

FINANCIAL ASSESSMENT

An integral component of the planning methodology is the work elements that make up the long-term financial assessment for the solid waste program. This component is essential to understanding the implications of future regulatory compliance, capital investments, and other aspects of the County's solid waste program. Further, it complements the County's capacity to evaluate programmatic and technical alternatives and it facilitates compliance with financial assurance elements of the governing regulations.

Collection Options:

One major component of this overall study, and an integral part of the financial assessment, pertained to collection options available to the County for the collection of residential waste and/or recyclable material throughout the unincorporated areas of the County. The various collection options were evaluated and presented to the Solid Waste Advisory Committee (SWAC) for review. Based on this review, the SWAC selected three basic collection options for further evaluation and incorporation into the financial assessment. These options are described below:

- ❖ Continue Operations as Presently Being Done – The existing services presently being offered by the Stoney Mountain Road Landfill would continue to be offered. Permitted haulers would continue to provide residential waste collection and in some cases recyclable material collection to those households desiring such services. Those citizens desiring to handle the disposal of their own residential waste and/or recyclable materials would continue to bring the waste materials to the transfer or convenience center facility.
- ❖ Construct Convenience Centers at Strategic Locations - The existing services presently being offered by the Stoney Mountain Road Landfill would continue to be offered. Permitted haulers would continue to provide residential waste collection and in some cases recyclable material collection to those households desiring such services. Additional convenience centers would be strategically located throughout the unincorporated areas of the County to facilitate the disposal of residential waste and/or recyclable material by those citizens desiring to handle their own disposal activities. The Stoney Mountain Road Convenience Center would remain in operation.
- ❖ Franchised Waste Collection Services - The existing services presently being offered by the Stoney Mountain Road Landfill would continue to be offered. The Stoney Mountain Road Convenience Center would remain in operation to serve those citizens desiring to handle their own residential waste and/or recyclable material disposal. The “curbside” collection of residential waste and recyclable material within the unincorporated areas of the County would be organized in such a fashion as to provide a uniform level of service to all households.

Convenience Center Revenue:

At the present time, those citizens desiring to dispose of their own residential waste are required to pay a fee for the disposal of this material based generally on the size and/or type of vehicle transporting the waste in conjunction with the amount of waste. For the purposes of this financial/rate analysis each collection option was analyzed assuming (1) a fee would not be charged at the convenience center(s), and (2) that a fee would be charged for the disposal of residential waste material at the convenience center(s). In the analyses where convenience center(s) revenue would be collected, the annual fee collected was assumed to be \$250,000 per year. Convenience center revenue is based on historical records, which show approximately 125,000 vehicles per year utilizing the facility with each vehicle bringing at least 2 bags of waste at \$1.00 per bag.

Collection Option Alternatives:

Utilizing the aforementioned collection options, two (2) alternatives were prepared for each option. One alternative assumed revenue would not be collected from those citizens utilizing the convenience center(s) and the other alternative assumed revenue would be collected through the convenience center(s). In all, six (6) alternatives were developed on which a detailed financial/rate analysis would be performed. Prior to performing the analysis, the financial assessment of the County's solid waste program was updated to determine the present status of the program. Waste disposal trends were analyzed and projections established for use in all alternatives. The selected alternatives are described as follows:

- **Alternative 1 – Continue Existing Operations and CIP – Without Stoney Mountain Convenience Center Revenue**

Existing solid waste operations continue as presently being performed. Proposed capital improvements are included in the analysis. Recycle collection will continue to be provided at the Stoney Mountain Road Convenience Center. No franchised collection of waste/recyclable material is proposed. Revenue associated with the Stoney Mountain Convenience Center is not included.

- **Alternative 2 – Continue Existing Operations and CIP - With Stoney Mountain Convenience Center Revenue**

Existing solid waste operations continue as presently being performed. Proposed capital improvements are included in the analysis. Recycle collection will continue to be provided at the Stoney Mountain Road Convenience Center. No franchised collection of waste/recyclable material is proposed. New Stoney Mountain Convenience Center revenue of \$250,000 is generated each year beginning in FY 2011.

- **Alternative 3 – Construct Convenience Centers - Continue Existing Operations and CIP - Without Convenience Center Revenue**

Existing solid waste operations continue as presently being performed. Proposed capital improvements are included in the analysis. Five new convenience centers are proposed to be constructed within the County that will operate six days per week. Recycle collection will be provided at the convenience centers. No franchised collection of waste/recyclable material is proposed. Revenue associated with the proposed convenience centers is not included.

- **Alternative 4 – Construct Convenience Centers - Continue Existing Operations and CIP - With Convenience Center Revenue**

Existing solid waste operations continue as presently being performed. Proposed capital improvements are included in the analysis. Five new convenience centers are proposed to be constructed within the County that will operate six days per week. Recycle collection will be provided at the convenience centers. No franchised collection of waste/recyclable material is proposed. New convenience center revenue of \$250,000 is generated each year beginning in FY 2011.

- **Alternative 5 – Franchised Collections - Continue Existing Operations and CIP - Without Stoney Mountain Convenience Center Revenue**

Existing solid waste operations continue as presently being performed. Proposed capital improvements are included in the analysis. Recycle collection will continue to be provided at the Stoney Mountain Road Convenience Center. Franchised collection of waste/recyclable material is proposed. Revenue associated with the Stoney Mountain Convenience Center is not included.

- **Alternative 6 – Franchised Collections - Continue Existing Operations and CIP - With Stoney Mountain Convenience Center Revenue**

Existing solid waste operations continue as presently being performed. Proposed capital improvements are included in the analysis. Recycle collection will continue to be provided at the Stoney Mountain Road Convenience Center. Franchised collection of waste/recyclable material is proposed. New Stoney Mountain Convenience Center revenue of \$250,000 is generated each year beginning in FY 2011.

The major financial components of each alternative are described in the subsequent sections:

Capital Improvements:

With the assistance of the Henderson County staff and McGill Associates, the program's capital improvements plan was updated to reflect the needs inherent to each alternative. Equipment needs and proposed capital projects were considered in this analysis. Careful consideration of the cash flows associated with these proposed projects and equipment needs were also part of this effort. The resulting summary of the cost estimates for capital improvements and equipment, for each of the aforementioned alternatives, is included in Appendix J, immediately following the appropriate alternative analysis. The support data for the cost estimates associated with each proposed capital improvement is included in Appendix K. It should be noted the capital improvements and equipment estimates are the same for Alternatives 1, 2, 5, and 6. The capital improvements and equipment estimates for Alternatives 3 and 4 are the same. It should be noted, that the planned capital projects reflect Henderson County's current understanding and expectations concerning the regulatory requirements pertaining to solid waste programs. No attempt has been made to account for the many variables and unknowns that could influence the future of such requirements.

Operating Costs:

New annual operating costs of \$500,000+ are projected to be realized beginning FY 2012 (Year 3) under Alternatives 3 and 4, included in Appendix K. These alternatives propose the construction of five additional convenience centers strategically located throughout the unincorporated areas of the County. A breakdown of these annual operating costs, by fiscal year, is shown under the heading of "New Operating Costs" located at the bottom of the table for "Capital Improvements with Convenience Centers" in the respective Alternative. A summary of the new operating costs associated with Alternatives 3 and 4 for FY 2012 (Year 3) are shown below:

- Convenience Center Utilities & Maintenance \$1000/site/month
- Convenience Center Attendants Eight (8) attendants at a cost of \$35,000/attendant/year
- Convenience Center Truck Drivers Two (2) drivers at a cost of \$50,000/driver/year
- Convenience Center Truck Fuel/Maintenance \$60,000 annually

Alternatives 1, 2, 5, and 6 did not assume additional annual operating costs. Proposed upgrades to existing facilities would be manned by existing personnel and/or serviced by existing equipment.

Revenue Requirement:

The yearly, required revenue for the solid waste program is comprised of all the expenditures necessary to ensure consistent, quality service to all users. These expenditures ensure proper operation and maintenance of equipment, development and perpetuation of the system, and maintenance of the utilities' financial integrity. These cost components can be divided into the following categories:

- Operation and Maintenance
- Debt Service
- Capital Outlay

The total of all the above items is the required revenue for the County's solid waste fund as shown in the following table for FY 2008, the year of the latest available audit at the time of this analysis:

Table 18: FY 2008 Revenue Requirement

CATEGORY	FY 2008 COST
Operations & Maintenance	\$ 3,909,188
Debt Service	\$ 0
Capital Outlay	\$ 144,932
REVENUE REQUIREMENT	\$4,054,120

The revenues generated from solid waste customers should meet or exceed the above revenue requirements in order to avoid subsidies from other funds. A copy of the present Disposal Rate Fee Schedule is included in Appendix K. The FY 2008 solid waste revenues totaled approximately \$5.2 million, yielding a net revenue of \$1.1 million. This margin should be closely monitored because growth in expenditures due to inflation and capital needs could decrease this margin, possibly resulting in operating losses or the spending of the program's fund balance and reserves.

Financial Analysis:

The Financial Analysis, for each of the six alternatives, is included in Appendix J. These analyses provide a summary of projections for the entire Solid Waste Enterprise Fund, including the capital improvements program for each respective alternative. Each Alternative's Financial Analysis is followed by its respective capital improvements and equipment cost tables. The following is a list of the Tables associated with the Financial Analysis of each respective Alternative:

Alternative 1:

- Table 19: Financial Analysis With Existing Operations and CIP Without Stoney Mountain Convenience Center Revenue
- Table 20: Capital Improvements Without Convenience Centers
- Table 21: Equipment Without Convenience Centers

Alternative 2:

- Table 22: Financial Analysis With Existing Operations and CIP With Stoney Mountain Convenience Center Revenue
- Table 23: Capital Improvements Without Convenience Centers
- Table 24: Equipment Without Convenience Centers

Alternative 3:

- Table 25: Financial Analysis With Existing Operations, CIP, and Convenience Centers Without Convenience Center Revenue
- Table 26: Capital Improvements With Convenience Centers
- Table 27: Equipment With Convenience Centers

Alternative 4:

- Table 28: Financial Analysis With Existing Operations, CIP, and Convenience Centers With Convenience Center Revenue
- Table 29: Capital Improvements With Convenience Centers
- Table 30: Equipment With Convenience Centers

Alternative 5:

- Table 31: Financial Analysis With Existing Operations, CIP, and Franchised Collections Without Stoney Mountain Convenience Center Revenue
- Table 32: Capital Improvements Without Convenience Centers
- Table 33: Equipment Without Convenience Centers

Alternative 6:

- Table 34: Financial Analysis With Existing Operations, CIP, and Franchised Collections With Stoney Mountain Convenience Center Revenue
- Table 35: Capital Improvements Without Convenience Centers
- Table 36: Equipment Without Convenience Centers

The Financial Analysis has been developed with audit information from FY 2004 through FY 2008, Year-to-Date figures for FY 2009, and the proposed budget for FY 2010 (Year 1). The following assumptions were developed for the analysis through the examination of financial trend data and discussions with the County staff:

- Sanitary landfill revenues are projected to be \$4.154 million in FY 2009, \$4.15 million in FY 2010 and 2011, and maintain an average annual growth rate of 1.58% thereafter, based upon historical growth trends and projected solid waste flow by McGill Associates. Other operating revenues are also projected to grow at an average annual rate of 1.58% except Methane Gas License fees and Fixed Asset Sales, which are expected to remain constant.
- The cost of the Animal Shelter, which was paid by the solid waste fund, is assumed to continue being paid back by the general fund as an annual payment of \$54,000. This represents a cost of \$800,000 financed over 20 years at 3%.
- Annual transfers from the Cane Creek District are expected to continue at \$50,000 per year through the next ten years. Transfers to the County general fund are expected to be \$115,000 in FY 2010 and continue each year at an average annual growth rate of 3%.
- The construction of a recycle material processing facility-off site in FY 2011 will require leasing approximately 57,000 square feet of space each year through FY 2018 when the On-Site facility is proposed to be constructed. Each square foot is projected to generate \$2 in rent revenue per year for an annual revenue of \$114,000.
- All operating expenses are projected to grow at average annual rates of 3% to 5%. Salaries and Benefits, Administration, and Professional Services are expected to grow at 5%, Operations, Maintenance and Repair, Contracted Service, and Hazardous Waste Disposal are expected to grow by 4%, and Groundwater and Methane Monitoring expenses are expected to grow at an average annual rate of 3%. These trends were derived from historical operating expenditure data.
- Recyclable revenue is projected to grow in accordance with overall tonnage growth. However, additional one time revenue increases are expected under the following alternatives:
 - Alternatives 3 and 4: Convenience Centers Recycling Revenue increases 2.5 times beginning in FY 2012.
 - Alternatives 5 and 6: Franchise Collection Recycling Revenue increases 3 times beginning in FY 2012.

- The Convenience Center revenue of \$250,000 reflected in Alternatives 2, 4, and 6 is based on historical records, which show approximately 125,000 vehicles per year utilizing the facility with each vehicle bringing at least 2 bags of waste and paying \$1.00 per bag.
- A new expenditure was realized by the program in FY 2009. The State of North Carolina now requires each landfill program to transfer \$2 to a State tipping fee fund for each ton of solid waste received. The collected funds are subsequently distributed to the Solid Waste Management Trust Fund, the Inactive Hazardous Sites Cleanup Fund, and contributing cities and counties. Since the landfill is expected to receive approximately 77,500 tons in FY 2009, this fee is projected to be approximately \$155,000. Annual tonnages are projected by McGill Associates to grow to approximately 83,000 tons by FY 2019, causing this annual fee to increase to \$166,000.
- Distribution of the State tipping fee back to the County will take place approximately six weeks after the end of each quarter. Because the fee was not in effect until July 1, 2008, only three distributions will take place in FY 2009. The fee distributions to Henderson County will be done on an unincorporated per capita basis. County staff has estimated the revenue to be \$24,000 in FY 2009 and \$75,000 in FY 2010. These and future disbursements may vary depending upon obligated State allocations to companies and economic changes.
- To reflect financial assurance requirements, closure reserves are represented as a separate reserve from the “available resources” reserves. The “available resources” reserve represents the resources available for capital improvements.
- Since August 2008, construction and demolition waste has been hauled with MSW waste. Hauling and disposal charges per ton of municipal solid waste and construction and demolition waste are assumed to be \$33.47 through FY 2010. Thereafter, it is projected to increase by approximately 10% every five years, as per discussions with County staff.
- At the end of FY 2009, the Solid Waste Enterprise Fund is projected to contain a balance of approximately \$1.31 million in “available resources” exclusive of the closure/post closure reserves. Closure/post closure reserves are projected to be \$2.38 million.
- In order to maintain a positive net income with large capital improvement projects, the analysis assumes that funds will be acquired by using reserve funds and borrowing capital. The remaining yearly capital requirements will be paid by annual capital outlays. The planned methods to finance the improvements in the Capital Improvements Plan for each of the six alternatives are shown in the following tables:

Table 37: Proposed Future Debt Packages Without Convenience Centers
 Alternatives 1, 2, 5, & 6

YEAR	TYPE	PRINCIPAL	YEARLY PAYMENT	RATE	TERM (YEARS)
2011	160A-20 Installment	\$ 1,197,100	\$ 95,376	5%	20
2019	160A-20 Installment	\$ 4,005,600	\$ 346,584	6%	20

Table 38: Proposed Future Debt Packages With Convenience Centers
 Alternatives 3 & 4

YEAR	TYPE	PRINCIPAL	YEARLY PAYMENT	RATE	TERM (YEARS)
2011	160A-20 Installment	\$ 5,197,100	\$ 414,066	5%	20
2019	160A-20 Installment	\$ 4,005,600	\$ 346,584	6%	20

Support data for the various components and assumptions utilized to develop the Financial Analysis is included in Appendix K.

Conclusions:

- The available resources balance may not be adequate for each alternative’s planned capital projects that include new technologies and operating costs.
- Increases in County tipping fees are anticipated to be necessary due to aforementioned rising costs. We have projected the following tipping fee increases for each alternative, from the present tipping fee of \$52 which is proposed to be held through FY 2010:

Table 39: Proposed Tipping Fee Summary

Fiscal Year	Continue Existing Operations Alternative 1	Continue Existing Operations With Convenience Center Revenue Alternative 2	Construct Convenience Centers Alternative 3	Construct Convenience Centers With Convenience Center Revenue Alternative 4	Franchised Collections Alternative 5	Franchised Collections with Convenience Center Revenue Alternative 6
2010	\$52	\$52	\$52	\$52	\$52	\$52
2011	\$53	\$53	\$58	\$58	\$53	\$53
2012	\$54	\$53	\$64	\$61	\$54	\$53
2013	\$55	\$54	\$67	\$64	\$55	\$53
2014	\$56	\$54	\$67	\$64	\$56	\$53
2015	\$58	\$54	\$70	\$65	\$57	\$54
2016	\$61	\$54	\$71	\$65	\$58	\$54
2017	\$62	\$54	\$71	\$65	\$59	\$54
2018	\$62	\$54	\$71	\$65	\$59	\$54
2019	\$62	\$54	\$71	\$65	\$59	\$54

Note: (1) All Alternatives include maintaining existing operations at the Stoney Mountain Road Landfill Facility.

(2) All Alternatives include Capital Improvement Projects proposed for the Stoney Mountain Road Landfill Facility.

- These increases yield a cumulative balance in available resources that is necessary in order to meet the large capital requirements of the program under each alternative for the next ten years and sustain the available resources needed for the future.
- Adding additional convenience centers (Alternatives 3 & 4) is not feasible without substantial increases in the disposal tipping fee costs and/or contributions from the County's general fund. The tipping fees, projected under Alternatives 3 and 4, would affect the future competitiveness of the County's transfer facility relative to the surrounding area waste collection/disposal facilities. This means less waste would be processed through the facility thereby resulting in less revenue to offset operating costs. Less revenue would affect the economic viability of the program to remain as an enterprise fund.

- There is a recognizable benefit for the County to pursue the various franchised collection options (Alternates 5 & 6). Franchising collections would provide a more predictable stabilized waste stream flow for the facility thereby facilitating future budget projections. Franchising collections also provide an opportunity for the citizens to realize cost reductions from private haulers. The more efficient the collection route, the lower the cost to the service provider, resulting in a lower cost to the customer. Surrounding counties, which have franchised residential waste collection, have realized a substantial cost savings relative to the fees charged their citizens for residential waste and recyclable material collection. County staff estimates the County-wide savings to be approximately one to three (\$1-3) million dollars annually or approximately two to seven (\$2-7) dollars per household per month. Franchised collections should also provide for an increased recyclable material collection rate throughout the unincorporated areas of the County.

Recommendations:

- Based on the aforementioned tipping fee summary, it is recommended that the County, through the Solid Waste Advisory Committee (SWAC), continue discussions with the permitted haulers relative to implementing collection efficiencies and/or the franchising of residential waste and/or recyclable material collection in the unincorporated areas of the County.
- The County should continue discussions on establishing and implementing an equitable disposal fee for the disposal of residential waste and/or recyclable material through the convenience center.
- Implement the proposed phased Capital Improvement Plan (CIP).
- It is recommended that the status of the fund be reviewed in late FY 2010 to evaluate tonnage trends, hauling and disposal fees, changing needs in capital improvements and equipment and their impacts on the financial status of the fund. Particular consideration must be given to assessing the impact of lower tonnages upon the future operating and capital needs of the program.