# Franklin County, TN

## Solid Waste Needs Assessment

Prepared by: The South Central Tennessee Development District June 30, 2011 (rev. 9/22/2011)



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

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

### Franklin County, Demographics, Statistics, and General Information

Franklin County is located in the south central section of Tennessee. As of 2010, the population was 41,052. Its county seat is Winchester. Franklin County is part of the Tullahoma, Tennessee, Micropolitan Statistical Area. The University Of The South, founded by the Episcopal Church, was organized just before the Civil War. It began full operations shortly after hostilities ceased. It remains the only higher education institution in the county, and encompasses a full university and theological seminary.

Two notable figures who were born in the county early in the twentieth century were singer/entertainer Dinah Shore and entrepreneur/philanthropist John Templeton. He later became a British subject and was awarded a knighthood.

Franklin is one of Tennessee's southern tiers of counties and abuts the Alabama border. It has a varied geography, extending from the southeast corner of the Nashville Basin over the Highland Rim and up onto the Cumberland Plateau, for a difference in elevation of about 1300 ft. The county is well watered and forested, and except for the steeper areas of the plateau is well suited for agriculture, having a long growing season and mild winters.

According to the U.S. Census Bureau, the county has a total area of 576 square miles (1,491.8 km<sup>2</sup>), of which 555 square miles (1,437.4 km<sup>2</sup>) is land and 21 square miles (54.4 km<sup>2</sup>) (3.69%) is water.

Year	Others	Winchester	Franklin County
2001	31941	7329	39270
2002	32082	7361	39443
2003	32223	7394	39616
2004	32364	7426	39791
2005	32507	7459	39966
2006	32650	7492	40142
2007	32794	7525	40318
2008	32938	7558	40496
2009	33083	7591	40674
2010	33428	7624	41052
2011	33640	7658	41298
2012	33854	7692	41546
2013	34070	7725	41795
2014	34287	7759	42046
2015	34505	7794	42298
2016	34724	7828	42552

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

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

Franklin County's population has been stable over the past ten years with an average increase by year of  $\sim 0.5\%$ . Population trends are projected to be steady over the next five years with little fluctuation in employment levels.

#### **Economic Impact of Industry:**

Franklin County has benefited from the flood control and power generation activities of the Tennessee Valley Authority (TVA), built by the President Franklin D. Roosevelt administration during the Great Depression. The TVA helped bring new industry to the area. It also created opportunities for water recreation by making new lakes, but many county residents were displaced from their homes in the massive public works project. The establishment of the federal Arnold Engineering Development Center, which lies partly in the county, also helped spur economic growth and technical development. Although the interstate highway system barely touched the county, it did provide valuable access via Interstate 24 to nearby Chattanooga.

Considerable industrial growth occurred in the county in the last decades of the 20th century, including the construction of a large automobile engine plant by the Nissan Corporation in Decherd. An emphasis on tourism also developed, based on Civil War history and local scenic attractions such as the dogwood forests, for which an annual festival is held.

Franklin County is blessed with several stable manufacturing facilities.

#### MANUFACTURING/EMPLOYMENT

Number of Plants: 63 Average Annual Employment: 17,610 Annual Average Wage: \$19,570.00 Major Industry In Area: Aerospace Testing, Automobile Engines, Machine Shops,Automobiel Parts, Welded storage tanks & Commercial Carpet

#### ARNOLD ENGINEERING & DEVELOPMENT CENTER

Arnold Engineering Development Center is the world's largest and most complex collection of flight simulation test facilities. The 4,000 acres that comprise AEDC are part of the 40,000 acre Arnold Air Force Base. The base was dedicated June 25, 1951 by President Harry S. Truman. AEDC has tested virtually every high performance aerospace system the Department of Defense has developed since the mid-1950's.Working for AEDC, there are 121 active duty military, 264 government civilian and 2,006 contract employees.

Their mission is to provide their customers with the world's most effective and affordable aerospace, ground test and evaluation products and services, to ensure Arnold Engineering Development Center's ground test facilities, technologies, and knowledge fully support today's and tomorrow's customers.

Franklin County's close proximity to Chattanooga, TN and Huntsville, Alabama allows residents to live in rural Tennessee and to commute to larger cities for employment.

Winchester / Franklin County has a strong manufacturing base and is supplemented by farming. Large farms and crops are scattered about the county. Its rich and varied soils are suitable for a variety of crops, including corn, cotton, hay, tobacco, and Irish and sweet potatoes.

The University of the South located in Sewanee is a globally recognized university. Tourism is a major component of the Franklin County economy with Woods Reservoir and Tims Ford Lake located in the northern end of the county.

#### **Trends and Infrastructure Needs:**

The municipal solid waste generated in Franklin County is projected to remain stable through the next five years. Population trends have not sharply increased or decreased in Franklin resulting in predictable solid waste stream tonnage.

The Interlocal Solid Waste Authority (ISWA) exists to provide efficient and cost effective disposal of solid waste and to educate the citizens within the region on waste reduction and recycling practices. The ISWA coordinator is Carol Fulmer. ISWA will potentially gain two additional members in Moore and Bedford counties, applications are awaiting approval. ISWA will then become a five (5) county region with considerable resources to educate the public in the benefits of recycling and waste diversion.

## **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.

		Workforce	e Data		Per Capita	Goods Produced		Service					Property	Retail	
Year	Total	Employed	Unemp	% Unemp	Income	Total	Industry	Other	Total	Trade	Health	Govt	Other	Тах	Sales
rear	TOLAT	Employeu	onemp	onemp	income	TULAI	muustry	Other	TULAI	Traue	пеани	GUVL	Other	IdX	Sales
2001	31895	30779	1116	3.5%	\$ 15,615	7648	3924	3724	8776	1807	3642	2405	923	\$ 7,077,397	\$ 368,762,319
2002	32078	30859	1219	3.8%	\$ 15,934	7728	3928	3800	8865	1825	3679	2429	932	\$ 7,185,174	\$ 368,758,631
2003	32203	30979	1224	3.8%	\$ 16,259	7810	3932	3877	8954	1843	3716	2453	941	\$ 7,294,593	\$ 368,754,944
2004	32328	30938	1390	4.3%	\$ 16,591	7893	3936	3956	9045	1862	3754	2478	951	\$ 7,405,678	\$ 368,751,256
2005	32453	31025	1428	4.4%	\$ 16,929	7977	3940	4037	9136	1881	3791	2503	961	\$ 7,518,455	\$ 368,747,569
2006	32636	31004	1632	5.0%	\$ 17,275	8064	3944	4120	9229	1900	3830	2529	970	\$ 7,632,949	\$ 367,644,635
2007	32761	30632	2129	6.5%	\$ 17,627	8152	3948	4204	9322	1919	3868	2554	980	\$ 7,749,187	\$ 366,545,000
2008	32944	30308	2636	8.0%	\$ 17,987	8242	3952	4289	9416	1938	3908	2580	990	\$ 7,867,195	\$ 348,217,750
2009	33069	30324	2745	8.3%	\$ 18,167	17844	3956	4377	9511	1958	3947	2606	1000	\$ 7,987,000	\$ 343,584,000
2010	33194	30306	2888	8.7%	\$ 18,349	8458	4015	4443	9559	1968	3967	2619	1005	\$ 8,026,935	\$ 345,301,920
2011	33340	30606	2734	8.2%	\$ 18,349	8585	4076	4509	9606	1978	3987	2632	1010	\$ 8,067,070	\$ 347,028,430
2012	33487	30875	2612	7.8%	\$ 18,440	8714	4137	4577	9654	1988	4007	2645	1015	\$ 8,107,405	\$ 348,763,572
2013	33634	31280	2354	7.0%	\$ 18,532	8844	4199	4646	9703	1997	4027	2659	1020	\$ 8,147,942	\$ 350,507,390
2014	33782	31417	2365	7.0%	\$ 18,625	8977	4262	4715	9751	2007	4047	2672	1025	\$ 8,188,682	\$ 352,259,927
2015	33931	31556	2375	7.0%	\$ 18,718	9112	4326	4786	9800	2017	4067	2685	1030	\$ 8,229,625	\$ 354,021,226

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 Franklin 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.

#### Franklin County Solid Waste Stream

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

Residential:30%Commercial:40%Institutional:10%Industrial:20%

Franklin County and ISWA continue to provide a high level recycling program and are continually investigating resources to expand collection and diversion activities. Inter Local Solid Waste Authority (ISWA) remains proactive in the implementation to the solid waste plans for Franklin County. The region continues to strive to meet diversion / waste reduction goals set forth by the State of Tennessee.

Site Name(s)	Annual Tons Disposed by Lincoln County Region, 2010	Current Landfill Capacity (daily throughput)	Maximum Capacity	Projected Life of Facility
Franklin County Solid Waste 487 Joyce Lane Winchester, TN 37398	29861.0	~100 tons	N/A	10 to 15 years

#### Recycling Tonnage by Name, Sector, Source, 2010

Material Name	Residential	Commercial	Industrial	Other All	Total
	All Programs	All Programs	All Programs	Programs	
Corrugated	2078.46				2078.46
Misc. Paper	804.47	1442.3	364.91		2611.68
Electronics	56.15				56.15
Lead-Acid Batteries		64.0	74.1		138.1
Mixed #1 and #2 plastic	116.19	22.43	2473.33		2611.95
Other mixed plastic	4.16				4.16
Mixed Metals	440.78	1.5	14972.45		15414.73
Oil Filters					
Tires	457.04				457.04
Antifreeze					
Glass	.42				.42
Used Oil	25.3	16.84	622.55		664.69
Other recyclables	7321.17		1095.92		8417.09
Totals	11304.14	1547.07	19603.26		32454.47

Solid Waste Program	Existing Regional Solid Waste Programs	Future Regional Solid Waste Programs	Tennessee Mandated Plan
Residential Solid Waste Collection	Franklin County provides fourteen (14) Convenient Centers to residents.	Maximize the efficiency of collection of waste from each collection site and maintain existing equipment. Additional convenience centers are needed in the east/northeast and west/northwest sections of Lincoln 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 three convenience centers.
Waste Reduction	In 2010 the diversion rate for Franklin County, TN was 52%.	The Franklin County Solid Waste Department is committed to develop a new plan that will enable them to meet the 25% reduction rate.	Achieving 25% waste reduction goal each year.
Problem Waste Management	Waste tire disposal continues to be problematic for Franklin County.	Disposal / revenue generation from waste tires will be studied by ISWA and the Franklin 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	Interlocal Solid Waste Authority 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 Franklin County SW Department transports waste via Allied Waste – Estill Springs to the Middlepoint Landfill in Murfreesboro, TN. \$30/NT	Franklin County will continue to partner with Allied Waste to transport municipal solid waste to Class I Landfill Middlepoint Landfill in Rutherford County, TN.	Region to assure 10-year disposal capacity.
Planning	Franklin County continues to partner with Allied Waste and Interlocal Solid Waste Authority with planning, forecasting, and reaction plans.	Franklin 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 Franklin County in a variety of ways:

- 1) Collected at convenience centers
- 2) Curbside pickup in Winchester
- 3) Private haulers in rural Franklin County
- 4) Delivered to the Recycle Center in Winchester on Joyce Avenue.

There are fourteen convenience centers in Franklin County for rural residents to dispose of their solid waste. The solid wastes collected at the fourteen convenience centers are transported to the Franklin County Transfer Station located on Joyce Avenue in Winchester. The transfer station is operated by Franklin County Solid Waste. Compactor bins are transported from the convenience centers and from the FC Transfer Station on Joyce Lane to the Allied Waste Transfer Station; Allied then hauls the solid waste to Middlepoint Landfill in Rutherford County, TN for \$30/NT. Some recyclables are collected at the convenience centers; however citizens are encouraged to transport recyclables to the Franklin County Recycle Center in Winchester.

Richardson Waste Removal collects construction debris in the county and is not offered through regular residential services. Richardson also provides commercial waste collection. Fees are not readily available.

#### Winchester Sanitation Department

The City of Winchester offers curbside collection of garbage, yard waste, and leaves. Scheduled routes offer collection of garbage and yard waste on a weekly basis. The Sanitation Department is responsible for collection of garbage (presently contracted to Waste Management, Gary Sanson - 967-2081), collection of household refuse, brush, leaves, Blue Bag Recycling Program, and also helps with mowing of City owned property.

#### Winchester's Blue Bag Recycling Program

Recyclables are picked up at curbside every 2nd and 4th Wednesday of the month.

Material Collected:

- Aluminum Cans (Please rinse also clean aluminum foil & pie pans)
- Metal Food Cans (Please rinse)
- #1 (PET) Plastic (Please rinse and remove lids) Soda Bottles & Food Jars
- #2 (HDPE) Plastic (Please rinse and remove lids) Milk & Detergent Bottles
- Newspaper
- Corrugated Cardboard Packing & Food Containers
- White Ledger Paper
- Mixed Paper Colored Paper, Stationery, Notebook Paper, Magazines, Catalogs, Phone Books

#### **Preparation of Materials**

- **Aluminum Cans** RINSE the can, and store with other aluminum materials such as clean aluminum foil and pie pans.
- **Tins Cans** need to be RINSED before storing with the of your empty corn, soup, and chili cans to name just a few.\*\*NOTE: The labels do not have to be removed. The end of the can do not have to be removed. Crushing your cans is optional
- **#1 (PET) Plastic** When recycling plastic, one needs to remove the lid and RINSE the container and store. Some examples are 2-liter drink bottles, peanut butter jars and other #1 plastic bottles and jars with the Recycling triangle with a 1 inside.
- **#2 (HDPE) Plastic** When recycling plastic, one need to remove the lid and RINSE contents from the container and store. Some examples are milk jugs, bleach and detergent bottles, and other #2 plastics bottles and jugs.
- **Corrugated Cardboard Packing Boxes** need to be free from excessive dirt. All Styrofoam and plastic must be removed from the boxes. Try to prevent the boxes from getting wet. Breaking down the boxes is optional.

## **Special Waste**

**Waste Oil** - Used oil is collected for recycling at all 14 Convenience Centers and at Franklin Co. Solid Waste Management located on Joyce Lane in Winchester. (Limit 5 gallons per person per day)

**Waste Antifreeze** - Used Antifreeze is collected for recycling at all 14 Convenience Centers and at Franklin Co. Solid Waste Management located on Joyce Lane in Winchester.

Construction and Demolition - The City of Winchester cannot pick up any of these items. Please contact BFI (931) 649-3032.



Waste Management provides curbside pickup in Winchester

Private haulers in rural Franklin County such as Richardson Waste Removal of Fayetteville, TN offers weekly trash services to residential, commercial, and industrial clients. Richardson has been providing service since 1963 in Franklin County. Richardson Waste Removal can provide residential garbage removals, roll-off containers for construction sites, general clean ups, and recycling of construction materials.



#### **Richardson Waste Removal:**

- Weekly trash service
- Residential garbage removal in Lincoln, Franklin, Giles
- Roll-off containers for construction, demo debris, commercial, industrial, and general clean up
- Roll-off containers available in Coffee Bedford, Marshall, Moore counties in Tennessee
- Recycling of construction materials
- New customers receive a 96 gallon trash can when you sign up for Easy Bill Pay

#### **Interlocal Solid Waste Authority**

ISWA was established in 1991 and is comprised of Franklin, Giles, and Lincoln counties. Bedford and Moore counties have applied for admission to ISWA (admission pending), the cities within the listed counties, and the City of Tullahoma. ISWA's Mission Statement is "to provide efficient and cost effective disposal of solid waste and to educate the citizens within the region on waste reduction and recycling practices.

Curbside pickup of recyclables are collected in Winchester on the 2<sup>nd</sup> and 4<sup>th</sup> Wednesday of each month, while pickup in Cowan is collected on the 1<sup>st</sup> and 3<sup>rd</sup> Wednesday of each month. Convenience centers collects metal, paper, and plastic. The Franklin County Recycle Center is located at 487 Joyce Lane, Winchester, TN.

ISWA holds the contract for waste disposal within the region. ISWA also has the contract for the mulching of yard waste. The region also provides an education program for the schools and the general public on waste reduction and recycling.



Franklin County Solid Waste Office



Recycle area



Sewanee Convenience Center



Tullahoma Convenience Center

#### ACCEPTABLE ITEMS

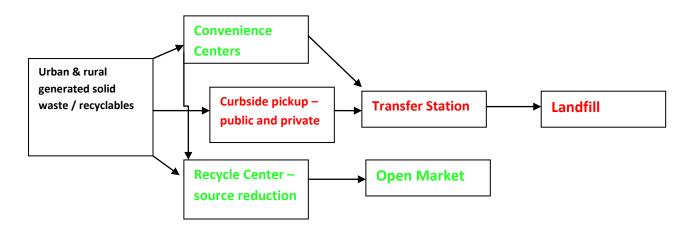
- Newspaper, white paper, junk mail
- Magazines
- Hard and soft cover books
- Plastics 1 & 2 (Look for the triangle with the 1 or 2 inside on the items)
- Aluminum Cans
- Metal food cans
- (Please rinse the above three items before recycling)
- Plastic shopping bags
- Cardboard
- Electronic items computers, monitors, etc.
- Paint and latex, if it is less than 1/4 gal, can be air dried and sent to the landfill since it is not hazardous.

#### UNACCEPTABLE ITEMS

- Cleaners, strippers, varnish, etc.
- Household trash
- Clothing
- Glass
- Styrofoam
- Furniture and 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.

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



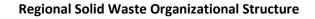
#### **Convenience Centers**

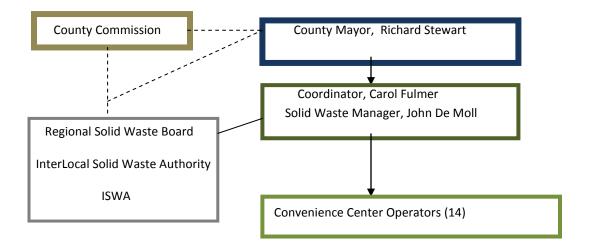
- 1) Cowan, 415 College Street North, Cowan, TN 37318
- 2) Keith Springs, 80 Community Lane, Belvidere, TN 37306
- 3) Liberty, 3234 Liberty Road, Winchester, TN 37398
- 4) Industrial Park, 485 Industrial Drive, Winchester, TN 37398
- 5) Old Salem, 68 Old Salem/Lexie Road, Belvidere, TN 37306
- 6) Winchester Springs, 365 Riddle Lane, Estill Springs, TN 37330
- 7) Center Grove, 70 Oakwood Lane, Tullahoma, TN 37388
- 8) Sewanee, 1501 University Avenue, Sewanee, TN 37375
- 9) Estill Springs, 7578 Tullahoma Highway, Estill Springs, TN 37330
- 10) Sherwood, 10229 Sherwood Road, Sherwood, TN 37376
- 11) Capitol Hill, 335 Capitol Hill Road, Estill Springs, TN 37330
- 12) Farris Chapel, 311 Farris Chapel Road, Winchester, TN 37398
- 13) Lexie Crossroads, 3521 Six Mile Board Road, Belvidere, TN 37306
- 14) Pleasant Ridge, 402 Pleasant Ridge Road, Huntland, TN 37345
- 15) Franklin County SW & Recycle Center, 487 Joyce Lane, Winchester, TN 37398

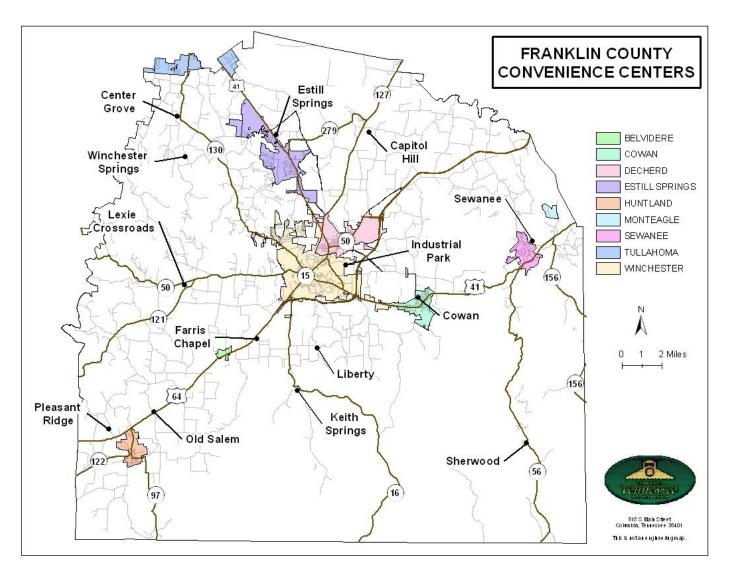


#### SECTION 5:

Provide organizational charts of each county and municipality's solid waste program and staff arrangement. Indentify 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.







## Municipal Solid Waste Facilities in Franklin County, TN

#### Convenience Centers

- 1) Cowan, 415 College Street North, Cowan, TN 37318
- 2) Keith Springs, 80 Community Lane, Belvidere, TN 37306
- 3) Liberty, 3234 Liberty Road, Winchester, TN 37398
- 4) Industrial Park, 485 Industrial Drive, Winchester, TN 37398
- 5) Old Salem, 68 Old Salem/Lexie Road, Belvidere, TN 37306
- 6) Winchester Springs, 365 Riddle Lane, Estill Springs, TN 37330
- 7) Center Grove, 70 Oakwood Lane, Tullahoma, TN 37388
- 8) Sewanee, 1501 University Avenue, Sewanee, TN 37375
- 9) Estill Springs, 7578 Tullahoma Highway, Estill Springs, TN 37330
- 10) Sherwood, 10229 Sherwood Road, Sherwood, TN 37376
- 11) Capitol Hill, 335 Capitol Hill Road, Estill Springs, TN 37330
- 12) Farris Chapel, 311 Farris Chapel Road, Winchester, TN 37398
- 13) Lexie Crossroads, 3521 Six Mile Board Road, Belvidere, TN 37306
- 14) Pleasant Ridge, 402 Pleasant Ridge Road, Huntland, TN 37345
- 15) Franklin County SW & Recycle Center, 487 Joyce Lane, Winchester, TN 37398

The Franklin County Solid Waste Department is fully 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.

The Franklin County Recycle Center operates out of a storage / sorting center located at 487 Joyce Lane, Winchester, TN. The facility is of somewhat modern design with segregated bins and overhead cranes to manipulate the material. Balers are located in the center as well.



Franklin County SW compactor truck



Franklin County Solid Waste & Recycle Center 487 Joyce Lane, Winchester



Franklin County Solid Waste Transfer Station 487 Joyce Lane, Winchester, TN





Franklin County Convenience Center

#### 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?

Franklin County in general has a strong recycle program. The general public in Franklin County is generally accepting to the challenge of reducing, reusing, and recycling. ISWA is proactive in the community and the school system to educate and to promote good recycling habits.

Recycling in rural areas is somewhat limited in that curbside recycling is not available. Breaking the old culture of tossing recyclables in the trash pickup 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.

Classroom training and special events are excellent venues to create the culture change. ISWA participates in these types of activities to promote the 3R's. Drop off centers at high traffic areas are needed in Winchester and Franklin County, however without funding this situation will continue to be an obstacle in waste diversion.

#### 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.

		Waste Reduction Goal Calculation Method					
County	Compared to Base Year Interlocal	Population Ratio	Economic-Population Ratio	Qualitative- Real Time			
Franklin	N/A	N/A	N/A	52%			
ISWA	13%	13%	7%	31%			

TABLE 7.1	Measurement of Regional Waste Reduction Goal
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Franklin County met the 25% mandated reduction in solid waste in 2010. Franklin County's recycle program is a key factor in the waste diversion stream. Industry reports to Interlocal Solid Waste Authority their recycle numbers which greatly reduces the tonnage to landfills.

## SECTION 8:

#### **TABLE 8.1:**

Site Name(s)	Annual Tons Disposed by Franklin County Region, 2010	Current Landfill Capacity (daily throughput)	Maximum Capacity	Projected Life of Facility
Franklin County Solid Waste Department 487 Joyce Lane Winchester, TN 37398	29861.0	~ 125-150 tons	n/a	15 to 20 years

#### **TABLE 8.2**

Provider of Service	Service Area	Available Service for 2010 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
415 College Street North Cowan, TN 37318	Cowan	~5000	Drop off	~4000 NT	Convenience Center
80 Community Lane Belvidere, TN 37306	Keith Springs	~5000	Drop off	~4000 NT	Convenience Center
3234 Liberty Road Winchester, TN 37398	Winchester	~5000	Drop off	~4000 NT	Convenience Center
485 Industrial Drive Winchester, TN 37398	Winchester	~5000	Drop off	~4000 NT	Convenience Center
68 Old Salem/Lexie Road Belvidere, TN 37306	Belvidere	~5000	Drop off	~4000 NT	Convenience Center
365 Riddle Lane Estill Springs, TN 37330	Winchester Springs	~5000	Drop off	~4000 NT	Convenience Center
70 Oakwood Lane Tullahoma, TN 37388	Tullahoma	~5000	Drop off	~4000 NT	Convenience Center
1501 University Avenue Sewanee, TN 37375	Sewanee	~5000	Drop off	~4000 NT	Convenience Center
7578 Tullahoma Highway Estill Springs, TN 37330	Estill Springs	~5000	Drop off	~4000 NT	Convenience Center
10229 Sherwood Road Sherwood, TN 37376	Sherwood	~5000	Drop off	~4000 NT	Convenience Center
335 Capitol Hill Estill Springs, TN 37330	Estill Springs	~5000	Drop off	~4000 NT	Convenience Center
311 Farris Chapel Road Winchester, TN 37398	Winchester	~5000	Drop off	~4000 NT	Convenience Center
3521 Six Mile Board Road Belvidere, TN 37306	Belvidere	~5000	Drop off	~4000 NT	Convenience Center
402 Pleasant Ridge Road Huntland, TN 37345	Huntland	~5000	Drop off	~4000 NT	Convenience Center

487 Joyce Lane Winchester, TN 37398	Franklin County	~45000	Drop off	~40000 NT	Transfer Station & Recycle Center
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Franklin County is equipped to handle the future growth needs in solid waste disposal. The 15 facilities in Franklin County provide adequate and easily accessible capacity. Partnering with Allied Waste at \$30/NT is a cost effective solution for transporting solid waste to Middlepoint in Murfreesboro.

ISWA's interaction with schools and businesses is a positive influence in the conditioning of the public to grasp the necessity of recycling. Future diversion attempts will hinge on ISWA's effectiveness in working with the general public, commercial entities, and industry.

Private haulers in Franklin County include Allied Waste, Richardson Waste Removal, Waste Management, and BFI. Allied Waste hauls the solid waste from the Franklin County Transfer Station to Middlepoint in Murfreesboro. Waste Management and the city of Winchester have contracted to provide curbside pickup of solid waste in Winchester. Richardson Waste Removal provides a varied service of solid waste, construction debris, and brush removal in rural Franklin County.

Culture change is slow to come by as some rural resident's still burn trash on private farms or use as backfill on private acreage. This is by no means suitable disposal, but still a reality as an obstacle to procure accurate tonnage generated by Franklin Countians.

The photos below indicate the simplistic nature of continuing education of the public.

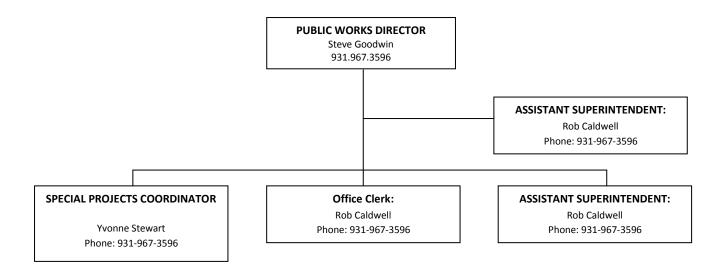




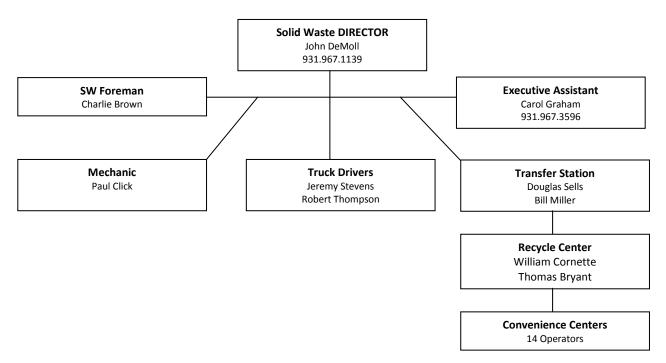




#### Winchester Public Works Department



## Franklin County 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	\$78225	\$20000	\$98225			
Transportation/hauling						
Collection and Disposal Systems						
Equipment						
Sites						
Convenience Center	\$247542	\$52458	\$300000			
Transfer Station	\$1086446		\$1086446			
Recycling Center						
MRF						
Landfills						
Site						
Operation						
Closure	\$12000		\$12000			
Post Closure Care						
Administration (supplies, communication costs, etc.)						
Education						
Public	\$2500	\$2500	\$5000			
Continuing Ed.						
Capital Projects	\$3803		\$3803			
1 3	REVEN	IUE				
Host agreement fee						
Tipping fees	\$8500	\$1500	\$10000			
Property taxes	\$910419	\$100000	\$1010419			
Sales tax						
Surcharges						
Disposal Fees						
Collection charges						
Industrial or Commercial						
charges						
Residential charges						
Convenience Centers charges						
Transfer Station charges	\$10000		\$10000			
Sale of recyclables	\$150000	\$50000	\$200000			
Other sources: grant	\$30700		\$30700			

#### 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.

Property Tax Charges:	\$910419.00
Commercial & Industrial Collection	\$ 18500.00
Grant:	\$ 30700.00
Other:	\$150000.00

Revenues will grow with continued improvement in the recyclable markets. Property tax increases are never popular but are by far the largest revenue stream for Franklin County Solid Waste. Increased taxes are inevitable but are tabled at this time by the county commission.

#### 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 continued commitment to recycling education that an increase in diversion will be realized in Franklin County. As the recycling program currently in effect continues to grow resulting diversion is inevitable. Franklin County is more than capable of achieving the mandated 25% diversion rate, while meeting all rules and regulation for solid waste management.