal practices, changes in the waste supply and sources of pledged revenues. The evaluation also focuses on the economy and finances of the service area. In this manner, flow control, legal, legislative and regulatory changes are evaluated to determine any impact on bond security and credit quality. While the need for external action can be destabilizing and jeopardize credit quality the potential remains that the solutions could improve credit quality. Thus, solid waste systems are evaluated independently, based on the ability to operate as a market participant or market

regulator, with non-discriminatory procurement, in a competitive environment.

The use of full cost accounting, based on accrual accounting, identifies direct and indirect costs, and has also provided solid waste systems with a method to increase credit quality and bond security through increased debt service coverage. This has been accomplished without fee increases or expenditure reductions, enabling the systems to remain as competitive as possible, an important attribute in an increasingly competitive operating environment.

Solid waste system managers can use full cost accounting to enhance bond security as well as provide additional management information to assist in the development of financial planning, models and cost recovery. There are two changes to the legal documents necessary from standard industry practice needed to subordinate these expenses. First, the definition of "operating" expenses payable from gross revenues should be defined to include direct and indirect costs that are being subordinated. Second, the flow of funds highlights the order and priority of payment of system expenses. The recovery of subordinated expenses is after payment of debt service. Examples of bond security enhanced by the subordination of expenses include:

- Solid waste department enterprise fund accounting has identified costs per ton associated with increasing landfill capacity to provide regional disposal services. These funds are retained by the solid waste department and are deducted from revenues transferred to the municipal general fund.

- Create through the bond documents a "subordinated expense" category. The flow of funds provides for payment from net revenues after payment of debt service. The bond documents also establish the funding mechanism for required reserves and the replenishment of required reserves, funds and accounts. It should be noted that these are bond security mechanisms, created through the bond documents. While these covenants are good for demonstrating compliance with a bond covenant, they conflict with the required GAAP format, which must be presented in the financial statements. However, these covenants can be built into the bond documents as a separate reporting requirement.

Pledged Revenues: Typically, municipal revenue or project bonds are payable from pledged revenues dedicated through a "trust estate." These revenues may be derived from some combination of tipping fees, sales of energy (such as electricity or steam under energy purchase contracts), sales of reclaimed or recycled materials, or generator/stranded asset recovery fees. The latter fees can be collected with ad valorem property taxes, or with water and sewer bills, or through a separate refuse billing. They can also be paid directly to a private hauler that has the collection and disposal arrangements with a private solid waste company hauler that remits funds to the solid waste agency. Revenues can also be received from system participants through waste collection and disposal contracts or agreements. The underlying source of funds to meet municipal contract payments could be general fund appropriations or fees and charges collected with property tax or water and sewer billings It is important to evaluate the willingness and ability of the participants in the system service area to pay rates, fees and charges for solid waste collection and disposal services. The presence of laws that limit the ability to raise fees and taxes should also be considered. Tax limitation laws constrain the ability of solid waste systems to raise rates at the system board level.

Contract revenues: Following the loss of legal flow control, waste collection and disposal contracts have been executed to commit waste to a system. These are separate from operating or service contracts and agreements. Contracts and agreements can be included as both operating revenue and operating expenses. These contracts often include complex formulas used to develop fees for the service of providing collection, disposal or system operations. The formulas are evaluated to determine what expenses are payable as operating expenses from gross revenues.

It is not uncommon for the service contract to include debt service on other classes of debt; this debt could be for facilities and acquisition of landfill space. Of importance to investors and credit analysts is the priority of payment of this debt service. As an operating expense, it is payable ahead of system revenue bonds that are payable from system net revenues. Thus, it is important to assess what expenses are senior to bonds payable from pledged revenues.

Operating Expenses: Full cost accounting facilitates the identification of all resources used in solid waste management, including the direct, indirect, up-front, operating and back-end costs associated with municipal solid waste services. Full cost accounting

is based on the accrual method of accounting. The identification of costs using full cost accounting can provide separate bond security definitions of operating expenses. These definitions are included in the bond documents and coordinate with the flow of funds. These definitions of subordinated operating expenses are separate from those required under Generally Accepted Accounting Principles (GAAP) accounting. However, the willingness of system participants to delay recovery of indirect expenses until after the payment of debt service is one method to provide additional debt service coverage. Some systems have recovered indirect costs ahead of debt repayment and others have recovered these costs after payment of debt service, increasing available funds for coverage of debt service. For some systems, this additional coverage has led to higher credit ratings when coupled with conservative financial projections and sound bond security covenants.

Pass-through expenses are typically found in solid waste system operating contracts and municipal waste collection and disposal agreements. The system costs identified as "pass through" such as taxes, fees and surcharges, revenue losses from change in law, increased disposal costs, hazardous waste removal, shortfall in certain revenues, certain uncontrollable costs and consumer price increases. The ability to pass along these costs to other participants provides a steady source of income to a system. Nonetheless, it is important to evaluate the willingness, and financial ability of the participants to meet increased expenses. Where tax limitations exist, it may be difficult for a municipality to raise the needed revenue. Additionally, the budget cycle and notification mechanism is important to ensure that sufficient funds will be appropriated in sufficient time to be received by the solid waste system to provide for system operations, maintenance and debt repayment.

Income Analysis

Enterprise fund accounting can identify dedicated sources of revenues that can be pledged to repay debt issued to finance system capital improvements. These revenues are often expressed as a "net revenue" pledge and generally are the revenues available after payment of operating and maintenance expenses. Debt service expenses reported in the income statement include interest expense. Payment of principal is shown in the cash flow statement. Depreciation is a non-cash item and is added back to net income in order to determine coverage of debt service. The system's ability to operate favorably compared to its budget, provide for capital needs and minimal dependency on investment income to meet debt service ratios and coverage requirements determine its fiscal health.

Operating income is the result of total operating revenues minus total operating expenses. Net income reflects adjustments to operating income, such as transfers in or out. Operating income and net income balances may be positive, where a surplus is reported, or negative, indicating a deficit and draw upon net assets. Beginning and ending net assets should be evaluated to determine whether or not annual operations were in balance and what transfers were handled through the enterprise fund.

A priority payment structure or "flow of funds" effectively directs which expenses get paid first, second, third, etc. Under the resolution, revenues collected by the enterprise fund, together with other moneys that are available to the fund, must be sufficient to pay all administrative and operating and maintenance expenses of the system. Thus, the willingness and ability of the solid waste department, authority or underlying municipality to delay recovery of specified direct and indirect costs provide increased funds to support debt service coverage.

Debt Service Coverage

The evaluation of the enterprise fund expenses into direct and indirect as determined under accrual and full cost accounting can provide the basis for subordination of expense recovery after debt service is paid. The identification of direct and indirect costs under full cost accounting has the potential to lead to increased funds available for debt principal and interest without increasing tipping fees, user charges or contract amounts or reducing expenses. This is possible when solid waste systems have been willing to recover operating expenses after payment of bond principal and interest. These expenses are still recovered, assuming there are sufficient revenues, but are recouped in the flow of funds, after payment of principal and interest, also known as "subordination".

In addition to the use of subordination to increase debt service coverage, the financial trend analysis of the solid waste system should be satisfactory. The evaluation of the financial ability of a solid waste system to repay its debt obligations is linked to the financial trends evaluated in the income statement. The income statement provides details of the sources of revenue, such a tipping fees, sales of reclaimed or recycled products, proceeds of the sales of steam or electric energy, interest income and income received from collection and disposal contracts and service agreements with municipal and corporate system

clients. Expenses of a solid waste system are defined on a functional basis, using accrual accounting definitions for direct and indirect costs associated with system operation.

While the magnitude of increased debt service coverage may not appear significant, the ability to broaden coverage while retaining operating flexibility and competitive fees demonstrates willingness as well as ability to pay debt. Increased coverage attained without rate increases or expenditure reductions are important in a competitive operating climate. Especially when tests and covenants have tended toward greater relaxation. Evidence of this are provisions where less than 1.0x debt service coverage is provided from operating revenues due to use of non-operating revenues to meet the test. Other provisions allow retroactive rate increases and additional waste volume due to improvements to be factored into the test. These provisions could lead to the issuance of more debt than the system can service.

Another way that subordination of expenses can increase debt service coverage is to treat equity distributions to a private operator as a subordinated expense. Service contracts and agreements for system operation often have a profit margin contained in the formula. However, in some instances, separate equity distributions are made from system income. If these payments are subordinated, and paid after debt service, funds available for debt service coverage are increased. Often, legal documents will include release tests for surplus funds to ensure that coverage tests are met. Thus, funds are not released to equity stakeholders, or for capital improvements, that could have stayed in reserve funds to insulate system operations.

When the additional bond and rate covenants range from 1.0x to 1.10x, having historical and projected coverage of more ample levels, such as 1.5x and higher as a result of subordinating expenses enhances bond security. A system that recently restructured debt with a 1.20x additional bonds test, was able to increase coverage due to subordination from about 1.33x annual debt service to about 1.52x. This was especially helpful to holders of lease revenue debt. While lease revenue bondholders had a first lien on "net revenues", another class of debt service for landfill bonds was payable as a system operating expense. Total coverage of all debt from net revenues available was about 1.30x with subordination. Without subordination, just 1.0x coverage of annual debt service was anticipated. These figures were based on the projected financial results based on the feasibility study. However, they demonstrate how additional revenues can be obtained without rate increases. Higher coverage is also beneficial when expiration of key contracts for energy sales or waste collection and disposal expire prior to final maturity of debt.

Credit Fundamentals [2]

Credit fundamentals for solid waste sector debt provide indicators to determine how well the system is performing as well as provide signs of stress that could destabilize financial operations. Public and private partnerships have resulted as a loss of legal flow control evidenced by waste supply, disposal and operating contracts and agreements. These contracts and agreements have provided solutions to the loss of waste supply and revenues that resulted following the loss of legal flow control. These partnerships have led to the evaluation of solid waste system debt based on the fundamentals of project finance. This analysis blends municipal revenue bond analysis with the evaluation of the corporate and municipal participants.

The use of full cost accounting enhances the evaluation of financial feasibility studies as these projections are based on clearly defined costs of services. Per ton costs and per ton revenues can be determined. This analysis enables revenue and expense models to be developed based on the full cost of providing solid waste service. Necessary revenue and expense reductions required in order to remain competitive can be identified. Thus, sensitivity analysis can be performed to ensure sufficient funds will be available to meet debt service payments.

The credit analysis process further evaluates revenues pledged and used to derive net revenues. The analysis includes the method used to set rates, the flexibility to change rates, the billing process, the degree of operating flexibility attained from the use of rate stabilization funds, reserves for operations and maintenance and standard debt service reserves. Also evaluated is the mechanism to trigger the payment of municipal or vendor guarantees to determine that sufficient time is allotted to get necessary budgetary approvals to ensure that all payments are made on time and in full. The flow of funds is evaluated and compared with payment of operating expenses to see what get paid ahead of bonds. Some debt structures provide for both vendor and municipal debt, with debt service on vendor bonds payable as an operating expense under the service contract. In effect, the vendor debt is senior to municipal debt.

Key fundamentals of the analysis of a solid waste system include the system description and type, its operating procedures and practices, the legal covenants and litigation, the independent engineering evaluations and the system's debt position and affordability. The analysis also evaluates the waste supply trends, alternatives to the system within a transportable distance, the service area fundamentals, the system's technological suitability and its economic and competitive feasibility.

Credit Quality[3]

Fitch IBCA's credit rating is[1] the distillation of all of the credit factors and fundamentals and is a statement about the issuer's willingness and ability to repay debt on time and in full. Credit fundamentals of solid waste systems that are positive include sound historical system operations, satisfactory financial operations, a diversified and committed waste supply, and a competitive rate structure, which leads to economic flow control that provides stable revenue sources. Credit concerns include the potential of limited financial flexibility, uneconomic rate structure, and competition from other facilities within transportable distance, uncommitted waste supply and revenues dependent on tip fees.

Characteristics of a minimum investment grade rating, in the "BBB" and "A" category, include sufficient waste supply, demonstration that the service area is economically viable and stable, projections are realistic, and the system has demonstrated the ability to withstand economic and financial difficulties. The flexibility to respond to a dynamic operating climate as well as sufficient reserves and coverage are also important to attainment of the investment grade rating.

The credit quality of solid waste systems has benefited from a one notch rating increase for systems that have been able to demonstrate conservative financial projections, sound legal security provisions, good historical financial operations and a stable service area that is both willing and able to pay user charges or solid waste hauling bills. The overall credit fundamentals are important and must be attained in order for the credit quality to be enhanced by increasing the funds available for debt service.

Appendix I: Enterprise Fund Accounting[4]

The credit analysis of solid waste systems includes the evaluation of historical financial position and projections contained in the financial statements. These financial statements for local governments and municipal authorities and their enterprises report financial operations according to GAAP. The principles of GAAP are codified by GASB, the successor to the National Council on Governmental Accounting. The Government Finance Officers Association (GFOA) provides certificates of achievement for the audited comprehensive annual financial reports of municipal governments.

Governmental accounting is based on the concept of "measurement focus" and determines whether the financial statements present information based on the flow of financial resources or the flow of economic resources. Accounting conventions are based on one of the following: (a) cash, (b)-modified accrual and (c) full accrual. Cash basis of accounting records cash outlays when they are paid out for goods and services. Modified accrual accounting recognizes expenditures when the liability is incurred and paid for with current resources. Accrual accounting records costs as the services are provided, regardless of when cash payments are made. Accrual accounting also forms the basis of full cost accounting.

The financial reports prepared using GAAP, cover general operating funds, capital funds and accounts—including long-term debt accounts, and enterprise funds. Enterprise funds generally support the revenue bond debt issued to construct or improve solid waste system facilities.

Enterprise funds for governmental activities are self-sustaining cost centers, with operations similar to the private business sector. The primary purpose of establishing the fund is to isolate all solid waste revenues and expenses for purposes of accountability. When costs are clearly identified and recovered, the citizens can better understand the full cost of the solid waste management system.

Under an enterprise fund, all system revenues are deposited in the enterprise fund and pledged to the payment of system obligations, including administration, debt service, operations, maintenance, development, community information and expansion, usually in accordance with a "master authorization." The accounting of an enterprise fund is segregated from all other community obligations and operations, including the general fund. The accrual basis of accounting is used for enterprise funds, which matches revenues with expenses and reflects long-term commitments.

Enterprise funds recognize accrued interest and depreciation as periodic expenses. Enterprise fund expenses include:

- Operating and service contracts payable from gross revenues.
- Long-term obligations.
- Debt service reserve on any revenue bond issues, and payment of debt service on any community bonds that were previously issued for solid waste management activities.
- Renewal and replacement of system components.
- Closure and post closure.
- Rate stabilization amounts.

Appendix II: Accrual Accounting[5]

The data used in solid waste management decisions is based on financial reports and records kept by the solid waste system. Federal, state and local requirements, such as the EPA's requirement to demonstrate financial assurance for landfill closure and post-closure care liabilities also dictate reports. Audited financial statements provide a snapshot of the fiscal health of the solid waste system, allowing a historical trend analysis.

The GASB recently issued Statement 34 that establishes standards for new financial accounting model. This reporting a model applies the objectives set forth in concept Statement No. 1, *Objectives of Financial Reporting*. While the new model does not require full cost accounting, since full cost accounting is based on accrual accounting, it makes it easier for systems to incorporate full cost accounting in their budget, financial and management decisions.

General Highlights: Highlights of the new financial reporting model include:

- Management discussion and analysis of the overall financial position and prior year's results.
- Government wide financial statements using full accrual accounting for all governmental activities, not just those covered by fees for services. Accrual accounting reports all revenues and costs of providing services and includes capital assets and long-term liabilities.
- Statement of activities reports the net costs of governmental functions.
- Statement of cash flows for those that use enterprise reporting. Preparation of cash flow statements. Four categories of cash flows provide for operating, non-capital financing, capital and related financing and investments.
- Cash flows from operations to be presented using the direct method for those that use enterprise reporting.
- Note disclosures including summary of significant accounting policies, changes in capital assets and long-term liabilities and segment reporting. Any material changes in closure and post-closure care costs arising from a change in assumptions, engineering firms or use of permitted areas within the landfill may be disclosed in the notes.

There are several components to the model that affect solid waste systems. Landfills that are component units or an activity within a primary government will have to implement the reporting changes at the same time as the primary government. The transition period is based on total revenues (governmental and enterprise funds in the first fiscal year ending after June 15, 1999). Governments with revenues of over $100 million are required to apply the new standard by fiscal years beginning after June 15, 2001. Smaller entities will have an additional one to two years for implementation.

Solid Waste Systems: Some of the implications arising from Statement 34, as they pertain to solid waste systems include:

- Stand-alone or component unit landfills will be required to adopt the new model. However, both sets of financial statements (government wide and fund statements) will be required if they are currently using governmental fund accounting and are not required to change to enterprise fund accounting based on the new definition which establishes new minimum requirements for enterprise fund reporting.
- Management discussion and analysis may include the status of operating permits within the state and federal environmental protection agencies or changes in closure and post closure requirements and approved changes in tip fees.
- Government wide reporting model measures economic resources on an accrual basis. Therefore, all landfills will report using full accrual accounting regardless of how they are financed or the fund types used to report them.
- Full cost accounting, which has its basis in accrual accounting, is not required. However, the EPA and GFOA have prepared handbooks and worksheets for implementation of full cost

accounting in order to provide better management information.

- Statement of net assets reports all assets, including infrastructure, and liabilities and is presented in a net asset or balance sheet format. Invested capital assets, net of related debt, and restricted and unrestricted net assets are reported. Restricted amounts are net assets that have constitutional or legislative constraints on use, such as laws restricting the use of tipping fees. These net assets are also restricted by external actions, such as debt covenants contained in legal documents. Restricted reserves include those for landfill closure and post-closure care.

- Reporting for general infrastructure assets is required under the model for the first time under two alternatives. Historical cost-based depreciation or a modified approach, which assessed the condition of the system, may be used to determine the cost of services. Landfills that have been previously reported as enterprise funds currently report all assets, including infrastructure. Although solid waste system assets that require reporting were not specifically identified in Statement 34, leachate collection system, roads in landfill and solid waste landfills, etc. are reportable. For those landfills that currently are reported in governmental funds, a transition period of, generally four years beyond the initial effective date of Statement 34 is provided for the retroactive reporting of infrastructure assets.

- Solid waste systems with a landfill are required to provide for landfill closure costs, including expenses associated with post-closure care continues under GASB Statement 18.

- Direct method for reporting cash flows will provide users with better information about cash inflows and outflows from operations.

Appendix III: Full Cost Accounting[6]

Full cost accounting is based on the accrual method of accounting, According to the EPA definition, "full cost accounting is a method of accounting for all monetary costs of resources used or committed, thereby providing the "whole picture" of municipal solid waste management on an ongoing basis."[7] Full cost accounting provides useful management information to explain costs and rate increases and assists in determining the actual costs of the services provided. Full cost accounting can provide greater information for preparing budgets and evaluating prospective economic feasibility.

Managerial Tool: Management decisions on the financial aspects of solid waste systems cover numerous areas, including:

- Waste collection agreements and contracts.
- Waste disposal agreements and contracts.
- Solid waste revenues.
- Household user fees.
- Solid waste benefit assessments.
- Tipping fees.
- Inter-local contracts.
- Facility operating agreements and contracts.
- Financial feasibility analysis.
- Price of energy sales.
- Price of sales of reclaimed products.

Full cost accounting can assist solid waste managers with revenue and expense data to enable effective rate setting for household user charges, tipping fees and charges under service contracts. Information may also be developed to determine capital costs for new or upgraded facilities and prepare more comprehensive budget requests.

Costs Identified: Full cost accounting does not take into consideration environmental, health and social costs. Full cost accounting recognizes the following costs: [8]

- Up-front costs comprising the initial investments and expenses in order to implement municipal solid waste services, such as the expenses associated with public education and outreach, land acquisition, permitting, building construction and modification, equipment and vehicles that are depreciated. It is important to uncover hidden costs and avoid overstating up-front costs by including both price and depreciation. Up-front outlays should be depreciated under full cost accounting. Land is not depreciated nor is leased equipment and structures.
- Operating costs for daily management of the system, such as personnel, legal, overhead, and lies.
- Back-end costs to end operations, including landfill closure and post-closure care as well as post-employment health and retirement benefits for employees. Back end costs are not depreciated but are amortized.

The full cost of solid waste management services includes all direct and indirect costs associated with each element of service-collection, processing, and

disposal, recycling and other. Most local government accounting focuses on the use of financial resources as measured by cash flow or general fund accounting. Full cost accounting focuses on the flow of economic resources and assets as a better measure of the costs of municipal solid waste management because it recognizes the full cost of all resources used or committed in support of operations.

The EPA has an extensive website and has completed a Handbook, case studies and workshops on full cost accounting. Under a cooperative agreement with the GFOA a full cost accounting workbook and electronic spreadsheets are being tested.[9]

Direct Costs: Direct costs include all expenditures made during a calendar year that are directly attributable to the provision of solid waste management services. Many of these costs would need to continue even if the landfill closed; for example, certain employee benefits and closure costs as well as:

- Personnel salaries and benefits.
- Landfill closure and post-closure.
- Personal services and benefits.
- Supplies.
- Depreciation.
- Interest on long-term debt.
- Amortization of landfill closure and post-closure.
- Contract services.
- Rents and leases.
- Building and vehicle maintenance.

Indirect Costs: Indirect costs include those costs resulting from support or services provided by one governmental department to other departments or service providers. These costs can also be termed as "overhead" costs and include:

- Payroll accounting.
- Data processing.
- Administration and executive management.
- Purchasing.
- Records management.
- Legal and other staff or departmental services.
- Oversight services by municipal officials.
- Human resources and training expenses.

Appendix IV: Acknowledgements, Bibliography And References

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Above The Line Or Below The Line: All Expenses Are Not Equal

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Senior Director

All Expenses are Not Equal

- Analysts view of operating expenses
- Derived term under financing documents
- Identify expenses that can be recovered using full cost accounting
- Profile system expenses under contracts and agreements
- Demonstrate increased bond security coverage

Solid Waste Sector Trends

- Litigation and legislation
- Environmental regulations
- Accounting regulations
- Formalizing public and private partnerships
- Contracts and agreements
- Revenue diversification
- Tax and revenue limits

How do I evaluate my system?

- **System services and facilities**
- **Vendor services and ability to perform**
- **Bond security**
- **Service contracts**
- **Service area ability and willingness to perform**
- **Feasibility analysis**

Solid Waste System Diagnostic Fundamentals

- **System description and type**
- **Operating procedures**
- **Legal covenants and litigation**
- **Independent evaluations**
- **Debt position**

Solid Waste System Diagnostic Fundamentals

- **Waste supply**
- **Alternatives**
- **Service area fundamentals**
- **Technology**
- **Economic feasibility**

How can I increase system $$$?

- **Increase supply via competitive rates and fees**
- **Diversify revenue structure**
- **Identify all expenses and pass-through costs**
- **Cost allocation and recovery**

Operating Revenues

- **Tip fees**
- **Generator fees**
- **Reclaimed materials**
- **Energy sales**
- **Collection and disposal contracts**
- **Service agreements**

Operating Expenses

- **Staff salaries and benefits**
- **Administrative**
- **Environmental**
- **Landfill closure and post-closure care**
- **Service contracts and agreements**
- **Enforcement**
- **Pass-through costs**

Funds and Account Expenses

- **Operating and maintenance**
- **Long-term obligations**
- **Debt service reserve**
- **Renewal and replacement**
- **Closure and post-closure**
- **Rate stabilization**

Local Waste Agreement Pass-through costs

Evaluate the service area ability and willingness to pay rates, fees and pass-throughs

- **Taxes, fees, surcharges**
- **Revenue loss from change in law**
- **Increased disposal costs**
- **Hazardous waste removal**

What accounting issues affect my system?

- **GASB statement 34**
  - ***-Enterprise Fund Accounting***
  - ***-Full Cost Accounting***
- **GASB Statement 18**
  - ***-Landfill closure and post-closure care***
  - ***-Financial Assurance***

Accrual Accounting

- **Costs recognized as services provided**
- **Costs associated with events or circumstances recognized as occur**
- **Accrued regardless of timing of cash outlay**

Modified Accrual

- **Accrual basis of accounting adapted**
- **Government fund focus on flow of current financial resources**
- **Costs recognized when liability incurred**
- **Costs liquidated from current resources**

Cash or General Fund Accounting

- **Flow of financial resources measures government funds**
  - **general fund**
  - **debt service funds**
  - **enterprise funds**
- **Cash outlays recorded when goods and services are paid for**
- **Timing when funds expended vs. authorized**

What are the Statement 34 Highlights?

- **Management discussion and analysis of overall financial position and prior year results**
- **Statement of activities**
- **Government wide financial statements**
- **Enterprise fund statements**
- **Statement of cash flows**
- **Note disclosures**

What are the solid waste implications of Statement 34 ?

- **Adopted by stand-alone or component units**
- **Accrual accounting required regardless of how financed**
- **Full cost accounting not required, but is based on accrual accounting**
- **Statement of net assets report to include infrastructure**
- **GASB statement 18 required**
- **Direct method for cash-flow reporting**

What accounting tools can help my profitability?

- ***Full Cost Accounting (FCA)***
- **Assists in developing enterprise fund**
- **Assists in constructing unit pricing**
- **Included Costs**
- **Excluded Costs**
- **Identify pass-through costs**

Solid Waste System FCA Costs

Recognized

- **Direct:** Exclusively related to waste services
- **Indirect:** Not exclusively related waste services
- **Up-front:** Initial investments and expenses
- **Operating:** Daily recurring costs
- **Back-end:** Expenses to end operations, closure and post-retirement benefits

Solid Waste System FCA Costs

Unrecognized

- **Social:** Impact on human beings, property and welfare
- **Environment:** Degradation
- **Contingent:** Remediation, property and personal damage liability

What is the line?

- **Indicates sum remaining after payment of expenses**
- **Operating revenues less operating expenses equals operating income**
- **Add in net transfers for net income**
- **Provides amount of funds available for payment of debt**

Income Statement
Full Cost Calculations by Activity

- **Total direct operating costs**
- **Add: adjustment for recycling**
- **Add: administrative costs**
- **Total operating expenses**
- **Less: debt service costs**
- **Equal: net income**

Income Statement with Subordination

- **Operating revenues**
- **Add Investment income**
- **Equals Total revenues**
- **Less Total direct operating costs**
- **Equals Net operating income**
- **Less Debt service expenses**
- **Equals Net available for subordinated expenses**
- **Less subordinated expenses**
- **Equals Net income**

Full Cost Accounting: Credit Quality Benefit

- **Delay recovery of direct or indirect costs until after payment of debt service**
- **Increases funds available to pay debt service**
- **Cost recovery in rate covenant**

Credit Quality Increased

- **Conservative bond security covenants**
  - **Additional bonds test**
  - **Rate covenant**
  - **Rate stabilization funds**
- **Strong service area**
- **Committed waste supply**
- **Increase funds available for debt service**
- **Enlarged debt service coverage ratio**

Bond Security

- **Pledged revenues**
- **Flow of funds**
- **Reserve funds**
- **Additional bonds test**
- **Rate covenant**
- **Default and remedies**

Solid Waste Credit Strengths

- **Historical system operations**
- **Satisfactory financial performance**
- **Diversified waste supply**
- **Committed waste supply**
- **Competitive rates**
- **Stable revenue sources**

Solid Waste Credit Concerns

- **Limited financial flexibility**
- **Uneconomic rate structure**
- **Competition**
- **Uncommitted waste supply**
- **Revenue volatility**

Fitch IBCA Credit Rating

- **Distillation of credit factors**
- **Ability to repay**
- **Willingness to repay**
- **Payment on time and in full**
- **Bands of credit quality**

Investment Grade Category Rating

- **Economic viability**
- **Stable service area**
- **Realistic projections**
- **Flexibility**
- **Sufficient reserves and coverage**

Case Analysis

Credit Strengths

- Strong service area
- County guaranty's
- 48% waste committed
- Market rate energy sales
- Competitive tipping fee
- Satisfactory coverage of debt service

Credit Concerns

- Vendor ability to secure waste
- Contract termination provisions
- Uncontrollable costs
- Release of surplus funds
- Sum-sufficient contracts

Case Analysis: System Statistics

- 14 contracting municipalities
- Five largest 72% waste supply
- Guaranteed tonnage 150,100 from municipalities
- Historical 1997 total municipal tons 232,671
- Revised municipal tonnage 250,000 with county to guaranty price for 90,000 tons procured by vendor
- Vendor to procure 267,000 tons through

Case Analysis: Income Statement

Operating Revenues	*2000*
Authority Tip fee	12,332
Company Tip fee	12,992
Total Tip fee	25,324
Electric Energy Sales	7,736
Total Revenues	*34,285*
Expenses	
Senior Operations and Maintenance	9,607
Ash Transportation	2,100
Landfill Debt service	2,866*
Total Expenses	*15,435*
Net Operating. Revenues	*18,850*

**senior lien on revenues*

Case Analysis: Coverage

	2000
Net Operating. Revenues	*18,850*
Senior lien debt service	**12,398**
Subordinated lease debt service	**1,379**
Total Net Available Revenue	**5,073**
Subordinated Expenses	**2,408**
Surplus Funds	**2,665**
Coverage (X)	
Senior Lease Revenue Bonds	**1.52**
Combined Lease Revenue Bonds	**1.37**
Total Landfill and Lease Bonds	**1.30**
Landfill Bonds	**1.14**

Case Analysis: Coverage Comparisons

(X) Coverage with Subordination		*(X) Coverage without Subordination*	
• **Sr. Lease**	**1.52x**	• **Sr. Lease**	**1.33x**
• **All Lease**	**1.37x**	• **All Lease**	**1.19x**
• **Total debt**	**1.30x***	• **Total debt**	**1.0x***

*** including landfill as operating expense**

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