

WEAKLEY COUNTY SOLID WASTE PLANNING REGION

Solid Waste Needs Assessment

August 2011

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

To begin implementation of the Solid Waste Management Act, counties were instructed to form solid waste regions (single or multi-county) and establish a solid waste board. Each region was required to formulate a 10-year plan for collection and disposal of solid waste in the area and submit this plan to the Tennessee Department of Environment and Conservation. Each municipal solid waste region must submit an annual progress report and 5-Year Plan Update (T.C.A. § 68-211-814). The plan, and any revised plan, submitted by each region must be consistent with the state solid waste plan and with all relevant state laws and regulations.

At a minimum, each plan must contain the following items:

- Demographic information and projections;
- Analysis of economic activity in the Region;
- Characterization of the waste stream;
- Projection of solid waste generation;
- Evaluation of collection systems within the Region;
- Current system analysis of waste streams, collection capability, disposal capability, costs, and revenues;
- Description of waste reduction activities designed to attain the required 25 percent reduction in solid waste;
- Description of education initiatives designed to achieve the goals stated in the statute; and
- Any other information the commissioner of the Department of Environment and Conservation deems relevant.

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 during 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. Considering the trends, discuss the affect on the solid waste infrastructure needs over the next five (5) years.

Population Trends in Weakley County

Weakley County's population has remained steady according to figures taken from the 2000 Census and the 2010 Census. As shown on Table 1.1 below, the population in 2000 was 34,895, and the population in 2010 was 35,021. This shows only an increase of 126 persons.

TABLE 1.1 Historic and Projected Population Trends (2000 thru 2016)

Year	County Population	Dresden	Gleason	Greenfield	Martin	Sharon	Unincorporated
2000	34,895	2,855	1,463	2,208	10,515	988	16,866
2001	34,358	2,960	1,453	2,171	10,173	969	16,632
2002	34,209	2,987	1,451	2,144	10,189	954	16,484
2003	33,945	2,955	1,445	2,118	10,064	949	16,414
2004	33,546	2,910	1,429	2,082	10,025	934	16,166
2005	33,541	2,900	1,421	2,066	10,073	927	16,154
2006	33,306	2,863	1,412	2,041	10,065	914	16,011
2007	33,227	2,838	1,399	2,032	10,092	910	15,956
2008	33,379	2,837	1,404	2,031	10,164	911	16,032
2009	33,459	2,839	1,406	2,032	10,202	910	16,070
2010	35,021	3,005	1,445	2,182	11,473	944	15,972
2011	35,390	3,010	1,520	2,225	11,425	950	16,260
2012	35,525	3,025	1,550	2,290	11,400	970	16,290
2013	35,990	3,035	1,585	2,325	11,350	990	16,705
2014	36,130	3,040	1,600	2,350	11,300	1,020	16,820
2015	36,594	3,050	1,618	2,398	11,289	1,047	17,192
2016	36,600	3,040	1,620	2,400	11,290	1,025	17,225

Sources: Historic data and projections are based on data from the U.S. Census Bureau.

The U. S. Census Bureau is projecting that Weakley County's population will increase during the next six years by approximately 5%. Since the unemployment rate in Weakley County has increased dramatically since 2009, the population estimates may be very optimistic.

Based on the latest U. S. Census bureau statistics, approximately 15% of Weakley County's population is 65 years of age and older and 26% is under the age of 18. These two figures account for more than 40% of Weakley County's total population.

If the population does increase in Weakley County, the solid waste disposal by the residents should also increase accordingly. All of the Class I landfills that Weakley County utilizes has more than sufficient life span to handle this waste.

The Weakley County Convenience Center has increased its recycling endeavors for several years. During 2010, the County started working with UTM Recycles to collect even more recyclables. UTM Recycles added bins at the Convenience Center to collect cardboard, plastics, and paper. UTM Recycles has also grown in the past few years and has a very successful recycling program. Residents are encouraged to bring their recyclable items either to the Convenience Center in Dresden or to UTM Recycles in Martin.

SECTION 2:

ECONOMIC ACTIVITY WITHIN THE REGION

Provide a table and chart showing the region's economic profile for the county and its 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 Weakley County

As shown on Table 2.2 on the following page, Weakley County is trying to recover from a weak economy. Unemployment rates have ranged from a low of 5.1% in 2000 to a high of 12.4% in 2009. As of June 2011, the unemployment rate was 12.8%. Unfortunately, this rate is expected to increase during the next five years.

Many industries have either closed or moved to other locations. These industries include the ones located in Weakley County and also in adjoining counties. Weakley County is actively pursuing industries to come to the area. There are several industrial sites with infrastructure available as well as a fully equipped airport located in Obion County. The average total wages in Weakley County was \$29,129, which is lower than the state average of \$36,146 and the national average of \$40,259.

The top ten county manufacturers are listed in the following table:

TABLE 2.1 Weakley County Top 10 Manufacturers

Manufacturer	Product	# Employed
MTD Products Inc.	Lawnmowers	1,090
Southern Source Inc.	Tool & die steel & alloys	143
Parker-Hannifin Corp.	Copper components for AC/Refrigerators	135
IFCO Systems	Crates and packaging	85
Plastic Products Company	Custom injection molders	72
Martin Bro. Containers	Wooden wire bound boxes	70
Leland-Powell Fasteners Inc.	Metal screws	56
B&R Machine & Gear Corp.	Iron/steel forgings	50
Arrow Aluminum Industries	Insulated storm doors and windows	46
Regency Pad Corporation	Mattress pads	39

TABLE 2.2 Weakley County Historic and Projected Economic Indicators

Labor Force Data					Non-Farm Wage and Salary Employment									Per Capita Income	Total Retail Sales
Year	Total	Emp.	Unemployed		Total	Goods Producing			Service Producing						
			Total	Rate(%)		Total	Mfg	Other	Total	Trade	Health	Govt.	Other		
2000	16,730	15,870	860	5.1%	12,230	3,570	3,010	560	8,660	2,000	1,200	3,480	1,980	20,528	197,518,424
2001	17,270	16,270	1,000	5.8%	12,250	2,920	2,540	380	9,330	2,030	1,170	3,790	2,340	21,195	197,706,174
2002	17,720	16,640	1,080	6.1%	12,270	2,740	2,370	370	9,530	2,110	1,200	3,600	2,620	21,289	192,408,124
2003	16,450	15,090	1,360	8.3%	11,320	2,220	1,880	340	9,100	2,120	1,300	3,530	2,150	21,955	214,407,643
2004	15,720	14,550	1,170	7.4%	10,990	2,040	1,700	340	8,950	2,040	1,320	3,420	2,170	23,415	222,488,273
2005	15,500	14,420	1,080	7.0%	10,990	1,990	1,650	340	9,000	1,980	1,360	3,430	2,230	24,752	224,907,186
2006	15,660	14,590	1,070	6.8%	10,880	1,940	1,600	340	8,940	1,980	1,350	3,380	2,230	25,558	242,173,616
2007	15,530	14,480	1,050	6.8%	10,800	1,800	1,450	350	9,000	2,150	1,360	3,360	2,130	27,346	279,334,355
2008	15,660	14,380	1,280	8.2%	10,780	1,820	1,490	330	8,960	2,090	1,390	3,360	2,120	28,787	286,385,921
2009	15,940	13,970	1,970	12.4%	10,520	1,540	1,250	290	8,980	2,030	1,460	3,450	2,040	28,998	264,400,558
2010	15,810	13,980	1,830	11.6%	10,360	1,420	1,090	330	8,940	2,030	1,460	3,400	2,050	29,145	283,031,635
2011	15,740	13,720	2,020	12.8%	10,350	1,415	1,090	325	8,935	2,030	1,460	3,400	2,045	29,238	285,728,550
2012	15,750	13,690	2,060	13.1%	10,340	1,410	1,085	325	8,930	2,020	1,460	3,390	2,060	29,449	288,128,275
2013	15,760	13,680	2,080	13.2%	10,360	1,415	1,080	335	8,945	2,050	1,450	3,380	2,065	29,586	290,005,225
2014	15,770	13,700	2,070	13.1%	10,365	1,420	1,085	335	8,945	2,050	1,450	3,380	2,065	29,689	292,365,130
2015	15,780	13,710	2,070	13.1%	10,375	1,420	1,090	330	8,955	2,060	1,460	3,375	2,060	29,825	293,440,260
2016	15,790	13,720	2,070	13.1%	10,400	1,430	1,100	330	8,970	2,080	1,460	3,380	2,050	29,892	295,100,555

Sources: Historic employment data are from the Tennessee Department of Labor and Workforce Development, per capita income data is from the U. S. Bureau of Economic Analysis, and retail data is from the Tennessee Department of revenue. All projections are by the NWTDD staff.

SECTION 3:

SOLID WASTE STREAM CHARACTERIZATION

Elaborate on the region's solid waste stream. Compare the current waste stream with trend anticipated over the next five (5) years, and discuss how this new total will be handled. 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.

Current MSW Stream

In the most recent Weakley County Solid Waste Annual Progress Report (2010), the total MSW stream was reported as 30,970 tons. This amount consisted of 19,847 tons being disposed in Class I landfills, 4,000 tons being diverted to a Class III/IV landfill, and 7,123 tons being recycled.

Weakley County's Class I disposal numbers have been consistent for the past several years. The per capita disposal rate for 2010 was 0.57, which is well below the State per capita disposal rate of 0.90.

A large portion of the MSW stream is due to the residents of Weakley County. It is estimated that the citizens make up 40% of the MSW stream. The remaining MSW stream is estimated to be 20% commercial, 10% institutional, and 30% industrial.

TABLE 3.1 Regional Solid Waste Stream Disposal for 2011 – 2016

Class I Disposal Site	Reported Year (APR 2010)	Projected Year					
	2010	2011	2012	2013	2014	2015	2016
MSW disposed in NW TN Disposal Corp. Class I Landfill located in Obion County	18,872	18,910	19,247	19,484	19,736	19,778	19,800
MSW disposed in West Camden Class I Landfill located in Benton County	16	18	20	22	24	26	28
MSW disposed in Madison County Class I Landfill located in Madison County	928	940	950	960	970	985	1,000
MSW disposed in Dyersburg Municipal Class I Landfill located in Dyer County	31	32	33	34	35	36	37
Total Regional Waste Disposal	19,847	19,900	20,250	20,500	20,765	20,825	20,865

The five-year projections for waste disposal in Weakley County are provided in the table above. These estimates are based on a 5% population increase to coincide with the figures in Section 1 of this assessment.

Weakley County will continue to offer recycling at the Convenience Center. Almost 250 tons of recyclables were collected at the Weakley County Convenience Center in 2010. The County has started working with UTM Recycles by collecting additional recyclables in bins provided by UTM. In 2010, UTM Recycles collected more than 500 tons of recyclable materials. UTM Recycles is open to the public seven days a week from 6am to 6pm. More than 5,000 tons of recyclables were reported by industries located in Weakley County.

Regional Solid Waste Management

The table on the next page describes how the region's total waste stream is managed currently and how it will be managed in the next 5 years. Weakley County and its municipalities and the businesses are all listed separately.

TABLE 3.2 Waste Stream Management

Jurisdiction or Sector	Solid Waste Stream Collection	Solid Waste Disposal Options	Present Problem Waste Handling	Future Problem Waste Handling 2011-2016	Other Problem Waste Types
Weakley County	<p>Residential solid waste Door-to-door waste pickup available throughout county</p> <p>Local businesses Subscription service</p>	Northwest TN Disposal Corp., Inc. Class I Landfill located in Obion County as primary waste disposal facility for unincorporated residents of Weakley County and local businesses	<p>Waste tires: Waste tire contract</p> <p>Used oil: Convenience Center</p> <p>Automobile fluids: Local Businesses</p> <p>Latex paint: HHW Event</p> <p>Electronics: Convenience Center</p>	<p>Waste tires: Waste tire contract</p> <p>Used oil: Convenience Center</p> <p>Used oil filters: Convenience Center</p> <p>Automobile fluids: Local Businesses</p> <p>Latex paint: Convenience Center</p> <p>Electronics: Convenience Center</p>	HHW collected at mobile collection events. Due to limited statewide mobile collection site scheduling, no regional approach has been developed to handle HHW. A regional approach to handle HHW could be evaluated by the Northwest Development District. Planned program discussions can be scheduled in the near future.
Dresden	Solid waste curbside collection fee service for city residents.	Northwest TN Disposal Corp., Inc. Class I Landfill located in Obion County as primary waste disposal facility for residents of Dresden and local businesses	Provided by Weakley County	Provided by Weakley County	Provided by Weakley County
Gleason	Solid waste curbside collection fee service for city residents.	Northwest TN Disposal Corp., Inc. Class I Landfill located in Obion County as primary waste disposal facility for residents of Gleason and local businesses	Provided by Weakley County	Provided by Weakley County	Provided by Weakley County
Greenfield	Solid waste curbside collection fee service for city residents.	Madison County Class I Landfill located in Madison County as primary waste disposal facility for residents of Greenfield and local businesses	Provided by Weakley County	Provided by Weakley County	Provided by Weakley County
Martin	Solid waste curbside collection fee service for city residents.	Northwest TN Disposal Corp., Inc. Class I Landfill located in Obion County as primary waste disposal facility for residents of Martin and local businesses	Provided by Weakley County	Provided by Weakley County	Provided by Weakley County
Sharon	Solid waste curbside collection fee service for city residents.	Northwest TN Disposal Corp., Inc. Class I Landfill located in Obion County as primary waste disposal facility for residents of Sharon and local businesses	Provided by Weakley County	Provided by Weakley County	Provided by Weakley County
Business	<p>Subscription service provided by:</p> <p>Contracts with private haulers, and</p> <p>Direct haul by business.</p>	Northwest TN Disposal Corp., Inc. Class I Landfill located in Obion County as primary waste disposal facility for residents of Weakley County and local businesses	<p>Available service provided by:</p> <p>In-house business programs and Contractors</p>	<p>Available service provided by:</p> <p>In-house business programs and Contractors</p>	Hazardous waste generated from commercial and industrial businesses is regulated by TDEC, Division of Solid Waste Management, and Hazardous Waste Section.

Wastes Entering or Leaving the County

Weakley County does not operate nor own a Class I landfill. No wastes from other areas enter the county. In 2010, a total of 19,847 tons of MSW was sent to four different Class I landfills. The table below illustrates where the MSW was disbursed.

TABLE 3.3 Wastes Leaving Weakley County

Class I Landfill	County Location	Tonnage
NW TN Disposal Corp.	Obion County	18,872
West Camden Landfill	Benton County	16
Madison County Landfill	Madison County	928
Dyersburg Municipal Landfill	Dyer County	31
Total		19,847

Source: TDEC 2010 Solid Waste Origin Report

SECTION 4:

REGIONAL COLLECTION SYSTEMS

Provide a detailed description of the waste collection system in the county and each municipality, including 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.

County and city government throughout the United States are struggling to develop efficient and cost-effective plans for managing their MSW. Weakley County has started recycling various commodities and plans to continue to expand its programs.

Weakley County

Weakley County has door-to-door waste pick up service contracted through Barker Brothers. This service is available to 100% of the rural residents. Through this contract, the rural citizens pay a price of \$19.33 per household per month.

Weakley County also has one convenience center which is centrally located in Dresden. The operating hours of the convenience center are Thursday, Friday, and Saturday from 8 am to noon. The County does charge for the MSW that is disposed of at the center. The charges are \$1 per bag or \$15 per truckload.

The Convenience Center does take recyclable items. The items collected are waste tires, used oil, metals, electronics, batteries, and glass. UTM Recycles operates another drop-off site in Dresden near the Weakley County Senior Center.

Municipalities

There are five municipalities in Weakley County. Four of the municipalities contract with Barker Brothers, Inc., and one municipality contracts with Waste Management, Inc. for door-to-door solid waste collection for the residents. The fees each municipality charges vary from a low of \$11.62 per month to a high of \$21.91 per month. None of the municipalities offer curbside recycling options.

The table below illustrates all locations where wastes are collected and stored along with the name of operators and transporters for these sites.

TABLE 4.1 Regional Collection Systems

Jurisdiction	Transporter	Class I Landfill
Weakley County	Barker Brothers, Inc.	Northwest TN Disposal Corp.
Dresden	Barker Brothers, Inc.	Northwest TN Disposal Corp.
Gleason	Barker Brothers, Inc.	Northwest TN Disposal Corp.
Greenfield	Waste Management, Inc.	Madison County Landfill
Martin	Barker Brothers, Inc.	Northwest TN Disposal Corp.
Sharon	Barker Brothers, Inc.	Northwest TN Disposal Corp.

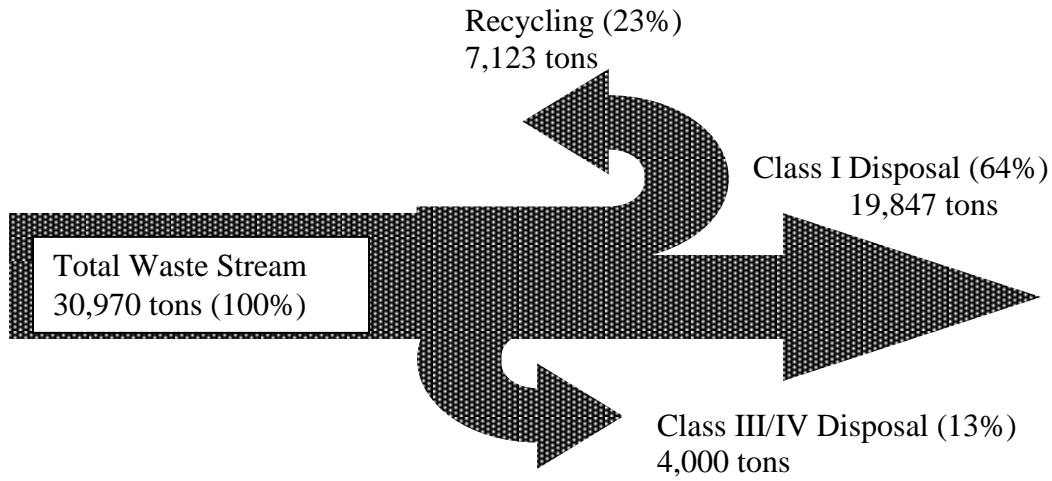
Weakley County recycles several different commodities. The table below shows these commodities and what processors are utilized.

TABLE 4.2 Weakley County Commodities and Processors

Commodities	Processor	Location
Metals	Varies depending on price	
Batteries	Mathis Battery	Dresden, TN
Tires	Mac Tires	Nashville, TN
E-Waste	Creative Recycling	Nashville, TN

Flow Diagram of Weakley County Total Annual Regional Waste Stream

The figures shown in the flow diagram below were taken from the 2010 Weakley County Solid Waste Annual Progress Report.



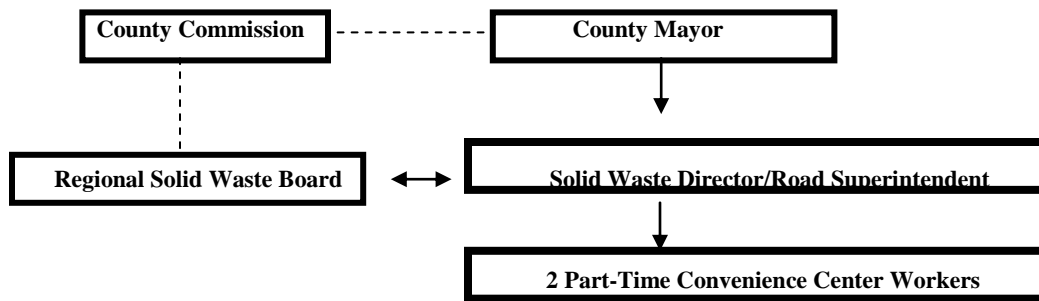
SECTION 5:

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 shortcomings in service and note what might be needed to fill this need.

Weakley County

An organizational chart is provided below for operations of the Weakley County Solid Waste Department.



Future Solid Waste Infrastructure Development Needs

The shed at the Convenience Center needs to be repaired. Some of the biggest needs are a new roof, new floor, and general exterior work. These needs have been listed in the Solid Waste Annual Progress Report since 2006, but nothing has been done. The County just does not have enough funds to make the needed repairs.

Two more trailers are needed at the Convenience Center. These trailers would be used for the collection of waste tires and metals. The County will try to apply for grants for these needs. Another collection truck is needed to pick up tires and other bulky items from the roadways.

The table below provides a list of the future needs for Weakley County to continue to operate an integrated solid waste management program. The costs listed are estimates only and should be considered a baseline for future planning.

TABLE 5.1 Future Solid Waste Needs

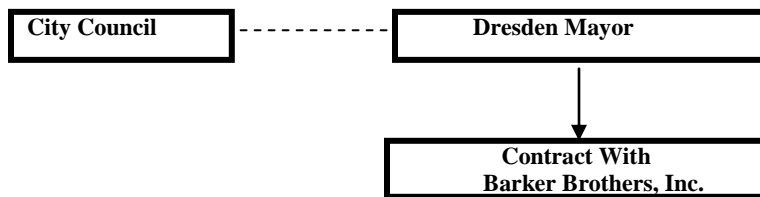
Need	Estimated Cost	Potential Revenue Source
Upgrades to Convenience Center	\$ 20,000	Grants
2 Trailers	\$ 8,000	Grants
Collection Truck	\$ 40,000	Grants

Municipalities

All of the municipalities contract directly with either Barker Brothers, Inc. or Waste Management for waste collection and disposal. None of the municipalities offer curbside recycling services.

Dresden

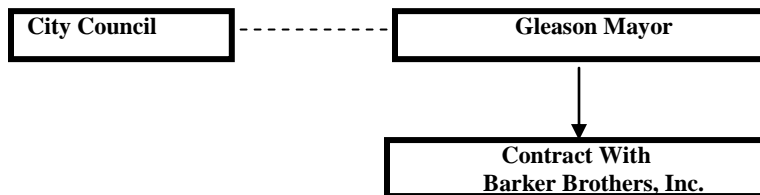
The Town of Dresden provides residential curbside collection and commercial subscription service for approximately 3,000 customers. The city does not provide recycling collection services. An organizational chart for the Town of Dresden is provided below.



No positions are funded out of the Dresden Solid Waste Budget. The city contracts directly with Barker Brothers, Inc. for waste disposal. Dresden residents pay \$11.62 per month for collection service and the commercial rates vary.

Gleason

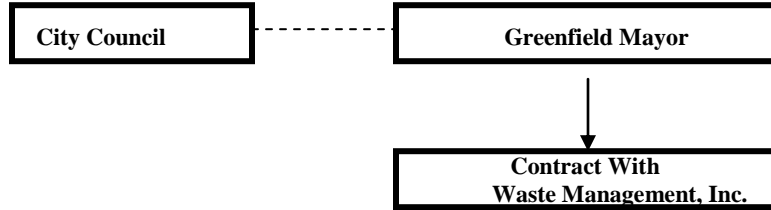
The Town of Gleason provides residential curbside collection and commercial subscription service for approximately 1,450 customers. The town does not provide recycling collection services. An organizational chart for the Town of Gleason is provided below.



No positions are funded out of the Gleason Solid Waste Budget. The city contracts directly with Barker Brothers, Inc. for waste disposal. Gleason residents pay \$19.31 per month for collection service and the commercial rates vary.

Greenfield

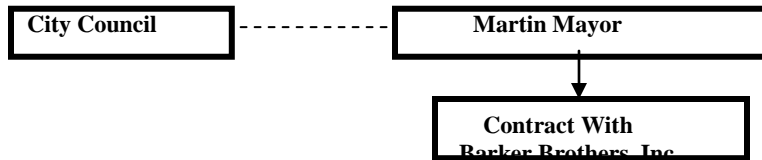
The Town of Greenfield provides residential curbside collection and commercial subscription service for approximately 2,180 customers. The city does not provide recycling collection services. An organization chart for the Town of Greenfield is provided below.



The Town of Greenfield funds no positions out of the Solid Waste Budget. Greenfield contracts directly with Waste Management, Inc. for waste disposal. Greenfield residents pay \$13.70 per month for collection service and the commercial rates vary.

Martin

The City of Martin provides residential curbside collection and commercial subscription service for approximately 11,475 customers. The city does not provide recycling collection services. An organizational chart for the City of Martin is provided below.

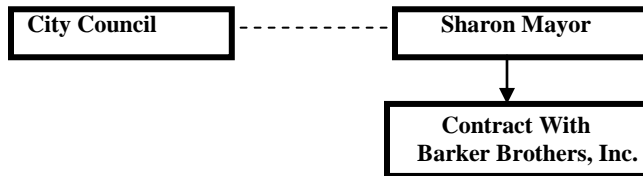


Martin funds no positions out of the Solid Waste Budget. The city contracts directly with Barkers Brothers, Inc. for waste disposal. Martin residents pay \$21.91 per month for collection service and the commercial rates vary.

The City of Martin operated a Class III/IV Landfill up until this year. The City closed the landfill on June 30, 2011 and reassigned staff members to other departments.

Sharon

The Town of Sharon provides residential curbside collection and commercial subscription service for approximately 950 customers. The city does not provide recycling collection services. An organizational chart for Sharon is provided below.

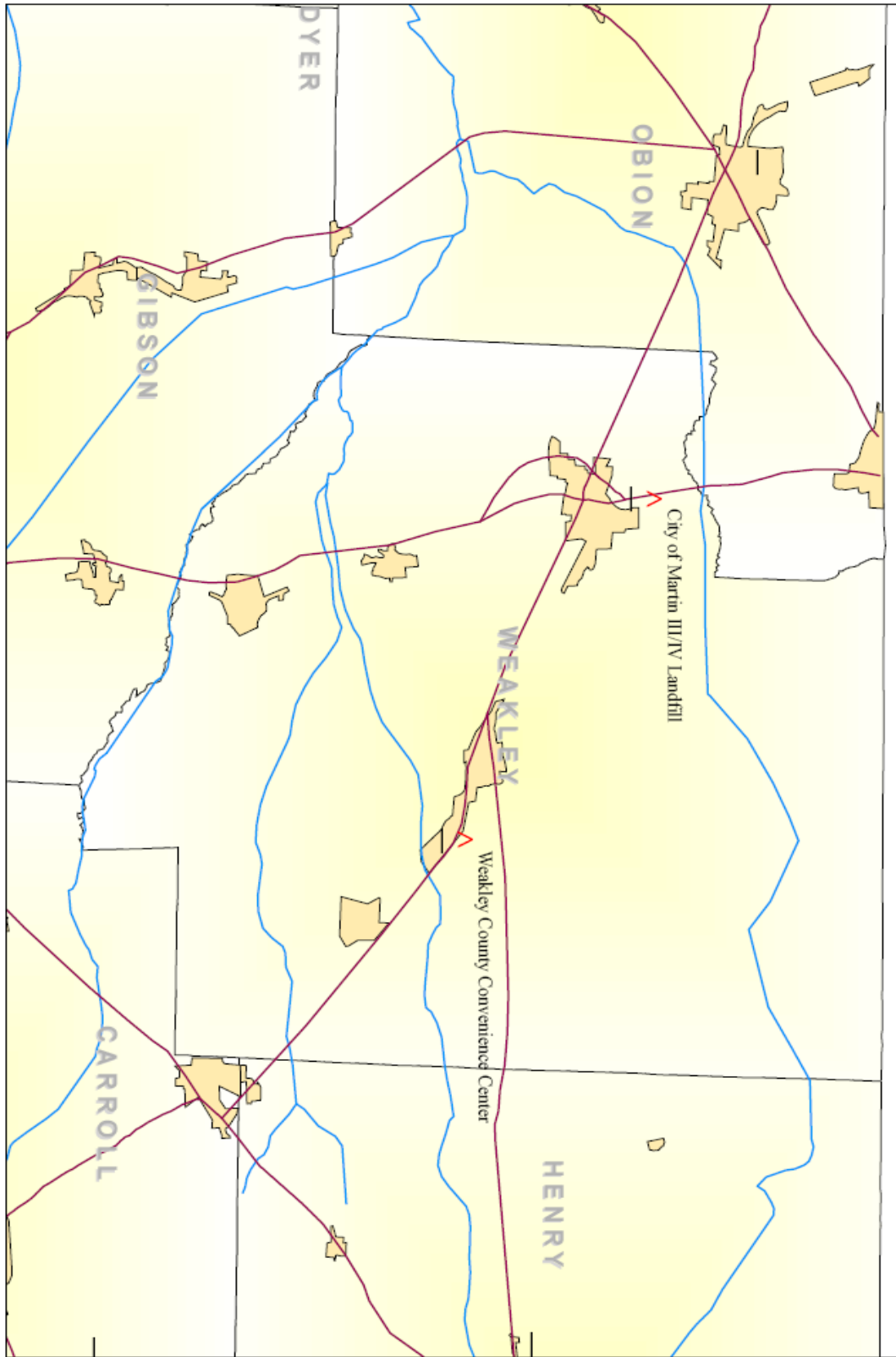


Sharon contracts directly with Barker Brothers, Inc. for MSW disposal. The residents pay \$14.45 per month for collection service and the commercial rates vary.

Locations of Solid Waste Facilities

A Weakley County map is provided on the following page with the locations all solid waste facilities in the county.

Weakley County Solid Waste Facilities



SECTION 6:

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 ongoing 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 Attitudes Concerning Recycling, Waste Diversion, and Waste Disposal

Trends are continuing to improve through education on solid waste, recycling, and environmental issues. Industries are finding recycling a viable tool to reduce expenditures while meeting State and Federal environmental mandates. The Weakley County Solid Waste Department does a very good job of being visible within all of the schools and community events.

The attitudes of the region and its citizens towards diverting materials away from Class I landfills is excellent. Weakley County has consistently had a low per capita disposal rate. The table below illustrates how well the county has done since 2005.

TABLE 6.1 Weakley County Per Capita Disposal Rates

Year	Class I Disposal	Population	Per Capita Disposal Rate
2010	19,847 tons	35,021	0.57
2009	18,900 tons	33,459	0.56
2008	16,643 tons	33,379	0.50
2007	17,614 tons	33,227	0.53
2006	17,377 tons	33,306	0.52
2005	16,691 tons	33,541	0.50

The above rates are well below the State's Per Capita Disposal Rates.

Recycling has increased at the Weakley County Convenience Center. The center is now taking metals, tires, electronic scrap, batteries, and used oil. The UTM Recycles Program has placed recycle bins at the center to collect glass, cardboard, and paper. UTM Recycles has also placed recycle bins near the Weakley County Senior Citizen Center for the convenience of the residents.

The UTM Recycles Program has really grown in the past five years. This program started in one small room at the motor pool and would hold occasional collection events for the community in a parking lot on campus. Now, the program is located in the old National Guard Amory and has a full-scale recycling program. The public has fully supported this endeavor.

By utilizing funds from the Litter Grant, Weakley County provides outreach on anti-littering, recycling, waste disposal, and waste diversion. The schools, community groups, and the general public are targeted.

Education Measures

The table below illustrates the programs that were conducted in 2010.

TABLE 6.2 Public Education and Information Activities

Program Name	Sponsor	Effectiveness	Program Type	Target Group	# Served
Sparky	Litter Grant	Positive	Classroom	Children/Educators	County-Wide
“Sparky” went to visit the elementary schools and distributed materials about anti-littering and recycling. Various materials were placed in bags and distributed to the students.					
Newspaper Advertisements	Litter Grant	Positive	Advertisements	Adult/General Public	County-Wide
Advertisements were placed in the newspaper about the convenience center regarding what materials are collected and the hours and days of operation.					
Presentations	Litter Grant	Positive	Community Outreach	Adult/General Public	County-Wide
The Convenience Center staff went to the Martin City Expo and other business fairs, UTM, and the libraries to promote anti-littering and recycling.					
Parades	Litter Grant	Positive	Community Outreach	Adult/General Public	County-Wide
A float was placed in all the local parades to promote anti-littering and recycling.					

The Weakley County Solid Waste Department has done an excellent job promoting recycling and waste diversion within the county.

SECTION 7:

REGIONAL SOLID WASTE REDUCTION GOAL

The Solid Waste Management Act of 1991 requires all regions to 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 the reduction rate by each of these goal calculation methodologies. Discuss how the region made the goal by each methodology or why it 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.

TABLE 7.1 Measurement of Regional Waste Reduction Goal

County	Waste Reduction Goal Calculation Method			
	Compared to Base Year	Population Ratio	Economic-Population Ratio	Qualitative - Real Time
Weakley County	-16%	-16%	-45.3%	35.9%
25% Waste Reduction Goal Achieved	No	No	No	Yes

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

Variables Affecting Regional Waste Reduction Efforts

The main reason Weakley County cannot meet three of the four waste reduction goal calculation methods is because the base year figures cannot be accurate. There are several reasons these figures are inaccurate.

1. Most existing disposal contracts in the 1990’s established fees based on cubic yards and reporting tonnage figures required estimating how many cubic yards of waste weighed a ton.
2. The landfill operators depend on the customer to accurately report the origin of the MSW. There was no system in place in 1995 to determine if the origin was accurate. Currently, the customer is still the first source of information for the landfill operators to initiate the reporting process to TDEC.

Weakley County did meet the Qualitative – Real Time Method of waste reduction by showing a real time diversion rate of 35.9%. Most of the recycling was completed by private entities but the county did recycle more than 247 tons of materials. The University of Tennessee at Martin Recycle Program recycled almost 525 tons of material that was collected throughout the City of Martin. Also, the City of Martin diverted 4,000 tons of material to its Class III/IV Landfill.

Future Regional Waste Reduction Program

One major change to occur in Weakley County during 2010 was the closure of the Class III/IV landfill in Martin. Barker Brothers, Inc. is now collecting the limbs and brush and taking this material to a Class I landfill. This will affect Weakley County's diversion rate in the years to come.

The Weakley County Convenience Center continues to increase the number of recyclables and the amount of tonnage recycled each year. The shed at the center does need repair work done to the roof, floor, and exterior of the building. Additional trailers are also needed to collect recyclables. The county will apply for grants as needed.

The center will continue to work in partnership with UTM Recycles. The UTM Recycles Program will continue to grow also. The general public is in full support of this program.

SECTION 8:

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.

TABLE 8.1 10-Year Regional Disposal Assurance in Weakley County in 2010/11

Site Name(s)	Annual Tons Disposed by Weakley County*	Solid Waste Permit #	Current Disposal (daily throughput)	Maximum Disposal Capacity (daily throughput)	Projected Life of Facility
West Camden Sanitary Landfill located in Benton County	16	SNL 03-0247	2,300 tons per day	5,000 tons per day	25+ years remaining life
Madison County Landfill located in Madison County	928	SNL 57-0239	2,000 tons per day	4,000 tons per day	25+ years remaining life
NW Tennessee Disposal Corporation located in Obion Co.	18,872	SNL 66-0143	2,200 tons per day	5,000 tons per day	25+ years remaining life
Dyersburg Municipal Landfill located in Dyer County	31	SNL 23-0218	170 tons per day	500 tons per day	25+ years remaining life

Source: West Camden Landfill, Madison Co. Landfill, NW Tennessee Disposal Corp., Dyersburg Municipal Landfill, August 2011

*Note: Annual tonnage disposed includes Municipalities and Businesses

No potential shortfalls in materials management capacity at the collection or processor level are foreseen.

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, frequency of collection, yearly tons collected, and the type of service provided.

TABLE 8.2 Public and Private Collection Service in Weakley County in 2010

Service Provider	Service Area*	Frequency of Service (Weekly, Bi-weekly, on call, etc.)	Estimated Average Annual Tons Collected*	Type Service (Curbside, Convenience Center, Green Box)
Weakley County Unincorporated	County-wide	Weekly	8,982	Convenience Center Residential curbside Local business subscription
Dresden	City residents Local business subscription	Weekly	1,715	Residential curbside Local business subscription
Gleason	City residents Local business subscription	Weekly	825	Residential curbside Local business subscription
Greenfield	City residents Local business subscription	Weekly	1,245	Residential curbside Local business subscription
Martin	City residents Local business subscription	Weekly	6,540	Residential curbside Local business subscription
Sharon	City residents Local business subscription	Weekly	540	Residential curbside Local business subscription
Total			19,847	

SECTION 9:

UNMET FINANCIAL NEEDS

Complete the chart below and discuss unmet financial needs to maintain current level of service. Provide a cost summary for current year expenditures and projected increased costs for unmet needs.

TABLE 9.1 Expenditures and Revenues for Weakley County for 2011/12

Expenditures	
Description	Amount
Convenience Centers	\$ 30,144
Total Expenditures	\$ 30,144
Revenues	
Misc. Refunds	\$ 10,000
Waste Tire Grant	19,900
Total Revenues	\$ 29,900

Weakley County expends over \$30,000 to operate its convenience center. In this fiscal year, the county only expects to receive \$10,000 in solid waste fees and the sale of recyclable materials. The county charges \$1 per bag of trash or \$15 per truckload. Weakley County also places fees on waste tires. The first six tires that residents bring to the convenience center are free. After

that, fees are imposed on the residents. These fees range from a low of \$1.35 for passenger tires to a high of \$40 for skidder tires. Even with these fees, the county is still losing money and the fund balance decreases every year. Weakley County contracts with Barker Brothers, Inc. for rural residential weekly door-to-door collection services. The residents pay the hauler directly, and the cost is \$19.33 per month.

TABLE 9.2 Expenditures and Revenues for the Town of Dresden for 2011/12

Expenditures	
Description	Amount
Waste Disposal	\$ 314,790
Total Expenditures	\$ 314,790
Revenues	
Collection Charges	\$ 314,790
Total Revenues	\$ 314,790

Dresden provides residential curbside collection and commercial subscription service for approximately 3,000 residents. The Town of Dresden charges the citizens \$11.62 per month for weekly waste collection and contracts with Barker Brothers, Inc. for waste disposal.

TABLE 9.3 Expenditures and Revenues for the Town of Gleason for 2011/12

Expenditures	
Description	Amount
Waste Disposal	\$ 124,350
State Fees	500
Salaries/Benefits	35,450
Office Expenses	6,700
Total Expenditures	\$ 167,000
Revenues	
Collection Charges	\$ 164,000
Interest	1,500
Miscellaneous	1,500
Total Revenues	\$ 167,000

The Town of Gleason provides residential curbside collection and commercial subscription service for approximately 1,450 residents. Gleason charges the citizens \$19.31 per month for weekly waste collection and contracts with Barker Brothers, Inc. for waste disposal. Two full-time employees work in the solid waste department. These employees also work with the street, water, and sewer departments.

TABLE 9.4 Expenditures and Revenues for the Town of Greenfield for 2011/12

Expenditures	
Description	Amount
Waste Disposal	\$ 134,000
Testing	11,000
Reporting	14,000
State Fees	1,000
Total Expenditures	\$ 160,000
Revenues	
Collection Charges	\$ 160,000
Total Revenues	\$ 160,000

Greenfield provides residential curbside collection and commercial subscription service for approximately 2,180 residents. The Town of Greenfield charges the citizens \$13.70 per month for weekly waste collection and contracts with Waste Management, Inc. for waste disposal.

TABLE 9.5 Expenditures and Revenues for the City of Martin for 2011/12

Expenditures	
Description	Amount
Dues & Subscriptions	\$ 5,900
Utilities	1,500
Garbage Service	1,519,710
Repair & Maintenance	11,500
Insurance	5,500
Miscellaneous	52,967
Total Expenditures	\$ 1,597,077
Revenues	
Interest and Penalties	\$ 17,200
Garbage Service	1,484,745
Additional Pickup Services	99,930
Total Revenues	\$ 1,601,875

The City of Martin provides residential curbside collection and commercial subscription service for approximately 11,475 residents. Martin charges the residents \$21.91 per month for weekly waste collection and contracts with Barker Brothers, Inc. for waste disposal.

The City of Martin closed its Class III/IV Landfill on June 30, 2011.

TABLE 9.6 Expenditures and Revenues for the Town of Sharon for 2011/12

Expenditures	
Description	Amount
Landfill Services	\$ 101,700
Miscellaneous	2,230
Total Expenditures	\$ 103,930
Revenues	
Refuse Collection Charges	\$ 106,600
Sanitation Penalty	25
Interest	130
Total Revenues	\$ 106,755

The Town of Sharon provides residential curbside collection and commercial subscription service for approximately 950 residents. Sharon charges the residents \$14.45 per month for weekly waste collection and contracts with Barker Brothers, Inc. for waste disposal.

SECTION 10:

CURRENT REVENUE SOURCES

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.

Weakley County

The Weakley County Solid Waste Budget is only funded through fees collected at the Convenience Center, the sales of recyclables, and the Waste Tire Grant. The county charges \$1 per bag or \$15 per truckload to residents who bring their trash to the convenience center. The residents are also allowed to bring up to six tires without being charged a fee. After the six free tires, the fees are as follows:

Passenger Tires:	16 inches and below	\$ 1.35
	With rim	\$ 5.00
Light Truck Tires:	17-19 inches	\$ 2.50
	With rim	\$ 6.00
Semi-Truck Tires	20 inches	\$ 3.50
	With rim	\$ 7.00
Tractor Tires	24 inches	\$ 8.00
	With rim	\$25.00
Skidder Tires:		\$40.00
	With rim	\$60.00

The 2010 Weakley County tax rate is \$2.0616. Each municipality has its own tax rate, and these rates range from a low of \$1.2500 to a high of \$1.6300. The local option sales tax is at the maximum rate of 2.75%.

Due to the current recession, unemployment rates are expected to increase and local option sales tax to decrease. Monies are very tight within the county at the present time.

The only other revenue sources for the county to utilize in these hard economic times are grants for solid waste management and/or waste diversion. Even with these grants, it would be difficult for the county to provide matching funds.

More funds need to be made available for the Waste Tire Program. Each year, Weakley County has to draw from the reserve fund to pay for this program. At the current rate of draw down, the reserve fund will be depleted by June 2012. Also, the information received from the State on the waste tire dealers is not current. The county has already paid the haulers for these dealers' tires by the time the county receives the information that the dealer is not paying the fees.

Dresden

Dresden provides residential curbside collection and commercial subscription service for approximately 3,000 residents. Dresden charges the citizens \$11.62 per month for weekly waste collection and contracts with Barker Brothers, Inc. for waste disposal. The only revenue sources are the fees the city collects from the residents.

Gleason

The Town of Gleason provides residential curbside collection and commercial subscription service for approximately 1,450 residents. Gleason charges the citizens \$19.31 per month for weekly waste collection and contracts with Barker Brothers, Inc. for waste disposal. The only revenue sources are the fees the city collects from the residents.

Greenfield

Greenfield provides residential curbside collection and commercial subscription service for approximately 2,180 residents. Greenfield charges the citizens \$13.70 per month for weekly waste collection and contracts with Waste Management, Inc. for waste disposal. The only revenue sources are the fees the city collects from the residents.

Martin

Martin provides residential curbside collection and commercial subscription service for approximately 11,475 residents. Martin charges the residents \$21.91 per month for weekly waste collection and contracts with Barker Brothers, Inc. for waste disposal. The only revenue sources are the fees the city collects from the residents.

Sharon

Sharon provides residential curbside collection and commercial subscription service for approximately 945 residents. Sharon charges the residents \$14.45 per month for weekly waste collection and contracts with Barker Brothers, Inc. for waste disposal. The only revenue sources are the fees the city collects from the residents.

FUTURE REVENUE NEEDS

No additional funds from the county budget are expected to be allocated for solid waste or recycling purposes due to the economic conditions of the county. Solid waste grants will be necessary for the future success of the program.

The municipalities will continue to adjust their collection fees in proportion to the increases of the private hauler fees and other costs.

SECTION 11:

REGIONAL SOLID WASTE PLAN

Discuss this region’s plan for managing its solid waste management system during 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.

The table below summarizes Weakley County’s existing programs, future programs, and the Tennessee Solid Waste Management Plan.

TABLE 11.1 Regional Solid Waste Management Plan

Solid Waste Program	Existing Solid Waste Programs	Future Solid Waste Programs	Tennessee Mandated Plan
Residential Solid Waste Collection	Weakley County has one convenience center and door-to-door collection service available to 100% of the county.	Continue door-to-door collection service and convenience center.	County to provide CCC’s for residents according to population or service area, maintain required design and operational standards.
Recycling	Weakley County offers recycling at its convenience center. The University of TN at Martin also offers recycling for the residents. Private recycling companies are also available	Expand the current recycling services.	County to provide at least one (1) drop-off site for collection of residential recyclable materials.
Waste Reduction	Weakley County met reduction goal by the Real-Time Method.	Continue to meet the 25% Waste Reduction Goal.	Region to achieve 25% Waste Reduction Goal.
Problem Waste Management	Weakley County collects metals, electronics, waste tires, used oil, and batteries at the convenience center. Weakley County hosts a HHW collection event to collect paint.	Continue to collect metals, electronics, waste tires, used oil and batteries at the convenience center. Start storing paint so contractor can pick up on milk runs	County to provide at least one (1) site to accept automobile fluids, batteries, and waste tires.
Public Education and Information	Weakley County provides educational activities to the schools through programs and to the public through events and presentations.	Continue to provide educational activities to the schools through programs and to the public through events and presentations.	Region to develop and implement solid waste management action plan for adults and children.
Disposal	Weakley County contracts with Barker Brothers, Inc. to provide disposal services.	Continue to contract disposal services with Barker Brothers, Inc. or other private hauler.	Region to assure 10-year disposal capacity.
Planning	The Weakley County Regional Solid Waste Board meets as needed to discuss solid waste issues. All reporting requirements are up to date.	Continue meetings throughout the year to discuss solid waste issues. Keep reporting requirements up to date.	Region to provide Annual Progress Reports, Needs Assessments, and other reporting requirements as needed.

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

- Continue Weakley County Regional Solid Waste Board involvement,
- Continue the activities of the Solid Waste Department,
- Continue the activities at the Convenience Center,
- Continue to pursue all grant funds for equipment and facilities,
- Continue to utilize technical assistance providers,
- Continue to research technologies and other program options,
- Continue to promote waste reduction efforts, and
- Continue public outreach and educational programs

This list is neither inclusive nor listed in priority. Expansion and sustainability will depend on the economy and funding sources.

SOURCES

U. S. Census Bureau
Tennessee Department of Labor and Workforce Development
U. S. Bureau of Economic Analysis
Tennessee Department of Revenue
2010 Weakley County Annual Progress Report
Yolanda Harris, Weakley County First Deputy/Litter Grant Administrator
Weakley County Budget Document
Dresden Budget Document
Gleason Budget Document
Greenfield Budget Document
Martin Budget Document
Sharon Budget Document