

# **MARSHALL COUNTY SOLID WASTE NEEDS ASSESSMENT**

**June 2014**

**PREPARED BY  
SOUTH CENTRAL TENNESSEE DEVELOPMENT DISTRICT  
And Staff of Marshall County Solid Waste Department**



## Introduction

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. Solid Waste Collection System
5. Analysis of Existing or Potential Solid Waste Flows within the Region and Between Adjacent Regions
6. Analyze Attitude of Region Toward Waste Management in General and Specify Needed Changes and/or Educational Measures
7. Evaluation of the Waste Reduction Systems for Counties & Municipalities in Region
8. Collection / Disposal Capacity and Projected Life of Solid Waste Sites
9. Unmet Financial Needs and Cost Summary
10. Compare Revenue sources for the Region's Current Solid Waste Programs with Projected future Demands. Identify Any Potential Shortfalls in that Capacity

Please provide the following information as the core foundations of the region's needs. The Needs Assessment is an attempt to outline the obstacles, difficulties, and needs unique to the region's handling and ideal disposal of its solid waste flow. You are encouraged to expound on the following items and provide additional information as warranted. There is no required format, only that the requested information is researched and answered thoroughly, with the improvement of the region in mind.

**Item #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 effect on the solid waste infrastructure needs over the next five (5) years.**

**Population Trends in Marshall County**

According to the U. S. Census Bureau, Marshall County's annual population change in 2003, was 27,396, and 2013 31,130 showing an increase of 13.3 %. As shown in Table 1.1 below, projections for the next five years also reflect increases in population. This increase is expected to continue for the next five years. With the joining of Maury and Marshall Counties into the Marshall-Maury REgion, recycling efforts of both counties will be combined and it will always be a point of emphasis to meet the needs of a growing population. Marshall County will plan to expand its recycling center in the coming years. The City of Columbia recycling efforts have increased from 1000 to 4000 homes participating in curbside recycling which will increase Marshall County's recycling operation.

**TABLE 1.1 Historic and Projected Population Trends (2004 thru 2020)**

Year	County Population	Lewisburg	Chapel Hill	Cornersville	Petersburg	Unincorporated
2004	27,804	10,562	1,157	933	77	14,917
2005	28,053	10,661	1,211	926	179	15,076
2006	28,289	10,733	1,215	933	180	15,228
2007	28,524	10,805	1,219	939	181	15,380
2008	28,760	10,876	1,224	946	182	15,532
2009	28,995	10,948	1,228	952	183	15,684
2010	29,231	11,020	1,232	959	184	15,836
2011	29,588	11,144	1,241	971	186	16,046
2012	29,944	11,267	1,251	983	188	16,255
2013	30,301	11,391	1,260	995	190	16,465
2014	30,657	11,514	1,270	1,007	192	16,674
2015	31,014	11,638	1,279	1,019	194	16,884
2016	31,276	11,735	1,286	1,029	196	17,030

2017	31,538	11,833	1,293	1,039	197	17,176
2018	31,799	11,930	1,300	1,048	199	17,322
2019	32,061	12,028	1,307	1,058	200	17,468
2020	32,323	12,125	1,314	1,068	202	17,614

Sources: Historic and Projected Population Trends

## Population Growth Since 2000

Marshall County 14.38%

Tennessee 11.54%

U.S. 9.71%

## Population Density

Marshall County 81.39 per square mile

Tennessee 150.58 per square mile

U.S. 81.32 per square mile

**Table 1.2 Population in Marshall County vs. Tennessee**

	Marshall County	% of the Total Population	Tennessee	U.S.
Under 5 years	1,972	6.44%, <a href="#">see rank</a>	6.43%	6.54%
5 to 9 years	2,129	6.95%, <a href="#">see rank</a>	6.50%	6.59%
10 to 14 years	2,158	7.05%, <a href="#">see rank</a>	6.60%	6.70%
15 to 19 years	2,051	6.70%, <a href="#">see rank</a>	6.89%	7.14%
20 to 24 years	1,650	5.39%, <a href="#">see rank</a>	6.72%	6.99%
25 to 34 years	3,781	12.35%, <a href="#">see rank</a>	12.98%	13.30%
35 to 44 years	4,189	13.68%, <a href="#">see rank</a>	13.46%	13.30%
45 to 54 years	4,622	15.10%, <a href="#">see rank</a>	14.60%	14.58%
55 to 64 years	4,047	13.22%, <a href="#">see rank</a>	12.38%	11.82%
65 to 74 years	2,321	7.58%, <a href="#">see rank</a>	7.68%	7.03%
75 to 84	1,225	4.00%, <a href="#">see rank</a>	4.20%	4.23%
85 years and over	472	1.54%, <a href="#">see rank</a>	1.57%	1.78%

\*Based on 2010 data. View [historical age data](#).

## **Item #2**

**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 Marshall County**

The average household income for Marshall County residents is estimated to be \$38,457 for the current year, while the average household income for the United States is estimated to be \$ 50,054 for the same time frame.

The current unemployment rate for 2014 in Marshall County is 8.1% according to Marshall County Tennessee unemployment rate report.

The U.S unemployment rate for the same time in 2014 is 7.2% while the national is 6.7%. The average total wages in all industries in Marshall County in 2012 was \$34,766. The average industry wage for Tennessee was \$42,764. Marshall County had a decrease of 300 persons in both the total labor force and the unemployed. This was combined with a 50 percent increase in the professional / business services sector, causing the large drop in the unemployment rate. For Marshall County, 67.9% of the population employed is white collar and 32.09 of the population employed is blue collar.

**Table 2.1  
Marshall County Historic and Projected Economic Indicators**

Year	Labor Force	Employed	Unemployl	Unemploy Rate	Per Capita Income	Total Retail Sales	Property Tax Rate
2003	13,243	11,924	1,319	10.0%	\$24,286	\$202,149,523	3.14
2004	12,778	11,870	908	7.1%	\$25,281	\$203,382,090	3.14
2005	12,541	11,729	812	6.5%	\$25,333	\$219,466,902	3.14
2006	12,716	11,908	808	6.4%	\$25,542	\$239,896,025	3.14
2007	13,011	12,009	1,002	7.7%	\$25,784	\$252,799,096	2.84
2008	12,605	11,430	1,175	9.3%	\$26,266	\$268,385,119	3.09
2009	12,442	10,262	2,180	17.5%	\$25,041	\$223,477,096	3.09
2010	12,512	10,452	2,060	16.5%	\$25,033	\$232,394,009	3.09
2011	12,487	10,777	1,710	13.7%	\$25,513	\$242,720,935	3.09
2012	12,409	11,006	1,403	11.3%	\$27,046	\$248,518,044	3.22
2013	12,407	11,156	1,251	10.1%	\$20,855	\$269,259,022	3.22
2014	12,800	11,610	1,190	9.3%	\$24,697	\$279,259,512	3.22
2015	12,778	11,723	1,055	8.3%	\$25,697	\$289,361,071	3.22
2016	12,661	11,461	1,200	9.4%	\$25,897	\$299,455,813	3.38
2017	12,715	11,692	1023	8.0%	\$26,147	\$309,892,117	3.38
2018	12,609	11,448	1161	9.2%	\$26,397	\$319,712,690	3.38
2019	12,750	11,595	1155	9.0%	\$26,647	\$329,583,911	3.38

Sources: Bureau of Labor Statistics; U.S. Census; TN Government Dept. of Revenue; TN Government Comptroller Div. of Property Assessment; Tennessee REAP. All projections are by Mike Wiles Director Joint Economic Community Development Board for Marshall County and the SCTDD staff.

**Item #3**

***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.***

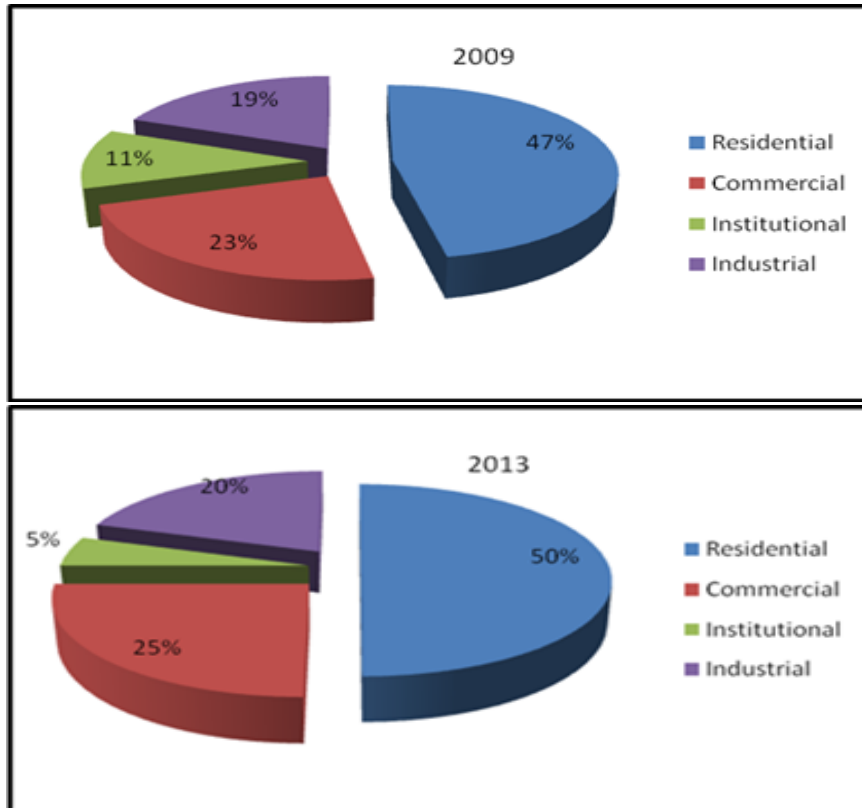
### **Current Solid Waste Stream**

In the most recent Marshall County Solid Waste Annual Progress Report 2013, the total disposal tonnage for Marshall County reported was 14,313 tons to Cedar Ridge Landfill, Inc. inside Tennessee. A total of 1,484 tons was sent to Middle Point Landfill inside Tennessee. This total includes all sources including commercial, residential, convenience centers and city collections in Marshall County. Currently all waste collected by Marshall County, Lewisburg, and Chapel Hill is being disposed at Cedar Ridge Landfill. The city of Cornersville's waste goes to Middlepoint landfill.

The projection of the waste stream will be much the same as it is now. With gradual growth expected over the next five years. Cedar Ridge Landfill is currently owned and operated by Waste Management Inc. The County and Marshall/Maury County Solid Waste Region dispose of their MSW at the landfill. Cedar Ridge Landfill also receives waste from outside the bi-county region.

**Do you have more data to include? What about the breakdown of percentages?**

**Table 3.1 Waste Stream Marshall County**



Sources: 2013 Annual Progress Report for Counties (2013 landfill origin by County)

**Item #4**

***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.***

**County Provided Services**

Marshall County has four convenience centers for its residents. The convenience centers are staffed and operated by Marshall County. The cities of Lewisburg, Cornersville and Chapel Hill collect their residents'



waste at the curb for a fee. The County does not provide collection for industries; industries contract with private haulers such as Republic Services and Waste Management for their solid waste collection. Marshall County provides a household hazardous waste (HHW) collection day for its residents on an annual basis in conjunction with TDEC.

### **Convenience Centers**

Marshall County has four (4) convenience centers for its residents. The hours of operation of the convenience centers are Monday, Tuesday, Thursday, Friday and Saturday from 7:00 AM to 6:00 PM. Each convenience center collects municipal solid waste, glass, cardboard, scrap-metal, and used oil. In addition, containers collecting single stream recyclables are located at each center. Single stream recyclable items in Marshall County include tin, aluminum, plastic numbers 1 through 7, and paper.

The majority of the waste collected at the convenience centers and within Marshall County's municipalities is disposed of at the Cedar Ridge Landfill. In 2013, Marshall County disposed of approximately 13,313 tons at Cedar Ridge. The tonnage includes commercial and residential sources but does not include MSW from industries. Approximately 1,484 tons of solid waste from industries in Marshall County was hauled to the Middle Point Landfill. This gives a total of 14,797 tons. Marshall County has a population of 31,130. The estimated per capita rate, not including all of the industry in Marshall County is calculated by dividing total tonnage by the population. The per capita rate is  $14,797 \text{ tons} / 31,130 = 0.48 \text{ tons per person per year}$  or 2.6 lbs per person per day. Tonnage reports for MSW disposal and recycled goods were provided by Marshall County.

The convenience centers are funded from the host fees paid by Waste Management from disposal of MSW at Cedar Ridge Landfill. Host fees are paid to the County for every ton of waste disposed of at the Landfill in addition to the per ton fees Marshall County receives in an annual payment of \$300,000.00.

County residents may contract with private companies to collect and dispose of their waste. Private haulers, such as Volunteer Disposal and United Waste Haulers service rural residents for \$12 to \$15 per month. Attempts were made to contact and obtain information on waste collection and disposal quantities from both of the private companies. Volunteer Disposal, at the time of the report was drafted, had not returned messages left by phone. United Waste stated that they only collect commercial/industrial waste and declined when asked to provide additional information.

Some of the solid waste generated by local businesses is disposed of at Republic Services' Middle Point Landfill in Murfreesboro, Tennessee and totaled 1484 tons in 2013.

## **Yard Waste**

Marshall County does not currently collect and/or dispose of yard wastes generated by its rural residents.

Household Hazardous Waste, Tires, Antifreeze, Used Oil, and White Goods. Household hazardous waste (HHW) is collected annually at Marshall County's Household Hazardous Waste Day. Paint, cleaners, pesticides, automotive fluids, pool chemicals and lawn and garden chemicals are examples of household generated hazardous wastes accepted. The event is typically held the Saturday before Earth Day each year. The 2013 event was held at the Marshall County Recycling Hub. The event is held in conjunction with TDEC.

Tires, paint, antifreeze, electronics and used oil are accepted year-long at the Marshall County Solid Waste office in Lewisburg during normal business hours. Used oil and white goods are accepted at all four convenience centers during business hours.

## **Cities of Marshall County**

The City of Lewisburg has a population of approximately 11,514. The City of Lewisburg contracts curbside collection of municipal solid waste and recyclables for its residential population and commercial entities. The City also provides year round collection of yard wastes and bulk items such as white goods, homeowner generated construction and demolition (C&D) wastes, and furniture. City provided residential services are included in the residential solid waste fee in the amount of \$12.50 per month.

In 2008, Lewisburg's curbside residential MSW program collected 5,184 tons of MSW which was disposed of at the Cedar Ridge Landfill. Collection is provided once weekly. Beginning March 2009, residential curbside MSW and recycling pickup will be on Tuesdays and on Thursdays, respectively, for residences north of State Highway 373. For those residences south of Highway 373, the collection days will be Wednesdays and Fridays for residential MSW and recycling, respectively. Solid waste collection of contractor generated waste is provided at a rate of \$21 per ton. Similar waste generated by homeowner is collected on an as- call basis and is included in the monthly solid waste fee. Leaf waste is collected year round by a City operated vacuum truck. Pickup is based on notification or as observed by collection truck operators. Residential yard wastes and commercial tree trimming wastes are collected and chipped at the Public Works facility.

The City of Chapel Hill has a population of approximately 1,270. Existing solid waste services are provided through a contract between Waste Management and the City of Chapel Hill. Curbside pickup is provided and waste is disposed at the Cedar Ridge Landfill. Chapel Hill charges \$10.50 per month and Waste Management charges the city \$11.88 per month per individual customer. Residential MSW curbside pickup occurs weekly on

Tuesdays and all solid waste must be in cans or bags furnished by the resident. All other bulk items such as furniture or other items may be taken to the County's convenience center #1 located on Highway 99. Yard wastes may be taken to an area near the Chapel Hill wastewater treatment lagoon where they are periodically burned by the City. Commercial, industrial and institutional customers must arrange for their own solid waste service; many contract with Waste Management and have dumpsters on site. The residents outside of the City of Chapel Hill may dispose of their residential waste at the convenience centers or are serviced by private collection and disposal companies. The Chapel Hill convenience center #1 collects municipal solid waste, glass, cardboard, scrap metal, used oil, and comingled or single stream recyclables. Refer to Figure 4-1 for convenience center locations.

The Town of Cornersville has a population of approximately 1,194. Existing solid waste services for Cornersville residents are provided through a contract between Waste Management and the Town of Cornersville. Curbside pickup occurs weekly on Wednesdays for residential customers and on Wednesday and Friday for business customers. Residential rates inside the city limit are \$12.43 per month. Residential customers outside of the city limits are charged \$15.50 per month and businesses are charged \$25.47 per month. All residential or business solid waste must be in cans or bags furnished by the customer. All residential, commercial, industrial, and institutional customers are required to be on the Waste Management contract although customers can contract with an additional waste hauler such as Allied Waste, etc. Residential bulk items and other items not in cans or bags can be taken to the Cornersville convenience center #4 located off of Highway 129. The Town of Cornersville also provides curbside brush service at no extra cost. Branches must be 5 inches in diameter or less and not more than 8 feet long. The residents outside the Town of Cornersville may also dispose of their residential waste at the convenience centers or are serviced by private collection and disposal companies. The Cornersville convenience center #4 collects municipal solid waste, glass, cardboard, scrap metal, used oil, and comingled or single stream recyclables.

Marshall County is in compliance with the state statute. Based on population, Marshall County is required to have 4 convenience centers.

**Marshall County Old Columbia Road Convenience Center**





Marshall County Solid Waste Department  
611 Hawkins Drive  
Lewisburg, Tennessee



## Chapel Hill, Tennessee Drop-Off



## Chapel Hill, Tennessee Convenience Center





## Chapel Hill, Tennessee Convenience Center



## Petersburg Drop-Off



## Belfast Convenience Center



### Solid Waste Convenience Center Operating Hours and Recyclable Materials Collected

<i>Location</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>	<i>Sunday</i>	<i>Types Of Recyclables</i>
Chapel Hill #1	7A-6P	7A-6P	CLOSED	7A-6P	7A-6P	7A-6P	CLOSED	MSW, glass, cardboard, scrap metal, used oil, plastic, paper
Old Columbia Road #2	7A-6P	7A-6P	CLOSED	7A-6P	7A-6P	7A-6P	CLOSED	MSW, glass, cardboard, scrap metal, used oil, plastic, paper
Belfast #3	7A-6P	7A-6P	CLOSED	7A-6P	7A-6P	7A-6P	CLOSED	MSW, glass, cardboard, scrap metal, used oil, plastic, paper
Cornersville #4	7A-6P	7A-6P	CLOSED	7A-6P	7A-6P	7A-6P	CLOSED	MSW, glass, cardboard, scrap metal, used oil, plastic, paper

Source: Solid Waste Director Morgan Thomas



**Item #5**

***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.***

Marshall County Solid Waste Director  
Morgan Thomas  
611 Hawkins Drive  
Lewisburg, TN 37091  
Phone: 931-359-0547

Marshall County Solid Waste Laborers: 6 FT, 11 PT, 20-25 Trustees.

Marshall County Solid Waste Committee  
Nathan Johnson, Commission Chair  
Anna Childress, Chairman  
Mike Waggoner  
Phil Willis  
Sheldon Davis  
Seth Warf

**Future Solid Waste Infrastructure Development Needs**

In order to properly staff and run the expanded Marshall County Recycling Center(or is it a MRF?) , the county will have to budget for , more employees, more trustees and maintenance of existing equipment and the purchase of new equipment will be needed.

Upgrades to the sort line consisting of screens and conveyors to increase capacity will be needed in the future to keep up with the growing needs of the Marshall County Recycling Hub. A 2 ram baler to bale recyclables will also be needed. A new skid loader will be needed to replace the old one. A new roll-off truck will be needed in the future to replace the old one to haul recyclables from convenience centers and drop offs. The convenience centers will be in need of new compactors to collect recyclables.

Due to the award of the Recycling Hub Grant, a full-time coordinator / educator for recycling is definitely desired to encourage the need for recycling in Marshall County. Unfortunately it is not in the budget for this year. Marshall County is working on increasing recycling participation at convenience centers. Future plans to expand the recycling program are already being discussed. Recycling rates have already been improved due to the expansion of the recycling center. In April of 2013 MC began accepting materials from the City of Spring Hill and from the City of Columbia in November of 2013. 2014 will lead to the addition of the City of Columbia as they expand from 1000 homes to 4000 homes participating in curbside recycling.

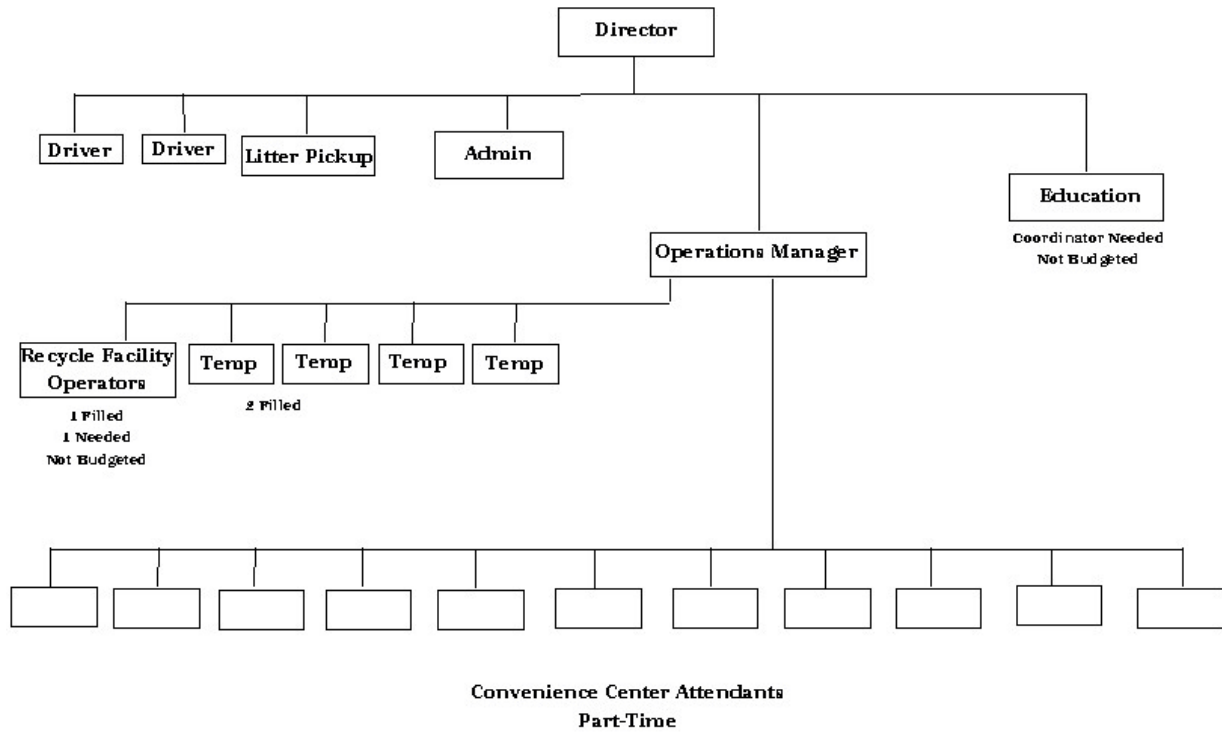


**MC** processes recyclables for the County and all communities in the county, and provides technical support and recycling education for the county and all communities. Hopefully with the additional revenue generated from the Hub a fulltime recycling coordinator can be added to the solid waste staff to improve recycling education in the county and continue the already extensive program in place.

**MC** also operates 4 convenience centers in which the cities are each responsible for providing trash service to the residents.

Currently Marshall County employs 6 full time employees which consist of a Solid Waste Director, 1 Administrative Assistant, 2 Drivers, 1 Operational Manager, 1 Recycle Facility Operator with 1 more needed but not budgeted, 2 Temporary positions with 2 more needed, 1 Education coordinator needed but not budgeted, and 11 part-time Convenience Center attendants.

Marshall County Solid Waste Department



Source: Solid Waste Director Morgan Thomas, SCTDD Staff



### **Item #6**

***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?***

### **Public Interest**

Marshall County continues to be a proactive partner with the community and surrounding counties in recycling efforts. Highly visible recycle centers located at the local Walmart Supercenter and Walgreen's parking lots provide residents with easy access for dropping off recyclables.

Walmart Lewisburg, Tennessee



Walgreens Lewisburg, Tennessee



## Front office Marshall County Solid Waste & Recycling Hub

The new Marshall County recycling center , funded by the Recycling Hub Grant(?) has already achieved maximum capacity due to the county residents' overwhelming participation in the recycling program, and needs to add more equipment to expand processing capacity.

Forming the new Solid Waste Region to include Maury County, helps build awareness and participation in the recycling program. The Regional Solid Waste Board is active and interested in improving recycling efforts. Almost all members attend Solid Waste Board meetings.

The rural convenience centers also offer opportunities for the public to participate in the recycling efforts of the Marshall County Solid Waste Department.

Marshall County also provides small cardboard boxes as recycle bins in every classroom in the schools of Marshall County. In addition, a front load bin is provided outside schools. The recyclables from schools are collected and sorted using prison inmate labor. The recycling efforts at County schools are an excellent complement to the annual educational day that the Solid Waste Director conducts at each school. Community Communication and outreach is an important component as it educates the community on the how, when, where, and what of the community's recycling program. Education plays a great role in the long term viability of a recycling program. Education programs for children and adults heighten community awareness for recycling. School based programs create interest among younger recyclers. Presentations are held annually at every elementary

school in the county. Booths are set-up at community events. The SW Director speaks to numerous civic, youth, and church groups each year. Marshall County also offers tours of our recycling facility, and provide for recycling at many county events. Expansion of a Recycling Coordinator is needed to meet the growing needs of the County and the Region. Having increased participation and education of younger community supporters is projected to increase environmental awareness and improve recycling rates in the short and long terms.

### **Item #7**

***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 met 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.***

Marshall County has a goal to reduce waste as much as practical within economic reason. Improving upon existing programs, expanding services and increasing participation are general means to accomplish the County's waste reduction goals. Lewisburg's expansion of recycling services in March 2009 is an example of all the above mentioned means. In 1999, according to the five year update to the Solid Waste Plan, Marshall County had a population of 25,658 and landfilled 25,316 tons of MSW at Cedar Ridge Landfill. The per capita rate was 0.99 tons per person per year. The volume of wastes required to be recycled, reused, or diverted from the waste stream is projected for the next ten years and is based on a reduction of waste of 25 percent with year 1999 as a base.

## Measurement of Regional Waste Reduction Goal

County	Year	% Reduction Compared to Base Year	Real Time Comparison
Marshall	2008	NA	17%
	2009	NA	26%
	2010	NA	32%
	2011	NA	29%
	2012	NA	35%

Region	Year	% Reduction Compared to Base Year	Real Time Comparison
Marshall-Maury	2008	38%	30%
	2009	25%	20%
	2010	54%	27%
	2011	61%	36%
	2012	64%	17%

Source: TDEC, Division of Solid Waste, Division of Solid Waste Assistance Program, Matt Maynard, Ashby Barnes

Waste reduction at its source is the best method to reduce overall waste consumption and per capita rates. When considering ways to reduce waste in communities, a holistic, synergistic approach should be considered. The County must identify and capitalizing on the strengths of varying organizations, businesses and individuals within the community to achieve waste reduction goals. For example, to reduce yard and food

wastes, the Marshall County's Cooperative Extension could become involved with local gardening and composting classes to educate businesses and individuals. The Co-op Extension could assist schools by educating the youth and helping them start and maintain a community garden and compost bin at their school. Businesses and industries should continue to be encouraged and educated on waste reduction and sustainable practices. Businesses and industries account for a large share of waste generated in the Waste reduction at its source is the best method to reduce overall waste consumption and per capita rates. When considering ways to reduce waste in communities, a holistic, synergistic approach should be considered. The County must identify and capitalizing on the strengths of varying organizations, businesses and individuals within the community to achieve waste reduction goals.

In addition Marshall County has created a regional recycling hub that currently processes recyclables from communities outside of the county. Marshall County plans to expand the capacity of the recycling hub to assist other communities in meeting their recycling goals. The revenue generated from the sale of this material will be used to improve recycling in Marshall County.





**Recycling boxes and Be Kind To The Earth stickers for the Marshall County Schools**







**Waste Management Recycling Marshall County**

**Item #8**

**A. Provide a chart indicating current collection and disposal capacity by facility site and the maximum capacity the current infrastructure can handle at maximum through put. 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.**

Chart 8A

Site Name(s)	Current Capacity	Maximum Capacity	Projected Life of Facility
Cedar Ridge Class 1	215k tons/yr	400,000/yr	5 years
#1 Chapel Hill	2.5k tons/yr	3.5k tons/yr	Indefinite
#2 Old Columbia Rd.	1.2k tons/yr	2k tons/yr	Indefinite
#3 Belfast	1.5k tons/yr	2k tons/yr	Indefinite
#4 Cornersville	.8k tons/yr	2k tons/yr	Indefinite

Source: Marshall County Solid Waste Department Director Morgan Thomas

**B. 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.**

Chart 8B

Provider of Service	Service Area	Population Total Under This Service	Frequency of Service (Weekly, Bi-weekly, on call, etc.)	Tonnage Capacity	Type Service (Curbside, Convenience Center, Green Box)
Marshall County	County-wide	33,301	Anytime during hours of operation	N/A	Convenience Center
Lewisburg	City-wide	11,391	Weekly/bi-weekly	N/A	Curbside
Chapel Hill	City-wide	1,260	Weekly/bi-weekly	N/A	Convenience Center
Cornersville	City-wide	995	Weekly/bi-weekly	N/A	Convenience Center
Petersburg	City-wide	190	Weekly/bi-weekly	N/A	Convenience Center

Source : Marshall County Solid Waste Director Morgan Thomas

**Item #9**

**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.**

Expenditures			
Description	Present Need \$/year	Unmet Needs \$/year	Total Needs (Present + Unmet) \$/year
Salary and Benefits	\$522,110		\$522,110
Transportation/hauling	200,000		200,000
Collection and Disposal Systems	25,000		25,000
Equipment		250,000	
Sites			
Convenience Center	150,000		150,000
Transfer Station			
Recycling Center			
MRF	150,000		150,000
Landfills			
Site			
Operation			
Closure			
Post Closure Care			
Administration (supplies, communication costs, etc.)			
Education	25,000		25,000
Public			
Continuing Ed.			
Capital Projects	300,000		300,000
REVENUE			
Host agreement fee			
Tipping fees			
Property taxes			
Sales tax			
Surcharges	450,000		450,000
Disposal Fees			
Collection charges			
Industrial or Commercial charges			
Residential charges			
Convenience Centers charges			
Transfer Station charges			
Sale of Methane Gas			
Other sources: (Grants, bonds, interest, sales, etc.)	175,000		175,000
Sale of recyclable material	750,000		750,000

Source: Marshall County Solid Waste Director Morgan Thomas

**Item #10**

**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. Use example in Chart 7 as an example to present data.**

Community	Current Revenue
Marshall County	Surcharge, Grants, Sale of Recyclables
Lewisburg	General Fund
Chapel Hill	General Fund
Cornersville	General Fund

Source: Marshall County Solid Waste Department Morgan Thomas

Revenues from the surcharge and sale of recycle materials will be expected to grow to meet the needs of the department.

**Item #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.**

Marshall County will continue to follow the same path. Marshall County will continue to dispose MSW at Cedar Ridge Landfill as long as it accepts waste under the current Marshall County/Cedar Ridge Agreement and Addendum to Agreement. This is Marshall County’s most economical option in the short term. Longer term planning includes soliciting bids from private solid waste disposal providers. A six month minimum lead-time should be allowed to secure such services. Transfer station site location,

permitting, and construction will be a longer process and may take one to two years to obtain property, design, and construct a transfer station.

Effective recycle centers located at the local Walmart Supercenter and Walgreen's parking lots make available to residents easy access for dropping off recyclables. Marshall County's current waste reduction efforts are still commendable. Continuing to find ways to improve the existing system will always bring challenges as waste reduction goals continue to be implemented. Over the next five years Marshall County will continue to be the Recycling Hub for the Maury/Marshall County Region.

**Sources:**

U.S. Census Bureau

U.S. Bureau of Economic Analysis

Tennessee Comptroller of the Treasury

Tennessee Department of Labor

Tennessee Department of Revenue

TN REAP

South Central Tennessee Development District/STAFF

2009 Marshall County Needs Assessment

2013 Annual Progress Report

Marshall County Solid Waste Director Morgan Thomas

Population Projection for the State of Tennessee

Bureau of Labor Statistics

Marshall County Finance Dept.

TDEC

TDEC, Division of Solid Waste, Division of Solid Waste Assistance Program, Matt Maynard Ashby Barnes

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