



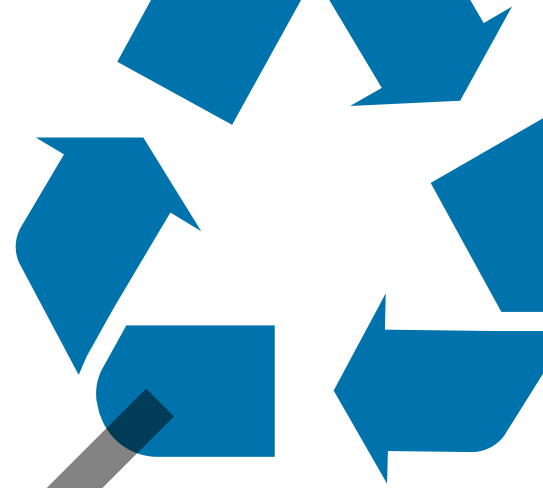
DAVIDSON COUNTY
SOLID WASTE REGION BOARD

ANNUAL PROGRESS REPORT

2023

DRAFT

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ABOUT SOLID WASTE REGION BOARDS

The 1991 Solid Waste Management Act required Tennessee Counties to form municipal solid waste regions. While some regions are multi-county solid waste regions, many counties in Tennessee formed a single county region. This was the case with Davidson County.

Solid waste regions were required to appoint a board that represented the cities and county within the region and to administer the activities of the solid waste planning region. Members serve for a six-year term (TCA 68-211-813).

The roles of the solid waste region board are the following:

1

Create a 10 Year Solid Waste Management Plan to reduce waste entering MSW landfills by 25% and ensure adequate disposal capacity. Each year the region board is required to submit an “Annual Progress Report” the Tennessee Department of Environment and Conservation describing any changes in the 10 Year Plan, current recycling and disposal data and future needs for the region.

2

Review permit applications for solid waste disposal facilities or incinerators within the region. The board is required to review the application against the 10 Year Plan and determine whether the application is in compliance with the plan and TCA 68-211-814.

3

Flow control or restricting import/export of solid waste across the region’s boundaries. Davidson County does not restrict the movement of solid waste.

State law also allowed for the creation of solid waste authorities. Solid waste authorities are entities having administrative, financial, and technical power to implement regional solid waste plans and programs. Davidson County did not opt for a solid waste authority.

More information on the Davidson County Solid Waste Region Board and the current Solid Waste Management Plan can be found at nashville.gov/departments/water/boards/solid-waste-region-board

ADMINISTRATIVE CONTACT INFO

REPORT
AUTHOR

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BOARD
CHAIR

02 — Damita Beck-Taylor, Solid Waste Region Planning Board

1708 14th Ave North, Nashville, TN, 37208

PLANNING BOARD

NAME	REPRESENTING
Diehl, Robert	Nashville & Davidson County
Grimes, Dale	Oak Hill
Greiner, Patrick	Nashville & Davidson County
Harvey, John	Berry Hill
McCormick, Jeff	Goodlettsville
Moody, Jennifer	Belle Meade
Stutzman, Emily	Nashville & Davidson County

LOCAL GOVERNMENT CONTACTS

LOCAL
GOVERNMENT
MAYOR

Freddie O'Connell, Mayor

Metro Courthouse, 1 Public Square, Nashville, TN 37201
615.862.6000

METRO WATER
SERVICES

John Honeysucker, Assistant Director

1600 2nd Ave N, Nashville, TN 37208

Jenn Harrman, Zero Waste Program Manager

Sharon Smith, Special Projects Manager

1915 Cement Plant Rd., Nashville, TN 37208

10 YEAR PLAN UPDATE

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.

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



There are no updates to the current plan.

COUNTY AND MUNICIPAL RESIDENTIAL RECYCLING AND DIVERSION

Metro Nashville and Davidson County

RECYCLING

Material	Tons Collected	Collected Curbside?
Single Stream	12,271.69	Yes
Single Stream	1,281.73	No
MRF Glass (Tri-Color)	2,082.89	No
Mixed Paper	1,026.10	No
Corrugated Containers (Cardboard)	2,644.05	No
Scrap Metal	912.44	No
Household Hazardous Waste	7.44	No
Electronics/E-waste	65.43	No
Mattresses	357.64	No
Cooking Oils/Grease	9.76	No
Yard Trimmings	31,985.02	Yes
Yard Trimmings	3,639.89	No

Single Stream Recycling

- OCC
- Cartons
- Aluminum Cans
- Mixed Paper
- Plastic Containers #1 and #2
- Tin Cans

DISASTER DEBRIS

Material	Tons Collected
Yard Trimmings	2,725.64

Forest Hills

RECYCLING

Material	Tons Collected	Collected Curbside?
Scrap Metal	1.93	No
Electronics/E-waste	0.76	No
Mattresses	0.47	No



COUNTY AND MUNICIPAL RESIDENTIAL RECYCLING AND DIVERSION

Goodlettsville

RECYCLING

Material	Tons Collected	Collected Curbside?
Single Stream	338.97	Yes
Scrap Metal	90.27	No
Corrugated Cardboard	41.5	No
Used Oil	0.15	No

Single Stream Recycling

- OCC
- Cartons
- Aluminum Cans
- Mixed Paper
- Plastic Containers #1 and #2
- Tin Cans

Oak Hill

RECYCLING

Material	Tons Collected	Collected Curbside?
Single Stream	211.30	Yes

Single Stream Recycling

- OCC
- Cartons
- Aluminum Cans
- Mixed Paper
- Plastic Containers #1 and #2
- Tin Cans

Belle Meade

RECYCLING

Material	Tons Collected	Collected Curbside?
Single Stream	36.34	Yes
Corrugated Cardboard	62.40	No

Single Stream Recycling

- OCC
- Cartons
- Aluminum Cans
- Mixed Paper
- Plastic Containers #1 and #2
- Tin Cans



COUNTY INFRASTRUCTURE

Metro Convenience Centers

Name & Address	Permit	Hours & Phone	Accepted Items
Anderson Lane Center 939A Anderson Lane Madison, TN 37115	CCC190000168	Tue-Sat 8:30am-4:30pm	Metals, Paper, Cardboard, Glass, Plastic, Compost
East Center 943A Doctor Richard G. Adams Dr. Nashville 37207	CCC190000167	Tue-Sat 8:30am-4:30pm	Metals, Paper, Cardboard, Glass, Batteries, Plastic, Tires, Used Oil, Antifreeze, E-Waste, Paint, Compost, Mattresses, Carpet
Ezell Pike Center 5113 Harding Place Nashville, TN 37211	CCC190000566	Tue-Sat 8:30am-4:30pm	Metals, Paper, Cardboard, Glass, Batteries, Plastic, Tires, Used Oil, Antifreeze, E-Waste, Paint, Compost, Mattresses, Carpet
Omohundro Center 1019 Omohundro Pl. Nashville, TN 37210	CCC190000484	Tue-Sat 8:30am-4:30pm	Metals, Paper, Cardboard, Glass, Plastic, Pallets, Tires, E-Waste, Compost, Mattresses

Goodlettsville Convenience Centers

Name & Address	Permit	Hours & Phone	Accepted Items
City of Goodlettsville Convenience Center 220 Connell St. Goodlettsville, TN 37072	CCC1900000586	Wed 11am - 4pm Sat 8am - 3pm	Metals, Paper, Cardboard, Plastic, E-Waste

Public Collection (Green Box)

Does your local government have any green boxes? **NO**

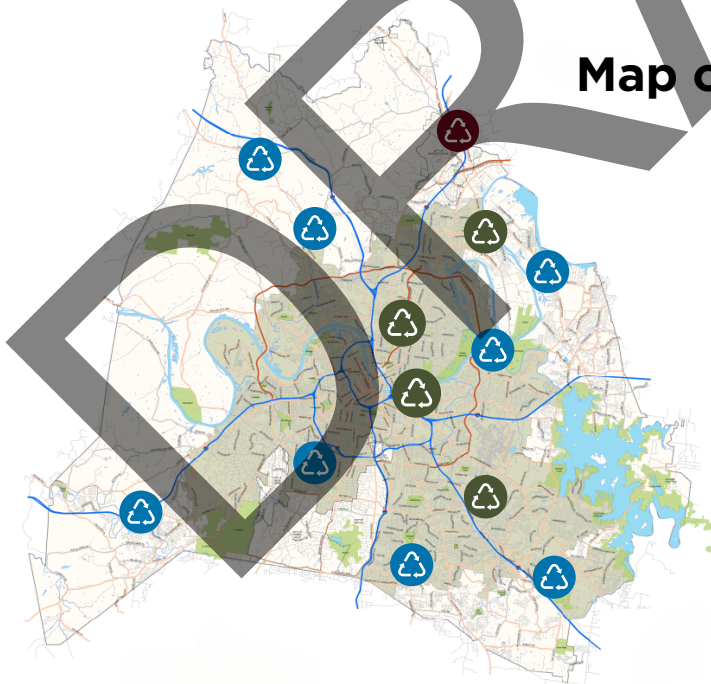






COUNTY INFRASTRUCTURE

Metro Drop-Off Recycling Centers

Location	Address	Restricted Access/ Staffed	Acceptable Material
WeGo Bellevue Park and Ride	7650 Coley Davis Road	No / No	newspaper, mixed paper, paper board, cardboard, aluminum, tin, glass containers, plastic bottles & containers
Cane Ridge High	12848 Old Hickory Blvd	No / No	Same as above
Granberry Elementary	5501 Hill Rd	Yes / No	Same as above
Hillsboro High School	3812 Hillsboro Pike.	Yes / No	Same as above
Joelton Middle	3500 Old Clarksville HWY	No / No	Same as above
Lakewood City Hall	3401 Old Hickory Blvd	No / No	Same as above
McGavock HS	3150 McGavock Pk	No / No	Same as above
Whites Creek HS	7277 Old Hickory Blvd	No / No	Same as above

Map of County Infrastructure



-  Metro Drop-Off Recycling Site
-  Metro Convenience Center
-  Goodlettsville Convenience Center
-  Metro Curbside Service Area



COUNTY OPERATIONS

Obstacles

- Funding
- Education
- Other
- Citizen Apathy
- Markets
- Lack of support
- Staff

Comments

Citizen apathy is not so much an obstacle for support of Nashville's Zero Waste Master Plan, but historic environmental injustices have an impact on how some citizens view investment in infrastructure that can have an impact on policy and program implementation.

Composting

City/County	Materials Collected	Products Produced	Who Performs the Services
Davidson County	Yard Waste, Tree Limbs, Post-Consumer Food Waste, Biosolids	Mulch, Compost, Class A Biosolid	Private Ownership/ Private Operation Publicly Operated

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

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? **YES**

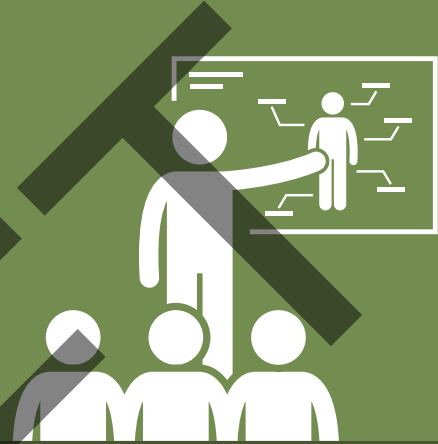
Does your local government have a Disaster Debris Management Plan? **YES**

Has the county submitted a draft to TDEC to file? **YES**

COUNTY OPERATIONS

Education Efforts

<u>Name of Program</u>	<u>People Served</u>
Dirt on Composting Webinar	50-100
Recycle Right Nashville	County-Wide
Sustainable in the City	500-10,000
Zero Waste Nashville	500-10,000
C&D Recycling and Reuse	100-500



This is Nashville - WPLN



Recycle Right Sorting Game



Mayor Cooper announces Every Other Week Recycling

Program Funding

How is the program funded?	Total Funding
Property Taxes/General Fund	\$35,694,100
Grants	\$49,612.50
Sale of Recyclables	\$774,686.26
Surcharge	\$5,666,165.66
Disposal Fee	\$2,554,733.97
Per Household Charges	\$68,465
Other - Developer Fees/Private Collection Permits	\$447,038.95

COUNTY OPERATIONS

Contracts

Metro Nashville

Contractor	Budget	Start Date	End Date	Type	Services
Republic	\$7,081,100.00	01/2002	06/2027	Contract	Disposal
Platform Capital	\$6,000,000	07/2004	11/2024	Contract	Collection
Waste Industries	\$925,500.00	12/2019	11/2024	Contract	Collection
Waste Management	\$7,500,000.00	07/2022	05/2027	Contract	Collection
Waste Pro	\$7,500,000.00	07/2022	07/2027	Contract	Collection
Waste Management	\$2,500,000.00	11/2015	11/2025	Contract	Recycling
The Compost Co.	\$500,000	09/2022	08/2027	Contract	Organics Collection
Compost Nashville	\$350,000	08/2022	08/2027	Contract	Organics Collection
Tradebe	\$800,000	02/2022	02/2027	Contract	Recycling
Southeastern Recycling	\$45,000	12/2021	12/2026	Contract	Recycling
Dynamic Recycling	\$300,000	10/2021	10/2026	Contract	Recycling
Liberty Tire	\$3,000,000	06/2021	06/2026	Contract	Recycling
American Compactor	\$60,000	05/2021	05/2026	Contract	Recycling

Employees

Waste Collection 25 Full-time Employees

Recycling Collection 49 Full-time Employees



COUNTY OPERATIONS

Budget

Business Unit	Business Unit Description	FY 23 Budget
65801300	Education/Pub Relations	\$546,000
65803100	Metro Collection	\$26,690,400
65803300	Downtown Business Collection	\$246,600
65803500	Front Loader Collection	\$369,600
65804200	Downtown Business Recycling	\$75,600
65804300	Curbside Recycling	\$4,213,200
65804511	Drop Off Recycle Centers	\$481,200
65804520	Convenience/Recycle Centers	\$3,201,600
65804800	Household Hazardous Waste	\$302,400
65804900	Tire Program	\$61,200
65805200	Landfill Engineering	\$837,600
65861110	Administration	\$5,196,000
Grand Total		\$42,220,800

APR QUESTIONNAIRE

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.

HB1021- This restricts local governments from adopting policies to regulate the use and sale of auxiliary containers, which is defined to include plastic bags and straws, from food and food service establishments. Plastic bags, single-use plastic utensils, and straws are not currently able to be recovered for recycling in the Middle Tennessee region, and they are unable to be regulated so are becoming waste to landfill or ending up as litter or in waterways. This policy specifically prohibits our ability to enact policies that support our Solid Waste Management Plan and efforts to reduce waste to MSW landfills. Downtown Nashville continues to be a significant generator of waste from glass bottles and this policy prevents our ability to minimize this excessive waste.

68-101-109: Labeling of Plastic Containers - This labeling continues to be misleading regarding the recyclability of materials. This confuses our customers on what can and cannot be recycled, increases contamination in recycling which directly affects the costs of the program, and creates a lack of confidence and trust in our program from our customers who see us as limiting what we can recycle, rather than only accepting materials that are actually recyclable.

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?

No.

3

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

Grant funding

Materials Management can best support Metro Nashville Waste Services by continuing to provide funding opportunities particularly for food waste infrastructure and collection.

APR QUESTIONNAIRE

Grow regional recycling programs

Assisting neighboring counties in establishing single stream recycling programs would not only benefit diversion for those counties, but would increase volume at Nashville's recycling facility. The increase in demand would drive future investment in better sorting technology and increase the number of accepted materials that can be recycled.

4

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?

We would like to see the Division of Solid Waste Management focus on statewide policy initiatives that support waste reduction. This includes addressing the negative impact of HB1021 on waste reduction efforts, policy for Extended Producer Responsibility for materials such as sharps and paint if not also for packaging, and other efforts that bring funding and infrastructure investment across the state.

5

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

Non-matching grant funding

Matching grant funds can often be difficult for waste diversion programs and projects most needed for achieving long-term goals. Non-matching grant funding would go a long way to implement solutions for waste diversion, particularly in advancing food waste reduction and construction and demolition reuse and recycling.

Legislative flexibility

HB1021 prevents the city from enacting policy that could dramatically reduce waste generated, particularly single use items. The county needs the flexibility to create policy that meets the goals of the county's solid waste master plan including policy on packaging materials.

APR QUESTIONNAIRE

6

§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?

Every Other Week Recycling

Metro Nashville increased recycling collection from once a month to every other week starting in January 2023. This effort has seen an increase in recycling collected while maintaining consistent contamination rates meaning more material is being diverted from landfills. This sets us up to improve the recycling program overall with the prospect of collecting more volume which would increase the ability to collect more accepted materials. This also sets us up for future changes to the curbside program as we evaluate programs like pay/save as you throw.

Construction and Demolition Diversion

After two plus years of research and industry engagement, Metro Nashville has developed draft policy to implement required diversion of marketable construction and demolition materials from landfill. This legislation was brought to Metro Council but ultimately was put off to allow the new council to review as it was introduced late in the session. Current efforts include educating new council members and engaging community members in areas where C&D recycling occurs to then bring this legislation back to Metro Council. If enacted, this new policy would drive investment in C&D recycling infrastructure and markets for the region.

Food Waste

One of the goals of the Zero Waste Master Plan is to implement curbside food scraps collection for diversion through composting, anaerobic digest, or other diversion methods. To better understand what a full scale program implementation would take, Metro Nashville launched a curbside Food Scraps Pickup Pilot program with 750 households across the curbside service area to gather both qualitative and quantitative data to inform future planning. In the first 21 weeks of the program, Metro Nashville has collected 67 tons of food scraps diverted from landfill through composting, which is double the amount collected at our drop-off composting sites on average. This also equates to approximately 6 lbs of food scraps per household per week collected. This program has been widely successful with minimal contamination and positive feedback from the participants. Next steps will be to take the data gathered and develop a report and plan for how this program can expand to everyone in Nashville's curbside service area.

APR QUESTIONNAIRE

Education

Metro Nashville continues to provide extensive education initiatives from workshops and presentations to facility tours and digital marketing. In 2023 we hosted 49 events and directly educated 1,729 residents. We also had 57,305 unique visitors to the recycling page of our website and our app continues to grow in use where residents can readily find information about all of our programs and how to recycle different materials.

Additional Efforts

- Waste Services has embarked on efforts to establish itself as a standalone department with a Solid Waste Director. This effort was approved by Metro Council and will continue to move forward in 2024.
- Research into new policies and programs or improving current efforts continues to be part of regular staff work to evaluate next steps to implement the Zero Waste Master Plan.
- Peer Collaboration is a key component of the work of the Zero Waste Nashville team to learn from other municipalities and industry groups that can inform our work in Nashville.

7

Describe any success stories on programs or efforts made in the last year

Nashville's Food Scraps Pickup pilot program has been touted by numerous entities including the National Resources Defense Council, Urban Green Lab, the Environmental Law Institute, and the Metro Nashville Mayor's Office. This program is showing the potential for food waste diversion from Nashville residents and has been widely welcomed by participants and non-participating residents. With over 2600 applications for a 750 household program, we have been able to create a pilot that reflects Nashville's diverse community members and collects invaluable data to inform future planning.



October 23, 2023 Pilot Launch Press Event

In 21 weeks we have collected 67 tons of food scraps with a contamination rate of less than 1%. Participation efforts such as bin set out rates of the households in the pilot are also consistent with set out rates for our contractor paying customers. At 6 lbs per household per week collected, if this program were to scale to all of our curbside trash and recycling service area, we are looking at a potential to collect between 17K - 22K tons of food scraps.

GRANT QUESTIONNAIRE

1

What grants would the county and municipalities like to see TDEC promote in the next two years?

- ✓ Access Improvements/Carts
- ✓ Education and Outreach
- ✓ Measurement
- ✓ Organics Management/Composting
- ✓ Convenience Centers
- Hub and Spoke
- New Technologies
- ✓ Recycling Equipment
- ✓ Technical Assistance
- Waste Reduction
- Other

2

What are the county and municipalities biggest needs for this next calendar year? Grant demonstration of need and priority will be determined through answering these questions.

- Education and Outreach
- ✓ Expand Infrastructure
- ✓ New Infrastructure
- Upgrade Equipment
- New Equipment
- ✓ Facility Upgrades
- Technical Assistance Providers
- Other

GRANT QUESTIONNAIRE

3

Explain Equipment Needs and Facility Upgrades

Currently the Materials Recovery Facility in Nashville is lacking in new technology to improve recovery rates and expand accepted materials. This includes a glass crusher and glass cleaning system to incorporate glass into curbside recycling, optical sorters to improve paper and plastic recovery, and no wrap equipment that reduces the impact of plastic bags in the sorting process.

In addition to traditional recycling, new infrastructure for construction and demolition recycling is needed to diversify options outside of landfilling. While a new state of the art facility was built in Davidson Co., the rate at which development is occurring requires diverse infrastructure and processing solutions.

For food waste, if we want to scale up our curbside food scraps collection efforts, the current facility will need to expand its facility to be able to take more material and its possible new facilities for composting, anaerobic digestion, or other food waste diversion methods will be needed to go full scale.

2023 LANDFILL REPORT

Municipal Solid Waste (Class I)

Landfill	2023 Tons	2022 Tons
BFI Middle Point	472,169.32	397,154.65
Bi-County	16,447.07	16,979.79
Cedar Ridge	245,695.84	317,470.42
Madison County	1.61	3.27
Meadow Branch	149.78	5.73
Rhea County	1750.94	2.25
Smith County	26.92	110.57
West Camden	223,280.75	241,332.71
Bradley County	-	50.67
Chesnut Ridge	130.46	0.97
ECM of Ridgely	22.89	-
Out of State	210,867.95	155,524.43
TOTAL	1,170,543.53	1,128,635.46

C&D Landfill (Class III/IV)

Landfill	2023 Tons	2022 Tons
Southern Services	173,823.25	276,887.75
Smith County	47.44	6.99
MS-COT	-	-
Bi-County	93,076.50	64,011.25
Rutherford County C&D	-	-
TOTAL	266,947.19	340,905.99

2023 RECYCLING REPORT

Private Recycling Programs*

Program Material	2023 Tons	2022 Tons
Automotive Fluids/ Batteries/HHW	732.62	1,639.08
C&D Recycling	7,203.5	5,332.37
Cardboard	43,873.39	39,134.41
Carpet/Pad	4,420	5,060.00
Food Waste	2,124.09	2,398.15
Glass	4,554.27	1,753.70
Grease	10,061	9,392.17
Metal/White Goods	51,135.64	56,489.17
Mixed Recyclables	3,424.39	6,528.7
Paper	20,368.85	22,681.92
Plastic	2,515.82	2,835.65
Textiles	2,071	2,322.10
Wood/Pallets	15,672.94	17,540.86
Tires	0	210.64
E-Waste	39	28.37
TOTAL	170,672.42	173,527.29

**Data table includes information collected by staff and does not include tonnage information collected by the state from large retailers and other entities.*

2023 RECYCLING REPORT

Public Recycling Programs

Program Material	2023 Tons	2022 Tons
Automotive Fluids/Batteries/HHW	7.85	6.96
Biosolids	23,307.89	24,277.99
Cardboard	2,747.95	2,716.67
E-Waste	66.19	52.87
Food Waste	189.53	199.00
Glass	2,082.89	2,079.24
Grease	9.76	13.16
Metals	1,004.64	925.66
Mixed Plastic/Metal	838.42	880.34
Mixed Recyclables (Single-Stream)	13,301.61	11,392.01
Paper	1,026.10	1,160.16
Tires*	6,549.74	6,190.93
Wood	42,948.91	34,351.91
Mattresses	358.11	176.88
TOTAL	94,413.08	84,423.78

**Represents all tires recycled in the county both public and private through the TDEC Tire Grant program managed by Metro.*