

DeKalb County Solid Waste Planning Region



Solid Waste Needs Assessments

Prepared by:
**The Upper Cumberland County Development District, and
Smithville, Tennessee
October 2008**

As required by The Solid Waste Management Act (T.C.A. §68-211-811).

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
Division of Solid Waste Management
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INTRODUCTION

In an effort to coordinate and plan for safe, efficient solid waste disposal in the state, the Tennessee General Assembly enacted several pieces of legislation, which are compiled in Title 68, Chapter 211 of the Tennessee Code Annotated. To comply with the requirements of this chapter, all local governments must engage in specified planning and organizational activities (See the Solid Waste Management Act of 1991, T.C.A. §§ 68-211-801 through 68-211-874).

Regional Solid Waste Management Planning

The Solid Waste Management Act of 1991 requires that local governments comprehensively plan to manage their solid waste through modern, integrated, efficient systems. In order to assure that such planning is carried out on the solid foundation of relevant and objective knowledge of local conditions, the Act requires that the staff of the Development District coordinate, conduct and maintain a Needs Assessment for each municipal solid waste planning region. This assessment shall be revised every five years [T.C.A. 68-211-811].

The categories of information required are:

1. Demographic information & projections;
2. An analysis of economic activity within the region;
3. Characterization of the waste stream;
4. Projections of solid waste generation;
5. Evaluation of the collection systems for every municipality & county within the region;
6. Evaluation of existing, new or expanded solid waste capacity and management facilities within the region;
7. A statement of goals that are consistent with the state plan;
8. An analysis of existing or potential waste flows within the region and between adjacent regions;
9. A comparison of projected demands from waste generation & importation of waste with available and projected capacity and an identification of potential shortfalls in capacity;
10. Any additional information as the commissioner may require.

In order that the regional planning effort is implemented on a solid foundation of relevant and objective knowledge of local conditions, the Act requires the Development Districts to coordinate, conduct and maintain a Needs Assessment for each solid waste region. This Assessment shall be revised every five years.

SECTION 1:**DEMOGRAPHIC INFORMATION AND PROJECTION**

Provide a table and chart showing the region's population for the last ten (10) years with a projection for the next five (5) years. Provide a breakdown by sub-table and sub-chart, or some similar method to detail all county and municipality populations. Discuss projected trends and how it will affect solid waste infrastructure needs over the next five (5) years.

Population Trends in DeKalb County

This section of the Solid Waste Needs Assessment update provides the basic data underlying the assessment of need. Using the latest population projections for each county and municipality developed by the University of Tennessee Business and Economic Research, the general analysis of business trends within the region and an assessment of the current permitted waste disposal capacity within the state that is available to each county, based on the information contained in Table 2.1, the population projections compiled for this study will be used to estimate daily future waste generation rates for each county. The resulting daily waste generation rates will be compared with the permitted waste disposal capacity in an attempt to identify any current or projected unmet need for each county. Although every reasonable effort has been made to compile the best available information for this assessment, it is important to note that the data is subject to numerous assumptions that impose severe limitations on the accuracy and reliability of the conclusions reached in this document.

DeKalb County's population growth between 2000-2005 has been in line with projections made several years ago by the University of Tennessee Center for Business and Economic Research. The increase of about 1.3% per year is expected to increase somewhat in the future due to the expanding lake-front developments.

TABLE 1.1 DeKalb County Historic and Projected Population Trends (1996 thru 2012)

Year	County	Alexandria	Dowelltown	Liberty	Smithville
1996	17,379	787	298	364	3,993
1997	17,381	791	301	367	3,994
1998	17,387	798	302	367	3,994
1999	17,389	810	302	367	3,994
2000	17,423	818	302	368	3,996
2001	17,531	819	303	370	3,997
2002	17,729	827	306	674	4,032
2003	17,936	836	310	376	4,071
2004	18,118	851	313	381	4,072
2005	18,214	858	314	381	4,077
2006	18,313	860	315	384	4,082
2007	18,436	866	315	384	4,083

2008	18,688	866	319	386	4,087
2009	18,697	869	319	388	4,091
2010	18,780	872	322	391	4,097
2011	18,863	872	327	395	4,099
2012	18,946	877	327	395	4,102

Sources: Historic data are from the U.S. Census Bureau. Projections are based on data from the University of Tennessee CBER. Data compiled by the Upper Cumberland Development District, 2008.

In-Migration of Retirees and the Impact on DeKalb County’s Public Infrastructure

Tennessee has already experienced a substantial in-migration of retirees. A Census 2000 Special Report entitled, Internal Migration of the Older Population: 1995-2000 (2003), indicates that Tennessee ranked seventh nationally with a net migration figure for people aged 65 and older (the number of in-migrants minus the number of out-migrants). A growing increase in population growth, beyond that projected in Table 1.1, could impact the existing solid waste infrastructure of DeKalb County. Although, DeKalb County’s growth rate from 1990 and 2000 was between 20% successful development in the County could increase growth rates beyond 20% over the next (5) years.

Presently, the County operates eight (8) convenience center sites, located across the County to collect residential household waste. Development areas are increasing around the lake-front portions of the County attracting residential dwellers. If the population in this area of the County increases more rapidly than projected, it would be reasonable to consider building additional convenience center sites or other facilities to support an integrated system.

Business Trends in DeKalb County

Population data and trends are only useful in developing factors for household waste generation rates. Local governments typically do not provide waste collection services to businesses and industries.

Disposal services for most non-residential waste are handled separately. Many industries provide their own waste transportation services. Furthermore, businesses and industries are under no requirement to track or report their waste collection and disposal practices. Therefore, even less data is available on non-residential waste generation and disposal needs than exists for the residential waste stream.

Further complicating the analysis of nonresidential waste streams is the lack of available employment projections. Growth and decline is not a reliable direct measure of growth and decline in the business sector. Without employment projections and waste stream data, no specific needs assessment of non-residential waste disposal can be undertaken.

SECTION 2:

ECONOMIC ACTIVITY WITHIN THE REGION

Provide a table and chart showing the region's economic profile for all county and municipalities for the last ten (10) years with a projection for the next five (5) years. This can be accomplished by using the following economic indicators:

- Taxable sales, property tax generation, and per capita income
- Evaluation by break down of each economic sector
- County or municipal budgeting information
- Other commonly accepted economic indicators

Economic Profile of DeKalb County

Taxation City and County Rates.

The County Tax Assessor makes appraisals for tax purposes on real and personal properties. By statute, appraisals are conducted every ten years, and the last appraisal was conducted in 1999. Residential and agricultural properties are assessed at 25% of the appraisal value and commercial and industrial personnel properties are assessed at 30% of appraised value. Per Capita Income for DeKalb County is \$25,892.

The Tennessee Department of Revenue has been notified that the governing body of DeKalb County has increased the local sales tax rate to 2.75% by means of a resolution, which was approved by a majority of the voters. The new rate became effective as of July 1, 2007. This rate change includes all of DeKalb County including Smithville, Alexandria, Dowelltown, and Liberty.

The Audit/Budget from 2006 through 2009 is provided on the next page.

	AUDIT 2006	AUDIT 2007	BUDGET 2008	BUDGET 2009
SOLID WASTE FUND				
REVENUES & OTHER SOURCES:				
40000 LOCAL TAXES				
40110 CURRENT PROPERTY TAX	\$ 605,799	\$ 691,317	\$ 788,419	\$ 802,452
40120 TRUSTEE'S COLL.-PRIOR YEARS	\$ 29,521	\$ 18,202	\$ 30,512	\$ 31,055
40130 CIRC. CLK/MASTERS COLL.-PRIOR YRS	\$ 10,637	\$ 8,174	\$ 6,544	\$ 6,660
40140 INTEREST & PENALTY	\$ 4,259	\$ 4,768	\$ 5,125	\$ 5,216
40150 PICK-UP TAXES	\$ 990	\$ 604	\$ 1,355	\$ 918
40162 PAYMENT IN-LIEU OF TAXES- LOCAL UTIL	\$ -	\$ 31,142	\$ -	\$ -
TOTAL LOCAL TAXES	\$ 651,206	\$ 754,207	\$ 831,955	\$ 846,301
43100 GENERAL SERVICES CHARGES				
43106 COM-INDUS. WASTE COLL. CHARGES	\$ 12,412	\$ 10,472	\$ 12,415	\$ 12,000
43107 RESIDENTIAL WASTE COLL. CHARGES	\$ 3,418	\$ 1,600	\$ 3,415	\$ 3,200
43110 TIPPING FEES	\$ 195,893	\$ 244,118	\$ 202,000	\$ 205,000
43114 SOLID WASTE DISPOSAL FEE	\$ 4,758	\$ -	\$ -	\$ -
43380 VENDING MACHINES	\$ -	\$ -	\$ -	\$ -
TOTAL GENERAL SERVICE CHARGES	\$ 216,481	\$ 256,190	\$ 217,830	\$ 220,200
44000 OTHER LOCAL REVENUE				
44110 INTEREST EARNED	\$ -	\$ -	\$ 1,000	\$ 850
44130 SALE OF MATERIALS & SUPPLIES	\$ 506	\$ 794	\$ 250	\$ 1,100
44145 SALE OF RECYCLED MATERIALS	\$ 4,360	\$ 2,045	\$ 2,500	\$ 3,500
44170 MISCELLANEOUS REFUNDS	\$ 15	\$ 63,415	\$ -	\$ -
44520 INSURANCE RECOVERY	\$ -	\$ -	\$ -	\$ -
44530 SALE OF EQUIPMENT	\$ -	\$ -	\$ -	\$ -
44540 SALE OF PROPERTY	\$ -	\$ -	\$ -	\$ -
TOTAL OTHER LOCAL REVENUE	\$ 4,881	\$ 66,254	\$ 3,750	\$ 5,250
46170 SOLID WASTE GRANTS				
46170 SOLID WASTE GRANTS	\$ 13,973	\$ 19,971	\$ 15,000	\$ 7,500
46980 OTHER STATE GRANTS	\$ -	\$ -	\$ -	\$ -
46990 OTHER STATE REVENUES	\$ -	\$ -	\$ -	\$ -
TOTAL OTHER STATE REVENUE	\$ 13,973	\$ 19,971	\$ 15,000	\$ 7,500
47000 FEDERAL GOVERNMENT				
47230 DISASTER RELIEF	\$ -	\$ -	\$ -	\$ -
47590 OTHER FEDERAL THROUGH STATE	\$ -	\$ -	\$ -	\$ -
TOTAL FEDERAL REVENUE	\$ -	\$ -	\$ -	\$ -
48000 OTHER GOV/CITIZENS GROUPS				
48140 CONTRACTED SERVICES	\$ -	\$ -	\$ -	\$ -
TOTAL OTHER GOV/CITIZENS GROUPS	\$ -	\$ -	\$ -	\$ -
49000 OTHER SOURCES (NON-REVENUE)				
49200 NOTES ISSUED	\$ -	\$ 1,225,000	\$ -	\$ -
49300 CAPITAL LEASES ISSUED	\$ -	\$ -	\$ -	\$ -
49800 TRANSFERS IN	\$ 270,000	\$ -	\$ -	\$ -
TOTAL OTHER SOURCES (NON-REV)	\$ 270,000	\$ 1,225,000	\$ -	\$ -
TOTAL REVENUES & OTHER SOURCES	\$ 1,156,541	\$ 2,321,622	\$ 1,068,535	\$ 1,079,251

Tax Rates per \$100 of Assessed Value

County Tax Rate	\$1.46
City of Smithville	\$0.68
City of Liberty	\$0.13
City of Alexandria	\$0.80

Economic Impact of Increasing Retiree Population

The UT-IPS study concluded a high percentage of IMRs support community and religious organizations, and environmental services. With regard to community involvement and integration, the survey findings suggest, and interview comments emphasized, that IMR contributions as volunteers in non-profit organizations in the community are widespread and of major significance in their vitality. However, while many IMRs participate in local activities, they are more likely to have fewer friends from the local community, are relatively less concerned than Locals with the availability of more higher-paying jobs and relatively more concerned with protecting forestland for recreation and wildlife habitat.

Tourism Industry in DeKalb County

Tennessee is the most bio-diverse inland state in the United States, and the southern area of the plateau in Middle Tennessee is one of the most bio-diverse regions in Tennessee. DeKalb County is the home of Center Hill Lake, a 64 mile long reservoir with 415 miles of largely undeveloped shoreline and 18,200 acres of deep, pure water – the ideal habitat for many species of fish. The lake offers a wide variety of sporting opportunities including boating, fishing, water-skiing, camping, picnicking, hiking and swimming. Additional attractions located on the lake are Edgar Evins State Park and Center Hill Dam. The U.S. Army Corps of Engineers built the dam on the Caney Fork River in 1949, and the Corps still owns and maintains the entire area.

SECTION 3:

WASTE STREAM CHARACTERIZATION

Elaborate on the entire region's solid waste stream. Compare today's waste stream with anticipated waste stream over the next five (5) years. How will the total waste stream be handled in the next five (5) years? Include in this discussion how problem wastes like waste tires, used oil, latex paint, electronics and other problem wastes are currently handled and are projected to be handled in the next five (5) years. What other waste types generated in this region require special attention? Discuss disposal options and management of these waste streams as well as how these waste streams will be handled in the future. Include in this discussion how commercial or industrial wastes are managed. Also provide an analysis noting source and amounts of any wastes entering or leaving out of the region.

Regional Solid Waste Stream

The waste stream in DeKalb County is varied as it is in most counties. The waste stream ranges from general household wastes to agricultural and industrial waste. The description, distribution, source, and quantities are described on the next page.

MATERIAL TONNAGE LIST IN RECYCLING

Material Name	Residential All Programs	Industrial all Programs	Other All Programs	Total
Alternate Daily Cover		55.0		55.0
Antifreeze		1.2		1.2
Compost		1,580.0		1,580.0
Corrugated	65.3	338.6		403.9
Electronics		0.1		0.1
Ferrous	123.1	13,518.9		13,642.0
Industrial By-Products		87.6	1.4	89.0
Lead-Acid		1.6		1.6
Miscellaneous Paper		5.1		5.1
Mixed Metals		468.9		768.9
Newspaper	9.0			9.0
Non-Ferrous		56.0		56.0
Office Paper	3.0			3.0
Other (1)		1.0		1.0
Other Plastics & Mixed Plastics		61.2		61.2
Pallets		184.9		184.9
Tires	154.4			154.4
Used Oil	6.7	19.2		25.9
Totals	361.5	16,679.3	1.4	17,042.1

MATERIAL TONNAGE LIST IN HAZARDOUS WASTE

Material Name	Residential Programs	Total
Household Hazardous Waste	2.0	2.0
Totals	2.0	2.0

MATERIAL TONNAGE LIST IN SOLID WASTE

Material Name	Residential Programs	Total
All Solid Waste	13,982.0	13,982.0
Totals	13,982.0	13,982.0

MATERIAL TONNAGE DESTINATION/LANDFILL

Destination	Tons	Percentage
DeKalb County Sanitary Landfill	13,982.0	100.0
Totals	13,982.0	100.0

Diversion Rate Summary Across All Sectors, County of DeKalb, 1998-2007

Year	Diverted (Tons)	Disposed (Tons)	Total Generated (Tons)	Real Time Diversion Rate
1998				
1999				
2000	83.0	13,687.0	13,770.0	0.6
2001		12,948.0	12,948.0	
2002		13,814.0	13,814.0	
2003		13,966.0	13,966.0	
2004	16,291.5	15,973.0	32,264.5	50.5
2005	14,043.9	13,897.0	27,940.9	50.3
2006	16,550.0	13,553.0	51,783.9	32.0
2007	17,295.7	13,982.0	31,277.7	55.3

Even if it were possible to know how much total solid waste disposal capacity currently exists at every landfill that a county is authorized to use, it is practically impossible to know how much of that disposal capacity can be assigned to any given county. If a specific landfill owner decides to accept waste from a new government three years from now, the additional waste stream generated by the new government will reduce the remaining capacity available to the local governments it is currently contracted to serve.

In 2007, the County will be directly servicing the collection, disposal and recycling program and maintaining records for all activities and volumes produced. With better material tracking, direct service delivery and implementation of an aggressive recycling and waste reduction program, DeKalb County will maintain a reliable database of disposal and recycling tonnages for that material handled by County owned and operated vehicles and local facilities.

DeKalb County has met the 25% waste reduction for 2007. Without the purchase of necessary equipment through grant applications awarded through TDEC, the current recycling program in DeKalb County would not be able to significantly improve their waste reduction. The proposed requested equipment will allow the County to expand the material they collect, process and market to include mulching, plastic, aluminum cans, and more paper grades.

Regional Solid Waste Stream Disposal for 2007 – 2012

Class I Landfill Disposal Sites	Reported Year	Projected Year					
	2006	2007	2008	2009	2010	2011	2012
Total Regional Solid Waste Disposed in DeKalb County Sanitary Landfill Class I Landfill (Regional disposal figures include County and private business haulers).	13,553	13,982.00	13,966.00	13,870.00	13,814.00	13,448.00	13,224.00

Note: Reported 2006 disposal figures from TDEC SW Origin Report for 2006; Regional solid waste stream projection based on average 1% County population change presented in Table 1, as prepared by the UCDD, 2007.

Five (5) year projections for waste generation in DeKalb County are provided in the table above. The estimate is based on 1.3% average annually, consistent with population increases projected in Section 1 of this document. This is a conservative estimate that waste will increase relative to future population growth. One important element to consider, and one in which will be extremely difficult to predict, is the affect of increasing tourism and population growth from residential development in DeKalb County and the amount of waste generated from these activities.

Regional Solid Waste Management

The Table below summarizes how the region’s total waste stream will be managed over the next five (5) years.

DeKalb County Regional Waste Stream Management

Jurisdiction or Sector	Solid Waste Stream Collection	Solid Waste Disposal Options	Present Problem Waste Handling	Future Problem Waste Handling 2007-2012	Other Problem Waste Types
DeKalb County	<p>Eight (8) County Convenience Centers and one (1) Recycling Center are available to all residents of the County..</p> <p>All solid waste generated in the County is accepted at the convenience center collection sites. Households are charged 11 cents/pound and high-volume private haulers are charged 3 cents/pound.</p> <p>All center sites accept recyclable materials free of charge for residents and businesses.</p>	<p>DeKalb County maintains a landfill to dispose of solid and demolition waste, respectively, in DeKalb County's Class I Landfill.</p>	<p>Waste tires: Waste tire contract negotiated.</p>	<p>Waste tires: Waste tire contract negotiated.</p>	<p>HHW is to be collected at mobile collection event made available by TDEC.</p>
			<p>Used oil: Waste heater fuel.</p> <p>Other Automobile fluids: Enterprise Oil, Inc. contract.</p> <p>Latex paint: Sanitation Department in-house and public reuse.</p>	<p>Used oil: Waste heater fuel.</p> <p>Used oil filters: Crushed light and heavy-duty, used oil drained for waste heater, scrap metal recycling of drained crushed filters.</p> <p>Other Automobile fluids: Enterprise Oil, Inc. contract.</p> <p>Latex paint: Sanitation Department in-house and public reuse.</p> <p>Electronics: Collected, marketed by County thru RMCT, Inc.</p>	<p>Due to limited statewide mobile collection site scheduling, no local or regional approach has been developed to handle HHW.</p>
Business	<p>Subscription service provided by several private haulers in the County for residents and businesses.</p>	<p>Primary disposal options for local haulers is the local landfill</p> <p>DeKalb County Sanitary Class I Landfill is also available for waste disposal.</p> <p>Other Class I Landfill sites operating in the region, accepting out-of-county waste, are viable sources for disposal also.</p>	<p>In-house business and contractor problem waste handling unknown and considered confidential.</p>	<p>In-house business and contractor problem waste handling unknown and considered confidential.</p>	<p>Hazardous waste generated from commercial and industrial businesses is regulated by TDEC, Division of Solid Waste Management, and Hazardous Waste.</p>

Comment [B2]: Sentence fragment....

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Source: DeKalb County 2006; TDEC SWM Remaining Life Survey, 2007; TDEC SW County of Origin Report, 2007.

SECTION 4:

REGIONAL COLLECTION SYSTEMS

Describe in detail the waste collection system of the region and every county and municipality. Provide a narrative of the life cycle of solid waste from the moment it becomes waste (loses value) until it ceases to be a waste by becoming a useful product, residual landfill material or an emission to air or water. Label all major steps in this cycle noting all locations where wastes are collected, stored or processed along with the name of operators and transporters for these sites.

Solid Waste and Recycling Collection Services

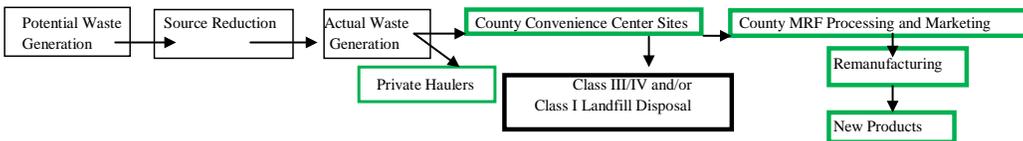
Waste collection and transportation services are varied, and data is based on the limited information gathered from the local government. First of all, it is important to understand that local government contracts for waste collection and disposal cover only residential (household) waste. Waste generated by local businesses and industries is handled by special contracts with each individual waste hauler. DeKalb County currently has eight (8) convenience center sites across the northern section of the county for the collection of residential solid waste and recyclable material.

The amount and type of recyclable materials grows with each day of operations. The staff is dedicated and enthusiastic about waste reduction and the prospect of researching all potential end-use options and markets for any waste material generated.

DeKalb County Regional Solid Waste Life-Cycle

Theoretically, the life-cycle of Waste Generation in the Region follows the management options illustrated below. Potential waste generation can be reduced at the source through measures, such as residents reusing materials of remaining value. Manufacturers can also reduce residual waste by modifying internal operations to efficiently manage feedstock used for producing commodities. What remains is the Actual Waste Generation collected at the County Convenience Center Sites and/or collected by any private haulers.

At the County Convenience Center sites, solid and demolition waste is collected in separate containers for disposal in the respective landfills provided in DeKalb County Sanitary Landfill. The County also provides recycling containers for recyclable material that will be processed, marketed and remanufactured into new products. The value of recyclables is expressed in marketing sales paid to the County. Lastly, brokers and markets sell recyclable products to manufacturers producing New Products. The waste management options of Class III/IV, and Class I disposal, and separation of recyclables are also available to any Private Haulers operating in the County.



SECTION 5:

REGIONAL SOLID WASTE REDUCTION GOAL

The Solid Waste Management Act of 1991 states that all regions must reduce the amount of waste going into Class I landfills by 25%. Amendments to the Act allow for consideration of economic growth, and a “qualitative” method in which the reduction rate is compared on a yearly basis with the amount of Class I disposal. Provide a table showing reduction rate by each goal calculation methodology. Discuss how the region made the goal by each methodology or why they did not. If the Region did not meet the 25% waste reduction goal, what steps or infrastructure improvements should be taken to attain the goal and to sustain this goal into the future.

Measurement of Regional Waste Reduction Goal

County	Waste Reduction Goal Calculation Method			
	Compared to Base Year	Population Ratio	Economic-Population Ratio	Qualitative- Real Time
DeKalb	32%	32%	27%	37%
25% Waste Reduction Goal Achieved	Yes	Yes	Yes	Yes

Source: TDEC, Division of Solid Waste Management, Division of Solid Waste Assistance Program, 11/2007.

Future Regional Waste Reduction Program in DeKalb County

Revenues are no longer based on a stable number like households, but rather on the amount of waste generated. The amount of waste weighed and paid can vary month-to-month and week-to-week, based on diversion program availability, seasonal factors, advertisements and promotions, and many other factors, and this can cause revenue headaches. Less waste collected means less revenue received.

The fundamentals of public works infrastructure to supply water, sewer, electricity and natural gas as necessary utilities, for instance, must be incorporated into the foundation of collecting waste generated from the source, be it residential or business. Transportation, disposal and management costs to support other facets of the waste utility industry are legitimate comparisons with the cost of providing other utilities to a modern society. Water, sewer, gas, etc. are considered necessary creature comforts for human beings. Trash management, and even environmental protection, such as water pollution control, is not considered an immediate personal comfort when the freedom to eliminate the waste can be easily and creatively practiced in the form of illegal dumping, burning or throwing trash in your own backyard without consequence. The connection of properly containerizing waste, revering the long-term benefits of self-preservation and safeguarding necessary environmental resources for the continued existence of oneself have not been successfully internalized to produce significant behavioral changes. Conserving any resource, whether it be water, electricity or landfill space, is not practiced concretely.

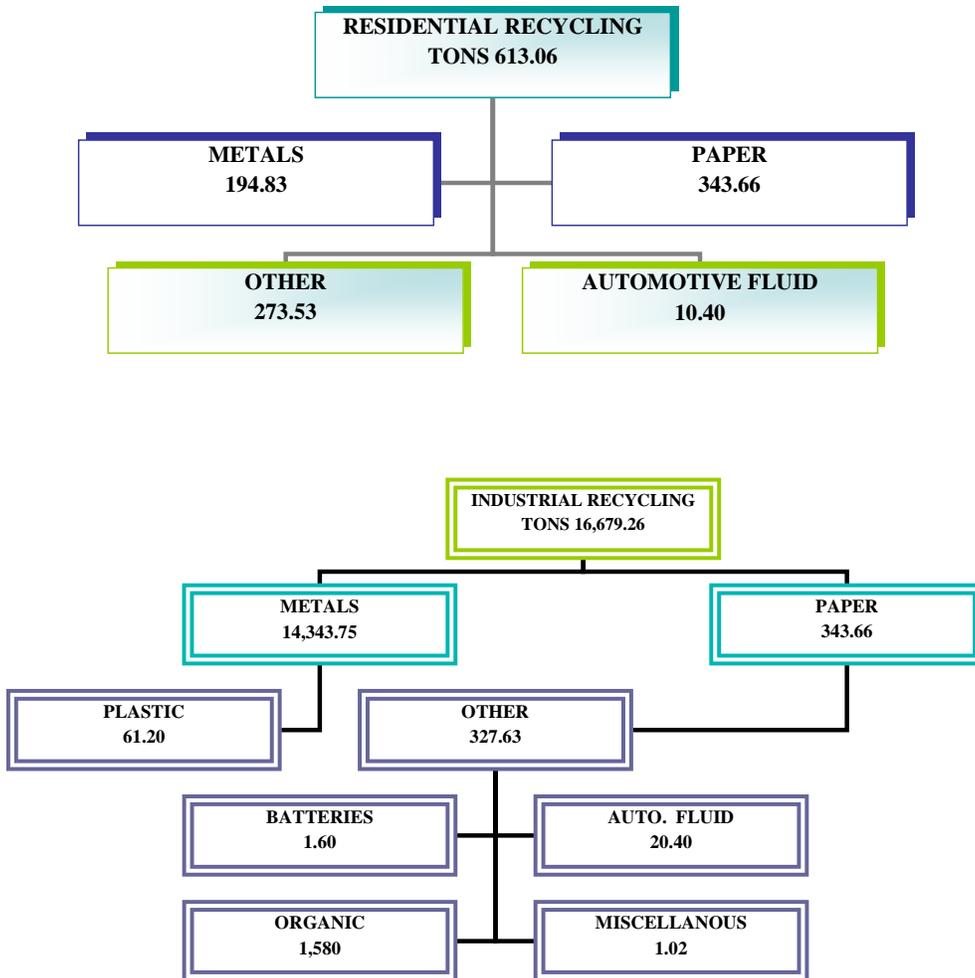
SECTION 6:

SOLID WASTE DISPOSAL CAPACITY

Provide a chart indicating current collection and disposal capacity by facility site and the maximum capacity the current infrastructure can handle at maximum throughput. Provide this for both Class I and Class III/IV disposal and recycled materials. Identify and discuss any potential shortfalls in materials management capacity whether these are at the collection or processor level.

Regional Disposal Assurance in DeKalb County in 2007

MATERIAL VOLUME BY TONS / YEAR 2007



DeKalb County transfers solid waste generated from convenience center sites to the County Class I Landfill. Reported figures from the TDEC SW County of Origin Report CY 2007, show 13,982 tons of solid waste generated in DeKalb County is disposed at the County Class I Landfill.

Household waste is only one portion of the waste stream that enters a licensed landfill. Private businesses contract separately for their waste collection and disposal services. The lack of detailed information on non-residential waste stream volumes makes it difficult to know how much of the remaining disposal capacity at any given landfill should be reserved for those sources of waste. In fact, the volume of household waste generated by local governments can vary significantly from year to year based on the level of recycling activity and the level of yard and/or construction debris generated within the community.

It is important to remember that a landfill may have space to expand its disposal capacity by adding new cells. Even if information on available disposal capacity for permitted landfill cells were available, it would not reflect the full future expansion potential of the landfill site.

Provide a chart or other graphical representation showing public and private collection service provider area coverage within the county and municipalities. Include provider's name, area of service, population served by provider, frequency of collection, yearly tons collected, and the type of service provided.

Public and Private Collection Service in the DeKalb County Region

Provider of Service	Service Area	Available Service for 2007 Population Total	Frequency of Service (Weekly, Bi-weekly, on call, etc.)	Estimated Annual Tons Collected	Type Service (Curbside, Convenience Center, Green Box)
County	County-wide (includes residents of DeKalb)	18,436	Weekly	13,982.00 (County CCC Sites- Class I)	Eight (8) Convenience Center Sites
Private Haulers*	County-wide	NA	As needed	NA	Subscription Service

*Several private haulers operate waste collection service for residents and businesses in DeKalb County. Information on customers and areas served and tonnages collected is not available and considered confidential by the private sector.

No out of county waste is accepted. Convenience Center Sites do not accept Class III/IV waste; it has to be taken to the landfills.

The County has installed waste oil collection tanks that it received through the waste oil grant. The convenience centers have seen an increase of waste oil collection. The county is still contacting local industries to collect their recycling / reuse tons. The county has added 6 recycling containers for cardboard, plastics and paper.

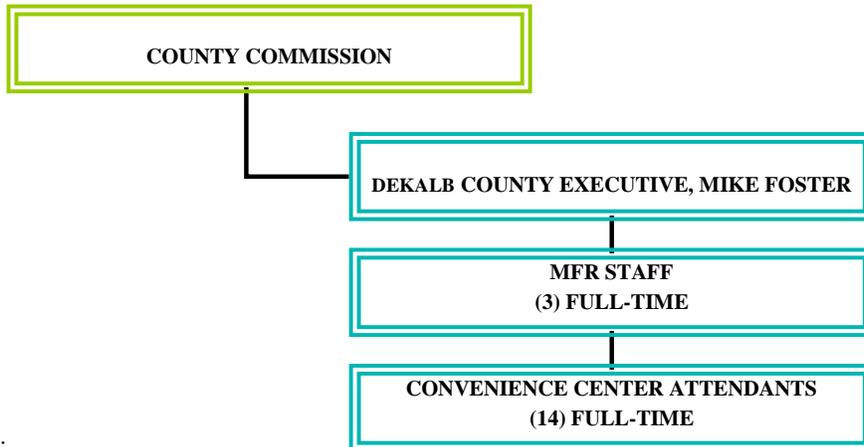
SECTION 7:

SOLID WASTE MANAGEMENT INFRASTRUCTURE

Provide organizational charts of each county and municipality's solid waste program and staff arrangement. Identify needed positions, facilities, and equipment that a fully integrated solid waste system would have to provide at a full level of service. Provide a scale county level map indicating location of all facilities including convenience centers, transfer stations, recycling centers, waste tire drop-off sites, used oil collection sites, paint recycling centers, all landfills, etc. Identify any short comings in service and note what might be needed to fill this need.

Regional Solid Waste Organizational Structure

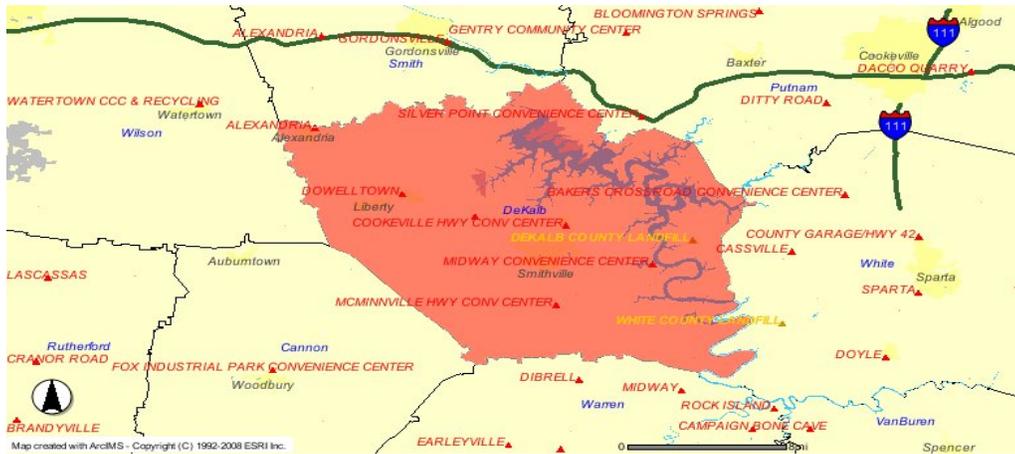
The recycling program in DeKalb County has been in existence since 1998. Smithville and surrounding communities is being implemented and overseen by the DeKalb County Executive and is responsible for all solid waste and recycling operations in DeKalb County. The recycling facility employs seventeen staff to collect and process material. See organization chart below:



The Solid Waste Manager is responsible for all solid waste and recycling daily operations in the County and answers directly to the DeKalb County Executive. The solid waste board, County Commission and the DeKalb County Executive evaluate program planning, budgeting and implementation. The County Litter Control Officer supervises inmates during daily operations at the Recycling Center and roadside litter pick-up.

Locations of Solid Waste Management Facilities

A DeKalb County map is provided below with several mapping layers: location of solid waste management facilities (convenience center sites, closed County sanitary landfill, Recycling Center); planned Development Projects including total proposed tracts and land mass acres.



Public Infrastructure Inventory Needs 2004-2009

	Tennessee	DeKalb County	County Rank	Percent of State
Estimated Costs, 2004-2009 (In Thousands)				
Transportation	\$10,031,713	\$106,864	22 nd	1.1%
Water and Wastewater	3,112,716	10,700	55 th	0.3%
Existing School Improvements	2,06,190	2,639	46 th	0.1%
K-12 New School Improvements	1,497,198	0	40 th	0.0%
Non K-12 Education	1,455	0	5 th	0.0%
Recreation	1,020,694	2,200	43 rd	0.2%
Other Utilities	556,070	0	29 th	0.0%
Law Enforcement	641,235	0	62 nd	0.0%
Business District Development	393,059	0	22 nd	0.0%
Libraries and Museums	140,510	0	48 th	0.0%
Industrial Sites and Parks	245,137	3,700	26 th	1.5%
Community Development	374,519	5,100	11 th	1.4%
Storm-Water	257,680	0	40 th	0.0%

Navigation	300,200	0	3 rd	0.0%
Public Buildings	339,067	500	50 th	0.1%
Public Health Facilities	51,503	1,000	15 th	1.9%
Fire Protection	175,243	2,000	15 th	1.1%
Housing	100,461	0	14 th	0.0%
Solid Waste	68,971	3,170	5 th	4.6%
Other Facilities	10,640	0	3 rd	0.0%
School System-Wide Need	16,645	0	14 th	0.0%
Telecommunications	29,774	0	6 th	0.0%
Property Acquisition	4,420	0	5 th	0.0%
GRAND TOTAL	\$21,438,100	\$137,872	35th	0.6%

Staffing

Sufficient staffing is in place to support operations of the existing system and future upgrades for the next five (5) years.

Safety and Health Training, and Certifications

The DeKalb County Waste Management Department is responsible for providing a safe and healthy environment for their employees. The Department can provide a certification training program, with incentives, for all staff, and include interested public officials. Waste industry professionals all know the importance of safety. Proper safety and health maintenance in operations of convenience centers and material recovery facilities can save money, time and lives.

Equipment

The table below provides a list of the potential equipment for continued and expanded operations of an integrated solid waste management program provided by DeKalb County for the Region over the next five (5) years. Equipment is listed in priority of need. Equipment costs are estimates only and should only be considered a baseline for future planning.

Future Waste Management Equipment Needs

DEKALB COUNTY			
Equipment	Operational Use	Estimated Cost (2007)	Potential Revenue Source
2 Roll-Off Trucks	Material collection	\$80,000.00	Grants/General Fund Appropriation
Expansion of 3 Current Convenience Centers	Material collection	\$17,000.00	Grants General Fund Appropriation
10 Roll-Off Containers	Material management	\$50,000.00	Grants/General Fund Appropriation
Construct 3 New Convenience Centers	Material management	\$170,000.00	Grant General Fund Appropriation

MFR Building	Material management	\$10,000	Grants/General Fund Appropriation
3 Balers / Compactors	Material collection	\$18,000.00	Grants/General Fund Appropriation
3 Recycling / Divided Containers	Material containerization	\$18,000.00	Grants/General Fund Appropriation
Wood Chipper	Material containerization	\$11,138.00	Grants/General Fund Appropriation
Total		\$374,238.00	

Facilities

Some examples of planned improvements and expansions to the solid waste management systems over the next (5) years include: Recycling Center asphalt paving, interior push-walls, glass cullet and material storage bays, building retrofits, indoor/outdoor security system.

Depending upon the future development of water and sewer services in the southern section of DeKalb County in the next five (5) years, there may be potential to construct a ninth (9th) convenience center site.

A Multi-Purpose Waste Management Facility may be constructed within the next five (5) to service equipment and collection vehicles provide storage for non-hazardous problem wastes, such as latex paint and electronic waste.

The table below provides a minimum list of the facilities for planned constructed and expanded, in no particular order. Cost estimates are only to be used as a baseline for planning purposes.

Future Waste Management Facility Construction and Upgrades

DEKALB COUNTY			
Facility	Facility Betterments	Estimated Cost (2007)	Potential Revenue Source
Convenience Center Collection Site Development			
Planned 3 Convenience Center Collection Site Construction	Site preparation, paving, fencing, gates, attendant sundries, utilities, equipment pads, signage etc.	\$170,000	Grants/General Fund Appropriation
Recycling and Existing Convenience Center Sites			
Recycling and CCC Site Upgrades	Asphalt paving, push-walls, cullet and storage bays, indoor/outdoor security system, building retrofits.	\$50,000	Grants/General Fund Appropriation
Multi-Purpose Waste Management Facility: repairs/maintenance, problem waste storage, etc.	Facility construction for waste management material handling: collection vehicles, heavy equipment, repair tools, repair parts inventory.	\$30,000	Grants/General Fund Appropriation
Total		\$250,000	

Current Revenue Sources for County Government Services

A summary of rates of the most broadly imposed taxes that were in place when DeKalb adopted the General Fund Budget for fiscal year 2007 are presented below:

Summary of Rates for DeKalb County Taxes (2007)

LOCAL TAX STRUCTURE		
PROPERTY TAXES	CITY	COUNTY
Rate per \$100 Value	\$0.68	\$1.70
Residential and Farm	25%	25%
Commercial and Industrial	40%	40%
Personal Equipment	30%	30%
(Inventory Tax) Raw Materials Only:		
Bonded Debt	\$875,000	\$10,044,910
Assessed Valuation	\$104,707,697	\$343,542,910
School Tax	0%	0.90%
Sales	2.75%	2.75%
Hotel-Motel Tax	5%	5%

Local Government Tax Revenue Sources

One of the major challenges of the 21st century is obtaining funds for environmental programs. The costs of environmental protection are growing rapidly, and yet, our nation's ability to meet these rising costs is falling behind and the financing gap is widening. State and local revenues are diminishing as a result of increased environmental regulations and program costs to meet these new requirements.

Competing local programs for a limited amount of resources has caused most local governments to seek other financial mechanisms to generate revenues. Traditionally, local governments fund solid waste services through property taxes without understanding what their waste management services actually cost which can result in poor decisions when developing new or expanding existing programs.

Incremental purchases with borrowed funds are often made for needed equipment and facility improvements with little consideration for long-term planning and management of the waste services.

The source of revenues and expenditures for this analysis are from the DeKalb County Sanitation Budget Fund 116 for fiscal year 2006/2007.

WAGES AND BENEFITS
FISCAL YEAR: 2006/2007
FORM 1

Total Annual Wages and Benefits (\$)	Estimated Allocation of Annual Wages and Benefits Expense by Employees by Program Area							
	Collection		Disposal		Recycling		Education	
	%	\$	%	\$	%	\$	%	\$
\$33,300	70	\$23,310			25	\$8,325	5	\$1,665
		\$23,310				\$8,325		\$1,665

Costs of wages and benefits for each employee are allocated among all programs by estimating the amount of time each employee spends performing tasks in that program area annually. This form represents a total of all wages/benefits allocated across program areas. DeKalb County benefits include social security and unemployment compensation only. Ideally, time spent across program areas can be more accurate if tracked each day by the employee. This is not customarily tracked on a daily basis and often for reasons of logistics. Estimating costs across program areas, after the fact, must be considered estimates, and results only used for planning purposes and not for establishing an annual budget.

GENERAL OPERATIONS AND MAINTENANCE
FISCAL YEAR: 2006/2007
FORM 2

Description of Expenditures	Total Annual Operations and Maintenance (\$)	Allocation of Annual Operations and Maintenance by Program Area							
		Collection		Disposal		Recycling		Education	
		%	\$	%	\$	%	\$	%	\$
Communication	\$1,100	70	\$56,600			25	\$275	5	\$55

Contracts (landfill fees)	\$43,810			100	\$43,810				
Equipment Repairs/Maintenance	\$5,000	90	\$4,500			10	\$500		
Electricity	\$4,200	70	\$2,940			30	\$1,260		
Diesel Gas,	\$10,400	100	\$10,400						
Natural Gas	\$1,400	75	\$1,050			25	\$350		
Water and Sewer	\$700	75	\$525			25	\$175		
Other Supplies and Materials	\$600	70	\$420			25	\$150	5	\$30
Trustee's Commission	\$2,000	25	\$500	25	\$500	25	\$500	25	\$500
Landfill Operation and Maintenance Charges	\$2,099,263			100	\$2,099,263				
Total	\$2,168,473		\$76,935		\$2,143,573		\$3,210		\$585

Costs of Operations and Maintenance represent the costs incurred to purchase items to maintain daily operations of program elements of the solid waste management system. Cost items are allocated across program areas according to how those funds are spent, in similar fashion to that on Form 1.

AMORTIZATION OF FUTURE OUTLAYS

FISCAL YEAR: 2006/2007

FORM 3A

Description of Future Outlay	Estimated Cost of Future Outlay (\$)	Amounts Previously Amortized (\$)	Expected Number of Years Until Funds Will Be Required	Annual Amortized Expense (\$)
Roll-Off Waste Collection Containers (4 @ \$5,000)	\$20,000	0	1	\$20,000
Forklift	\$20,000	0	5	\$4,000
Latex Paint Recovery Containers (3 @ \$1,000 each)	\$3,000	0	1	\$3,000
Recycling Collection Vehicle	\$40,000	0	2	\$20,000
Roll-Off Compactor	\$20,000		5	\$4,000
Roll-Off Compactor Containers (2 @ \$5,000)	\$10,000		5	\$2,000

Planned CCC Site Construction	\$50,000	0	5	\$10,000
Recycling and CCC Site Upgrades	\$50,000	0	4	\$12,500
Multi-Purpose Waste Management Facility	\$30,000	0	5	\$6,000
Education Program Material	\$12,500		1	\$12,500
Total	\$255,500			\$94,000

Equipment, facility construction and expansion list has been provided.

A future outlay is an anticipated expenditure of cash in the future that is obligated by current activities or prior solid waste management activities. Amortization is a method of determining the annual costs of obligations for future outlays over time (for example, the reduction of debt by regular payments sufficient to retire the debt obligation by maturity).

One method of calculating the annual cost of amortization for a future outlay can be determined by:

Current Estimated Cost of Future Outlay – Amounts Previously Amortized
Expected Number of Years Until Funds Will be Required

AMORTIZATION OF FUTURE OUTLAYS
FISCAL YEAR 2006/2007
FORM 3B

Annual Amortization Expense (\$)		Allocation of Amortized Expense of Future Outlays by Program Area							
		Collection		Disposal		Recycling		Education	
		%	\$	%	\$	%	\$	%	\$
Roll-Off Collection Containers (4 @ \$5,000)	\$20,000	50	\$10,000			50	\$10,000		
Forklift	\$4,000					100	\$4,000		
Latex Paint Recovery Containers	\$3,000					100	\$3,000		
Roll-off Compactors	\$4,000	100	\$4,000						
Roll-off Compactor Collection Containers	\$2,000	100	\$2,000						
Recycling Collection Vehicle	\$20,000	50	\$10,000			50	\$10,000		
Planned CCC Site Construction	\$10,000	75	\$7,500			25	\$2,500		
Recycling and CCC Site Upgrades	\$12,500	60	\$7,500			40	\$5,000		
Multi-Purpose Waste Management Facility	\$6,000	60	\$3,600			40	\$2,400		

Education Program Materials	\$12,500							100	\$12,500
Total	\$94,000		\$44,600				\$36,900		\$12,500

DeKalb County provides solid waste collection/disposal and recycling services for residents and several local haulers and businesses countywide. Summary Form B allows the County to evaluate the present fee structures established for business customers and consider future variable rate structures across program areas. Each local government must determine for itself, according to its unique circumstances, how best to allocate costs of solid waste management between customer classes.

UNIT COSTS

FISCAL YEAR: 2006/2007

SUMMARY FORM B

MSW Program Area	Cost Unit by Customer Class by Program Area							
	Total Residential Cost	Residential		Cost Per Household		Total Nonresidential Cost	Nonresidential	
		Tons	\$/Ton	HHs	\$/HH		Tons	\$/Ton
Collection	\$70,632	781	\$90	240	\$295	\$17,658	386	\$48
Disposal	\$40,948	781	\$51	240	\$171	\$10,237	386	\$26
Recycling (includes Class III/IV waste diversion)	\$24,568	206	\$121	240	\$102	\$6,142	51	\$120
Education	\$11,220	987	\$11	240	\$47	\$2,805	437	\$6
Total	147,368	-----	\$273	240	\$615 (\$60/month)	\$36,842	-----	\$200

Notes: Tonnage figures based on estimates: % waste tons - residential (63%), commercial (37%) of 1,167 total tons. % recycling tons- residential (80%), commercial (20%) of 257 total tons. The number of households based on 2.3 people per household (total population in 2006).

In many business categories, the generation of solid waste may vary greatly from one nonresidential customer to the next. Therefore, for some local governments, "cost-per-customer" data may not provide precise indications of the overall expense of solid waste management services provided to nonresidential customers, compared with the cost of those provides to residential customers. In addition to cost-per-customer data, therefore, local governments are encouraged to include in their analyses of non-residential costs alternative cost bases, such as cost per container dump, if such data are available.

Summary Form B calculates estimated costs for any or all waste programs using certain standard units of measure. Calculating costs by unit helps put the overall costs of solid waste programs in perspective of providing an integrated solid waste system that includes multiple services. Cost per household may be used to determine the amount of service fees to charge per year, or month per household.

DeKalb County will evaluate alternative revenue sources, such as user fees, as waste management services expand to meet the growing needs of residents and additional state and federal regulations. Performing a full-cost accounting study, DeKalb County can:

- Determine the cost of solid waste management services;
- Adopt a more business-like approach to solid waste management.

- Improve methods of evaluating privatization initiatives.
- Determine an appropriate mix of solid waste management services for the future.
- Establish rates and user charges to fund services for the future.

In an effort to manage and reduce the amount and types of waste generated in an industrialized, ‘throw-away society,’ local governments develop programs and construct collection and disposal facilities incrementally over time. The annual budget and the 4-year re-election process limits long-term planning to construct facilities to ‘grow into and not out of’ over a longer time period than public officials are willing to risk, nor available revenue sources might allow.

SECTION 8:

PUBLIC PARTICIPATION

Describe current attitudes of the region and its citizens towards recycling, waste diversion, and waste disposal in general. Where recycling is provided, discuss participation within the region. Indicate current and on-going education measures to curb apathy or negative attitude towards waste reduction. Are additional measures needed to change citizen’s behaviors? If so, what specific behaviors need to be targeted and by what means?

Current Public Attitudes Concerning Environmental Protection

No qualitative surveys have been conducted to measure public attitudes of DeKalb County residents concerning support of environmental protection programs. The methodology for testing any data, including the qualitative nature of attitudes, requires a methodology of random sampling of the local population. This can be a daunting task and not usually an option for governments with limited means to purchase this service.

Measurements assessing public and private sector attitudes by the DeKalb County have been derived from the nature of local public interaction at County waste management facilities; comments at public meetings; telephone calls to the County Executive’s office, either for information, complaints or praise; informal feed-back from County employees, friends, and family members; ‘letters to the editor’ in the local newspapers; and constructive guidance and budgetary commitment by elected officials for the Solid Waste Management Program. Program staff are encouraged by numerous positive comments from those residents who are using the Recycling and Convenience Center sites across the County.

SECTION 9:

REGIONAL SOLID WASTE PLAN

Identify all current revenue sources by county and municipality that are used for materials and solid waste management. Project future revenue needs from these categories and discuss how this need will be met in the future.

The budget and audit from 2006 through 2009 are provided on the following three pages.

	AUDIT 2006	AUDIT 2007	BUDGET 2008	BUDGET 2009
SOLID WASTE FUND				
REVENUES & OTHER SOURCES:				
40000 LOCAL TAXES				
40110 CURRENT PROPERTY TAX	\$ 605,799	\$ 691,317	\$ 788,419	\$ 802,452
40120 TRUSTEES COLL.-PRIOR YEARS	\$ 29,521	\$ 18,202	\$ 30,512	\$ 31,055
40130 CIRC. CLK/MASTERS COLL.-PRIOR YRS	\$ 10,637	\$ 8,174	\$ 6,544	\$ 6,660
40140 INTEREST & PENALTY	\$ 4,259	\$ 4,768	\$ 5,125	\$ 5,216
40150 PICK-UP TAXES	\$ 990	\$ 604	\$ 1,355	\$ 918
40162 PAYMENT IN-LIEU OF TAXES- LOCAL UTIL	\$ -	\$ 31,142	\$ -	\$ -
TOTAL LOCAL TAXES	\$ 651,206	\$ 754,207	\$ 831,955	\$ 846,301
43100 GENERAL SERVICES CHARGES				
43106 COM-INDUS. WASTE COLL. CHARGES	\$ 12,412	\$ 10,472	\$ 12,415	\$ 12,000
43107 RESIDENTIAL WASTE COLL. CHARGES	\$ 3,418	\$ 1,600	\$ 3,415	\$ 3,200
43110 TIPPING FEES	\$ 195,893	\$ 244,118	\$ 202,000	\$ 205,000
43114 SOLID WASTE DISPOSAL FEE	\$ 4,758	\$ -	\$ -	\$ -
43380 VENDING MACHINES	\$ -	\$ -	\$ -	\$ -
TOTAL GENERAL SERVICE CHARGES	\$ 216,481	\$ 256,190	\$ 217,830	\$ 220,200
44000 OTHER LOCAL REVENUE				
44110 INTEREST EARNED	\$ -	\$ -	\$ 1,000	\$ 850
44130 SALE OF MATERIALS & SUPPLIES	\$ 500	\$ 794	\$ 250	\$ 1,100
44145 SALE OF RECYCLED MATERIALS	\$ 4,360	\$ 2,045	\$ 2,500	\$ 3,500
44170 MISCELLANEOUS REFUNDS	\$ 15	\$ 63,415	\$ -	\$ -
44520 INSURANCE RECOVERY	\$ -	\$ -	\$ -	\$ -
44530 SALE OF EQUIPMENT	\$ -	\$ -	\$ -	\$ -
44540 SALE OF PROPERTY	\$ -	\$ -	\$ -	\$ -
TOTAL OTHER LOCAL REVENUE	\$ 4,881	\$ 66,254	\$ 3,750	\$ 5,250
46170 SOLID WASTE GRANTS				
46170 SOLID WASTE GRANTS	\$ 13,973	\$ 19,971	\$ 15,000	\$ 7,500
46980 OTHER STATE GRANTS	\$ -	\$ -	\$ -	\$ -
46990 OTHER STATE REVENUES	\$ -	\$ -	\$ -	\$ -
TOTAL OTHER STATE REVENUE	\$ 13,973	\$ 19,971	\$ 15,000	\$ 7,500
47000 FEDERAL GOVERNMENT				
47230 DISASTER RELIEF	\$ -	\$ -	\$ -	\$ -
47500 OTHER FEDERAL THROUGH STATE	\$ -	\$ -	\$ -	\$ -
TOTAL FEDERAL REVENUE	\$ -	\$ -	\$ -	\$ -
48000 OTHER GOV/CITIZENS GROUPS				
48140 CONTRACTED SERVICES	\$ -	\$ -	\$ -	\$ -
TOTAL OTHER GOV/CITIZENS GROUPS	\$ -	\$ -	\$ -	\$ -
49000 OTHER SOURCES-(NON-REVENUE)				
49200 NOTES ISSUED	\$ -	\$ 1,225,000	\$ -	\$ -
49300 CAPITAL LEASES ISSUED	\$ -	\$ -	\$ -	\$ -
49800 TRANSFERS IN	\$ 270,000	\$ -	\$ -	\$ -
TOTAL OTHER SOURCES (NON-REV)	\$ 270,000	\$ 1,225,000	\$ -	\$ -
TOTAL REVENUES & OTHER SOURCES	\$ 1,156,541	\$ 2,321,622	\$ 1,068,535	\$ 1,079,251

	AUDIT 2006	AUDIT 2007	BUDGET 2008	BUDGET 2009
EXPENDITURES:				
56731 WASTE PICK-UP				
143 LABORERS	\$ 37,627	\$ 40,412	\$ 49,000	\$ 49,000
186 LONGEVITY	\$ -	\$ -	\$ 1,000	\$ 600
201 SOCIAL SECURITY (@ 6.2%)	\$ -	\$ -	\$ -	\$ 3,075
204 STATE RETIREMENT (@ 5.18%)	\$ -	\$ -	\$ -	\$ 2,659
205 EMPLOYEE & DEPENDENT INSURANCE	\$ -	\$ -	\$ -	\$ 2,472
210 UNEMPLOYMENT	\$ -	\$ -	\$ -	\$ 210
212 EMPLOYER MEDICARE (@1.45%)	\$ -	\$ -	\$ -	\$ 719
338 MAINTENANCE & REPAIR VEHICLES	\$ -	\$ -	\$ 6,600	\$ 7,600
498 OTHER SUPPLIES & MATERIALS	\$ -	\$ -	\$ 100	\$ 100
611 INTEREST ON CAPITAL LEASES	\$ -	\$ -	\$ -	\$ -
TOTAL WASTE PICK-UP	\$ 37,627	\$ 40,412	\$ 56,600	\$ 66,246
56732 CONVENIENCE CENTERS				
143 LABORERS	\$ 170,398	\$ 175,117	\$ 210,000	\$ 210,000
201 SOCIAL SECURITY (@ 6.2%)	\$ -	\$ -	\$ -	\$ 13,020
204 STATE RETIREMENT (@ 5.18%)	\$ -	\$ -	\$ -	\$ 10,876
205 EMPLOYEE & DEPENDENT INSURANCE	\$ -	\$ -	\$ -	\$ 4,944
210 UNEMPLOYMENT	\$ -	\$ -	\$ -	\$ 910
212 EMPLOYER MEDICARE (@1.45%)	\$ -	\$ -	\$ -	\$ 3,045
307 COMMUNICATION	\$ 3,216	\$ 3,423	\$ 3,500	\$ 3,500
498 OTHER SUPPLIES & MATERIALS	\$ 5,903	\$ 6,437	\$ 7,200	\$ 7,200
791 OTHER CONSTRUCTION	\$ 490	\$ 661	\$ 1,000	\$ 1,000
TOTAL CONVENIENCE CENTERS	\$ 179,997	\$ 195,637	\$ 221,700	\$ 264,437
56764 LANDFILL OPERATION & MAINTENANCE				
143 LABORERS	\$ 144,996	\$ 162,686	\$ 180,000	\$ 190,000
186 LONGEVITY	\$ -	\$ -	\$ 2,000	\$ 850
187 OVERTIME PAY	\$ 1,675	\$ 3,740	\$ 20,000	\$ 20,000
201 SOCIAL SECURITY (@ 6.2%)	\$ -	\$ -	\$ -	\$ 12,440
204 STATE RETIREMENT (@ 5.18%)	\$ -	\$ -	\$ -	\$ 10,394
205 EMPLOYEE & DEPENDENT INSURANCE	\$ -	\$ -	\$ -	\$ 9,896
210 UNEMPLOYMENT	\$ -	\$ -	\$ -	\$ 840
212 EMPLOYER MEDICARE (@1.45%)	\$ -	\$ -	\$ -	\$ 2,909
307 COMMUNICATION	\$ 496	\$ 494	\$ 1,000	\$ 1,000
321 ENGINEERING SERVICES	\$ 25,221	\$ 42,076	\$ 42,000	\$ 42,000
328 LAUNDRY SERVICE	\$ 14,162	\$ 19,148	\$ 19,000	\$ 19,000
330 OPERATING LEASE PAYMENTS	\$ -	\$ -	\$ 26,600	\$ 26,600
338 MAINTENANCE & REPAIR VEHICLES	\$ 60,308	\$ 49,840	\$ 100,000	\$ 46,000
361 RENTALS	\$ 19,911	\$ 19,460	\$ -	\$ -
399 OTHER CONTRACTED SERVICES	\$ 29,313	\$ 35,122	\$ 35,000	\$ 35,000
408 CRUSHED STONE	\$ 5,224	\$ 5,940	\$ 13,000	\$ 13,000
412 DIESEL FUEL	\$ 90,659	\$ 96,488	\$ 115,000	\$ 115,000
462 UTILITIES	\$ 9,294	\$ 9,768	\$ 12,300	\$ 12,600
498 OTHER SUPPLIES & MATERIALS	\$ 15,792	\$ 24,219	\$ 25,000	\$ 25,000
514 DEPRECIATION	\$ 162,908	\$ 177,349	\$ 190,000	\$ 13,000
620 LOSS ON DISPOSAL OF PROPERTY	\$ -	\$ 23,871	\$ -	\$ -
623 CLOSURE/POST CLOSURE CARE COST	\$ 139,844	\$ 139,451	\$ 6,000	\$ 16,000
698 OTHER CHARGES	\$ 64,660	\$ 6,444	\$ 25,000	\$ 25,000
716 MOTOR VEHICLES	\$ -	\$ -	\$ 250,000	\$ -
791 OTHER CONSTRUCTION (By Rate Proceeds)	\$ -	\$ 3,289	\$ 1,221,711	\$ -
TOTAL LANDFILL OPERATION & MAINT.	\$ 764,821	\$ 809,191	\$ 2,221,611	\$ 823,221
56768 OTHER WASTE DISPOSAL				
191 BOARD & COMMITTEE MEMBER FEES	\$ -	\$ -	\$ 600	\$ 600
201 SOCIAL SECURITY	\$ 26,067	\$ 29,097	\$ 32,000	\$ 31
204 STATE RETIREMENT	\$ 3,666	\$ 6,832	\$ 7,500	\$ 26
205 EMPLOYEE & DEPENDENT INSURANCE	\$ -	\$ -	\$ -	\$ -
210 UNEMPLOYMENT	\$ 3,923	\$ 3,020	\$ 4,300	\$ 5
212 EMPLOYER MEDICARE (@1.45%)	\$ -	\$ -	\$ -	\$ 7
610 TRUSTEE'S COMMISSION	\$ 16,211	\$ 16,116	\$ 16,000	\$ 11,672
699 OTHER CHARGES	\$ -	\$ -	\$ -	\$ -
TOTAL OTHER WASTE DISPOSAL	\$ 50,067	\$ 64,865	\$ 60,300	\$ 12,441
56770 POST CLOSURE CARE COSTS				
523 CLOSURE/POST CLOSURE CARE	\$ -	\$ -	\$ 5,000	\$ -
TOTAL POST CLOSURE CARE COSTS	\$ -	\$ -	\$ 5,000	\$ -
58600 EMPLOYEE BENEFITS				
201 SOCIAL SECURITY	\$ -	\$ -	\$ -	\$ -

		AUDIT 2006	AUDIT 2007	BUDGET 2008	BUDGET 2009
46851	STATE REVENUE SHARING-TVA FUNDS	\$ -	\$ 68,792	\$ -	\$ 245,000
46880	BOARD OF JURORS	\$ -	\$ -	\$ -	\$ -
46915	CONTRACTED PRISONER BOARD	\$ 389,157	\$ 170,861	\$ 210,000	\$ 210,000
46940	REAPPR. PROG. REIMBURSEMENT	\$ -	\$ -	\$ -	\$ -
46960	REGISTRAR SALARY SUPPLEMENT	\$ 16,380	\$ 16,380	\$ 16,000	\$ 16,000
46980	OTHER STATE GRANTS	\$ 10,000	\$ 72,241	\$ -	\$ -
46990	OTHER STATE REVENUES	\$ 4,150	\$ 4,150	\$ -	\$ 5,600
	TOTAL OTHER STATE REVENUE	\$ 685,490	\$ 614,235	\$ 455,500	\$ 704,611
47000 FEDERAL GOVERNMENT					
47135	COMMUNITY BASED ORGANIZATIONS	\$ -	\$ -	\$ -	\$ -
47180	COMMUNITY DEVELOPMENT	\$ -	\$ 518,946	\$ -	\$ -
47230	DISASTER RELIEF	\$ -	\$ -	\$ -	\$ -
47235	HOMELAND SECURITY GRANTS	\$ 52,269	\$ 28,753	\$ -	\$ -
47250	LAW ENFORCEMENT GRANTS (Fire Dept)	\$ -	\$ -	\$ -	\$ 25,000
47590	OTHER FEDERAL THROUGH STATE	\$ -	\$ 146,950	\$ -	\$ -
47600	DIRECT FEDERAL REVENUE				
47620	POLICE SERVICE (LAKE AREA)	\$ 37,600	\$ 34,848	\$ 37,000	\$ 37,000
47990	OTHER DIRECT FEDERAL REVENUE	\$ -	\$ 252,383	\$ -	\$ -
	TOTAL FEDERAL REVENUE	\$ 89,869	\$ 981,880	\$ 37,000	\$ 62,000
48000 OTHER GOVERNMENTS & CITIZENS					
48110	PRISONER BOARD	\$ -	\$ -	\$ -	\$ -
48130	CONTRIBUTIONS (E-911 & CITIES)	\$ 330,785	\$ 211,585	\$ 220,000	\$ 220,000
48140	OTHER CONTRACTED SERVICES	\$ -	\$ -	\$ -	\$ -
48610	DONATIONS (United Way)	\$ -	\$ -	\$ -	\$ -
	TOTAL OTHER GOV'T'S/CITIZENS GROUPS	\$ 330,785	\$ 211,585	\$ 220,000	\$ 220,000
49000 OTHER SOURCES (NON-REVENUE)					
49200	NOTES ISSUED	\$ -	\$ -	\$ -	\$ -
49300	CAPITAL LEASES ISSUED	\$ -	\$ -	\$ -	\$ -
49500	OTHER LOANS ISSUED	\$ -	\$ -	\$ -	\$ -
49800	TRANSFERS IN	\$ -	\$ -	\$ -	\$ -
	TOTAL OTHER SOURCES (NON-REVENUE)	\$ -	\$ -	\$ -	\$ -
	TOTAL REVENUE & OTHER SOURCES	\$ 4,687,035	\$ 5,749,664	\$ 5,290,081	\$ 5,755,584

The Solid Waste Region of DeKalb County developed a 10-Year Plan for short and long-term solid waste services, as required by The Solid Waste Management of 1991. The Table below summarizes the existing programs, the 5-Year Update Program Plan, and the Tennessee Solid Waste Management Plan as required by the Act of 1991.

Planned Solid Waste Management System 2007 – 2012

Solid Waste Program	Existing Regional Solid Waste Programs	Future Regional Solid Waste Programs	Tennessee Mandated Plan
Residential Solid Waste Collection	DeKalb County provides residential collection of solid waste at eight (8) CCC sites. Private haulers provide collection/disposal services for local residents and businesses.	Continue County residential drop-off service. Maintain efficient collection equipment and facilities. Continue private hauling services.	County to provide CCCs for residents according to population or service area, maintain required design and operational standards.
Recycling	Cardboard, newsprint, aluminum and steel cans, mixed paper, magazines, phonebooks, electronics, latex paint, used oil, scrap metal, plastic drink containers, waste tires, glass bottles, waste tires and batteries.	Increase business and school recyclables collection. Expand types and amounts of materials collected at drop-off sites. Expand Recycling operations to collect, manage, process additional materials types and amounts. Continue material processing maximizing available market prices.	County to provide eight (8) CCCs and one (1) recycling center for collection of residential recyclable materials, and county Landfill.
Waste Reduction	DeKalb County collects recyclables from public and private sector, tracks business waste diversion activities. Exceeded 25% Regional Waste Reduction Goal.	Continue collecting recyclables from public and private sector, tracking business waste diversion activities to achieve 25% Regional Waste Reduction Goal. Continue waste diversion of Class 1 disposal in DeKalb County Landfill.	Continue achieving 25% waste reduction goal.
Problem Waste Management	DeKalb County provides collection at Convenience Center Sites for used oil and scrap metal. The County Recycling Center collects used oil, used oil filters, automobile fluids, e-waste, latex paint, waste tires. HHW TDEC mobile collection events to be scheduled.	Continue problem waste collection and expand service as needed. HHW TDEC mobile collection events to be scheduled.	County to provide at least one (1) site to accept automobile fluids, batteries and waste tires. County to provide HHW collection events, when state scheduling is provided.
Public Education and Information	DeKalb County provides education activities targeting government, business, media, public, schools, and civic groups.	Increase educational activities to target government, business, media, public, schools, and civic groups.	Region to develop and implement solid waste management action plan for adults and children.
Disposal	DeKalb County transports waste collected at County convenience centers to the County Landfill for disposal in Class 1 Landfill. Other Class 1 Landfills identified on the TDEC SW County of Origin Report (2007) report as receiving waste generated in DeKalb County for disposal. Possible customers may be private haulers operating in the County.	Continue to competitively negotiate long-term disposal contract.	Region to assure 10-year disposal capacity.
Planning	Monthly meetings with Regional Planning Board, County Executive, Sanitation Department and County Commission to maintain plan updates, annual reports, etc.	Continue monthly meetings, and reporting requirements. Forge partnerships between government, business, media, civic, and public.	Region to provide Annual Progress Reports, 5-Year Plan Updates, other reporting requirements as needed.

Sustainability of the Solid Waste Plan must include, at the minimum:

- Regional Planning Board Involvement,
- Expansions and Upgrades of Residential Collection Services and Facilities,
- Pursuing all Grant Funds for Equipment and Facilities,
- Utilize Technical Assistance Providers,
- Research Technologies and Other Program Options,

- Promote Other Waste Reduction Efforts,
- Expand Recycling Material Types and Amounts Collected,
- Garner Competitive Market Prices for Recyclable Materials,
- Provide Employee Work and Equipment Safety Training,
- Maintain Flexible Problem Waste Collection,
- Continue Aggressive Public Outreach, Education Program, and
- Expand Business and School Recycling Collection Program.

Sustainability will depend on public, governmental and business sector response to produce desired outcomes for improving the infrastructure, as well as the health and welfare of all citizens in DeKalb County and municipalities. The list is meant to be a work in progress that is ongoing for future needs, changing environmental regulations, and the means to continue encouraging enthusiastic efforts of the Sanitation Department staff, and expand local participation when possible. A partnership between the County and City government officials is necessary to share the investment of a comprehensive community waste reduction program.

SECTION 10:

Describe current attitudes of the region and its citizens towards recycling, waste diversion, and waste disposal in general. Where recycling is provided, discuss participation within the region. Indicate current and on going education measures to curb apathy or negative attitude towards waste reduction. Are additional measures needed to change citizen's behaviors? If so, what specific behaviors need to be targeted and by what means?

Current and On-Going Education Measures to Increase Public Participation

DeKalb County continues to promote the recycling program through available venues: media advertisements, school environmental classes, community center local activities, governmental financial support and business organizational interests. With each day, there is increasing support for the increasing activities developing at the Recycling Center. Communities throughout the County are enthusiastic about the recycling services provided at the Center. Residents drive across the County to bring recyclable materials to the Center.

The County government administration is continuing to develop distinctive programs to target schools, businesses, civic organizations and the public.

- Schools are collecting cardboard, and paper. Several teachers and their students bring the material to the Center each week. There are cooperative discussions between school board members, principals, teachers and local government officials to create an environmental education component for introduction to all local schools in the coming school years.
- The County Litter Officer directs the inmates to separate the roadside trash from the recyclables discarded on the road before bagging both materials. The roadside recyclables are brought to the

Center for processing. And, the invaluable and contaminated litter or dumpsite material is placed in the roll-off trash containers.

- TDEC staff has provided significant support to the County in the form of technical guidance, on-site field visits lending relevant information for improvements, and the opportunity to apply for grant solicitations. The County is fortunate to receive TDEC grant awards to construct the Recycling Center, to purchase waste and recycling collection equipment, to manage Waste Tires, and to purchase Used Oil equipment. Also, the County has benefited from state-funded technical assistance from RMCT, Inc., the Upper Cumberland Development District (UCDD), and The University of Tennessee, County Technical Assistance Service (UT-CTAS).

DeKalb County recognizes participation in yearly community events to demonstrate the reasoning to curb litter and illegal dumping, and practice proper waste containerization as critical local activities to improve local resident and business participation. Attracting industry investments and tourism, and maintaining an educated resident population without the experience of the ‘brain drain’ of other rural communities, are significant features for intrinsic community development in DeKalb County.

Community center associations located across the County support an array of local issues for those residents and businesses which inhabit those geographic areas. Community members develop center activities grounded in principles of equal representation and the commitment to improve the lives of all local residents.

SECTION 11:

Discuss this region’s plan for managing their solid waste management system for the next five (5) years. Identify any deficiencies and suggest recommendations to eliminate deficiencies and provide sustainability of the system for the next five (5) years. Show how the region’s plan supports the Statewide Solid Waste Management Plan.

When the original plan was compiled household waste was the only item accepted at the collection sites, but now recycling is offered. The county will continue to support the statewide solid waste management plan in meeting their 25% reduction each year. The County demonstrates below the future management of waste collection and recycling.

Future Waste Management Facility Construction and Upgrades

DEKALB COUNTY			
Facility	Facility Betterments	Estimated Cost (2007)	Potential Revenue Source
Convenience Center Collection Site Development			
Planned 3 Convenience Center Collection Site Construction	Site preparation, paving, fencing, gates, attendant sundries, utilities,	\$170,000	Grants/General Fund Appropriation

	equipment pads, signage etc.		
Recycling and Existing Convenience Center Sites			
Recycling and CCC Site Upgrades	Asphalt paving, push-walls, cullet and storage bays, indoor/outdoor security system, building retrofits.	\$50,000	Grants/General Fund Appropriation
Multi-Purpose Waste Management Facility: repairs/maintenance, problem waste storage, etc.	Facility construction for waste management material handling: collection vehicles, heavy equipment, repair tools, repair parts inventory.	\$30,000	Grants/General Fund Appropriation
Total		\$250,000	