

**MUNICIPAL SOLID WASTE PLAN
FENTRESS COUNTY REGION**

As Required By

**The Solid Waste Management Act of 1991
T.C.A. 68-31-813(c) and 68-31-815**

**Prepared For
The Fentress County Municipal Solid Waste Region Planning Board**

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PART I

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Definition of the Region and Rationale for its Formation

The Fentress County Municipal Solid Waste Region includes Fentress County and the municipalities of Allardt and Jamestown. The region is 498.7 square miles in land area and 0.70 square miles in water area.

Fentress County is a single county region. In the initial stages of developing a plan to collect and dispose of the county's solid waste, officials conducted meetings with neighboring counties. Those counties were proposing to adopt single county region resolutions and the county officials were undecided about waste collection and disposal options as required by state law. Due to inadequate equipment and landfill space available to Fentress County to the end of the 1992 fiscal year, county officials elected to form a single county region and immediately began plans for collection and disposal of waste for the next ten years. On October 19, 1992 the County Commission passed the required Resolution declaring Fentress County a single county region as defined by the Solid Waste Management Act of 1991. Collection and disposal operations were implemented immediately. Care has been taken to insure that long range collection and disposal plan options would not be preempted.

The Commission appointed the Solid Waste Planning Board Members and in addition to statutory duties, directed the Board to execute the region's solid waste program. The county appointed (5) members and the cities of Jamestown and Allardt appointed (1) member each. The board selected from it's members a chair, vice chair, and secretary. An Advisory Committee whose membership was chosen by the Board and whose duties are to assist and advise the Board was established in October of 1992. The advisory committee currently consists of five (5) members.

System Elements, Regional Needs, Goals and Objectives

Household Collection

A network of convenience centers has been chosen as the method of collection for household wastes. Fentress County's service area in square miles is 498.7. Four Class I Convenience Centers have been constructed, permitted and are in operation (a fifth is under construction). The current network of centers serve areas of north and south Fentress and Jamestown.

The region needs expansion of services through the siting of additional class I conveniences centers in west and east sections of the county (communities of Sharp, Allardt, Armathwaite, Shirley, Stockton, Mount Helen, Helena, Boatland and Manson). The region has a goal of constructing three additional facilities for the unserved areas. Fentress County's objective is to locate eight centers throughout the region that minimize the average travel distance for citizens to seven miles. The green box system is the method of collection in most communities unserved by class I centers. The region plans to discontinue the green box system by the end of 1995 when all centers are scheduled to be in operation.

The centers operate with roll off compactor containers for household wastes and an open top container for white goods and scrap metals (recyclables are also collected at the sites). The sites are attended during operating hours and locked when closed. Center attendants are educating the public on recycling and other solid waste programs. The estimated average distance to the centers for a household is five to seven miles. The convenience centers do not accept commercial waste for disposal. All collected trash is compacted and transported to the Scott County Landfill, thirty miles away for disposal in a class I landfill.

Commercial Collection

The county offers commercial collection to area industry and business (there are currently no private haulers in the county). The estimated number of accounts is eighty. A commercial collection fee of \$12.50 per six cubic yard container is charged. The region plans to continue to offer this service and expand as necessary. In 1993, the county purchased a front loader truck to service the accounts.

Recycling and Waste Reduction

Means to accomplish the 25% waste reduction goal will include continuing and expanding the recycling effort, constructing a class IV landfill, source reduction and industrial process change. Education programs are already underway and will continue to focus primarily in the school system, industry, business and the local citizen by media and distribution of educational materials.

Recycling

The current recycling program consists of a materials processing facility, three drop off centers constructed of PVC piping and netting located at area grocery stores and four class I convenience centers accepting household waste and recyclables. The recycling program is in a transition phase due to the implementation of class I convenience centers and the planned construction of a new processing facility at the property purchased for a class I, III and IV landfill or an expansion of the existing facility. Each area in the county will receive service through a class I center that accepts household wastes and recyclables. Plans are underway to design and purchase permanent roll off recycling collection bins to replace the temporary bins in use. The new bins will work in coordination with the total solid waste collection system. At each site an operator will be actively educating the public about recycling and waste reduction. Other education programs already underway include visits to local schools, distribution of educational materials, media public service announcements and industrial education.

Class IV Wastes

The feasibility of a class IV landfill is underway. Construction of such facility if determined feasible is expected to be complete by July of 1996. Class IV wastes that will be diverted to a class IV landfill include all demolition/construction wastes. Waste reduction from this source is expected to be 7 percent of the total solid waste generation.

Industrial Process Change and Source Reduction

Education programs will focus on waste reduction by source and industry. Incentives to reduce waste in the workplace will include free collection of all recyclable waste, a tip fee for class I waste and public recognition of waste reduction efforts. Source reduction will be encouraged through educational efforts. Industrial process change and source reduction in 1996 is estimated at 5 percent.

Composting

A goal to handle a portion of yard wastes (primarily tree limbs and branches) by a small scale composting operation consisting of shredding or chipping has been set for the region. Plans to locate and permit a site to shred tree limbs and branches is planned in late 1994 or early 1995. The initial site will be on property adjacent to the transfer station on 127 south, 6 miles south of Jamestown the county seat. If the landfill option is chosen as the method of disposal for the region, the composting operation will be moved to the tract of property purchased for the landfill facilities. This property is 2.8 miles west of Jamestown on Gouldstown Road. An estimated 4 percent of the total estimated 7.6 percent of yard wastes is planned for composting.

Disposal Capacity

Fentress County is now in process of studying the feasibility of a Class I Landfill. The region is also studying other disposal options available in the event that a Class I Landfill is not financially feasible.

Disposal options under study include:

- I. County owned and operated class I and class IV landfills
- II. County owned and operated class I and class IV landfills which would operate as regional facilities
- III. The county hauling class I wastes to a class I landfill and a county owned and operated class IV landfill
- IV. The county hauling all wastes to appropriate disposal facilities
- V. Contract the hauling and disposal of all class I wastes and a county owned and operated class IV landfill
- VI. Contract the hauling and disposal of all waste generated in the county

In 1992, the citizens of Fentress County passed by referendum vote a one cent sales tax to fund the collection and disposal of solid waste. A ten year revenue projection and budget fully addresses the monies available and the costs associated with the disposal of solid waste in the region in this summary.

Draper Aden and Associates is now in process of compiling a final study of the feasibility of class I and IV landfills for the region. The study will also include analysis of other options available to the region regarding the transport and disposal of municipal solid waste.

If the region elects to construct a class I landfill contingent upon funds and financing available, the construction will be completed no later than November of 1996 which will coincide with the provisions of the 1991 Solid Waste Management Act.

In November of 1994, the final report concerning the class I landfill will be available and a decision concerning the landfill will be made. If the region elects not to construct a class I landfill, immediate action will be taken to construct a long term transfer station and negotiations with the nearest region operating a class I landfill or plans to work with surrounding regions to construct a class I landfill will begin.

Education and Information Programs

The region needs expansion of the current education effort. A full scale program should address specific solid waste issues that include collection and disposal, waste reduction options and costs involved in establishing a solid waste system. Students, industry and business, public officials, civic clubs and organizations and the general public should be included in the education process.

The regional goal is to implement an education program that addresses all aspects of the solid waste system and reaches all sectors of the population by July of 1995. The objective of an education program is to encourage public participation in the waste reduction programs and gain control of unmanaged waste.

In the 1993 school year, the Office of Solid Waste coordinated visits to each elementary school classroom through the local Agricultural Extension Office and the 4-H Clubs. The instruction focused on recycling, litter prevention and general waste reduction strategies. Hands on demonstrations, slide shows and handouts were utilized in the instruction. The Office of Solid Waste plans to continue and expand these programs in coordination with agricultural extension office. Plans are to include the two local high schools and one private school for the next school year are underway. Classroom instruction through the use of slides and demonstrations will continue and increase in frequency. Contests, awards, earth day celebrations, floats from recycled materials and solid waste projects in science fairs will be implemented as a part of the education program.

The Soil Conservation Service is working in coordination with the solid waste program to provide an individual who will be visiting the schools with environment and conservation education through the Americore Program. This federal program is in the planning stages and will be implemented in 1995.

Meetings with management of local industry and business will be scheduled to focus on ways to recycle and reduce waste in the workplace. Since the start of the recycling program in 1992, over 70% of local industry and business participate in the paper recycling. A focus on continuing and expanding the recycling effort will be an important component of the education process. Additionally, ways to reduce or reuse waste will be the focus of the workshops and meetings in the workplace.

The office of solid waste will conduct at least two annual meetings with public officials to discuss the solid waste programs in the county. The information provided will include costs, state requirements and progress of solid waste programs.

Civic Clubs and Organizations

A comprehensive list of local organizations will be compiled by the office of solid waste for purposes of meeting with those groups to discuss solid waste programs. A goal to meet with each group annually to discuss solid waste issues and increase participation is scheduled to begin in the 1995 fiscal year.

General Public

Sources of media that are utilized for purposes of education include two local radio stations, local newspaper and the local cable channel. Media education will include news releases of the opening of new facilities, public service announcements and a weekly column updating the public on solid waste issues. Announcements of any upcoming events (household hazardous waste collection) will be announced and publicized through the media. A comprehensive brochure outlining all solid waste programs in the county will be published and widely distributed to the public via the class I convenience centers. The center attendants will be activity educating and encouraging the public concerning methods of waste reduction. Educational materials obtained by the office of solid waste will be placed in the public library for public use.

Problem Wastes

Household Hazardous Waste

The region has no method for collecting and disposing of household hazardous wastes. A household hazardous waste collection system that includes education, specific waste collection days that occur annually and a site to hold the collections will be needed to successfully implement a program to handle these wastes.

The regional plan is to conduct one or two household hazardous waste collection events annually in coordination with the state sponsored program and promote the events through the education plan already started in the county. The objective is to keep as much household hazardous waste from being dumped on the ground or unknowingly disposed of in sanitary landfills. Household hazardous waste education is scheduled to begin in the fall of 1994 and two collection events will be conducted (spring and fall) beginning in 1995.

Waste Tires

Fentress County will be applying for the tire storage grant from the state and will construct a tire storage facility at the county owned property where the transfer station is now located. In the event that the region makes a final decision to construct class I and IV landfills, the remainder of the grant will be applied for and a storage facility will be located on this property. The site is located on Gouldstown Road two and an eighths mile from the courthouse. The storage facility will be completed in 1995.

Waste Oil

Fentress County does not have a program to address collection of waste oil. However, newspaper articles and public service announcements alert the public not to pour used oil onto the ground but to take their oil to a service station for recycling until the county program is underway.

The region has applied for a grant from the state for a container to collect used oil. The region plans to begin a used oil collection program in late 1994 or 1995.

Lead Acid Batteries

Fentress County does not have a program to dispose of used batteries. The public, through an information and education column, have been encouraged to take all used lead acid batteries back to retail stores when purchasing new batteries. The office of solid waste plans to conduct two annual household hazardous waste collections in 1995 that will accept the lead acid batteries for disposal. The event will be publicized and promoted in advance to insure participation.

At such time as criteria are available to establish a collection site, the region will implement a collection program to handle this waste.

Litter

Fentress County received \$20,211 in litter grant monies from the state in 1993. The litter grant funds were used to pay in part wages of one administrative personnel to handle litter education, and two employees to clean-up litter from around the green dumpster sites and to drive a truck for collection of litter picked up by prisoner labor. A portion of the funds were used for media advertisement for the prevention of litter. All litter collected was taken to the transfer station for compaction and was transported to the Scott county landfill.

After the siting of class I convenience centers is complete, the two staff funded by the litter grant program will shift from the green dumpster sites to cleaning up illegal dumps throughout the county. Prison labor to clean up the roadsides will continue and a program to recycle a portion of the roadside waste will be implemented.

Coordination of Programs

The coordination of new programs, services, and facilities will be relatively easy since the programs and services are all, with the exception of a disposal facility, continuations of the present programs and plans. The development of an in house dynamic planning and evaluation system will ensure this coordination. In simple terms the planning and management are elements of the same team. The major problem that needs continuous attention is to ensure that the synergistic impact of decisions is properly evaluated to preclude waste of capital resources. Each new service option or program will be evaluated by all elements of the implementing team with a complete layout of options to include advantages and disadvantages. These will be reviewed by the Region Board and the Region Advisory Committee. Public meetings and briefings will be held on major decisions such as the landfill decision or at any time when major changes in direction are contemplated.

Implementation Schedule

1994:

- Five class I convenience centers constructed, operational and staffed
- Ten percent waste reduction achieved
- Waste oil collection site

1995:

- Eight class I convenience centers constructed, operational and staffed
- Household hazardous waste event
- Waste tires storage facility

1996:

- Conduct one tire shredding operation
- Permanent recycling roll off collection containers at class I convenience centers
- Construction of class I landfill and facilities or long term contract negotiated for the disposal of class I wastes
- Expansion of existing recycling facilities or the construction of new facilities

1997-2003:

- A continuation of the collection, disposal, waste reduction and education systems established in the five previous years and expansions as plan updates dictate

Ten Year Budget

	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Solid Waste Management Account 55710	55,254.00	55,254.00	55,254.00	55,254.00	55,254.00	55,254.00	55,254.00	55,254.00
Sanitation Information/Education Account 55720	9,921.96	10,715.72	11,572.98	12,498.82	13,498.73	14,578.63	15,744.92	17,004.51
Waste Collection (Summary Account 55730)								
Waste Pickup Account 55731	114,678.00	114,678.00	114,678.00	114,678.00	114,678.00	114,678.00	114,678.00	114,678.00
Convenience Centers Account 55732	115,196.80	115,196.80	115,196.80	115,196.80	115,196.80	115,196.80	115,196.80	115,196.80
Problem Waste Account 55734	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Waste Collection	237,474.80	229,874.80	229,874.80	229,874.80	229,874.80	229,874.80	229,874.80	229,874.80
Waste Disposal (Summary Account 55750)								
Recycling Center Account 55751	60,219.00	60,219.00	60,219.00	60,219.00	60,219.00	60,219.00	60,219.00	60,219.00
Landfill Operation/Maintenance Account 55754	323,242.00	332,278.00	341,998.00	351,826.00	361,942.00	372,418.00	383,218.00	394,378.00
Total Waste Disposal	383,461.00	392,497.00	402,217.00	412,045.00	422,161.00	432,637.00	443,437.00	454,597.00
Post Closure Care Costs Account 770	12,050.00	8,977.50	9,426.38	9,897.69	10,392.58	10,912.21	11,457.82	12,030.71
Other Charges Account 58400	36,613.00	36,613.00	36,613.00	36,613.00	36,613.00	36,613.00	36,613.00	36,613.00
Includes: Insurances and Trustee's Commission								
Employee Benefits Account 58600	22,564.00	22,564.00	22,564.00	22,564.00	22,564.00	22,564.00	22,564.00	22,564.00
General Government Debt Service Account 81100	88,082.47	79,673.99	74,562.50	71,583.34	68,615.47	65,674.33	62,645.17	59,666.66
Convenience Center Capital Note(Planned)	11,758.33	11,368.75	10,979.17	10,589.58	10,200.00	9,810.42	9,420.83	9,031.25
Recycling Facility Capital Note(Optional)	8,300.00	8,025.00	7,750.00	7,475.00	7,200.00	6,925.00	6,650.00	6,375.00
Total Debt	108,140.80	99,067.74	93,291.67	89,647.92	86,015.47	82,409.75	78,716.00	75,072.91
TOTAL EXPENDITURES	865,479.56	855,563.76	805,559.83	868,395.23	876,373.58	884,843.39	893,661.54	903,010.93
TOTAL REVENUES	832,316.30	858,222.46	884,955.02	912,540.36	941,055.67	970,379.02	1,000,689.38	1,031,966.64
BEGINNING OF YEAR BALANCE	157,604.00	124,440.74	127,099.44	206,494.63	250,639.76	315,321.85	400,857.48	507,885.32
END OF YEAR BALANCE	124,440.74	127,099.44	206,494.63	250,639.76	315,321.85	400,857.48	507,885.32	636,841.03

Responsibilities

The Fentress County Solid Waste Board has been given responsibility for implementing the region's ten year plan. The Commission appointed the Solid Waste Planning Board Members and in addition to statutory duties, directed the Board to oversee solid waste operations within the region. The organization of the solid waste system, excluding the board, is designed to accept policy direction from another county agency or regional authority.

Map

A system base map is inserted at the end of this document and contains locations of facilities, transportation routes, education sites and proposed facilities.

PART II

**A REGIONAL MUNICIPAL
SOLID WASTE MANAGEMENT PLAN**

(1994-2003)

DESCRIPTION OF THE MUNICIPAL
SOLID WASTE REGION

CHAPTER I

CHAPTER I

DESCRIPTION OF THE MUNICIPAL SOLID WASTE REGION

A. General Description

The Fentress County Municipal Solid Waste Region includes Fentress County and the municipalities of Allardt and Jamestown.

The region is 498.7 square miles in land area and 0.70 square miles in water area.

The following description is a report compiled by the State Planning Office and contains the region's major physiographic features.

Over three-fourths of the county's landscape is found within the Cumberland Plateau Province; the remaining one-fourth lies in the Eastern Highland Rim region. Stratigraphic units underlying the Cumberland Plateau section of the county include Pennsylvanian age conglomerates, sandstones, shales and siltstones. In the Highland Rim Region limestones of Mississippian age predominate.

With the single exception of its northwest side, the Cumberland Plateau dominates all of the county's landscape. The surface of the plateau is gently rolling tableland that has a relief usually less than 100 feet. Along the county's eastern border the elevation of the plateau is 1600 feet; however, on the western side of the county and along U.S. Highway 127 the elevation gradually rises to 1700 feet.

Ridges and hills rising above the plateau surface are non-existent, while stream valleys usually consist of shallow drainage-ways. However, on the eastern side of the county, several precipitous stream gorges have cut below the general surface of the plateau. The two most prominent gorges are Clear Creek, along the county's southern boundary, and White Oak Creek, several miles east of Jamestown. Both of these gorges and their tributaries have depths of 200 to 400 feet and represent the most rugged terrain in the plateau area of the county. Along the county's eastern border, these stream gorges are found within Big South Fork National Park. This recently established park is an area of rugged scenic beauty with spectacular bluffs and lush forests that are characteristic of the Cumberland Plateau. Of the park's 105,000 total acres, 14,957 acres are in Fentress County.

On the western edge of the plateau, the escarpment that separates it from the Highland Rim is highly irregular owing to the headword erosion of the Wolf and Obey Rivers and their tributaries. The average height of the escarpment from the valley floors to the rim of the plateau is slightly over 400 feet. Situated northwest of Jamestown between the valleys of the Obey and Wolf Rivers lies Reynolds Mountain. This is not a mountain in the traditional sense, but a broad massive outlier jutting outward from the main body of the plateau.

The valleys of the Wolf and Obey Rivers constitute the Highland Rim region of the county. Both valleys, along with numerous tributary streams that drain into them, have deeply dissected the western side of the plateau. Their width varies from one to two miles, while the elevation of their floors is around 500 feet.

Fentress County drains into two major drainage basins, the Tennessee and the Cumberland. The southern tip of the county drains into Clear Creek which flows eastward to the Emory River in Morgan County. The Emory joins the Tennessee River in Roane County. The eastern part of the county is drained primarily by White Oak Creek and Laurel and Clear Forks. All of these flow eastward into the South Fork of the Cumberland River in Scott County. The Wolf and Obey Rivers drain the county's western side, both flowing westward into Pickett County. These two rivers are also a part of the Cumberland River System.

The highest elevation, 1,870 feet, is located on the Cumberland Plateau in the southwest panhandle area of the county. This point, found on the Clarkrange Highway (State Route 62), is situated 0.5 miles northeast of the Fentress Putnam County line and is designated on the topographic map as Bench Mark 25-33-8 (Clarkrange 108 NE).

The lowest elevation, 651 feet, is found in the west-central area of the county on the Obey River. This is the normal pool level of Dale Hollow Reservoir (Riverton 334 NE).

According to the latest Upper Cumberland Development District Land Use Survey, 74 percent of the total land area is in forest, 18.8 percent is cropland, 4 percent is used by industry and the remainder is either in pasture or occupied by urban dwellings.

A regional base map is inserted at the end of this document which indicates political boundaries, major roads and waterways.

B. Rationale for Region Formation

Fentress County solid waste officials conducted meetings with neighboring counties before the single county region resolution was adopted. Neighboring counties were proposing to adopt single county region resolutions and the county officials were undecided about waste collection and disposal options as required by state law. Specifically, Fentress County was unable to find a neighboring county with which to form a multi-county region. Due to inadequate equipment and landfill space available to Fentress County to the end of the 1992 fiscal year, county officials elected to form a single county region and immediately began plans for collection and disposal of waste for the next ten years. Sixteen months of study were conducted including an inventory of all existing facilities and equipment to assess and define needs for solid waste collection and disposal. Meetings between County Planning Commission Members and County Commissioners were also conducted. On October 19, 1992 the County Commission passed the required Resolution declaring Fentress County a single county region as defined by the Solid Waste Management Act of 1991. Collection and disposal operations were enacted immediately that would coordinate with the long range collection and disposal plan.

C. Institutional Structure

The Commission appointed the Solid Waste Planning Board Members and in addition to planning duties, authorized the Board to implement the region's ten year plan. The county appointed (5) members and the cities of Jamestown and Allardt appointed (1) member each giving Fentress County a (7) member Solid Waste Board (one member is a County Commissioner). Members of the board of Municipal Solid Waste Region serve a six (6) year term except that two members appointed by the County Executive shall have a two (2) year term, two members appointed by the County Executive shall have a four (4) year term, one member appointed by the County Executive shall have a six (6) year term, and that one member appointed by the Mayor of the City of Jamestown shall have a four (4) year term; and that one member appointed by the Mayor of the City of Allardt shall have a six (6) year term. In the Municipal Solid Waste Region Board's initial organizational meeting it selected from it's members a chair, vice chair, and secretary (a copy of the resolution establishing the region, the board and copies of minutes is in Appendix A). A Municipal Solid Waste Advisory Committee whose membership was chosen by the Board and whose duties are to assist and advise the Board was established in October of 1992. The advisory committee currently consists of five (5) members (a list of Advisory Committee members is in Appendix A).

The region began conducting public meetings in 1992 at elementary schools throughout the county to involve the public in the decision making process. Since that time all solid waste meetings and workshops are publicized in advance with the local media sources available. The public is invited and urged to attend meetings. A public hearing of the ten year plan was conducted on June 15, 1994. (A copy of the summary and an attendance list is in Appendix C).

D. Demographics

The 1993 population of Fentress County was projected at 14,546, with a population density of 29.17 persons per square mile. The total land and water area is 498.7 square miles. Jamestown (1,862) and Allardt (609) are the only two municipalities in the county. The total population of unincorporated areas is 12,075. According to the U.S. Census Bureau, Fentress County's population is 100% rural. For further demographic breakdown by age, sex, education and type of housing see tables I-1 through I-6 (1990 United States Census Bureau). Fentress County's population has declined slightly over the last ten years. To calculate future waste generation rates the projected population decrease has been used.

E. Economic Activity

Total highway miles in the county are; 74.02 miles of U.S. Primary Highways, zero (0) miles U.S. Secondary Highways, 38.54 State Highway miles and 435.90 miles of County Roads. There are no interstate highways in the county. Fentress County has one airport, Jamestown Municipal Airport.

Total employment in Fentress County is 5,682. Average per capita income is \$9,617 which is 57.6% of the state and 48.3% of the national per capita income. Approximately 32.3% of the county's population is below the U.S. poverty line. Fentress County is one of Tennessee's persistent poverty counties. See Part B Economic Activity Charts for a distribution of non-agricultural employment by sector, agricultural employment and major employers.

In 1992 Fentress County had a total appraised property value of \$267,668,994.00 and an assessed property value of \$79,100,761.00. The current property tax rate is \$3.00. Total 1993 revenues from property tax in Fentress County was \$1,850,000.00. The City of Jamestown had an appraised property value of \$43,137,449.00 and an assessed value of \$15,544,598.00. The tax rate for Jamestown is 95 cents bringing revenues of \$134,000.00 in 1991. Sales subject to sales tax for the 1992 Fiscal Year were \$59,415,390.00. Local sales tax revenue (2.5 cents) was \$1,303,575.29. County Wheel Tax is \$25 per vehicle and yielded a tax revenue of \$271,559.72 in 1991.

The solid waste program is funded through a local one cent sales tax passed in 1991. By law, one half of all local sales tax is set aside for the county school program. For this reason, the solid waste program receives a portion of the property tax as reimbursement for the half of the local sales tax the school program receives. The county commission has committed to fund solid waste at the equivalent of the receipts from the one cent local sales tax. By contractual agreement the two municipalities are providing their sales tax portion to the county. The sales tax increase took effect in January 1992. The one cent sales tax funding the solid waste program generates estimated revenues of \$620,000 each year. Other revenues include tipping fees, sale of recycled materials, grants from the State of Tennessee and property tax.

Regional economic factors that may affect future waste generation rates are increased tourism and the influx of garment factories in the region. An economic growth factor has been used in the projections of waste generation in this document (.0319) to allow for an increase in tourism and industry.

Chapter I Forms

A. Regional Summary: Demographics

1. Name of Region: Fentress County Municipal Solid Waste Region
2. Regional Population: 14,669
3. Regional Area: 498.7 square miles

4. Table I-1... Population and Population Density

Area (sq. miles)	Population	Avg. Population Density (per sq. mile)
498.7	14,699	29.4

5. **Table I-2... Distribution of the Total Regional Population, by Urban and Rural Areas**

Urban		Rural	
Population	Percent (%)	Population	Percent (%)
-0-	-0-	14,669	100

6. **Table I-3... Distribution of the Total Regional Population by Sex and Age**

Age	Total	Male	Percent (%)	Female	Percent (%)
0-4	898	481	53.6	417	46.4
5-17	2,931	1,535	52.4	1,396	47.6
18-44	5,797	2,830	48.8	2,967	51.2
45-64	3,067	1,496	48.8	1,571	51.2
65+	1,976	830	42.0	1,146	58.0
Total	14,669	7,172	48.9	7,497	51.1

7. **Table I-4... Distribution of Regional Population by Education (Age > 25)**

Education	Number (#)	Percent (%)
Less than 8th grade	3,498	37.4
Grade 8	N/A	N/A
High School (1-4)	4,379	46.8
College (1-4)	1,259	13.5
Post Grad/Professional (>4)	213	2.3
Total	9,349	100

8. **Total Number of Households in Region 5,511**

9. **Table I-5... Distribution by Type of Housing and Occupancy**

Single Family	Total Persons	Occupied	Owner	Rented
1, Detached	11,590	11,590	9,521	2,069
1, Attached	112	112	68	44
Multi Family				
2	128	128	10	118
3-4	154	154	6	148
5-9	93	93	3	90
10-19	28	28	1	27
20-49	0	0	0	0
50 or more	0	0	0	0
Institutional	110	N/A	N/A	N/A
Mobile/Trailer	2,284	2,284	1,784	500
Other	170	170	104	66
Regional Total	14,669	14,599	11,487	3,062

10. Table I-6... Regional Population Projections 1994-2003
 Regional Population 1993: 14,546

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
14,505	14,463	14,424	14,384	14,344	14,304	14,264	14,204	14,146	14,087

B. Economic Activity Charts

1. Table I-7... Basic Economic Information, for Each County, and the Region in 1991

Population	MSA Co. y/n	Total Employed	Total Earned	Per Capita Income	Below Poverty
14,699	NO	5,682	\$75,079,000.00	\$9,617.00	32.3 %

2. Table I-8... Non-Agricultural Employment, by Sector, in 1993: 4,887

	Manufacturing	Construction	Trade	Finance	Service	Government	Trans/Utilities
(#)	1,704	286	995	157	831	703	156
(%)	34.9	5.9	20.4	3.2	17.0	14.4	3.2

3. Table I-9... Total Agricultural Employment in 1991: 602

Agricultural Employment	602
-------------------------	-----

4. Table I-10... Major Generators of Commercial and Non-Hazardous Industrial Waste in 1991. All Generators > 25 Employees.

Employer	Employed (#)	Product	Tons/Yr
Burnett Poultry Co.	40	Feed	30
Clarkrange Manufacturing	200	Apparel	48
DOW Manufacturing	57	Apparel	20
Fashion Manufacturing	75	Apparel	35
Fentress Industries	350	Apparel	330
Frogge & Williams	25	Limestone	6
Gamco	100	Apparel	102
Gernt Lumber Company	25	Crossties	N/A
Mark Twain Apparel	50	Apparel	18
Micro Metals	80	Powder Metals	42
Osh Kosh B'Gosh	200	Apparel	90
Park Manufacturing	85	Apparel	108
Walter Dimension Lumber	130	Wood Parts	N/A
Wayne Quality Manufacture	70	Apparel	72
TN/KY Apparel	150	Apparel	114
Regional Total	1,637		1,015

5. **Summary of Institutions Housing < 100 Persons
Not Applicable**

6. **Summary of Major Health Care Facilities < 50 Beds**

Table I-11... Hospital and Nursing Home

Facilities (#)	Beds (#)	Infectious Waste Mgt. On/Off Site Type	Estimated Tons/Yr
2	171	Off Site/Incinerate	17.25

7. **Table I-13... Sources of Local Revenue Utilized in the Region**

Property Tax	Local Sales Tax	Wheel Tax	Local Waste Collection Fee	User/Tip Fee
X	X			X

8. **Table I-14-15... Revenue for Fiscal Year 1993**

Assessed Property Value		Property Tax Revenue	
County	City	County	City
\$79,100,761.00	\$15,544,598.00	\$1,850,000.00	\$134,000.00

Sales Subject to Sales Tax	Local Sales Tax Revenue	# of Registered Vehicles	Wheel Tax Revenue
\$59,415,390.00	\$1,305,575.29	10,862	\$271,559.72

ANALYSIS OF THE CURRENT
SOLID WASTE MANAGEMENT
SYSTEM FOR THE REGION

CHAPTER II

**GROWTH TRENDS, WASTE
PROJECTIONS AND PRELIMINARY
SYSTEM STRUCTURE**

CHAPTER III

CHAPTER II

ANALYSIS OF THE CURRENT SOLID WASTE MANAGEMENT SYSTEM FOR THE REGION

Statutory Requirements:

"...*(E)ach plan submitted by a municipal solid waste region shall include the following:...(2) a current system analysis of: (A) waste streams, including data concerning types and amounts generated; (B) Collection capability, including data detailing the different types of collection systems and the populations and areas which receive and do not receive such services; (C) disposal capability, including an analysis of the remaining life expectancy of landfills or other disposal facilities; (D) costs, using a full-cost accounting model developed by the State Planning Office; including costs of collection disposal, maintenance, contracts, and other costs; and (E) revenues, including cost reimbursement fees, appropriations, and other revenue sources.*" [T.C.A. Section 68-31-815 (b)(2)]

A. Waste Stream Characterization

In the 1993 calendar year 9,703 tons (documented from weigh tickets at the site of disposal) municipal solid waste (MSW) were received for disposal. Source of MSW is distributed as follows:

- (1) Residential; 6,113 tons (63%)
- (2) Commercial and Institutional; 2,329 tons (24%)
- (3) Non-Hazardous Industrial; 1,261 (13%) (See tables II-1 and II-2)

Materials which could have been recycled, composted or diverted to a Class III or IV landfill were:

- (1) Yard clippings (769)
- (2) Construction demolition (363 tons)
- (3) White goods (120 tons) (See table II-3)

Note: Textiles are higher than the national average due to the number of textile manufacturing industries located in the county. Yard wastes are lower than the national average due to less bagging of yard wastes in rural areas as opposed to urban areas.

Unmanaged Solid Waste

The unmanaged solid waste in Fentress County was estimated based on the Tennessee Planning Office Report, 1991, that states rural areas have a generation rate of 4.54 lbs per day per person and the following formula. An estimated Twenty five percent of the county's total waste is uncollected.

$$\text{MSW} = \frac{1991 \text{ population} \times \text{per capita generated} \times 365 \text{ days/year}}{2,000 \text{ lbs/ton}}$$

$$\text{MSW} = \frac{16,628 \times 4.54 \times 365}{2,000} = 13,777 \text{ tons potential waste generation}$$

Factors which contribute to unmanaged waste:

Burying

It is legal for landowners to bury waste on their property if the following conditions are met:

- (1) If it has been generated on the property by the property owner
- (2) If it is non-hazardous household waste
- (3) Does not create a nuisance or health hazard

Burning

Burning permits must be obtained for legal burning, however some citizens burn trash illegally.

Unauthorized Dumps

The number of illegal dumps known to the local government is 25

- (1) Wilder Road; mile marker 7 and 8, 6 sites
- (2) Wilder Road; past bridge, 4 sites
- (3) Little Crab area; Hinds Cemetery Rd, 1 site, Campbell Rd, 1 site Glenoby Rd; 4 sites
- (4) Model Farm Road; 1 site
- (5) Jamestown; 2 sites
- (6) Squirrel Flat Road; 1 site
- (7) Angel Mountain Road; 1 site
- (8) Zenith; 1 site
- (9) Levi Hull Road; 1 site
- (10) Flat Rock Road; 1 site
- (11) Round Mountain Road; 1 site

Unauthorized dumps consist primarily composed of furniture, tires, appliances, junk cars and household garbage. The county receives a litter grant from the State of Tennessee which funds a two person clean up crew. The Director is responsible for litter education for the public and in the school system. The program also utilizes prisoners to clean up roadside litter. All litter is disposed of as waste to a landfill and counted in the total waste disposal figures.

B. Waste Collection and Transportation Systems

Fentress County with a population of 14,669 and 5,511 households is provided collection service by the county government. One municipality, Allardt, provides door to door collection services within the city limits. Door to door collection, commercial collection, convenience centers and green box system are four types of collection services available.

Door to Door Collection

Door to door collection is provided by the City of Allardt to residents inside the city limits. A F600 truck runs one route, once a week to eighty households. The solid waste collected is transported six miles to the county transfer station for compaction. The waste is transported thirty miles to the Scott County Landfill. Annual operating cost of collection was \$8,000 in the 1991 Fiscal Year.

Convenience Centers

The county operates four convenience centers, a fifth is under construction and three are in the planning stages for additional centers. Each center contains a 40-yard compactor container for municipal solid waste and a 30-yard open top container for white goods.

- (1) Located on 127 South, 6 miles from Jamestown, is an operating convenience center and transfer station. The center, serving an estimated ten percent of the population, is open 6:00 a.m. to 5:00 p.m. each day except Sunday.
- (2) A convenience center located in the City of Jamestown on Fairgrounds road serves an estimated twenty five percent of the population, is open six days a week, 7:00 a.m. to 6:00 p.m. The center is open on Sundays from 8:00 a.m. to 4:00 p.m.
- (3) Two centers are located on 127 south and serve the communities of Clarkrange, Grimsley, Banner Roslin, and Martha Washington. The centers are open 10:00 a.m. to 6:00 p.m. six days a week on alternate days, closed on Sundays. An estimated twenty five percent of the county's population will be serviced by the two centers.

Note: All centers were opened in the 1994 fiscal year and data is incomplete as to how much solid waste each center will handle, however the above percentages have been projected.

The sites are attended during operating hours and locked when closed. The centers accept recyclables (recyclables are also being collected on a temporary basis at three grocery stores). Plans will include locating recycling containers at all convenience centers and discontinuing the grocery store sites. Center attendants will be educating the public on recycling and other solid waste programs. The estimated average distance to the centers for a household is 6 miles. The convenience centers do not accept commercial waste for disposal. All collected trash is placed in compaction style boxes and transported to the Scott County Landfill 30 miles away. The 1994 fiscal year operating costs of the convenience centers and transfer station is estimated at \$44,638.00.

Green Box System

The county provides dumpsters (six cubic yard) throughout the county to serve each community currently unserved by a convenience center. Residential waste collected for landfill disposal was 5,991 tons in calendar 1993. The green dumpsters serve approximately forty percent of the county. Approximately 2,396 tons will be collected at the green box sites in calendar 1994 (See table for location of green boxes). The green boxes are emptied on a schedule. Eighty percent of the dumpsters are emptied two or three times per week and twenty percent are attended to daily. All waste collected at the sites is transported a maximum of 13.75 miles to the transfer station located on 127 South for transport thirty miles to the Scott County Landfill.

The sites experience problems of overloading, litter on site, salvage, scavenging and fires. The service area is approximately 348 square miles and 40% (5,880 persons) of the population is served by green box dumpsters. The average distance to a green box for any household does not exceed 6 miles. The annual cost of operating this system was \$55,000 in the 1991 fiscal year. The county is planning to phase out all green dumpster sites by July 1995. The plan includes constructing four additional convenience centers to serve the communities now served by the green box system.

Community	Green Dumpster Sites	Containers	Tons/Yr
East Fentress	Highway 52 East	5	445
	Fire Hall	1	89
East Jamestown	Sharp Community/Hwy 154	2	178
Mount Helen	Mount Helen Road	3	267
Pall Mall	Huff's Grocery	1	89
	Reeds Creek	1	89
	Upchurch Garage	2	178
	Wolf	4	356
Stockton	Stockton Road	3	267
West Fentress	Boatland Road	1	89
	Manson	4	356
Total		27	2,403*

*Rounded

Commercial Collection

The county offers collection service to commercial industry and local business by the green box system. There is a commercial collection fee of \$12.50 per tip. Currently the county is serving approximately 80 commercial accounts.

C. Source Reduction and Recycling Systems

Fentress County began a full scale recycling program in 1992. Also in operation are cardboard recycling programs at the following businesses: Wal Mart, Swaffords & Sons Grocery, Food Lion, Save-a-Lot, Burnett's Superette and Food City. A private aluminum buyer from Scott County purchases aluminum from the public once a week. The Fentress County Office of Solid Waste administrates the county recycling program. The Director handles all administration related to waste reduction.

The collection system consists of drop off centers constructed of plywood or PVC piping frames with nets located at three area grocery stores and three class I convenience centers. The drop off centers located at grocery stores are accessible 24 hours a day, 7 days a week. The class I convenience centers have specific publicized hours. Glass, plastic jugs and food/drink cans are accepted at the centers. The collection centers were established in February of 1992 and in the calendar year of 1993 the program collected 459 tons and private industry recycled 624 tons of old corrugated containers bringing the total reduction to 10% of the total municipal solid waste in Fentress County. The following table illustrates the breakdown of recyclables collected in 1993.

1993 Calendar Year Recycled (in tons)	
Corrugated Containers (private)	624.0
Corrugated Containers (county)	248.1
Newsprint	9.7
White Paper	2.5
Aluminum	1.8
Steel Food Cans	5.4
Plastics	8.1
Glass	10.0
Appliances/scrap	96.4
Total	1083

All materials are processed at the recycling facility before transport and sale. Corrugated containers, newsprint, white paper, plastic jugs and tin cans are baled. Glass bottles and aluminum cans are crushed. Used appliances are flattened into an open top container by use of a track loader. A vehicle runs two routes to collect recyclables. One route primarily services businesses and industry by collection of corrugated containers. A second route services the drop off centers. The program currently serves approximately fifty businesses one to three times per week depending on volume. The convenience centers are serviced and maintained one to three times per week on an as needed basis. The recycling center accepts all recyclables. The public is assisted with unloading at the recycling center.

Drop off centers

- Clarkrange Convenience Center
- Grimsley Convenience Center
- Jamestown Convenience Center
- Transfer Station
- Recycling Center
- Food City
- Save-A-lot:
- Burnette's Superette

(see systems map for locations)

Education Efforts

Education programs are underway in both recycling and general sanitation education. The programs include: Weekly newspaper articles, yearly visits to county schools, public service announcements on local radio, educational videos to local cablevision (see samples of materials used).

Plans for the recycling program include locating recycling containers (roll off, trailer) at each existing convenience center (collecting MSW) as well as those planned for communities. The containers will have designed compartments for each material collected. The center attendants will receive training about recyclable materials which they will pass on to the public when municipal solid waste is brought to the center. Four sites are in operation in Clarkrange, Grimsley and Jamestown. Planned sites will serve the areas of North Fentress (now under construction) East and West Fentress.

D. Waste Processing, Composting, and Waste-To-Energy/Incineration Systems

Composting

A small scale composting operation consisting of chipping/shredding yard waste (tree limbs, leaves, grass clippings) into mulch for resale to the public is under discussion. Options include contracting the shredding of these wastes or purchasing a small scale chipper/shredder. The composting operation will be located at the landfill site or the property adjacent to the transfer station.

The Soil Conservation Service in coordination with the UT Agricultural Extension Service has set up a number of composting operations to handle dead poultry generated in the county by local growers. The current reduction rate is tons is estimated at 24 tons per year. This system is further elaborated on in Chapter VIII, Composting, Solid Waste Processing, Waste -To-Energy and Incineration Capacity.

E. Disposal Facilities—Landfill and Balefills

Fentress County is now in process of closing a Class I Landfill (Permit Number SNL 25-103-0112). The following is an implementation schedule.

Post Closure Plan

- The region plans to begin post closure operations on the old landfill in the 1995 Fiscal Year
- The estimated FY 1995 cost for post closure is \$177,000.00. This money has been budgeted and is now cash reserve.
- Three monitoring wells are planned for installation this year
- Before January 1, 1995 water testing will be underway
- Bidding the contract for final cover is scheduled in the fall 1994
- The site will be monitored for thirty years as required by law

Fentress County is now conducting a feasibility study for the operation and construction of class I and IV landfill facilities. Chapter VIII elaborates on the progress to date on the study.

See the systems map inserted at the end of this document for locations of facilities.

F. Costs of the Current System

Costs incurred by the county for all solid waste services, facilities, and programs in fiscal year 1994 are in the six following pages.

Note: The data available for the expenses incurred in the fiscal year 1993 were insufficient to give a detailed report, therefore, fiscal year 1994 was used as a base year and is most accurate for planning purposes.

BUDGET

Expenditures by Fund Type				
		Current Est	Notes	
Solid Waste Management		161,687.50	Includes Debt Service	
Sanitation Education/Information		7,216.80		
Waste Collection		302,006.34	Convenience Centers Plus Collection	
Waste Disposal		531,542.54	Recycle/Landfill/Disposal Fee Scott	
Totals		1,002,453.18		
Solid Waste Management			Fund 55710	
		Appropriation	Gen Rev	Grant Rev
104	Assistant	4,800.00	0.00	4,800.00
105	Supervisor/Director	25,000.00	25,000.00	0.00
161	Secretary	13,203.84	11,503.84	1,700.00
201	Social Security	3,302.69	3,302.69	0.00
	Workers Compensation	180.30	180.30	0.00
	Federal Unemployment	126.00	126.00	0.00
	State Unemployment	126.00	126.00	0.00
301	Accounting Services	3,000.00	3,000.00	0.00
307	Communication	800.00	1,000.00	0.00
308	Consultants	2,000.00	0.00	2,000.00
318	Debt Collection Services	0.00	0.00	0.00
320	Dues/Memberships	0.00	0.00	0.00
331	Legal Services	200.00	200.00	0.00
332	Legal Notices Recording	0.00	0.00	0.00
348	Postal Charges	500.00	500.00	0.00
349	Printing, Stationary, Forms	150.00	150.00	0.00
351	Rentals	3,150.00	3,150.00	0.00
355	Travel	2,000.00	1,000.00	1,000.00
399	Other Contracted Services	0.00	0.00	0.00
435	Office Supplies	600.00	600.00	0.00
452	Utilities	2,000.00	2,000.00	0.00
499	Other Supplies/Materials	7,485.04	1,985.04	5,500.00
509	Refunds	0.00	0.00	0.00
	Sub-Total	68,623.88	53,823.88	15,000.00
510	Trustee's Commission*	10,000.00	10,000.00	0.00
602	Principal on Notes	58,063.63	58,063.63	0.00
602	Interest on Notes	25,000.00	25,000.00	0.00
	Sub-Total	93,063.63	93,063.63	0.00
Total Solid Waste Management		161,687.50	146,887.50	15,000.00

Sanitation Education and Information				Fund 55720
		Appropriation	Gen Rev	Grant Rev
105	Supervisor/Director	4,800.00	2,400.00	2,400.00
201	Social Security	368.64	368.64	0.00
	Workers Compensation	20.16	20.16	0.00
	Federal Unemployment	14.00	14.00	0.00
	State Unemployment	14.00	14.00	0.00
302	Advertising	2,000.00	211.00	1,789.00
Total	Sanitation Education/Info	7,216.80	3,027.80	4,189.00
Waste Collection (Summary Account)				Fund 55730
Waste Pickup				Fund 55731
141	Foreman	5,421.65	5,421.65	0.00
147	Truck Drivers	51,864.07	51,864.07	0.00
149	Laborers	24,700.00	10,678.00	14,022.00
201	Social Security	6,296.50	6,296.50	0.00
	Workers Compensation	6,718.51	6,718.51	0.00
	Federal Unemployment	294.00	294.00	0.00
	State Unemployment	294.00	294.00	0.00
338	Maintenance/Repair Vehicles	5,600.00	5,600.00	0.00
340	Medical/ Dental	400.00	400.00	0.00
355	Travel	250.00	250.00	0.00
361	Permits	150.00	150.00	0.00
425	Fuel	16,800.00	14,800.00	2,000.00
499	Other Supplies/Materials	500.00	500.00	0.00
511	Vehicle/Equipment Insurance	6,349.00	6,349.00	0.00
Sub Total - Waste Pickup		125,637.74	109,615.74	16,022.00
Convenience Centers				Fund 55732
164	Attendants	34,948.20	33,508.20	1,440.00
201	Social Security	2,684.02	2,684.02	0.00
	Workers Compensation	3,023.02	3,023.02	0.00
	Federal Unemployment	392.00	392.00	0.00
	State Unemployment	392.00	392.00	0.00
307	Communication	1,429.36	1,429.36	0.00
336	Maintenance/Repair Equipment	500.00	500.00	0.00
340	Medical/Dental Services	1,200.00	1,200.00	0.00
452	Utilities	1,500.00	1,500.00	0.00
499	Other Supplies/Materials	300.00	300.00	0.00
724	Site Development	130,000.00	0.00	50,000.00
Sub Total - Convenience Centers		176,368.60	44,928.60	51,440.00
Total Waste Collection		302,006.34	154,544.34	67,462.00

Waste Disposal (Summary Account)				
Recycling Center			Fund 55751	
		Appropriation	Gen Rev	Grant Rev
105	Supervisor/Director	9,600.00	9,600.00	0.00
149	Laborers	27,150.00	27,150.00	0.00
164	Attendants	14,950.00	14,950.00	0.00
201	Social Security	4,269.22	4,269.22	0.00
	Workers Compensation	4,018.35	4,018.35	0.00
	Federal Unemployment	252.00	252.00	0.00
	State Unemployment	252.00	252.00	0.00
307	Communication	600.00	600.00	0.00
335	Maintenance/Repair Building	1,000.00	1,000.00	0.00
336	Maintenance/Repair Equipment	2,000.00	2,000.00	0.00
340	Medical/Dental Services	800.00	800.00	0.00
355	Travel	800.00	800.00	0.00
425	Fuel	1,200.00	1,200.00	0.00
452	Utilities	1,500.00	1,500.00	0.00
499	Other Supplies/Materials	2,800.00	2,800.00	0.00
733	Equipment Purchases	15,000.00	3,500.00	11,500.00
Sub-Total Recycling Center		86,191.57	74,691.57	11,500.00
Landfill Operation & Maintenance			Fund 55754	
141	Foreman	5,421.65	5,421.65	0.00
144	Heavy Equipment Operator	10,843.30	10,843.30	0.00
201	Social Security	1,249.15	1,249.15	0.00
	Workers Compensation	1,332.87	1,332.87	0.00
	Federal Unemployment	42.00	42.00	0.00
	State Unemployment	42.00	42.00	0.00
307	Communication	480.00	480.00	0.00
309	Contracts w/Governments	187,200.00	187,200.00	0.00
321	Engineering Services	5,000.00	5,000.00	0.00
336	Maintenance/Repair Equipment	70,000.00	70,000.00	0.00
340	Medical/Dental Services	200.00	200.00	0.00
351	Rentals (Equipment)	2,640.00	2,640.00	0.00
420	Fertilizer, Lime, & Etc.	1,500.00	1,500.00	0.00
425	Fuel	3,000.00	3,000.00	0.00
452	Utilities	1,000.00	1,000.00	0.00
499	Other Supplies/Equipment	2,000.00	2,000.00	0.00
511	Vehicle/Equipment Insurance	400.00	400.00	0.00
715	Land	129,000.00	0.00	0.00
724	Site Development	24,000.00	0.00	0.00
Sub-Total Landfill Operation/Maintenance		445,350.97	292,350.97	0.00
Total Waste Disposal		531,542.54	367,042.54	11,500.00

G. Revenues

Total Revenue Yields in the fiscal year 1994 are shown in the table below. Note: Data available for the revenues received in the fiscal year 1993 were insufficient to give a detailed report, therefore, fiscal year 1994 was used as a base year and is most accurate for planning purposes.

Receipts and Fund Balances for the Fiscal Year Ending June 30, 1994		
	Current Est	Notes
BFY (07/01/93) Balances	265,881.30	Actual
Local Taxes	620,000.00	One Cent Sales Tax
Commercial Collection Fees	80,000.00	\$12.50 Per Tip
Sale of Recycled Material	18,000.00	Primarily Paper and Scrap
Planning Grant	15,000.00	State of Tennessee
Litter Grant	20,211.00	State of Tennessee
Recycling Grant	10,000.00	Tennessee Valley Authority
Convenience Center Grant	50,000.00	State of Tennessee
JTPA Older Workers Program	1,440.00	(2 at \$5/hr at 24 hr/wk for 6 wks)
Loans	150,000.00	For Land Purchase
Total Funds available	1,230,532.30	
Total Estimated Expenditures	(1,002,453.18)	
Est June 30, 94 Reserves	228,079.12	

Beginning of the Year Balance

All revenue received by solid waste in excess of expenditures is automatically credited to the solid waste reserve and is retained in cash or cash equivalent instruments. This means that certain funds (loans, reimbursable grants, etc.) may show up as reserve in the following year as they have been obligated but not expended. This reserve on the 1st of July, 1993 (FY 1994) was \$265,881.30.

Local Taxes

In 1992 Fentress County citizens by vote passed a one cent sales tax to fund a solid waste program for Fentress County. One half of all local sales tax goes to the school system by law. A reimbursement from property tax has been established so that solid waste may receive the full benefit of the one cent sales tax.

Commercial Collection Fees

Fentress County services an estimated 74 commercial accounts. In 1993 a fee schedule of \$12.50 per 6 cubic yard dumpster emptied was established.

Sale of Recycled Material

Shown below are the totals of revenue from the sale of recycled material in fiscal year 1993.

Note: Does not reflect materials collected and not sold.

Revenues From the Sale of Recycled Material	
Corrugated Containers	\$9,249.54
Computer Printout	\$374.80
Old Newsprint	\$170.25
White Ledger	\$135.60
Plastic Bottles (PET, HDPE)	\$438.94
Aluminum Food Cans	\$1,024.15
Steel Food Cans	\$501.28
Scrap Metal	\$8,583.48
Glass Containers	\$196.37
Total	\$20,674.41

Planning Grant

From the State of Tennessee, this grant paid in part staff time for preparing the ten year plan and a computer and printer.

Litter Grant

From the State of Tennessee, This grant paid in part the salary of staff to conduct education programs, two staff persons for litter pick up and litter advertising.

Recycling Grant

Received from the Tennessee Valley Authority, this grant was used to purchase a collection vehicle and glass crusher for the recycling program.

Convenience Center Grant

Received from the State of Tennessee, this grant will be used as reimbursement for convenience center already constructed in the region.

JTPA Older Workers Program

This money was received through a work program coordinated with the Upper Cumberland Human Resources Agency. All funds received were used for staffing convenience centers.

Loans

\$150,000.00 loan received from Fentress County Bank for the purchase of land to construct a class I and IV landfill.

H. Public Information and Education Programs

Fentress County employs a full time Solid Waste Director who oversees the recycling program and sanitation education. In the 1993 Fiscal Year the following educational activities were implemented;

Industry and Business

- Offer as an incentive, door to door collection of recyclables at no charge to business or industry
- Expansion of the door to door collection service of recyclables and focus on educating businesses on the benefits of recycling

Student Education

In the 1993 school year, the Office of Solid Waste coordinated visits to each elementary school classroom through the local Agricultural Extension Office and the 4-H Clubs. Every elementary classroom in the county received educational instruction on solid waste management. The instruction consists of:

(1) Recycling

- A. Slide presentations
- B. Hands on demonstrations
- C. Hands on examples of recycled products

(2) Litter Prevention

- A. Costs of clean up
- B. Community pride issues

(3) Convenience Centers

- A. Locations
- B. What the centers accept
- C. Slide presentation

(4) Landfill

- A. Environmental impact
- B. Costs
- C. Physical make up of a class I landfill

Public Officials

- As a part of the information process, county commissioners now receive copies of all minutes from the solid waste board meetings.
- Public officials are notified of special solid waste events and encouraged to attend and participate.

General Public

An information and education effort that involves the public is now underway in Fentress County and consists of the following:

- A weekly information and education column in local newspaper
- Public service announcements concerning recycling and litter
- Video education on the local cable channel
- News releases of the opening of new facilities
- Announcements of any upcoming events
- Live radio coverage of solid waste events
- Newspaper releases and articles on solid waste events
- Convenience center attendants are educating and encouraging the public to recycle
- Meetings with civic clubs and organizations

I. Problem Wastes (See Chapter X)

J. System Map for Base Year (1993) (The composite map is inserted at the end of this document)

K. Strengths and Weaknesses of Existing System

Policy Statement according to the Act:

(a) It is declared to be the policy of the State of Tennessee, in furtherance of its responsibility to protect the public health, safety, and well-being of its citizens and to protect and enhance the quality of its environment, to institute and maintain a comprehensive, integrated, state-wide program for solid waste management which will assure that solid waste facilities, whether publicly or privately operated, do not adversely affect the health, safety, and well-being of the public and do not degrade the quality of the environment by reason of their location, design, method of operation, or utilization of the resources contained in solid waste.

(b) It is further declared to be the policy of the State of Tennessee to educate and encourage generators and handlers of solid waste to reduce and minimize to the greatest extent possible the amount of solid waste which requires collection, treatment, incineration or disposal through source reduction, reuse, composting, recycling, and other methods.

(c) It is further declared to be the policy of the State of Tennessee to promote markets for and engage in the purchase of goods made from recovered materials and goods which are recyclable.

Solid waste collection in the region consists of a network of class I convenience centers which serves the general public. Four centers are now in operation (a fifth is under construction) and have replaced the green box system in those communities. Three additional centers are planned and will replace the remaining green boxes in the region. The convenience centers meet all criteria required by state laws and regulations. The centers are kept clean, free of any litter and are of no risk to the surrounding environment. Additionally, the boxes which contain the household waste are of compactor style and have no exposed waste.

The remaining green box sites in the region are serviced by a two litter pick up crew and truck. Every effort is made to keep litter from the area surrounding dumpsters. These sites have problems of overloading, litter blowing onto neighboring properties, scavenging and fires in spite of efforts to minimize problems. In the fall of 1995 the remaining green boxes will be removed from public use and every citizen in the county will be serviced by a class I convenience center.

Commercial collection consists of approximately eighty accounts serviced by the green box system by use of a front load dump truck. The commercial accounts own their dumpsters and are responsible for the cleanliness of the area surrounding the dumpsters.

All waste collected is transported 35 miles to the Scott County Landfill for disposal in a class I landfill.

Solid waste education programs have been enacted to promote reducing, reusing and recycling as well as purchasing of recycled and recyclable materials. These programs have focused primarily on students and the general public. Plans include an educational program which will address these issues in the industry and business sectors.

Integration of the solid waste system began in 1992 and is a continuing process. Integration is scheduled to be complete by July 1996. The following elements are lacking for the completion of the integration process.

- (1) A complete network of convenience centers to service each area of the county with significant population
- (2) Permanent roll off containers to collect recyclables
- (3) Proposed class I and IV landfills and facilities if feasible
- (4) Special wastes programs

Strengths of the Existing and Planned System

- (1) Four permitted, (a fifth under construction and three planned) operational class I convenience centers which meet the collection requirement for households
- (2) Fully operational recycling program that is scheduled to be expanded in 1996
- (3) An established commercial collection system
- (4) Two recently purchased vehicles to handle both private and commercial collection
- (5) An established education program with planned expansions in industry and business
- (6) Planned collection of all problem wastes on or before state mandates
- (7) Integrated facilities planned at new landfill site, (tire storage, office complex, etc)
- (8) A disposal contract secured through 1996
- (9) A one cent sales tax to fund solid waste program

Weaknesses of the Existing and Planned System

- (1) Three additional class I convenience centers needed to serve east and west areas of county
- (2) Permanent recycling collection containers needed
- (3) Final decision of waste disposal option still pending

CHAPTER II: FORMS

A. Regional Summary: Waste Stream Characterization

1. Table II-1... Quantity of Solid Waste Received for Disposal/Incineration in Calendar 1991

Tons Disposed	Population	Waste Disposed/Per Capita
10,386	14,546	0.71

2. Table II-2... Origin of Regional Solid Waste in 1991

Residential	Institutional Commercial	Non-Hazardous Industrial
6,543	2,493	1,350

3. Table II-3... Acceptance of Certain Categories of Solid Waste for Disposal

Yard Waste		Sewage Sludge		Constr. Demo		Tires		White Goods	
Y/N	Qty	Y/N	Qty	Y/N	Qty	Y/N	Qty	Y/N	Qty
Y	789	N	-	Y	363	Y	166	N	120

4. Table II-4... Description of the Waste Stream by Materials

Waste Category	National %	Calculated Regional Tons
Paper & Paperboard	40.0	4154
Glass	7.0	727
Ferrous Metals	6.5	675
Aluminum	1.4	145
Other Non-Ferrous Metals	0.60	62
Plastics	8.0	831
Rubber and Leather	2.5	260
Textiles*	12.1	1,257
Wood	3.6	374
Food Waste	7.4	789
Yard Wastes**	7.6	789
Misc. Inorganic. Waste	1.5	156
Other	1.7	177
Total	99.9	10,376

* Textiles are estimated at 12.1 percent due to garment industry.

** Yard Wastes are estimated at 7.6 percent due to less bagging of yard wastes in rural areas.

5. Table II-5... Unmanaged Waste

Potential Waste 1991 Generation	Actual Waste Disposed 1991/TPY	Unmanaged Waste 1991/TPY	Percent of Potential Total
13,777	10,386	3,391	25

REGIONAL SUMMARY: FACILITIES

6. Table II-6... Operating and Planned Composting Facilities in the Region*

Facility location	Tons waste Processed/Yr	Materials
Gouldstown Road	1,516	Yard Waste

* Please note that a final decision concerning this option has not been reached.

7. Municipal Solid Waste Incinerators or Waste-to-Energy Facilities in the Region
Not Applicable

8. Table II-8... Existing Municipal Solid Waste Landfills in the Region
Not Applicable

9. Table II-9... Existing Landfills Expected to Close Before 2003

Location	Current Use (Tons/Day)	Current Annual Use (Tons/Year)	Anticipated Date of Closure
Airport Rd.	0	0	In Process

10. Table II-10... Planned Expansions and Planned New Facilities Which Will Operate for Ten Years or More

Proposed Facility Expan/New	Location	Available Capacity	Permitted Capacity Sought	Design Rate/Waste (tpd)	Potential Expansion Y/N
New	Gouldstown Rd	1996	6 acres	30	Yes

11. Table II-11... Total Existing and Planned Capacity in the Region at the Close of the Next Ten Years

Year	Existing	TONS Planned	Total
FY 1993	0	0	0
FY 1994	0	0	0
FY 1995	0	166,920	166,920
FY 1996	166,920	0	0
FY 1997	153,307	0	0
FY 1998	139,433	0	0
FY 1999	130,765	0	0
FY 2000	121,820	0	0
FY 2001	112,589	0	0
FY 2002	103,063	0	0
FY 2003	93,232	0	0

Note: This table is based on the initial study conducted by Draper Aden Associates on the feasibility of a class I landfill. A final decision has not been reached on this option. However, for planning purposes the projections of the worse case scenario on the lifetime analysis of the landfill were used.

CHAPTER III GROWTH TRENDS, WASTE PROJECTIONS AND PRELIMINARY SYSTEM STRUCTURE

Statutory Requirements:

"(E)ach plan submitted by a municipal solid waste region shall include...anticipated growth trends for the next ten-(10) year period...and anticipated waste capacity needs." [T.C.A. Section 68-31-815(b)(4) and (5)]

A. Growth Trends and Waste Projections

Total quantity of solid waste collected for disposal in the 1993 calendar year was 9,703 tons (actual weight at the disposal site, includes that portion recycled). The projected population for calendar 1993 was 14,546 yielding a per capita waste to .67 tons per person. See table III-2 through III-6 for population changes, imports or exports of waste, economic factors and waste reduction affecting solid waste generation.

B. Multi County Region-Not Applicable

C. Preliminary System Design

The planned elements of an integrated waste management system include:

- (1) A network of convenience centers
- (2) A commercial collection
- (3) A county owned and operated landfill if feasible or hauling wastes out of county to another disposal facility
- (4) A waste reduction and recycling program
- (5) A public education program

Convenience Centers

Four class I permitted convenience centers are in operation throughout the region and a fifth is near completion. Plans to locate additional centers are underway to serve all population centers in the county. All residential waste (63% of the total waste disposed) will be collected at convenience centers. Certain class IV wastes will be sent directly to the class IV facility if and when such facility is operational. A class IV facility is an essential element of a completed system

Note: Prior to choosing convenience centers as the collection standard, an analysis of door to door collection revealed that due to the widespread rural population and inadequate road systems (no shoulder to accommodate collection trucks) a door to door collection would be logistically difficult if not impossible to implement.

Commercial Collection

Commercial collection by use of a front end loader is in place and will continue. A commercial disposal fee (\$12.50 per six cubic yard) is charged to users of the service which is currently estimated at eighty accounts. A front end loader was purchased in 1992 to handle commercial waste. This collection system will handle all commercial and non-hazardous industrial waste (37% of the total waste disposed).

Landfill

Fentress County has purchased a tract of land for development of a class I (handling 75% of the total waste) and class IV landfill (handling 7% of the total waste). The permitting process is underway and all reports are positive to date for construction of a Class I landfill. The first tract of developed space is expected to last longer than ten years at the current solid waste generation rate in Fentress County. Detailed financial studies are underway and will permit the determination of fiscal feasibility. In the event that a landfill is not feasible for Fentress County, the option of hauling out of county to another facility is being studied. At such time as adequate information is available, a final decision on disposal of the region's waste will be made.

Waste Reduction and Recycling

Fentress County began a recycling program in 1992. The current recycling effort is handling ten percent of the total waste generated. A goal to meet the 25% reduction mandate has been set for Fentress County. Plans to locate recycling containers at convenience centers as they are constructed are underway. New recycling facilities at the landfill site or expansion of existing facilities are planned as well as purchase of equipment to handle increased volume of recyclables. An implementation schedule is further discussed in Chapters IV and VI.

Educational Program

Current education efforts are underway by use of local media and through the school system. Future efforts will include a recycling brochure for county wide distribution, increased media education (PSA's and articles) and a curriculum for the school system that will encompass all solid waste issues.

Note: All of the above elements of the system are discussed in detail in their respective chapters.

D. Evaluation Criteria for the Region

Certain solid waste management system options have been evaluated prior to the writing of the plan due to immediate collection and disposal needs. In the next seven chapters a continuation of the evaluation and a final selection of system elements and configurations will be completed.

The evaluation criteria includes:

- (1) Institutional compatibility
- (2) Number and size of facilities
- (3) Evaluation of markets for recovered materials
- (4) Capital and operation costs
- (5) Unit costs
- (6) Siting and regulatory requirements
- (7) Environmental impacts
- (8) Public acceptance

CHAPTER III: FORMS

1. Table III-1 ... Summary of Annual Per Capita Solid Waste Generation Rates for each County in the Region.

Total Waste Disposed in 1993	Projected Population	Annual Per Capita/Generation Tons/Person/Year
9,703	14,546	0.67

2. Table III-2 ... Quantity of Solid Waste (tons) Requiring Disposal (Generation) in the Region in Each Projected Year, Adjusted for Population Changes

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
9,718	9,692	9,664	9,637	9,610	9,584	9,557	9,517	9,478	9,438

3. **Table III-3 ... Quantity of Solid Waste Requiring Disposal (in tons) Adjusted for Population Growth and Economic Growth**

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
10,029	10,350	10,681	11,023	11,376	11,740	12,115	12,503	12,903	13,316

4. **Table III-4 ... Quantity of Waste Requiring Disposal (in tons) Adjusted for Population Changes, Economic Growth, and Source Reduction, Recycling and Industrial Process Change**

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
7,572	7,762	8,011	8,262	8,532	8,805	9,086	9,377	9,677	9,987

5. **Optional Table, Not Applicable**

6. **Optional Table, Not Applicable**

7. **Table III-7 ... Annual Projections of Solid Waste Requiring Disposal Adjusted for Waste Imports or Exports (in tons/year)**

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Exports	7,684	7,104	7,762	8,011	0	0	0	0	0	0	0
Imports	0	0	0	0	10,995	0	0	0	0	0	0
Local Dis.	936	468	0	0	8,262	8,532	8,805	9,086	9,377	9,677	9,987
Total	8,620	7,572	7,762	8,011	19,217	8,532	8,805	9,086	9,377	9,677	9,987

WASTE REDUCTION

CHAPTER IV

WASTE COLLECTION AND
TRANSPORTATION

CHAPTER V

CHAPTER IV WASTE REDUCTION

Statutory Requirements:

"The goal of the state is to reduce by twenty-five percent (25%) the amount of solid waste disposed of at municipal solid waste disposal facilities and incinerators, measured on paper capita basis within Tennessee by weight, by December 31, 1995." [T.C.A. Section 68-31-861(a)]

"...[E]ach plan submitted by a municipal solid waste region shall include... a description of waste reduction activities designed to attain the twenty-five percent (25%) reduction by Section 25(a) [T.C.A. Section 68-31-861 (a)]; and Section 14(b)10. T.C.A. Section 68-31-815(b) (10)].

"A county or region shall have the flexibility to design its own plan and methods which take into account local condition for attaining the waste reduction goal set by this section. This plan shall be included as a part of the county or regional plan required by Section 13 of this act." [T.C.A. Section 68-31-861 (f)]

A. Establishing a Base Year Quantity

Fentress County applied for and received a waiver of per capita waste rate. The regional per capita waste was .66 tons. After application and review of request waiver, the disposal rate for 1989 base year was changed to .71 tons (adjustment to base year data approval letter from the Director of Solid Waste Assistance is in Appendix B).

Population Data to Support Change of Base Year Population Projection to Determine Per Capita Waste Rate
In table I below the 1980 census was 14,826 and the 1989 projection derived from the 1980 census was 15,750. According to this data an increase of 924 persons over the next nine years was projected. In the table increments of 103 persons for six years were given and increments of 102 persons for three years were given to illustrate population growth as projected by the 1980 census.

Table I

1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
14,826	14,929	15,032	15,134	15,237	15,340	15,442	15,545	15,648	15,750

In table II the 1980 census is shown at 14,826 and the 1990 census at 14,669 which indicates an actual decrease of 157 persons over the 10-year period indicated. Shown are decrements of fifteen persons for three years and sixteen persons for seven years which gives a 1989 population of 14,684.

Table II

1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
14,826	14,811	14,795	14,799	14,763	14,748	14,732	14,716	14,700	14,684	14,669

Using the base rate generation of 10,440 tons and a more accurate population for 1989 of 14,684 the per capita rate is .71 tons.

B. Calculate a Target 1995 Waste Reduction per Capita Disposal Role

The average per capita rate of .71 X .25 reduction goal equals an .18 target 1995 per capita reduction. The 1995 population according the census is projected at 14,565 X .18 per capita rate equals 2,622 tons as the target reduction for 1995.

C. How the Region Will Meet the Statewide Waste Reduction Goal

The twenty five percent waste reduction goal for the region is planned in three areas:

- (1) Recycling (15%)
- (2) Class IV diversion (7%)
- (3) Source reduction (3%)

The short term goal is to reach the twenty five percent waste reduction six months before the December 1995 deadline. The long term reduction goal is maintaining the twenty five percent reduction rate through a continuing education program in recycling and source reduction. Table IV-2 illustrates the quantitative allocation of the 1995 waste reduction target by material and economic sector. Table IV-3 and 4 illustrates the quantitative allocation of recyclables by material and the class IV reduction. Both reduction methods are outlined for the next ten years.

Means to accomplish the 25% waste reduction goal will include continuing and expanding the recycling effort, constructing a class IV landfill, source reduction and industrial process change. Education programs are already underway and will continue to focus primarily in the school system, industry, business and the local citizen by media and distribution of educational materials.

Recycling

The recycling program consists of a materials processing facility, three drop off centers constructed of PVC piping and netting located at area grocery stores and three class I convenience centers accepting household waste and recyclables. The recycling program is in a transition phase due to the implementation of class I convenience centers and construction of a new processing facility at the property purchased for a class I, III and IV landfill or an expansion of the existing facility. Each area in the county will receive service through a class I center that accepts household wastes and recyclables. Plans are underway to design and purchase permanent recycling collection bins to replace the temporary bins in use. The new bins will work in coordination with the total solid waste collection system. At each site an operator will be actively educating the public about recycling and waste reduction. Other education programs already underway include visits to local schools, distribution of educational materials, media public service announcements and industrial education.

Plans to expand existing facilities or construct facilities at the new landfill property are under study. The design capacity rate will be eight to ten tons per day to allow for future increase of the collection of recyclable material. Plans to shred certain yard wastes (tree limbs) are under discussion. Options include contracting out shredding or purchasing a small shredder to handle this waste. Mulch from the operation would be sold for a nominal fee. Due to Fentress County being 100% rural, percentages of yard wastes are lower than the national average and reduction from this source is expected to be 3 percent. Illustrated in Tables IV, 3 and 4 are the percentages and tons of recyclables to be collected and processed over the next ten years.

Class IV Wastes

The feasibility of a class IV landfill is underway. Construction of such facility if determined feasible is expected to be complete by July of 1996. Class IV wastes that will be diverted to a class IV landfill include all demolition/construction wastes. Waste reduction from this source is expected to be 7 percent of the total solid waste generation. Estimated reductions for the next ten years are illustrated in tables IV, 5 and 6.

Industrial Process Change and Source Reduction

Education programs will focus on waste reduction by source and industry. Incentives to reduce waste in the workplace will include free collection of all recyclable waste, a tip fee for class I waste and public recognition of waste reduction efforts. Source reduction will be encouraged through educational efforts. Industrial process change and source reduction in 1996 is estimated at 5 percent. See tables IV, 7 and 8 for reductions over the next ten years.

There are no legal regulatory bans existing or planned for specific wastes, however, certain waste will be diverted to other classes of disposal. Certain yard wastes are planned for shredding and will be sold as mulch. All class IV wastes will be diverted to a class IV facility. The quantity of materials that will be diverted can be found in the tables at the end of the chapter.

Incentives

- (1) Collection of recyclables for industry is at no charge
- (2) Tip fees for class IV wastes will be considerably lower than class I wastes

D. Staffing, Budgeting and Funding

Ten Year Staff Plan

Three areas of waste reduction will require staff for administration and labor. The following staff will not require an increase over the next ten years, therefore the staff now employed will remain constant for the next ten years.

- I Recycling
 - (a) Director
 - (b) Facility Manager
 - (c) Three member crew for collection and processing
- II Class IV
 - (a) Landfill Operator/Manager
- III Source Reduction
 - (a) Sanitation Education and Information Director

Note: The Solid Waste Director now on staff serves as both the Recycling Director and the Sanitation Information and Education Director.

Ten Year Budget

Refer to the comprehensive ten year budget in chapter XI which addresses recycling, sanitation education and information and disposal.

Ten Year Funding Plan

In 1992 Fentress County citizens by vote passed a one cent sales tax to fund a solid waste program for Fentress County. One half of all local sales tax goes to the school system by law. A reimbursement from property tax has been established so that solid waste may receive the full benefit of the one cent sales tax. Secondly, the sale of recycled material estimated at \$20,000.00 for fiscal year 1995 will be utilized for the continuation of the program. Recycling and education grants from the State of Tennessee and the Tennessee Valley Authority have been used to purchase recycling equipment and education. Such grants may occur again but will not be depended upon for operation of the programs or for purchase of needed equipment to successfully operate the programs. The ten year estimated funds available to handle solid waste programs can be found in chapter XI of the plan.

E. Implementation Schedule

The following schedule outlines what progress has been made in waste reduction and when the final implementation will be in place.

	1993	1994	1995-1996	1996-2003
Recycling Percentage	10	11	15	15
Class IV Percent Reduction	0	0	3	7
Percent Source Reduction	0	1	3	3

F. Responsibility and Progress of the Program

The Fentress County Municipal Solid Waste Region Board is responsible for plan implementation. The county will be providing service for the two municipalities in the region, the City of Allardt and the City of Jamestown.

G. Data Collection

In order to assess progress of reduction goals as outlined in the plan, all recyclable materials are weighed before shipment to markets and end users. Additionally, when revenues are received, buyers attach weigh tickets which are also utilized for assessment of waste reduction. All class IV wastes diverted to class IV will be weighed before disposal.

To determine the amount of waste reduced through industrial process change and source reduction all waste disposed in class I landfill will be weighed, added to class IV and recycled amounts and subtracted from the estimated generation rate. This method will be additionally used for general information in waste reduction trends.

CHAPTER IV: FORMS

1. Table IV-1... Population and Quantities of Waste Disposal at Municipal Solid Waste Disposal Facilities and Incineration, in 1989

Population	1991 Total Waste Disposed (tons)
14,699	10,440

2. Table IV-2... Waste Reductions by Material and Sector

Material	%	% Residential	% Commercial	% Institutional	% Industrial
Paper	8	20	40	10	30
Glass	1	100	0	0	0
Wht Gds	2	100	0	0	0
Al/Steel	.5	100	0	0	0
Plastics	.5	100	0	0	0
Yd Wste	3	70	10	10	10
Class IV	7	60	0	0	40
Ind/Source	3	25	25	25	25

3. **Table IV-3... Percentages and Tons of Recyclables Collected Over the Next Ten Years**

	1994		1995		1996		1997		1998	
	%	Tons								
Paper	8	802	8	828	8	854	8	882	8	910
Glass	1	50	1	104	1	107	1	110	1	114
Wht Gds	1	170	2	207	2	214	2	220	2	228
Al/Steel	1	50	1	52	0.5	53	0.5	55	0.5	57
Plastics	0	25	1	52	0.5	53	0.5	55	0.5	57
Yd Wste	0	0	3	311	3	320	3	331	3	341
Total	11	1,097	15	1,554	15	1,601	15	1,653	15	1,707
	1999		2000		2001		2002		2003	
	%	Tons								
Paper	8	939	8	969	8	1,000	8	1,024	8	1,065
Glass	1	117	1	121	1	125	1	129	1	133
Wht Gds	2	235	2	242	2	250	2	258	2	266
Al/Steel	0.5	59	0.5	61	0.5	63	0.5	65	0.5	67
Plastics	0.5	59	0.5	61	0.5	63	0.5	65	0.5	67
Yd Wste	3	352	3	363	3	375	3	387	3	399
Total	15	1,761	15	1,756	15	1,876	15	1,928	15	1,997

4. **Table IV-4... Percentages and Tons of Class IV Waste Reduction**

1994		1995		1996		1997		1998	
%	Tons								
0	0	7	725	7	748	7	772	7	796
1999		2000		2001		2002		2003	
7	822	7	848	7	875	7	903	7	932

5. **Table IV-5... Percentages and Tons of Industrial Process Change and Source Reduction**

1994		1995		1996		1997		1998	
%	Tons								
1	100	3	311	3	320	3	331	3	341
1999		2000		2001		2002		2003	
3	352	3	363	3	375	3	387	3	400

6. **Table IV-6... Estimated Quantities of Waste Removed or Diverted From the Waste Stream for the Next Ten Years**

Year	Recovered & Recycled	Class IV Reduction	Source Reduction	Economic Incentives	Total
1992	237	0	0	\$8,532.00	237
1993	1,083	0	0	\$38,988.00	1,083
1994	1,097	0	301	\$50,328.00	1,398
1995	1,554	725	311	\$67,140.00	2,590
Subtotal	3,971	1,427	612	\$164,988.00	6,010
1996	1,601	748	320	\$69,156.00	2,669
1997	1,653	772	331	\$71,424.00	2,756
1998	1,707	796	341	\$73,728.00	2,844
1999	1,761	822	352	\$76,068.00	2,935
2000	1,817	848	363	\$78,480.00	3,028
2001	1,876	875	375	\$81,036.00	3,126
2002	1,928	903	387	\$83,340.00	3,218
2003	1,997	932	400	\$86,292.00	3,329
Total	18,311	8,123	3,481	\$784,512.00	29,915

Note: An estimate of \$36 per ton has been used to figure the economic incentive for recovered and recycled (total tons include reduction from private corrugated recycling programs). This figure is an average of one year's recyclables collected and sold. The average was figured prior to a substantial increase in the price of corrugated. However, that the price is now stabilizing and the prior year's average has been used for more accurate planning purposes. An estimate of \$36 per ton has been used to figure the economic incentives for the source reduction based on the current commercial per ton disposal rate for a class I facility. Current data for economic incentives for class IV reduction is insufficient for the region at this time, therefore this is not included in the total incentive amount.

WASTE COLLECTION AND TRANSPORTATION

CHAPTER V

CHAPTER V WASTE COLLECTION AND TRANSPORTATION

Statutory Requirements:

"... [Each plan submitted by a municipal solid waste region shall include...collection capability, including data detailing the different types of collection systems and the population and areas which receive and do not receive such services..." [T.C.A. 68-31-815(b)(2)(B)]; and "...as part of the local plan required by Section 13 of the Act, each county or multi-county municipal solid waste disposal region shall submit a plan for the adequate provision of collection services to the State Planning Office. Such plan shall identify unmet needs and shall be updated annually." [T.C.A. 68-31-851(b)]

A. Existing Collection System

Fentress County's service area in square miles is 498.7. According to the Solid Waste Management rules (Chapter 1200-1-7-10) the total service area divided by 180 square miles yields the minimum requirement. The minimum number of class I convenience centers required in Fentress County is three. Four Class I Convenience Centers have been constructed, permitted and are in operation (a fifth is under construction).

The collection system is in transition due to the phasing out of the green box system to a network of class I convenience centers to accept household waste and recyclables. Areas of the county based on number of communities and population will be serviced by a class I convenience center. When an area's need is met by a class I center, the green box system is discontinued.

- (1) Located on 127 South, 6 miles from Jamestown, is an operating convenience center and transfer station. The center is open 6:00 a.m. to 5:00 p.m. each day except Sunday. The center contains one 40-yard compactor container for municipal solid waste and a 30 yard open top container for white goods. The center serves an estimated ten percent of the population.
- (2) Another center is located in the City of Jamestown on Fairgrounds road. The center serves an estimated twenty five percent of the population. The center is open six days a week, 10:00 a.m. to 6:00 p.m.
- (3) Two convenience centers located on 127 south serve the south end communities of Clarkrange, Grimsley, Banner Roslin, and Martha Washington.. The centers are open 10:00 a.m. to 6:00 p.m. six days a week on alternate days, closed on Sundays. The centers serve an estimated thirty percent of the county's population.
- (4) A convenience center to serve the north section of the county is located in the community of Pall Mall, (scheduled for completion in November, 1994).

All centers operate with roll off compactor containers for household wastes and an open top container for white goods and scrap metals (recyclables are also collected at the sites). The sites are attended during operating hours and locked up when closed. Center attendants are educating the public on recycling and other solid waste programs. The estimated average distance to the centers for a household is five to seven miles. The convenience centers do not accept commercial waste for disposal. All collected trash is compacted and transported to the Scott County Landfill, thirty miles away for disposal in a class I landfill.

These centers were opened in the 1993 FY and early FY 1994 and data is incomplete on the amount of municipal solid waste disposed. Estimates are projected in percentages as shown above. Fiscal Year 1993 operating costs of the convenience centers and transfer station is estimated at \$44,638.

B. Regional Needs

In order to provide adequate service to the region's rural and widespread population, three planned Class I Convenience Centers will service the areas unserved by the five centers in operation. Areas of West Fentress, East Fentress (which includes the City of Allardt, the communities of Shirley, Armathwaite, Mount Helen, Stockton) and Northeast Fentress (Pine Haven and Sharp communities) will be served by the three planned

facilities. Until such time as the needs can be met, these areas will continue to receive services by the green box system.

C. How the Region Will Meet Identified Needs

The collection goal is to provide service for each community unserved by a class I convenience center. Two unserved areas have been identified; East Fentress and West Fentress. Locating sites for West Fentress, East Fentress (City of Allardt, Armathwaite and Shirley communities) and Northeast Fentress (Sharp and Pine Haven communities) are underway. Construction on these sites is scheduled to begin in the spring of 1995. The sites will be in operation by fall of 1995. The total solid waste collection system of eight Class I Convenience Centers is scheduled to be in operation on or before November 1, 1995. The centers will accept all household wastes, recyclables and white goods. A collection vehicle (roll off) has already been purchased to collect waste from the centers and is in use at the four completed class I centers. All waste collected is compacted on site and transported to the Scott County Landfill for disposal.

D. Staffing and Training Needs

Staffing needs for the next ten years include personnel to operate convenience centers and collection vehicles of roll off and front load types. Four convenience centers are in operation (a fifth will be operational in late November) and are staffed with trained personnel (eight employees). Four additional personnel will be trained upon completion of the planned facilities. New personnel will be trained at the existing facilities by the operators. All convenience center staff (twelve employees) will be hired and trained on or before November of 1995. Collection staff will consist of a roll off truck operator, a front loader truck (for commercial collection system already in place) operator and a trained driver to collect recyclables. Drivers are now operating the vehicles that will be used for the collection of solid waste for the next ten years. Training is underway for relief drivers in the case of vacations or absenteeism.

E. Ten Year Budget

Refer to the comprehensive ten year budget in chapter XI which addresses capital and annual operating costs of the collection system.

F. Ten Year Timetable

1993:

- (1) One cent sales tax in effect to fund all solid waste programs for the next ten years
- (2) Roll off truck for household waste collection at convenience centers purchased and in operation
- (3) Front loader truck for commercial collection purchased and in operation

1994:

- (1) Five fully staffed and equipped convenience centers in operation
- (2) Commercial collection fee established of \$12.50 per six cubic yard container
- (3) All waste collected (including recyclables) weighed at site of disposal/sale
- (4) Recycling collection vehicle purchased and in operation

1995:

- (1) Eight fully staffed and equipped convenience centers in operation
- (2) Plan update to assess the collection and transportation of solid waste

1996 - July 2003:

- (1) Plan updates to assess needs of equipment replacement and maintenance, any necessary changes in collection and transportation methods and needs for refinancing or extending services.

G. Multi County Region, Not Applicable

H. Map

The base year planning map is inserted at the end of this document.

RECYCLING

CHAPTER VI

CHAPTER VI RECYCLING

Statutory Requirements:

"... (Each plan submitted by a municipal solid waste region shall include...a recycling plan, including a description of current public and private recycling efforts and planned efforts to enhance recycling within the county or region." [T.C.A. 68-31-815(b)(7)]

and "Effective January 1, 1996, each county shall provide...one (1) or more sites for collection of recyclable materials..." [T.C.A. 68-31-863(a)]

"Each person or entity operating a collection site for recyclable materials shall annually report the quantities of recyclable materials collected, by type of material, to the region which shall then report...[this information]...to the State Planning Office." [T.C.A. 68-31-863(b)]

A. Regional Needs

Fentress County needs expansion of the current recycling system to accomplish a goal of fifteen percent waste reduction from this category. Expansion of existing facilities or construction of new facilities are being studied for feasibility and practicality. Additionally, plans for the expansion of collection are underway so each community will receive collection service of recyclables. The region also plans to purchase permanent roll off collection containers to replace the temporary bins that have been constructed to collect recyclables. In 1993, an estimated ten percent of the waste was diverted by recycling. An estimated eight percent came from private recycling efforts (corrugated programs) and corrugated collected at industry by the county sponsored program. With only two percent reduction coming from households, the additional five percent needed to reach the goal will be expected from this source.

B. Actions to be Taken to Expand and Enhance Recycling

(1) Fentress County has set a regional goal of fifteen percent waste reduction through a recycling program. The objective is to expand and increase service primarily to households, which now recycle only two percent of the waste collected for recycling. An additional eight percent is being collected and recycled through industry. Plans to continue and expand commercial recycling are also underway, however, the primary objective is to increase recycling in the home.

(2) The service area for collection of recyclables is in transition due to the siting of class I convenience centers. South Fentress, North Fentress (scheduled for completion in November 1994) and the City of Jamestown are served by class I convenience centers that accept household wastes and recyclables. Unserved areas of the region include West Fentress and East Fentress. Siting of centers to serve each of these communities are underway.

Three additional sites will be located to serve West Fentress, plus the East Fentress communities of Allardt, Armathwaite, Shirley, Mount Helen and Sharp. Three convenience centers now in operation and three area grocery stores are accepting recyclables.

The program serves sixty commercial businesses by a door to door collection of cardboard. This program will continue and expand as new businesses are located in the county or the expansion of service is needed. Additional materials such as cardboard slicks, plastic wrap, scrap textiles will be incorporated in the program based on ability to handle and process the waste, market availability and economic incentives.

(3) The scope of the program is ; Collection of recyclables through class I convenience centers, a door to door collection of commercial recyclables, and a central processing facility. An estimated 5,511 households and 80 industries will be serviced by the program. A portion of that goal has already been reached by the

current program. Fifteen percent of the total solid waste generated will be diverted through the recycling effort. Eight percent of the total recycled will be through industry and seven percent by household. The service area will geographically consist of the City of Jamestown, the City of Allardt, and the communities of Pall Mall, Pine Haven, Sharp, West Fentress, Clarkrange, Martha Washington, Grimsley, Banner Roslin, Tinch Town, Stockton, Armathwaite, Mount Helen and Shirley. The total service area encompasses 498.7 square miles. Shown in the chart below are the existing, planned and the final number of collection sites.

(4) Collection Locations, Existing, Planned and Final

Existing	Planned	Final
Burnett's Superette	Pall Mall	Clarkrange
Food City	Sharp Place	Grimsley
Save -A- Lot	East Fentress	Jamestown
Clarkrange Convenience Center	West Fentress	Pall Mall
Grimsley Convenience Center		Woodyard (South Jamestown)
Jamestown Convenience Center		Sharp Place
Woodyard Convenience Center/Transfer Station		East Fentress
		West Fentress

(5) All materials will be transported to the recycling facility for processing and shipment to market. The recycling facility is located on 127 south at the former class I landfill site scheduled for post closure in July of 1994. Plans to expand this recycling facility or locate new facilities at the proposed landfill are being discussed for feasibility and practicality.

(6) Fentress County recycling program generates adequate quantities of the following materials to market singularly: scrap metals, corrugated containers and steel food cans. Fentress County is now participating in cooperative marketing with the City of Cookeville/Putnam County recycling program. There is no written contract between the two regions and participation is voluntary. Two types of marketing systems have been utilized between the two regions;

(a) A broker will send a truck to both counties to pick up two partial loads to make a complete load.

(b) If option (a) cannot be exercised Fentress County will transport 12 bales of materials to Putnam County where the load is shipped out with Putnam County's recyclables.

Secondly, Fentress County has joined Middle Tennessee Recyclers Marketing Cooperative. The cooperative will be working toward ways to enhance marketing for rural counties in Middle Tennessee. A facility located in Jackson County to make products from post consumer plastics is one such project in which the cooperative is involved.

(7) The Director of Solid Waste is responsible for the marketing of materials. This staff person will be responsible for interacting with the Office of Cooperative Marketing. The region has already been in contact with the Office of Cooperative Marketing and has received information on markets for scrap textiles and specifications for recycling equipment. Plans are to continue contact with the office in order to assure the best markets available are being utilized by the region.

(8) The Office of Solid Waste whenever feasible will purchase paper products with recycled content and office supplies manufactured with recycled plastic. A recent search for recycled paper has proved successful and the ten year plan will be printed on paper with recycled content for wide distribution to the public. Other office items with recycled content (primarily plastic and paper) have been purchased.

Secondly, the region is involved with a project with the Middle Tennessee Recyclers Marketing Cooperative which is promoting the manufacturing of products from post consumer plastics.

(9) Education programs will address three areas of the population; students, industry and local citizens. Education in the school system will consist of a solid waste office personnel visiting each classroom in the school system (this program was enacted in the 1993 school year). Grades kindergarten through third are given a hands on demonstration of what, how and where to recycle. Grades fourth through eighth are visited in coordination with the local University of Tennessee Agricultural Extension Service, 4-H groups and given slide shows to demonstrate what, how and where to recycle. Slide shows will also be utilized for grades nine through Twelve. An Environmental Protection Agency curriculum, Lets Reduce and Recycle will be widely distributed to teachers for use in the classroom. Plans to publish a comprehensive brochure to include recycling and other solid waste programs are underway. Until such time as the printing and wide distribution of the brochure, black and white publications will be utilized. Plans to educate industry will include working closely with managers to educate businesses to reduce waste through recycling or reusing waste materials. Educating the public sector includes utilizing all sources of media, wide distribution of brochures and convenience center operators encouraging and educating the public. In addition to the UT Agricultural Extension Service, the Soil Conservation Service also plans to work in coordination with the solid waste program to educate students about environmental and conservation issues.

(10) Recycling staff includes the Solid Waste Director to oversee education, design, marketing and administrative duties (grant writing, reports, budgeting). A supervisor to oversee the collection, processing, loading of recyclables at the facility. An additional three to five employees (contingent on progress of the program) will collect and process all materials.

(11 and 12) The ten year budget and funding for recycling is in chapter XI of the plan.

(13) All recyclables are weighed after processing (into bales or crushed into boxes) for purposes of resale and reduction. Upon receipt of payment, a log of materials, their weights and revenues are kept for purposes of reporting to the state and for evaluating progress in waste reduction.

C. Public and Private Sector Coordination

Contact with each private company that has a recycling program has been made by the staff of the solid waste region. A system to inventory what the private companies are recycling has been established. Market information is also shared, however certain local stores (chain stores) have no control over the markets used for their recycled materials.

Secondly, the ten year education plan includes meeting with the private businesses to help establish recycling programs for the portion of waste which may be diverted from the waste stream. A corrugated recycling program has been established with over eighty businesses throughout the region. The collection of recyclables is free to all businesses who wish to participate in the program.

D. Ten Year Implementation Schedule

The following schedule outlines the progress made and the implementation schedule for the next ten years.

1993: In 1993 the recycling program along with the private sector programs reduced the waste going into landfill by ten percent. The following outlines the programs accomplishments during that year.

1993:

- (1) Five drop off centers located at area grocery stores
- (2) A commercial collection of cardboard established
- (3) An education program in the schools
- (4) An education and information column and PSA's

1994:

- (1) Goal of eleven percent reduction met
- (2) Four convenience centers equipped with recycling collection bins
- (3) Expanded commercial collection of cardboard
- (4) Increased education in the schools (three lesson plans on solid waste)
- (5) Commercial education program established
- (6) Long term collection vehicle for industrial recyclables purchased

1995:

- (1) Goal of fifteen percent reduction met
- (2) Permanent roll off collection containers located at eight convenience centers (a collection vehicle to handle all roll off's was purchased in 1992)
- (3) All education programs completely established and in place for continuation over the next ten years

1996:

- (1) Evaluation and expansion of existing facilities or construction of new facilities if deemed necessary

1997-2003:

- (1) Continuation of the established programs and evaluation of expansions as needed and implemented

E. Responsibility

The Fentress County Solid Waste Region Board has been given the responsibility of implementing the region's ten year plan including all aspects of the recycling program. Being a single county region, the Fentress County Government is responsible for the implementation of the recycling operations in the region.

F. See Base Map for Facility and Collection Locations

COMPOSTING,
SOLID WASTE PROCESSING,
WASTE-TO-ENERGY AND
INCINERATION CAPACITY

CHAPTER VII

**CHAPTER VII
COMPOSTING, SOLID WASTE PROCESSING,
WASTE-TO-ENERGY AND INCINERATION CAPACITY**

Statutory Requirements:

Neither composting facilities, solid waste processing facilities, or incineration facilities are included in the statutory list of planning requirements. However, because these facilities are viable options which may be considered in designing an integrated, regional waste management system, the Director of the State Planning Office has determined that this information is relevant, and should be included in the regional plan.

"...[E]ach plan submitted by a municipal solid waste region shall include...any other information as the Director of the State Planning Office may deem relevant..." [T.C.A. 68-31-815(b)(15)]

A. Quantitative Need for Composting

Fentress County consists of one hundred percent rural population. Yard wastes have been determined to be considerably lower than the national average due to less bagging of yard wastes in rural areas as opposed to urban areas. Fentress County's estimated yard waste is 7.6 percent or 789 tons in calendar 1993 year and largely consists of tree limbs and branches and warrants a small scale composting in the form of mulching.

B. Steps the region will take to meet needs

(1) A goal to handle a portion of yard wastes (primarily tree limbs and branches) by a small scale composting operation consisting of shredding or chipping has been set for the region.

(2) Plans to locate and permit a site to shred tree limbs and branches is planned in late 1994 or early 1995. The initial site will be on property adjacent to the transfer station on 127 south, 6 miles south of Jamestown the county seat. If the landfill option is chosen as the method of disposal for the region, the composting operation will be moved to the tract of property purchased for the landfill facilities. This property is 2.8 miles west of Jamestown on Gouldstown Road.

(3) An estimated 4 percent of the total estimated 7.6 percent of yard wastes is planned for composting. Two methods of handling the wastes are:

- (a) by contract
- or
- (b) by purchasing a small shredder

(4) The region plans to apply for a permit by rule for the siting of the facility which will comply with all siting requirements as set forth in the law.

(5) The mulch will be stored on an appropriate surface which meets with the State's criteria for a processing facility of this type.

(6) An estimated 4% of the total 7.6% will be composted. The resulting mulch would be sold to the public for a nominal fee or to a greenhouse or landscaping company.

(7) Solid waste personnel already on staff will handle all labor associated with the operation. At such time as the state requires certification and training of personnel, the region will comply with those requirements.

(8) Capital costs for the set up of this site are expected to be nominal and operational funds will most likely be used for any expenses incurred. If the region should elect to purchase their own equipment and if the landfill is feasible, funding will be generated from the capital obtained to construct such facilities.

(9) Operating costs will be absorbed by the current system.

(10) Due to the fact that the same staff will be handling this operation, integration with other system elements is assured, specifically waste reduction. This is one of the major advantages of a small system.

C. Implementation

Fentress County plans to request a permit by rule in 1995 for the composting operation to be located at property adjacent to the transfer station. If the region reaches a conclusion to construct a landfill, the composting operation will be moved to that site. The composting operation is scheduled to begin no later than the spring of 1995.

D. Multi County Region, Not Applicable

E. See Systems Map for Locations of the Transfer Station and the Proposed Landfill Site.

Poultry Composting

A poultry composting program (for dead birds produced during the grow outs) is now operation. This is a cooperative effort between the Soil Conservation District, the UT Agricultural Extension Service and the Agricultural Soil Conservation Service.

Number of Growers

The region has 56 poultry growers with a combined total of 127 houses. Each house contains 20,000 birds at maturity. The rate of grow outs is 6 per year with the birds weighing 4 and 1/2 pounds at maturity. The mortality rate is estimated at 4% with the average bird at death weighing 2 and 1/2 pounds.

Number of Participants

The current number of composting facilities under operation is 4. Under construction are 4 more houses and a waiting list of 10 growers who plan to participate in the program.

Operation

The composting operation consists of a building which contains composting bays and a space for storage of raw liter and the composted materials. The system works through a process of natural heating of liter and dead birds piled in layers in the bays and turned until composted into usable spread.

Current Reduction Rate and Projection

No. of Houses	Grow outs per year	Mortality Rate in numbers	Mortality Rate in Pounds	Tons Composted
4 in 1994	24	19,200	48,000	24
8 in 1995-1996	48	38,400	96,000	48
18 beyond 1997*	108	86,400	216,000	108
* completion dates unknown				

DISPOSAL CAPACITY

CHAPTER VIII

CHAPTER VIII DISPOSAL CAPACITY

Statutory Requirement::

"Each plan submitted by a municipal solid waste region shall include [a] planned capacity assurance, including description of planned or needed facilities". [T.C.A. 68-31-815(b)(6)]

Fentress County is now in process of studying the feasibility of a Class I Landfill. The region is also studying other disposal options available in the event that a Class I Landfill is not feasible.

All disposal options under study include:

- I. County owned and operated class I and class IV landfills
- II. County owned and operated class I and class IV landfills which would operate as regional facilities
- III. The county hauling class I wastes to a class I landfill and a county owned and operated class IV landfill
- IV. The county hauling all wastes to appropriate disposal facilities
- V. Contract the hauling and disposal of all class I wastes and a county owned and operated class IV landfill
- VI. Contract the hauling and disposal of all waste generated in the county

In 1992, the citizens of Fentress County passed by referendum vote a one cent sales tax to fund the collection and disposal of solid waste. In chapter XI, a ten year revenue projection and a ten year budget fully addresses the monies available and the costs associated with the disposal of solid waste in the region.

Draper Aden and Associates is now in process of compiling a final study of the feasibility of class I and IV landfills for the region. The study will also include analysis of other options available to the region regarding the transport and disposal of municipal solid waste.

A. Total Regional Demand and Planned Supply for Disposal

Quantity of Waste Requiring Disposal (in tons) Adjusted for Population Changes, Economic Growth, and Source Reduction, Recycling and Industrial Process Change

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
7,572	7,762	8,011	8,262	8,532	8,805	9,086	9,377	9,677	9,987

According to the study performed by Draper Aden, Associates, the proposed Fentress County Landfill will provide adequate supply of disposal capacity for the next ten years. The lifetime analysis of the proposed landfill as reported by the landfill study by Draper Aden, Associates is reprinted below.

Lifetime Analysis

The lifetime of the Class I Landfill is limited on this site by two factors. The first and foremost is the availability of good clay at the site. The second is the mining rubble which is about 30 feet deep across a large portion of the site.

As stated in the hydrogeological study, there are some excellent clays located beneath the site. However, these clays appear to be in the form of a lens which dissipates as you get farther from the area to be developed. Borings which were located away from this area showed no good clays. Although there may be sources of clay elsewhere on the site, it is assumed at present that this will limit the amount of landfill development the site is capable of supporting.

As stated in the hydrogeological report, the mining rubble on the site is holding water which is then pushing its way out through the hillsides in the form of wet weather springs. This sort of situation can be disastrous for a landfill if such water builds up behind a lined slope. In addition, it is not known what sort of structural stability this material has and if it could support a lined landfill. We have therefore assumed that a large cut will be made between the mining rubble and the landfill.

Both of these limiting factors affect Phase Two far more than Phase One.

The following numbers were based upon two years with 65 tons per day and 30 tons per day thereafter.

The worst case site lifetime analysis based upon the above factors was utilized for the preparation of this report. That breakdown is as follows:

Phase	Cell	Life Expectancy
1	1	2 years 1 Month
1	2	3 Years 4 Months
1	3	4 Years 1 Month
2	1	2 Years 8 Months
2	2	3 Years 4 Months
Total		15 Years 6 Months

If, however, additional clay is made available or found at other areas on the site and the mining rubble is deemed sufficiently stable for developing a landfill slope, the following would be the best case site lifetime analysis:

Phase	Cell	Life Estimate
1	1	2 Years 1 Month
1	2	3 Years 4 Months
1	3	4 Years 1 Month
1	4	3 Years 0 Months
2	1	2 Years 8 Months
2	1	3 Years 4 Months
2	1	8 Years 6 Months
2	1	8 Years 6 Months
Total		35 Years 6 Months

Projected Demand and Supply, and Identification of Potential Shortfalls or Surplus in Disposal Capacity

County: Fentress

Tons per Year

Year	Demand: Tons of Waste Requiring Disposal	Supply: Existing & Planned Capacity	Surplus (+)	Shortfall (-)
1993	8,620	8,620	0	0
1994	7,572	7,572	0	0
1995	7,762	7,762	0	0
1996	8,011	166,920	158,909	0
1997	19,217*	158,909	139,692	0
1998	8,532	139,692	131,160	0
1999	8,805	131,160	122,074	0
2000	9,806	122,074	113,269	0
2001	9,377	113,269	103,892	0
2002	9,677	103,892	94,215	0
2003	9,987	94,215	84,228	0

* Fentress County has secured a contract with Scott County to dispose of waste through November of 1996. The year 1997 shows tonage on reciprocating agreement.

B. Excess Capacity

Fentress County has not directly addressed flow control, however the region plans to address this issue whenever the appropriate time arises.

C. Shortfall in Capacity

(1) Fentress County has met a short term goal of securing capacity of the solid waste generated from 1993 through 1996 by contract with the Scott County landfill. The region's long term goal is to open a class I landfill no later than October of 1996 or secure a long term contract to dispose waste in a class I facility.

(2) Multi County Region-Not Applicable

(3) The table above reflects the capacity the of the proposed landfill. Current estimates reflect a surplus at the end of the ten year planning period.

- (4) To date the following chart outlines the expenditures toward a class I landfill.

Date	Purpose	Expenditure
8-1-93	Land	150,000.00
8-12-93	TDEC Permit Fees	4,000.00
Garman Hydrogeological		
11-19-92	Surveying	1,447.61
1-8-93	Surveying	5,867.90
1-21-93	Surveying	9,215.32
02- 5-93	Surveying	5,568.68
03- 30-93	Surveying	6,781.44
04-30-93	Surveying	8,257.45
07-29-93	Shipping Samples	716.03
10-8-93	Report to State	383.25
Beaver Engineering		
11-19-92	Drilling	11,453.75
2-5-93	Drilling	24,241.03
5-13-93	Drilling	30,589.50
Elrod Dunson, Incorporated		
12-2 -93	Engineering	12,087.33
Hood Coal Corporation		
01-08-93	Clearing Sites	945.00
01-29-93	Clearing Sites	2,520.00
04-27-93	Clearing Site	4,635.00
Foy Survey		
10-29-92	Survey	250.00
11-05-92	Survey	450.00
12-01-92	Survey	8,725.00
12-18-92	Survey	3,690.00
02-05-93	Survey	2,130.00
03-04-93	Survey	915.00
04-08-93	Survey	2,255.00
Draper Aden & Associates		
4-28-94	Engineering	336.00
6-17-94	Engineering	9,182.60
McDonald Excavating		
7-29-93	Clearing	1,016.00

Estimated Costs of Developing the landfill according to the study conducted by Draper Aden Associates are outlined in the chart below.

Present Value Costs

The table below reflects costs based on the 1994 dollar:

Year	Total	Year	Total
1995	71,205	2003	613,227
1996	582,790	2004	595,632
1997	623,580	2005	907,277
1998	723,601	2006	884,430
1999	700,578	2007	853,750
2000	678,652	2008	648,028
2001	624,626	2009	628,605
2002	611,430	2010	610,106

(5) Financing

The region recognizes that solid waste must be disposed of in a permitted facility that meets the Subtitle D regulations as set forth in the act and further recognizes the immense cost associated with this disposal.

At this time the region is in the final phase of landfill testing to determine if the previous cells tested may be enlarged to extend the life of the landfill and the amount of years for long term financing. This final phase will be completed in November of 1995 and will allow the region to make a final determination of the costs associated with the construction of a class I landfill. The region will elect to utilize long term financing in the form of loans for the capital expenses associated with the construction of the landfill. The one cent sales tax passed in 1992 will be utilized for the operations portion of the landfill. Commercial tipping fees will also be utilized. Any grants available will be applied for and used when applicable but will not be depended on for a source of capital or operation funds.

(6) Staff and Training

The region has on staff a trained landfill operator. At such time as the State of Tennessee develops training and certification requirements the region plans to comply with those requirements.

(7) Ten Year Budget

A ten year operation and maintenance budget by year is included in the cost figure above in the study conducted by Draper Aden. NOTE: a ten year budget by line item will be completed and will be in Chapter XI under budgets.

(8) Fentress County citizens by referendum vote passed a one cent sales tax to fund the collection and disposal of solid waste. In chapter XI, a complete ten year revenue projection has been made.

(9) In the event that a class I landfill and facilities are constructed, integration of the following elements will occur:

- (a) Construction of tire storage facility on property adjacent to the landfill
- (b) Composting operations located on property adjacent to the landfill
- (c) Construction of new recycling facilities
- (d) Construction of offices and other solid waste facilities deemed necessary

D. Implementation Schedule

If the region elects to construct a class I landfill contingent upon funds and financing available, the construction will be completed no later than November of 1996 which will coincide with the provisions of the 1991 Solid Waste Management Act.

In November of 1994, the final report concerning the class I landfill will be available and a decision concerning the landfill can be made. If the region elects not to construct a class I landfill, immediate action will be taken to construct a transfer station and negotiations with the nearest region operating a class I landfill or plans to work with surrounding regions to construct a class I landfill will begin.

E. Responsibility

Fentress County adopted a single county region and it is the sole responsibility of the Fentress County Government to implement the class I landfill.

F. See map at the end of this document for locations or existing or planned landfill facilities

G. Formal contract between Scott and Fentress County can be found in Appendix D.

PUBLIC INFORMATION
AND EDUCATION

CHAPTER IX

CHAPTER IX PUBLIC INFORMATION AND EDUCATION

Statutory Requirement:

"...[E]ach plan submitted by a municipal solid waste region shall include...a description of education initiatives aimed at business, industry, schools, citizens, and others, which address recycling, waste reduction, collection, and other goals..." [T.C.A. Section 68-31-815(b)(11)]

"...Each solid waste regional plan shall include an education program to assist adults and children to understand solid waste issues, management option and costs, and the value of waste reduction and recycling."

A. Regional Needs

Fentress County needs a comprehensive solid waste education program that addresses each sector of the population. The program should address specific solid waste issues that include collection and disposal, waste reduction options and costs involved in establishing a solid waste system. Students, industry and business, public officials, civic clubs and organizations and the general public should be included in the education process.

B. Steps the region will take to meet needs

(1) The regional goal is to implement an education program that addresses all aspects of the solid waste system and reaches all sectors of the population by July of 1995. The objective of an education program is to encourage public participation in the waste reduction programs and gain control of unmanaged waste.

(2) Target groups and audiences including:

- (a) Students
- (b) Teachers
- (c) Industry and Business
- (d) Public Officials
- (e) Civic Clubs and Organization
- (f) Public

(3,4) Information and methods that will be utilized

- (a) Student Education

In the 1993 school year, the Office of Solid Waste coordinated visits to each elementary school classroom through the local Agricultural Extension Office and the 4-H Clubs. The instruction focused on recycling, litter prevention and general waste reduction strategies. Hands on demonstrations, slide shows and handouts were utilized in the instruction. The Office of Solid Waste plans to continue and expand these programs in coordination with agricultural extension office. Plans are to include the two local high schools and one private school for the next school year are underway. Classroom instruction through the use of slides and demonstrations will continue and increase in frequency. Contests, awards, earth day celebrations, floats from recycled materials and solid waste projects in science fairs will be implemented as a part of the education program.

The Soil Conservation Service is working in coordination with the solid waste program to provide an individual who will be visiting the schools with environment and conservation education through the Americore Program. This federal program is in the planning stages and will be implemented in 1995.

(b) Industry and Business

Meetings with management of local industry and business will be scheduled to focus on ways to recycle and reduce waste in the workplace. Since the start of the recycling program in 1992, over 70% of local industry and business participate in the paper recycling. A focus on continuing and expanding the recycling effort will be an important component of the education process. Additionally, ways to reduce or reuse waste will be the focus of the workshops and meetings in the workplace.

(c) Public Officials

The office of solid waste will conduct at least two annual meetings with public officials to discuss the solid waste programs in the county. The information provided will include costs, state requirements and progress of solid waste programs.

(d) Civic Clubs and Organizations

A comprehensive list of local organizations will be compiled by the office of solid waste for purposes of meeting with those groups to discuss solid waste programs. A goal to meet with each group annually to discuss solid waste issues and increase participation is scheduled to begin in the 1995 fiscal year.

(e) General Public

Sources of media that can be utilized for purposes of education include two local radio stations, local newspaper and the local cable channel. Media education will include news releases of the opening of new facilities, public service announcements and a weekly column updating the public on solid waste issues. Announcements of any upcoming events (household hazardous waste collection) will be announced and publicized through the media. A comprehensive brochure outlining all solid waste programs in the county will be published and widely distributed to the public via the class I convenience centers. The center attendants will be activity educating and encouraging the public concerning methods of waste reduction. Educational materials obtained by the office of solid waste will be placed in the public library for public use.

(5) Staff

The Solid Waste Board employs a Director to implement and coordinate the education effort. The Agricultural Extension Office will be assisting in the educating of students and the convenience center attendants will assist in educating the public. All other educational programs (civic organizations, industry, business) will be the responsibility of the waste reduction manager.

(6) Budget and Funding

Last year, funding for Sanitation Education and Information was \$7,361.28. A portion of this fund paid one quarter of the Waste Reduction Managers' (currently the Director handles this program) salary and a portion was used for advertising. A portion of the litter grant (\$1,789) from the State of Tennessee paid one eighth of the waste reduction managers' salary and litter prevention advertisement. The remaining funds came from the solid waste fund warrant. The education budget and funding sources for the next ten years is in chapter XI of the plan.

(7) Evaluation and Reporting

Each quarter, the Office of Solid Waste staff will compile a report of the education activities implemented during the quarter. This report will include a comprehensive list of the educational activities including; number of classrooms educated, number of public service announcements and articles, number of meetings with civic groups, public officials, industry and businesses. Grant monies awarded to the education effort and budget evaluation will be included in the report. The report will be presented to the Solid Waste Board at the regularly scheduled meeting the following month for review. Upon evaluation of the education program, the board will make an assessment of the programs progress and make the appropriate recommendations to the staff.

C. Ten Year Implementation Schedule

In the 1994 fiscal year, each elementary school classroom was visited by office of solid waste staff coordinated through the local agricultural extension service. The visits consisted of education focussed on recycling and litter prevention by use of slides and hands on demonstrations. Seventy percent of local industry and business participated in some form of paper recycling. Office personnel addressed civic groups at their request concerning the solid waste issues developing in the region. A local newspaper column was established to address solid waste issues. Local media publicized solid waste events and covered regularly scheduled meetings. These educational efforts will be expanded into the following implementation schedule.

Fiscal Year 1995

- (1) Student education programs established in all public and private schools coordinated through the agricultural extension office.
- (2) The education will consist of slides, hands on demonstrations and distribution of EPA curriculum for teaching staff to utilize throughout the year.
- (3) Contests, awards, earth day activities and increased participation in science projects relating to solid waste will be an integral part of the education process.
- (4) A list of local industries and businesses will be compiled and meetings with managers will be scheduled throughout the year. The objective of these meetings is to find ways to cut down on waste in the workplace that will benefit the industry and the solid waste program. A workshop session consisting of defining the type and amount of waste, alternative uses, recycling or reduction methods will be the key elements in the education process. An analysis of the amount of waste generated by each industry will determine priority status.
- (5) A list of civic groups will be compiled for purposes of setting up meetings to update the members on solid waste issues. Whenever possible, educational materials such as slides, demonstrations and hand outs will be utilized in the presentations.
- (6) An increased effort in media coverage specifically pertaining to waste reduction education will be initiated. Public Service Announcements will consist of information about recycling, litter prevention and other waste reduction methods. Other areas of increased media coverage will include recognition of students, industry and organizations who have made progress toward waste reduction. Photos and articles pertaining to solid waste facilities under construction and completion of projects will be published in the local newspaper. All education programs are to be implemented in the 1995 Fiscal Year.

1996-2003:

During this time period, the programs established in 1995 will continue and expand as new solid waste information is collected or as program needs change.

D. Responsibility

The Fentress County Solid Waste Board has been given full responsibility of implementing the region's ten year plan including all aspects of the education program. The Office of Solid Waste staff will be responsible for the implementation of the education program and coordinating efforts with the Agricultural Extension Office in student education.

PROBLEM WASTES

CHAPTER X

CHAPTER X PROBLEM WASTES

Statutory Requirements:

"...*(E)ach plan submitted by a municipal solid waste region shall include...a plan for the disposal of household hazardous waste: [T.C.A. 68-31-815(b)(8)]*

"...*Each county...shall provide a service site and shall advertise...the day(s) and hours and location where the household hazardous wastes will be collected...[and]...furnish at least one(1) person who will assist...[at the] collection unit.*" [T.C.A. 68-31-829].

"...*Effective January 1, 1995, no municipal solid waste disposal facility or incinerator shall accept for disposal any whole waste tires, lead acid batteries, or used oil...*" [T.C.A.68-31-866(a)]

"...*By January 1, 1995, each county shall provide at lease one (1) site to receive and store waste tires, used automotive oils and fluids, and lead-acid batteries...[and] shall sell and/or cause the transfer of the recyclable materials...to a commercial recycler or a regional receiving facility...*" [T.C.A. 68-31-866(b)]

"...*(E)ach plan submitted by a municipal solid waste region shall include...any other information as the Director of the State Planning Office may deem relevant to the implementation of the Act.*" [T.C.A. 68-31-815(b)(15)]

A. Household Hazardous Waste

(1) Regional Needs

The region has no method for collecting and disposing of household hazardous wastes. A household hazardous waste collection system that includes education, specific waste collection days that occur annually and a site to hold the collections will be needed to successfully implement a program to handle these wastes.

(2) Region Plan

(a) The regional plan is to conduct one or two household hazardous waste collection events annually in coordination with the state sponsored program and promote the events through the education plan already started in the county. The objective is to keep as much household hazardous waste from being dumped on the ground or unknowingly disposal of in sanitary landfills. Household hazardous waste education is scheduled to begin in the fall of 1994 and two collection events will be conducted (spring and fall) beginning in 1995.

(b) The Jamestown Convenience Center located on Fairgrounds Road has been chosen as a preliminary collection site. The convenience center is a permitted class I convenience center, is fenced, rocked, has telephone service, water, electricity and restroom facilities. The center is equipped with containers to accept any non-hazardous waste which may be brought to the collection event. The site will have a flat compacted rock working area of 100 feet by 100 feet. Solid waste office personnel will be on site to assist with the collection of household hazardous wastes.

(c) The comprehensive solid waste education program will include the proper disposal of household hazardous waste and promote the use of safe substitutes at home (safe substitutes have been published twice in the local paper). This education effort will be ongoing throughout the year at the schools and in the media. The collection days will be advertised in advance through all local media sources available including the local newspaper. The schools will also be notified of the collection days by the ongoing education program of the Agricultural Extension Service through the local 4-H clubs. Posters will be made (by students) and displayed at area businesses which will contain specific information about what waste will be accepted, date, time and place of the collection event. Other education materials will include a brochure

published by the office of solid waste outlining how to handle household hazardous wastes, safe substitutes and information about the county program to collect the wastes. Leaflets will cover topics such as nonpoint water pollution, options for paint disposal, pesticides, etc. The brochure and leaflets will be distributed to the schools, businesses and at the convenience centers.

(d) The office of Solid Waste will provide staff to assist with the collection of household hazardous wastes. The staff will be fulfill the required services as the state contract outlines and will additionally provide any services deemed necessary to conduct the collection activities. The civil defense director who handles the hazardous materials program in Fentress County will be notified of the collection event in the case of an emergency regarding spillage. The director has a plan to handle such emergency situations already in place in the event of an accidental spill.

(e) Administrative staff will collect the information necessary to train the staff that will be assisting in the collection of household hazardous wastes. Two staff will be trained for the purpose of collecting the wastes. The training will include; what household hazardous wastes are, which ones will be accepted, proper handling and disposal, what to do in the event of a spill and the State's policy guide.

(f) The solid waste program will not incur any additional costs from the household hazardous waste program. Administrative and convenience center staff already in position will handle all labor associated with the events and the education program already in place will include the household hazardous waste. Media coverage will be in the form of public service announcements for which there is no charge.

B. Waste Tires

(1) Current tire handling situation

In 1993 Fentress County collected waste tires at the class I landfill. Tires were stored in an open top roll off and transported to the Scott County Landfill for disposal one time every two weeks. Tires were also collected in the green dumpsters that are located in various communities in the county. There is not sufficient data to determine the number of tires collected, however estimates are 12,000 in the 1993 calendar year.

(a) Fentress County will be applying for the tire storage grant from the state and will construct a tire storage facility at the county owned property where the transfer station is now located. In the event that the region makes a final decision to construct class I and IV landfills, the remainder of the grant will be applied for and a storage facility will be located on this property. The site is located on Gouldstown Road two and an eighths mile from the courthouse.

Both sites will be of an area of 250 feet by 300 feet will be prepared for space for two sites. One site of 50 feet by 200 feet will be prepared leaving a large area for a second site if deemed necessary at a later time. The site will be graded, with an earthen berm and drain with a shut off valve. The site will store an estimated 13,750 tires of various sizes and will be covered with tarps to insure control of vectors. The site is scheduled to be complete by the end of 1994. With 5,511 households in the county and an estimated disposal rate of two tires per household, the site will serve as storage for 12,000 tires in 1995.

(b) The tire shredding operation will be adjacent to the storage facility but will occur at the same site.

(c) The shredding operation will occur two times annually. An estimated five to six thousand tires will be shredded at each visit. Staff will be on site during the shredding operation to provide labor. Staff will be trained on the policy guide of the State's contractor for shredding tires.

(d) A market search for shredded tires will be conducted to see if a recycling option is available. Both the sale of material or the donation of material will be considered to divert the tires from the landfill. If no viable option can be found, the shredded tires will be disposed of in the class III and IV landfill which is now in the permitting process.

(e) No additional labor costs will be incurred due to the tire collection and shredding operations. All labor associated with the tire program will be performed by landfill or recycling personnel already on staff.

(2) **Tire Sales in 1993**

According to the Department of Revenue from January 1, 1993 to January 1, 1994, 10,376 new tires were sold in Fentress County (this number based on tire pre-disposal fees). The proposed storage site will store up to 13,750 tires which will allow for storage of tires up to one year.

(3) A comprehensive solid waste education program is planned for Fentress County. In the plan, an increased awareness of the proper disposal of tires will be addressed. By the use of public information and education, the office of solid waste plans to develop a reporting system for use by the general public to locate tire sites that need to be inventoried. The reporting system will be established during the winter when foliage of leaves and weeds will not hide the sites from view. The office of solid waste staff will organize a schedule to inventory the tire piles. The use of landowners, students and solid waste staff may be utilized in the actual inventory events.

C. WASTE OIL

(1) Fentress County does not have a current program to address collection of waste oil. However, newspaper articles and public service announcements alert the public not to pour used oil onto the ground but to take their oil to a service station for recycling until the county program is underway.

(2) **Quantity of Oil Collection in 1993/Not Applicable**

(3) Although the private sector (service stations) are recycling used oil, the region needs a collection system to address do-it-yourselfers in the county. Plan are underway to contact these businesses and establish the amounts of waste oil they are recycling.

(4) The region has applied for a grant from the state for a container to collect used oil and a crusher for oil filters. The region plans to begin a used oil collection program before the end of 1994. The Jamestown Convenience Center on Fairgrounds road has been chosen for the collection site. The site is a permitted class I convenience center, is fenced, rocked, has telephone service, water, electricity and restroom facilities. The waste oil container will meet the state criteria as well as all aspects of the waste oil collection system. The waste oil collected will be recycled through a buyer until such time as the new landfill facilities are constructed when the oil will be used as a heat source.

D. LEAD ACID BATTERIES

(1) Fentress County does not have a program to dispose of used batteries.

(2) The public, through an information and education column, have been encouraged to take all used lead acid batteries back to retail stores when purchasing new batteries. The office of solid waste plans to conduct two annual household hazardous waste collections in 1995 that will accept the lead acid batteries for disposal. The event will be publicized and promoted in advance to insure participation.

(3) At such time as criteria are available to establish a collection site, the region will implement a collection program to handle this waste.

E. LITTER

Fentress County received \$20,211 in litter grant monies from the state in 1993. The litter grant funds were used to pay in part wages of one administrative personnel to handle litter education, and two employees to clean up litter from around the green dumpster sites and to drive a truck for collection of litter picked up by prisoner labor. A portion of the funds were used for media advertisement for the prevention of litter. All litter collected was taken to the transfer station for compaction and was transported to the Scott county landfill.

The litter grant money will continue to be used in part to fund office personnel to handle education. Litter education will be included in the comprehensive plan to educate schools, industry, business and the general public. Recycling and litter education will be integrated at the schools through the 4-H clubs. The soil Conservation Service will also be working in coordination with the solid waste office by the utilization of a person who will be provided through the Americore program to visit the schools to education about solid waste issues.

After the siting of class I convenience centers is complete, the two staff funded by the litter grant program will shift from the green dumpster sites to cleaning up illegal dumps throughout the county. Prison labor to clean up the roadsides will continue and a program to recycle a portion of the roadside waste will be implemented.

**IMPLEMENTATION: SCHEDULE,
STAFFING AND FUNDING**

CHAPTER X I

CHAPTER XI

IMPLEMENTATION: SCHEDULE, STAFFING AND FUNDING

A. System Definition

- (1) The region's integrated waste management system includes the following components:
 - (a) Collection System
 - (b) Disposal System
 - (c) Waste Reduction Program
 - (d) Education Program

(a) Collection System

The collection system consists of a network of convenience centers to collect household waste and recyclables. The collection of commercial waste and recyclables and the collection of problem wastes are also included in the system. Eight class I convenience centers will service the communities of the county. The collection system is scheduled to be complete by July of 1995. Four centers are now fully equipped, staffed and in operation (one center doubles as the transfer station and a convenience center and a fifth center is scheduled for completion in November of 1994). All centers are fenced, rocked, equipped with a compactor, an open top for white goods and utilities. The class I convenience center network will replace the green dumpster system now in the phase out process. Each center will be staffed by a solid waste employee during operating hours. Operating hours will be determined by a study of what days and hours the center in that community is most utilized. The centers will accept all household wastes and recyclables. A roll off truck has been purchased and roll off type containers will be used for the collection of all wastes. A permanent recycling container is being designed for placement at all convenience centers and will replace the temporary system currently utilized. The Jamestown convenience center and will serve as the waste oil collection center and the site for annual collections of household hazardous waste. A waste tire facility will be constructed at the new proposed landfill site for storage of used tires. Tires will be accepted at the storage facility only and will not be accepted at the convenience centers. A commercial collection system is now operational and serves eighty businesses. A commercial disposal fee of \$12.50 is charged to each account per six cubic yard dumpster emptied. A front loader truck was purchased in 1992 that services all commercial accounts.

(b) Disposal System

The region plans to dispose of the solid waste (except that portion recycled or diverted) in the Scott County landfill until July of 1996. A copy of the contract can be found in appendix D. The region is now in the process of the feasibility of a class I facility in the county to handle disposal needs subsequent to July 1, 1996. To date the following progress has been made on the siting and permitting of the facility:

Landfill activity to date:

- (1) Site purchase
- (2) Testing
- (3) Land survey
- (4) Geological reports
- (5) Engineering reports
- (6) First Phase permitting

Expenditures to date on project

Fentress County Landfill Project, Expenditures to date, June 15, 1994	
Land purchase	\$150,000.00
1st phase permit fee	\$4,000.00
Garman Hydrogeological	\$53,966.70
Beaver Drilling	\$66,284.28
Dunson Engineering	\$14,087.33
Hood Dozer	\$8,100.00
Foy Survey	\$18,415.00
Total	\$ 314,853.31

Planned Activity

- (1) Plans to continue the landfill process are underway.
- (2) In FY 1995 an additional \$25,000 has been set aside for further engineering studies.
- (3) Feasibility studies are in process to develop a class I landfill utilizing every option available.
- (4) A class IV landfill will be developed to augment either the class I landfill or the transfer of solid waste out of county.

Alternative Plan

In the event a class I landfill is not feasible the region plans to haul the waste to a commercial or another county owned landfill. Every effort will be made to negotiate a long term contract at the most reasonable rate available.

(c) Waste Reduction Program

The region's goal is to expand the waste reduction programs already in operation and achieve a twenty five percent waste reduction by December 1995. The current system consists of the following elements:

- (1) A recycling program that handles ten percent of the total waste generated
- (2) An education program that focuses on reducing, reusing and recycling
- (3) A planned class IV facility to accept all class IV wastes

The expansion effort will focus on:

- (1) Expansion of existing recycling facilities or construction of new facilities on county property at the planned landfill
- (2) Construction and placement of permanent roll off containers for the collection of recyclables at class I convenience centers
- (3) Expansion of the existing education system
- (4) Expansion of materials accepted for recycling
- (5) Construction of a class IV landfill

(d) Sanitation Education and Information

The Solid Waste Board employes a Director to oversee an educational program involving the school system, elected officials, industry and the general public. Each elementary school classroom in the county was visited through the local 4-H clubs (UT Agricultural Extension Office) and given recycling demonstrations and information on how to participate on the local level (this was previously handled by the Waste Reduction Manager and is now handled by the Director). In the 1995 Fiscal Year an expansion of this program is planned. The expansion will focus on the coordination of a year round education program between the Office of Solid Waste and the UT Agricultural Extension Services. The

Soil Conservation Service is also working in coordination with the solid waste office to provide personnel to visit the schools with a focus on solid waste education incorporated with conservation. The program will focus primarily on the increase in environmental education through the 4-H program and the Conservation Service through the school teaching staff. A weekly column was established to address solid waste issues and educate the public about the solid waste programs developing in the region. Other media sources used for educating the public include two local radio stations and the local cable channel.

Waste Generation

The following tables illustrate quantities of solid waste that will require disposal and what percentages of the waste will be handled by each component .

Quantity of Solid Waste Requiring Disposal (Generation) in the Region in Each Projected Year, Adjusted for Population Changes

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
9,718	9,692	9,664	9,637	9,610	9,584	9,557	9,517	9,478	9,438

Quantity of Solid Waste Requiring Disposal Adjusted for Population Growth and Economic Growth

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
10,029	10,350	10,681	11,023	11,376	11,740	12,115	12,503	12,903	13,316

Quantity of Waste Requiring Disposal Adjusted for Population Changes, Economic Growth, and Source Reduction, Recycling and Industrial Process Change

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
7,572	7,762	8,011	8,262	8,532	8,805	9,086	9,377	9,677	9,987

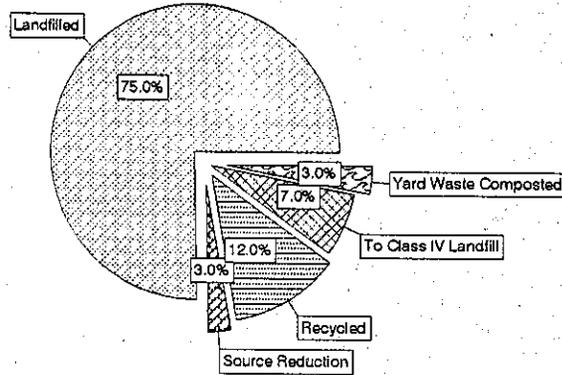
Quantity of waste that will be handled by convenience centers, commercial collection, recycling, class IV and source reduction over the next ten years.

Year	Total Tons	Convenience centers (63%)	Commercial Collection (37%)	Recycling	Class IV	Source Reduction
1994	10,029	5,564	3,268	1,097	0	100
1995	10,350	4,889	2,871	1,554	725	311
1996	10,681	5,048	2,964	1,601	748	320
1997	11,023	5,208	2,689	1,653	772	331
1998	11,376	5,375	3,157	1,707	796	341
1999	11,740	5,547	3,258	1,761	822	352
2000	12,115	5,763	3,385	1,756	848	363
2001	12,503	5,908	3,469	1,876	875	375
2002	12,903	6,102	3,583	1,928	903	387
2003	13,316	6,292	3,695	1,997	932	400

(2) Proportional flow diagram for the Fentress County Municipal Solid Waste Region.

Total Tons 10,681

- Source Reduction - 3 percent or 320 tons
- Yard Wastes - 3 percent or 320 tons
- Recycling - 12 percent or 1,282 tons
- Class IV Landfill - 7 percent or 748 tons
- Class I Landfill - 75 percent or 8,011 tons



(3) See Base Map at the end of this document for waste flow patterns.

(4) Institutional Structure

The region's solid waste board (a 7 member board) is responsible for implementation of the ten year plan. The resolution setting up the region and its board and the members appointed to the board can be found in Appendix A.

B. Implementation schedule

Part I, Statutory and Regulatory Deadlines

Date	Statutory and Regulatory Deadlines
3/18/94	Landfill Operators Certification*
	Effective date of EPA Subtitle D regulations and proposed Tennessee regulations for municipal landfill,. Applies to all new landfills and horizontal expansions of existing landfills.
01/01/95	Class I Municipal Landfills can no longer accept waste oils, used tires, or lead acid batteries.
	Oil Collection Site
	Tire Collection Site
	Battery Collection Site**
12/25/95	25% Waste Reduction Goal
01/01/96	Recycling Collection Site
10/09/96	All municipal landfills must comply with ground water protection provisions of EPA subtitle D regulations.

Part II, Planning Milestones

Year	Planned Milestone
1994	Five class I convenience centers constructed, permitted and operational
	Five recycling collection sites operational
	Waste oil collection site
	Waste tire collection site
1995	Eight class I convenience centers constructed, permitted and operational
	Eight recycling collection sites operational
	Household hazardous waste event
1996	Construction of class I landfill that complies with EPA subtitle D regulations or long term contract for disposal in a class I facility

1993:

- New roll off truck purchased for the long term collection of household waste
- Two class I convenience centers constructed, permitted and operational

1994:

- Five class I convenience centers constructed, operational and staffed

1995:

- Eight class I convenience centers constructed, operational and staffed
- Household hazardous waste event
- Waste oil collection site

1996:

- Waste tire storage facility
- Conduct one tire shredding operation

1997-2003:

- A continuation of the collection system established in the five previous years and expansions as plan updates dictate

Commercial Collection

1993:

- New front loader truck purchased for the collection of commercial waste
- Computerized list of commercial accounts

1994:

- Waste collection fee of \$12.50 per tip
- A quarterly report of revenues reviewed from commercial collection

1995:

- All commercial businesses and industries producing more than one ton per week participating in the commercial collection system
- A computerized log of waste generations by each business and industry

1996-2003:

- A continuation of the commercial collection system and expansion as deemed necessary by the ten year plan updates.

C. Staffing and Training Requirements

(1) 1993 Solid Waste Management Positions

Waste Management, Fund 55710

104 Administrative Assistant
105 Supervisor/Director
161 Secretary

Sanitation Education and Information, Fund 55720

105 Supervisor/ Director

Waste Collection, Fund 55730

Waste Pickup, Fund 55731

141 Foreman
147 Truck Drivers
149 Laborers

Convenience Centers, Fund 55732

164 Attendants

Waste Disposal, Fund

Recycling Center, Fund 55751

105 Supervisor/Director

149 Laborers

164 Attendants

Landfill Operation and Maintenance, Fund 55754

141 Foreman

144 Heavy Equipment Operator

(2) The region plans to hire additional staff for the planned convenience centers. The additional four staff members will be added in 1995. Some other changes have been made since 1993 concerning promotions to foreman from laborers/attendants. The charts below indicates the changes and outlines planned staff for the next ten years.

Year	System Element	Position	# Employed
1995	Waste Management	Administrative Assistant	.25*
		Director	1
		Secretary	1
	Sanitation Education/Information	Director	.25*
	Waste Collection (Pick Up)	Foreman	.25*
		Truck Drivers	3
		Laborers	2
	Waste Collection (Convenience Centers)	Attendants	8
	Waste Disposal (Recycling)	Director	.50*
		Foreman	1
		Laborers	3
	Landfill Operation/Maintenance	Foreman	.25*
		Equipment Operator	.50*

*** Notes**

Note 1- The Director (formerly the Waste Reduction Manger (Title) was responsible) is responsible for the three following positions. The percentage indicates the amount of time spent toward each job.

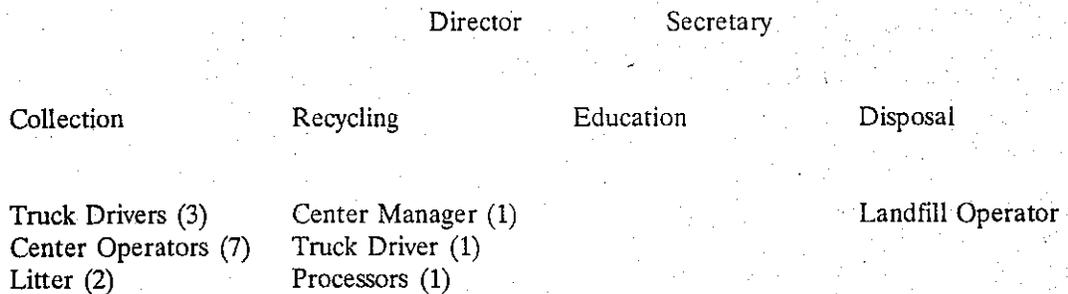
- (a) Administrative Assistant 25%
- (b) Sanitation Education and Information 25%
- (c) Recycling Director 50%

Note 2- The Landfill Manger (Title) is responsible for the three following positions. The percentage indicates the amount of time spent toward each job.

- (a) Waste Collection Foreman 25%
- (b) Landfill Foreman 25%
- (c) Heavy Equipment Operator 50%

Year	System Element	Position	# Employed
1995-2003	Waste Management	Administrative Assistant	.25%*
		Director	1
		Secretary	1
	Sanitation Education/Information	Director	.25%*
	Waste Collection (Pick Up)	Foreman	.25%*
		Truck Drivers	3
		Laborers	2
	Waste Collection (Convenience Centers)	Attendants	12
	Waste Disposal (Recycling)	Director	.50%*
		Foreman	1
		Laborers	3
	Landfill Operation/Maintenance	Foreman	.25%*
Equipment Operator		.50%*	

**Employee Flow Chart
Management**



D. Budget

Immediately following are budgets, please refer to notes at the end of each page.

Fentress County Municipal Solid Waste Region Revenue Projections										
	FY 95	FY96	FY97	FY98	FY99	FY2000	FY2001	FY2002	FY2003	
Local Taxes	682,000.00	703,755.80	726,205.61	749,371.57	773,276.52	797,944.04	823,398.46	849,664.87	876,769.18	
Current Services	85,000.00	87,711.50	90,509.50	93,396.75	96,376.11	99,450.50	102,622.97	105,896.65	109,274.75	
Recycled Materials	20,000.00	20,638.00	21,296.35	21,975.71	22,676.73	23,400.12	24,146.58	24,916.86	25,711.71	
Waste Grants*	71,362.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Litter Program*	20,211.00	20,211.00	20,211.00	20,211.00	20,211.00	20,211.00	20,211.00	20,211.00	20,211.00	
Total Revenue	878,573.24	832,316.30	858,222.46	884,955.02	912,540.36	941,005.67	970,379.02	1,000,689.38	1,031,966.64	
Note Proceeds	0.00	140,000**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total Revenue	878,573.24	832,316.30	858,222.46	884,955.02	912,540.36	941,005.67	970,379.02	1,000,689.38	1,031,966.64	

Notes:
 Inflation Factor Not Used
 Economic Growth Factor from Regular Study Used
 * Economic Growth Factor not Used
 ** For planned convenience centers and optional recycling expansion

Fentress County Municipal Solid Waste Region Fiscal Year 95 Budget Estimate

		FY 94	FY 95
		Appropriated	Estimate
Fund 55710 - SOLID WASTE MANAGEMENT			
104	Assistant	4,800.00	11,050.00
105	Supervisor/Director	25,000.00	26,730.70
161	Secretary	13,203.84	2,994.80
201	Social Security	3,302.69	3,527.08
210	Unemployment Compensation	252.00	182.70
301	Accounting Services	3,000.00	3,000.00
307	Communication	800.00	1,000.00
308	Consultants	2,000.00	500.00
331	Legal Services	200.00	500.00
348	Postal Charges	500.00	500.00
349	Printing, Stationary, Forms	150.00	100.00
351	Rentals	3,150.00	2,700.00
355	Travel	2,000.00	1,000.00
399	Other Contracted Services	0.00	50.00
435	Office Supplies	600.00	1,500.00
452	Utilities	2,000.00	1,800.00
499	Other Supplies & Materials	7,485.04	1,500.00
506	Liability Insurance	856.00	1,560.00
510	Trustee's Commission	10,000.00	11,000.00
513	Worker's Compensation	180.30	190.00
602	Principal on Notes	58,063.63	75,000.00
603	Interest on Notes	25,000.00	34,000.00
Total	Solid Waste Management	161,687.50	180,385.28
Fund 55720 - SANITATION EDUCATION and INFORMATION			
105	Supervisor/Director	4,800.00	800.00
201	Social Security	368.64	69.20
210	Unemployment Compensation	28.00	9.28
302	Advertising	2,000.00	4,000.00
429	Instructional Supplies & Materials	0.00	2,500.00
443	Road Signs	0.00	1,787.00
499	Other Supplies & Materials	0.00	500.00
513	Worker's Compensation	20.16	22.00
Total	Sanitation Education & Information	7,216.80	9,687.48
Fund 55730 - WASTE COLLECTION (Summary Account)			
Fund 55731 - WASTE PICKUP			
141	Foreman	5,421.65	0.00
147	Truck Drivers	51,864.07	62,500.00
149	Laborers	24,700.00	19,800.00
201	Social Security	6,296.50	6,295.95
210	Unemployment Compensation	588.00	406.00
338	Maintenance & Repair of Vehicles	5,600.00	24,000.00
340	Medical & Dental Services	400.00	300.00
355	Travel	250.00	250.00
361	Permits	150.00	150.00
425	Fuel	16,800.00	16,000.00
499	Other Supplies & Materials	500.00	750.00
511	Vehicle & Equipment Insurance	6,349.00	2,448.00
513	Worker's Compensation	6,718.51	7,500.00
Total	Waste Pickup	125,637.74	140,399.95

Fund 55732 - CONVENIENCE CENTERS

164	Attendants	34,948.20	46,000.00
201	Social Security	2,684.02	3,519.00
210	Unemployment Compensation	784.00	704.00
307	Communication	1,429.36	1,800.00
336	Maintenance & Repair of Equipment	500.00	1,200.00
340	Medical & Dental Services	1,200.00	1,000.00
351	Rentals	0.00	1,200.00
399	Other Contracted Services	420.00	500.00
452	Utilities	1,500.00	2,800.00
499	Other Supplies & Materials	300.00	1,600.00
513	Worker's Compensation	3,023.02	6,400.00
724	Site Development	130,000.00	30,000.00
Total	Convenience Centers	176,368.60	96,723.00

Fund 55733 -TRANSFER STATION

164	Attendants	0.00	18,189.60
201	Social Security	0.00	1,349.94
210	Unemployment Compensation	0.00	82.00
307	Communication	0.00	400.00
336	Maintenance & Repair of Equipment	0.00	1,500.00
340	Medical & Dental Services	0.00	150.00
399	Other Contracted Services	0.00	100.00
452	Utilities	0.00	800.00
361	Permits	0.00	2,000.00
499	Other Supplies & Materials	0.00	400.00
513	Worker's Compensation	0.00	1,125.00
Total	Transfer Station	0.00	26,096.54

Fund 55734 - PROBLEM WASTES

724	Site Development	0.00	2,800.00
733	Solid Waste Equipment	0.00	8,200.00
Total	Problem Wastes	0.00	11,000.00
Total	Waste Collection	302,006.34	274,219.49

Fund 55750 - WASTE DISPOSAL (Summary Account)**Fund 55751 - RECYCLING CENTER**

105	Supervisor/Director	9,600.00	1,600.00
141	Foreman	0.00	14,996.80
147	Truck Driver	0.00	9,750.00
149	Laborers	27,150.00	24,798.70
164	Attendants	14,950.00	0.00
201	Social Security	4,269.22	3,912.63
210	Unemployment Compensation	504.00	360.76
307	Communication	600.00	450.00
320	Dues & Memberships	0.00	100.00
327	Freight Expenses	96.00	250.00
335	Maintenance & Repair of Building	1,000.00	500.00
336	Maintenance & Repair of Equipment	2,000.00	1,800.00
340	Medical & Dental Services	800.00	300.00
355	Travel	800.00	800.00
425	Fuel	1,200.00	1,200.00
452	Utilities	1,500.00	3,000.00
499	Other Supplies & Materials	2,800.00	3,000.00

513	Worker's Compensation	4,018.35	4,979.00
733	Equipment Purchases	15,000.00	100.00
Total	Recycling Center	86,191.57	71,897.89

Fund - 55754 LANDFILL OPERATION and MAINTENANCE

141	Foreman	5,421.65	10,843.30
144	Equipment Operator - Heavy	10,843.30	10,843.30
201	Social Security	1,249.15	1,659.02
210	Unemployment Compensation	84.00	81.20
307	Communication	480.00	450.00
309	Contracts w/Governments	187,200.00	170,000.00
321	Engineering Services	5,000.00	1,000.00
336	Maintenance and Repair of Equipment	70,000.00	6,000.00
340	Medical & Dental Services	200.00	150.00
351	Rentals (Equipment)	2,640.00	100.00
425	Fuel	3,000.00	1,800.00
452	Utilities	1,000.00	2,000.00
499	Other Supplies & Materials	2,000.00	3,000.00
513	Worker's Compensation	1,332.87	2,100.00
511	Vehicle & Equipment Insurance	400.00	414.00
715	Land	129,000.00	0.00
724	Site Development	24,000.00	20,000.00
Total	Landfill Operation and Maintenance	445,350.97	230,440.82
Total	Waste Disposal	531,542.54	302,338.71

Fund 55770 - POST CLOSURE CARE COSTS

321	Engineering Services	0.00	50,000.00
323	Explosive & Drilling Services	0.00	25,000.00
399	Other Contracted Services	0.00	300.00
365	Contact for Final Cover	0.00	185,000.00
420	Fertilizer, Lime, & Etc.	0.00	1,500.00
Total	Post Closure Care Costs	0.00	261,800.00

Totals by Account Type

Solid Waste Management	161,687.50	180,385.28
Sanitation Education and Information	7,216.80	9,687.48
Waste Pick up	125,637.74	140,399.95
Convenience Centers	176,368.60	96,723.00
Transfer Station	0.00	26,096.54
Problem Wastes	0.00	11,000.00
Recycling Center	86,191.57	71,897.89
Landfill Operation and Maintenance	445,350.97	230,440.82
Post Closure Care Costs	0.00	261,800.00
Total All Accounts	1,002,453.18	1,028,430.96

**Fentress County Municipal Solid Waste Region Fiscal Year 95 Budget Estimate
Estimated Revenues & Other Sources (FY 94 figures are from actual recorded receipts)**

Account 40000 Local Taxes

	FY 94	FY 95
40100 County Property Taxes		
40110 Current Property Tax	287,858.13	310,000.00
40120 Trustee's Collections-Prior Year	24,341.05	20,000.00
40130 Circuit - Clerk & Master Collections-Prior Year	8,751.60	12,000.00
40140 Interest and Penalty	6,875.02	15,000.00
40150 Pickup Taxes	14.30	10.00

40162	Payments in Lieu of Taxes-Local Utilities	39,698.40	40,000.00
40200	County Local Option Taxes		
40210	Local Option Sales Tax	335,313.35	355,000.00
40270	Business Tax	7,097.28	6,000.00
	Total Local Taxes	709,959.13	758,010.00
Account 43000 Charges for Current Services			
43100	General Service Charges		
43110	Tipping Fees	70,680.00	85,000.00
	Total Charges for Current Services	70,680.00	85,000.00
44000	Other Local Revenues		
44100	Recurring Items		
44145	Sale of Recycled Material	20,858.24	20,000.00
	Total Other Local Revenues	20,858.24	20,000.00
46000	State Of Tennessee		
46100	General Government Grants	0.00	0.00
46170	Solid Waste Grants	0.00	69,862.24
46400	Public Works Grants		
46430	Litter Program	23,609.90	20,211.00
46800	Other State Revenues	7,638.37	0.00
46980	Other State Grants	0.00	0.00
	Total State of Tennessee	31,248.27	90,073.24
	Total Estimated Revenues	832,735.64	953,083.24
Estimated Other Sources			
49200	Note Proceeds	150,000.00	0.00
	Total Estimated Revenue & Other Sources	982,735.64	953,083.24
	July 1, 1994 Fund Balance	265,881.30	187,091.50
	TOTAL FUNDS AVAILABLE TO BUDGET	1,248,616.94	1,140,174.74
	TOTAL ESTIMATED EXPENDITURES	1,002,453.18	1,028,430.96
	June 30, 1995 Estimated Balance	246,163.76	111,743.78

Note: Employee Benefits - Social Security and Worker's Compensation will be combined and come from account # 58600.

Notes: These are the actual approved budgets for FY 94 and FY 95. These figures were used for the projection following.

Ten Year Budget

	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Solid Waste Management Account 55710	55,254.00	55,254.00	55,254.00	55,254.00	55,254.00	55,254.00	55,254.00	55,254.00
Sanitation Information/Education Account 55720	9,921.96	10,715.72	11,572.98	12,498.82	13,498.73	14,578.63	15,744.92	17,004.51
Waste Collection (Summary Account 55730)								
Waste Pickup Account 55731	114,678.00	114,678.00	114,678.00	114,678.00	114,678.00	114,678.00	114,678.00	114,678.00
Convenience Centers Account 55732	115,196.80	115,196.80	115,196.80	115,196.80	115,196.80	115,196.80	115,196.80	115,196.80
Problem Waste Account 55734	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Waste Collection	237,474.80	229,874.80	229,874.80	229,874.80	229,874.80	229,874.80	229,874.80	229,874.80
Waste Disposal (Summary Account 55750)								
Recycling Center Account 55751	60,219.00	60,219.00	60,219.00	60,219.00	60,219.00	60,219.00	60,219.00	60,219.00
Landfill Operation/Maintenance Account 55754	323,242.00	332,278.00	341,998.00	351,826.00	361,942.00	372,418.00	383,218.00	394,378.00
Total Waste Disposal	383,461.00	392,497.00	402,217.00	412,045.00	422,161.00	432,637.00	443,437.00	454,597.00
Post Closure Care Costs Account 770	12,050.00	8,977.50	9,426.38	9,897.69	10,392.58	10,912.21	11,457.82	12,030.71
Other Charges Account 58400	36,613.00	36,613.00	36,613.00	36,613.00	36,613.00	36,613.00	36,613.00	36,613.00
Includes: Insurances and Trustee's Commission								
Employee Benefits Account 58600	22,564.00	22,564.00	22,564.00	22,564.00	22,564.00	22,564.00	22,564.00	22,564.00
General Government Debt Service Account 81100	88,082.47	79,673.99	74,562.50	71,583.34	68,615.47	65,674.33	62,645.17	59,666.66
Convenience Center Capital Note(Planned)	11,758.33	11,368.75	10,979.17	10,589.58	10,200.00	9,810.42	9,420.83	9,031.25
Recycling Facility Capital Note(Optional)	8,300.00	8,025.00	7,750.00	7,475.00	7,200.00	6,925.00	6,650.00	6,375.00
Total Debt	108,140.80	99,067.74	93,291.67	89,647.92	86,015.47	82,409.75	78,716.00	75,072.91
TOTAL EXPENDITURES	865,479.56	855,563.76	805,559.83	868,395.23	876,373.58	884,843.39	893,661.54	903,010.93
TOTAL REVENUES	837,316.30	858,222.46	884,955.02	912,540.36	941,055.67	970,379.02	1,000,689.38	1,031,966.64
BEGINNING OF YEAR BALANCE	157,604.00	124,440.74	127,099.44	206,494.63	250,639.76	315,321.85	400,857.48	507,885.32
END OF YEAR BALANCE	124,440.74	127,099.44	206,494.63	250,639.76	315,321.85	400,857.48	507,885.32	636,841.03

Ten Year Budget Notes

Note I: Solid Waste Management, Waste Pick up, Recycling Center, Other Charges, Employee Benefits are shown in 1994 dollars and are shown with no planned increases.

Note II: Sanitation Education and Information is shown with a yearly projected increase of 8% to reflect the mandating of such grant programs as the litter grant which are requiring more education each year. There are also other grants that will be available in this area.

Note III: Problem Wastes reflects the monies remaining in the grant programs (Waste Oil and Tire Storage) in FY 1996 with no planned expenditures in the next seven years.

Note IV: Landfill Operation and Maintenance reflects a disposal fee of \$36 per ton for the waste which will be disposed of in a Class I Facility. Until such time as the region makes a final determination as to the feasibility of a Class I Landfill the region will plan in the budget under this code for disposal.

Note V: Post Closure Care Costs are reflected with an inflation factor of 5% as approved by the State in the closure plan.

Note VI: The Debt Service account reflects both principal and interest payments, this code also reflects planned and optional loans. For a breakdown of these loans see the following amortization schedules. This shows capital outlay notes. If the construction of a Class I Landfill becomes feasible, certain of the current capital outlays and the future outlays will be re-financed to long term bonded indebtedness. This will reduce annual interest payments and thus increase the amount of operating capital available for other purposes.

Loan Schedules

FENTRESS COUNTY MUNICIPAL SOLID WASTE REGION			
LOAN NUMBER 1			
Tennessee Valley Authority			
Initial Amount:	31,985.00		
Interest Rate	0.00%		
Terms	533.08/month		
Number of Payments	60		
First Payment	10/30/91		
Use of Funds	Construction of Recycle Building		
Owe Begin FY 94	21,323.40 (Principal)		
			End FY
Fiscal Year	# Payments	Amount	Amt Remain
FY 92	8	4,264.64	27,720.36
FY 93	12	6,396.96	21,323.40
FY 94	12	6,396.96	14,926.44
FY 95	12	6,396.96	8,529.48
FY 96	12	6,396.96	2,132.52
FY 97	4	2,132.32	0.20
Total	60	31,984.80	
Note: Extra 20 cents due to roundoff error in pay schedule			

FENTRESS COUNTY MUNICIPAL SOLID WASTE REGION		
LOAN NUMBER 2		
Union Bank		
Initial Amount:	30,000.00	
Interest Rate	0.055	
Terms	3 years	
Number of Payments	Three	
First Payment	01/14/92	
Use of Funds	Purchase of used scraper	
Final Payment	Principal	Interest
01/14/95	10,000.00	550.00

FENTRESS COUNTY MUNICIPAL SOLID WASTE REGION			
LOAN NUMBER 3			
Union Bank			
Initial Amount	150,000.00		
Interest Rate	0.055		
Terms	12 Years		
Number of Payments	Twelve		
First Payment	06/30/94		
Use of Funds	Land Purchase		
Payment Date	Principal	Interest	Remaining
30-Jun-94	12,500.00	7,345.89	137,500.00
30-Jun-95	12,500.00	7,562.50	125,000.00
30-Jun-96	12,500.00	6,893.84	112,500.00
30-Jun-97	12,500.00	6,187.50	100,000.00
30-Jun-98	12,500.00	5,500.00	87,500.00
30-Jun-99	12,500.00	4,812.50	75,000.00
30-Jun-00	12,500.00	4,136.30	62,500.00
30-Jun-01	12,500.00	3,487.50	50,000.00
30-Jun-02	12,500.00	2,750.00	37,500.00
30-Jun-03	12,500.00	2,062.50	25,000.00
30-Jun-04	12,500.00	1,378.77	12,500.00
30-Jun-05	12,500.00	687.50	0.00

FENTRESS COUNTY MUNICIPAL SOLID WASTE REGION			
LOAN NUMBER 4			
Union Bank			
Amount	500,000.00 - Borrowed in three parts		
Interest Rate	0.055		
Terms	Int/6 months - Prin per year		
Number of Payments	Twenty Four		
First Payment	03/22/93		
Use of Funds	Solid Waste Management		
Payment Date	Principal	Interest	Remaining
22-Mar-92		6,046.55	500,000.00
21-Sep-93	41,666.67	12,085.91	458,333.33
22-Mar-93		12,604.17	458,333.33
21-Sep-94	41,666.67	12,604.17	416,666.66
22-Mar-94		11,458.33	416,666.66
22-Sep-95	41,666.67	11,458.33	374,999.99
23-Mar-95		10,312.50	374,999.99
21-Sep-96	41,666.67	10,312.50	333,333.32
22-Mar-96		9,166.67	333,333.32
21-Sep-97	41,666.67	9,166.67	291,666.65
22-Mar-97		8,020.83	291,666.65
21-Sep-98	41,666.67	8,020.83	249,999.98
22-Mar-98		6,875.00	249,999.98
22-Sep-99	41,666.67	6,875.00	208,333.31
23-Mar-99		5,729.17	208,333.31
21-Sep-00	41,666.67	5,729.17	166,666.64
22-Mar-00		4,583.33	166,666.64
21-Sep-01	41,666.66	4,583.33	124,999.98
22-Mar-01		3,437.50	124,999.98
21-Sep-02	41,666.66	3,437.50	83,333.32
22-Mar-02		2,291.67	83,333.32
22-Sep-03	41,666.66	2,291.67	41,666.66
22-Mar-03		1,145.83	41,666.66
21-Sep-04	41,666.66	1,145.83	0.00

Planned Loan

FENTRESS COUNTY MUNICIPAL SOLID WASTE REGION			
For: Construction of Three Convenience Centers			
Amount: 80,000.00			
Year	Principal	Interest	Remaining
1996	7,083.33	4,675.00	77,916.67
1997	7,083.33	4,285.42	70,833.34
1998	7,083.33	3,895.83	63,750.00
1999	7,083.33	3,506.25	56,666.67
2000	7,083.33	3,116.67	49,583.34
2001	7,083.33	2,727.08	42,500.00
2002	7,083.33	2,337.50	35,416.67
2003	7,083.33	1,947.92	28,333.34
2004	7,083.33	1,558.33	21,250.00
2005	7,083.33	1,168.75	14,166.67
2006	7,083.33	779.17	7,083.34
2007	7,083.33	389.58	0.00

Optional Loan

FENTRESS COUNTY MUNICIPAL SOLID WASTE REGION			
For: Recycling Expansion or New Facility			
Amount: 60,000.00			
Year	Principal	Interest	Remaining
1996	5,000.00	3,300.00	55,000.00
1997	5,000.00	3,025.00	50,000.00
1998	5,000.00	2,750.00	45,000.00
1999	5,000.00	2,475.00	40,000.00
2000	5,000.00	2,200.00	35,000.00
2001	5,000.00	1,925.00	30,000.00
2002	5,000.00	1,650.00	25,000.00
2003	5,000.00	1,375.00	20,000.00
2004	5,000.00	1,100.00	15,000.00
2005	5,000.00	825.00	10,000.00
2006	5,000.00	550.00	5,000.00
2007	5,000.00	275.00	0.00

ALLOCATION OF IMPLEMENTATION
RESPONSIBILITIES: PLAN ADOPTION
AND SUBMISSION

CHAPTER XII

CHAPTER XII
ALLOCATION OF IMPLEMENTATION RESPONSIBILITIES:
PLAN ADOPTION AND SUBMISSION

A. One County Regions

- (1) Full responsibility for implementation of the plan resides with the county.

The two following pages contain:

- (1) A resolution of the Regional Administrative Board, signed by its chairman adopting the plan.
- (2) A resolution by the County Commission acknowledging the county's commitment to support and fund the plan.

RESOLUTION NO. _____
A RESOLUTION
ADOPTING THE FENTRESS COUNTY
MUNICIPAL SOLID WASTE REGION'S
TEN YEAR SOLID WASTE PLAN

WHEREAS, Tennessee Code Annotated 68-211-801 et seq. requires that each Municipal Solid Waste Region Board is responsible for developing a ten (10) year plan for the management of solid waste, and

WHEREAS, by resolution Fentress County Board of County Commissioners created the Fentress County Solid Waste Region, and

WHEREAS, the resolution creating the Fentress County Region also established a Board with the responsibility of developing and updating the Regions' plan as per the requirements of T.C.A. 68-211-801 et seq, and

WHEREAS, this Board has developed a ten (10) year municipal solid waste plan based upon and following the guidelines for such plans as promulgated by the Tennessee State Planning Office and T.C.A. 68-211-801 et. seq., and

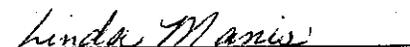
NOW, THEREFORE, BE IT RESOLVED, that the Fentress County Municipal Solid Waste Region Board hereby adopts the Fentress County Municipal Solid Waste Region Plan and acknowledge Fentress County's participation and responsibilities under this plan.

BE IT RESOLVED, this 31 day of October, the welfare of the citizens of Fentress County, Tennessee requiring it.

Passed and so ordered on this date, October 31, 1994, the public welfare requiring it.


Donald Crockett, Chairman

ATTEST:


Linda Manis, County Clerk

RESOLUTION NO. _____
A RESOLUTION
RATIFYING THE FENTRESS COUNTY
MUNICIPAL SOLID WASTE REGION'S
TEN YEAR SOLID WASTE PLAN

WHEREAS, Tennessee Code Annotated 68-211-801 et seq. requires that each county in the State of Tennessee form solid waste regions, and

WHEREAS, said regions are responsible for developing a ten (10) year plan for the management of solid waste, and

WHEREAS, by resolution Fentress County Board of County Commissioners created the Fentress County Solid Waste Planning Region, and

WHEREAS, the resolution creating the Fentress County Region also established a Board with the responsibility of developing and updating the Regions' plan as per the requirements of T.C.A. 68-211-801 et seq, and

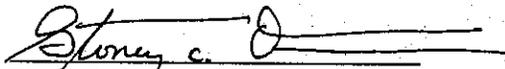
WHEREAS, this Board has developed a ten (10) year municipal solid waste plan based upon and following the guidelines for such plans as promulgated by the Tennessee State Planning Office and T.C.A. 68-211-801 et, seq., and

WHEREAS, the guidelines promulgated by the Tennessee State Planning Office require that the municipal solid waste region plan prepared by the Fentress County Municipal Solid Waste Region Board be ratified by the Board of County Commissioners.

NOW, THEREFORE, BE IT RESOLVED, by the Fentress County Board of Commissioners that it hereby ratifies the Fentress County Municipal Solid Waste Region Plan and acknowledge Fentress County's financial responsibilities under this plan.

BE IT RESOLVED, this 31 day of October, the welfare of the citizens of Fentress County, Tennessee requiring it.

Passed and so ordered on this date, October 31, 1994, the public welfare requiring it.


Storey C. Duncan, County Executive

ATTEST:


Linda Manis, County Clerk

Linda Manis
Fentress County Clerk

P.O. Box 823
Jamestown, Tennessee 38556
(615) 879-8014

November 3, 1994

This is to certify that on October 31, 1994 in a Reconvened Session of the Fentress County Commission, a motion was made by Gary Peters, seconded by Ralph Taylor to pass the Ten (10) Year Municipal Solid Waste Plan.
The motion was passed by Voice Vote.

Sworn and subscribed before me this 3rd day of November, 1994

Linda Manis
Linda Manis, County Clerk

My Commission expires: 8-31-98

State of Tennessee
Fentress County
I, *Linda Manis* Co Co Co
certify the above to be a true and
correct copy of the original as filed in
my office.
This 3rd day of November 1994
Linda Manis

**FLOW CONTROL AND PERMIT
APPLICATION REVIEW**

CHAPTER XIII

CHAPTER XIII

FLOW CONTROL AND PERMIT APPLICATION REVIEW

The Fentress County Municipal Solid Waste Region has no existing disposal facility, thus it has not addressed out of region waste flow control.

Being a single county region with no disposal facility, flow control is not addressable at this time. At such time as the region needs to address this issue the region board will take this matter under advisement and make a final determination.

PART III

APPENDICES

Appendix A

Legal Documentation and Organization of the Region

I. To assure that the municipal solid waste region was established and is operating in accordance with T.C.A. Section 68-31-813, copies of the following documents are provided.

1. Certified copy of resolution adopted by each county commission, establishing the region [T.C.A. Section 68-31-813 (a)].
2. Description of the administrative board for the regions, including:
 - a. list of members, including the jurisdiction each represents, and term of office;
 - b. copy of the appointment letter for each member, and a record of their confirmation (resolution or minutes) by the appropriate legislative body(ies). [T.C.A. Section 68-31-813] and
 - c. a list of the current officers of the board (1993)
3. Description of the structure and role of Regional Municipal Advisory Committee [T.C.A. Section 68-31-813(e)], including:
 - a. a list of members, the interest each represents, and term of office;
 - b. mission statement
 - c. summary of activities during plan development; and
 - d. probable role in implementation.

II. To assure that the municipal solid waste region is complying with other provisions of the Solid Waste Management Act of 1991, please submit letter(s), signed by the appropriate County Executive and Mayors in the region, certifying that each jurisdiction has complied with the financial accounting requirements of T.C.A. 68-31- 874(a), as amended. For municipalities, the letter of certification should indicate the name of the special revenue fund established by that city.

RESOLUTION NO. _____
A RESOLUTION
CREATING FENTRESS COUNTY'S
MUNICIPAL SOLID WASTE PLANNING REGION

WHEREAS, the adoption of the Subtitle D landfill regulations by the United States Environmental Protection Agency and companion regulations adopted by the Tennessee Solid Waste Control Board will impact on both the cost and method of disposal of municipal solid waste; and

WHEREAS, at the urging and support of a coalition of local government, environmental, commercial, and industrial leaders, the 97th Tennessee General Assembly enacted T.C.A. §68-211-801 et seq., titled "Solid Waste Management Act of 1991"; and

WHEREAS, with the view that better planning for solid waste will help control the additional costs that will be imposed by the new landfill regulations, help protect the environment, provide an improved solid waste management system, better utilize our natural resources, and promote the education of the citizens of Tennessee in the areas of solid waste management including the need for and desirability of reduction and minimization of solid waste, local governments in Tennessee supported and worked for the passage of this Act; and

WHEREAS, one of the stated public policies of this Act is to institute and maintain a comprehensive, integrated statewide program for solid waste management; and

WHEREAS, as per T.C.A. §68-211-811, the nine development districts in the State of Tennessee have completed a district needs assessment which are inventories of the solid waste systems in Tennessee; and

WHEREAS, Fentress County's Board of County Commissioners has

given consideration to the needs assessment prepared by Upper Cumberland development district;

WHEREAS, T.C.A §68-211-813, requires that counties in the State of Tennessee form municipal solid waste regions no later than December 12, 1992; and

WHEREAS, the Act's stated preference is the formation of multi-county regions with counties having the option of forming single or multi-county municipal solid waste regions; and

WHEREAS, the State of Tennessee will provide grant monies of varying amounts to single county, two county, and three or more county municipal solid waste regions to assist these regions on developing their municipal solid waste region plans; and

WHEREAS, the primary and prevailing purpose of the municipal solid waste regions are the preparation of municipal solid waste regional plans which among other requirements must identify how each region will reduce its solid waste disposal per capita by twenty-five percent (25%) by December 31, 1995, and a planned capacity assurance of its disposal needs for a ten (10) year period; and

WHEREAS, the development of a municipal solid waste regional plan that results in the most cost effective and efficient management of municipal solid waste is in the best interest of the citizens of Fentress County.

NOW THEREFORE BE IT RESOLVED, by the Board of County Commissioners of Fentress County, Tennessee, acting pursuant to T.C.A. §68-211-801 et seq., that there is hereby established a Municipal Solid Waste Region for and by Fentress County, Tennessee; and

BE IT FURTHER RESOLVED, that pursuant to T.C.A. §68-211-813

(a) (2), that the Board of County Commissioners of Fentress County, Tennessee finds and determines that Fentress County shall be and shall constitute a single county municipal solid waste region due to the following: Fentress County Citizens have resolved to control their own destiny and have passed a local option sales tax increase to help fund solid waste efforts; and

BE IT FURTHER RESOLVED, that pursuant to T.C. A. §68-211-813 (b) (1), a Municipal Solid Waste Region Board is hereby established to administer the activities of this Region; and

BE IT FURTHER RESOLVED, that this Municipal Solid Waste Region Board shall be composed of seven members; and

BE IT FURTHER RESOLVED, that pursuant to T.C.A. 68-211-813 (b) (1) five Board Members shall be appointed by the County Executive and approved by this Board of County Commissioners and, due to the fact that the City of Jamestown collects or provides disposal services through its own initiative or by contract, the City of Jamestown shall have a Board member appointed by the Mayor of City of Jamestown and approved by the City of Jamestown; and due to the fact that the City of Allardt collects or provides disposal services through its own initiative or by contract, the City of Allardt shall have a Board member appointed by the Mayor of City of Allardt and approved by the City of Allardt; and

BE IT FURTHER RESOLVED, that members of the Board of Municipal Solid Waste Region shall serve a six (6) year term except that two members appointed by the County Executive shall have a two (2) year term, that two members appointed by the County Executive shall have a four (4) year term, that one member appointed by the County Executive shall have a six (6) year term, and that one member appointed by the Mayor

of the City of Jamestown shall have a four year term; and that one member appointed by the Mayor of the City of Allardt shall have a six year term; and

BE IT FURTHER RESOLVED, that this Municipal Solid Waste Region Board shall have all powers and duties as granted it by T.C.A. §68-211-813 et seq. and in addition, in the performance of its duty to produce a municipal solid waste region plan, it shall be empowered to utilize existing Fentress County governmental personnel, to employ or contract with persons, private consulting firms, and/or governmental, quasi-governmental, and public entities and agencies and to utilize Fentress County's services, facilities and records in completing this task; and

BE IT FURTHER RESOLVED, that at the Municipal Solid Waste Region Board's initial organization meeting it shall select from its members a chair, vice-chair, and secretary and shall cause the establishment of a municipal solid waste advisory committee whose membership shall be chosen by the Board and whose duties are to assist and advise the Board; and

BE IT FURTHER RESOLVED, that the Municipal Solid Waste Region Board, in furtherance of its duty to produce a municipal solid waste region plan, is authorized to apply for and receive funds from the State of Tennessee, the federal government, Fentress County, the City of Jamestown, City of Allardt, and donations and grants from private corporations and foundations; and

BE IT FURTHER RESOLVED, that Fentress County shall receive, disburse and act as the fiscal agent for the administration of the funds of the Municipal Solid Waste Region and the Region's Board; and

BE IT FURTHER RESOLVED, that upon the passage of this

Resolution and at no later date than December 31, 1992, the County Clerk of Fentress County shall transmit a copy of this Resolution to the Tennessee State Planning Office.

RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF FENTRESS COUNTY, TENNESSEE this the ____ day of _____, 1992, the welfare of the citizens of Fentress County requiring it.

SPONSER:

Leonard Bullock
County Commissioner

Attest:

Approved:

Pat Coates
County Clerk *Linda Mann*

George Mullins
County Executive

Approved as to Form:

Thomas C. Blum
County Attorney

State of Tennessee
Fentress County
I, Pat Coates Co Co Clk
certify the above to be a true and
correct copy of the original as filed in
my office.
This 5 day of November 1992.
Pat Coates Co Co Clk
Linda Mann Co Co Clk

**FENTRESS COUNTY MUNICIPAL SOLID WASTE
"OFFICIAL PLAN OBJECTIVES"**

WHEREAS, the Board of County Commissioners of Fentress County, Tennessee has created a Fentress County Solid Waste Planning Region, a single county solid waste region, in accord with the "Tennessee Solid Waste Act of 1991";

WHEREAS, the Fentress County Municipal Solid Waste Planning Region is required to develop a "Plan" for a ten year period;

WHEREAS, the duties and responsibilities of Fentress County Municipal Solid Waste Planning Board will be to administer the daily operations and all aspects program, including all facilities, equipment, employees, and all other related activities and operations;

WHEREAS, the Solid Waste Planning Board is to function as a separate entity of Fentress County Government as does the Fentress County School Board, Fentress County Highway Department and all other county offices required by the Tennessee State Law.

NOW THEREFORE, the Fentress County Municipal Solid Waste Planning Region states its "official plan objectives" as follows:

1. The first priority of the Solid Waste Board Objectives will be to develop a Class I Landfill that is within the means of the Solid Waste Funds Budget to provide for the disposal of all the county's municipal solid waste.

2. In the event a Class I Landfill is not feasible within the county, a plan will be initiated to economically transport the county's solid waste to an out of county disposal facility. This Plan may require the construction of a solid waste transfer station and the purchase of long distance transport trucks and related equipment.

3. A Class IV Landfill will be developed to augment either the Class I Landfill or the transfer of solid waste out of the county.

4. A network of convenience centers will be provided throughout the county for citizens to dispose of household solid waste. These centers will be constructed to State specifications.

5. Convenience centers will be designed to operate with rear rolloff type equipment compacted on site.

6. Commercial solid waste will continue to be collected by the front loader system.

7. The County's present landfill is going to close before a new one can be opened. A Plan to transport out of County during this interval of time can be accomplished over a short period of time utilizing the solid waste trucks and equipment presently being purchased and operated by the County

**Fentress County Municipal Solid Waste
Regional Planning Board**

Original Appointments and Terms

Members Representing Fentress County:

Mr. Wilfred W. Sharp, (6) six years
Dr. Lonza Mitchell, (4) four years
Colonel Lloyd Bryant, (4) four years
Mr. Turk Baz, (2) two years
Mr. Jack Crabtree, (2) two years

Member Representing The City of Jamestown:

Mr. Donald Crockett, (4) four years

Member Representing The City of Allardt:

Ms. Mary Potter, (6) six years

Original Officers

Mr. Wilfred W. Sharp, Chairperson
Colonel Lloyd Bryant, Secretary
Mr. Jack Crabtree, Vice Chairperson

Current Members

Members Representing Fentress County:

Mr. Dwight Dickson (6) four years
Mr. Ralph Taylor (4) four years
Ms. Margaret Pile (4) four years
Mr. Tex Moles (2) two years
Mr. Kevin Norries (2) two years

Member Representing The City of Jamestown:

Mr. Donald Crockett (4) four years

Member Representing The City of Allardt:

Ms. Mary Potter (6) six years

Current Officers:

Mr. Donald Crockett, Chairperson
Ms. Margaret Pyle, Vice Chairperson
Mr. Dwight Dickson, Secretary

**Fentress County Municipal Solid Waste
Regional Advisory Committee:**

Original Appointments, Interest and Terms

Mr. Donald Padget, Presbyterian Minister, (6) six years
Ms. Bernice Matthews, Progressive Savings Bank, (6) six years
Mr. Marvin Shanks, Retired from environmental Sciences Division, Oak Ridge Nation Laboratory, Oak Ridge, Tennessee (4) four years
Ms. Margaret Pile, UT Agricultural Extension Leader, (4) four years
Ms. Jan Lee, State Farm Insurance Agent, (4) two years
Mr. Bill Bowden, Fentress Courier, Owner and Editor, (2) two years
Ms. Payton Robbins, Recycling Coordinator, (2) two years
Mr. Eddie Cook, Cook Trucking, Owner, (1) one year
Ms. Jo Blan LaRue, Retired, (1) one year
Ms. Avo Turner, Retired, (1) one year

Original Officers:

Mr. Donald Padget, Chairperson
Ms. Payton Robbins, Secretary

Current Members:

Mr. Donald Padget, Presbyterian Minister, (6) six years
Ms. Bernice Matthews, Progressive Savings Bank, (6) six years
Mr. Marvin Shanks, Retired from environmental Sciences Division, Oak Ridge Nation Laboratory, Oak Ridge, Tennessee (4) four years
Ms. Jan Lee, State Farm Insurance Agent, (4) two years
Mr. Bill Bowden, Fentress Courier, Owner and Editor, (2) two years

Current Officers:

Mr. Donald Padget, Chairperson

Resolution establishing the region and the minutes with the appointments and officers both original and new are attached.

Advisory Committee

Mission Statement

It is the mission of the Fentress County Municipal Solid Waste Region Advisory Committee to evaluate the plans and progress of all solid waste activities in the region and make recommendation and comment to the region's board when the committee feels it is necessary and is in the best interests of the citizens of the region regarding the collection, disposal and treatment of solid waste.

Activity to Date

The Fentress County Municipal Solid Waste Advisory Committee has conducted meetings since its formation in November of 1992. The advisory committee received copies of the ten year plan throughout its development and has made recommendations to the board regarding the solid waste programs in the region. The committee reviewed the final ten year document and made a statement regarding the evaluation of the plan.

Implementation Role

The advisory committee plans to conduct meetings once each two months to evaluate the implementation of the ten year plan . The committee will make suggestions to the board regarding any changes or other alternatives which may be appropriate regarding the development of the program.

State of Tennessee,
County of Fentress

Fentress County Court met in a Special Called Session on August 3, 1992 at 7:30 p.m. Present and presiding the Honorable George Mullinix, County Executive. Pat Conatser, County Clerk kept the Minutes. Nine of the County Commissioners were present. John Clark was absent.

Motion by Edwin Stockton seconded by Leonard Bilbrey to Pass a RESOLUTION that will make Fentress County its own Solid Waste Region.

RESOLUTION ATTACHED:

Roll Call Vote: 9 for -1 absent John Clark
RESOLUTION PASSES

Motion by Leonard Bilbrey seconded by Edwin Stockton to appoint a Board by RESOLUTION to oversee SOLID WASTE. (Board may have to be re-appointed Oct 1, 1992)

Bill Sharp, Chairman- 6 years
Dr. Lonza Mitchell - 4 years
Lloyd Bryant - 4 years
Turk Baz - 2 years
Jack Crabtree - 2 years

At the end of their terms the Succeeding Board Member will be appointed by the County Commission.

RESOLUTION ATTACHED:

Roll Call Vote: 8 for - John Clark, Absent - Ampy Huff- Pass

RESOLUTION PASSES

Motion by Leonard Bilbrey seconded by Arnold Peavyhouse that Fentress County Commission establish specifications and advertise ~~for bids for~~ 22 NEW Compactor Garbage trucks as large as we can conveniently use in Fentress County.

ROLL CALL VOTE: 9 For- 1 Absent, John Clark
MOTION PASSES

Motion by Edwin Stockton seconded by Gary Peters to buy back from the Insurance Company for \$2,400.00 the garbage compactor truck that was in an accident a few weeks ago. He said he felt that this would be a good buy, as equipment on this truck could be used to keep the other truck running until we can obtain the new trucks.

Roll call vote: 9 for - John Clark, Absent.

Commissioner Arnold Peavyhouse then asked why the dumpster at the Boatland Road had been moved, Co Ex Mullinix said he did not know that it had, but that He would check on it first thing Tuesday Morning and take care of trying to get it placed back at this location.

Motion by Gary Peters seconded by Leonard Bilbrey to recess.

State of Tennessee,
County of Fentress

Fentress County Solid Waste Management Board met in their first Organizational Meeting on Thursday Night, August 27, 1992 at 7:00 p.m. in the Main Courtroom with Chairman Bill Sharp presiding. Board Members present were as following: Turk Baz, Lloyd Bryant, Jack Crabtree, and Dr. Lonza Mitchell.

Mr. Sharp ask the Board to set up an order of Business for Meetings. First call to order, roll call, reading and approval of minutes, reports of standings and special committees, unfinished business, and new business.

Motion by Dr. Lonza Mitchell seconded by Lloyd Bryant to hire Sheila Cook as part-time Secretary. Mrs Cook will also work in County Clerks Office part-time. The County Clerk and Solid Waste Board will share equally the regular office hours required. The Solid Waste Board will pay for any overtime hours worked, as required by the Board. Passed by unanimous vote.

The Board elected Jack Crabtree as Vice Chairman and Lloyd Bryant as Financial Officer.

The Board sent to Committee the drawing up of an "Official Plan" of the Solid Waste Board. The Committee Members are the Chairman Bill Sharp and Financial Officer Lloyd Bryant.

Motion was made by Jack Crabtree seconded by Dr. Lonza Mitchell to purchase one Roll Off Collection Truck and twelve Open Top containers to be placed in existing container collection sites, during the change over to Manned Convenience Center. Passed by unanimous vote.

Motion by Jack Crabtree seconded by Dr. Lonza Mitchell for resolutions to provide expenses for the Board Members to perform their duties as Board Members. All expenses to be presented to the Board for approval. Passed by unanimous vote.

The Board discussed appointing a Citizens Advisory Committee. Postponed any formal action concerning Advisory Committee until the next Board Meeting.

The Board set Thursday Night at 7:00 p.m. September 3, 1992, as a Work Session (get together) with Board, County Executive George Mullinix, and Landfill Engineer.

Motion by Jack Crabtree seconded by Lloyd Bryant to set the 2nd Thursday of each month at 7:00 p.m. for Official Board Meetings. Motion passed by unanimous vote.

Motion to adjourn by Lonza Mitchell seconded by Turk Baz at 9:00 p.m. Passed by unanimous vote.

Sheila Cook
Sheila Cook
Secretary

Bill Sharp
Bill Sharp
Chairman

State of Tennessee,
County of Fentress

(Friday, October 7, 1994 @ 7:00 p.m.)

Fentress County Commission met in a Reconvened Session of the September 29, 1994 meeting. Present and presiding the Honorable Stoney Duncan, County Executive. Linda Manis, County Clerk kept the Minutes. Nine County Commissioners were present. Gary Peters was absent.

Motion by Bob Pile seconded by Ralph Taylor to approve the Minutes of September 29, 1994 and to ratify actions taken in that meeting. Passed by unanimous voice vote.

Motion by Ralph Taylor seconded by Lee Little to approve County Executives Recommendations for the Fentress County Sanitation Board.

- (1) Hershel Smith (1 yr term)
- (2) Clinton T. Wright (2 yr term)
- (3) I. K. (Buster) Stockton (3 yr term)

Passed by voice vote.

Motion by Lee Little seconded by John Clark to approve County Executives Recommendations for the Fentress County Municipal Region Planning Board.

- (1) Kevin Norris (2 yr term)
- (2) Tex Moles (2 yr term)
- (3) Margaret Pile (4 yr term)
- (4) Ralph Taylor (4 yr term)
- (5) Dwight Dixon (6 yr term)

Passed by unanimous voice vote.

Motion by Leonard Bilbrey seconded by Edwin Stockton to approve a Resolution allowing Sheriffs Dept to sell 3 patrol cars, old deputy uniforms and miscellaneous unclaimed property and apply the proceeds to the purchase of a new vehicle for the Sheriffs Dept. (RESOLUTION ATTACHED)

Roll Call Vote: 9 for - Gary Peters absent
Motion Passes

Motion by Lee Little seconded by Ralph Taylor to adjourn until 7:00 p.m. October 17, 1994. Passed by voice vote.

State of Tennessee,
County of Fentress

The Fentress County Solid Waste Planning Board met for their regular monthly meeting on Thursday October 20, 1994 at 6:00 p.m. at the Solid Waste Office. All Board Members were present with the exception of Ms. Mary Potter and Mr. Ralph Taylor.

Mr. Crockett, Secretary of the Board, called the meeting to order.

Mr. Crockett announced the first order of business was to elect new officers to the board.

Motion by Mr. Dwight Dixon to nominate Mr. Donald Crockett, Chairperson of the Board. Seconded by Mr. Kevin Norris.

Roll Call Vote: For: Ms. Margaret Pyle Pass: Mr. Donald Crockett
Mr. Kevin Norris
Mr. Dwight Dixon
Mr. Tex Moles

Motion Passes.

Motion by Mr. Dwight Dixon to nominate Ms. Margaret Pyle, Vice Chairperson, Seconded by Mr. Donald Crockett.

Roll Call Vote: For: Mr. Kevin Norris Pass: Ms. Margaret Pyle
Mr. Donald Crockett
Mr. Dwight Dixon
Mr. Tex Moles

Motion Passes.

Motion by Mr. Donald Crockett to nominate Mr. Dwight Dixon, Secretary, Seconded by Mr. Kevin Norris.

Roll Call Vote: For: Ms. Margaret Pyle Pass: Mr. Dwight Dixon
Mr. Kevin Norris
Mr. Donald Crockett
Mr. Tex Moles

Motion Passes.

Ms. Payton Robbins, employee of the Solid Waste Department, presented the ten year planning document to the Board. The Board reviewed approximately one half of the planning document and a motion was made by Mr. Donald Crockett, Second by Mr. Dwight Dixon to recess and meet again at a later date to complete the review. Motion passed by Voice Vote. Meeting recessed at 8:00 p.m.


Faye Dalton
Secretary/Solid Waste Department


Mr. Donald Crockett
Chairman of the Planning Board

Re: Letter of Certification, T.C.A. 68-31-874(a)

November 3, 1994

Fentress County Municipal Solid Waste Region Board
Post Office Box 1169
Jamestown, Tennessee 38556

In accordance with T.C.A. 68-31-874(a) as amended, I, Stoney C. Duncan, Fentress County Executive do hereby certify that Fentress County has met all appropriate financial and accounting requirements of said act.

Fentress County is not currently operating a disposal facility and as such is not required and has not established an Enterprise Fund 120. Such a fund will be established if and when a landfill is in operation in the county. All of the remaining solid waste management financial activities are under the Special Revenue Fund 116 (Solid Waste/Sanitation). The county executive's office serves as the fiscal agent of all activities of this fund to include the signing of all warrants authorized by the fund managers. Post closure of the old landfill is budgeted under Special Revenue Fund 116.

The State of Tennessee Comptroller's Division of Audit serves as auditor of Fentress County accounts to include solid waste accounts in accordance with contract. Fentress County budget's to include those of solid waste are approved by the county commission and are reviewed by the Office of the Tennessee State Comptroller.


Stoney C. Duncan, Fentress County Executive

Appendix B

Documentation for Adjustments to the Base Year Generation

This appendix contains documentation for adjustments to the base year generation, or variances from the waste reduction goals, as set forth in [T.C.A. Section 68-31-861(a) and (b)] discussed in Chapter IV.

1. Adjustment of 1989 Generation Data:
 - a. a copy of the county's letter to the Director of the State Planning Office requesting an adjustment to the 1989 base line data, and setting forth reasons for the adjustment.
 - b. copies of any supporting documentation;
 - c. copy of a letter from the Director of Solid Waste Assistance approving the adjustment.



FENTRESS COUNTY MUNICIPAL SOLID WASTE REGION

WILFRED (BILL) SHARP
CHAIRMAN OF THE BOARD/EXECUTIVE DIRECTOR

POST OFFICE BOX 1169
JAMESTOWN, TN. 38556
(615) 879-1135

March 1, 1994

Department of Environment and Conservation
Mr. Paul Evan Davis, Director
Division of Solid Waste Assistance
401 Church Street
Nashville, Tennessee 37243

Dear Mr. Davis:

The Fentress County Solid Waste Regional Planning Board is submitting a request for a Base Year Adjustment for Fentress County for planning for calendar year 1989 based on an error in projection of the population for Fentress County for the 1989 base year. Attachments enclosed explain the rationale for this request.

Yours Sincerely,

Wilfred W. Sharp
Chairman/Fentress County Regional Solid Waste Planning Board

State of Tennessee,
County of Fentress

The Fentress County Solid Waste Board met for a Reconvened Meeting on Monday Afternoon, February 21, 1994 at 1:00 p.m. at the Solid Waste Board Office. All Board Members were present except Mr. Baz and Mrs. Potter. Sheila Cook recorded the Minutes.

Motion by Dr. Mitchell seconded by Mr. Crockett to accept the bid on the used van truck from Roger Hall Used Cars for the price of \$7,600.
Roll Call Vote: All present voted Aye.
Motion Passes.

Motion by Mr. Crabtree seconded by Mr. Crockett moved to send a Resolution to the State Planning Office providing for a waiver of the projection of tonnage for Solid Waste Planning for calendar year 1989 to calendar year 1993. (COPY ATTACHED). Passed by Voice Vote.

Motion by Mr. Crabtree seconded by Dr. Mitchell authorizing Mr. Sharp to rebid for future Convenience Center buildings, also the bidder must be a licensed contractor. Passed by Voice Vote.

The Board discussed and decided when the Grimsley Convenience Center was ready to open the hours should be from 10:00 A.M.-6:00 P.M. on Tuesdays, Thursdays and Saturdays. The Clarkrange Convenience Center will be open on Mondays, Wednesdays and Fridays. They authorized to close down the Banner Roslin Rock Collection Site at an appropriate time.

Motion by Dr. Mitchell seconded by Mr. Crockett for Mr. Sharp and Miss Robbins to attend the 23rd Annual Solid/Hazardous Waste Conference & Exhibition April 20-22, 1994 to be held in Gatlinburg, TN with their expenditures for registration fees, transportation, hotel and meals to be paid.

Roll Call Vote: All present voted Aye.
Motion Passes.

Motion by Dr. Mitchell seconded by Mr. Stockton to adjourn at 2:30 p.m.
Passed by Voice Vote.

Sheila Cook
Sheila Cook
Secretary

Bill Sharp
Bill Sharp
Chairman

FENTRESS COUNTY SOLID WASTE PLANNING REGION

FEBRUARY 21, 1994

POPULATION DATA TO SUPPORT CHANGE OF BASE YEAR POPULATION PROJECTION TO DETERMINE PER CAPITA WASTE RATE

As shown in table I below the 1980 census was 14,826 and the 1989 projection derived from the 1980 census was 15,750. According to this data an increase of 924 persons over the next 9 years was projected. In the table increments of 103 persons for 6 years were given and increments of 102 persons for 3 years were given to illustrate population growth as projected by the 1980 census.

Table I

1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
14,826	14,929	15,032	15,134	15,237	15,340	15,442	15,545	15,648	15,750

In table II The 1980 census is shown at 14,826 and the 1990 census at 14,669 which indicates an actual decrease of 157 persons over the 10 year period indicated. Shown are decrements of 15 persons for 3 years and 16 persons for 7 years which gives a 1989 population of 14,684.

Table II

1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
14,826	14,811	14,795	14,799	14,763	14,748	14,732	14,716	14,700	14,684	14,669

Using the base rate generation of 10,440 tons and a more accurate population for 1989 of 14,684 the per capita rate is .71 tons.



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION

401 Church Street
Nashville, Tennessee 37243

March 10, 1994

Mr. Wilfred W. Sharp, Chairman
Fentress County Regional Solid Waste Planning Board
Post Office Box 1169
Jamestown, TN 38556

Dear Mr. Sharp:

We have received and reviewed your request for an adjustment to the base year data regarding population for that year. It appears that you have a valid request for a base year adjustment. Therefore, we are approving your adjusted base year data to reflect a population estimate of 14,669 persons for 1989 and an annual per capita disposal rate of 0.71 tons.

If we can be of further help on this or any other matter, please do not hesitate to contact our office.

Sincerely,

Paul Evan Davis
Director
Division of Solid Waste Assistance

PED:GHD:dhm

Appendix C

Public Participation Activities

1. Summary of workshops, public information meetings, informational and educational activities.
2. An attendance list, and summary of the Public Hearing

Workshops

In late 1992 the County Executive in coordination with the solid waste board and county commissioners conducted community meetings at local elementary schools. Listed below is the school where the meetings were conducted and the communities and/or municipalities that school represents.

York Elementary
City of Jamestown

Pine Haven Elementary
Pine Haven
Sharp Place
Pall Mall

Grimsley Elementary
Grimsley
Banner Roslin
Clarkrange

Allardt Elementary
City of Allardt
Armathwaite
Shirley
Stockton
Mount Helen

The attendance list, and summary of the Public Hearing

Name	Address
Wilfred W. Sharp	Route 1, Box 88, Clarkrange, Tennessee
Steven Cook	Star Route, Box 61A, Pall Mall, Tennessee
Georgia Bowling	Route 1, Box 89H, Clarkrange, Tennessee
Jim Bowling	Route 1, Box 89H, Clarkrange, Tennessee
Charlotte Emery	Route 1, Box 214A, Jamestown, Tennessee
Betty R. Crabtree	Route 2, Box 338A, Jamestown, Tennessee
Margaret M. Pyle	Star Route, Box 50D, Pall Mall, Tennessee
George Mullinix	Post Office Box 1174, Jamestown, Tennessee
Edwin Stockton	Route 4, Box 593, Jamestown, Tennessee
Jack Crabtree	Route 2, Box 338A, Jamestown, Tennessee
Lonza Mitchell	Post Office Box 179, Jamestown, Tennessee
Vicie Sharp	Route 1, Box 88, Clarkrange, Tennessee
James Beaty	Route 1, Box 43, Jamestown, Tennessee
Mary Potter	Post Office Box 147, Allardt, Tennessee
Nancy B. Gernt	Route 1, Box 468, Clarkrange, Tennessee
Ken Taylor	Post Office Box 941, Jamestown, Tennessee
John Robbins	Route 4, Box 435, Jamestown, Tennessee
Brenda Robbins	Route 4, Box 435, Jamestown, Tennessee
Ben Russell	Route 2, Box 341, Jamestown Tennessee
Austin Choate	Route 1, Box 109, Jamestown, Tennessee
Larncce Hinds	Route 1, Box 121, Deer Lodge, Tennessee
Ellis Atkinson	Route 1, Box 214C, Jamestown, Tennessee
Wanda Atkinson	Route 1, Box 214C, Jamestown, Tennessee
Bruce Cooper	Route 4, Box 125, Jamestown, Tennessee
Don Padget	Post Office Box 8, Allardt, Tennessee
Bill Bowden	Post Office Box 1198, Jamestown, Tennessee
Kenneth Beaty	Route 1, Box G-22, Jamestown Tennessee
Turk Baz	Post Office Box 69, Jamestown, Tennessee
Caren Wheeley	Route 2, Box 382A, Jamestown, Tennessee
Don Hicks	Rock Creek Route, Box 86-1A, Jamestown, Tennessee
Ben Wheeley	Route 2, Box 382A, Jamestown, Tennessee
Clay Crabtree	Route 2, Box 337K, Jamestown, Tennessee
David Gernt	Allardt, Tennessee
Sheila Cook	Pall Mall, Tennessee
Payton Robbins	Route 4, Box 435, Jamestown, Tennessee

The Fentress County Municipal Solid Waste Region Ten Year Plan

Public Hearing

June 15, 1994
York Agricultural Institute

Required by the State of Tennessee Solid Waste Management Act of 1991

Agenda

The plan presentation will begin promptly at 6:00 PM and conclude at 6:45 PM. The floor will then be open for questions and comments until 7:45 PM when the meeting will adjourn. You may also send questions or comments in writing to the Fentress County Solid Waste Region, Post Office Box 1169, Jamestown, Tennessee 38556.

Introduction.....	Mr. Bill Sharp
Inventory and Analysis of Solid Waste System.....	Mr. Bill Sharp
Plan Objectives.....	Mr. Bill Sharp
Financial Status.....	Mr. Bill Sharp
Ten Year Plan	
I Management Structure.....	Ms. Payton Robbins
A. Administration	
B. Planning	
C. Finances	
II Sanitation Education/Information.....	Ms. Payton Robbins
A. Industry/Business	
B. Students	
C. Elected Officials	
D. Public	
III Collection.....	Ms. Payton Robbins
A. Waste Pick Up	
B. Convenience Centers	
C. Commercial Collection	
IV Disposal	
A. Recycling & Waste Reduction.....	Ms. Payton Robbins
B. Problem Wastes.....	Ms. Payton Robbins
C. Post Closure and Landfill.....	Mr. Bill Sharp

Introduction

The Solid Waste Management Act of 1991 Requirements and Objectives
Formation of Region
Board Formation and Appointments
Advisory Board
Preparation of Ten Year Plan

Official Plan Objectives

Approved by County Commission October 19, 1992

- (1) The first priority of the Solid Waste Board Objectives will be to develop a Class I Landfill that is within the means of the solid waste budget to provide for the disposal of all the county's municipal solid waste.
- (2) In the event a class I landfill is not feasible within the county, a plan will be initiated to economically transport the county solid waste to an out of county disposal facility. This Plan may require the construction of a solid waste transfer station and the purchase of long distance transport trucks and related equipment.
- (3) A class IV landfill will be developed to augment either the class I landfill or the transfer of solid waste out of county.
- (4) A network of convenience centers will be provided throughout the county for citizens to dispose of household wastes and recyclables. These centers will be constructed to state specifications.
- (5) Convenience centers will be designed to operate with rear roll off type equipment compacted on site.
- (6) Commercial solid waste will continue to be collected by the front loader system.
- (7) The county's present landfill will require closure before a new one can be opened. A plan to transport out of county during this interval can be accomplished over a short period of time utilizing the solid waste trucks and equipment presently being purchased and operated by the county.

Written comments and questions may be sent to:
 Fentress County Municipal Solid Waste Region
 Post Office Box 1169
 Jamestown, Tennessee 38556

Local Tax Funding and Financial Condition of Fentress County Solid Waste Region June 15, 1994

(1) One cent sales tax receipts (annual)	\$620,000.00
(2) Inventory of equipment, vehicles, buildings and land (assets).....	\$1,053,669.00
(3) Debt is less than one year's tax receipts	
A. Development loan.....	\$500,000.00
B. Recycling facility.....	\$32,000.00
C. Landfill earth scraper.....	\$30,000.00
Balance, June 30, 1994.....	\$470,333.33

-NOTES-

- (1) 1993-94 Landfill disposal costs.....\$187,200.00
- (2) 1992-93 Solid waste cash reserve.....\$265,881.30
- 1993-94 Estimated cash reserve.....\$229,580.00
- (3) 20 full and part time employees, total salaries and wages is equal to 22% of the budget as compared to 65% to 75% of other county offices.

Inventory and Analysis of the Current Waste Management System 1992

- No existing management structure to develop and implement a ten year plan
- No administrative personnel to oversee daily operations
- Approximately 90 open top dumpsters located at 30 uncontrolled sites served the general public
- 75 commercial accounts were receiving serviced @ a fee of \$7.50 per dumpster tipped
- One 1984 ford front load dump truck used to empty both public and commercial dumpsters

- One 1982 Ford dump truck used for litter pick up around the public dumpsters
- The landfill if used at the current capacity would require closure in 4 to 6 months
- A recycling program operating by contract with Challengers Incorporated

Management Structure

Administration

- On October 19, 1993, the County Commission passed the required resolution declaring Fentress County a single county region as defined by the Solid Waste Management Act of 1991.
- The Commission appointed the Solid Waste Planning Board Members and in addition to planning duties, authorized the Board to oversee all solid waste operations within the region. The county appointed (5) members and cities of Jamestown and Allardt appointed (1) member each. Fentress County has a (7) member Solid Waste Board.
- The Solid Waste Board established the office of solid waste and hired two administrative personnel, an executive director to oversee all solid waste operations and an office secretary. On July 1, 1993, the board hired a waste reduction manager to oversee education and the recycling operations. At the same time the board assumed responsibility for the recycling program and all waste reduction operations.
- An advisory committee comprised of six Fentress County citizens was formed. The advisory committee's duties include review of solid waste activities in the region and review of the ten year plan. The committee has held formal meetings and made recommendations to the board.

Planning

The Fentress County Solid Waste Board is responsible to develop and implement a ten year plan to handle the county's solid waste. The advisory committee will review and comment on the planning process and the ten year plan. Planning commission review and comment is also required and the county commission is responsible for the funding of the plan.

The plan must address five basic requirements:

- Funding
- Management
- Education
- Collection
- Disposal

The planning process:

- Planning activities and administrative decisions are made in official meetings or other publicized workshops
- Administrative personnel develop the ten year planning document
- Public hearing
- Advisory committee review
- Planning commission review
- The Solid Waste Board and the County Commission formally adopt the plan by resolution (any plan submitted to the state without board and commission approval will be considered incomplete and the region will be subject to penalties)
- Amendments and comments made concerning the plan appended to the document
- Submit plan to state

Finances/Funding

Tax Revenue

In 1992 Fentress County citizens voted to pass a one cent sales tax to fund a solid waste program that would meet state guidelines.

Based on last year's revenues and a projected 3.19 percent economic growth predicted for Fentress County, the following chart illustrates anticipated tax revenues for the next ten years.

Solid Waste Funds Tax Revenue Projections for Ten Years	
Year	Amount
FY 1995	\$620,000.00
FY 1996	\$639,778.00
FY 1997	\$660,186.92
FY 1998	\$681,246.88
FY 1999	\$702,978.66
FY 2000	\$725,403.68
FY 2001	\$748,544.06
FY 2002	\$772,422.62
FY 2003	\$797,062.90
FY 2004	\$822,489.21

Other sources of revenue

Solid Waste Funds Other Sources of Revenue (1995 FY Estimate)	
Commercial Collection Fees	\$80,000.00
Sale of Recycled Material	\$20,000.00

Grants

The following chart shows the grants received in FY 1994, some of these grants will be recurring and new grants may be awarded.

Solid Waste Funds Grants Awarded FY 1994	
Convenience Center Grant	\$50,000.00
Education Grant	
Litter Grant	\$20,211.00
Planning Grant	\$15,000.00
Recycling Grant	\$10,000.00
Tire Storage/Waste Oil Grants	

Budgeting

FY 1994 Operations Budget		
Fund 55710	Solid Waste Management	\$68,623.88
Fund 55720	Sanitation Education/Information	\$7,216.80
Fund 55730	Waste Pick up	\$125,637.74
Fund 55732	Convenience Centers	\$46,368.60
Fund 55751	Recycling Center	\$71,191.57
Fund 55745	Landfill Maintenance & Operation	\$222,350.97
Total Operations		\$541,389.56

Ten year budget changes planned for include:

- (1) Eight convenience centers @ \$80,000 annually
- (2) Disposal fees increasing due to new landfill regulations
- (3) An inflation increase
- (4) Grants (educational) will provide an increase in certain line items

Sanitation Education and Information

Statutory Requirement:

"...[E]ach plan submitted by a municipal solid waste region shall include...a description of education initiatives aimed at business, industry, schools, citizens, and others, which address recycling, waste reduction, collection, and other goals..." [T.C.A. Section 68-31-815(b)(11)]

"...Each solid waste regional plan shall include an education program to assist adults and children to understand solid waste issues, management option and costs, and the value of waste reduction and recycling.

The regional goal is to implement an education program that addresses all aspects of the solid waste system and reaches all sectors of the population by July of 1995. The objective of an education program is to encourage public participation in the waste reduction programs and gain control of unmanaged waste.

Industry and Business

- Conduct meetings with management of local industry and business to focus on ways to reduce, reuse and recycle waste in the workplace
- Offer as an incentive, door to door collection of recyclables at no charge to business or industry
- Expand the current door to door collection service with a focus on businesses (currently, over 70 businesses and industries are serviced by recycling pick up, 80% of that is industry)
- Conduct educational workshops with local industry on ways to reuse, reduce and recycle in the workplace

Student Education

In the 1993 school year, the Office of Solid Waste coordinated visits to each elementary school classroom through the local Agricultural Extension Office and the 4-H Clubs. Every elementary classroom in the county received educational instruction on solid waste management.

The instruction consists of:

(1) Recycling

- A. Slide presentations
- B. Hands on demonstrations
- C. Hands on examples of recycled products

(2) Litter prevention

- A. Costs of clean up
- B. Community pride issues

(3) Convenience Centers

- A. Locations
- B. What the centers accept
- C. Slide presentation

(4) Landfill

- A. Environmental impact
- B. Costs
- C. Physical make up of a class I landfill

The Office of Solid Waste plans to continue and expand these programs in coordination with agricultural extension office for the next ten years.

Specifically:

- Next year each classroom will receive at least three instructional programs through the 4-H club
- Include the two local highschools and one private school next school year
- Classroom instruction through the use of slides and demonstrations will continue and increase in frequency
- An increased effort to involve the teaching staff
- Contests, awards, earth day celebrations, floats from recycled materials and solid waste projects in science fairs will be implemented

Public Officials

- The office of solid waste will conduct at least two annual meetings with public officials to specifically discuss solid waste
- Information provided will include costs, state requirements and progress of solid waste programs
- As a part of the information process, county commissioners now receive copies of all minutes from the solid waste board meetings
- Public officials will be notified of special solid waste events and encouraged to attend and participate

General Public

An information and education effort that involves the public is now underway in Fentress County and consists of the following:

- A weekly information and education column in local newspaper
- Public service announcements concerning recycling and litter
- Video education on the local cable channel
- News releases of the opening of new facilities
- Announcements of any upcoming events
- Live radio coverage of solid waste events
- Newspaper releases and articles on solid waste events
- Convenience center attendants are educating and encouraging the public to recycle

- Meetings with civic clubs and organizations

Planned education activities include:

- A comprehensive brochure (now in process) outlining solid waste programs in the county will be published and widely distributed to the public via the class I convenience centers and schools
- New video releases
- Placement of solid waste educational materials in the public library
- A comprehensive list of local civic organizations will be compiled by the office of solid waste for purposes of meeting with those groups to discuss solid waste programs at least one time annually.

The Solid Waste Board employs a full time Waste Reduction Manager to implement and coordinate the education effort. A reporting system to review educational activities has also been planned.

Collection

Statutory Requirements:

"... [E]ach plan submitted by a municipal solid waste region shall include...collection capability, including data detailing the different types of collection systems and the population and areas which receive and do not receive such services..." [T.C.A. 68-31-815(b)(2)(B); and "...as part of the local plan required by Section 13 of the Act, each county or multi-county municipal solid waste disposal region shall submit a plan for the adequate provision of collection services to the Department of Environment and Conservation.. Such plan shall identify unmet needs and shall be updated annually." [T.C.A. 68-31-851(b)

Waste Pick Up

- As outlined in the plan objectives, rear roll off equipment with compaction will be used for collection of household waste
- In 1992 a rear roll off truck was purchased for \$80,000 as a capital investment to collect household waste for the next ten years
- As outlined in the plan objectives, commercial collection of waste will continue using the front loader system
- In 1992 a front loader truck was purchased for \$110,000 as a capital investment to collect commercial waste for the next ten years
- Depreciation and maintenance have been planned for both collection vehicles

Convenience Centers

Collection options

- Door to Door Collection System
- A Network of Convenience Centers

An evaluation of the two systems indicated:

A door to door collection that would provide service to ninety percent of the public in Fentress County would be difficult due to the widespread and rural population. Additionally, due to the nature of roads in Fentress County (no shoulder) truck stops would create traffic hazards.

Eight convenience centers placed throughout the county would adequately serve ninety percent of the population and keep road side dumping to a minimum. The network of centers would also meet the state requirement as to the number of centers per population area.

State Law requires convenience centers meet certain criteria to receive a permit

- Restrict unauthorized access by fencing

- Post operating hours, rules and regulations
- Control dust and mud by paving or compacted rock
- Run on and run off surface water must be controlled
- On site fire suppression equipment
- Equipped with electricity, telephone and water
- On site structure to provide shelter, sanitary facilities and storage of records and supplies
- Collection containers placed on concrete pad

The region has constructed and is operating four permitted convenience centers to serve the public. Three of the four centers were built on property already owned by the county. The solid waste board plans to continue searching for county owned property to develop sites. A fifth center has been permitted and is under development in the community of Pall Mall.

After several weeks of research concerning the needs of Fentress County citizens as to the days and hours of operations for convenience centers the following schedule has been implemented.

Locations and Hours of Operations of Convenience Centers

Jamestown Convenience Center

Fairgrounds Road next to highway department

Monday thru Friday.....7:00 A.M. to 6:00 P.M.

Saturday.....7:00 A.M. to 12:00 P.M.
2:00 P.M. to 6:00 P.M.

Clarkrange Convenience Center

Highway 127 south next to the firehall

Monday, Wednesday and Friday.....10:00 A.M. to 6:00 P.M.

Grimsley Convenience Center

Highway 127 south next to the Church of Christ

Tuesday, Thursday and Saturday.....10:00 A.M. to 6:00 P.M.

Woodyard Convenience Center

Highway 127 south, 1 mile north of the Airport

Monday thru Friday.....7:00 A.M. to 5:00 P.M.

Saturday.....7:00 A.M. to 11:00 A.M.
1:00 P.M. to 5:00 P.M.

Two convenience centers are planned to serve communities in the west and east areas of the county, and one center planned to serve the mid north section of the county. See county map for areas planned to receive service and locations of existing centers.

Costs

Capital Costs

The total cost of the Grimsley Convenience Center was \$34,375.21. This center exemplifies the average cost associated with constructing a convenience center and can be used for illustrative purposes.

Grimsley Convenience Center Land/Construction/Equipment Costs	
Land	\$3,500.00
Rough grade, top soil removal (1st rock)	\$755.00
Paving Rock	\$2,815.41
Hauling Rock	\$600.00
Grading & Spreading Rock (2nd rock)	\$285.00
Fence	\$4,200.00
Three (3) concrete pads	\$3,800.00
Building Construction	\$4,950.00
Electrical	\$1,200.00
Plumbing	\$950.00
Compactor Installation	\$899.42
Signs	\$291.50
Packer	\$7,787.00
Open Top Container	\$2,341.88
Total	\$34,375.21

A \$50,000 grant from the State of Tennessee will be disbursed to the region and may go toward any capital or operational expenses incurred for any purpose.

The three additional convenience centers planned for the region are scheduled to be in operation on or before July 1, 1995.

Operating Costs.

Annual Operating Costs of a Class I Convenience Center	
Attendant Labor (\$5.30/hr @ 24 hrs/wk)	\$6,614.40
20% State Compensation, etc	\$1,322.88
Electric	\$720.00
Water	\$180.00
Telephone	\$360.00
Supplies	\$150.00
Site and Equipment Maintenance	\$500.00
Total	\$9,846.28

Commercial Collection

- Although there is no requirement by law to provide a commercial collection of solid waste, the solid waste board plans to continue commercial collection service based on economic need
- A front loader truck capable of handling all commercial accounts, (74 current accounts) was purchased in 1992 at \$110,000 as a capital investment to collect commercial waste
- A collection fee of \$12.50 per tip was set to help pay for collection and disposal of commercial waste
- Plans to encourage business and industry to locate in Fentress County

Disposal

Recycling & Waste Reduction

Statutory Requirements:

"... (Each plan submitted by a municipal solid waste region shall include...a recycling plan, including a description of current public and private recycling efforts and planned efforts to enhance recycling within the county or region" [T.C.A. 68-31-815(b)(7)]

and "Effective January 1, 1996, each county shall provide...one (1) or more sites for collection of recyclable materials..." [T.C.A. 68-31-863(a)]

"Each person or entity operating a collection site for recyclable materials shall annually report the quantities of recyclable materials collected, by type of material, to the region which shall then report...[this information]...to the Department of Environment and Conservation." [T.C.A. 68-31-863(b)]

The region began its recycling program in 1992. The program currently consists of these elements:

- (1) A recycling facility
- (2) Processing Equipment
 - A. Baler
 - B. Forklift
 - C. Aluminum can crusher
 - D. Scales
 - E. Glass Crusher
 - F. CFC recovery unit
 - G. Collection vehicle
 - H. Two open top containers for scrap metal
 - I. Aluminum can trailer
- (3) Door to door collection of commercial recyclables (70 participants)
- (4) Temporary bins at two grocery stores and three convenience centers for public use
- (5) Private and public recycling efforts combined equal a ten percent waste reduction

Fentress County plans expansion of the current recycling system to accomplish a goal of fifteen percent waste reduction. The components of the expansion include:

- (1) Permanent roll off containers designed for placement at the convenience centers (8)
- (2) Expansion of existing facilities or construction of new facilities are planned and will be implemented as needed
- (3) Increased education efforts

The remaining ten percent waste reduction needed to meet the state mandate is planned from two sources:

- (1) Class IV landfill diversion(7%)
- (2) Source reduction(3%)

Quantity of Waste Requiring Disposal (in tons) Adjusted for Population Changes and Economic Growth

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
10,029	10,350	10,681	11,023	11,376	11,740	12,115	12,503	12,903	13,316

Waste reduction by material and source

Material	%	%Residential	%Commercial	%Institutional	%Industrial
Paper	8	20	30	10	40
Glass	1	100	0	0	0
Wht Gds	2	100	0	0	0
Al/Steel	.5	100	0	0	0
Plastics	.5	100	0	0	0
Yd Wste	3	70	10	10	10
Class IV	5	60	0	0	40
Source Rd.	3	25	25	25	25

Estimated Quantities of Waste Diversion for the Next Ten Years

Year	Recovered & Recycled	Class IV Reduction	Source Reduction	Total
1992	237	0	0	237
1993	1,083	0	0	1,083
1994	1,097	702	301	2,100
1995	1,554	725	311	2,590
Subtotal	3,971	1,427	612	6,010
1996	1,601	748	320	2,669
1997	1,653	772	331	2,756
1998	1,707	796	341	2,844
1999	1,761	822	352	2,935
2000	1,817	848	363	3,028
2001	1,876	875	375	3,126
2002	1,928	903	387	3,218
2003	1,997	932	400	3,329
Total	18,311	8,123	3,481	29,915

Problem Wastes

Waste Oil

- The region has applied for a grant from the state for a container to collect used oil and a crusher for oil filters.
- The region plans to begin a used oil collection program before the end of 1994.
- The transfer station, located on 127 south (seven miles south of Jamestown, next to woodyard) is the planned collection site. The transfer station is a permitted class I convenience center and meets the state criteria for waste oil collection sites.
- The waste oil collected will be recycled through a buyer until such time as new landfill facilities are constructed when the oil will be used as a heat source.

Waste Tires

- The region has applied for a tire storage grant from the state and is planning to construct a tire storage facility at the county owned property where the class I, III and IV landfills are proposed. The site is located on Gouldstown Road two and an eighths mile from the courthouse.
- State specifications as to site area, drainage and adequate cover have been planned.
- The site will store an estimated 13,750 tires of various sizes and will be covered with tarps to insure control of vectors. The site is scheduled to be complete by the end of 1994. With 5,511 households in the county and an estimated disposal rate of two tires per household, the site will serve as storage for 12,000 tires in 1995.

A tire shredding operation is planned adjacent to the storage site and will occur two times annually. An estimated five to six thousand tires will be shredded at each visit.

- Staff will be on site during the shredding operation to provide labor and will be trained on the policy guide of the states' contractor for shredding tires.
- A market search for shredded tires will be conducted to see if there is a recycling option available. Both the sale or the donation of material will be considered to divert the tires from the landfill.
- If no viable option can be found, the shredded tires will be disposed of in the class III and IV landfill which is now in the permitting process.
- No additional labor costs will be incurred due to the tire collection and shredding operations. All labor associated with the tire program will be performed by landfill or recycling personnel already on staff.
- By the use of public information and education, the office of solid waste plans to develop a reporting system to locate tire sites that need to be inventoried. The reporting system is planned to take place during the winter when foliage of leaves and weeds will not hide the sites from view. The office of solid waste staff will organize a schedule to inventory the tire piles.

Household Hazardous Waste

- The county plans to participate in the state mobile household hazardous waste collection program.
- Household hazardous waste education is scheduled to begin in the fall of 1994 and two collection events will be conducted (spring and fall) beginning in 1995. The county has secured a date in the spring of 1995.
- The transfer station, located on 127 south (seven miles south of Jamestown, the county seat) is planned as a preliminary collection site. This site meets the state criteria for the household hazardous waste event.
- The event will accept all household hazardous wastes including lead acid batteries
- The solid waste program will not incur any additional costs from the household hazardous waste program. Administrative and convenience center staff already in position will handle all labor associated with the events.

Litter

- Fentress County received \$20,211 in litter grant monies from the state in FY 93 and will receive grant money again this year
- The litter grant funds pay in part wages of one administrative personnel to handle litter education and two employees to clean litter from the green dumpster sites
- A continuation and increase in litter education is planned

Post Closure

- The region plans to begin post closure operations on the old landfill beginning in the 1995 Fiscal Year
- The estimated annual cost for post closure in the 1995 FY is \$134,000.00, this money has been budgeted and is now in reserve
- Two new monitoring wells are planned for installation this year
- Before January 1, 1995 water testing will be underway
- Clay from the proposed landfill site will be used to cover the old landfill site
- The site will be monitored for thirty years as required by law

Landfill

The county government explored several waste disposal options to include incineration and contract for out of county disposal. The county had acquired the services of an engineer and geological survey firm to evaluate potential county landfill sites which would meet the requirement of the solid waste law. A potential site was found and an option for purchase had been completed.

Landfill activity to date:

- (1) Site purchase
- (2) Testing
- (3) Land survey
- (4) Geological reports
- (5) Engineering reports
- (6) First Phase permitting

Expenditures to date on project

Fentress County Landfill Project, expenditures to date, June 15, 1994	
Land purchase	\$150,000.00
1st phase permit fee	\$4,000.00
Garman hydrogeological	\$53,966.70
Beaver drilling	\$66,284.28
Dunson Engineering	\$14,087.33
Hood Dozer	\$8,100.00
Foy Survey	\$18,415.00
Total	\$ 314,853.31

- Plans to continue the landfill process are underway.
- This year an additional \$25,000 has been set aside for further engineering studies.
- Feasibility studies are in progress to develop a class I landfill utilizing every option available.
- A class IV landfill will be developed to augment either the class I landfill or the transfer of solid waste out of county.

STATE OF TENNESSEE
COUNTY OF FENTRESS

MINUTES
OF
FENTRESS COUNTY SOLID WASTE
PUBLIC HEARING
JUNE 15, 1994

Prepared by:
Ms. Nancy B. Gernt
Certified Court Reporter
P.O. Box 608
Jamestown, TN 38556-0608

The Public Hearing held by the Fentress County Solid Waste Board, relative to the ten year plan, was held June 15, 1994, 6:00 p.m., at York Institute Theater in Jamestown, Tennessee, pursuant to notice by publication.

Present for the hearing were Mr. Bill Sharp, Ms. Payton Robbins, several members of the Board, Planning Commission and general public.

Mr. Sharp opened the meeting with the introductions of the Board members, and Planning Commission that were present, and recognized each of them for their untiring efforts on this project.

The inventory and analysis of the solid waste system, the plan objective and financial status were presented by Mr. Sharp, after which he turned the hearing over to Ms. Payton Robbins assisted by Mrs. Margaret Pile, who then presented the ten year plan in detail, complete with slide presentation on the various aspects. This presentation complimented the handouts which had been given to each person attending the hearing.

Following the ten year presentation, questions and/or comments were solicited from the public in attendance, with the following being questions being voiced, to-wit:

My name is Karen Wheely. My question is about the cost of the individual sites. The second cost is over a Thousand Dollars and it was... for taxes. Are they taxing our sites?

Mr. Sharp: You mean the convenience site?

Mrs. Wheely: The convenience site.

Mr. Sharp: No, I haven't seen...that..that must be the overhead.

Mrs. Wheely: Twenty percent state compensation is that...

Mr. Sharp: That's social security and withholding tax...social security and state compensation for employees wages.

Mrs. Wheely: Okay.

Mr. Sharp: Any further comments and/or questions?

I'm Ken Taylor. On page six of your handout you've done a real good job in some of these revenues--could we get a copy, or later pick up a copy of your operating

costs.

Mr. Sharp: I think one of the handouts may have covered this entirely.

Mr. Taylor: Could we get a copy of that?

Mr. Sharp: Is that the local tax revenue....

Mr. Taylor: On that page, local tax funding and financial condition.

Mr. Sharp: Yes.

Mr. Taylor: Could we get a copy of these (indiscernible), and on revenue, expected revenue, and on that I would really like for you to give your ten year plan with the associated costs. You could give us an estimate, and those would be rough estimates, probably, each year for the next ten years your expected revenue and expected operating--or the expected service costs for the next ten years?

Mr. Sharp: That will be written in the plan.

Mr. Taylor: Can we get a copy of that?

Mr. Sharp: Yes. We will see that you get a copy of the whole plan.

Mr. Taylor: One other item, do you have a mission statement, or a policies and procedures and by-laws?

Mr. Sharp: Yes, we set up policies and procedures. We don't really have by-laws. We agreed up front to certain procedures on handling our business; and we have always had rather formally, or informally as we didn't feel (indiscernible). I might say that we have not always agreed. Just like we're not always carrying a 100% vote on the County Commission, but we have always carried a majority vote on the County Commission. At our Solid Waste Board meetings we have not always agreed, but after we have discussed it and discussed---in some of our meetings that lasted three hours--we had a feeling for what the majority of the members felt, and the way they were leaning. And whenever we had--we've had thirty-four meetings and from day one, and now we don't have deaf people on this Board either, let me tell you. Jack Crabtree and Doc Mitchell and (indiscernible), are not "yes people". But we have yet to fail to have a majority vote, or a unanimous vote, I should say. Every vote the Solid Waste Board has ever taken has been unanimous.

Mr. Taylor: Okay. I would like to recommend that the Fentress County Solid Waste Board, the Region Board establish a mission statement; set records for yourselves and others to follow. I would like to recommend you have a policy and procedure manual and/or draft by-laws to go by. And, (indiscernible), and I'm sure you have'll have plenty of your own. I would like to then know somewhere it's stated, and

clearly stated, a safe-guard of at least three things. One would be a safe-guard of a conflict of interest, from anyone associated with the Board of Directors, or Advisory Board or any adhoc or standing committees that may be formed; that it be clearly stated that a conflict of interest policy...also, I would like to see the philosophy statement that the operation be service driven--the operation be a service driven entity, and just define that since the taxpayers are funding primarily all of it, if not all of it, that your first and foremost objective to be to provide service to the taxpayers, or service going back to the taxpayers with as little bureaucratic or administrative costs, to make the sure the job is done correctly and adequately.

And the third safeguard would be to against bureaucratic monopoly to encourage the free-enterprise system, for example utilize the competitive bids or competitive proposals,... and that would be the three things I would like to recommend.

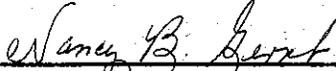
Mr. Sharp: They are in the record and will be looked at . Does anyone else have any questions or any statements that they wish to make at this time?

(No audible response.)

Mr. Sharp: If we have no further discussion or no further questions, or no further statements, I'll call the meeting adjourned. Thank you for coming tonight.

AND FURTHER HEARINGS ON THIS DATE WERE HAD NOT.

I, Nancy B. Gernt, do hereby certify that the foregoing is a true, accurate and correct transcription of the minutes of the Public Hearing conducted by the Fentress County Solid Waste Board and taken by me, to the best of knowledge, belief and ability.



Nancy B. Gernt
Certified Court Reporter

Appendix D

Exports and Imports

1. The following two pages contain the contract between Fentress County and Scott County Solid Waste Disposal.

CONTRACT

BETWEEN

James Coffey d/b/a SCOTT SOLID WASTE DISPOSAL

and

FENTRESS COUNTY, TENNESSEE

This Contract made and entered into on this _____ day of July, 1993, is by and between JAMES COFFEY, d/b/a SCOTT SOLID WASTE DISPOSAL, of Highway 63, Huntsville, Tennessee 37756, and FENTRESS COUNTY, TENNESSEE, a political subdivision of the State of Tennessee, Jamestown, Tennessee 38556.

W I T N E S S E T H:

That both parties, namely Fentress County, Tennessee and James Coffey d/b/a SCOTT SOLID WASTE DISPOSAL do hereby agree to the following:

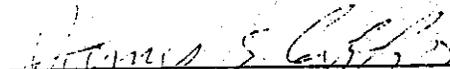
1. For the first year, 1993-94: Scott Solid Waste Disposal will accept only nonhazardous and noninfectious solid waste from Fentress County, TN. The tipping fee is to be \$20.00 a ton with the following stipulation: That after the year 1996, Scott County will be allowed to dispose of their solid waste in the Fentress County Landfill at the rate of \$20.00 per ton, for the same amount of tonnage for a year.
2. For the second year, 1994-95: Scott Solid Waste Disposal will accept only nonhazardous and noninfectious solid waste from Fentress County, TN. The tipping fee is to be \$20.00 a ton with no reciprocal agreement as to Scott County using the Fentress County Landfill.
3. For the third year, 1995-96: Scott Solid Waste Disposal will accept only nonhazardous and noninfectious solid waste from Fentress County, TN. The tipping fee is to be \$20.00 a ton with the following stipulation: That after the year 1996, Scott County will be allowed to dispose of their solid waste in the Fentress County Landfill at the rate of \$20.00 per ton tipping fee, and be allowed to dispose of double the amount of tonnage that Fentress County disposed of the third year.
4. In the event that Fentress County's Landfill becomes operation during the terms of this agreement. In the terms of this agreement Scott County can use at its discretion, any or all of accumulated air space earned.
In the event that Scott County does not use this space by the year January 1, 2000 Scott County will be required to pay in addition, to the \$20.00 credit, any additional fees that may be required by Fentress County Solid Waste Board.

IN WITNESS WHEREOF, this Contract has been executed by
the parties hereto on the day and year first above written.

SCOTT COUNTY, TENNESSEE

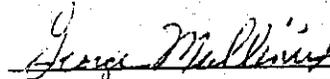


CLARENCE D. LOWE, COUNTY EXECUTIVE

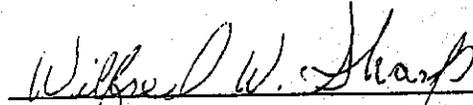


JAMES E. COFFEY d/b/a SCOTT SOLID
WASTE DISPOSAL

FENTRESS COUNTY, TENNESSEE



GEORGE MULLINIX, COUNTY EXECUTIVE



WILFRED (BILL) SHARP, CHAIRMAN
FENTRESS CO. MUNICIPAL SOLID WASTE
REGION

Appendix E

Review by Appropriate Municipal or Regional Planning Commission

1. Copies of letters sent to appropriate planning commissions regarding review of the plan.
2. Copies of minutes of the Fentress County Regional Planning Commission and the City Of Jamestown Regional Planning Commission noting the review of the plan.



FENTRESS COUNTY MUNICIPAL SOLID WASTE REGION

POST OFFICE BOX 1189
JAMESTOWN, TN. 38556
(615) 879-1135

October 14, 1994

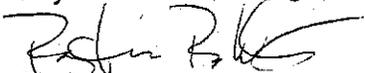
Tennessee Department of Economic and Community Development
Attention: Mr. David Stearns
Local Planning Office
621 East 15th Street
Cookeville, Tennessee 38501-1820

Mr. Stearns,

Please find enclosed a copy of the Fentress County Municipal Solid Waste Region Solid Waste Plan for review by the Fentress County Planning Commission in accordance with T.C.A. 13-3-105. If there is anything further our office may do to assist the commission regarding the plan, please contact the office at 879-1135.

Sincerely,

Payton Robbins, Acting Executive Director



Enclosures

MINUTES
FENTRESS COUNTY REGIONAL PLANNING COMMISSION
JULY 26, 1994

Members present were Jack Crabtree, Austin Choate, Oscar Odum, Ben Russell, Dennis Vaughn, Dr. Lonza Mitchell and Ken Hannifin. Members absent were Gary Matthews, Bill Sharp, Elzie Wright, Joel Watson and Erwin Stephens. Staff Planner David Starnes was also present. Chairman Jack Crabtree called the meeting to order at 7:00 p.m.

At the request of the Chairman, the approval of the Minutes of the June 28, 1994 meeting was postponed until the August meeting.

STATUS REPORT--FENTRESS COUNTY SOLID WASTE PROGRAM

With the absence of Bill Sharp, Planning Commission member and Executive Director of the Solid Waste Board, Chairman Crabtree gave the report on the county's solid waste program. It was reported that the Solid Waste Board is still in the process of preparing the Ten Year Plan. After completion, the planning commission will need to recommend to the county commission that it be approved. It was also reported that additional testing is taking place at two sites at the new landfill to see whether the areas could be developed as cells for holding the county's trash.

STATUS REPORT--FENTRESS COUNTY WATER UTILITIES

It was reported by Dr. Lonza Mitchell, representing the Fentress County Utility District, that a letter has been drafted to the U.S. Fish & Wildlife Service concerning the environmental implications of the District's proposed water treatment plant and reservoir on the North Prong of Clear Fork. It was stated that this government agency and other agencies were opposed to the District's proposed water system because of its impact on several mussel species in the area. Specifically, the letter requested that the agency hold a public hearing to explain why the species would be threatened by this project. After discussion of this issue, a show of support of this action was taken with the planning commission members signing the letter. It was stated that the letter would be sent to the appropriate personnel for review and comment.

STATUS REPORT--FENTRESS COUNTY LAND USE SURVEY AND ANALYSIS

Staff presented copies of the *Existing Land Use Study, Fentress County, Tennessee* to the planning commission members for review and discussion. This document included a study of developed and undeveloped land use in Fentress County along with an analysis of the physiography, land and water areas, agriculture, public and semi-public lands and rural unincorporated communities. Maps and a table of the unincorporated communities were also included to illustrate the text. In reviewing the material, staff stated that the conclusion of this study would be trends and analysis of future land use. Staff and the members discussed future trends in the county which included development of Highway 127 as a county growth corridor, development along Highways 154 and 297 in the Big South Fork Region, little or no development in the valley of the East Fork of the Obey River and slow but steady development in the Pall Mall community. Staff stated that the written text on the future trends and analysis would be presented for review at the next planning commission meeting.

With no other business, the meeting adjourned at 8:00 p.m.

Wilfred W. Sharp
Chairman

8/23/94
Date

Lonza Mitchell
Secretary

8/23/94
Date



FENTRESS COUNTY MUNICIPAL SOLID WASTE REGION

POST OFFICE BOX 1189
JAMESTOWN, TN. 38556
(615) 879-1135

October 14, 1994

City of Jamestown Planning Commission
Attention: Mr. Lonnie Choate, Chairman
Post Office Box 670
Jamestown, Tennessee 38556

Mr. Choate,

Please find enclosed a copy of the Fentress County Municipal Solid Waste Region's Ten Year Solid Waste Plan for review by the City of Jamestown Planning Commission in accordance with T.C.A. 13-3-105. If there is anything further our office may do to assist the commission regarding the plan, please contact the office at 879-1135.

Sincerely,

Payton Robbins, Acting Executive Director

Enclosures

MINUTES
JAMESTOWN REGIONAL PLANNING COMMISSION
OCTOBER 25, 1994

The Jamestown Regional Planning Commission met on Tuesday, October 25, 1994. Members present were Lonnie Choate, Ray Hancock, Bob Bow, Frank Smith, Harold Whited, and Gilbert Holt. Member absent was Bill Hull. Staff Representative David Starnes was present. Others present were Alderman Don Crockett and Brandon Hancock. Chairman Lonnie Choate called the meeting to order at 5:30 p.m.

On a motion by Frank Smith, seconded by Bob Bow, the Minutes of the September 27, 1994 meeting and the special called meeting of October 10, 1994 were unanimously approved.

DISCUSSION--CONSTRUCTION OF EXTENDED CANOPY AT BIG JOHN'S MARKET

Chairman Choate stated that he had received materials from Bran Shoemaker, President of H. Shoemaker Distributors, Inc., Oneida, Tennessee, concerning the extension of a canopy over gasoline pumps at Big John's on Highway 127. In reviewing the materials, a variance of 15 feet was requested in the 40 foot front yard setback of the C-1, General Business District. After discussion, it was stated that the granting of the variance would be a matter for the Jamestown Board of Zoning Appeals. Staff was requested to set up a Public Hearing and BZA meeting the 4th Tuesday in November.

REVIEW--FENTRESS COUNTY MUNICIPAL SOLID WASTE REGION PLAN

Alderman Donald Crockett, member of the Fentress County Solid Waste Board, stated that the Board has recently completed a 10 year Solid Waste Plan for review by the Jamestown Regional Planning Commission. In reviewing this plan, it was noted that household collection would be available at Class 1 convenience center sites, of which four are now in operation and one scheduled to be open soon at Pall Mall. The Log Yard site, south of Jamestown, is also serving as a transfer station while the county's waste is presently being hauled to Scott County at \$30 a ton and six days a week. Three more sites are planned with two serving the west and east sides of the county. The plan also calls for commercial collection at a tip of \$12.50 a dump, a full scale recycling program, and a full scale education program through schools, civic clubs, and businesses. Special waste, such as tire storage, waste oil, and household hazards will be handled at special site facilities. In regard to waste disposal, the county has the option of either developing a Class I and Class 4 landfill on property evaluated for such purposes west of Jamestown, developing this same site into a regional landfill, or continue hauling waste out of the county. The Planning Commission members discussed this plan noting that, because of the state's 1991 Solid Waste Act, the county and municipalities would need to make a serious effort in meeting the Act's requirements and taking care of its waste disposal. Alderman Crockett also stated that, because of the heavy financial expense in the Fentress County's Solid Waste Program, Jamestown should consider additional sources of revenue to help pay for collection and disposal since this municipality is the biggest source of waste in the county.

RODNEY L. YORK--REZONING REQUEST FROM R-1 TO R-2

A rezoning request was presented to the Planning Commission for the rezoning of property on the south side of Woodland Avenue at its intersection with Oak Street. Said request had been submitted by Rodney L. York. After review, noting that the area was compatible for rezoning to R-2, a motion was made by Gilbert Holt, seconded by Frank Smith, that the Planning Commission recommend to the Board of Mayor and Aldermen that the property be rezoned from R-1 to R-2. The vote of the members was all ayes.

STATUS REPORT--RECENT REZONING REQUESTS AMENDING THE JAMESTOWN ZONING ORDINANCE MAP

Staff presented a copy of the Jamestown Zoning Map showing rezoning requests that have taken place since the map was adopted in 1990. In reviewing the map, it was noted that there was a concentration of rezoning requests on the southeast side of the community. Another analysis was that most of the rezoning request throughout the city were from R-1 to C-1 and from R-1 to R-2.

WORK SESSION--AMENDING THE JAMESTOWN ZONING MAP

At the last meeting of the Planning Commission, the large numbers of recent rezoning requests led the members to believe that the Zoning Map may be needed to be amended in its entirety. A copy

of this map was reviewed by the members which noted rezoning changes, present zoning districts, lot layouts, etc. After discussion, the members came to the conclusion that one area that should be recommended for change would be the R-1 District centered on the Woodland Avenue part of Jamestown. The high concentration of trailers in this area would make it better suited as a R-2, High Density Residential District. Although other possible areas that could be changed to a different zoning district were looked at, Chairman Choate recommended that this work session on the zoning map be concluded for now and placed on the agenda at the next meeting.

With no other business, the meeting adjourned at 6:30 p.m.

Chairman

Date

Secretary

Date