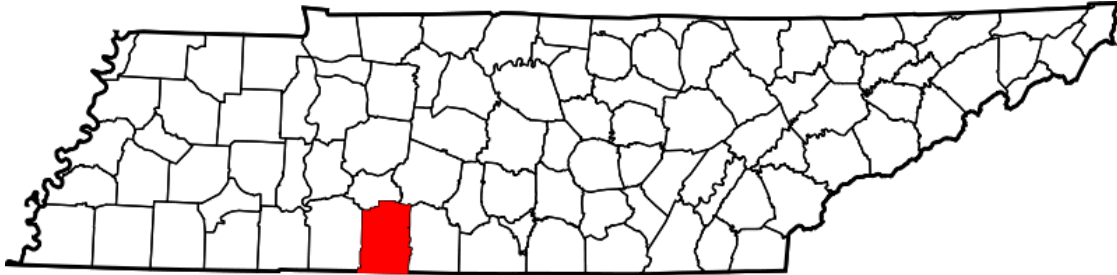


Lawrence County, TN



Solid Waste Needs Assessment

Prepared by:
The South Central Tennessee Development District
June 30, 2012



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
401 Church Street, 8th Floor
Nashville, TN 37243-1533

SECTION 1: Provide a table and chart of the region's population during the past 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 county and municipality populations. Considering the trends, discuss the affect on the solid waste infrastructure needs over the next five (5) years.

Lawrence County, Demographics, Statistics, and General Information

Lawrence County is located in southern middle Tennessee, 75 miles from the state's capital city, Nashville. The city of Lawrenceburg, the county seat of Lawrence County, hosts attractions such as David Crockett State Park, Crockett Theater, and the annual Middle Tennessee District Fair. Additional attractions include festivals, cultural events, museums, local merchants, and our tranquil Amish community. Lawrence County's vibrant history includes the famed frontiersman and statesman, David Crockett, and the rich foundations of the Southern Gospel Music industry.

Lawrence County possesses a skilled and diverse workforce which includes major employers such as DURA Automotive, Jones Apparel, Graphic Packaging and Modine Manufacturing. Just recently, the county implemented a new economic plan that offers Tax Increment Financing to potential industries and also received an A+ Bond Rating, making our county one of the most business friendly counties in Tennessee.

Created by an act of the Tennessee General Assembly on October 21, 1817, Lawrence County was formed from lands previously included in Hickman and Giles Counties. The county was named in honor of Captain James Lawrence (1781-1813) who, while commanding the USS Chesapeake in an 1813 engagement with the Royal Navy frigate HMS Shannon, issued the famous command: "Don't give up the ship!". Lawrence died of wounds received during the engagement.

The earliest settlers of European ancestry were largely from the Carolinas. In the early years, most residents were farmers, supported by a few tradesmen, such as harness makers, blacksmiths, and carpenters. Lawrenceburg was chosen as the county seat in 1819 because it was near the center of the county and Jackson's Military Road ran on the eastern edge of the town. In April, 1821, the road was rerouted through the center of the town. This road, which was a major thoroughfare from Natchez, Mississippi, to Nashville, Tennessee, played a significant role in the development of the county.

The City of Lawrenceburg is the county seat as of the census of 2010, there were 10,428 people residing in the city. The population density was 857.6 people per square mile (331.1/km²). There were 5,166 housing units at an average density of 410.4 per square mile (158.4/km²). The racial makeup of the city was 93.29% White, 3.94% Black, 0.43% Native American, 0.39% Asian, 0.03% Pacific Islander, 0.84% from other races, and 1.08% from two or more races. Hispanic or Latino of any race was 1.67% of the population.

There were 4,718 households, out of which 27.2% had children under the age of 18 living with them, 45.2% were married couples living together, 14.3% had a female householder with no husband present, and 37.1% were non-families. 33.7% of all households were made up of individuals, and 17.0% had someone living alone who was 65 years of age or older. The average household size was 2.24, and the average family size was 2.84.

In the city the population was spread out with 22.6% under the age of 18, 8.5% from 18 to 24, 25.5% from 25 to 44, 23.6% from 45 to 64, and 19.7% who were 65 years of age or older. The median age was 40 years. For every 100 females there were 84.3 males. For every 100 females age 18 and over, there were 79.1 males.

The median income for a household in the city was \$25,770, and the median income for a family was \$32,856. Males had a median income of \$27,264 versus \$20,250 for females. The per capita income for the city was \$17,310. About 12.5% of families and 16.4% of the population were below the poverty line, including 19.0% of those under age 18 and 16.7% of those ages 65 or over.

The City of Ethridge as of the census of 2000, there were 536 people, 210 households, and 153 families residing in the town. The population density was 457.8 people per square mile (176.9/km²). There were 245 housing units at an average density of 209.2 per square mile (80.9/km²). The racial makeup of the town was 99.63% White and 0.37% Pacific Islander. Hispanic or Latino of any race were 0.75% of the population.

There were 210 households out of which 33.3% had children under the age of 18 living with them, 52.4% were married couples living together, 16.7% had a female householder with no husband present, and 27.1% were non-families. 22.4% of all households were made up of individuals and 11.9% had someone living alone who was 65 years of age or older. The average household size was 2.55 and the average family size was 2.98.

In the town the population was spread out with 25.6% under the age of 18, 11.0% from 18 to 24, 28.7% from 25 to 44, 22.8% from 45 to 64, and 11.9% who were 65 years of age or older. The median age was 34 years. For every 100 females there were 97.8 males. For every 100 females age 18 and over, there were 90.0 males.

The median income for a household in the town was \$28,542, and the median income for a family was \$42,708. Males had a median income of \$29,000 versus \$18,125 for females. The per capita income for the town was \$15,360. About 4.2% of families and 9.7% of the population were below the poverty line, including 7.5% of those under age 18 and 6.3% of those ages 65 or over.

The City of Loretto as of the census of 2010, there were 1,714 people, 681 households, and 486 families residing in the city. The population density was 442.3 people per square mile (171.0/km²). There were 735 housing units at an average density of 195.3 per square mile (75.5/km²). The racial makeup of the city was 98.14% White, 0.60% African American, 0.30% Native American, 0.18% Asian, 0.24% from other races, and 0.54% from two or more races. Hispanic or Latino of any race were 1.02% of the population.

There were 681 households out of which 29.5% had children under the age of 18 living with them, 58.3% were married couples living together, 10.4% had a female householder with no husband present, and 28.5% were non-families. 24.8% of all households were made up of individuals and 13.8% had someone living alone who was 65 years of age or older. The average household size was 2.44 and the average family size was 2.91.

In the city the population was spread out with 23.5% under the age of 18, 8.8% from 18 to 24, 25.5% from 25 to 44, 24.0% from 45 to 64, and 18.1% who were 65 years of age or older. The median age was 40 years. For every 100 females there were 89.6 males. For every 100 females age 18 and over, there were 86.3 males.

The median income for a household in the city was \$31,528, and the median income for a family was \$35,952. Males had a median income of \$29,940 versus \$21,250 for females. The per capita income for the city was \$18,195. About 9.5% of families and 13.6% of the population were below the poverty line, including 16.6% of those under age 18 and 18.7% of those ages 65 or over.

According to the U.S. Census Bureau, Lawrence County has a total area of 618 square miles, of which 617 square miles is land and 1 square mile (0.12%) is water. As of the census of 2000, there were 39,926 people, 65,480 households, and 11,362 families residing in the county. The population density was 65 people per square mile (25/km²). There were 16,821 housing units at an average density of 27 per square mile (11/km²). The racial makeup of the county was 96.83% White, 1.47% Black or African American, 0.32% Native American, 0.24% Asian, 0.02% Pacific Islander, 0.39% from other races, and 0.73% from two or more races. 1.00% of the population was Hispanic or Latino of any race.

There were 15,480 households out of which 33.70% had children under the age of 18 living with them, 59.10% were married couples living together, 10.60% had a female householder with no husband present, and 26.60% were non-families. 23.70% of all households were made up of individuals and 11.40% had someone living alone who was 65 years of age or older. The average household size was 2.56 and the average family size was 3.02.

In the county, the population was spread out with 26.20% under the age of 18, 8.40% from 18 to 24, 28.10% from 25 to 44, 23.00% from 45 to 64, and 14.40% who were 65 years of age or older. The median age was 36 years. For every 100 females there were 94.30 males. For every 100 females age 18 and over, there were 90.20 males.

The median income for a household in the county was \$30,498, and the median income for a family was \$35,326. Males had a median income of \$27,742 versus \$20,928 for females. The per capita income for the county was \$15,848. About 10.70% of families and 14.60% of the population were below the poverty line, including 19.20% of those under age 18 and 16.30% of those ages 65 or over.

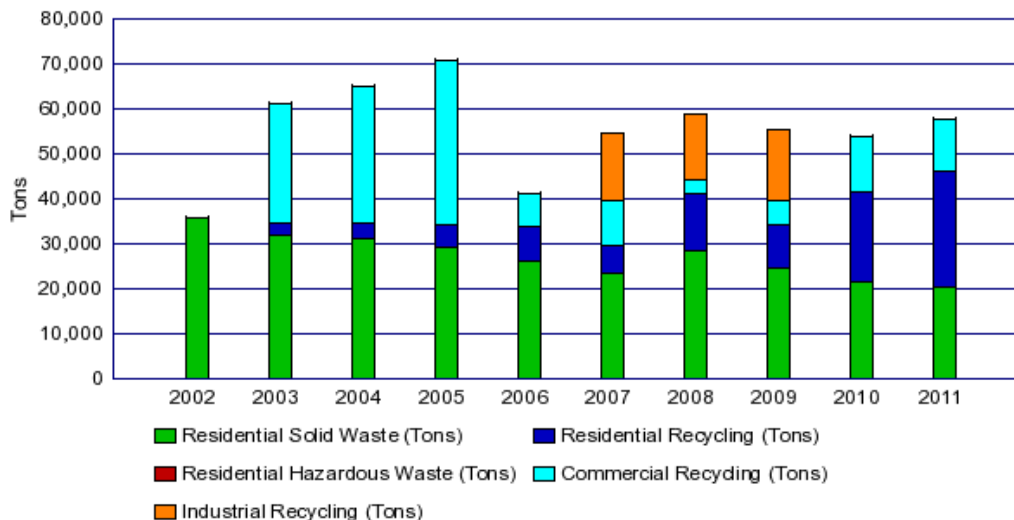
TABLE 1.1 Lawrence County Historic and Projected Population Trends (2001 thru 2016)

Year	Unincorporated / Others	Lawrenceburg	Lawrence County
2001	29751	10272	40022
2002	30003	10220	40223
2003	30256	10170	40425
2004	30509	10119	40629
2005	30663	10170	40833
2006	30817	10221	41038
2007	30972	10272	41244
2008	31127	10324	41451
2009	31284	10376	41660
2010	31441	10428	41869
2011	31484	10637	42115
2012	31355	10849	42204
2013	31223	11066	42289
2014	31086	11288	42373
2015	30945	11513	42458
2016	30799	11744	42543

Sources: Historic data are from the U.S. Census Bureau. Projections are based on data from the U.S. Census Bureau Fact Finder.

Lawrence County’s population has been stable over the past ten years with an average increase by year of ~0.004%. Population trends are projected to remain stable over the next five years with some modest gains in employment levels.

A projection for solid waste generation in Lawrence County is estimated to remain consistent if recycling does not increase. The charts below indicate improvements in the recycling arena over the past eight years. Reflecting on stable population recycling can make a significant impact on solid waste diversion.



County Trends over Time

Year	Residential Solid Waste (Tons)	Residential Recycling (Tons)	Residential Hazardous Waste (Tons)	Commercial Recycling (Tons)	Industrial Recycling (Tons)	TOTAL (Tons)
2002	35,948.0					35,948.0
2003	31,784.0	2,912.4		26,463.5		61,159.9
2004	31,108.0	3,331.0		30,540.1		64,979.1
2005	29,413.7	4,911.9	10.5	36,410.9		70,747.1
2006	26,119.5	7,824.6	7.9	7,191.9		41,143.9
2007	23,509.0	6,075.7		9,919.5	15,111.7	54,615.8
2008	28,497.9	12,728.8	8.2	2,996.8	14,723.3	58,955.1
2009	24,464.7	9,893.2	8.3	5,253.7	15,931.7	55,551.6
2010	21,431.7	20,101.9		12,298.0		53,831.5
2011	20,236.5	26,066.8		11,300.0		57,603.3

Economic Impact of Industry:

Lawrence County is blessed with numerous manufacturing facilities. Diversity in manufacturing is responsible for a steady employment level. For many years the local manufacturing base in Lawrence County was Murray Ohio. Murray produced bicycles, lawnmowers, and other small engine devices

Murray left Cleveland in the 1950s and moved its factory and assembly plant to Lawrenceburg, Tennessee, with corporate headquarters located in Brentwood, Tennessee. Originally a non-union plant, the Lawrenceburg facility began operations in 1956, and over the next several decades, the complex grew to become one of the largest facilities of its type in the United States: 42.7 acres under roof. One of its more famous former employees is former Senator Fred D. Thompson. It later became a UAW plant producing both bicycles and lawn and garden equipment.

During the 1980s, in an attempt to overcome declining sales, Murray began selling its bicycle line in lower-cost mass market stores and discount chains such as Target, K-Mart, and Wal-Mart. While the practice enabled the company to increase sales of overall units, profits failed to meet expectations as a result of reduced margins imposed by mass retailers. Additionally, many independent bicycle dealers (IBDs) resented the new competition, and in retaliation some dealers refused to stock or promote Murray bicycles.

In June 1988, the Murray Ohio Manufacturing Company was acquired by the British investment group Tomkins plc. In 1996, Murray Inc., the last major U.S. bicycle producers with Huffy Bicycle and Roadmaster (formerly AMF), received a major blow when U.S. courts ruled that imports from China were not a 'material threat' to U.S. companies. Within three years, Huffy, Roadmaster and Murray ceased manufacture of bicycles in the United States.

In 1998, Murray moved bicycle production from Lawrenceburg to a non-union factory in Mississippi. Production of all U.S.-made bicycles halted in 1999. In 2000, the Murray brand was acquired by Pacific Cycle, a U.S. distributor of bicycles produced in Taiwan and the People's Republic of China. Murray has since been used as a brand for imported Chinese bicycles sold by Pacific Cycle. Pacific Cycle was later acquired by Dorel Industries.

Murray has a history of lawn and garden (L&G) equipment. In June 1988, Murray was acquired by Tomkins plc of Great Britain. In 1993, the new company purchased the Noma brand of L&G equipment. It manufactured under a variety of brands, including for other companies. Murray licensed the Stanley brand and produced lawn and garden mowers and snow blowers sold at Wal-Mart and other retailers.^[5] The machines were built at the former bicycle facility in Lawrenceburg.

The Murray brand was acquired by Briggs & Stratton in 2004. On August 30, 2005, Lawrenceburg produced its last lawnmower, closing on September 30, 2005.

2012 Rebuild Tennessee

County Executive J Mack Chandler, Lawrenceburg Mayor Keith Durham, and Daniel Webb, Executive Director of Economic Development received the John S. Wilder Award presented by The Tennessee Development District Association and *The South Central Tennessee Development District*. The presentation took place at the downtown Sheraton in Nashville, TN. Lawrence County was the only county that received an award for creation of new jobs into the county due to the expansion of Modine. Chandler stated it's all about teamwork and working together.

The City of Lawrenceburg and Lawrence County are rebuilding Tennessee through an industrial expansion. Modine Manufacturing, a producer of radiators, HVAC system modules, and oil coolers, considered relocating from Lawrenceburg, Tennessee to Mexico to take advantage of lower manufacturing wages. The company was persuaded to remain in Lawrence County because of the commitment from Lawrenceburg, Lawrence County, Lawrenceburg/Lawrence County Chamber of Commerce and the State of Tennessee. The City of Lawrenceburg, Lawrence County, and chamber officials, working with the Tennessee Department of Economic and Community Development and South Central Tennessee Development District, were able to acquire \$570,000 in Tennessee Fast Track funds to improve the old Murray Manufacturing facility in order to accommodate Modine's heavy manufacturing needs. This project not only retained 180 employees but created an additional 280 high skilled jobs. Additionally, South Central Tennessee Development District was able to assist the City of Lawrenceburg in obtaining \$500,000 in Appalachian Regional Commission funds to expand the roadways which serve Modine Manufacturing and eleven other companies in the Lawrenceburg Industrial Park.

TPR Federal-Mogul Tennessee, Inc. announced they will locate a manufacturing plant in Lawrenceburg. The facility, located at 201 Helton Drive, will serve the North American automobile manufacturing industry and create 72 jobs.

MANUFACTURERS

Company	Employees	Description
Graphic Packaging	250	Extruded Film/ Printed Carton
Modine Manufacturing	213	Automotive Supplier
Dura Automotive Systems	190	Automotive Supplier
Hughes Parker Industries	125	Automotive Supplier
Southern Craft	100	Metal Caskets
Assurance Operations Corp	97	Automotive Supplier
Iron City Stamping	86	Metal Stampings
C.J. Industries	82	Sports Apparel
Dyna-Pak	80	Plastic Bags & Packaging
Bertolini, Inc.	60	Stackable Seating

NON-MANUFACTURING

Company	Employees	Description
Jones Distribution Corp.	442	Distribution
Wal-Mart	344	Retailer
South East Carriers	125	Logistics/Distribution
NHC Healthcare	120	Healthcare
Evers Construction Company	120	Industrial/Commercial Construction
Doss Brothers Construction	90	Industrial/Commercial Construction
RaCon, Inc.	42	Industrial/Commercial Construction
AllSource Logistics	23	Logistics

MAJOR PUBLIC FACILITIES- NON-MANUFACTURING

Company	Employees	Description
Lawrence County Public Schools	1500	Local Government
Crockett Hospital	330	Healthcare
Lawrence County Government	250	Local Government
City of Lawrenceburg	129	Local Government
Lawrenceburg Utility Systems	103	Public Utilities
Columbia State Community College	28	State Government Higher Education

SMALL AND EMERGING HIGH TECH COMPANIES

Company	Employees	Description
3D Proparts	60	Precision Prototypes
DRM, LLC	45	Industry Automation and Manufacturing
Lorik Tool	21	Automated Robotic Machinery
InMotion, LLC	16	Precision Machining and Fabrication
Shannon Precision Tool	12	Precision Tool and Dye Manufacturing
Precision Laser & Manufacturing LLC	50	Laser Steel Cutting

Trends and Infrastructure Needs:

The municipal solid waste generated in Lawrence County is projected to remain stable through the next five years. Population trends have remained stable in Lawrence County resulting in a predictable solid waste tonnage stream. The variable in predictability is the increased efforts of the Lawrence County Solid Waste Department in diversion tactics. Recycling has become a way of life in Lawrence County as the diversion from landfills has been reduced by 15,000 net tons over the last nine years.

Lawrence County continues to struggle with facilities and accessibility for the Solid Waste Center. The center I located in an industrial area just off Highway 43, however with the proximity to commercial areas the center is landlocked and expansion is limited. New locations and facilities to better serve the general public and to make recycling even more convenient will be huge tasks for the Solid Waste Department and the local governments of Lawrenceburg and Lawrence County.

SECTION 2:

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, and other commonly accepted economic indicators.

Year	Workforce Data				Per Capita Income	Goods Produced			Service					Property Tax	Retail Sales
	Total	Employed	Unemployed	% Unemp		Total	Manuf	Other	Total	Trade	Health	Govt	Other		
2002	17026	15528	1498	8.8%	\$ 13,483	15289	14450	839	14624	1478	136	472	12537	\$ 9,461,045	\$ 23,097
2003	17209	15609	1600	9.3%	\$ 13,758	15601	14745	856	14771	1493	137	477	12664	\$ 9,605,121	\$ 23,330
2004	17334	15809	1525	8.8%	\$ 14,039	15919	15046	873	14921	1508	138	482	12792	\$ 9,751,392	\$ 23,566
2005	17459	15696	1763	10.1%	\$ 14,325	16244	15353	891	15071	1523	140	487	12921	\$ 9,899,891	\$ 23,804
2006	17584	15597	1987	11.3%	\$ 14,618	16576	15666	909	15224	1539	141	492	13052	\$ 10,050,650	\$ 24,044
2007	17767	16292	1475	8.3%	\$ 14,916	16914	15986	928	15377	1554	143	497	13183	\$ 10,203,706	\$ 24,287
2008	17892	16139	1753	9.8%	\$ 15,220	17259	16312	947	15533	1570	144	502	13317	\$ 10,359,092	\$ 24,651
2009	18075	15291	2784	15.4%	\$ 15,531	17612	16645	966	15690	1586	146	507	13451	\$ 10,516,845	\$ 25,021
2010	18200	15597	2603	14.3%	\$ 15,848	17971	16985	986	15848	1602	147	512	13587	\$ 10,677,000	\$ 23,896
2011	18325	15595	2730	12.3%	\$ 16,006	18241	17240	1001	15927	1610	148	515	13655	\$ 10,693,016	\$ 24,254
2012	18450	16365	2085	11.3%	\$ 16,006	18514	17498	1016	16007	1618	148	517	13723	\$ 10,709,055	\$ 24,618
2013	18531	16458	2073	11.2%	\$ 16,087	18792	17761	1031	16087	1626	149	520	13792	\$ 10,725,119	\$ 24,988
2014	18613	16551	2061	11.1%	\$ 16,167	19074	18027	1047	16167	1634	150	522	13861	\$ 10,741,206	\$ 25,362
2015	18695	16645	2050	11.0%	\$ 16,248	19360	18298	1062	16248	1642	151	525	13930	\$ 10,757,318	\$ 25,743
2016	18777	16739	2038	10.9%	\$ 16,329	19650	18572	1078	16329	1651	151	528	14000	\$ 10,773,454	\$ 26,129

Sources: Workforce Data, TN Dept of Labor & Workforce Development: Per Capita Income, US Bureau of Economic Analysis: Retail Data, TN Dept of Revenue: Property Tax information from Perry County Budget Office, US Census Bureau of Labor Statistics

SECTION 3:

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 and industrial wastes are managed. Also, provide an analysis of any wastes entering or leaving the region, noting the source and amounts of such wastes.

Lawrence County Solid Waste Stream

The estimated percentages of the total material placed into the waste stream are:

- Residential: 30%
- Commercial: 20%
- Institutional: 5%
- Industrial: 45%

Lawrence County continues to strive to meet diversion / waste reduction goals set forth by the State of Tennessee. Predicted generation percents will remain unchanged in the next five years. Lawrence County has had success with its plan. They continue to enhance their recycling program each year. Lawrence County modernizes their equipment when possible. Lawrence County offers cardboard collection at no charge to all businesses and industries. They provide recycling bags at no charge to the general public. Their inmate worker program allows labor costs to remain lower. LCSW partners with schools for a recycling contest and each year it is a major boost to reduction efforts.

Site Name(s)	Annual Tons Disposed by Perry County, 2011	Current Landfill Capacity (daily throughput)	Maximum Capacity	Projected Life of Facility
Lawrence County Solid Waste Department 2126 Baler Drive Lawrenceburg, TN 38464	20236.5	~100 tons	N/A	10 to 15 years

Recycling Tonnage by Name, Sector, Source, 2011

Material Name	Residential All Programs	Commercial All Programs	Industrial All Programs	Other All Programs	Total
Corrugated	1520.0				1520.0
Misc. Paper	163.0				163.0
Electronics					
Lead-Acid Batteries	6.0				6.0
Mixed #1 and #2 plastic	2431.0				2431.0
C&D Debris					
Mixed Metals	12832.0				12832.0
Oil Filters	141.0				141.0
Tires	30.0				30.0
Antifreeze					
Glass	1.0				1.0
Used Oil					
Other recyclables	8944.0	11300.0			20244.0
Totals	26068.0	11300.0	0.0	0.0	37368.0

Solid Waste Program	Existing Regional Solid Waste Programs	Future Regional Solid Waste Programs	Tennessee Mandated Plan
Residential Solid Waste Collection	Lawrence County provides one (1) Convenience Center to residents.	Maximize the efficiency of collection of waste from each collection site and maintain existing equipment. Additional convenience centers are needed in the south/southeast and west/northwest sections of Perry County.	County to provide CC Sites for residents according to population or service area, maintain required design and operational standards.
Recycling	Paper, plastic, metals, batteries, electronics, paint	Increase business and school recyclables collection. Centralized recycle center allows public and private access.	County to provide one convenience centers.
Waste Reduction	In 2011 the diversion rate for Lawrence County, TN was 64.87%.	The Lawrence County Solid Waste Department is committed to develop a new plan that will enable them to consistently meet the 25% reduction rate.	Achieving 25% waste reduction goal each year.
Problem Waste Management	Waste tire disposal continues to be problematic for Lawrence County.	Disposal / revenue generation from waste tires will be studied by Lawrence County SW Department.	County has restrictions related to disposal of tires, paint cans, refrigerators, freezer, fluids, and batteries. County to provide HHW collection events, when state scheduling is provided.
Public Education & Information	Lawrence County SW administers several programs for recycling and SW diversion education. Programs are designed for the general population from school age children to adults.	Expansion of recycling is a must to create a culture of Reduce, Reuse, and Recycle.	Region to develop and implement solid waste management action plan for adults and children.
Disposal	The Lawrence County SW Department transports waste to a Mississippi landfill. \$34.00/NT	Lawrence County will continue to partner with Waste Services of Mississippi to transport municipal solid waste to Class I Landfill in Walnut, MS.	Region to assure 10-year disposal capacity.
Planning	Lawrence County continues to partner with Waste Services with planning, forecasting, and reaction plans.	Lawrence County continues to utilize South Central Tennessee Development District as a resource for Annual Progress Reports and updates to the state of Tennessee.	Region to provide Annual Progress Reports, 5-Year Plan Updates, other reporting requirements as needed.

SECTION 4:

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.

Municipal solid waste is collected in Lawrence County in a variety of ways:

The Solid Waste Department's mission is to provide the residents of Lawrence County with an economical and environmentally sound solid waste disposal options and recycling avenues. This mission is accomplished through the operation of the county transfer stations. We are also responsible for maintaining the County's landfill. There is one convenience center in Lawrence County located in Lawrenceburg for rural residents to dispose of their solid waste. The transfer station is operated by the government department of Lawrence County Solid Waste.

Waste Connections of Mississippi then transports the solid waste to the Class I Landfill in Walnut, Mississippi at ~\$34/NT. Recyclables are collected at the convenience center. Private haulers are utilized by the rural residents to collect solid waste and transport to the LCSW Transfer Station.

Lawrenceburg Sanitation Department

The City of Lawrenceburg Sanitation Department serves both households and businesses with garbage and brush pickup. The department also provides recycling services, working side by side with County officials.

The City collects garbage for about 5,600 residences and 750 businesses every week. Lawrenceburg provides uniform trash cans to all residents and some small commercial establishments. The Department then uses "flipper" garbage trucks to pick up these cans mechanically, providing efficient and cost-effective service.

The City Sanitation Department can now provide residents with roll off debris service.

The City collects brush from along City properties using trucks with knuckle booms. These lift the brush mechanically so one staff member can drive and operate the truck - reducing labor and risk of injury - while keeping our City neat and clean.



Curbside Service

The City will pick up brush, bagged leaves, and grass trimmings placed near the curb. Brush limbs should be stacked with butt ends together. These items are picked up on a regular route system.

Recycling

The City of Lawrenceburg encourages all residents to help keep our community clean and preserve natural resources by recycling. Recyclable items can be brought to the Solid Waste Facility at 2126 Baler Drive (behind DynaPak off Helton Drive in Lawrenceburg) or to recycling centers at local schools. Recycling bags are available.

Items accepted are:

- **Aluminum and cans**
- **Cardboard**
- **Newspapers**
- **Magazines**
- **Metal cans**
- **#1 and #2 plastics**
- **Scrap metal**

Residents may also bring motor oil, batteries, tires, and scrap metal to the Solid Waste Facility for recycling.

A commercial shredder is available for safely disposing of documents. Residents or businesspeople may shred documents personally or request that the Sanitation Staff shred items – free of charge.

Garbage Collection

The City of Lawrenceburg is divided into five wards for garbage collection. Below is a schedule for residential sanitation pickup:

Garbage Schedule

- **Ward #1 - Northeast section Monday**
- **Ward #2 - Southeast section Tuesday**
- **Ward #3 - Northwest section Wednesday**
- **Ward #4 - Central section Thursday**
- **Ward #5 - Western section Friday**

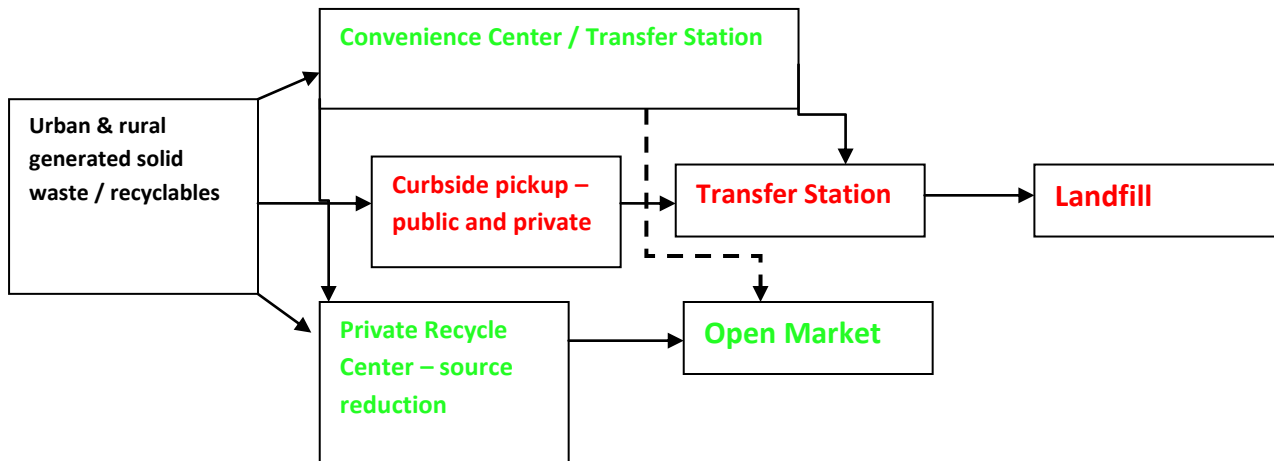
The City also picks up commercial refuse five days per week, before residential routes are serviced.

Larger items, such as furniture or appliances, must be brought to the Solid Waste Facility. Remember to remove refrigerants from appliances.

Potential waste generation can be reduced at the source through measures, such as educating citizens about the three R's (reduce, reuse, recycle). Education has been identified as the number one (#1) factor in increasing diversion rates in communities around the world. Along with reduction measures from citizens, the commercial and manufacturing sector can also reduce residual waste by modifying internal operations to efficiently manage the waste.

Private haulers in rural Lawrence County such as Grimes Recycling, SE International, and Burlison Scrap Metal collects and transports solid waste from primary residents in the rural areas to the transfer station. Fee schedule is unavailable.

Waste Stream – Lawrence County (red = no value, green = reusable)



Convenience Centers

Lawrence County Convenience Center

2126 Baler Drive

Lawrenceburg, TN 38464

Hours of Operation

Sunday:
Monday: 7:00 am to 4:00 pm
Tuesday: 7:00 am to 4:00 pm
Wednesday: 7:00 am to 4:00 pm
Thursday: 7:00 am to 4:00 pm
Friday: 7:00 am to 4:00 pm
Saturday: 7:00 am to 12:00 pm

Materials Collected

Metals, Paper, Plastic, Tires, Used Oil, Batteries, Pallets

Lawrence County Transfer Station

2126 Baler Drive

Lawrenceburg, TN 38464

Hours of Operation

Sunday:
Monday: 7:00 am to 4:00 pm
Tuesday: 7:00 am to 4:00 pm
Wednesday: 7:00 am to 4:00 pm
Thursday: 7:00 am to 4:00 pm
Friday: 7:00 am to 4:00 pm
Saturday: 7:00 am to 12:00 pm

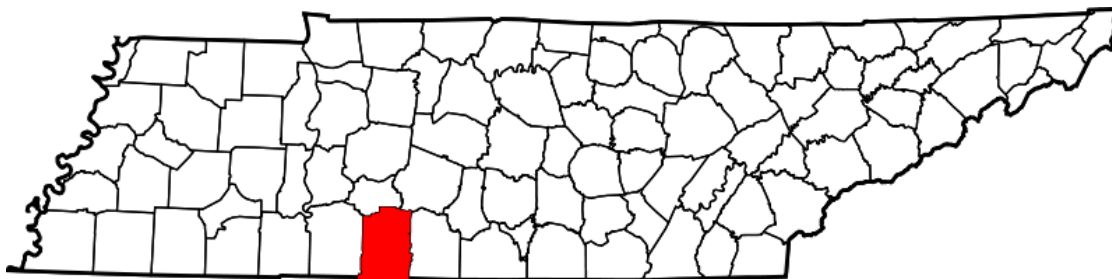
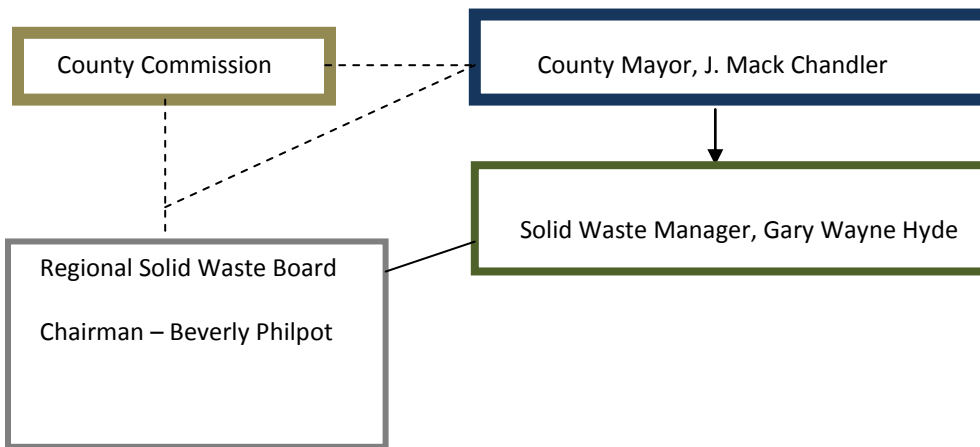
Materials Collected

Municipal Solid Waste

SECTION 5:

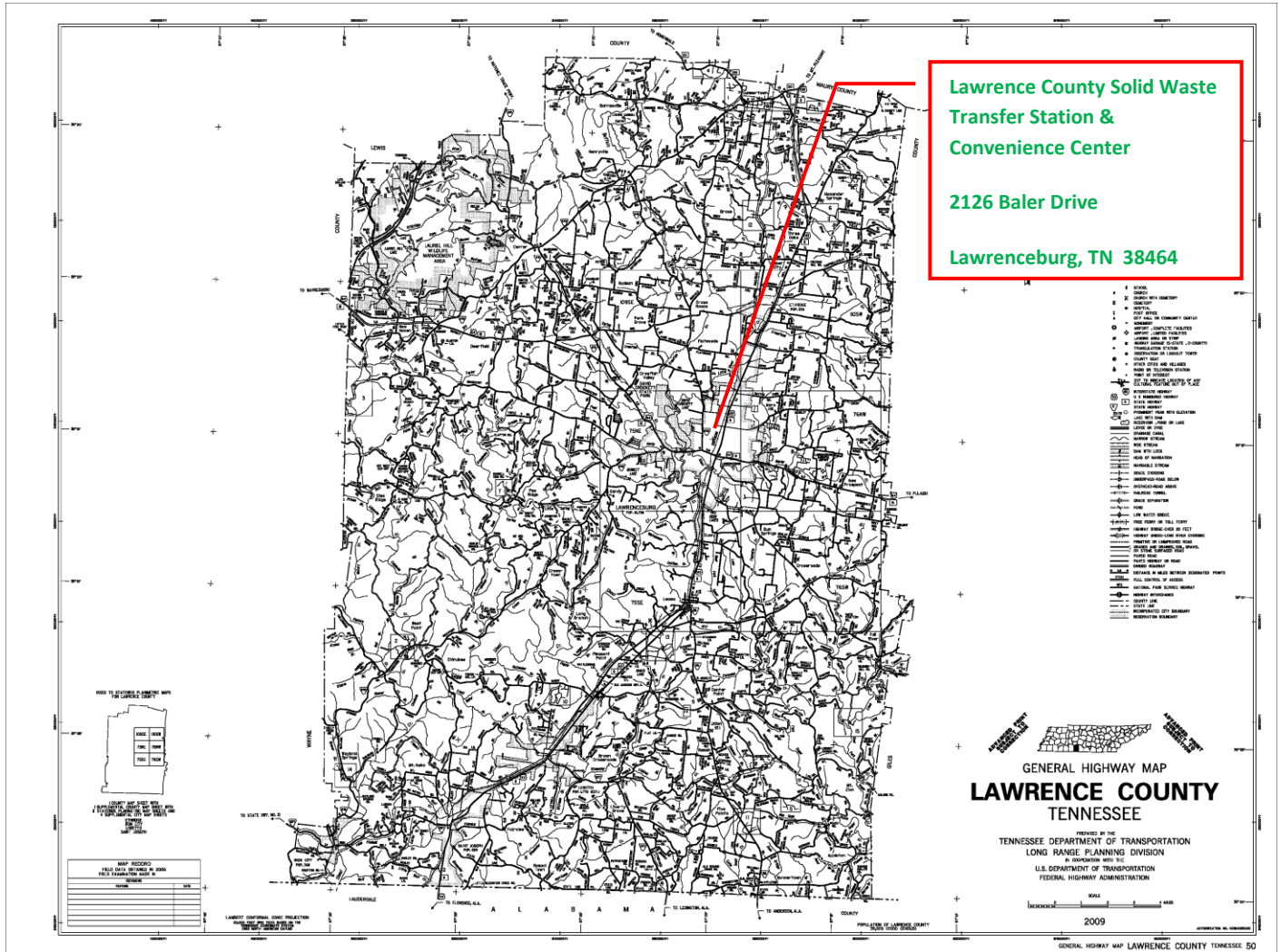
Provide organizational charts of each county and municipality's solid waste program and staff arrangement. Identify needed positions, facilities, and equipment that a fully integrated solid waste system would have to provide at a full level of service. Provide a scale county level map indicating location 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.

Regional Solid Waste Organizational Structure



Municipal Solid Waste Facilities in Lawrence County, TN

Lawrence County Map



Convenience Centers

- 1) 2126 Baler Drive, Lawrenceburg, TN 38464

The Lawrence County Solid Waste Department is staffed and at this time does not anticipate adding additional positions. Any adjustments to the operations of the county collection sites will be assessed by the County Mayor, County Commission and the Solid Waste Board to discuss any variables that affect the waste collection. In order to better serve the citizens of Lawrence County two or three additional manned convenience centers are recommended. These convenience centers should be strategically located in order to serve each quadrant / population centers of Lawrence County, possibly located in Loretto, Summertown, and the northwest section of Lawrence County.

SECTION 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?

Lawrence County has a strong recycling program. The residents in Lawrence County are accepting to the challenge of reducing, reusing, and recycling. However, with the absence of "convenience"... recycling is greatly reduced in the population centers of Loretto/Leoma/St. Joseph and the Summertown areas.

Lawrence County continues to promote litter prevention and recycling through its Cleanup Lawrence County marketing initiative. This campaign involves radio advertising and newspaper ads encouraging citizens to report areas in need of litter attention and to promote recycling. Lawrence County also advertises HHW events as they are offered by the state.

The Lawrence County education campaign includes visits to elementary schools to discuss the importance of recycling and litter prevention. Students are given materials to reinforce the litter-free and recycling theme. We intend to continue and expand this program as much as possible. Press releases regarding community club litter pickup events twice each year and the recycling contest involving all Lawrence County schools reinforce ways that the general public can become involved with keeping our county clean.

Recycling in rural areas is limited in that curbside recycling is not available. Breaking the old culture of tossing recyclables in the trash can is still a major obstacle to overcome. The idea of making recycling easy is the only way to get significant participation from the population as a whole.

SECTION 7:

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 Interlocal	Population Ratio	Economic-Population Ratio	Qualitative- Real Time
Lawrence County	N/A	N/A	N/A	64.87%

Lawrence County achieved the 25% mandated reduction in solid waste in 2011. Based on numbers from the Annual Progress Report, Lawrence County was able to achieve a diversion rate of 64.87%. Comprehensive record keeping by the Lawrence County Solid Waste Director captures virtually all recycling numbers in the county.

Lawrence County Schools Earn A+ in Recycling

Ingram Sowell Elementary School claimed the first place prize of \$1,200 in the contest by contributing 290,320 pounds of recyclables. Lawrenceburg Sacred Heart took the second place prize of \$700 with its total of 58,373 pounds. Loretto Sacred Heart claimed third place with 42,245 pounds, winning \$400. Leoma Elementary took the fourth place prize of \$200 by turning in 42,160 pounds of recyclables. In fifth place was South Lawrence Elementary, whose supporters recycled 36,340 pounds of waste in 2009 and helped the school win \$100.

All other schools participating in the contest won \$50 awards. New Prospect Elementary contributed 31,660 pounds, Lawrence County High School 31,290 pounds, David Crockett Elementary 29,745 pounds, Summertown Elementary 28,370 pounds, E.O. Coffman Middle School 27,940 pounds, Summertown High School 24,530 pounds, Ethridge Elementary 22,780 pounds, Lawrenceburg Public 21,790 pounds, Loretto High School 19,870 pounds and the Seventh Day Adventist School contributed 4,550 pounds.

County Executive Paul Rosson commended each school and its supporters for another successful recycling effort. “Our schools continue to be a great partner in the recycling program,” Rosson said. “We are so proud of their hard work to lead the way in our recycling efforts.”

To participate in the recycling contest, households are encouraged to place their recyclables in the designated storage buildings located on the campus of each school. Recyclable items include newspaper, plastic items imprinted with numbers 1 and 2, aluminum cans, magazines, newspaper and cardboard.

SECTION 8:

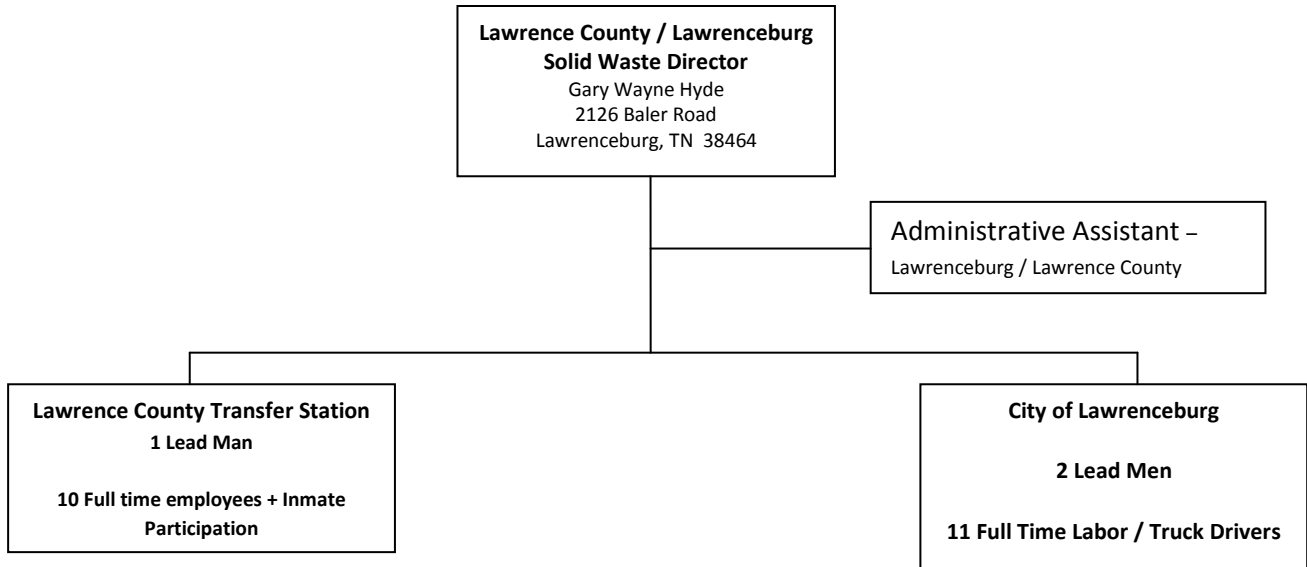
TABLE 8.1:

Site Name(s)	Annual Tons Disposed by Perry County Region, 2011	Current Landfill Capacity (daily throughput)	Maximum Capacity	Projected Life of Facility
Lawrence County Solid Waste Department 2126 Baler Road, Lawrenceburg, TN 38464	20236.50	~ 125-150 tons	n/a	15 to 20 years

TABLE 8.2

Provider of Service	Service Area	Available Service for 2011 Population Total	Frequency of Service (Weekly, Bi-weekly, on call, etc.)	Estimated Annual Tons Collected	Type Service (Curbside, Convenience Center, Green Box) or Door to Door
2126 Baler Road, Lawrenceburg, TN 38464	Lawrence County	~42000	Drop off	~21000NT	Convenience Center / Transfer Station

Lawrence County / Lawrenceburg Solid Waste Department



SECTION 9:

Complete the following chart 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			
Description	Present Need \$/year	Unmet Needs \$/year	Total Needs (Present + Unmet) \$/year
Salary and Benefits			
Transportation/hauling			
Collection and Disposal Systems			
Equipment			
Sites			
Convenience Center		\$200,000.00	\$200,000.00
Transfer Station			
Recycling Center			
Waste Tire Pickup			
Landfills			
Site			
Operation	\$1,677,214.00		\$1,677,214.00
Closure			
Post Closure Care			
Administration (supplies, communication costs, etc.)			
Education		\$25,000.00	\$25,000.00
Public			
Capital Projects			
Total Expenditures	\$1,677,214.00	\$225,000.00	\$1,902,214.00
Revenue			
Host agreement fee			
Tipping fees	\$1,000.00		\$1,000.00
Property taxes			
Sales tax			
Surcharges			
Disposal Fees	\$75,000.00		\$75,000.00
Collection charges			
Industrial or Commercial charges	\$400,000.00		\$400,000.00
Residential charges	\$746,000.00	\$400,000.00	\$1,146,000.00
Convenience Centers charges			
Transfer Station charges			
Other sources: grant / Sale of recyclables	\$280,000.00		\$280,000.00
Total Revenue	\$1,502,000.00	\$400,000.00	\$1,902,000.00

SECTION 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 Chart 9 as an example to present data.

Residential Charges: \$746,000.00

Commercial Charges: \$400,000.00

Grants / Recyclables: \$280,000.00

Lawrence County and Lawrenceburg Solid Waste Departments receive no property tax revenues from the local governments. Residential charges, commercial charges, and revenue from recyclables will grow with continued improvement in the recyclable markets. Increased efforts in marketable recyclables could alter the revenue stream significantly for the county as a structured recycling effort continues to be implemented.

SECTION 11:

Discuss this region's plan for managing its solid waste 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 South Central Tennessee Development District believes that with a defined commitment to recycling education that an increase in diversion will be realized in Lawrence County. As the recycling program currently grows, increased diversion numbers anticipated in 2012. Lawrence County consistently achieves the mandated 25% diversion rate, while meeting all rules and regulation for solid waste management.

Lawrence County could greatly affect the recycle numbers by installing two or three manned convenience centers in the county. Increased "convenience" for the residents of Lawrence County will cause greater diversion for solid waste to the landfills.