TIPTON COUNTY SOLID WASTE PLANNING REGION

Solid Waste Needs Assessment

March, 2010

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



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

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

Regional Solid Waste Management Planning

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

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

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

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



DEMOGRAPHIC INFORMATION AND PROJECTION

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

Population Trends in Tipton County

Since the last U.S. Census in 2000, Tipton County's population has increased approximately 12.3%. The population in 2000 was 51,271 and the estimated population in 2009 was 57,591. As shown on Table 1.1 on the next page, the U.S. Census population in Tipton County in 2000 was 51,271. Much of this increase was due to the relocation of population from urban Memphis. This population increase can result in a raise in property tax base and increase of sales tax revenue.

The U.S. Census Bureau is projecting that Tipton County's population will increase during the next six years by approximately 9.1%. Since the unemployment rate in Tipton County has increased from a low of 5.1% in October of 2008 to a high of 7.9% in June of 2009, the population estimates may be very optimistic.

Based on the latest U.S. Census Bureau statistics, 12.6% of Tipton County's population is 65 years of age and older and 25.1% is under the age of 18. These figures account for nearly 37.7% of Tipton County's total population.

If the population does increase in Tipton County, the solid waste disposal by the residents should also increase accordingly. The Solid Waste Director and his staff will continue to promote recycling and reuse to maintain the waste diversion goal.

If more recycling is conducted at the Recycle Center, a warehouse to store increased volumes of paper, cardboard and other recyclable items will need to be constructed within 18 months to 2 years. The need for this warehouse is current but funding is not available at the current time.

TABLE 1.1 Historic and Projected Population Trends (2000 thru 2015)

Year	County Population	Atoka	Brighton	Burlison	Covington	Garland	Gilt Edge	Mason	Munford	Unincorporated
2000	51,271	3,235	1,719	453	8,463	309	489	1,089	4,708	30,806
2001	52,064	3,761	1,855	456	8,549	309	486	1,119	4,878	30,651
2002	52,857	4,287	1,991	459	8,634	310	484	1,148	5,048	30,496
2003	53,650	4,813	2,127	463	8,720	310	481	1,178	5,218	30,341
2004	54,443	5,339	2,263	466	8,805	311	479	1,207	5,388	30,186
2005	55,202	5,864	2,397	437	8,891	311	476	1,237	5,558	30,031
2006	55,799	5,945	2,435	439	8,981	313	480	1,240	5,624	30,343
2007	56,396	6,025	2,473	440	9,071	314	484	1,244	5,690	30,655
2008	56,994	6,106	2,511	442	9,161	316	488	1,247	5,756	30,967
2009	57,591	6,186	2,549	443	9,251	317	492	1,251	5,822	31,279
2010	58,187	6,267	2,586	445	9,341	319	496	1,254	5,888	31,591
2011	59,117	6,382	2,643	449	9,494	322	502	1,264	5,989	32,072
2012	60,047	6,497	2,700	453	9,646	326	508	1,274	6,089	32,553
2013	60,977	6,612	2,758	456	9,799	329	515	1,285	6,190	33,034
2014	61,907	6,727	2,815	460	9,951	333	521	1,295	6,290	33,515
2015	62,837	6,842	2,875	464	10,104	336	527	1,305	6,391	33,996

Sources: Historic data and projections made by UT-CTAS staff. are based on data from the U.S. Census Bureau.

SECTION 2:

ECONOMIC ACTIVITY WITHIN THE REGION

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

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

Economic Profile of Tipton County

As shown in Table 2.2 on the following page, the Tipton County economy is very weak when compared to the state and national averages. Unemployment rates have ranged from a low of 3.8% in 2000 to a high of 7.8% in 2006.

The current unemployment rate in Tipton County is 12.4% as of May 2009. This is the highest it has ever been. Many manufacturing companies have either closed down completely or reduced the work force. Hopefully, this unemployment rate will decrease once the nation's economy improves.

The average total wages in all industries in Tipton County was \$46,645, which is significantly higher than the state average of \$36,146. The average industry wage is also more than the industry average in the nation of \$40,259.

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

TABLE 2.1 Tipton County Top 8 County Manufacturers

		#
Manufacturer	Product	Employed
Unilever	Slim Fast & Ice Cream	227
Delfield	Commercial Coolers	210
Mueller Brass	Brass Fittings	235
Tops	Paper Products	100
Charms	Candy	295
B & H Electronics	Metal Stamping Component Parts	206
Paslode	Nails	120
Turner's Dairy	Milk Products	100

Two of the top five manufacturers in Tipton County shut down in 2009. New Generations Furniture Co. and Dana Corporation shut their doors leaving approximately 560 people out of work. Brad Hurley with the Tipton County Chamber of Commerce said manufacturing was down about 40% at the current time in Tipton County.

TABLE 2.2 Tipton County Historic and Projected Economic Indicators

Labor Force Data				Non-Farm Wage and Salary Employment						Per Capita					
			<u>Une</u>	mployed		Goods I	Producin	g Se	ervice Pr	oducing	_			Income	Total Retail
Year	Total	Emp.	Total	Rate(%)	Total	Total 1	Mfg Ot	her To	al Trac	le Hea	lth Gov	t. Oth	er		Sales
1999	22789	22016	773	3.4%	12011	8183	3510	4673	3828	1770	670	439	949	\$41,118	\$5,159,226
2000	25307	24352	955	3.8%	12329	8250	3325	4925	4079	1821	752	450	1056	\$41,557	\$5,280,149
2001	25797	24578	1219	4.7%	12647	8317	3140	5177	4330	1872	834	461	1163	\$41,996	\$5,443,581
2002	25724	24280	1444	5.6%	13361	8563	2906	5657	4798	2043	916	482	1357	\$43,296	\$5,761,064
2003	26177	24482	1695	6.5%	13256	8450	2830	5620	4806	2014	998	493	1301	\$42,664	\$6,057,387
2004	25971	24323	1648	6.3%	13664	8649	2707	5942	5015	2040	1080	499	1396	\$43,964	\$6,475,953
2005	26707	24984	1723	6.5%	14082	8807	2480	6327	5275	2072	1162	494	1547	\$44,508	\$6,603,418
2006	27553	26023	1530	5.6%	14762	9157	2331	6826	5605	2038	1312	513	1742	\$45,568	\$6,828,929
2007	27836	26356	1480	5.3%	15283	9266	2056	7210	6017	2236	1408	513	1860	\$46,424	\$7,080,710
2008	28237	26037	2200	7.8%	13903	7813	1844	5969	6090	2229	1409	536	1916	\$45,072	\$7,248,335
2009	28382	25076	3292	11.6%	13296	7080	1,674	5406	6216	2332	1417	546	1922	\$46,645	\$7,382,434
2010	28402	25107	3295	11.6%	13422	7080	1,674	5406	6342	2434	1437	555	1916	\$47,910	\$7,550,059
2011	28422	25153	3269	11.5%	13735	7267	1,714	5553	6468	2537	1457	565	1910	\$50,239	\$7,650,633
2012	28442	25171	3271	11.5%	13861	7267	1,714	5553	6594	2639	1478	574	1903	\$51,836	\$7,784,733
2013	28462	25217	3245	11.4%	14610	7890	1,724	6166	6720	2742	1499	584	1896	\$53,083	\$7,885,307
2014	28482	25264	3218	11.3%	14870	8024	1,749	6275	6846	2844	1520	593	1889	\$50,030	\$8,052,932
2015	28502	25310	3192	11.2%	15011	8039	1,790	6249	6972	2947	1541	603	1882	\$50,030	\$8,072,010

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



SOLID WASTE STREAM CHARACTERIZATION

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

Current MSW Stream

In the most recent Tipton County Solid Waste Annual Progress Report (2008), the total MSW stream was reported as 45,235.75 tons. This amount consisted of 39,736 tons being disposed in Class I landfills, 5,499.8 tons being disposed in Tipton Counties Class III/IV landfill and 18,636.9 tons being recycled.

Tipton County's Class I disposal numbers have been consistent since the 1995 base year with the exception of the year 2001. The current disposal number of 29,840 tons (2009) is the lowest it has been since 1995.

A large portion of the MSW stream is due to the residents of Tipton County. It is estimated that the citizens make up 64 % of the MSW stream. The remaining MSW stream is estimated to be 21% commercial, 5% institutional, and 10% industrial.

TABLE 3.1 Regional Solid Waste Stream Disposal for 2009 – 2014

Class I Disposal Site	Reported Year (APR 2008)	Projected Year					
	2008	2009	2010	2011	2012	2013	2014
MSW disposed in NW TN Disposal Corp. Class I Landfill located in Obion County	28712	3,586	3,622	3,659	3,696	3,733	3,769
MSW disposed in North Shelby County located in Shelby County	6864	20,677	20,885	21,099	21,310	21,523	21,738
Out of State to Mississippi	4160	5,280	5,333	5,388	5,442	5,496	5,550
Total Regional Waste Disposal	39,736	29,840	29,840	30,146	30,477	30,752	31,057

above. These estimates are based on a 1% annual increase to coincide with the population increases that were projected in Section 1 of this assessment.

Tipton County will continue to offer recycling at the Recycle Center. More than 1,500 tons of recyclables were collected at the Tipton County Recycle Center in 2008. This

figure includes 684 tons of waste tires. There are other private recycling facilities in the county that takes recyclables. 861.2 tons of recyclables were reported by these facilities in 2008. Over 16,625 tons of recyclables were reported by industries.

Regional Solid Waste Management

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

TABLE 3.2 Waste Stream Management

Jurisdiction or Sector	Solid Waste Stream Collection	Solid Waste Disposal Options	Present Problem Waste Handling	Future Problem Waste Handling 2009-2014	Other Problem Waste Types
Tipton County & and Cities which does not provide for service	County Convenience Center Available to all residents of the County	North Shelby . Class I Landfill located in Shelby County as primary waste disposal facility for unincorporated residents of Tipton County	Waste tires: Waste tire contract Used oil: Recycle Center Automobile fluids: Recycle Center Electronics: Recycle Center	Waste tires: Waste tire contract Used oil: Recycle Center Used oil filters: Recycle Center Automobile fluids: Recycle Center Electronics: Recycle Center	HHW collected at mobile collection events. Due to limited statewide mobile collection site scheduling, no regional approach has been developed to handle HHW. A regional approach to handle HHW could be eventually evaluated by the TDEC. Planned program discussions can be scheduled in the near future.
Covington	Solid waste curbside collection fee service for city residents.	North Shelby as primary waste disposal facility for residents of Atwood and local businesses	Provided by City of Covington	Provided by City of Covington	Provided by City of Covington

Wastes Entering or Leaving the County

Barker Brothers, Inc. did operate a transfer station in Tipton County but that has been closed, which terminated the waste that was entering Tipton County. Tipton County does not operate nor own a Class I landfill. All of the county's MSW is sent out of the county. In 2008, a total of 39,736 tons of MSW was sent to three different Class I landfills. The table below illustrates where the MSW was disbursed.

TABLE 3.4 Wastes Leaving Tipton County

Class I Landfill	County Location	Tonnage
Northwest TN Disposal Corp.	Obion County	28712
North Shelby County	Shelby County	6864
Out of State (Mississippi)	A Mississippi County	4160
Total		39,736

Source: TDEC 2008 Solid Waste Orgin Report



REGIONAL COLLECTION SYSTEMS

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

County and city government throughout the United States are struggling to develop efficient and cost-effective plans for managing their MSW. Tipton County has an excellent system in place and plans to continue this system into the future.

Tipton County

Tipton County has a main Convenience Center centrally located within the county that may be used by all citizens for a very low user fee, door-to-door waste pick up is offered through private subscription contracted through Republic, Waste Connections and ABC. The county's disposal contract with Republic has been locked in for the next 4 years that started July 1 2009 at \$28.69/ton and increasing by 4% annually. The contract will expire on June 30, 2014 at which point a new contract will be awarded. The cost of this service will probably be increasing due to less competition.

The Tipton County Recycling and Convenience Center is available to all residents of the county. All residents are encouraged to bring their recyclables to the center. The operating hours of the center are 7 a.m. to 4 p.m. Monday through Friday. There are also several other private recyclers that operate within Tipton County.

Municipalities

There are eight municipalities in Tipton County. Only one, the City of Covington, of the eight municipalities contract with Republic or ABC for door-to-door solid waste collection for their residents. City of Covington bills the residents. The fee this municipality charges is \$17.00 per month. There are no public recycling options offered by any of the municipalities.

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

TABLE 4.1 Regional Collection Systems

Jurisdiction	Transporter	Class I Landfill
Tipton County	Convenience Center	North Shelby Landfill
Tipton County	Republic and ABC	North Shelby Landfill
Tipton County	Waste Connections	Tunica MS Landfill
Covington	Republic.	North Shelby Landfill

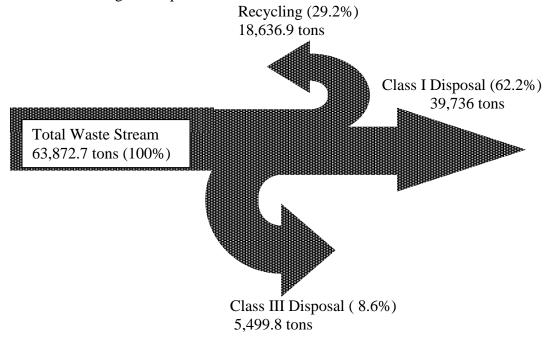
Tipton County recycles many different commodities. The table below shows these commodities and what processors are utilized.

TABLE 4.2 Tipton County Commodities and Processors

	y commountes and 110ccs			
Commodities	Processor	Location		
Cardboard	RMCT(Planet	Franklin, TN		
	Recycling) →			
	Natures Best	Hennings, TN		
	PCA	Counce, TN		
	PRAT Industries	Shreveport, LA		
Newspaper	Cell Pack	Decatur, AL		
Mixed Metals	Hodges	Stanton, TN		
	Whites Salvage	Hennings, TN		
	Metal Management	Memphis, TN		
	Hutcherson's	Halls, TN		
Tires	MAC	Saltillo, MS		
Auto Batteries	Interstate Batteries	Jackson, TN		
E-Waste	Creative Recycling	Nashville, TN		
Plastic	Central Paper Stock	Memphis, TN		
Auto Fluids	ATM Oil Recycling	Marion, AK		
Class III/IV (Wood)	Tipton Co. (Fire Wood)	Class III/IV Tipton County		
Pallet Used for Transport	Creative Recycling	Memphis, TN		
Pallet (Wood)	Tipton Co. (Fire Wood)	Class III/IV Tipton County		

Flow Diagram of Tipton County Total Annual Regional Waste Stream

The figures shown in the flow diagram below were taken from the 2008 Tipton County Solid Waste Annual Progress Report.





REGIONAL SOLID WASTE REDUCTION GOAL

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

TABLE 5.1 Measurement of Regional Waste Reduction Goal

	Waste Reduction Goal Calculation Method							
County	Compared to Base Year Population Ratio		Economic-Population Ratio	Qualitative - Real Time				
Tipton County	49.0%	49.0%	42.0%	33.0%				
25% Waste Reduction Goal Achieved	Yes	Yes	Yes	Yes				

Source: TDEC, Division of Solid Waste Management, Division of Solid Waste Assistance Program. Note some numbers submitted in previous years have been in question.

Variables Affecting Regional Waste Reduction Efforts

Tipton County has met all of the above waste reduction goal calculation methods. The main reason the county has met all of the above methods is because the county has had a Solid Waste Director who has brought their program from a met the minimum need to a prominent position in County's overall Public Works Program. The Solid Waste/Public Works Director has implemented a well-organized solid waste program since he took the position. He has utilized many solid waste grants as were attainable to build a successful program and has worked hand-in-hand with local and state departments to benefit Tipton County.

Future Regional Waste Reduction Program

No major changes need to be made to this successful program. The Recycle Center needs to have repair work completed to make it safer and more energy efficient. The roof is leaking in several places and is in dire need of being totally replaced. The driveway is full of potholes and also needs repair work.

A warehouse will need to be built in or around five years. This warehouse is needed to store increased volumes of paper created by the horizontal baler. This need is current but funding is not available at the current time.

The current equipment is showing wear and tear and will need to be replaced in the near future. Tipton County will apply for solid waste grants as they become available.



SOLID WASTE DISPOSAL CAPACITY

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

TABLE 6.1 10-Year Regional Disposal Assurance in Tipton County in 2008/09

Site Name(s)	Annual Tons Disposed by Carroll County*	Solid Waste Permit #	Current Disposal (daily throughput)	Maximum Disposal Capacity (daily throughput)	Projected Life of Facility
NW Tennessee Disposal Corporation located in Obion Co.	28,712.00	SNL 66-0143	2,200 tons per day	5,000 tons per day	25+ years remaining life
North Shelby Landfill Shelby County	6,864.00	SNL	2.300 tons per day	5,500 tons per day	25+ years remaining life
Exported out of TN Mississippi	4,160.00		2,000 tons per day	4,000 tons per day	25+ years remaining life
Tipton County Landfill Class III/IV	5,499.75 Tons		35 tons per day	100 tons per day	25+ years remaining life

Source: NW Tennessee Disposal Corp., North Shelby Landfill and Mississippi landfill

*Note: Annual tonnage disposed includes Municipalities and Businesses

No potential shortfalls in materials management capacity at the collection or processor level are foreseen. Tipton County does utilize its own Class III/IV landfills.

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

TABLE 6.2 Public and Private Collection Service in Tipton County in 2008

Service Provider	Service Area*	Frequency of Service (Weekly, Bi-weekly, on call, etc.)	Estimated Average Annual Tons Collected*	Type Service (Curbside, Convenience Center, Green Box)
Tipton County & and Cities which does not provide for service	Entire County	Six Days	6,864	Convenience Center
Covington	City residents Local business subscription	Weekly	10,400	Residential curbside Local business subscription
Subscription	Rural residents	Weekly	22,472	Residential curbside
		Total	39,736	



UNMET FINANCIAL NEEDS

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

TABLE 7.1 Expenditures and Revenues for Tipton County for 2008/09

Expenditures			
Description	Amount		
Convenience Center	\$ 639,510		
Recycling Center	363,227		
Litter & Trash Collection	18,463		
Total Expenditures	\$ 1,021,200		
Revenues			
State Revenue Sharing	\$655,000		
Tipping Fee	20,200		
Solid Waste Disposal Fee	235,000		
Sale of Recycled Materials	81,000		
Waste Tire Grant	30,000		
General Fund			
Total Revenues	1,021,200		

Tipton County has three separate budgets for its solid waste programs: Convenience Center, Recycling Center, and Litter Grant/ Trash Collection. The Solid Waste/Public Works Director is in charge of all three programs. During FY2009, the market for recyclable materials dramatically dropped. Thus, the revenue was much less at the Recycle Center. Also, the county loses money on the Waste Tire Grant if the manifests are not approved because of a possible conflict with DOR records or any other reason. In the upcoming fiscal year, the county is studying implementing a solid waste fee or possibly door-to-door collection.

TABLE 7.2 Expenditures and Revenues for the Town of Covington for 2008/09

Expenditures			
Description	Amount		
Waste Disposal	\$1,310,950		
Total Expenditures	\$1,310,950		
Revenues			
Collection Charges	\$1,310,950		
Total Revenues	\$1,310,950		

Covington provides residential curbside collection and commercial subscription service for approximately 9253 residents. The Town of Covington charges the citizens \$17 per month for weekly waste collection and contracts with Barker Brothers, Inc. for waste disposal.

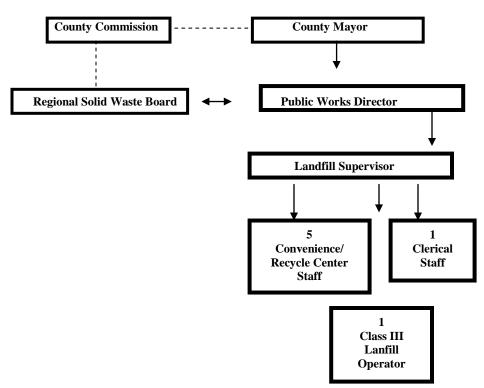


SOLID WASTE MANAGEMENT INFRASTRUCTURE

Provide organizational charts of each county and municipality's solid waste program and staff arrangement. Provide a scale county level map indicating location of all existing facilities including convenience centers, transfer stations, recycling centers, waste tire drop-off sites, used oil collection sites, paint recycling centers, all landfills, etc. Identify all current revenue sources by county and municipality that are used for materials and solid waste management. Identify needed positions, facilities, and equipment that a fully integrated solid waste system would have to provide at a full level of service. Project future revenue needs from these categories and discuss how this need will be met in the future.

Tipton County

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



Future Solid Waste Infrastructure Development Needs

The Tipton County Recycle Center needs extensive upgrading gto be more efficient and safer.

In or around five years, a warehouse will need to be constructed in order to store increased volumes of paper, e-waste, etc. This need is current but the funding is not available at this time.

Current equipment is 8-9 years old and is showing wear and tear. More equipment will be needed in the near future. The county will utilize grants for this equipment.

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

TABLE 8.1 Future Solid Waste Needs

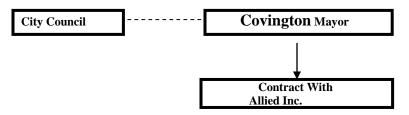
	Estimated Cost	Potential Revenue Source
Need		
Rolloff Truck	\$ 130,000	Grants
Disposal Containers	\$ 60,000	Grants
Recycling Trailers	\$ 40,000	Grants
Recycling Equipment	\$ 125,000	Grants
Trailers	\$ 22,000	Grants
Compactors	\$ 25,000	Grants
Recycling Building 100 x 70	\$ 250,000	Grants
Warehouse		
60 x 60 Warehouse	\$150,000	Grants

Municipalities

Only on municipality contracts directly for door-door collection that is Covington with Allied, Inc.. Since none of the municipalities in Tipton County are required by Tennessee statute to provide a fully integrated solid waste system, no recycling efforts are conducted by any of the municipalities.

Covington

The City of Covington provides residential curbside collection and commercial subscription service for approximately 3500 customers. The city does not provide recycling collection services. An organizational chart for the City of Covington is provided below.



Six positions are funded out of the Covington Solid Waste Budget. The city contracts directly with Allied, Inc. for waste disposal. Covington residents pay \$17 per month for collection service and the commercial rates vary.

Figure 8.1 Convenience Center Location Map

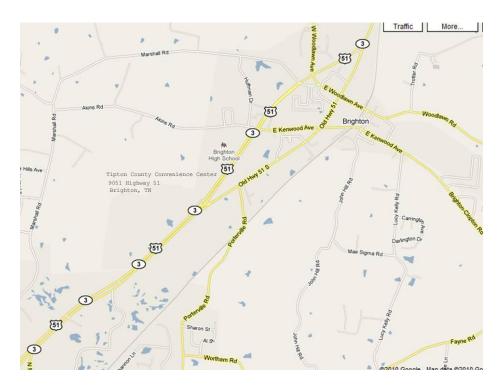


Figure 8.2 Convenience Center Sight Layout





CURRENT REVENUE SOURCES

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

Tipton County

The current Tipton County Solid Waste/Sanitation Fund has several sources of revenue. These sources are: State Revenue Sharing, Tipping Fees, Solid Waste Disposal Fee, Sale of Recycled Materials, Waste Tire Grant, and the Litter Program Grant.

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

The only revenue sources for the county to utilize in these hard economic times are grants for solid waste management and/or waste diversion. Hopefully, if these grants are offered, Tipton County will continue to be able to fund a fully integrated solid waste program.

The county is having difficulties implementing the Waste Tire Grant. Due to lack of timely information from the DOR, the tire dealers are already paid through the grant before the county is informed the dealers are not paying the required fee. Also, the tire grant operates by fiscal year and the fees are paid by calendar year. This causes discrepancies between the DOR and TDEC. In order for the waste tire program to be functional, only residential tires need to be collected and manifested by the county.

Covington

Covington provides residential curbside collection and commercial subscription service for approximately 3500 residents. The City of Covington charges the citizens \$17 per month for weekly waste collection and contracts with Barker Brothers, Inc. for waste disposal. The only revenue sources are the fees the city collects from the residents.

SECTION 10:

PUBLIC PARTICIPATION

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

Current Attitudes Concerning Recycling, Waste Diversion, and Waste Disposal

Trends are continuing to improve through education on solid waste, recycling, and environmental issues. Industries are finding recycling a viable tool to reduce expenditures while meeting State and Federal environmental mandates. The Tipton County Solid Waste/Public Works Director has been instrumental in keeping the public apprised on current issues.

The Recycling Center has seen an increase in recycling every year it has been open. Tours are conducted at the Recycling Center throughout the year to promote the program. Many student groups and civic organizations partake of these tours.

Education Measures

Schools in Tipton County offer educational programs regarding the effects and benefits of recycling and waste reduction. The Solid Waste Director has been instrumental in setting these programs up. The Solid Waste/Public Works Director also utilizes the Litter Grant to fund county outreach projects. The table below illustrates the programs that were conducted in 2008.

TABLE 10.1 Public Education and Information Activities

Program Name	Sponsor	Effectiveness	Program Type	Target Group	# Served
Educational Programs	Tipton County	Positive	Public Access/Advertisment	Children/Teachers Adult/General Public Business/Industry Governmental Institutional Civic	County Wide
Educational awareness for students and the effects and benefits of recycling and waste reduction.					
Educational awareness for stud	cints and the circu	s and benefits of re	cycling and waste reduc	:0011.	

The Tipton County Solid Waste Director has done an excellent job promoting recycling and waste reduction within the county. Tours are provided at the Recycle Center and presentations are made for various groups and organizations.

SECTION 11:

REGIONAL SOLID WASTE PLAN

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.

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

TABLE 11.1 Regional Solid Waste Management Plan

Solid Waste Program	Existing Solid Waste Programs	Future Solid Waste Programs	Tennessee Mandated Plan
Residential Solid Waste Collection	Tipton County convenience center and subscription door-to-door collection service	Continue County convenience center and subscription door-to- door collection service and review possible mandatory door- to-door collection service	County to provide CCC's for residents according to population or service area, maintain required design and operational standards.
Recycling	Tipton County has a Recycle Center to receive recyclables from residents and provide some pickup from companies. Private recycling companies are also available.	Continue to provide current recycling services.	County to provide at least one (1) drop-off site for collection of residential recyclable materials.
Waste Reduction	Tipton County met reduction goal by every calculation	Continue to meet the 25% Waste Reduction Goal.	Region to achieve 25% Waste Reduction Goal.
Problem Waste Management	Tipton County collects electronics, waste tires, automobile fluids, and batteries at the Recycle Center. Tipton County hosts a HHW collection annually.	Continue to collect electronics, waste tires, automobile fluids, and batteries at the Recycle Center. Continue to host a HHW collection event annually	County to provide at least one (1) site to accept automobile fluids, batteries, and waste tires.
Public Education and Information	Tipton County provides educational activities to the schools through the Litter Grant.	Continue to provide educational activities to the schools through the Litter Grant.	Region to develop and implement solid waste management action plan for adults and children.
Disposal	Tipton County contracts with Barker Brothers, Inc. to provide disposal services.	Continue to contract disposal services with Barker Brothers, Inc.	Region to assure 10-year disposal capacity.
Planning	The Tipton County Solid Waste Board meets as needed throughout the year to discuss solid waste issues.	Continue meetings throughout the year to discuss solid waste issues.	Region to provide Annual Progress Reports, Needs Assessments, and other reporting requirements as needed.
	All reporting requirements are up to date.	Keep reporting requirements up to date.	

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

- Continue Tipton County Solid Waste Board involvement,
- Continue the activities of the Solid Waste/Public Works Director,
- Continue the activities at the Recycle Center,
- Continue to pursue all grant funds for equipment and facilities,
- Continue to utilize technical assistance providers,
- Continue to research technologies and other program options,
- Continue to promote waste reduction efforts, and
- Continue public outreach and educational programs

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