

MAURY COUNTY SOLID WASTE NEEDS ASSESSMENT

June 2014



Rippavilla Plantation

Best Tourist Attraction in 2014

Prepared by the
South Central Tennessee Development District
101 Sam Watkins Boulevard Mount Pleasant, Tennessee 38474

As required by the
Solid Waste Management Act of 1991 (T.C.A. 68-211-801 through 68-211-874)

For the
TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
Division of Solid Waste Management, TDEC
William R. Snodgrass Tennessee Tower
312 Rosa L Parks Ave. 14th Floor
Nashville, Tennessee 37243

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 Towards 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 Maury County

According to the U. S. Census Bureau, Maury County's annual population in 2003, was 74,000 and 2013, 87,013 showing an increase of 14%. As shown in Table 1.1 below, projections for the next five years also reflect steady increases in population. This increase over Maury County is expected to continue to rise for the next five years. Maury County is 14th fastest growing of 95 counties in Tennessee.

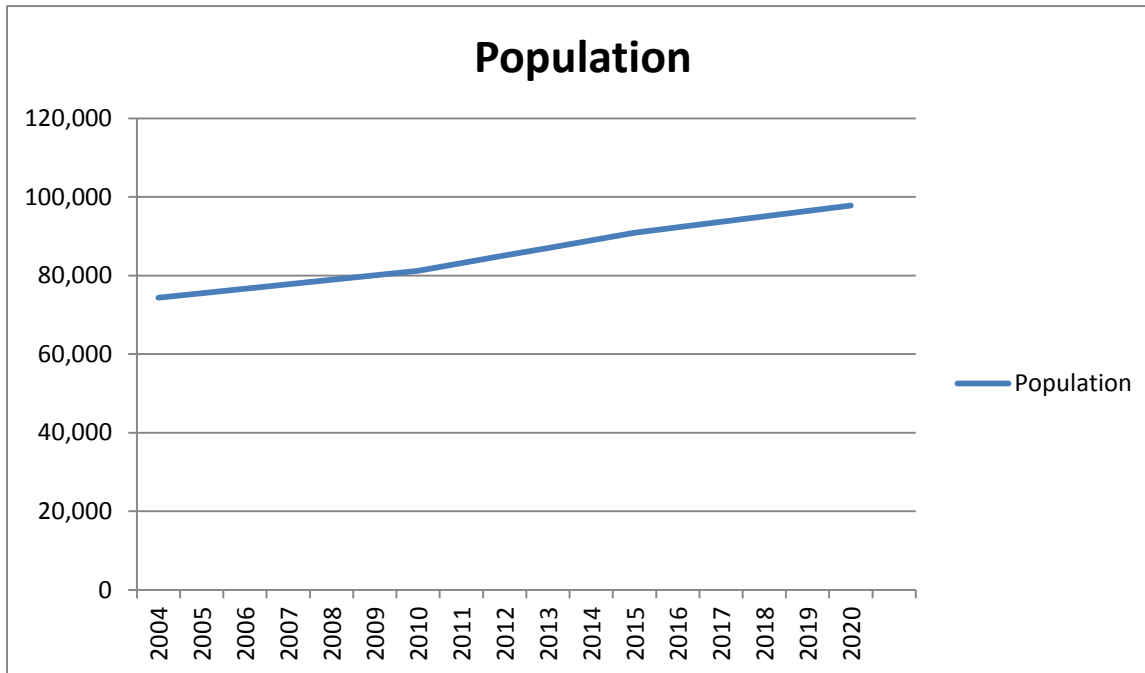
The City of Columbia recycling efforts have increased from 1000 to 4000 homes participating in curbside recycling due to the Hub and Spoke Grant awarded to Marshall County which increased Maury County's recycling efforts since Maury and Marshall County are part of a region.

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

Year	County Population	Columbia	Mount Pleasant	Spring Hill	Unincorporated
2004	74,328	33,416	4,431	5,661	30,820
2005	75,535	33,506	4,416	6,431	31,182
2006	76,675	33,976	4,477	6,570	31,652
2007	77,815	34,447	4,537	6,710	32,121
2008	78,955	34,917	4,598	6,849	32,591
2009	80,095	35,388	4,658	6,989	33,060
2010	81,235	35,858	4,719	7,128	33,530
2011	83,161	36,691	4,826	7,351	34,292
2012	85,087	37,524	4,934	7,575	35,054
2013	87,013	38,358	5,041	7,798	35,816
2014	88,939	39,191	5,149	8,022	36,578
2015	90,865	40,024	5,256	8,245	37,340
2016	92,250	40,645	5,333	8,423	37,849
2017	93,635	41,567	5,410	8,601	38,358
2018	95,020	41,888	5,487	8,778	38,866
2019	96,405	42,510	5,564	8,956	39,375
2020	97,790	43,131	5,641	9,134	39,884

Sources: Historic data from Projected Population Trends from the U.S. Census Bureau

Graph 1.1 Maury County's Population



Source: Historic and Projected Population Trends

Maury County shows a gradual population increase from 2004 to the projected year 2020. It is anticipated that Maury County's solid waste will also increase at a gradual rate from 2014 to 2020.

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 Maury County

The average household income for Maury County residents is estimated to be \$41,591 for 2014, while the average household income for the United States is estimated to be \$50,054 for 2014. The average household income for Maury County is projected to increase over the next five years. Unemployment rates for 2006 were 5.5% and in 2010 it increased to 14.2%. The closing of the Saturn plant caused a large increase in the unemployment rate. The average wage per job in Maury County is \$24,427. The per capita income for Maury County is \$31,498, and the per capita income declined by 7.8% from 2002-2012.

The unemployment rate for 2013 in Maury County was 8.6% according to Maury County Tennessee unemployment rate report.

The U.S unemployment rate in 2014 is 6.3% while in Tennessee it is 8%. It is projected that the unemployment rate will slightly increase over time.

The average total wages in all industries in Maury County from 2008 to 2012 was \$45,000. The average industry wage for Tennessee was \$42,764. Tennessee has grown by 9.65% since 2000. Maury County had an increase in the size of its labor force.

The City of Columbia has a population of 38,358.

The City of Spring Hill has a population of 32,576 and is located 10 miles north of Columbia and situated in both Maury and Williamson Counties. With the re-opening of GM in Spring Hill as part of its new Ecotech Engine program and addition of vehicles manufacturing, it is estimated that 2000 more jobs will be added to the economy of Maury County and surrounding areas. Spring Hill also plans to expand its healthcare to include a medical center comprised of Maury County Regional Medical Center and TriStar Centennial.

The City of Mount Pleasant has a population of 5,041.

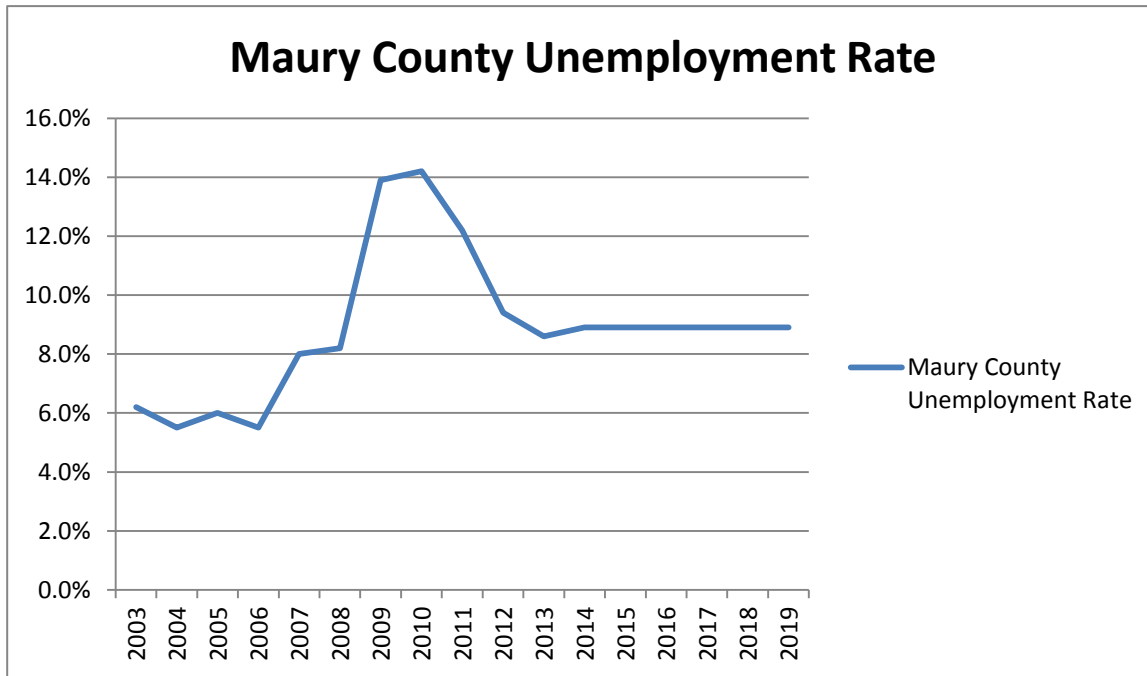
Table 2.1

Maury County Historic and Projected Economic Indicators

Year	Labor Force	Employed	Unemployed	Unemployment Rate	Per Capita Income	Total Retail Sales	Property Tax Rate
2003	36687	34422	2265	6.2%	29190	57,953,107	2.73
2004	36108	24126	1982	5.5%	30186	831,035,098	2.73
2005	36113	33938	2175	6.0%	29766	854,667,521	2.89
2006	36650	34638	2012	5.5%	31259	951,933,943	2.5
2007	36756	33818	2938	8.0%	30377	1,011,246,510	2.5
2008	37607	34529	3078	8.2%	31259	1,025,092,921	2.5
2009	37163	32006	5157	13.9%	30377	978,732,765	2.65
2010	36597	31393	5204	14.2%	30428	1,019,656,844	2.597
2011	36398	31969	4429	12.2%	31717	1,093,562,696	2.597
2012	36389	32978	3411	9.4%	33134	1,133,214,237	2.597
2013	37358	34144	3214	8.6%	22627	1,006,496,609	2.597
2014	36712	33445	3267	8.9%	30029	1,006,496,609	2.597
2015	36712	33445	3267	8.9%	30029	1,006,496,609	2.597
2016	36712	33445	3267	8.9%	30029	1,006,496,609	2.597
2017	36712	33445	3267	8.9%	30029	1,006,496,609	2.597
2018	36712	33445	3267	8.9%	30029	1,006,496,609	2.597
2019	36712	33445	3267	8.9%	30029	1,006,496,609	2.597

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 SCTDD staff, Hickman County Solid Waste Director, Patrick Hite Executive Director of Hickman County Economic and Community Development Association

Graph 2.1 Maury County Unemployment Rate

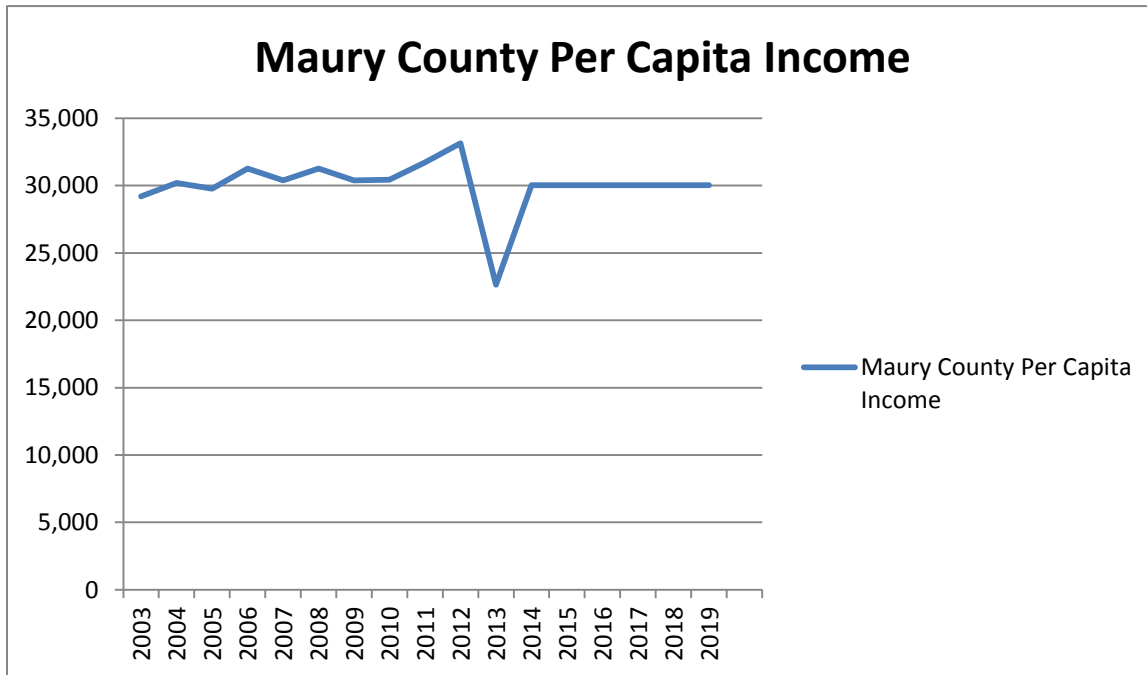


Sources: Bureau of Labor Statistics; U.S. Census; TN Government Dept. of Revenue; TN Government Comptroller Div. of Property Assessment; Tennessee REAP. All projections are by Bureau of Labor Statistics; U.S. Census; TN Government Dept. of Revenue; TN

Maury County has had a population growth annually of 16.49% since 2000.

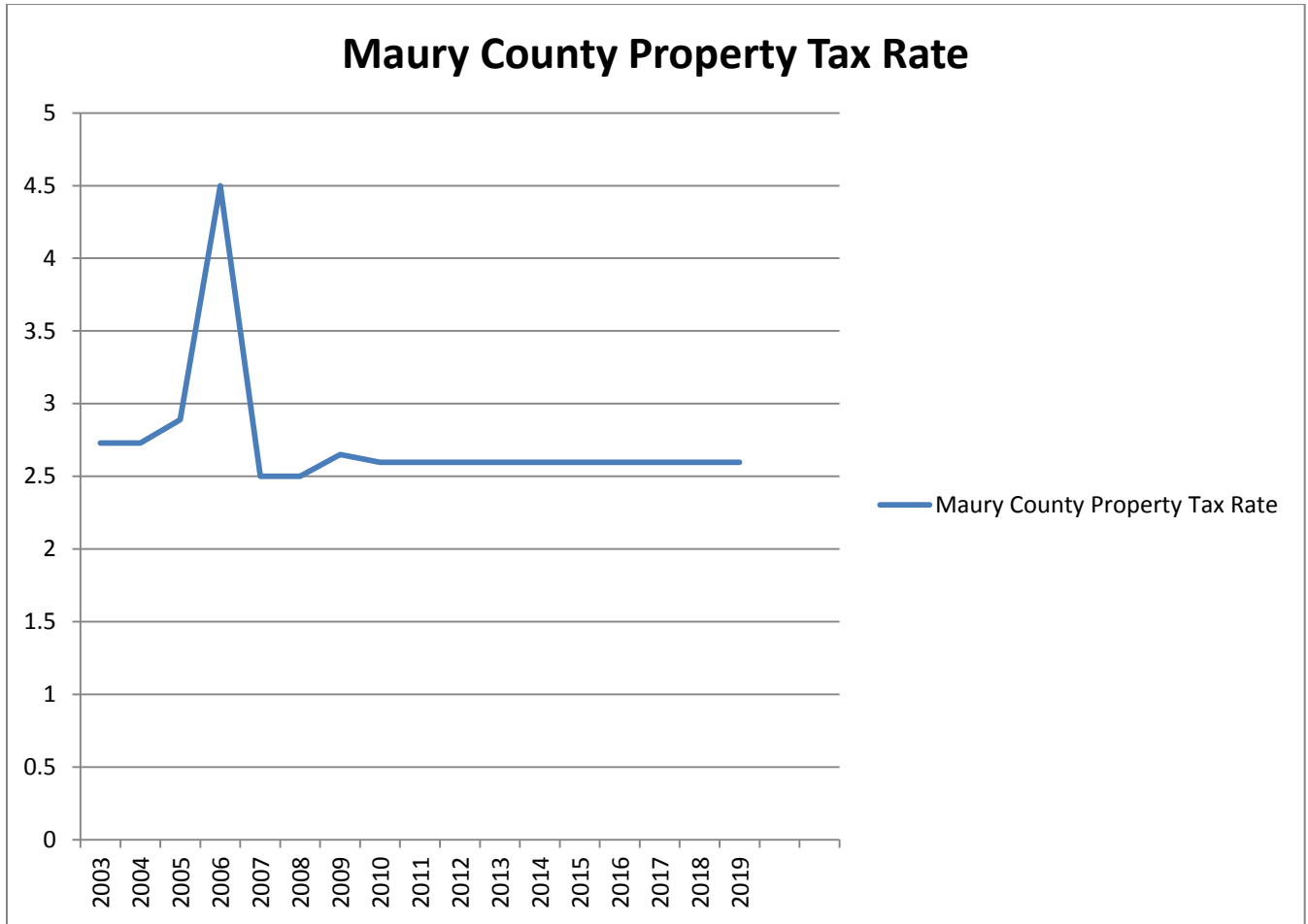
Maury County's population is 26.20% under the age of 18, 8.7%, is 18 and up, 29.80%, 25-44, 23.20% is 45-64, 12% is 65 and older. Maury County consists of 82.39% White, 14.25% Black or African American, 0.31% Native American, .33% Asian, and .2% Pacific Islander.

Graph 2.2 Maury County Per Capita Income



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 Bureau of Labor Statistics; U.S. Census; TN Government Dept. of Revenue; TN

Graph 2.3 Maury County Property Tax Rate



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 South Central Tennessee Development District.

Maury County's current unemployment rate of 8.6% in 2013 is projected to remain the same or slightly increase. The per capita income for Maury County increased from 2003 to 2008 but is projected to decrease or remain the same from 2009 to 2019. The property tax rate is fairly constant with a slight increase projected from 2008 to 2019.

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.

Waste Stream Characteristic

In the most recent Maury County Solid Waste Annual Progress Report 2013, the total disposal tonnage for Maury County reported is 31,080 tons to Maury County Demolition Landfill. A total of 45,710 tons was sent to Cedar Ridge Landfill in Lewisburg, Tennessee. This total includes all sources including commercial, residential, convenience centers and city collections in Maury County. Currently all waste collected by Maury County, Columbia, and Spring Hill is being disposed by Waste Management Inc.'s, Cedar Ridge Landfill. The city of Mount Pleasant is hauled to Clarksville, Tn. by Waste Haulers, or Bath Springs Haulers. Some solid waste may be hauled to West Camden if Waste Management or the cities choose to.

Cedar Ridge is owned by Waste Management Inc. The County and the Marshall/Maury Solid Waste Region dispose of their Municipal Solid Waste at this landfill. Cedar Ridge also receives wastes from other counties.

Tires are accepted at Maury County Solid Waste and trucked to Saltillo, MS for recycling. Tires are included in the Department of Revenue Program which begins July 1, 2014. Maury County is looking to Department of Revenue for tire funding.

The chart below shows the sector breakdown Maury County's Waste Stream in 2010 and 2013.

Graph 3.1 Waste Stream Maury County

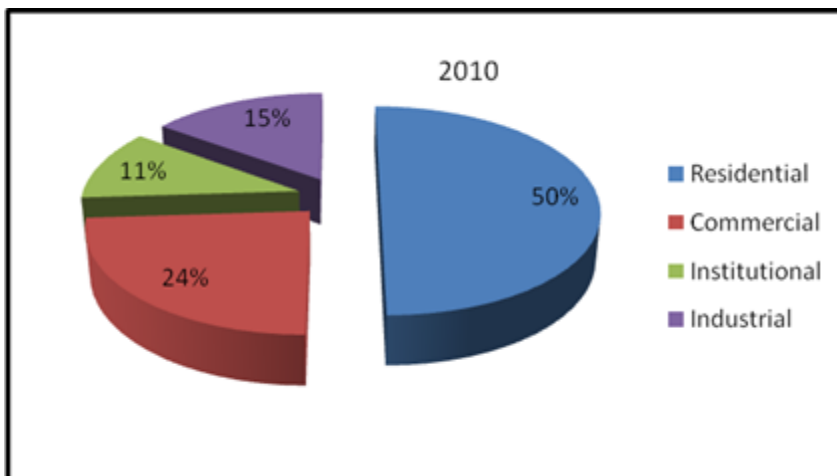
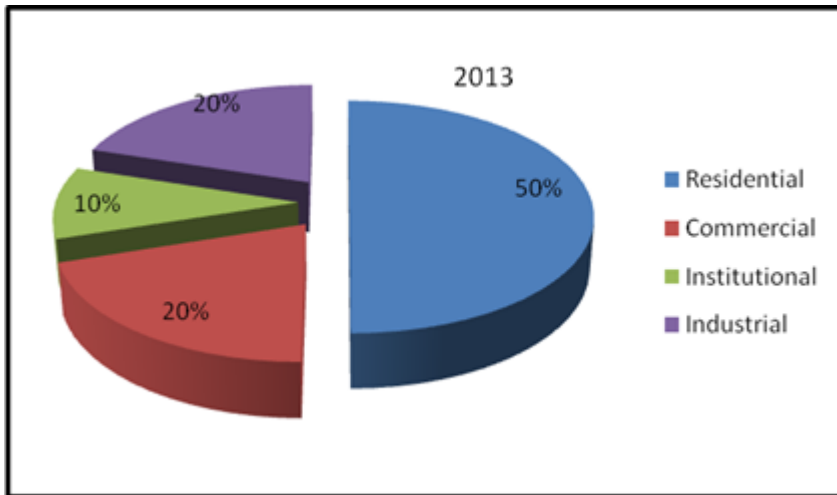


Table 3.1 2010 & 2013

Sector 2010	Percentages of Maury County Regional Total
Residential	50%
Commercial	24%
Institutional	11%
Industrial	15%

Sector 2013	Percentages of Maury County Regional Total
Residential	50%
Commercial	20%
Institutional	10%
Industrial	20%

Sources: 2013 Annual Progress Report for counties (2013 landfill origin by county)

Solid Waste is projected to increase from 2010 to 2014. Manufacturing in Maury County is expected to grow over the next five years therefore as manufacturing grows so will jobs, population and solid waste.

Columbia and Spring Hill solid waste generated will increase more than other areas due to the re-opening of the GM plant in Spring Hill.

During the next five years Maury County plans to continue the Solid Waste Collection Systems that are currently in place. Local government carriers and utilize private haulers throughout the County. Most of the commercial and industrial wastes generated within Maury County are disposed of in the Cedar Ridge Landfill. 16,820

tons of commercial waste was reported to be recycled in 2013 according to the 2013 Annual Progress Report. Solid wastes are all broken down by product not whether it is commercial, residential or industrial.

Maury County is working on a program to separate solid waste as it comes into the transfer station and know whether the waste numbers are commercial, residential or industrial.

Regional Solid Waste Management

Maury County disposes of solid waste at Cedar Ridge Landfill.

Columbia disposes of waste at Cedar Ridge Landfill by City of Columbia.

Spring Hill disposes of waste at Cedar Ridge Landfill by Waste Management.

Mount Pleasant disposes of waste by Waste Haulers to Bath Springs Landfill in Clarksville, Tennessee.

Waste entering or leaving the County

45,710 tons of municipal solid waste left the county in 2013. These tons went to Cedar Ridge Landfill Lewisburg, Tennessee and Bath Springs Landfill Clarksville. Some may even go to Middlepoint Landfill but how much is not possible to be accurately tracked.

Household Hazardous Waste (HHW) Disposal

Maury County provides Household Hazardous Waste collection events annually. Household Hazardous Waste collection days are still effective to keep hazardous waste out of the waste stream. Maury County Household Hazardous Waste collection events are open to all residents in the State of Tennessee. No commercial, business or farm materials accepted.

Products accepted:

Marine products, Photo chemicals, Household products,
Pool Acids/Chlorine, Solvents and Thinners, Paints/Stains/Varnishes
Automotive Products (except used oil)

Items Not Accepted:

Medical wastes

- Smoke detectors
- Explosive/ammunition
- Radioactive
- Used oil
- Commercial/Business waste,
- Farm hazardous waste

Maury County Solid Waste Department accepts E-Waste (Computers, T.V.'s Microwave, and etc.) and any kind of paint since paint is accepted on a daily basis at our main location at 1233 Lawson white Drive Columbia, Tennessee, Monday – Friday 7-3.

These materials can be recycled:

- Mixed paper, cardboard, plastic containers, household glass containers, aluminum and steel
- The following items must be delivered to the Maury County Solid Waste Facility on Lawson White Drive:
- Refrigeration/Air conditioning units
- Electronics
- Paint both oil based and acrylic
- Tires

A more in depth breakdown is on the Maury County website

Source Maury County website www.maurycounty.com

Waste entering Maury County is 45,710.70 tons per year. During the next five years Maury County plans to continue the collection of Household Hazardous Waste. Collection days are necessary to keep problem waste from entering the waste stream. Maury County will continue to collect recyclables at the recycle center and convenience centers for scrap metal, white goods, antifreeze, and used oil. Twenty two schools recycle and curbside collection service of recyclables is still in implementation stages in Columbia.

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.

Solid Waste Collection System

Maury County has nine (9) convenience centers for its residents. The convenience centers are staffed and operated by Maury County. Columbia and Mount Pleasant provide curbside solid waste collection for their residents. Columbia residents are charged a solid waste fee monthly which is included in their Columbia Power and Water bill. Mount Pleasant's residents are billed for solid waste fees on their Mount Pleasant monthly power and water bill. Maury County industries have a contract with Maury County Solid Waste and the customer calls when they need pick-up. Maury County partners with some industries for pick-up of recycle and solid waste. This program is limited to available containers provided by Maury County Solid Waste Department.

Convenience Centers

Maury County has nine convenience centers for its residents. The hours of operation of the convenience centers are Monday thru Saturday from 7:30 AM to 5:00 PM. Each convenience center collects residential solid waste. Additionally, the recyclable material collected is; clear, mixed brown and green glass, cardboard, and scrap- metal. In

addition, containers collecting single stream recyclables are located at each center. Recyclable items in Maury County include tin, aluminum, plastic bottles and paper.

All of the solid waste collected at the convenience centers is disposed of at the Cedar Ridge Landfill. Spring Hill also disposes at Cedar Ridge Landfill but Mount Pleasant does not. In 2013, Maury County disposed of approximately 45,710 tons at Cedar Ridge Landfill. The tonnage includes commercial and residential sources. Material is segregated by Marshall County inmates at Marshall County Solid Waste Department Recycling Center since Maury County is a part of the Marshall/Maury Region.

The estimated per capita rate, not including all of the industry in Maury County is 11.68 lbs., per person per day.

Tonnage of municipal solid waste disposed of, and recyclable materials collected, were provided by Maury County and Tennessee Department of Environment and Conservation origin reports.

Yard Waste

Currently there is no composting, waste-to-energy, or incineration in Maury County.

Household Hazardous Waste, Tires, Antifreeze, Used Oil, and White Goods

Household hazardous waste (HHW) is collected annually at Maury 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 scheduled for September 13, 2014, at the Maury County Solid Waste Department. The event is held in conjunction with Tennessee Department of Environment and Conservation.

Tires, paint, and electronics are accepted year-long at the Maury County Solid Waste office in Columbia during normal business hours. Used oil is accepted at local oil change businesses in the County.

Cities of Maury County

The City of Columbia has a population of approximately 38,158.

Columbia contracts with a private hauler to provide curbside collection of municipal solid waste and recyclables for its residential population. 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 solid waste pick-up services are included in the residential solid waste fee in the amount of \$14.00 per month.

Columbia now offers curbside recycling to its residents. Columbia has a door to door voluntary recycle program. However, only customers that already receive automated trash service with the city are eligible for the recycle program. Items that are accepted for recycling collection include plastic, tin and aluminum containers, and “Anything that Tears” paper products, according to the Columbia website. Pick-up for recyclables is bi-weekly on days of garbage pick-up.

The City of Spring Hill had a population of approximately 32,576 in 2013, of which 7,798 are residents of Maury County.

Existing solid waste services are provided through a contract between Waste Management and the City of Spring Hill. Curbside pick-up is provided and waste is disposed at the Cedar Ridge Landfill. The City of Spring Hill now offers pick-up for recyclables on a bi-weekly basis on the days of normal trash pick-up. Spring Hill’s recycling program consists of door to door mandatory recycling program.

The chipper service provided to Spring Hill residences is still one of the most popular services of the Public Works Department. Spring Hill charges \$9.52 per month for residential and \$19.71 for commercial accounts. All bulk items such as furniture or other items may be taken to the Maury County convenience centers around the perimeter of Spring Hill. Commercial, industrial and institutional customers schedule for their own solid waste service. The majority contract with Waste Management and have dumpsters on site.

Residents outside the city limits of Spring Hill may dispose of their residential wastes at the convenience centers or use a private collection service.

The Town of Mt. Pleasant has a population of approximately 5,041.

Existing solid waste services for Mt. Pleasant residents are provided through a contract between Waste Management and the City of Mt. Pleasant. Curbside pickup occurs weekly on Wednesdays for residential customers and on Wednesday and Friday for business customers. Residential rates inside the city limit are \$16.00 per month and businesses are charged \$40.00 for 1 day pick up or \$110.00 for two days per week. All residential or business solid waste must be in cans or bags furnished by the customer. Residential bulk items and other items can be taken to Mt. Pleasant convenience center located off of Highway 166.

The residents outside of city of Mt. Pleasant may also dispose of their residential waste at the convenience centers or are serviced by private collection and disposal companies. The Mt. Pleasant convenience center collects, municipal solid waste, in addition to the following recyclable materials: glass, cardboard and scrap metal.

The Maury County Solid Waste Department currently has 9 convenience centers and 2 unmanned drop-off centers for recyclables. Maury County Solid Waste uses roll -off trucks for the solid waste and recyclables. Maury County Solid Waste also uses a rotator lift truck for recyclables. Equipment for the solid waste needs is updated as needed by Maury County funds or grants.

Maury County Convenience Center

1233 Lawson White Drive

Columbia, Tennessee 38401

Operating Hours and Recyclable Materials Collected

Table 4.1

#	Location	Hours	Days of Week
1	1984 Bear Creek Pke	7:30-5:00	Mon - Sat

2	314 Carters Creek Pke	7:30-5:00	Mon - Sat
3	1406 Fountain Heights	7:30-5:00	Mon - Sat
4	2100 Gravel Hill Road	7:30-5:00	Mon - Sat
5	3105 Neeley Hollow Rd	7:30-5:00	Mon - Sat
6	1419 Santa Fe Pke	7:30-5:00	Mon - Sat
7	2481 Tindell Lane	7:30-5:00	Mon - Sat
8	450 Arrow Mines Road	7:30-5:00	Mon - Sat
9	5712 Fly Hollow Rd	7:30-5:00	Mon - Sat

Source: Maury County Solid Waste Director Mike Sweeney

To determine the number of convenience centers required for a county, according to Tennessee Regulations 1200-1-7-.10, the minimum level of solid waste collection services for a county shall be determined using the following methods:

(a) Household Collection – A county shall be deemed to have met minimum level of service if at least ninety percent (90%) of all residents have access to household collection (Signed confirmation by the County Mayor).

(b.) Convenience Centers – Each County must have at least one convenience center unless a higher level of service is provided.

To determine the number the number of convenience centers for a county, the service area of a county must be calculated. The service area can be calculated using square miles or population.

According to State of Tennessee calculations, Maury County is required to have three (3) convenience centers. Since Maury County has nine (9) convenience centers, it is in compliance.

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.

Maury County Solid Waste Director
Maury / Marshall Solid Waste Board Chairman
Mike Sweeney
1233 Lawson White Drive
Columbia, TN 38401
Phone: 931-626-0093

Maury County Solid Waste Laborers: 14 FT, 36 PT.

Maury County Solid Waste Board Members of Maury/Marshall
Solid Waste Board
Jimmy Bassham
Michelle Williams
Victor Lay
Ken Donaldson
Mayor Charlie Norman
Gerald Adkison

Maury County has two drop off recycling locations for residents to dispose of recyclables.

- West 8th Street & Beckett in Columbia
- Behind Food Lion in Spring Hill

Maury County tries to reduce waste as much as possible. GM of Spring Hill is very efficient in source reduction. Existing programs can still be improved although Maury County schools have implemented a recycling program that generated 312.14 tons in 2013. Increasing participation in waste reduction must still be a goal to attain the 25% reduction. In 2010, according the five-year update to the Solid Waste Plan, Maury County had a projected population of 85,988 and projected tonnage of 72,000 tons of municipal solid waste.

The volume of waste 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.

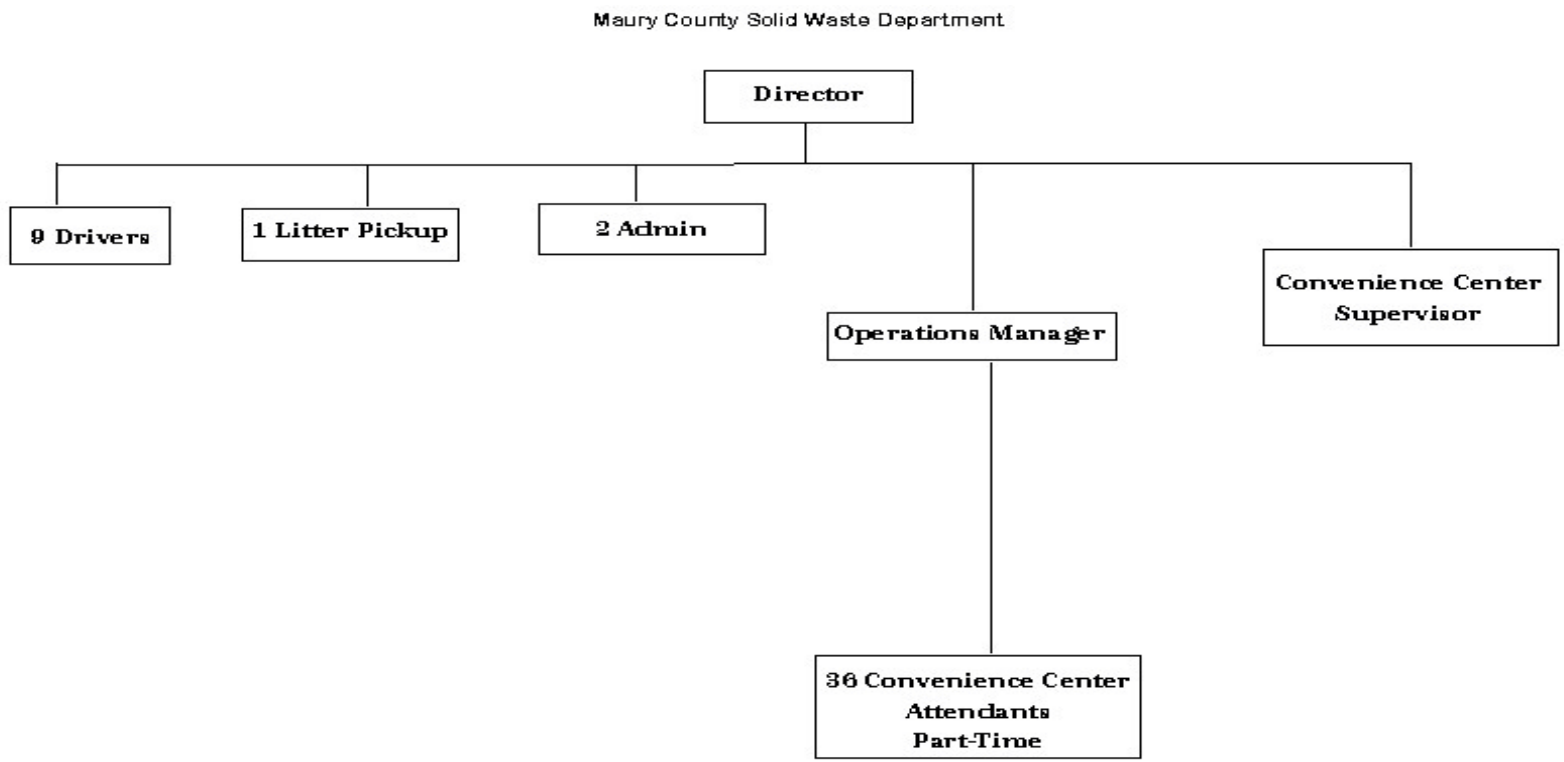
The County commission has reduced funding by .05 cents. There has been no money to replace old equipment and all equipment needs maintenance and or replacement.

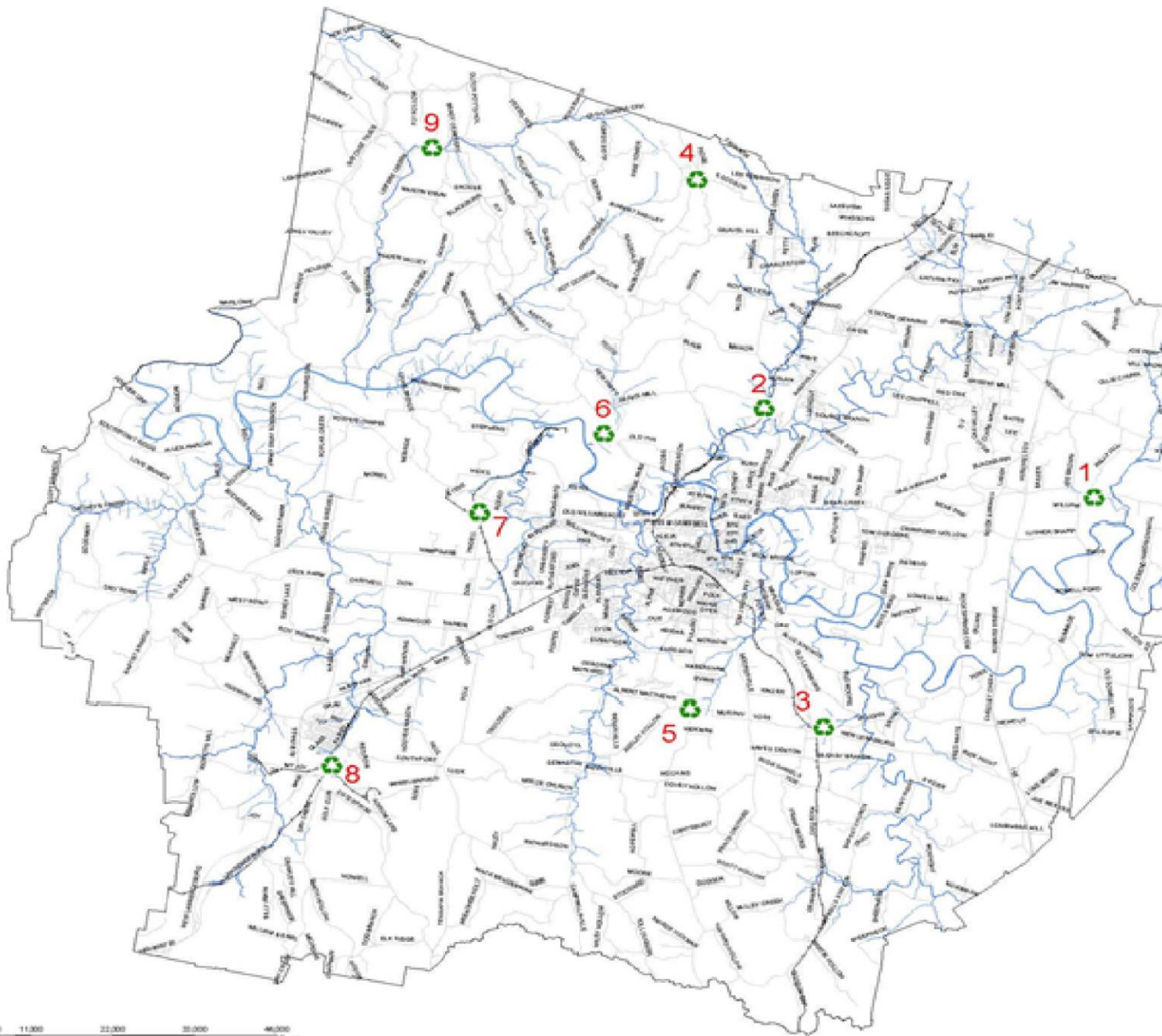
Future Solid Waste Infrastructure Development Needs

In order to broaden waste efforts a new transfer station will be needed, new leachate tanks, trucks, equipment, recycle containers, and loader.

Currently Maury County employs fourteen (14) full time employees as well as two (2) administrative assistants, ten (10) drivers, thirty six (36) part-time employees, and ten (10) county inmates daily. Maury County inmates are picked up from the jail on a daily schedule. The inmates are delivered by Maury County transportation to the Maury County Solid Waste Department and given specific duties each day. Lunch is provided by the Maury County Solid Waste Department. Inmates are returned at the end of the day to the Maury County jail.

Chart 5.1 Maury County Solid Waste Department and
Chart 5.2 Maury County Map of Convenience Centers











0 11,000 22,000 33,000 44,000 46,000 Feet

Maury County Collection Centers

Legend

-  collection_center
-  County_Outline
-  s_wtr_in
-  streets
-  railroads
-  s_wtr_ar

ID	LOCATION	PHONE_NO
1	1984 Bear Creek Pike	380-1784
2	314 Carters Creek Pik	380-0543
3	1406 Fountain Heights	381-9827
4	2100 Gravel Hill Road	381-0303
5	3105 Neeley Hollow R	380-1971
6	1419 Santa Fe Pike	388-5810
7	2481 Tindell Lane	388-0060
8	450 Arrow Mine Road	379-0030
9	5712 Fly Hollow Road	682-3811

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

Maury County continues to be a proactive partner with the community and surrounding counties in recycling efforts. Highly visible recycle containers located at West 8th & Beckett in Columbia and behind Food Lion parking lot in Spring Hill provide residents with easy access for dropping off recyclables. Residents continue to show an overwhelming desire to recycle as they frequent the recycle drop off locations as well as continued recycling efforts by local businesses.

All twenty two Maury County schools are very involved in recycling efforts and are to be commended.

The formation of the Marshall / Maury County Region helped 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 once a year discussing the Annual Progress Report and discussion of scheduling other meetings.

Maury County presently uses *Keep Maury Beautiful* as an educator agent. Maury County Solid Waste also utilizes Solid Waste staff to do other projects to help increase recycling. With the re-opening of GM of Spring Hill the once depressed Spring Hill will open back up to progression to include increase in jobs, people, industry and solid waste.

The recycling efforts at County schools are an excellent complement to the annual educational day that the Solid Waste Director conducts at each school. Convenience operators have been educated to properly stream recyclables.

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 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

Table 7.1

County	Year	% Reduction Compared to Base Year	Real Time Comparison
Maury	2008	NA	32%
	2009	NA	19%
	2010	NA	26%
	2011	NA	37%
	2012	NA	11%

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 :Tennessee Department of Environment and Conservation, Division of Solid Waste Management, Division of Solid Waste Assistance Program.

Maury County did not make the 25% waste reduction and diversion goal in 2009 or 2011. However because Maury is a part of the Marshall – Maury Region, the two counties met the goal as a region. If Maury County increases its recycling efforts every year, obtaining the 25% goal will be easier to achieve in the future.

Maury County’s population should increase around the end of five years due to the re-opening of the GM Plant in Spring Hill. By Maury County identifying and capitalizing on the strengths of varying organizations, businesses and individuals within the community waste reduction goals can be achieved. For example, General Motors are very efficient in product re-use in all phases of their manufacturing operation. Maury County Schools has implemented a recycling program that generated 312.14 tons in 2013.

Businesses and industries should continue to be encouraged to recycle and be educated on waste reduction and sustainable practices by Maury County. 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.

In order for Maury County to achieve waste reduction goals, the county relies heavily on larger industries to reduce waste.

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 Table 8.1

Site Name(s)	Current Capacity	Maximum Capacity	Projected Life of Facility
Cedar Ridge Class 1	215k tons/yr	400,000/yr	5 years
#1 Bear Creek Pike	1.5k tons/yr	2.5k tons/yr	Indefinite
#2 Carters Creek Pke	1.5k tons/yr	2.5k tons/yr	Indefinite
#3 Fountain Heights Rd.	1.5k tons/yr	2.5k tons/yr	Indefinite
#4 Gravel Hill RD.	1.5k tons/yr	2.5k tons/yr	Indefinite
#5 Neeley Hollow Rd	1.5k tons/yr	2.5k tons/yr	Indefinite
#6 Santa Fe Pke	1.5k tons/yr	2.5k tons/yr	Indefinite
#7 Tindell Lane	1.5k tons/yr	2.5k tons/yr	Indefinite
#8 Arrow Mines Rd	1.5k tons/yr	2.5k tons/yr	Indefinite
#9 Fly Hollow Rd	1.5k tons/yr	2.5k tons/yr	Indefinite

Source: Maury County Solid Waste Department Director Mike Sweeney

The Maury County Transfer Station located on Lawson White Road provides a centralized location for all solid waste activities. The Solid Waste Department sorts, categorizes, and ships from this location. Currently landfill destinations are Cedar Ridge. Carters Creek Pike is the busiest convenience center, while Neely Hollow Road is the second busiest.

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 Table 8.2

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)
Maury County	County-wide	87,013	Anytime during hours of operation	N/A	Convenience Center
Columbia	City-wide	38,358	Weekly	N/A	Curbside
Spring Hill	City-wide	7,798	Weekly	N/A	Curbside
Mt. Pleasant	City-wide	5,041	Weekly	N/A	Curbside
Waste Haulers	County-wide	87,013	Anytime during hours of operation	NA	Curbside
Waste Connections	County-wide	87,013	Anytime during hours of operation	NA	Curbside
Waste Solutions	County-wide	87,013	Anytime during hours of operation	NA	Curbside
GarbageMan	County-wide	87,013	Anytime during hours of operation	NA	Curbside
V.J. Crumley Haulers	County-wide	87,013	Anytime during hours of operation	NA	Curbside

Source : Maury County Solid Waste Director Mike Sweeney

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.

Table 9.1 Below

Expenditures

Description	Present Need \$/year	Unmet Needs \$/year	Total Needs (Present + Unmet) \$/year
Salary and Benefits	\$1,500,000		\$1,500,000
Transportation/hauling	250,000		250,000
Collection and Disposal Systems			
Equipment			
Sites			
Convenience Center	918,000		918,000
Transfer Station			
Recycling Center			
MRF			
Landfills			
Site			
Operation			
Closure			
Post Closure Care			
Administration (supplies, communication costs, etc.)	10,000		10,000
Education	20,000		20,000
Public			
Continuing Ed.			
Capital Projects			
REVENUE			
Host agreement fee			
Tipping fees	1.0		1.0
Property taxes	893,000		893,000
Sales tax			
Surcharges			
Disposal Fees	1,200,000		1,200,000
Collection charges			
Industrial or Commercial charges			
Residential charges			
Convenience Centers charges			
Transfer Station charges	2500		2500
Sale of Methane Gas			
Other sources: (Grants, bonds, interest, sales, etc.)	74,400		74,400

Source: Maury County Solid Waste Department

Revenues for Maury County consist of county appropriations and collection fees along with the sale of recycled materials, grants, and revenues from citizen groups. Expenditures are salaries, fringe, equipment additions/upkeep, facility management, landfill fees, and capital projects. Unmet needs are related to equipment replacement, landfill fees, and labor/fringe expense. Costs to the county for unmet needs will increase as needs for the county increase.

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 9 as an example to present data.

Community	Current Revenue
Maury County	Surcharge, Grants, Sale of Recyclables
Columbia	General Fund
Spring Hill	General Fund
Mt. Pleasant	General Fund

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.

Maury County's Solid Waste Department will continue to expand as needed to accommodate the needs of increasing solid waste. Maury County will continue to dispose Municipal Solid Waste at Cedar Ridge Landfill as long as it accepts waste under the current Maury County/Cedar Ridge Agreement and Addendum to Agreement.

This is Maury 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 Beckett Drive and behind Food Lion in Spring Hill make available to residents easy access for dropping off recyclables. Improvement is needed from Maury County's community. Maury County will continue to find ways to improve the existing system, such as more contact to the businesses to include the importance of obtaining recycling numbers from the businesses so the information submitted for the Annual Progress Report can be accurately compiled.

Maury County receives a grant from Tennessee Department of Transportation annually for Litter Prevention and Pick-up that also helps to educate schools and organizations about recycling and litter prevention. Over the next five years Maury County will continue to promote the current recycling efforts in the community and strive to add more recycling opportunities.

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 Maury County Needs Assessment
2013 Annual Progress Report
Maury County Solid Waste Director Mike Sweeney
Population Projection for the State of Tennessee
Bureau of Labor Statistics

Business Climate

Maury County Website

City of Columbia Website

Spring Hill Website / Rippavilla Website (front cover picture)

Mount Pleasant Website

TDEC, Division of Solid Waste Management, Division of Solid Waste Assistance Program

Maury County Solid Department, Mike Sweeney