

Southeast Tennessee municipal solid waste region

Meigs County

Solid Waste Needs Assessment



June 2015

INTRODUCTION

The Solid Waste Management Act of 1991 (SWMA) was written to avert extreme financial hardships that could have occurred if small local governments were suddenly required to upgrade landfills to meet Resource Conservation and Recovery Act (Subtitle D) regulations. Rules were promulgated by the Tennessee Department of Environment & Conservation to implement Subtitle D included provisions requiring landfill operators to line facilities with impermeable clay and synthetic materials; install leachate collection systems and monitoring wells; and provide thirty years of post-closure care. These were, at the time, extremely expensive changes in the development and operation of disposal facilities, and there was fear in the legislature that some counties would not have a disposal option.

In order to ensure that local governments were protected from high costs and lack of disposal capacity, the SWMA promoted regional landfills, an attempt to guide small counties into alliances with other counties. Theoretically, small counties would form a regional board that would then settle on a disposal site, and each local government would share in the cost of operation. The law even has a provision that would allow local governments to require all entities within their respective jurisdictions to dispose of their waste at the regional landfill. The premise behind the latter concept proved to be unconstitutional (see *Carbone vs Clarks City*, U.S. Supreme Court, May 1994). While acknowledging that the flow control provision existed, no county in the State was willing to pledge public funds to facilities that may not receive enough waste to garner the tipping fees needed to meet costs.

During the same period in the early 1990s, the Tennessee Valley Authority was exploring ways to integrate solid waste into fuel supply systems at power plants that had the existing technology to properly combust waste material. One of these plants was located in Kingston, and local officials became interested in combining their respective waste streams, closing most of their landfills, and hauling everything to a waste-to-energy facility.

Engineers working with TVA had prepared studies for other power plants and suggested the Watts Bar site as an alternative because two moth-balled fossil fuel plants are located there. The engineers recommended installing a companion boiler system that would utilize existing infrastructure and reduce the haul distance for all southeast Tennessee counties. Other infrastructure planned for the site included a materials recovery facility (MRF), which would have diverted enough material to meet the SWMA waste reduction goal. This situation was the catalyst for the formation of the Southeast Tennessee Municipal Solid Waste Planning Region, which included all of the counties within the Southeast Tennessee Development District¹. Without the flow control provision, commitments from all counties and cities were vital in bringing this project to fruition.

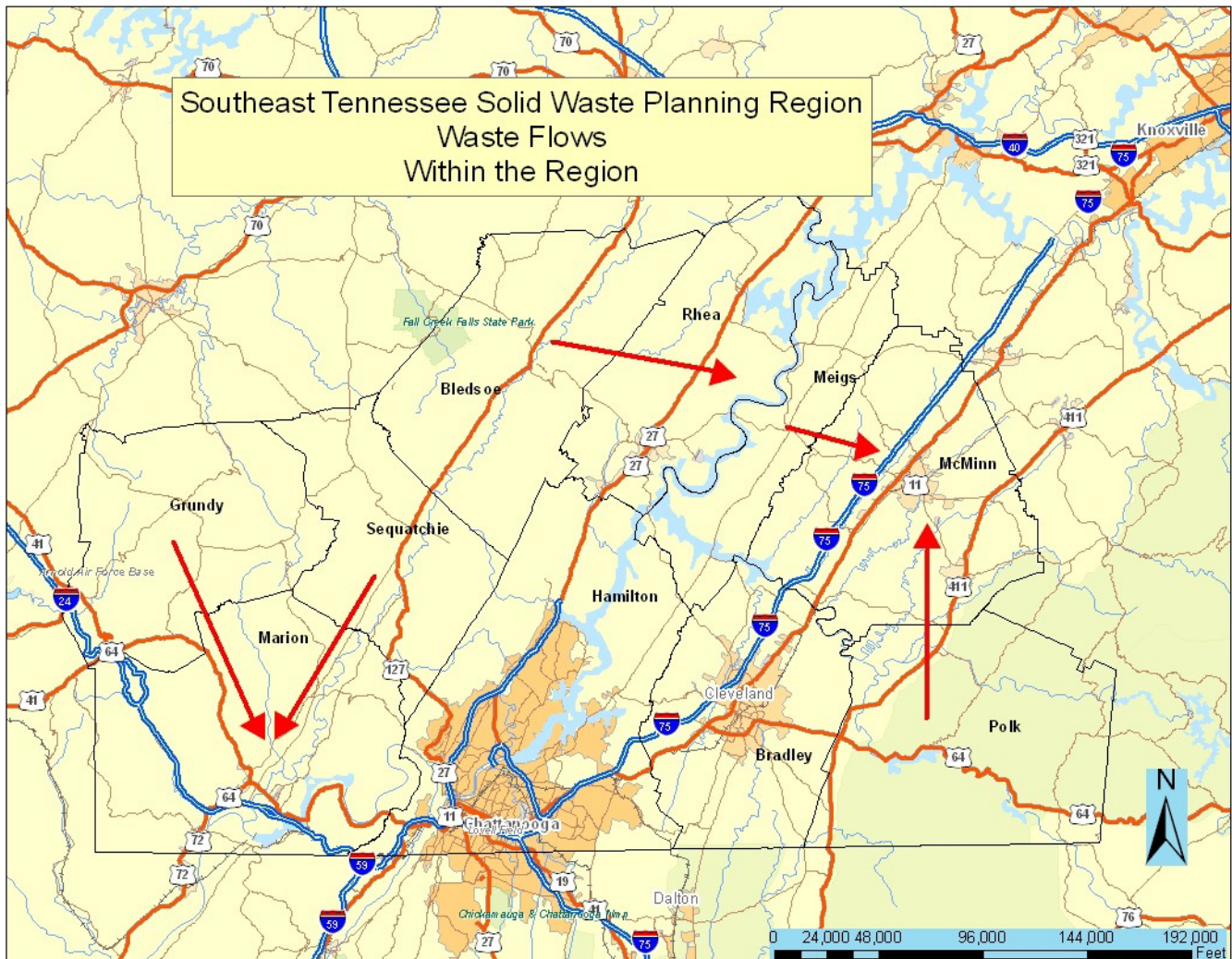
¹ The Southeast Tenn. Municipal Solid Waste Planning Board is composed of Hamilton, Bradley, Grundy, Hamilton, Marion, McMinn, Meigs, Polk, Marion, and Hamilton Counties.

After the completion of studies funded by TVA, the utility lost interest in the project. No official reason was ever conveyed, but the decision was probably based on the fact that any emissions from the proposed plant would have a potential impact on the Cherokee National Forest and the Smokey Mountain National Park. TVA's involvement in the project was crucial because the utility had existing infrastructure and would have bought the steam produced by the plant. Tipping fees would have been a reasonable \$35 per ton, including MRF operations. Without TVA, the Board could not finance a stand-alone facility because tipping fees would have reached \$100 or more, far above existing landfill disposal costs.

The failure to implement the waste-to-energy project did not deter the Board from remaining a regional planning entity. Board members were comfortable with the situation and wished to remain together in the event that other regional opportunities arose.

Saving landfill space was a primary goal of the SWMA. Many experts believed early on that the cost per ton of garbage would be in the \$40 - \$90/ton range at Class I facilities. Consequently, recycling, waste diversion, and saving landfill space became paramount goals. High tipping fees failed to materialize, however, as competition and economies of scale drove down development costs. Subsequently, many cities and counties found themselves with expensive recycling and waste diversion programs. Studies by several jurisdictions showed costs of \$280+ to recycle a ton of waste material versus \$25-\$28 dollars to simply dump it in the landfill. It is no surprise that many cities dropped their recycling programs (they weren't required by law to have one in any case) and shifted most of the burden to county governments, which were required to meet SWMA goals. There was no crises, no shortage of landfill space, and most of the landfill operators were marketing their space to any and all, inside of Tennessee or out, in the region or not. The more waste coming into the landfill, the more money is made for the operators. Few landfill operators were (or are) working diligently to save space; they are generally selling as much space as possible for the best price.

In Southeast Tennessee there are six (6) operating Class I Landfills. SANTEK Environmental, Inc. operates two of these facilities for Bradley and Rhea Counties respectively. SANTEK can generally landfill all of the waste that it can attract to either landfill, some of it from Georgia. In return, the counties get reduced or no disposal costs, income from disposal operations, and assistance with programs, including the State's Household Hazardous Waste collection events.



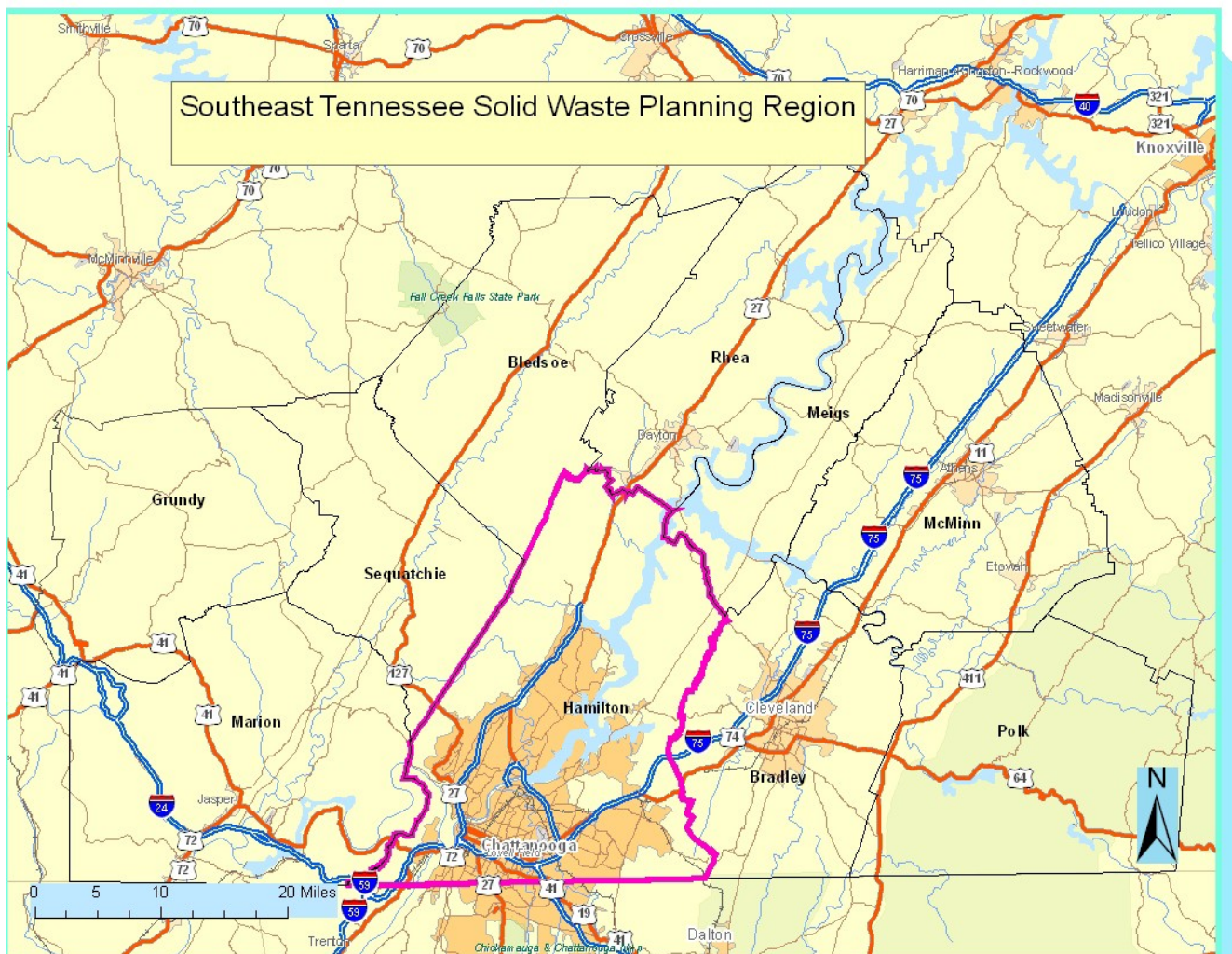
Meadow Branch, a private landfill located in McMinn County, provides disposal for several counties in East Tennessee, including several outside of the region. McMinn County receives a host fee for Meadow Branch, and operates its own landfill, which also accepts waste from outside the region.

Marion County’s landfill is operated by an Authority. Like the other landfills, waste is accepted from any source. In the past, landfill operators have received waste from Dade County, Georgia, Jackson County, Alabama, and both Hamilton and Franklin Counties in Tennessee. The landfill routinely accepts all of Grundy and Hamilton County’s waste.

Chattanooga operates the sixth landfill in the region. It is a facility that originally belonged to Hamilton County, but when the city’s Summitt Landfill was closing, the city and county came to an agreement that allowed Chattanooga to own and operate the landfill. This landfill could accept waste from other areas, but there are currently no customers. A large proportion of the Chattanooga/Hamilton County waste stream, over 200,000 tons annually, goes to an Allied Waste landfill located in northern Alabama.

The original solid waste assessment for the entire region advocated sub-regions composed of natural “waste sheds.” In reality, these sub-regions have occurred, essentially as predicted, based on the economics of waste generation, hauling distance, etc. As the previous map indicates, these sub-regions consist of county groupings as follows: Rhea and Bledsoe; Meigs-McMinn-Polk; Bradley County; Hamilton County; and Marion-Grundy-Sequatchie.

The following is a detailed description of Hamilton County’s waste collection, diversion, and disposal system and how these programs function in relation to other parts of the Region. Every attempt has been made to provide an objective assessment of the County’s infrastructure and program needs based on the legal requirements of the SWMA.



Item 1-Demographic Information & Projections

Provide a table and chart of the region's population during the past ten (10) years with a projection for the next five (5) years. Provide a breakdown by sub- table and sub-chart, or some similar method to detail county and municipality populations. Considering the trends, discuss the affect on the solid waste infrastructure needs over the next five (5) years.

Table 1.1 Historic Population

Year	Population
1950	6,088
1960	5,160
1970	5,219
1980	7,431
1990	8,033
2000	11,084
2010	11,753

Source: U. S. Census Bureau data and population estimates

By 2000, the County population had grown to 11,084, a large increase over previous decades. Much of this growth is related to the development of waterfront properties. Meigs County has 225 miles of shoreline, much of it undeveloped. Its western border is the Tennessee River and the Hiwassee River in the south section of the county empties into the Tennessee in a broad delta. Many creeks feed into both bodies of water, and the Tennessee River is impounded to form two lakes bordering the county: Chickamauga and Watts Bar. During the housing boom in the early part of the decade, the county grew consistently, but current trends indicate that growth will level off for the next few years.

Although the county does not have the industrial, commercial, or institutional resources to support additional population growth, there are adequate highways that are free from congestion and provide linkages to the urban areas of Dayton (Rhea County) and Chattanooga where employment is available. As the following table indicates, more than 67% of Meigs County's workforce traveled outside the county for employment opportunities at the beginning of the decade, and there have been few additions

to the employment inventory within the county to change those statistics. Twenty-nine percent spend 45 minutes or more in travel time to work.

Table 1.2 Meigs Workforce

Worked outside county	69%
More than 30 minutes to work	53%
Drove alone	84%
Carpooled	16%

Source: 2010 U.S. Census

No updates to population counts have occurred since the 2010 Census.

Table 1.3 Population Projections

Year	Projected Population		
	Total County	City of Decatur	Unincorporated
2005	11,593	1,564	10,029
2006	11,709	1,584	10,124
2007	11,825	1,605	10,219
2008	11,940	1,626	10,314
2009	12,056	1,647	10,409
2010	12,172	1,668	10,504
2011	12,288	1,689	10,599
2012	12,403	1,710	10,693
2013	12,519	1,731	10,788
2014	12,635	1,752	10,883
2015	12,751	1,773	10,978
2016	12,867	1,794	11,073
2017	12,983	1,815	11,168
2018	13,099	1,836	11,263
2019	13,215	1,857	11,358
2020	13,331	1,878	11,453

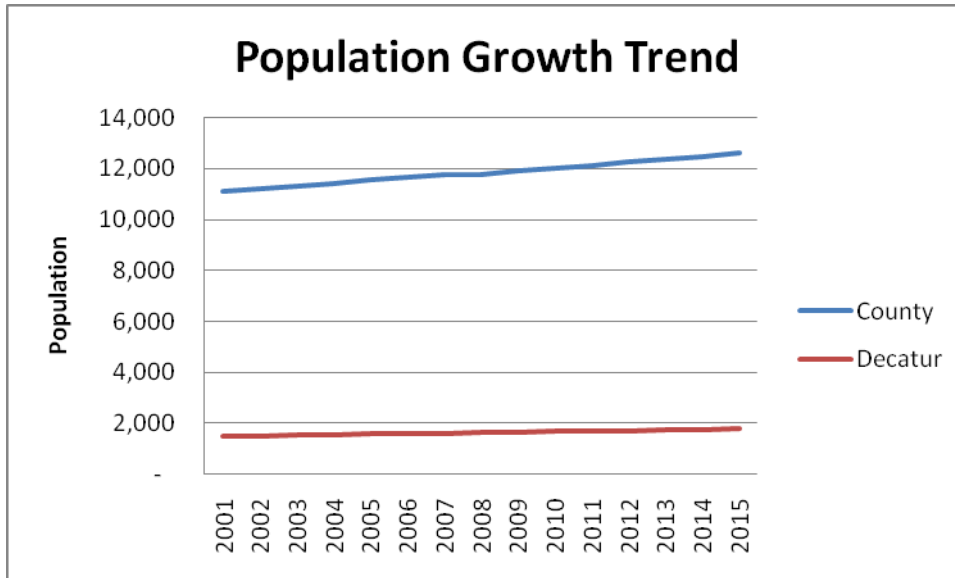
Sources: Historic statistics are derived from U.S. Census Bureau data.

Projections are derived from a least squares model of population growth.

Population projections have explicit and implied assumptions. Only in special circumstances (e.g. military base closures) do planners assume that populations will decrease although, as is apparent from previous census years, the Meigs County population did decrease in the twenty-year period from 1950 through 1970. Previous population losses were primarily due to the fact that the county is not located on major transportation corridors and there are a limited number of industries that choose to locate in an area that does not have direct access to four-lane highways, rail, and/or barge facilities. During that period, the county had no four-lane highways, barge facilities, or railroads. Consequently, people moved away to find employment, and Recent high school graduates and college students, found it necessary to relocate for

the same reason. The population stayed on a plateau into the 1970's and began showing signs of resurgent growth at the 1980 decennial census.

Figure 1.1



Over the past several years, many retired people have found that southeast Tennessee is a great retirement area. Meigs County has probably benefited from this trend because it has numerous, low-cost properties on the Tennessee and Hiwassee Rivers that were and are available for development.

Item 2-Analysis of Economic Activity within the Region

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

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

Meigs County's economy is heavily dependent on surrounding areas since a majority of the workforce is employed outside the county. Unemployment has remained higher than the State average of about 10 percent and is not expected to begin declining until after 2011 when new industry is slated for locations in the northern sections of Hamilton and Bradley Counties, both of which are very near Meigs County.

Table 2.1 Economic Profile

Year	Labor Force	Employed	Number	Percent	Income	(1,000s)	(\$Millions)
2006	4,880	4,550	330	6.80%	23,276	38,182	87
2007	4,850	4,540	310	6.40%	24,198	37,687	92
2008	4,940	4,520	430	8.70%	24,100	43,684	91
2009	5,210	4,500	710	13.60%	24,050	43,300	90
2010	5,200	4,495	705	13.60%	24,000	43,100	89
2011	5,194	4,490	704	13.60%	23,900	43,000	89
2012	5,190	4,500	690	13.30%	23,800	42,980	88
2013	5,180	4,510	670	12.90%	23,850	43,000	89
2014	5,185	4,515	670	12.90%	23,900	43,100	90
2015	5,190	4,520	670	12.90%	23,950	43,300	90
2016	5,195	4,525	670	12.90%	24,000	43,500	91
2017	5,200	4,530	670	12.90%	24,050	43,700	91
2018	5,205	4,535	670	12.90%	24,100	43,900	91
2019	5,210	4,540	670	12.90%	24,150	44,100	92
2020	5,215	4,545	670	12.80%	24,200	44,300	92

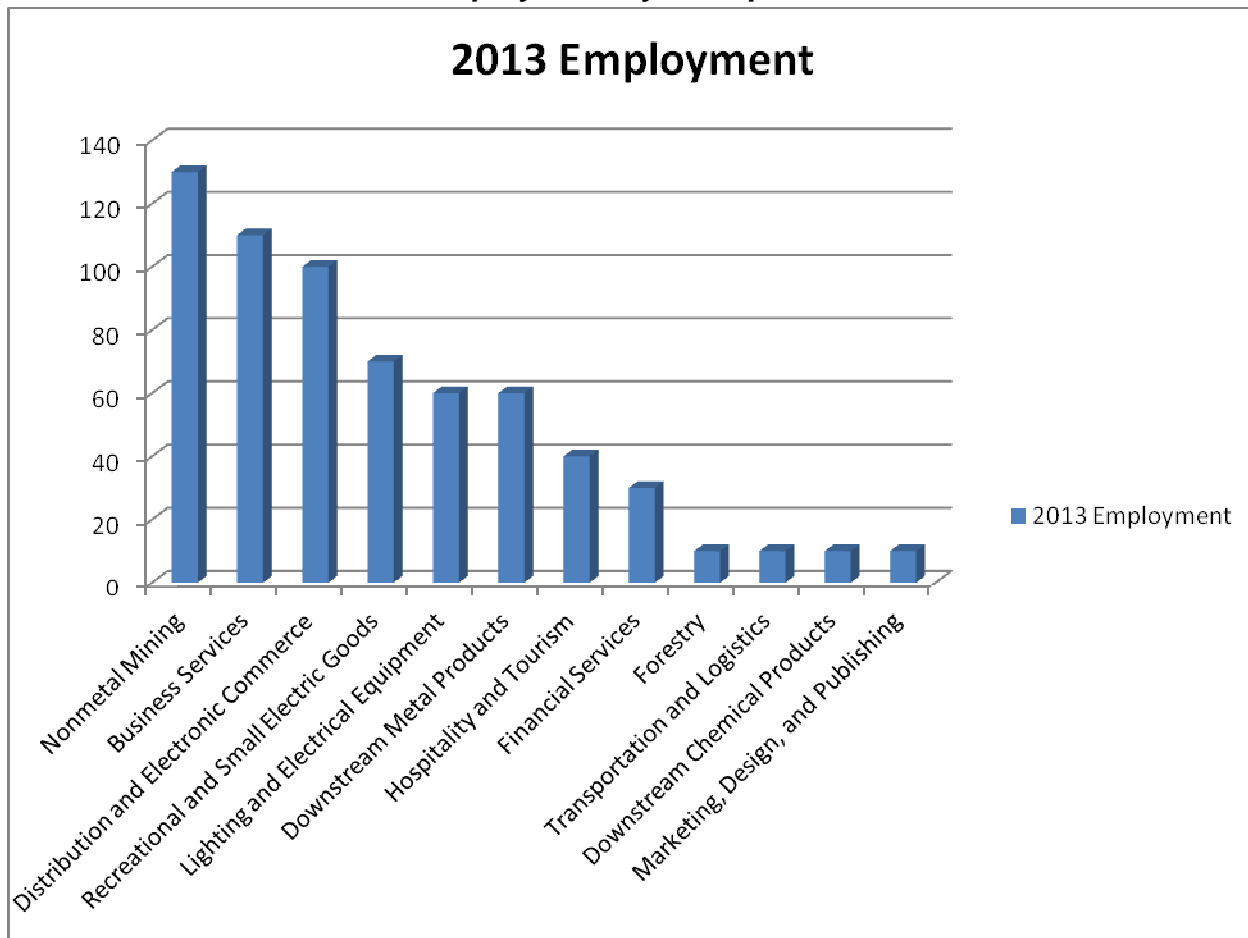
Sources: Historic employment data, U. S. Dept. of Labor; Per capita income data, U.S. Bureau of Economic Analysis; Retail data, Tenn. Dept. of Revenue; Bank deposits, FDIC.

All state and local area dollar estimates are in current dollars (not adjusted for inflation). Projections: SETDD staff.

Projections of employment from 2015 to 2020 assume a “business as usual” situation. In that case, the unemployment rate is likely to continue an upward trend if the available workforce expands. Much of

As the following table indicates, the total number of jobs across all sectors has remained relatively stable over time. This is not due to indigenous employers but to employment outside of the county. Besides the small industrial park in Decatur, there are no industries of any note, and there are few retail establishments. Most residents travel to Athens, Dayton, and Chattanooga for most of their needs.

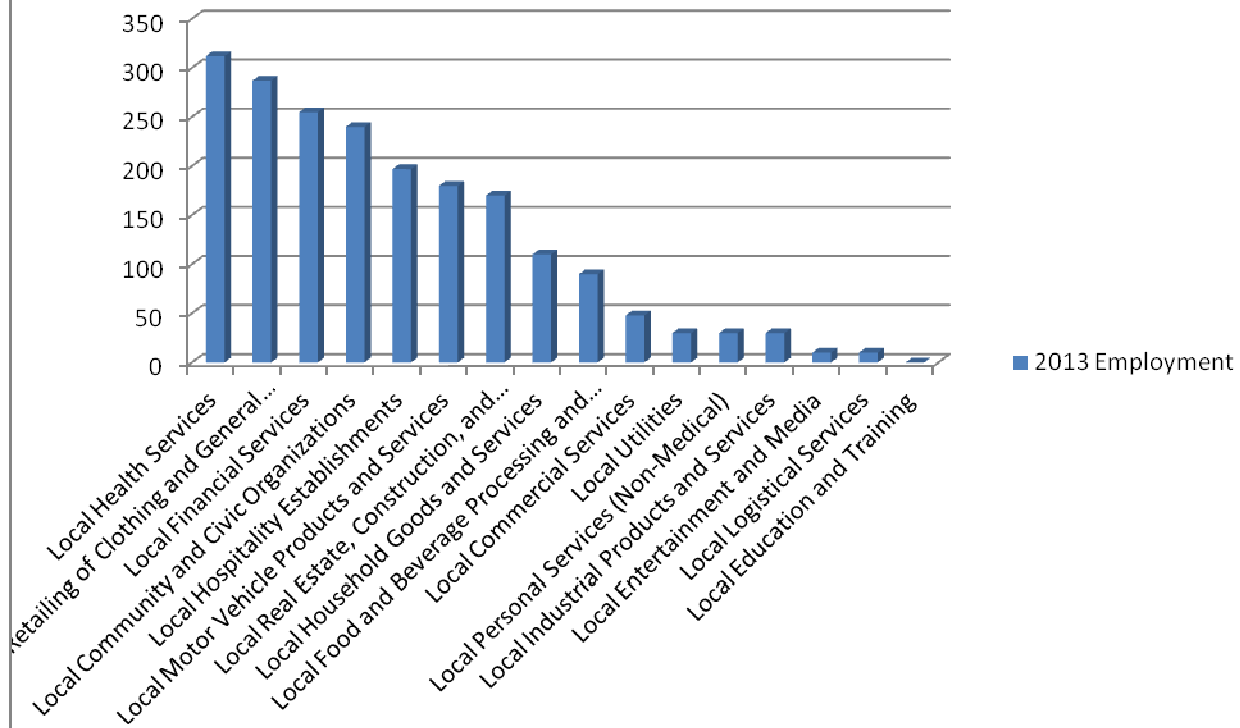
Table 2.2 Economic Profile-Employment by Occupation-Traded Clusters



Source: U.S. Cluster Mapping Project (<http://clustermapping.us/>), Institute for Strategy and Competitiveness, Harvard Business School. Data Sources

Table 2.3 Economic Profile-Employment by Occupation-Local Clusters

2013 Employment



Source: U.S. Cluster Mapping Project (<http://clustermapping.us/>), Institute for Strategy and Competitiveness, Harvard Business School. Data Sources

Item 3-Characterization of the Solid Waste Stream

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

Using composite percentages based on random observation of the waste stream, the following chart provides a rough illustration of waste volumes by type of material. Waste generation does not necessarily mean that these materials enter the waste collection system. In rural counties like Meigs, much of the wood waste, construction and demolition (C & D), and food wastes are disposed of on private property. Very little change is expected in waste stream composition over the next five (5) years.

Figure 3.1

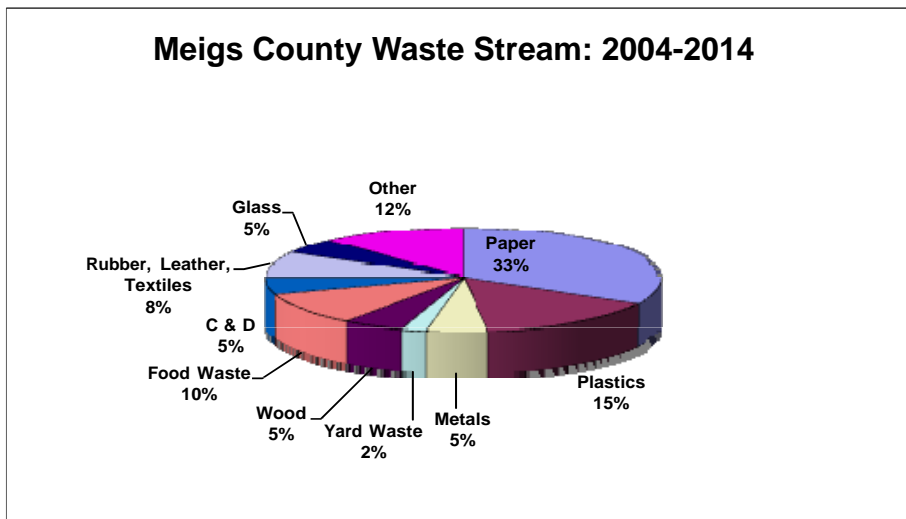


Table 3.3

Jurisdiction/	Collection	Disposal Options	Current	Future	Other Problem
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Sector			Problem Waste Handling	Problem Waste Handling	Waste
Meigs County	<p>Three county convenience centers.</p> <p>Available to all residents, including those within the Town of Decatur.</p>	<p>All waste collected at convenience centers is taken to the Meadow Branch Class I landfill near Athens, TN.</p>	<p>Waste Tires: Mac Tire, Inc. contract</p> <p>Automotive Fluids: 58 Express Lube</p> <p>Used Oil: No program</p> <p>Latex Paint: No program</p> <p>Electronics: None</p>	<p>Waste Tires: Continue contracting.</p> <p>Add automotive, used oil, and latex paint collection capacity at convenience centers.</p> <p>Assistance from RMCET to collect and market</p>	<p>HHW collected at mobile collection event.</p>
Business	<p>Contracts with private haulers and self-service by business/industry.</p>		<p>In-house programs and contractors</p>	<p>In-house programs and contractors.</p>	<p>Commercial generation of hazardous waste is regulated by TDEC.</p>

Item 4-Solid Waste Collection System

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

Meigs County has three convenience centers strategically located to maximize access to all residents (see attached map). The centers are located as follows:

- Blythe's Ferry Road – South Meigs
- Legg Hollow Road – Decatur, Central Meigs
- River Road (just off SR 68) – North Meigs

Meigs County has no residential waste collection services, so the county area is divided by 180 square miles (TDEC formula) to arrive at a reasonable waste-shed area. This area includes At least 7.3 square miles of forest areas that is not populated and could be deducted from the total square miles of potential service area. Although the formula suggests that one center is adequate, three centers were constructed to serve separate sections of the county.

Table 4.1

Minimum Collection Required

	County Sq. Miles	Municipal Sq. Miles	Required Centers	Existing Centers
Meigs	189	0	1	3

Using the alternative SWMA population formula for determining the required number of convenience centers also yields an answer of only one convenience center (12,751 people divided by 12,000).

Transportation Considerations

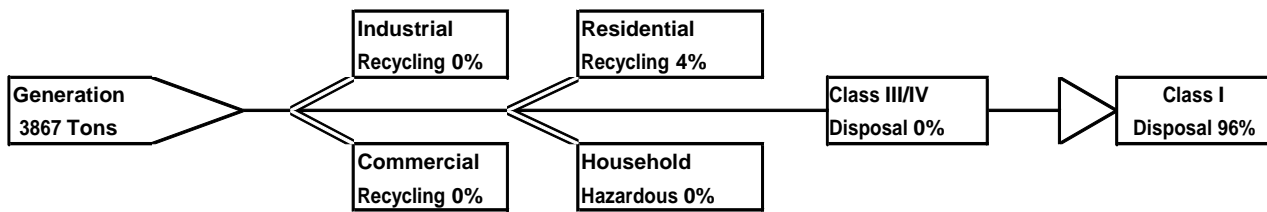
All of Meigs County is located in the Tennessee River Valley region and the river was once a primary method of transportation. Today, however, there are no ports in the county, and the river is essentially a recreation and conservation corridor.

Since there are no rail or air facilities, the only other transportation option is motor vehicle. Recently, the first four-lane highway in the county was completed to link Decatur with I-75 and the City of Athens via Highway 30. Bridges across the Tennessee River at Highways 30 and 60 make access to other parts of the region easy for commuters, and Highway 58 runs from north to south through the middle of the county to provide a direct link to Chattanooga (42 miles) and I-40 at Kingston (37 miles).

Regional Solid Waste Flow and Life-Cycle

The following chart represents data collected for the 2014 Annual Report for the Southeast Tennessee region. As is apparent, there are no data available on waste reduction or diversion because it is very difficult to document waste diversion in a rural county. Most of the yard waste is disposed on site by burning (a permitted option) or hauled to a remote location. All wood waste from sawmills and other commercial operations is generally used for livestock bedding and/or as a soil additive. In an urban county, this data would likely be captured and counted toward waste reduction/re-use efforts, but most of the local commercial operations are small, family-owned businesses, and collecting sufficient information to make an estimate of waste volumes is extremely difficult.

Table 4.1 Waste Generation



Industrial and commercial recycling capacities are difficult to determine due to a lack of cooperation from industry and small businesses in the county. Significant quantities of material are diverted, but these companies often fail to comply with requests for information.

Table 4.2: Regional Collection Systems

Provider of Service	Service Area	Population Total Under This Service	Frequency of Service (Weekly, Bi-weekly, on call, etc.)	Annual Tonnage Capacity	Type Service (Curbside, Convenience Center, Green Box)
Meigs County	County-wide drop-off	11,940	As Needed	8,000	Convenience Center

Item 5-Analysis of Existing or Potential Solid Waste Flows within the Region and Between Adjacent Regions

*Provide organizational charts of each county and municipality's solid waste program and staff arrangement. Identify needed positions, facilities, and equipment that a fully integrated solid waste system would have to provide at a full level of service. **Provide a page-size, scaled county map indicating the location of all solid waste facilities,** including convenience centers, transfer stations, recycling centers, waste tire drop-off sites, used oil collection sites, paint recycling centers, all landfills, etc. Identify any short comings in service and note what might be needed to fill this need.*

Solid Waste Staffing

Decatur is the only municipality in Meigs County, and it does not have a waste collection system. The county provides all waste collection services at convenience centers.

The organization chart for Meigs County's waste collection and disposal system is very simple because the county does not own a landfill and contracts for most services. The County Mayor is in charge of the three (3) convenience center operators and Waste Connections of Tennessee, Inc. handles hauling and disposal.

Like many small counties, Meigs provides a full service waste collection program, including recycling, as efficiently as possible. Funding for new positions is in short supply, but the county would benefit from having a full-time director to handle solid waste. Currently, the County Mayor is in charge of waste collection and recycling operations. It is a very lean operation due to the lack of revenue to fund extensive operations.

The county's convenience centers provide a full range of service. Each is equipped with a 4 yd³ compactor feeding into a 40 yd³ receiving container; a 40 yd³ open top roll-off container for bulky items; a 40 yd³ container for metals. The primary center is located just east of Decatur to serve the primary population centers.



Legg Hollow Convenience Center

The main convenience center is a clean, well-maintained facility located just east of Decatur in the center of the county. This center handles all of the used tires, which are hand loaded into a semi trailer by the attendant (located to the right behind the trees). In addition to his waste handling job, the attendant also collects cardboard, mixed paper, and scrap metal.



Blythe Ferry (East View) Convenience Center

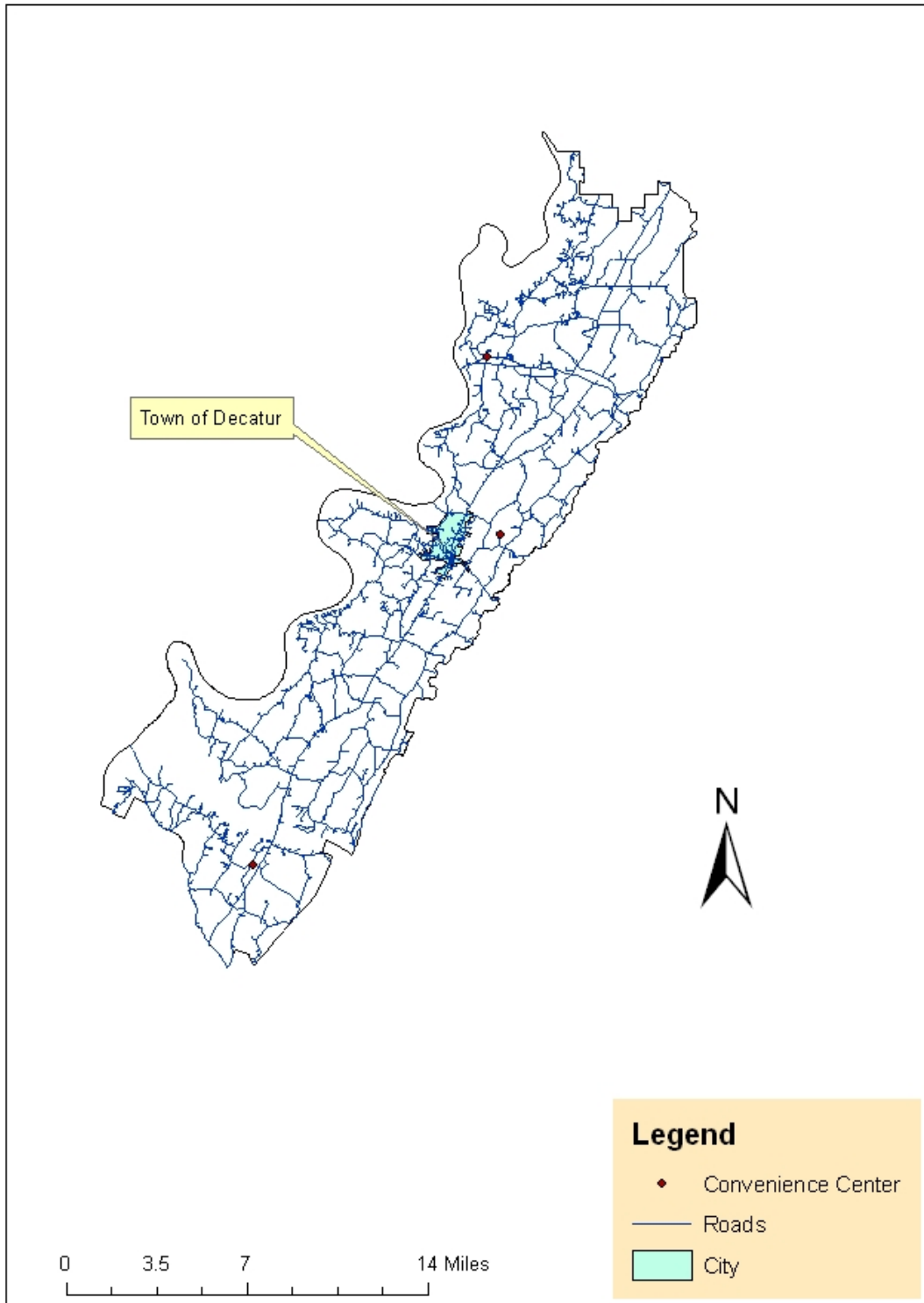
This center is located in the southern section of the county. In order to increase waste handling and recycling operations, an expansion to this site will be necessary. However, the site is adequate for basic waste collection and provides easy access with a one-way drive.



River Road (Watts Bar) Convenience Center

This center is located in the north end of the county just north of Highway 68. Watts Bar Dam on the Tennessee River is located about one mile west of this facility.

Meigs County Solid Waste Facilities



Item 6-Analyze Attitude of Region Toward Waste Management in General and Specify Needed Changes and/or Educational Measures

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

Over the last 15 years, waste disposal in Meigs County has been transformed from unattended, burned-out green boxes surrounded by blowing litter to clean, well-maintained convenience centers. Illegal garbage dumps were common as was roadside litter. Today, roadside litter is still a constant problem, but the illegal dumps have diminished to the point that they are rarely noticed. This transformation is a cultural shift that is probably the result of concerted efforts to influence the behavior of school-age children who have now become adults.

Unfortunately, we do not have studies to determine how this change in behavior came about. It is perhaps as likely that “Information Age” technology has exposed large numbers of residents to more environmental messages. Even though there is wide-spread support for the county’s recycling program, more could be done to improve the knowledge base of the local population.

Current programs are associated with the Tennessee Department of Transportation Litter Grant Program, which provides funds to local governments for litter collection and education.

Item 7-Evaluation of the Waste Reduction Systems for Counties & Municipalities in Region

The Solid Waste Management Act of 1991 requires all regions to reduce the amount of waste going into Class I landfills by 25%. Amendments to the Act allow for consideration of economic growth, and a “qualitative” method in which the reduction rate is compared on a yearly basis with the amount of Class I disposal. Provide a table showing the reduction rate by each of these goal calculation methodologies. Discuss how the region made the goal by each methodology, or why it did not. If the Region did not meet the 25% waste reduction goal, what steps or infrastructure improvements should be taken to attain the goal, and to sustain this goal into the future.

Table 5.1

Tennessee Sector Summary Report

Type	Residential	Commercial	Total Tons
Recycling	154	74	228
Waste Diversion	0	0	0
Hazardous Waste	0	0	0
Solid Waste	3639	0	3639
Total	3793	74	3867
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Real Time Diversion Rate (Percentage)	6.0%		
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Public Recycling Rate (Percentage)	4.0%		

The base year per capita waste generation rate was 0.57 tons as indicated in a May 26, 1994 letter from Paul Evan Davis (TDEC) to Jack Marcellis, past chairman of the Southeast Tennessee Municipal Solid Waste Region. According to the 1995 Annual Progress Report, Meigs County had population of approximately 8,316 and produced about 1,993 tons of waste, for a waste reduction rate of about 58% at an annual generation rate of about 0.24 tons. The obvious conclusion to be derived from these large waste reduction numbers is that original waste generation figures were artificially high because they were based on estimates of volume, not verifiable scales data. Recycling and other waste reduction numbers do not support a reduction of this magnitude.

Industrial recycling quantities are often difficult to capture, and the primary source in Meigs County is a major carpet manufacturer that has reduced production as the economy declined. The county has more collection facilities than are required by the SWMA, and there are few roadside dumping areas. So, the explanation for the anomaly in the waste stream volumes must be one or more of the following:

1. The local population generates less than national, state, and regional averages.
2. Alternate disposal opportunities (e.g. burn barrels) are widespread.
3. Waste is hauled out of the county, and the origin is attributed to another county.

Observations of local practices indicate that alternate disposal opportunities partially explains the difference, but it is also possible that Meigs County residents were using unmanned green boxes in a

neighboring county until approximately 2004 when the waste volumes start coming in line with the national waste generation average of about 3.5 lbs/person/day.

Item 8-Collection/Disposal Capacity and Projected Life of Solid Waste Sites

(a) Using the example shown below, provide a chart indicating current collection and disposal capacity by facility site and the maximum capacity the current infrastructure can handle at maximum through put. Provide this for both Class I and Class III/IV disposal and recycled materials. Identify and discuss any potential shortfalls in materials management capacity whether these are at the collection or processor level.

There are no operating landfills in Meigs County. The following is a list of landfills available for waste disposal.

Table 8.1: Regional Landfills

Site Name(s)	Annual Tons Meigs County	Permit Number	Current Capacity	Maximum Capacity	Projected Life of Facility
Meadow Branch Landfill	5,400	SNL540000174	Capacity not determined	Capacity not determined	5 years
McMinn County Landfill	500	SNL540000003	Capacity not determined	Capacity not determined	20 years
Rhea County Landfill	250	SNL720000269	Capacity not determined	Capacity not determined	15 years

Most of the waste collected at Meigs County convenience centers is hauled to the regional, privately owned landfill in McMinn County. Two other Class I facilities are near enough to provide economical disposal opportunities, and McMinn County operates a Class III/IV landfill adjacent to its landfill near Athens, TN. With all of these disposal options, Meigs County officials encounter no difficulties in negotiating reasonable waste collection and disposal agreements.

All recycling must be hauled outside the county for sale and/or processing. Currently, paper products are taken to Cleveland Recycled Fiber in Bradley County; metals are hauled to Chattanooga where there are several end user options; and tires are hauled by a state-wide contractor.

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

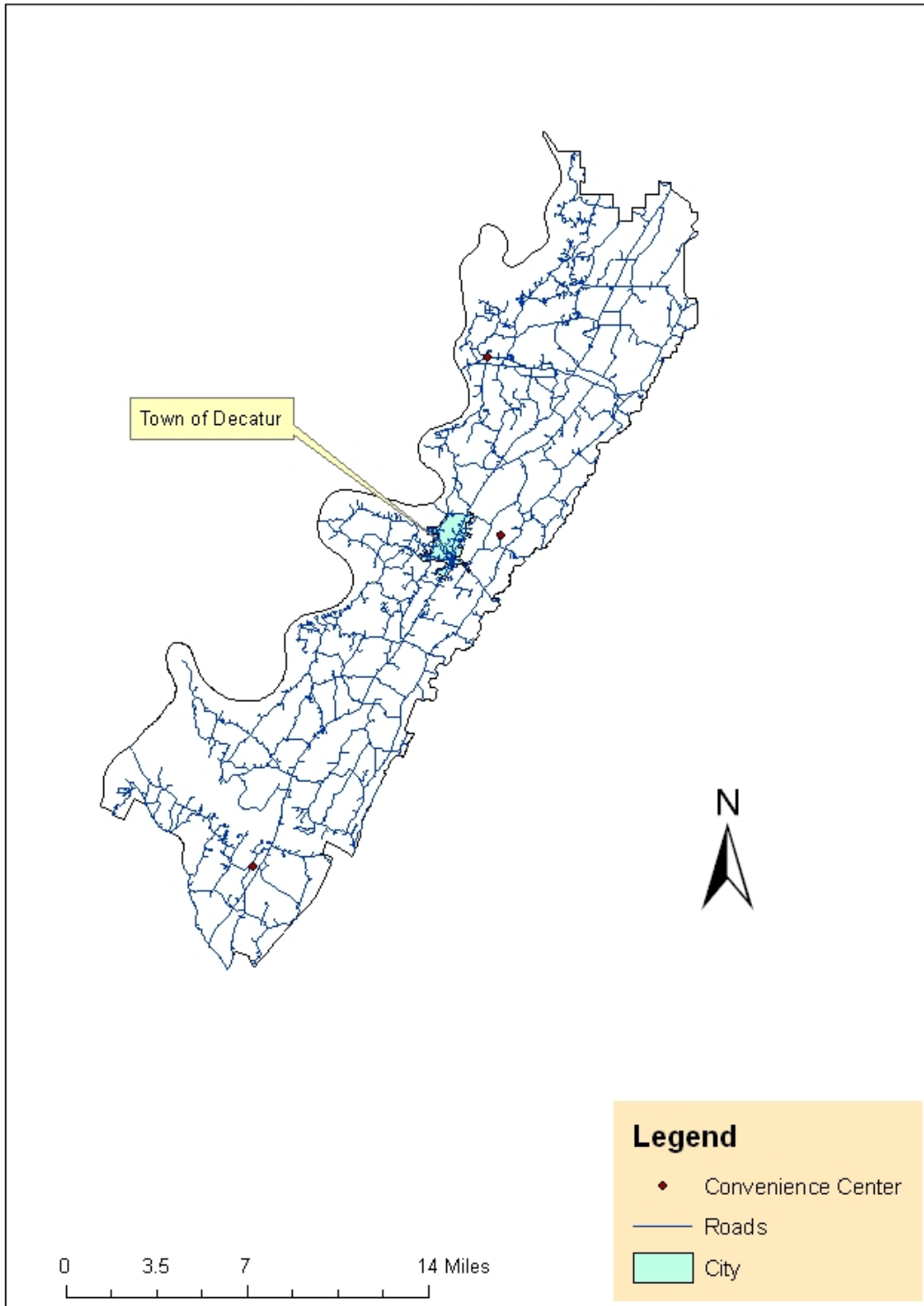
Table 8.2: Regional Collection Systems

Provider of	Service Area	Population Total	Frequency of	Annual	Type Service
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Service		Under This Service	Service (Weekly, Bi-weekly, on call, etc.)	Tonnage Capacity	(Curbside, Convenience Center, Green Box)
Meigs County	County-wide drop-off	11,940	As Needed	8,000	Convenience Center

As the attached map indicates, Meigs County has adequate waste collection service for all residents.

Meigs County Solid Waste Facilities



Item 9-Unmet Financial Needs and Cost Summary

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

EXPENDITURES			
Description	Present Need \$/year	Unmet Needs \$/year	Total Needs (Present + Unmet) \$/year
Salary and Benefits			
Transportation/hauling			
Collection and Disposal Systems	\$155,000		
Equipment			
Sites			
Convenience Center			
Transfer Station			
Recycling Center			
MRF			
Landfills			
Site			
Operation			
Closure			
Post Closure Care			
Administration (supplies, communication costs, etc.)			
Education			
Public			
Continuing Ed.			
Capital Projects			
REVENUE			
Host agreement fee			
Tipping fees			
Property taxes	\$156,063		
Sales tax			
Surcharges			
Disposal Fees			
Collection charges			
Industrial or Commercial charges			
Residential charges			
Convenience Centers charges			
Transfer Station charges			
Sale of Methane Gas			
Other sources: (Grants, bonds, interest, sales, etc.)			

Demands. Identify Any Potential Shortfalls in that Capacity

Identify all current revenue sources by county and municipality that are used for materials and solid waste management. Project future revenue needs from these categories and discuss how these needs will be met. (Use Chart 9 as an example to present data)

Item 10-Compare Revenue Sources for the Region’s Current Solid Waste Programs with Projected Future Demands. Identify Any Potential Shortfalls in that Capacity

Identify all current revenue sources by county and municipality that are used for materials and solid waste management. Project future revenue needs from these categories and discuss how these needs will be met. (Use Chart 9 as an example to present data)

REVENUE			
Host agreement fee			
Tipping fees			
Property taxes	\$156,063		
Sales tax			
Surcharges			
Disposal Fees			
Collection charges			
Industrial or Commercial charges			
Residential charges			
Convenience Centers charges			
Transfer Station charges			
Sale of Methane Gas			
Other sources: (Grants, bonds, interest, sales, etc.)			

Item 11-Sustainable Goals Consistent with the State Plan

Discuss the region's plan for managing its solid waste system over the next five (5) years. Identify any deficiencies in that plan and offer recommendations for eliminating these deficiencies. Suggest and list the specific ways in which the region can improve its solid waste program to reach a level of waste

reduction above that of the goal and provide long term sustainability to the current solid waste collection system.

*Show how the region's plan supports the **statewide Solid Waste Management Plan**.*

There are sufficient waste disposal facilities, and capacity is available from either of three permitted disposal facilities. The recycling program is operated in an efficient manner, but all of the collection facilities are located in rural areas away from the primary waste generation point, which is the Town of Decatur. In order to increase collections, at least one recycling center should be located within the Town.

One problem likely to occur in the future is associated with the maintenance of existing facilities and equipment with lower revenues. The loss of sales and property taxes is highly likely, and there are no mechanisms available to Tennessee counties that would ameliorate these conditions.

As energy costs increase, the Town of Decatur will probably grow as residents move closer to jobs, commercial establishments, and other amenities. There will be increased pressure on the Town to provide additional services while the cost of these services will require the Town to carefully prioritize needs as they relate to statutory requirements.

The third problem is educating the public about waste reduction, recycling, litter control, and other waste issues. With a relatively high illiteracy rate, the county cannot rely on the written word for educational purposes. More internet-related advertising should be incorporated into the education program. In addition, radio and television advertisements should be provided while maintaining an educational presence in the K-12 schools.

Recommendations

Education

Recommendation: Much of today's information is disseminated through the internet. Consequently, it is imperative that the county develop and maintain a website that provides all of the basic details of county programs and services, including solid waste and recycling.

Action Item: Request assistance from the County Technical Advisory Service and the Southeast Tennessee Development District in developing and maintaining a website.

Facilities and Programs

Recommendation 1: Signs should be posted at prominent intersections to indicate locations of waste collection and recycling facilities.

Funding Source: General Fund or Dept. of Transportation grant.

Recommendation 2: The Blythe Ferry and River Road Convenience Centers are in need of additional space.

Action Item 1: Determine if additional space is available at existing locations

Action Item 2: Acquire property and/or prepare Permit-by-Rule modifications prior to implementing expansions.

Funding Source: General Fund

Recommendation3: All convenience centers need waste paint collection containers.

Action Item: Apply for grant funds to purchase waste paint collection containers.

Funding Source: Solid Waste Management Fund

Recommendation 4: Increased cardboard collections at convenience centers will require methods to compact or bale materials to increase density enough to make it transportable.

Action Item: Apply for grant funds to purchase a compactor and roll-off container designated for cardboard collection.

Recommendation 5: County officials would like to develop a glass and plastic recycling program if it can get grant funds to purchase containers and develop a plan to get materials to a market on a break-even basis.

Action Item 1: Apply for grant funds to purchase six roll-off containers.

Action Item 2: Contact RMCET for assistance with marketing materials, setting up milk runs, etc.

Funding Source: Solid Waste Management Fund

Recommendation 6: Encourage and coordinate the development of a recycling program in Decatur staffed by Town employees to construct a drop-off center.

Action Item: Meetings between county and municipal officials.

Funding Source: Appalachian Regional Commission/USDA Rural Development, Rural Utilities Service

Conclusion

In general, Meigs County has all of the facilities and programs in place to meet statutory requirements. Some improvements are possible, but the county has made a good faith effort to provide its residents with recycling options using the most cost-effective methods available. In order to meet the mandates of the SWMA, the county will need to increase its recycling and diversion rate. However, this will be very difficult since the waste controlled by the county is all residential with limited volumes of homogenous waste that can be easily recycled.

Opportunities that should be explored may include joint ventures with the Town of Decatur. A recycling facility that is more convenient to the primary population center, schools, and commercial establishments could help increase the diversion rate necessary for SWMA compliance.