

10/20/2021

Mr. Nick Jackson, Chair
Knox County Municipal Solid Waste Region
205 West Baxter Avenue
Knoxville, TN 37934

Subject: State Waste Reduction and Diversion Goal – Knox County Municipal Solid Waste Planning Region

Dear Mr. Jackson:

TDEC is pleased to inform you that the Knox County Municipal Solid Waste Region achieved the 25% waste reduction and diversion goal as presented in Tennessee Code Annotated §68-211-861 and Tennessee Solid Waste Processing and Disposal Rule 0400-11-01-.09.

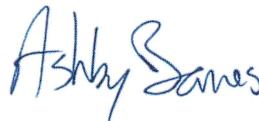
Using the base year methodology, the region achieved a 12% decrease since the base year, but using the qualitative assessment methodology the region achieved a 56% waste diversion rate.

If you should have any questions, please contact us at (615) 532-0075 or by email at Trey.White@tn.gov or Ashby.Barnes@tn.gov.

Sincerely,



Trey White
Manager, Materials Management Technical



Ashby Barnes
Recovered Materials Scientist

CC: The Honorable Glenn Jacobs, Knox County Mayor
Drew Thurman, Knox County Solid Waste Director
John LeCroy, Regional Director for External Affairs
Tim Hendrick, East Tennessee Development District
Central Office Files

2021 Annual Regional Solid Waste Plan Update 2021 Annual Progress Report 2021 TDEC Survey Response 2020 Waste & Recycling Reports (calendar year)

Purpose of Document:

This contains information used to update to the Regional Solid Waste Plan, report on the regions annual progress respective to waste reduction and diversion requirements, responses to survey questions, and quantitative waste and recycling totals from the previous calendar year.

The data conveyed in this document are only facsimiles of what is entered into an online reporting tool called Re-TRAC. This annual reporting to the Tennessee Department of Environment and Conservation (TDEC) is required under state law.

The author makes good faith efforts to capture accurate waste and recycling information but accuracy can vary greatly from one reporter to another. The highest level of information is supplied by the City of Knoxville and Knox County regarding their public collection programs. TDEC performs a quality control review after the reporting is finalized by the region so amounts here may vary from totals later summarized and presented by State of Tennessee agencies. TDEC officials review and later issue a letter regarding progress and compliance with required diversion targets.

The Knox County Regional Solid Waste Board is presented the information in this report at a properly noticed public meeting where they may question the author about the process and information reported. The Board votes to accept the reporting by empowering the Board Chair to sign off electronically on the final document in the Re-TRAC system. The reporting is finally completed when the Knox County Mayor goes in and completes a final signs-off through Re-TRAC.

Information conveyed in the reporting will be used by the Solid Waste Board and by local solid waste offices for guidance in making solid waste decisions and to help formulate solid waste policies for the region. Though the Region's plan is developed cooperatively the City and County Solid Waste programs are empowered to take independent action without consulting each other or following the plan as needed which means nothing stated or reported here should be construed to be a limit on County or City authorities.

For questions about this document or solid waste assistance within Knox County contact Knox County Solid Waste at 865-215-5865 or send an email to solidwaste@knoxcounty.org.

References in Tennessee Code Annotated (T.C.A.) about Waste Plans and Annual Reporting

- T.C.A. 68-211-814 Municipal solid waste region plans — Authority of region or solid waste authority after approval. —
- T.C.A. 68-211-815 Municipal solid waste region plans — Contents. —
- T.C.A. 68-211-871 Annual report — Contents — Annual progress report — Sanctions for noncompliance — Annual reports by recovered materials facilities. —

General Information

Administrative Contact Information

Report Author:

Drew Thurman
Knox County Solid Waste

Solid Waste Regional Planning Board Membership

Contact Solid Waste by Email at solidwaste@knoxcounty.org or phone by 865-215-5865

Nick Jackson (Chair)
Representing Knox County
Term Expires:03/31/2027

Catherine Wilt
Representing Knox County
Term Expires
03/31/2024

Jay Price
Representing City of Knoxville
Term Expires
03/31/2025

Kim Davis
Representing Knox County
Term Expires
03/31/2024

Ronnie Nease
Representing Knox County
Term Expires
03/31/2027

Local Government Mayor or Executive:

Glenn Jacobs
Knox County Mayor
400 Main Street, Suite 615
Knoxville, TN 37902
865-215-2005
County.Mayor@knoxcounty.org

Solid Waste Director:

Drew Thurman
Solid Waste Director
Knox County Engineering and Public Works
205 West Baxter Avenue
Knoxville, TN 37917
865-215-5865
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Other Key Contacts

Patience Melnik
Waste and Resources Manager
City of Knoxville
400 Main Street #520C
Knoxville, TN 37902
865-215-2053
pmelnik@knoxvilletn.gov

Demographic Information (Completed by TDEC)

Locally compiled demographic information can be found at:

Knox - Knox County Planning Agency/Commission
Knoxville Area Facts & Figures
<https://knoxmpc.org/data/facts-and-figures>

Narrative Surveys

10 Year Plan Update | 2020-Annual

From Re-TRAC:

Each Region submitted an original 10 Year Plan detailing the roles and responsibilities of those who provide solid waste and materials management services. Tennessee Code Annotated §68-211-814(a)(3) and Rule 0400-11-01-.09(3)(j) require each Region to submit an annual progress report covering the next ten (10) years that serves as routine update to the Region's original 10 Year Plan. Similarly, Rule 0400-11-01-.09(3)(d) requires each county to develop a comprehensive integrative municipal solid waste management plan consistent with the 2015 – 2025 Solid Waste and Materials Management State Plan. Each county comprehensive integrative municipal solid waste management plan then modifies, updates and contributes to each Region's Plan, Rules 0400-11-01-.09(3)(e). Information provided in the following fields will serve as the county's comprehensive integrative municipal solid waste management plan which informs updates to each Region's annual progress report.

The Department understands that not all elements of the Plan change year to year. We encourage the Region to review all of the sections below and think about its plans for the next 10 Years, and the updates needed to amend its original plan.

In the past reporting year, have there been any changes or update to the region's Plan? If so, enter the updates/changes/amendments in the appropriate section.

Thinking over the next 10 years, will any of the contents of the current Regional Plan need to be updated? The contents of the Municipal Solid Waste Region Plans, described in §68-211-815(b), are listed below. By checking the box for that section, there will be an opportunity to review and amend the section. Tennessee Code Annotated requires Region plan amendments shall be consistent with the state solid waste plan.

Section(s) the Region would like to amend:

- Demographics
- Current System Analysis
- Adoption of the uniform financial accounting system required by §68-211-874
- Anticipated growth trends for the next ten-year period
- Anticipated waste capacity needs
- Planned capacity assurance, including descriptions of planned or needed facilities
- A recycling plan, including a description of current public and private recycling efforts and planned efforts to enhance recycling within the county or region
- A plan for the disposal of household hazardous wastes
- A description of waste reduction and recycling activities designed to attain the goal required by §68-211-861
- A description of education initiatives aimed at businesses, industries, schools, citizens and others; which addresses recycling, waste reduction, collection and other goals
- An evaluation of multi-county solid waste disposal region options with an explanation of the reasons for adopting or failing to adopt a multi-county regional approach
- A timetable for implementation of the plan
- A description of the responsibilities of the various participating jurisdictions

[X] A plan for managing solid waste generated as a result of disasters or emergencies, based upon the FEMA 325 Public Assistance Program

Plan for Managing Solid Waste Generated as a Result of Disasters or Emergencies, Based Upon the FEMA 325 Public Assistance Program

Did you previously upload a copy of the region's Debris Management Plan (DMP) for the 2018 or 2019 reporting period?

No (selected in order to allow an upload a new memo)

Knox Debris Management Plan Memo.pdf [uploaded]

Nothing has changed regarding Knox County and the Knox County Solid Waste Region's approach. The contractors have/may change from year to year but until a 325 plan is adopted Knox County's plan for emergency debris management is primarily focused on pre-event contracting to perform all the functions that would be required for a federally reimbursable disaster resulting in large amounts of debris.

Annual Progress Report

1. Convenience Centers

Are there permitted convenience centers in the county or its municipalities?

Yes

Convenience Centers	Hours	Address	Zip code	Permit#
Carter	M-F 8am-6pm; Sat 7am-3pm	8815 Asheville Highway	37924	CCC 47-0027
Dutchtown	M-F 8am-6pm; Sat 7am-3pm	10618 Dutchtown Road	37932	CCC 47-0022
Halls	M-F 8am-6pm; Sat 7am-3pm	3608 Neal Drive	37918	CCC 47-0483
John Sevier	M-F 8am-6pm; Sat 7am-3pm	1950 West Governor John Sevier	37920	CCC 47-0449
Karns	M-F 8am-6pm; Sat 7am-3pm	6930 Karns Crossing Lane	37931	CCC 47-0563
Powell	M-F 8am-6pm; Sat 7am-3pm	7311 Morton View Lane	37849	CCC 47-0532
Tazewell/Gibbs	M-F 8am-6pm; Sat 7am-3pm	7201 Tazewell Pike	37721	CCC 47-0526

2. Public Collection with Green Box (Rule 0400-11-01-.10(5)(a))

Does the county or its municipalities operate and use unmanned county collection containers or green boxes for municipal solid waste collection?

No

3. List publicly operated curbside municipal solid waste programs

Do residents in the county or each municipality have access to municipal solid waste curbside service(s)?

Yes

City of Knoxville
 60,000 homes
 Collected once a week
 Semi-automated
 95 gallon cart
 Accepted: bulky, white goods, brush, tires
 -City curbside trash to all single family, duplex up to 4 units. - Residential

-City operates a paid trash program in the central business improvement district (subscription based). Daily to businesses and residents Downtown.

4. List publicly operated curbside recycling programs

Do residents in the county or each municipality have access to curbside recycling service(s)?

Yes

City of Knoxville
 30,000 homes
 Single Stream recycling
 95 gallon cart
 Collected every other week

5. List publicly operated recycling drop-off locations

Are there publicly operated recycling drop-off locations in the county or its municipalities not associated with convenience centers?

Yes

Area	Description	Address
West	Cedar Bluff -City Recycling Center	341 Parkvillage Road, Knoxville
East	Chilhowee Park/Magnolia Ave -City Recycling Center	210 Alice Street, Knoxville
Downtown	Old City -City Recycling Center	227 Willow Avenue, Knoxville
South	Chapman Highway -City Recycling Center	225 W. Moody Avenue, Knoxville
North	Goodwill Store -City Recycling Center	5412 Pleasant Ridge Rd, Knoxville

6. List any recovery businesses that accept, buy, or process recyclable materials for the county or its municipalities. Does the county or municipalities have recovery businesses that accept, buy, or process recyclable materials for the county or its municipalities?

Goodwill Industries of Knoxville
 Green Energy Biofuel
 Liberty Tires
 PSC Metals
 Southeastern Recycling
 Spectra Environmental
 Westrock
 Certified Cylinder
 Enterprise Waste Oil Co.
 Green Wave Computer Recycling

7. List any restrictions or bans placed on wastes collected in the county or each municipality Does the county or municipalities have any restrictions or bans placed on wastes collected?

Yes

Knox County: Organics, Metals, Yard Trimmings, Inert Debris

Provide additional explanation, if necessary:

County restricts organics and inert debris and metal from MSW stream. Organics above are sent to green waste facilities, inert debris to C&D landfills and source separate metals.

8. Check all obstacles that apply to expanding recycling in the county or its municipalities.

1. Knox County

-Citizen apathy

-Markets

-Staff

2. City of Knoxville

-Funding

-Markets

9. Management of Organics

Does the county or its municipalities manage organics?

Yes

City of Knoxville

Material is collected and turned into mulch by way of a private facility being paid by a City Contract.

Accepted: Yard Trimmings, brush, leaves

10. Assistance for Backyard Composting

Does the county or its municipalities offer assistance for backyard composting?

No

11. Disaster Debris or Storm Event

In the last year, did a disaster debris or storm event increase the tonnage of organics diversion or disposal for the county or its municipalities?

No

Does your local government have a disaster debris plan?

Yes

Has the County submitted a draft to TEMA to file?

No

Has the County submitted a draft to FEMA to file?

No

Provide additional information, if necessary:

Knox County plan consists of a combination of pre-event contracts plus other emergency planning performed by Knoxville Emergency Management Agency (KEMA) and other Continuity of Operations Planning documents prepared by the County. Pre-event debris removal and monitoring contracts are in place and a memo was uploaded in Re-TRAC to TDEC.

12. Recycling Services for Other Entities Beside Residents

Does the county or its municipalities offer recycling services to other entities besides residents?*

Yes

City of Knoxville

Curbside

Drop-off Locations

Commercial Entities serviced: 106

Special Events: 2

Provide additional information, if necessary:

Glass is not collected at curbside single stream, but is collected at the recycling centers.

13. What methods do the county and each municipality use to collect, transport and dispose of their municipal solid waste?

1.Knox County

Primary collector:

- Publicly
- Open Market
- Contract

Collection-Transportation Equipment:

- Unknown amount of Side Load Refuse Trucks
- Unknown amount of Front Load Trucks
- Unknown amount of Rear Load Trucks
- 3 Roll-off Trucks owned by Knox County

Hauling and Transportation Destination: (Check all that apply)*

Materials sent to Transfer Station

Direct haul to landfill (No Transfer Station)

Provide additional explanation, if necessary:

County only listed roll-off trucks owned and operated by Knox County. There are several other types of waste trucks used by multiple contractors servicing the County Convenience Centers and County facilities.

2.City of Knoxville

Primary collector:

- Publicly
- Contract

Collection-Transportation Equipment:

- 9 amount of Side Load Refuse Trucks
- 6 Unknown amount of Rear Load Trucks

Hauling and Transportation Destination: (Check all that apply)*

Materials sent to Transfer Station

Direct haul to landfill (No Transfer Station)

Provide additional explanation, if necessary:

City staff pickup downtown garbage in 2 rear loaders. Our contractor, Waste Connections, picks up all other curbside residential trash in side-loaders and rear loaders.

14. What methods do the county and each municipality use to collect, transport, process or recycle their commodities?

1.Knox County

Primary collector:

- Publicly
- Open Market
- Contract

Collection-Transportation Equipment:

- Unknown amount of Side Load Refuse Trucks
- Unknown amount of Front Load Trucks
- Unknown amount of Rear Load Trucks
- 3 Roll-off Trucks owned by Knox County

Hauling and Transportation Destination:

Direct haul to private processing facility (No Transfer Station)

Provide additional explanation, if necessary:

County only listed roll-off trucks owned and operated by Knox County. There are several other types of waste trucks used by multiple contractors servicing the County Convenience Centers and County facilities.

2. City of Knoxville

Primary collector:

-Publicly

-Contract

Collection-Transportation Equipment:

-9 amount of Side Load Refuse Trucks

-6 Unknown amount of Rear Load Trucks

-5 Roll-off Trucks

Hauling and Transportation Destination:

Direct haul to private processing facility (No Transfer Station)

Provide additional explanation, if necessary:

City staff pickup recycling from businesses and residences downtown in two rear loaders, Waste Connections uses a combination of side-loaders and one rear-loader to pickup curbside recycling, and Waste Connections moves our roll-offs from our recycling centers.

15. Education Efforts

1. Community Recycling Events

City of Knoxville, Knox County, Non-profits, Businesses

Persuade and Inform

County-Wide

2. Expos, Trade Shows, Public Outreach, & Consultation

City of Knoxville and Knox County

Persuade and Inform

County-Wide

3. Knox County Litter Prevention Education

Knox County and Keep Knoxville Beautiful

Persuade and Inform

County-Wide

4. Awards

City of Knoxville, Knox County, Non-profits, Utilities, Businesses

Inform

County-Wide

5. CAC AmeriCorps

City of Knoxville, Knox County, Non-profits, Utilities, Businesses

Persuade and Inform

County-Wide

6. Regional Medication Collection Program

City of Knoxville, Knox County, Non-profits, Utilities, Businesses

Persuade and Inform

County-Wide

7. Recycling Education
City of Knoxville
Persuade and Inform
County-Wide

16. Check all that apply and complete funding options that the county and its municipalities use to fund their programs.

Knox County

How is the program funded?

- Property Taxes/General Fund
- Sale of Recyclables
- Grants

Specify 3 Year Average Property Taxes/General Fund amount:

\$3,700,000

Specify 3 Year Average amount of sale of recyclables:

\$500,000

Specify 3 Year Average Grants amount:

\$150,000

City of Knoxville

How is the program funded?

- Grants

Specify 3 Year Average Grants amount:

\$22,500

Grant mentioned is TDEC's Education and Outreach grant. Knox County interpreted this question as a budgetary question for the entire program. If TDEC wants to know how much of the County solid waste budget is earmarked for education that is much lower at ~\$5000/year or less not counting individual salaries.

17. Contracting Out of Services

Does the county or its municipalities contract out its services?

Yes

Knox County, Construction and Demolition Landfill, Meridian, 2021-2030
Knox County/City of Knoxville, MSW Disposal, Waste Connections, 2020-2030
Knox County, Facilities Waste & Recycling, Waste Management, 2019-2024
Knox County, Roll-off Hauling Services, Waste Connections, 2021-2028
City of Knoxville, Curbside trash & recycling hauling, Waste Connections, 2017-2032
City of Knoxville, Construction and Demolition Landfill, Meridian, 2018-2027
Knox County/City of Knoxville, Material Recovery (MRF), WestRock, 2019-2029
Knox County, Used Oil and Hydrocarbon Recovery, Spectra Environmental, 2020-2025
Knox County, Tire Recycling, Liberty Tire, 2017-2022
City of Knoxville, Mulch Contract, Living Earth, 2016-203

Are any of the above contracts considered an exclusive franchise?

No

18. Complete the following section for the county and its municipalities that provide solid waste and/or recycling services.

Knox County

Municipal Solid Waste Services:

How many part-time?

1

How many Full Time Equivalents (FTE)?

32

Total Staff

33

Recycling Services:

How many part-time?

1

How many Full Time Equivalents (FTE)?

32

Total Staff

33

Provide a brief explanation of employee roles noted above, if necessary:

County does not differentiate waste from recycling employees. Knox County has 32 employees and most of them work in some combination of waste, recycling, or litter removal.

City of Knoxville

Municipal Solid Waste Services:

How many part-time?

0

How many Full Time Equivalents (FTE)?

19

Total Staff

19

Recycling Services:

How many part-time?

2

How many Full Time Equivalents (FTE)?

2

Total Staff

4

Provide a brief explanation of employee roles noted above, if necessary:

NA

19. Budget and other optional uploads

Please upload a copy of last Fiscal Year's Solid Waste and Sanitation Fund expenses, revenues, assets and liabilities for the county below by clicking on "Upload File" under A. Solid Waste and Sanitation Fund. Please use options B-J to upload the Solid Waste and Sanitation Fund expenses, revenues, assets and liabilities of the municipalities within the county. There are also upload options for any other additional reports, documents, and files deemed relevant to this Annual Progress Report.

Provide additional information, if necessary:

Knox County FY2021 budget uploaded to Re-Trac.

TDEC Survey Questions

1. Are there any policies, statutes, rules, protocols or ordinances that inhibit the county and municipalities from having effective programs? Reference specific statutes, rules, policies or documents when answering the question.

End Markets vs Collection: The statewide approach toward focusing on the collection of material is not adequate for the development of end use markets for waste materials. IE: Counties are incentivized in hub and spoke type grants, equipment grants, recycle rebates, and through multipliers in the APR counting diversion to increase their collection of plastics and other materials deemed important. This does nothing to increase the value of the material collected. In fact it actually has a negative impact on the value because once supply is increased the market has been manipulated to reduce the value because supply overtakes demand. If a focus was made at creating better regional end uses or manufacturing processes that would lead to increased options to sell plastics these county-by-county actions to increase collection may not be necessary or if they were still necessary, they would not be collecting material with the hopes that a market would materialize because the market may already be there. The same could be said of tires, asphalt shingles, metal, paper, cardboard, fiber, clothing, electronics, etc. All of these commodities have manufacturing sectors that depend on reliable feed stocks. If investment were made in economic development to prioritize manufacturing that would utilize recycled material then the counties may have more buyers than supply and thus the supply would be more valuable. Other counties may be encouraged to collect and sell their materials if markets were better.

Transparency in Funding Priorities: TDEC materials management priorities for funding are decided by TDEC officials in Nashville without a transparent process or local participation. For a brief period a working group for the TDEC 2025 plan implementation was convened to discuss and implement a better process. The working group provided much needed local /county participation in prioritization, measurement, fee collection, and funding opportunities. This group has not been convened since involved TDEC personnel changed. This very survey question section in re-trac is a result of something that was implemented based on the groups work. I understand COVID complicates the issue but there has been no return to this effort to increase local/county input into TDEC decisions. Inquiries into how funding was prioritized in recent years were ignored or dismissed as either unexplained or unknown. IE: There was not a clear explanation how TDEC chose to allocate current/future Permanent HHW grants. The explanation given was regarding total cuts to TDEC budgets and/or references to statutes requiring certain level of grant/rebate funding. Requests for HOW the decision was made and what priority was given to what program(s) was never given despite multiple requests. Knox County has made cut to services/programs and we have always been able to provide anyone asking with how we made decisions and what was prioritized vs what was not. NOT answering this type of question can create more distrust than just saying, why the decision was made & who made it. From a customer service perspective nobody wants to hear "that was just our policy" as an explanation.

Tire Fee System Change: Counties receive direct payments for their portion of the tire fee directly from the TDOR. While Knox County prefers the latest model (2015-present) there are several issues regarding how scrap tires and associated industry is regulated that has not been updated. The legislation on the books is still less than ideal and it reflects an outdated fee structure that has not even kept pace with inflation or the actual costs of tire processing. Everyone involved in waste knows that \$1 per tire is not sufficient to manage and pay for the beneficial end use of all waste tires removed. It would be good to see TDEC use their influence in either rule making or as input to lawmakers on suggested improvements to the current system. Specifically improvements that result from a participatory process with support from local governments/counties. Shortly following the law change TDEC issued a relatively useful "Waste and Scrap Tire Management Toolkit" that summarized responsibilities to Counties but it

would be nice to see what if any constructive changes could be made to waste fee structures, permitting or regulatory framework for waste tire processing facilities, definitions of beneficial end use, and/or initiatives that encourage end market development might be possible if representative from TDEC and local governments discussed ways to move forward with major or incremental changes to the existing system.

Enforcement Improvements: TDEC field staff should have greater power to hold property owners accountable for environmental crimes and/or civil penalties related to speculative accumulation, illegal disposal, and violation of other waste or environmental rules/laws. They should be empowered to go after the individual(s) committing the violations as well as the property owners that are either partner or victim of the acts. This has been largely treated as a “local issue” even though in many cases there are perhaps statutes that would allow for more vigorous enforcement. And if statutes are not sufficient perhaps they could be modified/changed/adopted. Particularly in the area of what would be considered illegal dumping and litter. There has been too much of a focus on dumping as a problem solely for the property owner when the culprits could perhaps be identified and charge with an environmental crime or be made to pay very high civil penalties. Other problems are when property owners are partners in allowing items to be dumped and there is no appetite to stop the act of unpermitted disposal which are in essence illegal landfills that are potentially more of a State of TN issue because TDEC has regulatory power over disposal sites.

2. Are there any parts or utility of the 10 Year Solid Waste and Materials Management Statewide Plan, Plan Update or Annual Progress Report the county and municipalities do not understand?

Increased Participation: Successful implementation of the 10-year TDEC plan requires voluntary buy-in, incentives, or penalties for local governments and municipalities compliance & participation. If the goal is to actually move the needle on anything waste/recycling/materials then national, regional, statewide, and local efforts must be coordinated. Counties and municipalities primarily operate based on funding and support from their local executive, legislative, and SW boards not what TDEC desires. Goals or programs encouraged by TDEC may not be aligned with the demands of the local forces driving their existing levels of service and changing those levels of service based on something decided by a statewide agency without local input is never well-received. A TDEC plan document is not sufficient to create support for actions necessary for the plan to be successfully implemented. Knox County has supported a big picture aspirational goal of waste reduction and sustainable materials management but we have not felt like a true partner in the endeavor. When programs are not designed with local buy-in there are many local governments that would rather seek political remedy from their respective legislative delegation. An example of this was the tire program. Counties complained about the tire grant administration for years. No changes were made to address very real local concerns. After going unheard counties sought for the law to be changed and now perhaps the statewide tire programs suffer from a lack of coordinated approach that could have happened if the grants administrators had simply listened and implemented desired changes suggested by local governments. There have been many such suggestions in place for other existing programs that have also not been taken into account.

3. What role can Materials Management play to be the biggest resource to the county and its municipalities?

Budget Planning: TDEC-Solid Waste should increase transparency and participation in policy, implementation, measurement, funding opportunities, goal setting, and penalties associated with not meeting goals. A great start would be for TDEC Solid Waste division to speak frankly with local governments about their budget priorities while working on budgets. IE: It is 2/22/2021 as this is being filled out and Knox County has no idea what, if any, grant opportunities are being suggested by TDEC for FY2022 of for what amount. If local governments were told approximately what amount of funding was

being requested by TDEC for what potential levels of funding for local governments we would have more information than we have. If a recycle rebate or other grant amount is made available it may not be possible to participate because the matching funds need to be requested right now (February) for budgets will be adopted/effect July 1st. Even if proposed TDEC funding was not granted it would still inform us for our own request. If funding is granted later in the spring a simple note from TDEC confirming the approximate amount would be beneficial as well as we could adjust our request. The TDEC grant/funding budget requests is not confidential. In fact open records laws make requests open and available to the public for inspection but we should not have to request this, it should be offered by the TDEC willingly/openly. IE: Knox County has a budget request for a specific service using a specific vendor. We have already told the vendor we are making a budget request to increase services. That request may be granted or denied but the vendor has full transparency that we are asking for an increase in funding to provide an increase in service. If the request is denied the vendor will be told the proposed increase did not go through but at all times the discussion is open, honest, and transparent. This standard should apply to TDEC and local government funding of grants/rebates.

4. What is needed in the county and municipalities to further waste reduction, recycling, diversion or end markets in Tennessee?

Statewide Market Development: Statewide approach (as opposed to a county-by-county approach) that partners with the State Economic Development authorities to recruit and focus developing market(s) that go beyond encouragement of local collection of material. Focusing primarily on the processing, manufacturing, or industry that would need investment into feed stocks to they can locate/build/develop in order to be a buyer or end user for the material collected. Current strategy is built upon requiring diversion and collection without sufficient end markets and reflects a short-sighted view of the challenges for the waste and recycling industry. An example of this may take the form of the State investing more in recruiting paper packaging manufacturers to locate processing/manufacturing facilities that produce raw materials for manufacturing from recycled material which would drive up the value of paper and make collection of paper products less costly which would both increase the economic development and add jobs for the entire region while also solving issues with the lack of value for collected materials. Instead TDEC has for far too long focused funding toward ensuring Counties are collecting a supply of paper with the hopes and dreams that industry would find this supply sufficient enough to depend upon the state-mandated collection systems. This is a failed strategy nationally/regionally/statewide and leads to the value of collected materials being at the mercy of the whims of global supply chains that are often located offshore.

5. §68-211-871(b) requires an annual progress report on the implementation of the regional comprehensive integrated municipal solid waste management plan. What steps are the county and municipalities taking locally to contribute to regional plan implementation?

Compliance and Participation: Knox County operates in compliance with relevant laws, statutes, guidelines. Continuation of best practices or existing practices. Making changes where necessary to comply with TDEC regulations. Knox County officials have always advocated for a participatory cooperative approach toward policy making process on all aspects of waste, planning, and management of waste and recycling in the region. The thought being that support in waste planning and implementation from large Counties is in the best interest of the Citizens of Knox County as well as Tennessee as a whole.

6. What areas would you like to see the Division of Solid Waste Management focus on in coming years to help the county and municipalities be successful implementing the Region's plan and programs?

Cooperative and Participatory Approach: There are a lot of opportunities to make major progress on turning waste materials into valuable resources. As identified elsewhere there is some question as to whether a county-by-county approach is sufficient to make major changes that would make a difference and or be sustainable over the long term. Rather than focusing in individual county level collection systems there could be major progress on recycling, proper disposal, end market development, economic development, proper environmental law enforcement, removal of toxic materials, remediation of legacy dumpsites, climate change, and environmental protection. Without getting too specific on what is needed an approach based on recognizing there are mutually beneficial targeted actions that can be taken in cooperation or conjunction with state and local governments that also engages industry and the private sector and other statewide development groups. A cooperative approach would be preferable to a top-down declaratory approach that is not developed with much input.

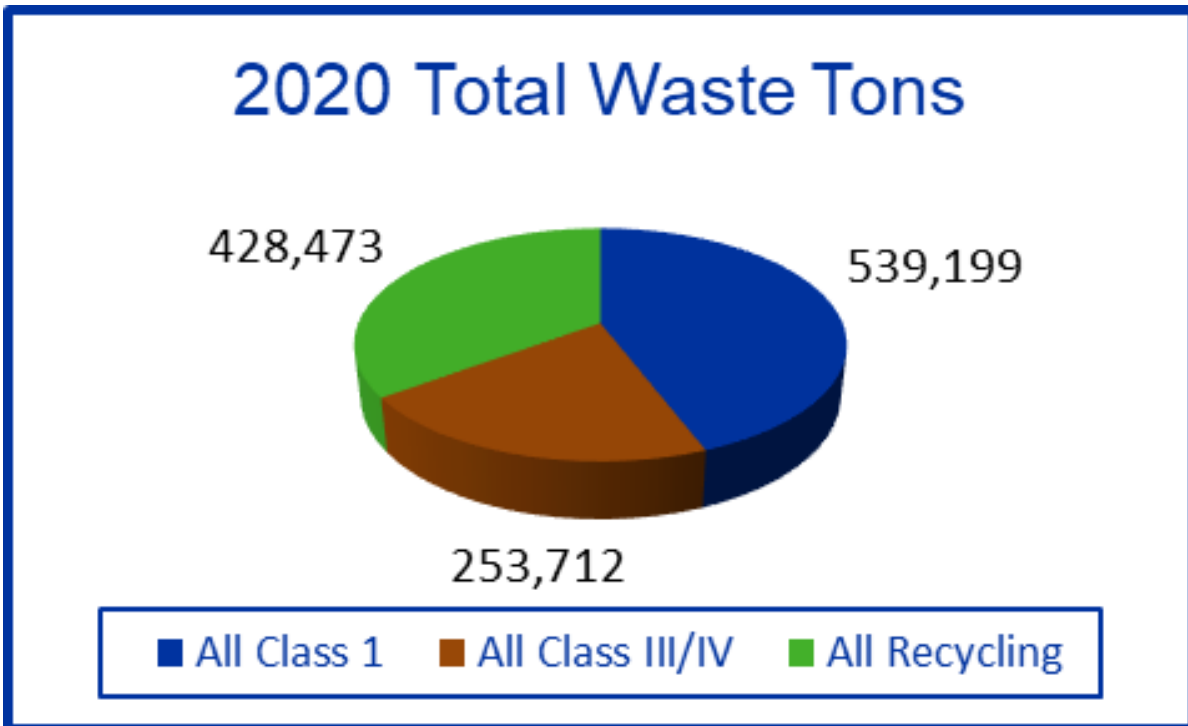
Quantitative Surveys

2020 Calendar Year Landfill Disposal Summary (entered by TDEC)		
Type	Landfill	Tons
Class I	Chestnut Ridge Landfill And Recycling Center - SNL010000160	307,019
Class I	Meadow Branch Landfill Inc - SNL540000174	168,763
Class I	Volunteer Regional Landfill - SNL760000271	58,857
Class I	Loudon County Landfill - SNL530000203	3,577
Class I	Lakeway Sanitation And Recycling, Inc. Landfill - SNL320000280	914
Class I	Rhea County Class I Landfill -SNL720000269	50
Class I	Jefferson County Landfill -SNL450000241	19
	Total	539,199
	Government Controlled	
	County Portion	38,269
	City Portion	59,449
	Total	97,718
	Government Controlled	18%
Type	Landfill	Tons
Class III/IV	Riverside C&D Landfill, Llc - DML470000011	147,517
Class III/IV	Poplar View Class Iii Landfill - DML470000057	106,109
Class III/IV	Jefferson County Demolition Landfill - DML450000046	86
	Total	253,712
	Government Controlled	
	County Portion	16,568
	City Portion	38,392
	Total	54,960
	Government Controlled	22%
	Government Share of Total Landfilled	
	Total Landfilled	792,911
	Government Controlled	152,678
	Government Controlled Percent	19%

2020 Calendar Year Recycling & Diversion Summary			
Industrial, Commercial, Institutional			
ID	Sector	Reporter	Total Tons
1267065	Commercial	Harrison Construction Company	165,974
1264895	All sectors	PSC Metals National Driver	69,314
1264901	All sectors	Living Earth Group	32,670
1264923	All sectors	WestRock (MRF)	26,765
1265275	Industry	Enterprise Oil	24,395
1265209	Commercial	Tennessee Metals	23,487
1265285	Industry	Darling Ingredients	9,904
1286119	Commercial	Walmart Stores, INC.	7,879
	Commercial	The Kroger Co.	4,672
1265201	Institutional	University of Tennessee	3,701
1265299	Industry	Cooper Recycling, LLC	2,521
1265241	Commercial	Karm Thrift Stores LLC	2,166
1265385	All sectors	Hines Fine Soil	1,300
1265313	Industry	Safety-Kleen Systems	1,115
1265251	Commercial	Home Depot	1,027
1265397	All sectors	Valley Proteins, Inc.	738
1265335	Commercial	Advance Auto Parts	737
1286147	Commercial	Dollar Tree and Family Dollar	728
1265381	Commercial	Publix Super Markets, Inc.	592
1265271	Commercial	Goodwill Industries - Knoxville, Inc.	338
1265217	Industry	Swift Industrial Power Inc.	300
1268403	Commercial	Dollar General Corporation	111
1265237	Commercial	Master Battery, LLC	49
1265213	Commercial	Terracycle Regulated Waste LLC	11
1265221	Commercial	Southeastern Recycling	2
1265211	Industry	TN Gas, LLC	2
		Industrial, Commercial, Institutional Industry Total	380,499
		% of Total Recycling	89%
Government (Residential Collection)			
ID	Sector	Reporter	Total Tons
1262487	Government	City of Knoxville	39,626
1263493	Government	Knox County	8,295
1263569	Government	HHW (City and County)	53
		Government & Residential Collection Total	47,974
		% of Total Recycling	11%
		Industrial, Commercial, Institutional Industry Total	380,499
		Government & Residential Collection Total	47,974
		Total Recycling	428,473

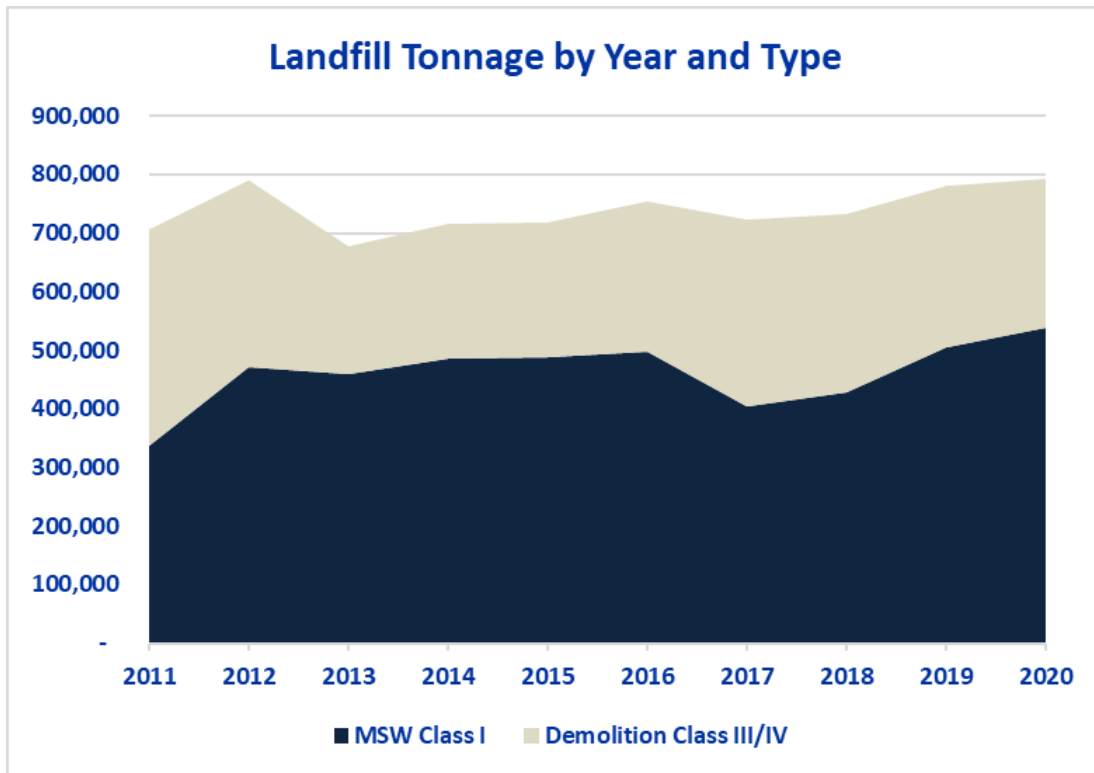
Trends from Previous Reporting Years

2020 Calendar Year Total Waste Summary		
Type	Total Tons	
All Class 1	539,199	
All Class III/IV	253,712	
All Recycling	428,473	
Total	1,221,384	
Diversion from Class I	682,185	56%
True/Actual Recycling	428,473	35%



Landfill Tonnage by Year

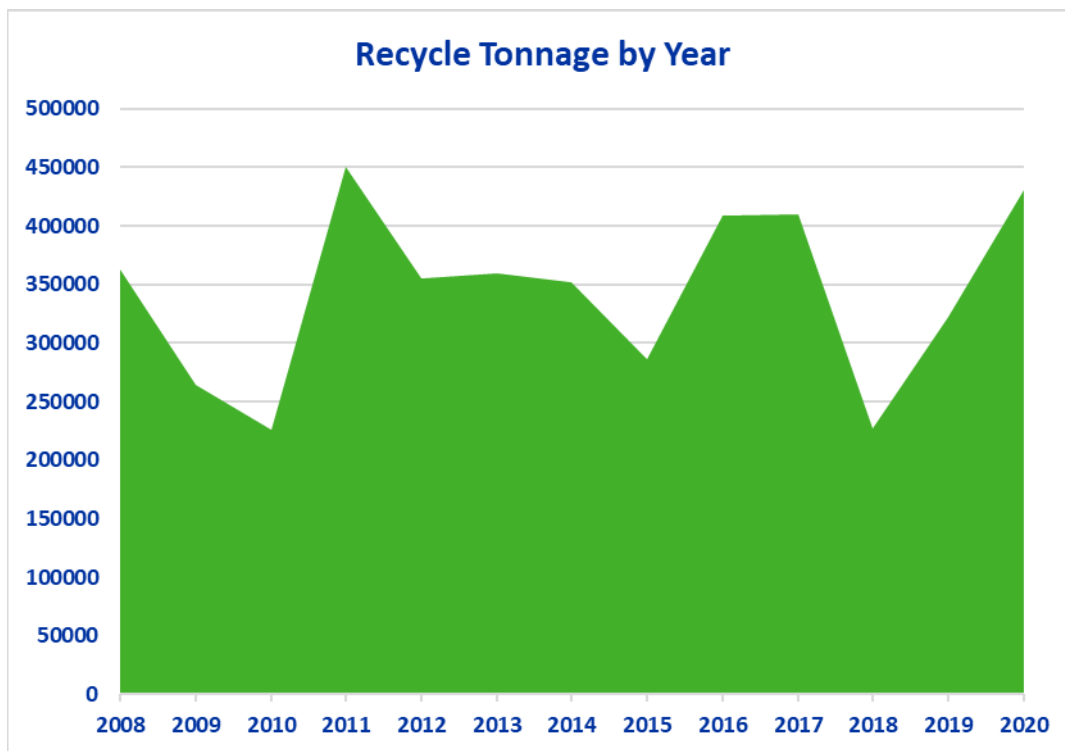
Year	Total	Class I MSW	Class III/IV Demolition	Percent Class III/IV
2008	817,847	345,500	472,347	57.8
2009	755,890	260,544	495,346	65.5
2010	726,555	274,391	452,164	62.2
2011	707,085	337,508	369,577	52.3
2012	790,657	471,555	319,102	40.4
2013	676,252	459,043	217,209	32.1
2014	714,591	484,794	229,797	32.2
2015	717,011	489,109	227,902	31.8
2016	753,255	498,266	254,989	33.9
2017	721,745	404,647	317,098	43.9
2018	732,585	429,029	303,556	41.4
2019	779,274	505,405	273,869	35.1
2020	792,911	539,199	253,712	32.0



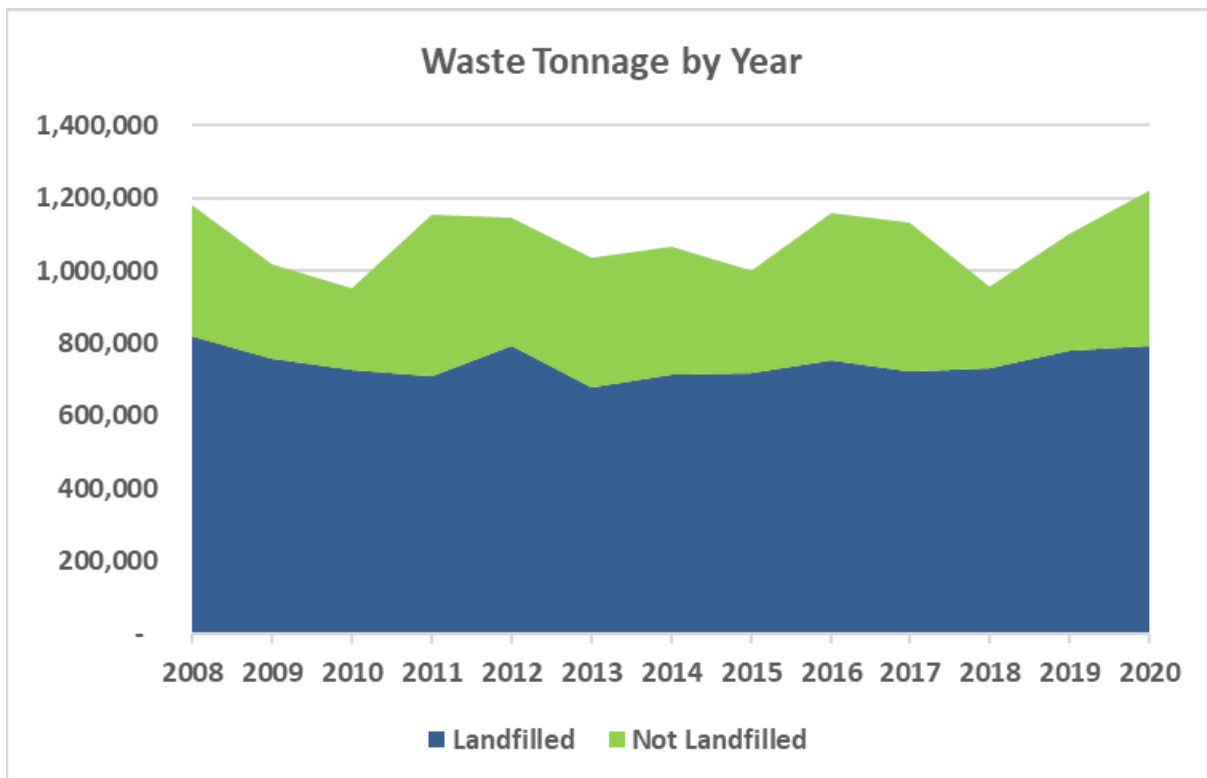
Recycle Tonnage by Year

Year	Total Tons		
2008	361,247		
2009	262,306		
2010	224,009		
2011	448,036		
2012	353,034		
2013	357,806		
2014	350,185		
2015	283,870		
2016	406,441		
2017	407,949		
2018	224,737		
2019	320,470		
2020	428,473		

*missing Construction/demolition recycling for 2018



Waste Tonnage by Year				
Year	Total	Landfilled	Not Landfilled	% Not Landfilled
2008	1,179,094	817,847	361,247	31%
2009	1,018,196	755,890	262,306	26%
2010	950,564	726,555	224,009	24%
2011	1,155,121	707,085	448,036	39%
2012	1,143,691	790,657	353,034	31%
2013	1,034,058	676,252	357,806	35%
2014	1,064,776	714,591	350,185	33%
2015	1,000,881	717,011	283,870	28%
2016	1,159,696	753,255	406,441	35%
2017	1,129,694	721,745	407,949	36%
2018	957,322	732,585	224,737	23%
2019	1,099,744	779,274	320,470	29%
2020	1,221,384	792,911	428,473	35%



Tire Report

Year	2018	2019	2020
Tons of Tires managed	3,990	3,212	2,968
Tons of Tires sent to beneficial use	3,990	3,212	2,968
Tons of Tires landfilled	-	-	-
Liberty Gate -Knox Customers	699	464	956