

**2015
UNICOI COUNTY
SOLID WASTE
DISTRICT
NEEDS
ASSESSMENT**



**Prepared by
First Tennessee Development District
June 2015**

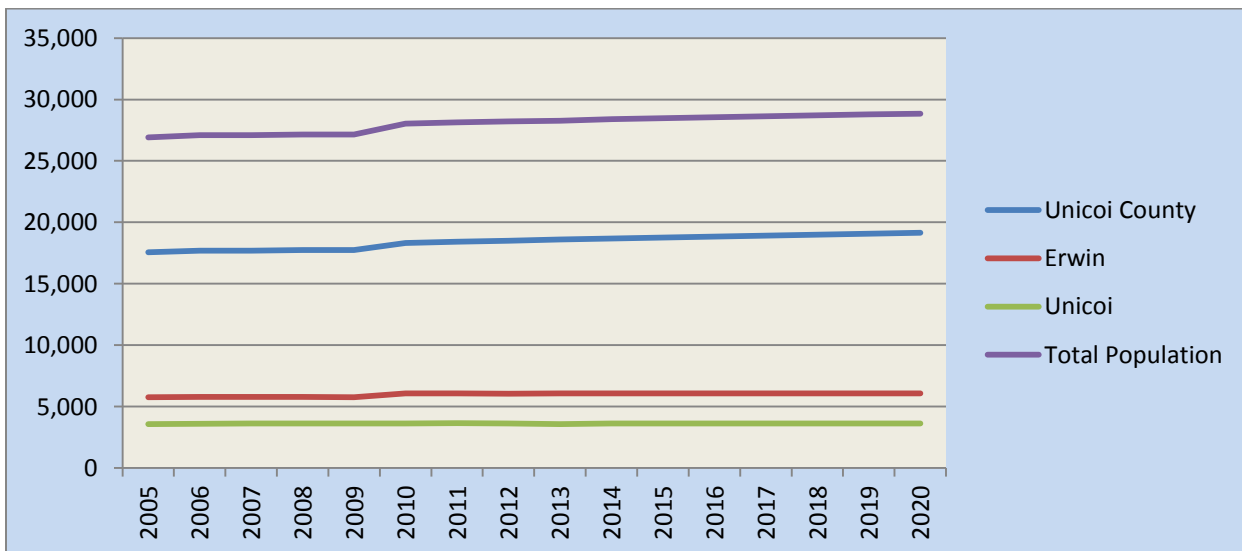
INTRODUCTION

The Solid Waste Management Act of 1991 requires Tennessee local governments to prepare and maintain a comprehensive plan for managing their solid waste through modern, integrated, efficient systems. To assure that such planning is carried out on a solid foundation of relevant and objective knowledge of local conditions, the Act requires that the Development District staff coordinate, conduct and maintain an assessment of the solid waste needs for each municipal solid waste planning region. This assessment shall be revised every five years [T.C.A. 68-211-811].

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 effect on the solid waste infrastructure needs over the next five (5) years.

	Unicoi County	Erwin	Unicoi	Total Population
2005	17,558	5,775	3,577	26,910
2006	17,693	5,801	3,611	27,105
2007	17,702	5,788	3,619	27,109
2008	17,737	5,785	3,633	27,155
2009	17,740	5,779	3,636	27,155
2010	18,313	6,088	3,629	28,030
2011	18,414	6,074	3,650	28,138
2012	18,510	6,063	3,639	28,212
2013	18,595	6,073	3,592	28,260
2014	18,685	6,080	3,644	28,409
2015	18,760	6,076	3,631	28,466
2016	18,847	6,073	3,631	28,551
2017	18,921	6,073	3,627	28,621
2018	19,003	6,075	3,625	28,703
2019	19,082	6,075	3,632	28,789
2020	19,150	6,074	3,629	28,854



Past population figures and future projections indicate that Unicoi County and the municipalities of Erwin and Unicoi are not expected to grow significantly over the next 5 years. Historical trends as shown in the table above indicate that the overall population of the County is expected to increase slightly through 2020 which has been the trend for the preceding 10 years prior to 2015. In fact, the Town of Unicoi is expected to experience virtually no increase in population over the next 5 years. With the insignificant growth in population estimates and the lack of significant economic growth expected over the next 5 years, Unicoi County's solid waste management system and the door-to-door collection program offered by the Town of Erwin, are more than adequate at this time to handle any increase in solid waste generation due to population growth. The Town of Unicoi does not offer solid waste collection services for residents. These residents tend to use the Limestone Cove Convenience Center which is located just a few miles from the Town.

However, like any projection of this nature, changes can occur in population growth due to factors not yet identified such as industrial expansions, residential developments, new industry, etc. We are however, confident at this time, all indicators of economic growth, residential development, etc., point to the fact that little or no population growth will occur in Unicoi County for the foreseeable future. An overall assessment of the solid waste management system in the County shows that current services provided are sufficient to meet the needs of residents for many years to come. It is apparent that at some time in the future, Unicoi and Unicoi County officials need to address the possibility of the Town of Unicoi providing door-to-door collection for Town residents. Whether through private contracting or public services, Unicoi residents need access to door-to-door collection services. Implementing door-to-door collection for Town residents will eventually result in better disposal of solid wastes, less illegal dumping and sets the stage for a possible recycling collection program in the Town.

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

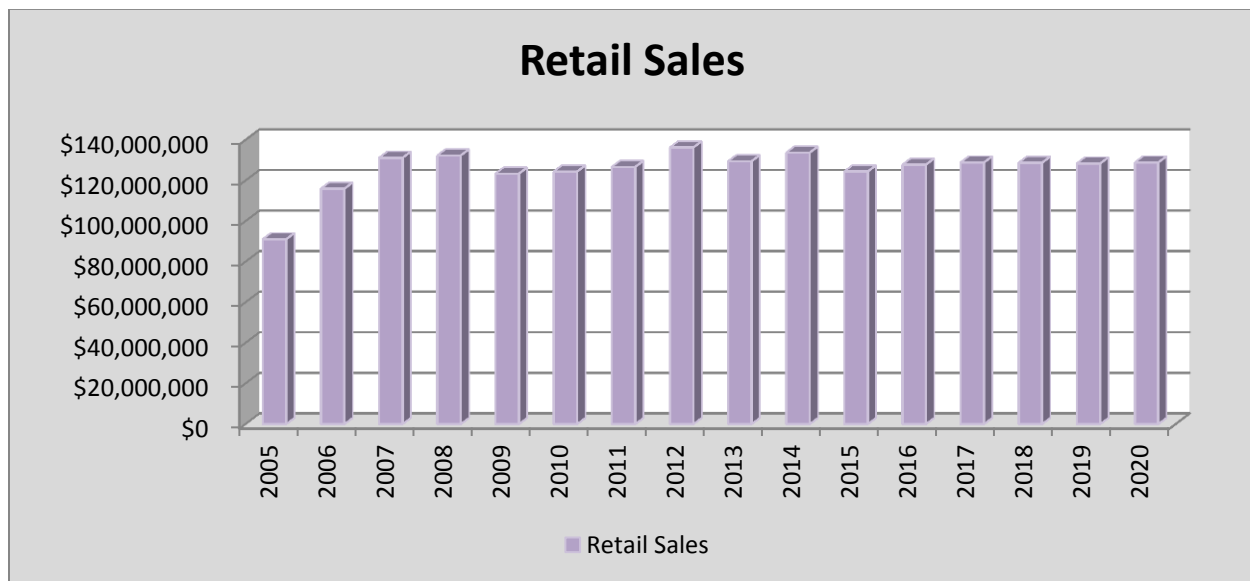
	Labor Force	Employed	Unemployed	Unemployment Rate	Per Capita Income	Retail Sales
2005	8,350	7,830	520	6.23%	\$27,345	\$91,027,008
2006	8,765	8,219	546	6.23%	\$28,036	\$115,937,931
2007	8,564	8,107	457	5.34%	\$29,476	\$131,161,512
2008	8,511	7,879	632	7.43%	\$30,724	\$132,329,393
2009	8,483	7,497	968	11.62%	\$29,735	\$123,346,640
2010	7,851	7,029	822	10.47%	\$30,574	\$124,364,147
2011	7,783	7,005	778	10.00%	\$31,610	\$126,665,774
2012	7,626	6,907	719	9.43%	\$32,633	\$136,273,015
2013	7,159	6,520	639	8.93%	\$32,987	\$129,479,109
2014	6,986	6,334	652	8.19%	\$31,508	\$133,716,629

2015	7,481	6,801	698	9.33%	\$31,862	\$124,430,116
2016	7,407	6,746	680	9.18%	\$32,120	\$127,770,427
2017	7,332	6,683	661	9.01%	\$32,222	\$128,853,676
2018	7,273	6,622	649	8.93%	\$32,140	\$128,732,893
2019	7,296	6,628	651	8.93%	\$31,970	\$128,373,243
2020	7,358	7,358	668	9.07%	\$32,063	\$128,875,903

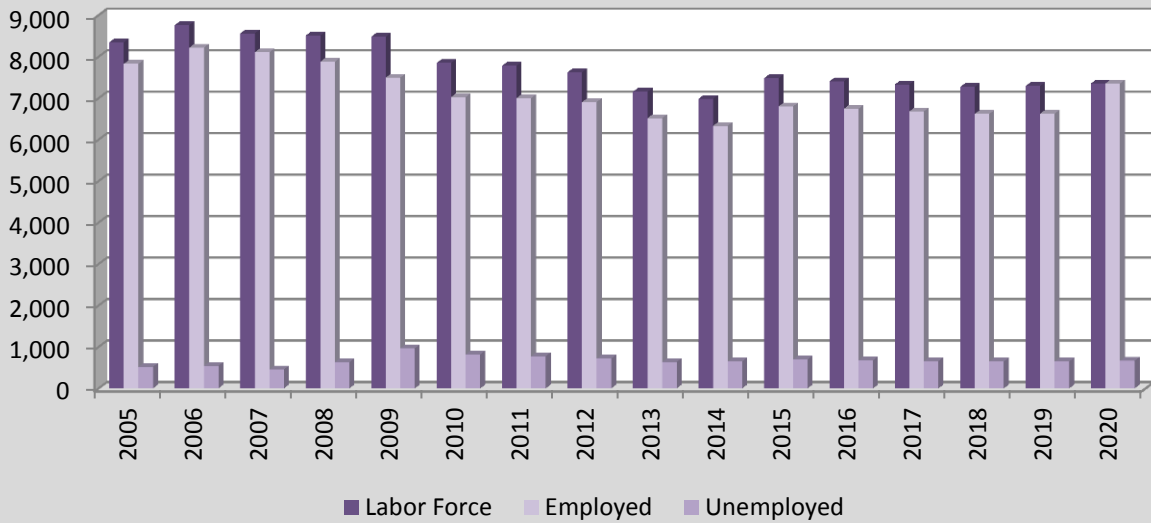
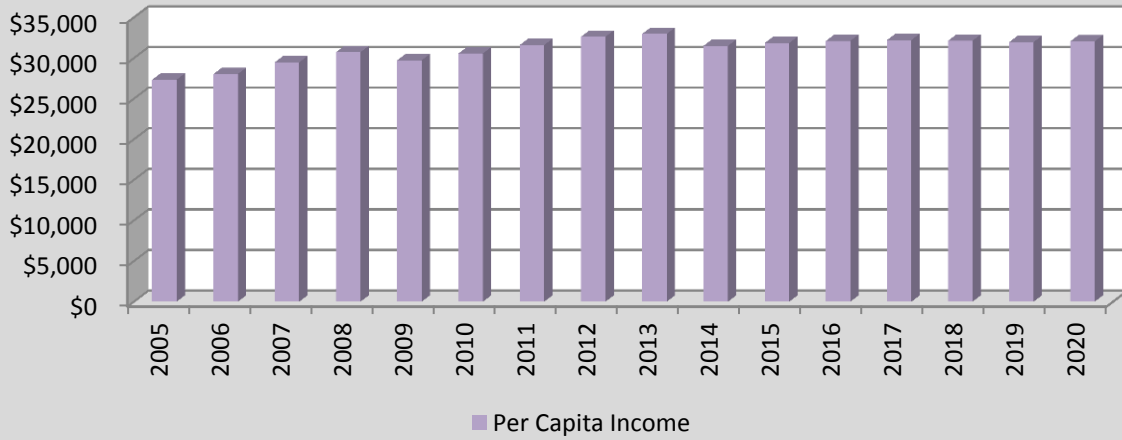
Source: U.S. Census Bureau, East Tennessee State University Department of Economics and Finance. Some projections done by FTDD staff.

The following charts show graphic representation of the data contained in the previous table. Data shows very little sustained growth in retail sales over the next 5 years which is a major portion of the Unicoi County economy. Unemployment rates in Unicoi County are slightly higher than other counties in the surrounding region due to the lack of manufacturing jobs. The County relies heavily on ecotourism and outdoor sports as the driving factor in the County's economy. While these activities provide sales tax revenue, they do not produce the number of jobs and the manufacturing sector. For the next 5 years, based on projections, the unemployment rate in Unicoi County is expected to hover around 9%.

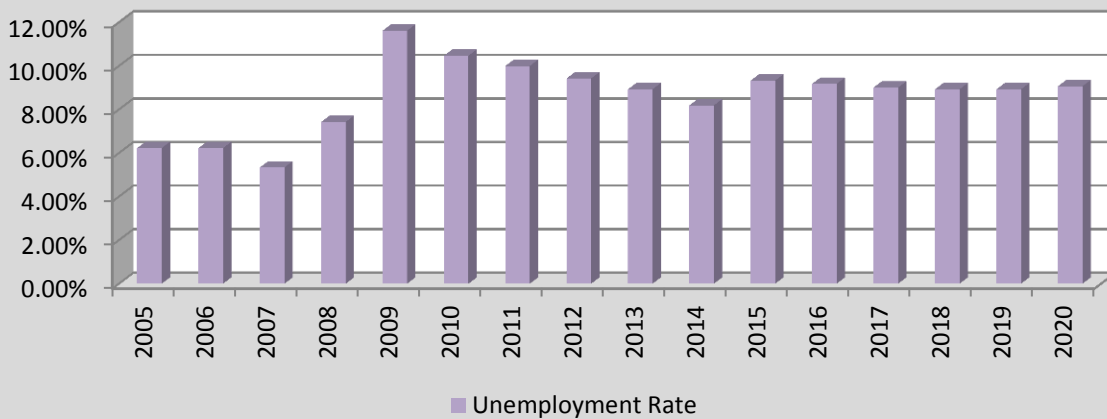
Nearly 80% of the land in Unicoi County is undevelopable for retail or industrial entities. Mountainous terrain and Federal land holdings prevent Unicoi County from the types of economic growth that other counties in the region often experience. There does not appear to be a significant decrease or increase in the unemployment rate or retail sales figures to cause a stress on the County's solid waste collection system over the next 5 years. As currently comprised and based on current or projected economic indicators, the solid waste management system is sufficient to handle any increase in waste.



Per Capita Income

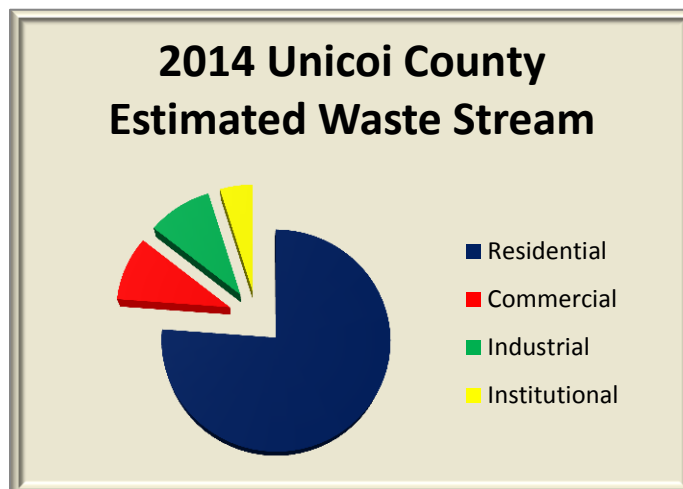
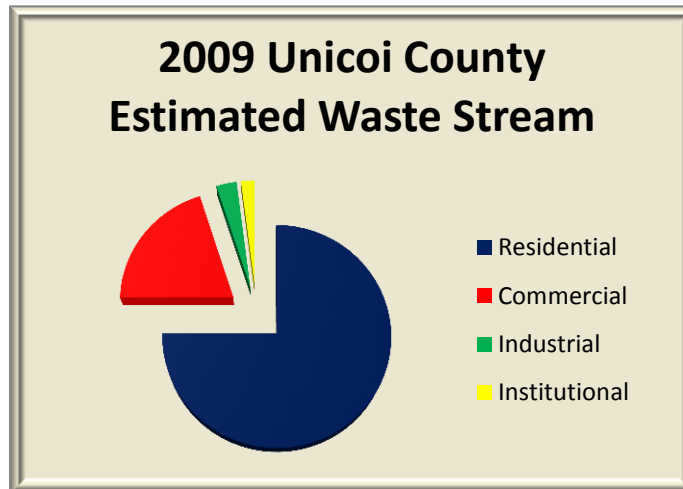


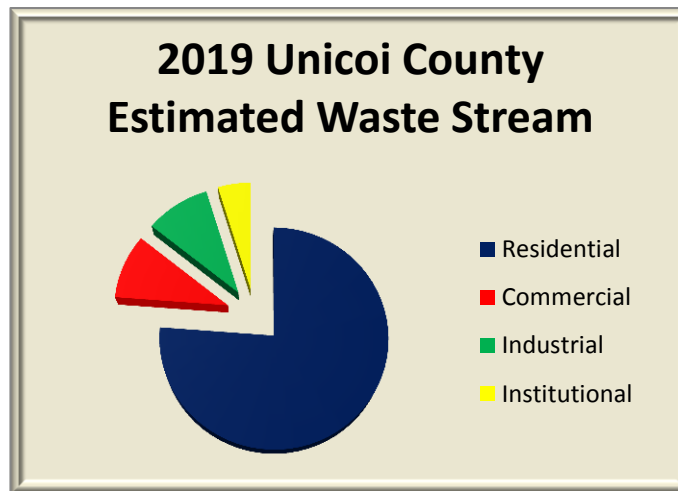
Unemployment Rate



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.





As is evident in the above charts, Unicoi County's waste is comprised primarily of residential materials based on estimates provided by local officials. Through 2019, the waste stream is not expected to change from previous years based on economic indicators or industrial growth. This has typically been the trend over the last 10 years and appears to continue throughout the next 5 years. The overall waste stream ranges from between 75 and 80% residential based on opinion. In 2004 and 2019, the remaining waste stream is estimated to be between 5 – 10% commercial, industrial and institutional materials. In 2009 the waste stream was estimated to contain 20% commercial materials. This proves it is difficult to accurately determine the makeup of the waste stream without conducting a waste audit. We are comfortable with estimates made in 2014 and projections for 2019, which are based on economic factors, landfill reports from area landfills. An overwhelming majority of Unicoi County's waste is disposed in the Iris Glen Environmental Center which would indicate that most comes from drop-off locations or door-to-door collection.

Unicoi County does not accept or handle commercial or industrial waste at any of its network of 3 staffed convenience centers. These sectors are handled by the private sector through direct contracts or public contract with private haulers. Due to the expected trends in population growth, economic activity and the composition of the County's waste stream over the next 5 years, Unicoi County appears to be positioned well to handle the MSW stream for the foreseeable future. For this system that is designed to only manage residential wastes, the historic and future trends appear meet the County's current collection and transportation capacity.

Unicoi County's special waste collection program is implemented through convenience centers. Each convenience centers serves as the collection point for special wastes managed by Unicoi County, with the exception of waste tires. These are only collected at the Hoover Convenience Center. Unicoi County is one of the founding members of the Washington County Regional HUB Tire Collection Program. The following table illustrates the County's commitment to managing special wastes.

<u>Special Waste</u>	<u>Collection Process</u>	<u>End Use</u>
Waste Tires	Washington County Regional HUB Collection Center	Liberty Tire, Concord, NC
Lead Acid Batteries	Collected at each Convenience Center	Sold for recycling.
Used Oil	Collected at each Convenience Center	Sold for recycling.
Antifreeze	Collected at Hoover Convenience Center	Fee is paid to recycle.
Electronics	Do not manage	
Latex Paint	Do not manage	

Future collection, management or marketing plans for any of these special wastes are not expected to change in the near future. However, in the 2014 Annual Solid Waste Progress Report, Unicoi County identified the need for a storage building to store latex paint at one of its convenience centers. If funds are obtained to purchase a building, the County will begin accepting paint from the public to divert from the waste stream.

All of the waste collected by Unicoi County, in its network of convenience centers, and the Town of Erwin's door-to-door collection program is disposed of within the Northeast Tennessee Solid Waste Planning Region at the Iris Glen Environmental Center. Waste Management, operators of the Iris Glen Environmental Center, provide some collection equipment and transportation from the County's convenience centers to the landfill. Waste Management also serves as the contracted collection company for Erwin's door-to-door collection program. A small amount of waste, 112 tons in 2014, was disposed in the Carter's Valley Landfill in Hawkins County by private haulers and 838 tons of waste was disposed in the Ecosafe Landfill in Sullivan County, also by private haulers. There is no waste from outside Unicoi County disposed in the County. Out of county waste is prohibited at any of the County's convenience centers.

One of the most significant waste stream management issues Unicoi County faces is the disposal of construction/demolition waste at convenience center sites. Currently, these materials are permitted to be disposed in the Centers, however, County officials are realizing that these materials account for approximately 50% of the loads transported for disposal. These un-compacted wastes are placing a significant burden on the solid waste program budget. County officials have discussed a prohibition on C/D waste, but are concerned with citizen response and the potential for an increase in illegal dumping. We believe prohibiting these materials from the collected waste stream is one of the most pressing issues the County faces in its system. Cost savings from fewer trips to the landfill, less "pull" charges and reduced tonnage, i.e. tipping fees, will create a healthier environment for sustainability of the program and create less burden on tax payers. It is understood that this change will cause concern among users of the system, but changes should be made to position the solid waste program for long term success and "free" up General Fund funds to make improvements and expansions to the solid waste management system.

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.

The solid waste collection system in Unicoi County is relatively basic. There is one municipality in Unicoi County that provides solid waste collection for residents. The Town of Erwin provides door-to-door collection through a contract with a private hauler to approximately 6,000 residents within the Town. Erwin does not provide collection for residents outside the city limits. Over 1/3 of the County population resides in Erwin and therefore has access to door-to-door collection of solid waste. The Town of Unicoi, although an incorporated community, does not provide solid waste collection services for residential or commercial clients. Residents of the Town of Unicoi most likely use the County's Limestone Cove Convenience Center. Unicoi County has a network of 3 staffed convenience centers that provide collection assurance for residents residing outside the city limits of Erwin. However, all residents of Unicoi County are permitted to use the County's convenience center option. All of the residential waste collected in Unicoi County through the public collection and disposal options, is disposed in the Iris Glen Environmental Center in Johnson City. This facility is operated by Waste Management and is owned in partnership with the City of Johnson City. Erwin transports waste directly to the Class I landfill while Unicoi County contracts with a private company (Waste Management) for transportation services. There are multiple private haulers in the County that collect in rural areas that disposed waste in either the Iris Glen Environmental Center, Carter's Valley Landfill in Hawkins County or Ecosafe Landfill in Sullivan County. The only opportunity for residents to participate in recycling programs is through the County's recycling collection sites, also located at each of the 3 convenience centers. Neither Erwin nor Unicoi provide recycling opportunities for residents. Erwin does however, collect large metal items at curbside from residents for recycling purposes and operates a yard waste collection and diversion program that converts large woody material into mulch. Recyclables collected at the County 3 drop-off sites is transported by a private hauler (Waste Management) to a Materials Processing Facility in Kingsport. At this time, the County does not receive any revenue from the sale materials.

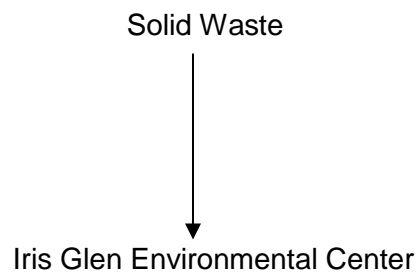
The overall functionality of the solid waste management system in Unicoi County is sufficient to meet the needs of residents. However, there are some shortcomings within the program that if implemented could enhance solid waste collection and recycling efforts. Municipal participation in recycling or other waste reduction programs would greatly improve overall success of the program. These programs would provide a majority of the residents in the County to have easy access to recycling collection. Furthermore, Unicoi County needs to explore the possibility of employing an individual to oversee the solid waste management program that can work with the municipal partners, implement educational programming and focus on day to day activities of the program. Currently, this responsibility lies with the County Mayor. It is also the opinion of the author that future plans should include the County directly employing convenience center operators. Currently, convenience center operations are carried out by "private contractors" that annual bid on operating the centers. While this has been a successful program for many years, it does limit the County's ability to provide oversight of their activities.

At no point during the life cycle of wastes in Johnson County does the material become a useful product. All solid waste generated, collected and disposed from Unicoi County is placed in a Class I landfill. The following flow diagrams show the flow of solid waste and recyclables in the Region from initial collection points to eventual end-points.

Unicoi County



Erwin





Higgins Creek Convenience Center



Hoover Convenience Center



Limestone Cove 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.

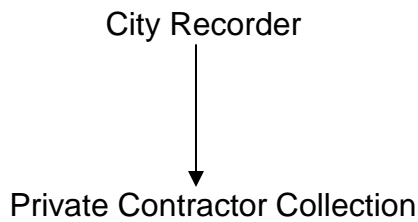
***Unicoi County
Solid Waste Program Organizational Chart***

County Mayor/County Commission



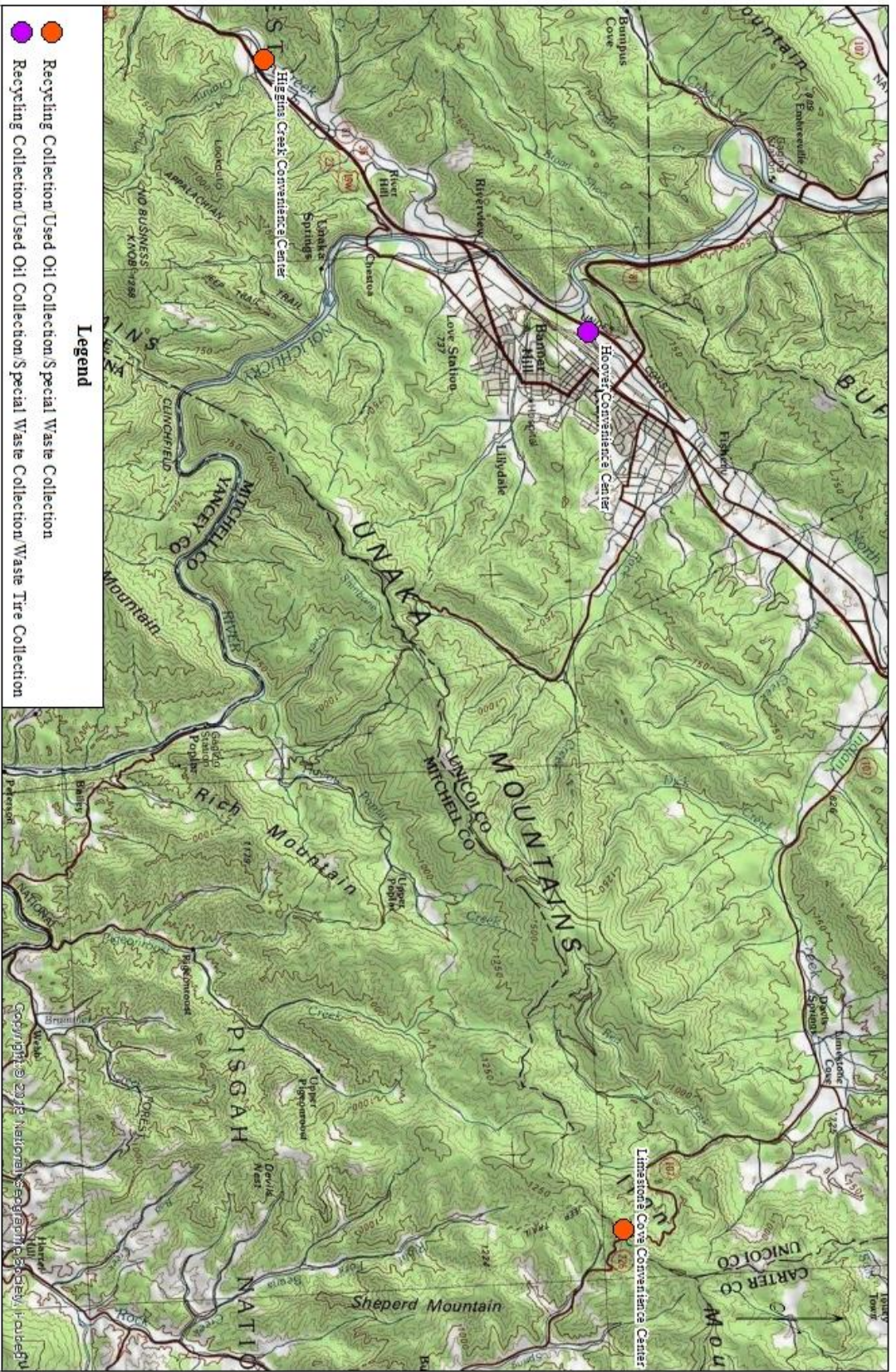
Contracted Convenience Center Operators

Erwin
Solid Waste Program Organizational Chart



Because of the unique nature that Unicoi County provides staffing to its 3 convenience centers, there does not appear to be a shortfall in staffing within the system. Furthermore, Erwin, the only municipality in the County that provides solid waste collection, does so through a contract with a private hauler. The Town does not provide staffing for this service and therefore does not have any immediate staffing needs. Additional staff in the Unicoi County system would be a luxury that would allow the local government to expand programs or ease pressure on existing staff. Should the County expand its recycling collection program or chose to make major changes to the current system, staffing needs would be a top priority. As previously mentioned, recycling is needed within both municipalities and if ever implemented, both municipalities would have to evaluate staffing levels and add additional staff as needed. Additional staff is always a desire of local government solid waste programs; however with the current system and budgetary constraints, there appears to be no shortcomings in the staff levels that lead to a reduction in service.

The following map shows the location of the network of convenience centers throughout the County that provide excellent coverage for residents relying on drop-off service for solid waste disposal. The identification of special waste collection, including tires is also expressed on this map.



Legend

- Recycling Collection Used Oil Collection \$pecial Waste Collection
- Recycling Collection Used Oil Collection \$pecial Waste Collection Waste Tire Collection
- Recycling Collection Used Oil Collection \$pecial Waste Collection Waste Tire Collection

Solid Waste Facility Location Map Unicoi County, Tennessee

Map Created: June 15, 2015
 For: Christopher L. Craig
 Cartographer: Wendy S. Hill
 Organization: First Tennessee Development District
 Department: GIS Program Department
 Mailing Address: 3211 North Roan Street
 Johnson City, TN 37601
 Software Version: ArcGIS, Standard, Version 10.1



All data, information, and maps are provided "as is" without warranty or any representation of accuracy, timeliness or completeness. The data is not guaranteed accurate or suitable for any use other than that for which it was gathered. The information is not to be used for development of construction plans or any type of engineering services.

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.

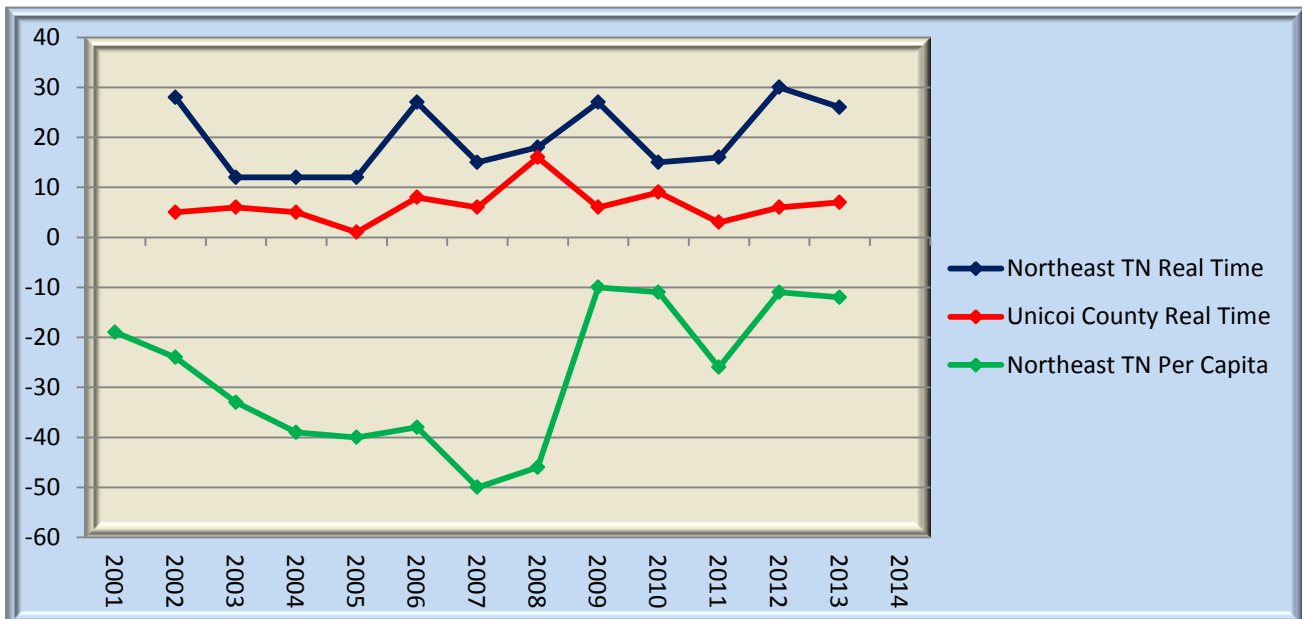
Since the last District Solid Waste Needs Assessment in 2008, the attitude and perception of Unicoi County residents toward waste management has changed very little. Although residents have participated in the County's drop-off recycling program for many years, their willingness to be fully engaged in the process remains relatively low. Participation throughout the program would also be classified as low and comparable to many other small rural counties in the State with little available funding to promote or expand opportunities for residents.

County officials have discussed for years of expanding the recycling program to provide more opportunities for residents, including cardboard collection at businesses, however the lack of funds to purchase equipment greatly decreases the County's ability to move forward. With the absence of recycling offered in the County's two municipalities, the largest population centers, public apathy toward waste reduction and recycling remains at levels as it has in the past.

There are currently no organized education programs in place to generate enthusiasm in the community. Several local citizens have expressed interest in being involved in the educational programming and have discussed becoming more involved with the County to promote recycling, anti-litter and waste reduction. However, none of these efforts ever materialize. Unicoi County needs a dedicated staff person to oversee the County program and focus on promoting the system, including recycling. Whether through dedicated volunteers or paid staff, education remains a key component in this and many other small County programs to generating public support and behavioral change toward solid waste management. Additional measures needed to change citizen's behavior and increase participation, include promoting the program in the community and offering additional opportunities for residents to participate.

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.



Year	Northeast TN Region Real Time	Unicoi County Real Time	Northeast TN Region Per Capita
2001			-19%
2002	28%	5%	-24%
2003	12%	6%	-33%
2004	12%	5%	-39%
2005	12%	1%	-40%
2006	27%	8%	-38%
2007	15%	6%	-50%
2008	18%	16%	-46%
2009	27%	6%	-10%
2010	15%	9%	-11%
2011	16%	3%	-26%
2012	30%	6%	-11%
2013	26%	7%	-12%
2014	N/A	N/A	N/A

Since 2001, Unicoi County has never met the State's 25% waste reduction goal using either of the approved calculation methods. In 2008 Unicoi County was the closest year to meeting the goal by achieving a 16% waste reduction. As a member of the Northeast Tennessee Solid Waste Planning Region, which consists of Carter, Johnson, Unicoi and Washington Counties, Unicoi County has had the benefit of other Counties in the Region assisting with meeting the goal several years since 2001. The most likely calculation method that would prove Unicoi County successful in meeting the goal is the "real time" method. Using this method, the primary reason for the County not meeting the goal in the past has been the lack of recycling and waste reduction data from private entities such as businesses and industries. Historically, across the State, Region's that have a high participation rate from businesses and industries in reporting recycling data, typically achieve >25% waste reduction rate using the "real time" calculation method.

The lack of dedicated solid waste program staff is a significant reason why the County is unable to collect more recycling and waste reduction data from private entities. The First Tennessee Development District assists the County with this data gathering process but is limited to mailed surveys which are historically ineffective in achieving responses. This is voluntary participation program started by the Development District in 2001-2002. Unfortunately, if participation is low, the percentage of waste reduction is also low.

One of the most important infrastructure improvements that need to be made in the County is the Towns of Erwin and Unicoi need to become more actively involved in recycling programs at the municipal level. While this is a long term goal, expanding recycling to the major population centers could certainly help the County towards its efforts to reach 25% waste diversion from Class I landfills. Secondly, Unicoi County needs to explore options for diverting C/D wastes from the MSW waste stream collected at convenience centers. Preliminary discussions have taken place over the last few years but significant planning and preparation needs to be done to ensure that residents have alternative disposal options for C/D materials to prevent and discourage illegal dumping. While officials in Unicoi County wholeheartedly support reducing wastes from entering the landfill by at least 25%, it is in some cases unattainable due to several factors that have been previously mentioned.

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.

Site Name(s)	Current Capacity	Maximum Capacity	Projected Life of Facility
Limestone Cove Convenience Center	Approximately 200 tons/month	Approximately 400 tons/month	25 Years
Hoover Convenience Center	Approximately 200 tons/month	Approximately 400 tons/month	25 years
Higgins Creek Convenience Center	Approximately 200 tons/month	Approximately 400 tons/month	25 years
Total:	Approximately 600 tons/month	Approximately 600 tons/month	

There appears to be no shortfalls in the ability of Unicoi County to manage the current waste stream or the projected waste stream over the next 5 years. While very difficult to determine maximum capacity, Unicoi County’s network of staffed convenience centers has the capacity to manage twice the amount of waste currently disposed of at these facilities. Additional tonnage would only increase the number of trips to the landfill by the County’s private hauler and would not necessarily cause the centers to reach “capacity”. And it is not expected that over the next 5 years, population growth would cause the County to expand the footprint of these Centers or construct a new Center to handle additional waste flow. These 3 centers adequately serve the needs of residents of Unicoi County and there are no plans to add additional sites in the future. The only potential modification to the system would occur at some point in the future should the Limestone Cove Convenience Center become overwhelmed with traffic due to its proximity to the Town of Unicoi. Since Unicoi does not provide solid waste collection services for residents, all or most of these residents use the Limestone Cove Center for disposal.

Curbside collection as is offered by the Town of Erwin is designed to easily expand with additional routes should the need arise due to an increase in tonnage of materials generated in the Town. There are no Class I or Class III/IV facilities in the County. Currently C/D materials are collected at convenience centers co-mingled with MSW. Recyclables are collected at each of the 3 convenience centers which have adequate capacity for the volume of materials that are collected. There are no materials processing facilities in the County. Recyclables are transported by private hauler to a MRF located in Kingsport, TN.

(b) Provide a chart or other graphical representation showing service area coverage by public and private waste collectors 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.

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)
Unicoi County	County-wide	28,000	Hours of operation	14,000 tons	Drop-off
Erwin/Private Hauler	City Limits	6,000	Weekly	N/A	Curbside
Private Haulers	County-wide	N/A	Weekly	N/A	Curbside

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	\$15,000		\$15,000
Transportation/hauling	\$450,000		\$450,000
Collection and Disposal Systems			
Equipment		\$53,500	\$53,500
Sites			
Convenience Center	\$45,000		\$45,000
Transfer Station			
Tire Recycling Center			
MRF			
Landfills			
Site			
Operation			
Closure			
Post Closure Care			
Administration (supplies, communication costs, etc.)	\$15,095		\$15,095
Education			
Public			

Continuing Education			
Capital Projects/Site Development	\$20,000		\$20,000
REVENUE			
Host agreement fee			
Tipping fees			
Property taxes/Other Taxes	\$436,791		\$436,791
Sales tax			
Surcharges			
Disposal Fees			
Collection charges			
Industrial or Commercial charges			
Residential charges			
Convenience Centers charges			
Transfer Station charges			
Sale of Recyclables			
Fund Balance Transfer			
Other sources: (Grants, bonds, interest, sales, etc.)	\$10,000	\$151,804	\$161,804

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.

Locality	Revenue Source
Unicoi County	Property Tax Grants
Erwin	Property Tax/General Fund

Future Solid Waste Management Needs

Community	Item	Estimated Cost	Potential Revenue Sources
Unicoi County	1 - Solid Waste Compactor	\$20,000	Grants
Unicoi County	4 – 40 yd Compartmentalized Recycling Containers	\$18,000	Grants
Unicoi County	3 – 40 yd Cardboard Recycling Containers	\$13,500	Grants
Unicoi County	Building for Paint Storage	\$2,000	Grants

As seen from the above tables, residential property taxes are the sole source of funding all solid waste programs in the County and the Town of Erwin. Grant funds, when available, provide a tremendous boost to Unicoi County's ability to make upgrades, replace equipment and expand the existing program, both solid waste and recycling, as can be seen in the Future Solid Waste Management Needs table. Without grants for solid waste equipment and or significant construction projects, it will be virtually impossible for Unicoi County to be able to meet solid waste management equipment and facility needs over the next 5 years without raising property taxes. In this County, property tax increase to fund the solid waste program or purchase new equipment is generally "off the table". County officials feel there must be more solid waste equipment and infrastructure grants available to meet the needs cities and counties with deteriorating equipment and facilities.

Fund 116 Solid Waste/Sanitation				
Statement of Proposed Operations		Budgetary	Est & Bgt	Proposed
For Fiscal Year Ending June 30, 2015		Basis	Current Year	
Account Number		2013	2014	2015
Estimated/Appropriated/Actual Revenues				
40000 Local Taxes				
40100 County Property Taxes				
116- -40110- - -	Current Property Tax	420,444	386,029	389,311
116- -40120- - -	Trustee's Collections - Prior Year	13,720	16,964	16,000
116- -40130- - -	Cir Clk/Clk & Master Collections-Pr Yr	15,536	13,609	15,000
116- -40140- - -	Interest And Penalty	2,912	2,854	2,800
116- -40150- - -	Pick-Up Taxes	18	366	500
116- -40161- - -	Payments In Lieu Of Taxes - T. V. A.	26	24	30
116- -40162- - -	Payments In Lieu Of Taxes-Local Utilitie	6,007	6,047	6,050
116- -40163- - -	Payments In Lieu Of Taxes - Other	779	723	750
Total County Property Taxes		459,442	426,616	430,441
40200 County Local Option Taxes				
116- -40270- - -	Business Tax	5,969	4,217	4,500
Total County Local Option Taxes		5,969	4,217	4,500
40300 Statutory Local Taxes				
116- -40320- - -	Bank Excise Tax	0	49	50
116- -40330- - -	Wholesale Beer Tax	393	295	300
Total Statutory Local Taxes		393	344	350
Total Local Taxes		465,804	431,177	435,291
41000 Licenses And Permits				
41100 Licenses				
116- -41140- - -	Cable TV Franchise	488	2,861	1,500
Total Licenses		488	2,861	1,500
Total Licenses And Permits		488	2,861	1,500
46000 State Of Tennessee				
46800 Other State Revenues				
116- -46851- - -	State Revenue Sharing -T.V.A.	15,681	9,724	10,000
Total Other State Revenues		15,681	9,724	10,000
Total State Of Tennessee		15,681	9,724	10,000
Total Revenues		481,973	443,762	446,791
Total Revenues		481,973	443,762	446,791

Fund 116 Solid Waste/Sanitation				
Statement of Proposed Operations		Budgetary	Est & Bgt	Proposed
For Fiscal Year Ending June 30, 2015		Basis	Current Year	
Account Number		2013	2014	2015
Estimated/Appropriated/Actual Expenditures				
50000 General County Operations				
55000 Public Health And Welfare				
55710 Sanitation Management				
116-55710-201-	- Social Security	420	0	0
116-55710-210-	- Unemployment Compensation	66	0	0
116-55710-307-	- Communication	1,958	2,056	2,000
116-55710-312-	- Contracts With Private Agencies	402,229	383,019	450,000
116-55710-330-	- Operating Lease Payments	41,397	40,159	45,000
116-55710-337-	- Maintenance And Repair Services-Office	0	58	3,500
116-55710-351-	- Rentals	1,345	1,345	1,345
116-55710-399-	- Other Contracted Services	10,980	11,480	15,000
116-55710-415-	- Electricity	5,845	5,997	6,500
116-55710-506-	- Liability Insurance	801	765	550
116-55710-509-	- Refunds	0	0	1,500
116-55710-510-	- Trustee's Commission	9,209	8,554	10,750
116-55710-513-	- Workman's Compensation Insurance	5,377	1,005	1,200
116-55710-724-	- Site Development	1,931	14	20,000
Total Sanitation Management		481,558	454,452	557,345
Total Public Health And Welfare		481,558	454,452	557,345
Total General County Operations		481,558	454,452	557,345
Total Expenditures		481,558	454,452	557,345
Total Expenditures		481,558	454,452	557,345

Template Name: LGC Budget Report
 Created By: BCColum

**Unicoi Co Mayor
 Budget Report 3 Column
 For Fiscal Year Ending JUNE 30, 2015**

User: Phyllis
 Date/Time: 9/19/2014 12:0
 Page 28 of 36

Fund 116 Solid Waste/Sanitation

Statement of Proposed Operations

For Fiscal Year Ending June 30, 2015

Account Number

**Budgetary
 Basis
 2013**

**Est & Bgt
 Current Year
 2014**

**Proposed
 2015**

Excess of Estimated Revenue Over

Under Estimated Expenditures

415

(10,690)

(110,554)

Estimated Beg Fund Bal JULY 01

132,876

133,291

122,601

Undesignated Fund Bal 132,876

Reserves 0

Designated Fund Bal 0

Beginning Fund Bal 132,876.00

Excess (Diff) in Rev/Exp **415**

Unadjusted Fund Bal 133,291

Adjustment 0

Total Ending Fund Bal 133,291

Adjustment

0

Estimated End Fund Bal JUNE 30

133,291

122,601

12,047

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.

Unicoi County's plans for managing the solid waste management system over the next 5 years will remain very similar to the current operations. One area the County will continue to try to improve is the effort to increase participation in the business and industry waste reduction/recycling reporting program through the First Tennessee Development District. In the coming years, Unicoi County officials will work more closely with major businesses and industries in the Region to further expand the voluntary reporting program. This program is extremely important to the Region in their efforts to attain the 25% waste reduction goal using the "real time" calculation method. Due to low participation rates in recycling and the lack of any other significant waste reduction opportunities in the County, reporting from private entities is vital to Unicoi County's efforts to achieve the goal.

Most of the changes proposed to the Unicoi County solid waste management system are dependent on available funding. Increasing recycling opportunities, adding paint and E-waste collection and diverting C/D materials from the municipal solid waste stream are all limited by the funding structure currently in place. The County will rely on grant funds to make these necessary changes. As previously recommended, hiring a staff person to oversee the program is a long term goal and not expected to be reached in the next 5 years. The County has recently explored partnering with a neighboring county to provide recycling collection and processing services. In exchange for providing this service, the partnering county would receive all revenues from the sale of materials. In Unicoi County, a county that relies on private haulers for all aspects of solid waste and recycling collection and transportation, this proposed partnership is an excellent idea that will reduce transportation costs for Unicoi County while increasing materials sales revenue for the partnering County.

Although the Unicoi County program is not as elaborate as larger county programs, long-term sustainability of the solid waste collection system is not in question. County officials have exhibited a commitment to maintaining the system in a way that provides residents with a solid waste program.

Sources:

U.S. Census Bureau

East Tennessee State University Department of Economics and Finance

Tennessee Comptroller of the Treasury

Tennessee Department of Labor

First Tennessee Development District staff

2008 Unicoi County Solid Waste District Needs Assessment Update

Unicoi County Annual Solid Waste Progress Reports