



Department of
**Environment &
Conservation**

Developing Tennessee's 2025-2035 Solid Waste Plan

TENSOS – May 16, 2025



AGENDA

Project Overview, Status, & Timeline

2025-2035 Plan

- TimeLine
- Overview
- Proposed Objectives



Project Overview, Status & Timeline



Overview

Geosyntec was engaged to prepare the 2025-2035 Integrated Solid Waste Management Plan (2035 Plan) for TDEC in August 2024

Purpose

The 2035 Plan will serve as a framework to guide solid waste and materials management programs and policies at state and local levels.

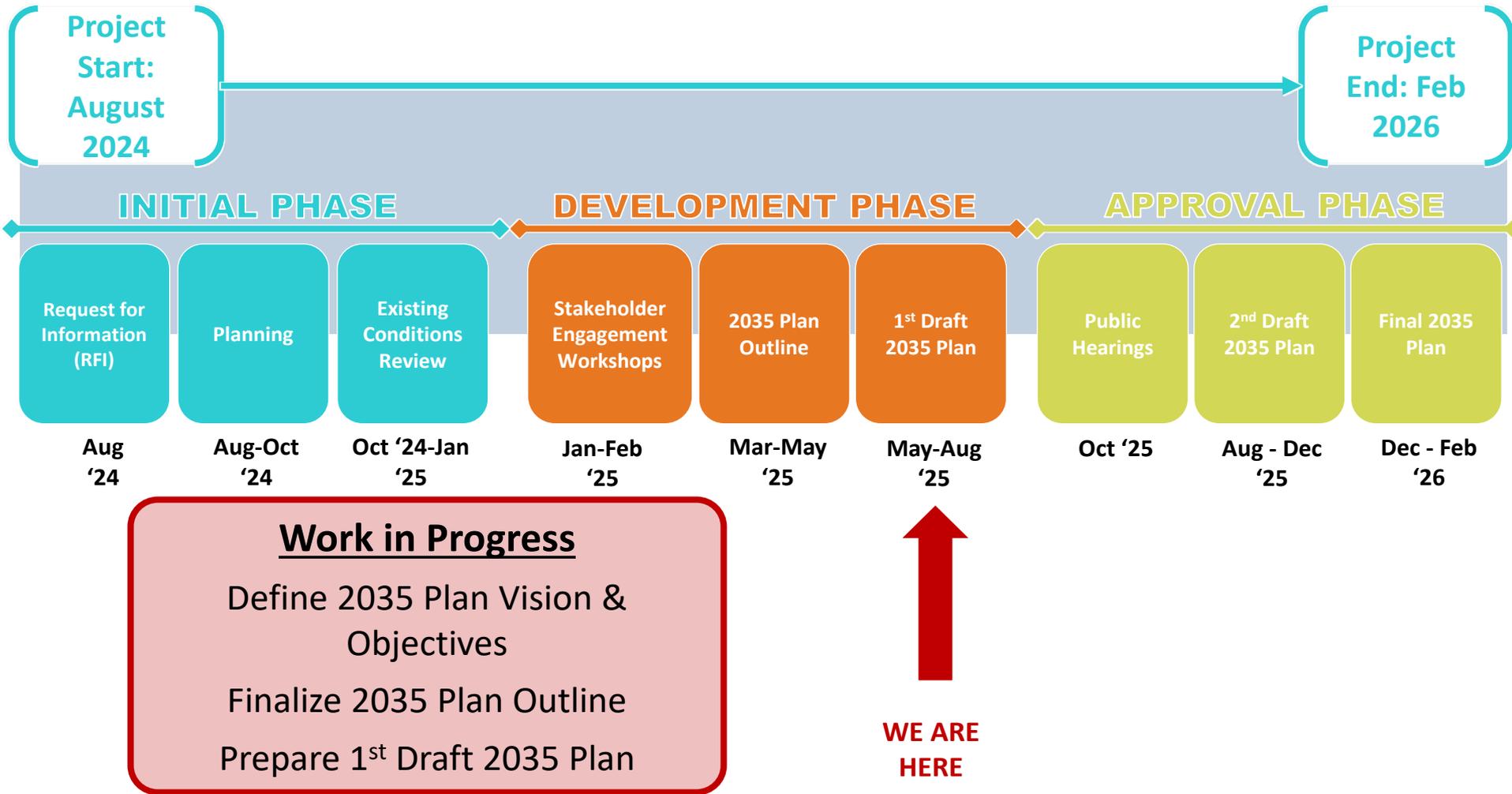
Development

Developed to align with TDEC visions, providing objectives, strategies, timeframes, priorities, and roles for implementation.

Direction

The 2035 Plan will offer guidance for local governments in developing their solid waste and materials management plans.

Project Status & Timeline



Proposed Objectives



Proposed Objectives

- **Objective 1: Ensure Long-term Environmentally Protective Disposal Capacity** – Assess and plan regularly for Tennessee’s disposal needs, maintaining sufficient capacity for non-divertible waste. Promote best practices in landfill operations and environmental monitoring to safeguard public health and environmental quality while supporting the transition toward a more sustainable waste system.
- **Objective 2: Advance Material Processing Infrastructure and Market Development** Close existing infrastructure gaps and support investment in modern, regional processing capacity. Strengthen end markets for recovered materials through public-private collaboration and promoting education and awareness.

Proposed Objectives

- **Objective 3: Increase Diversion of Organic Waste** – Develop strategies to reduce organic waste entering MSW landfills by promoting reuse, beneficial use, composting, and source reduction efforts. Support regional collaboration by sharing best practices, establishing communication channels, and coordinating efforts to enhance resource sharing and efficiency.
- **Objective 4: Strengthen Goals and Data-Driven Performance Metrics** – Establish clear, measurable, and forward-looking goals for solid waste and materials management, supported by modernized data collection and reporting systems. Improve data accuracy, transparency, and timeliness to better track material flows, disposal trends, and diversion rates, informing more strategic decision-making and progress reporting.

Proposed Objectives

- **Objective 5: Manage Problematic or Hard-to-Manage Waste** – Provide guidance on managing problematic or hard-to-manage waste, including HHW, tires, batteries, oil, electronics, solar panels. Promote proven emerging technologies and establish programs to prevent illegal dumping.
- **Objective 6: Disaster Debris Management** – Prepare local governments to respond effectively to natural or manmade disasters by ensuring they have an updated Municipal Solid Waste Region Plan that includes a Disaster Debris Management Plan (DDMP) component. Emphasize incorporating the DDMP into larger Emergency Management Plans for comprehensive preparedness and response.

Proposed Objectives

- **Objective 7: Expand and Focus Education and Outreach**—Improve education and outreach regarding opportunities for source reduction, recycling, and composting and their benefits. Educate the public on how solid waste management is funded and the vital importance of this service.

- **Objective 8: *Develop Sustainable Funding Sources for Municipal Solid Waste Management Programs*** — Encourage state and local governments to seek sustainable funding sources by providing, guidance on application processes, and establishing funding mechanisms to support municipal solid waste management programs. Ensure counties and private entities are able to meet financial responsibility for permitted facilities including day to day operations, closure, and post closure activities.

Debris Management

- Objective 6: Prepare local governments to respond effectively to natural or manmade disasters by ensuring they have an updated Municipal Solid Waste Region Plan that includes a Disaster Debris Management Plan (DDMP) component. Emphasize incorporating the DDMP into larger Emergency Management Plans for comprehensive preparedness and response.
- Who is responsible for writing the plan?

It's a partnership between TDEC, TEMA, and the County.

TCA 68-211-815 -By law counties are required to write the plan.

- Debris Management Planning Tool-

https://www.tn.gov/content/dam/tn/environment/solid-waste/documents/solid-waste/sw_debris-planning-tool-2017.pdf

Ten-year plan for counties

- Will my county have to re-write our 10-year plan?
- TCA 68-211-815 Solid Waste Master Plan Contents
- Grants team will provide a Solid Waste Master Planning Grant to write a new plan or update the current plan to align with TDECs plan
 - Consultants, DD's, or internal County staff can write the plan
 - Consult with TDEC staff on whether you need to update or rewrite the plan

Diversion Rate

TN Code § 68-211-861 (2024)

- **(a)[For contingent amendment, see the Compiler's Notes.]** The goal of the state is to reduce by twenty-five percent (25%) the amount of solid waste disposed of at Class I municipal solid waste disposal facilities and incinerators, measured on a per capita basis within Tennessee by weight. As an alternative to calculating the waste reduction and diversion goal on a per capita basis, regions shall have the option of calculating the goal on an economic growth basis using the method prescribed by the department and approved by the underground storage tanks and solid waste disposal control board. The goal shall also apply to each municipal solid waste region; provided, that the goal shall not apply to individual disposal facilities or incinerators. The base year from which reductions are to be measured is 1995, unless a region can demonstrate that 1995 data is clearly in error. The method of calculating goals based on economic growth using the method prescribed by the department and approved by the underground storage tanks and solid waste disposal control board shall be promulgated as a rule in accordance with the Uniform Administrative Procedures Act, compiled in title 4, chapter 5.

Diversion Rate

For the new plan, the State of Tennessee would like to do two goals, one for the whole state and an individual goal for recycling for the counties.

- The State goal will still use the metrics on the pink-n-blue to calculate the state's diversion percent. This will satisfy TCA, but I would like to include an actual recycling percentage, which can be done with a county real-time goal.

- **Real-Time Comparison**

Real-Time Compare = $(\text{Current Year Tons \& Generation} - \text{Current Year Disposal}) / \text{Current Year Disposal}$

- **Base Year Diversion for Recycling**

Diversion_Base = $(\text{Recycled_Base}) / (\text{Recycled_Base} + \text{Disposed_Base}) * 100$

- This is changing the way Diversion rates are figured internally.

Steering Committee Members

Goal: To incorporate stakeholders across the state to provide feedback on the 2035 plan pertaining to the future of solid waste and recycling programs and infrastructure within Tennessee.

West:

Philip Davis, City of
Memphis

Travis Alexander, Obion

Wanda Fuzzell, NWTDD

Lindsay Ross, Wayne

Middle:

Misti Baker, SCTDD

Mark Neblett, Bi-
County LF

Mac Nolen, Williamson

Kim Raia, CTAS

Jeff Barrie, TEC

Doug Giles, UST/SW
Control Board

Michael Skipper, GNRC

East:

Tim Hendrick, ETDD

Mark Torbett, Sullivan

Drew Thurman, Knox

George Thornsby,
TDEC

Waste Characterization



Statewide Waste Characterization Study

- EPA Solid Waste Infrastructure For Recycling (SWIFR) Grant
- Conducting a comprehensive Statewide Waste Characterization Study to optimize effective recycling and diversion within Tennessee
- SCS Engineers is conducting the waste sorts

SCS
ENGINEERS
www.scsengineers.com

Statewide Waste Characterization Study

West:

1. Jackson-Madison Sanitary Landfill
2. West Camden Sanitary Landfill (2x for seasonal view)
3. Northwest Obion Landfill

Middle:

1. Republic Services Middle Point Landfill (2x for seasonal view)
2. Bi-County Solid Waste Management Landfill
3. River Hills WM MRF

East:

1. Chestnut Ridge Sanitary Landfill
2. Lakeway GFL Landfill

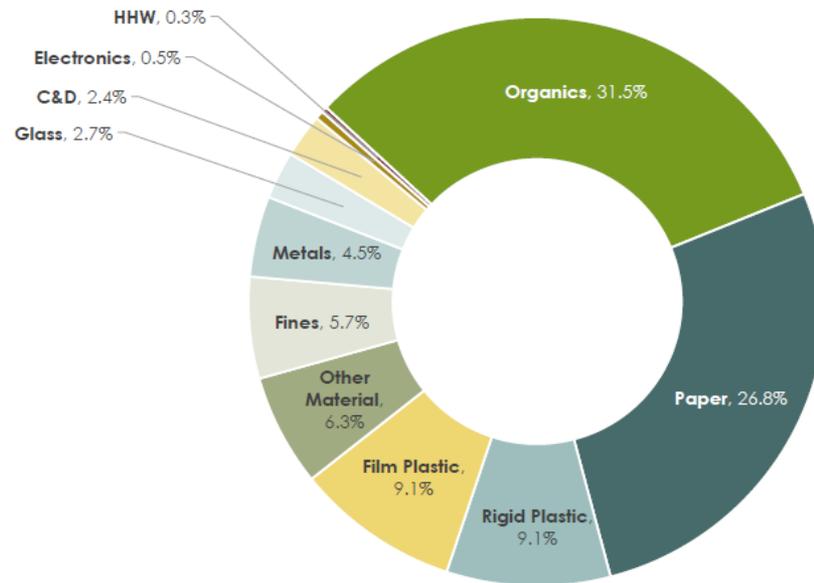
Project Completion: Middle 2026

Statewide Waste Characterization Study

- Sorts conducted April 2025:
 - Jackson-Madison Sanitary Landfill: March 31st - April 5th
 - 50 MSW samples manually sorted, including:
 - 28 residential
 - 22 commercial
 - 48 construction/bulky waste loads visually characterized
 - 47 gate surveys completed
 - Republic Services Middle Point Sanitary Landfill: April 7th – April 10th
 - 50 MSW samples manually sorted, including:
 - 26 residential
 - 24 commercial
 - 49 construction/bulky waste loads visually characterized
 - 143 gate surveys completed

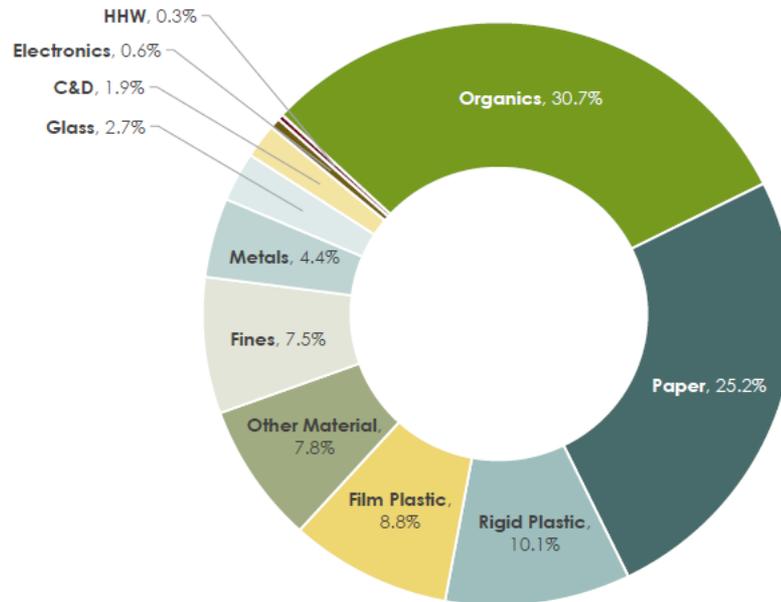
Statewide Waste Characterization Study

Overall Municipal Solid Waste Composition



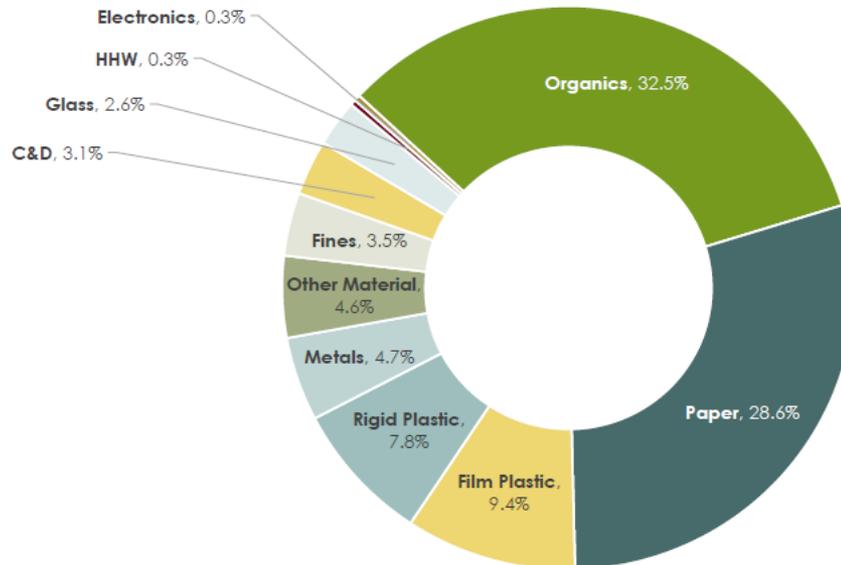
Statewide Waste Characterization Study

Residential Waste Composition Summary



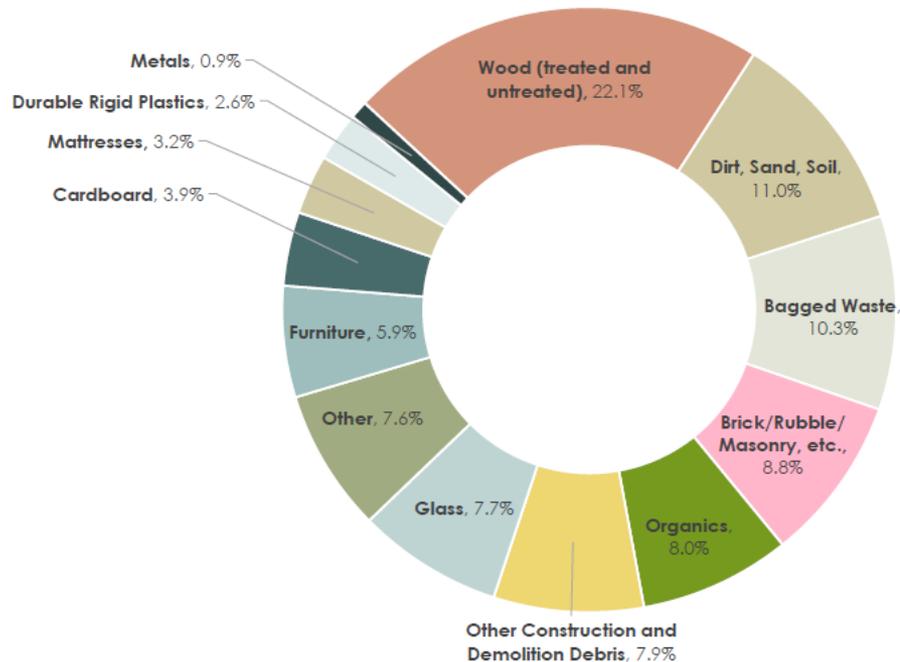
Statewide Waste Characterization Study

Commercial Waste Composition Summary



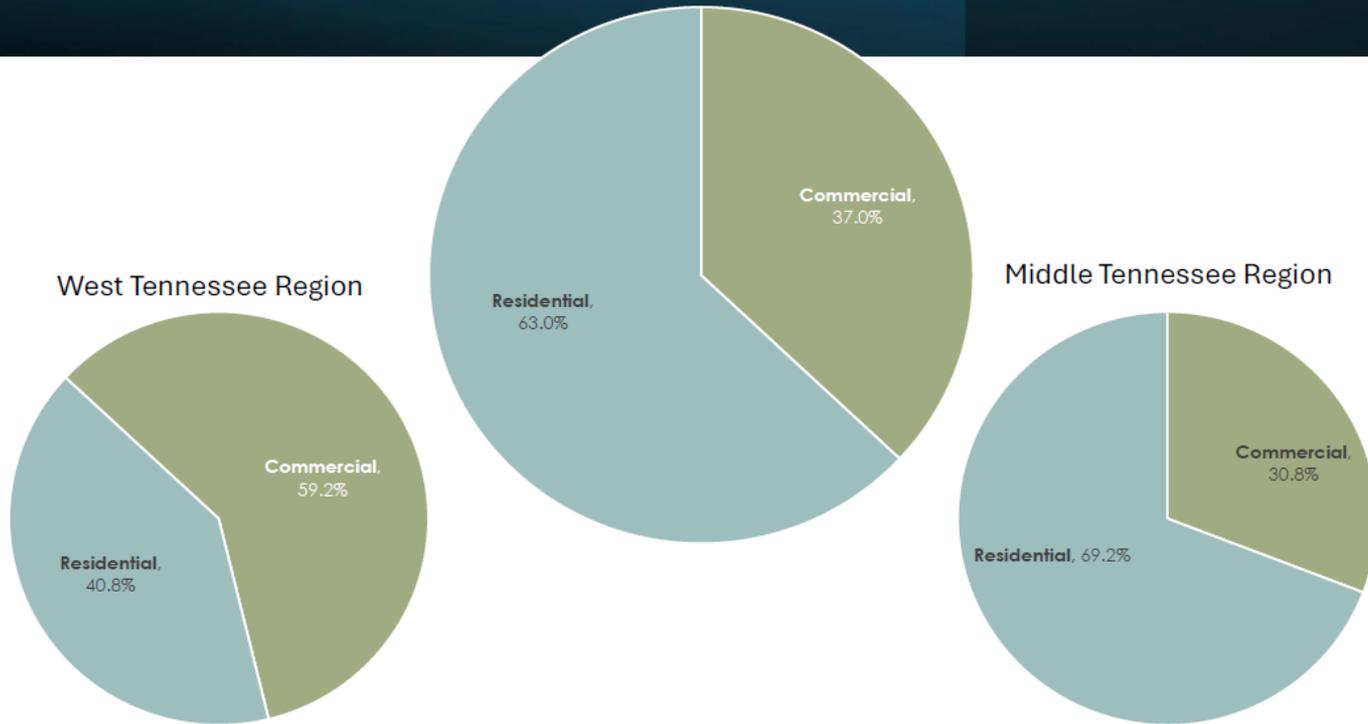
Statewide Waste Characterization Study

Bulky/CDD Visual Observation Summary



Statewide Waste Characterization Study

Overall Gate Survey Data



Statewide Waste Characterization Study

Jackson-Madison Sanitary Landfill



Statewide Waste Characterization Study

Republic Services Middle Point Sanitary Landfill





Questions?

TN

Department of
Environment &
Conservation

Geosyntec
consultants