

Solid Waste Management in Chatham County

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Agenda

- Climate Change Contribution
- Municipal Solid Waste (MSW)
- Landfills and Incinerations
- How Chatham Manages Waste
- Quiz

Waste & Recycling Enthusiast Program (WREP) Overview

- Offers a platform to engage with the community, learn about sustainable practices, and make a tangible difference in our environment.
- Six classes 6:00-8:00 pm
 - September 18: How Chatham Manages Waste and Waste Management
 - September 25: Waste Reduction
 - October 2: Recycling, MRFs, How Items Get Recycled
 - October 9: Composting
 - October 16: Environmental Justice
 - October 23: Hazardous Waste and Closing Information
- Adults attend 5 of 6 classes (Youth attend 4 of 6 classes)
- Complete assessment and program evaluation- October 16



Waste Management

And How Chatham Manages Waste

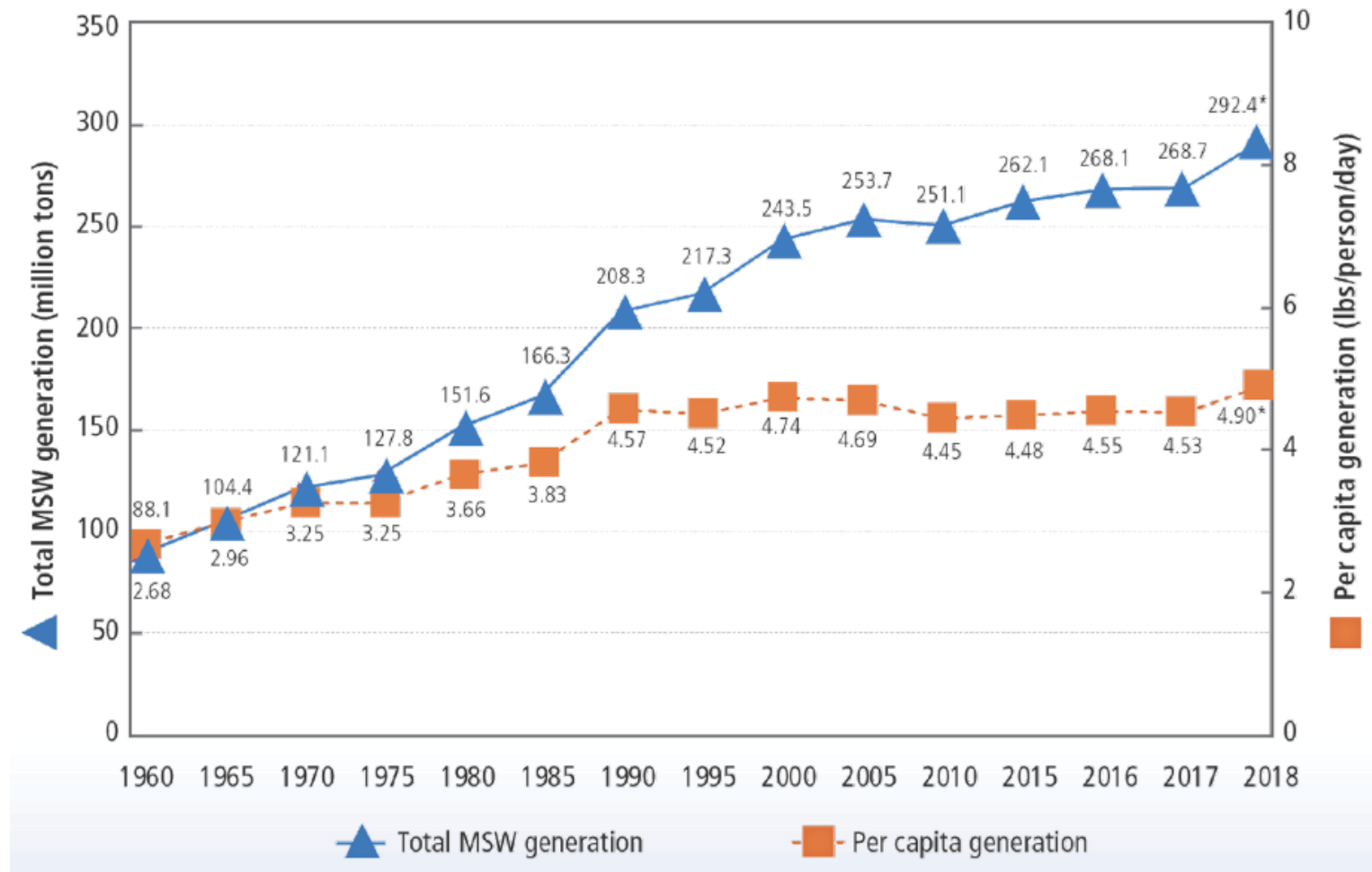
Municipal Solid Waste

- Waste consisting of everyday items that are discarded by the public.
- Common synonyms: trash, garbage, rubbish.
- MSW includes items that could be recycled, composted, etc.



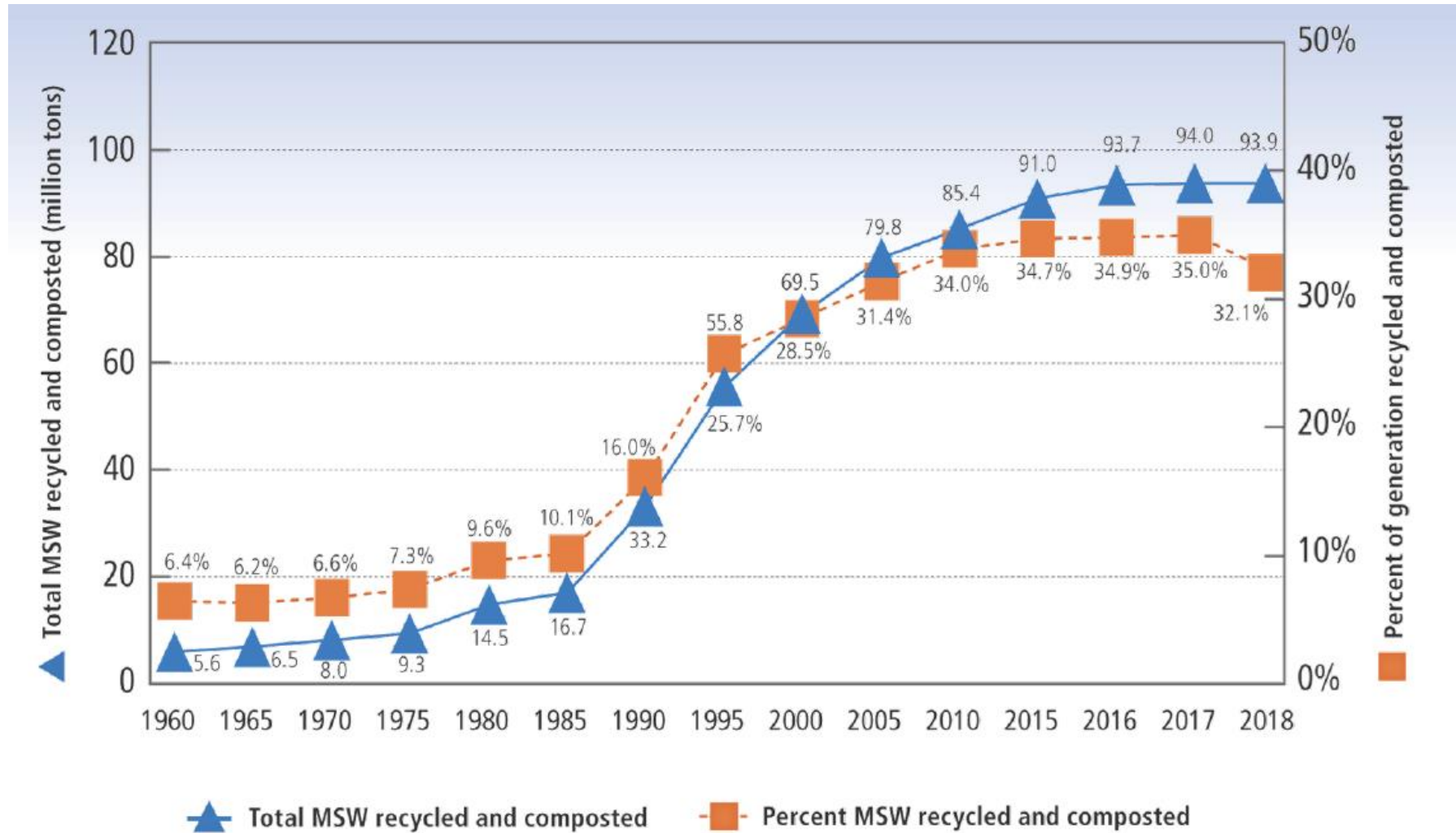
Waste is managed at a local level.

MSW Generation Rates, 1960-2018



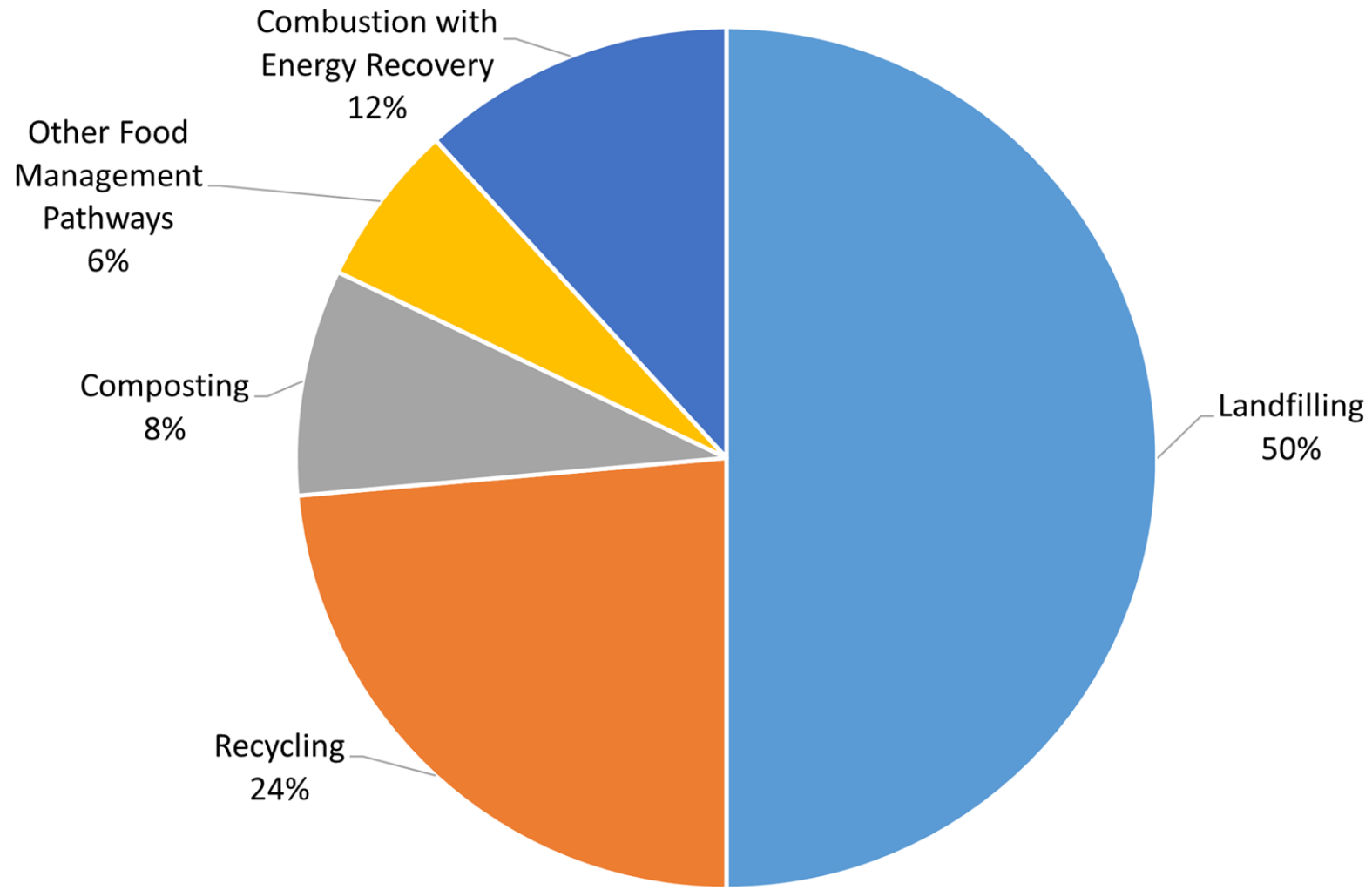
Source: US EPA Advancing Sustainable Materials Management 2018 Fact Sheet

Recycling and Composting Rates, 1960-2018



Source: US EPA Advancing Sustainable Materials Management 2018 Fact Sheet

Management of MSW in the US, 2018



Source: US EPA Advancing Sustainable Materials Management 2018 Fact Sheet

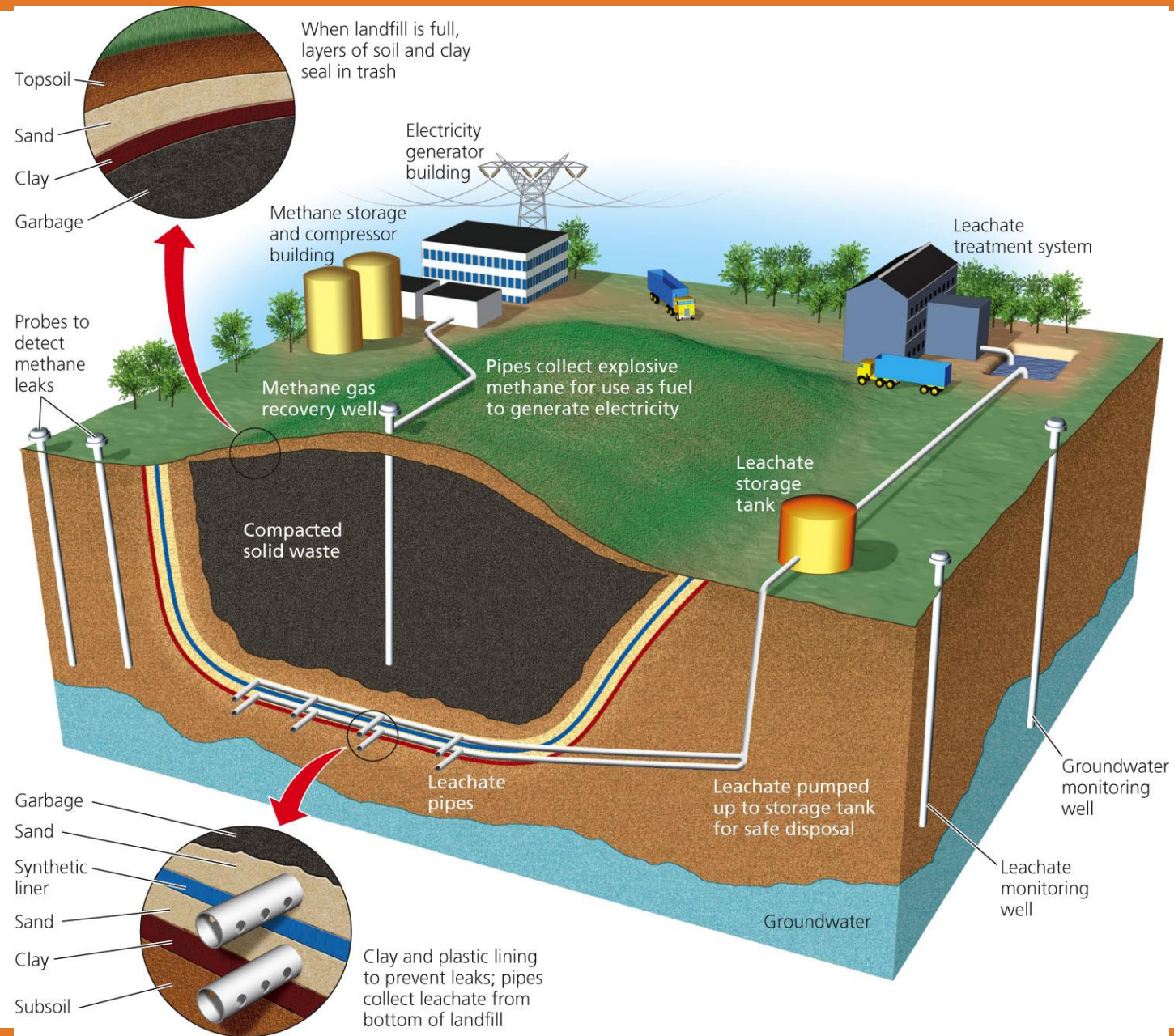
Biodegradable Timeline

Biodegradable Timeline Answer Key

3-4 weeks	Banana
1 month	Paper bag
5 months	Cotton rag
1 year	Wool sock
40-50 years	Leather boot
50-80 years	Rubber sole
80-100 years	Tin can
200-500 years	Aluminum can
450 years	Plastic 6-pack ring
1 million years	Plastic jug
Unknown- possibly forever	Styrofoam cup
Unknown- possibly forever	Glass bottle

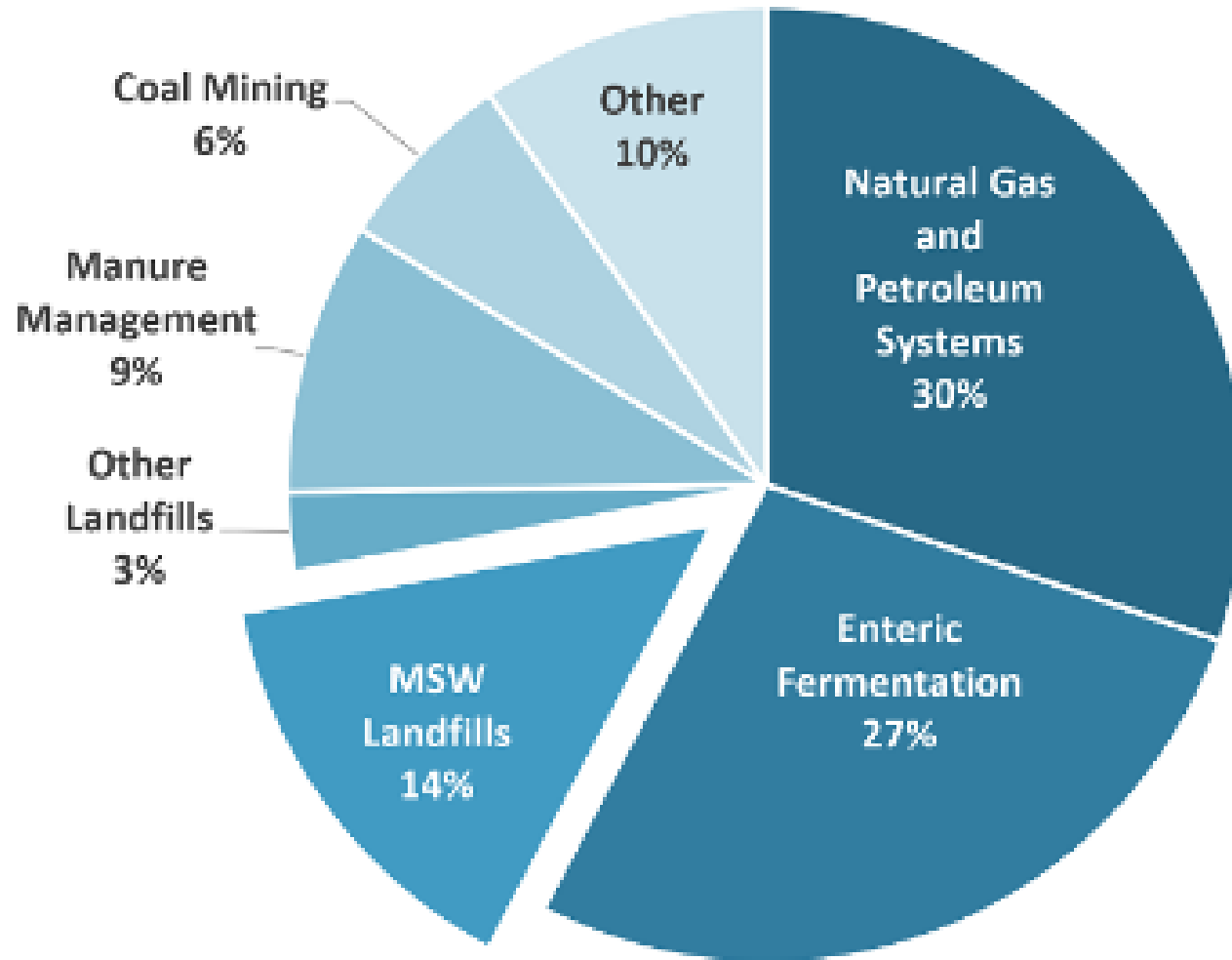
Landfills and Waste-to-Energy

Landfill Design



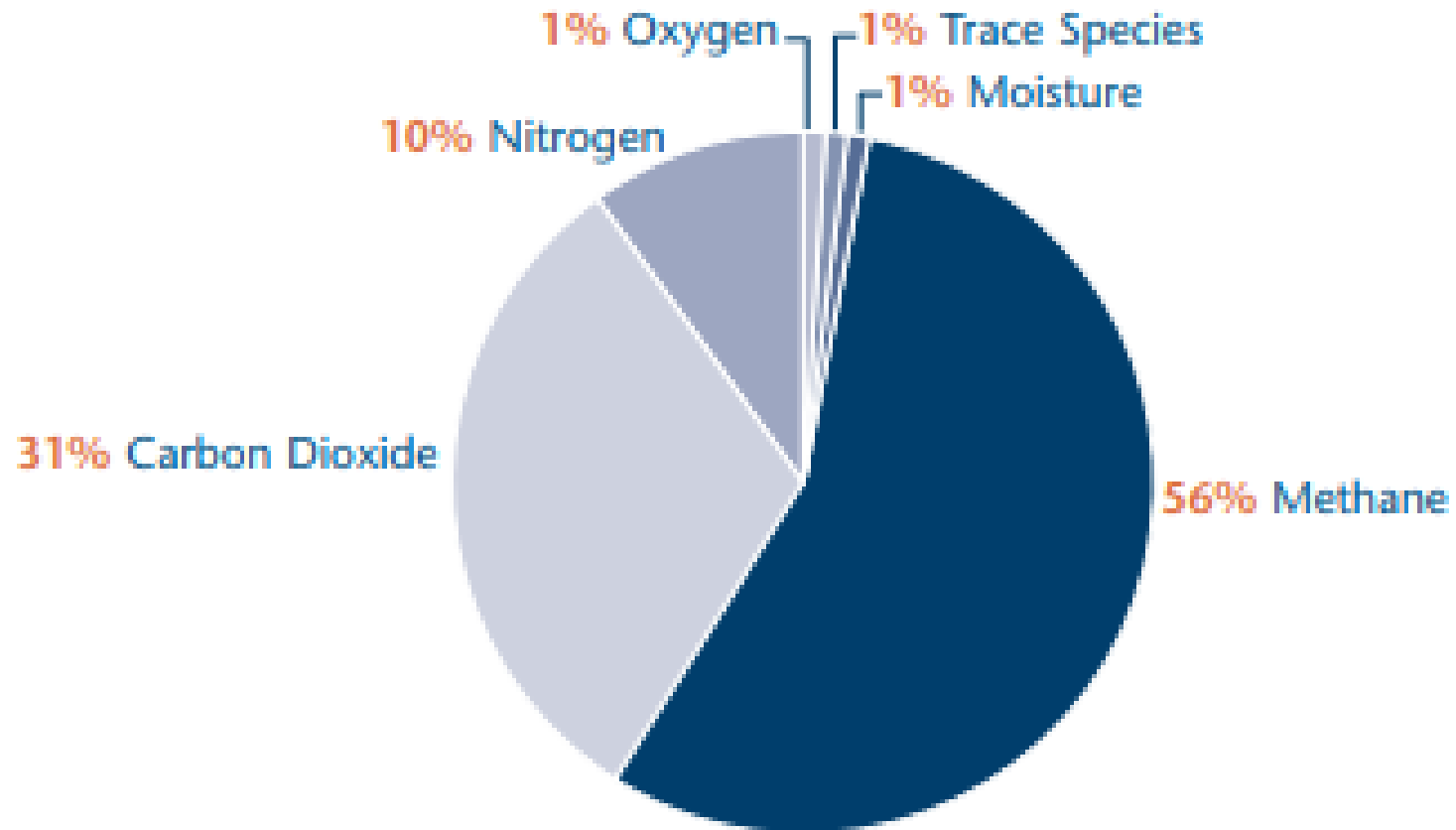
Source: *Living in the Environment: Concepts, Connections, and Solutions. International Student Edition.*

US Methane Emissions, By Source- 2022



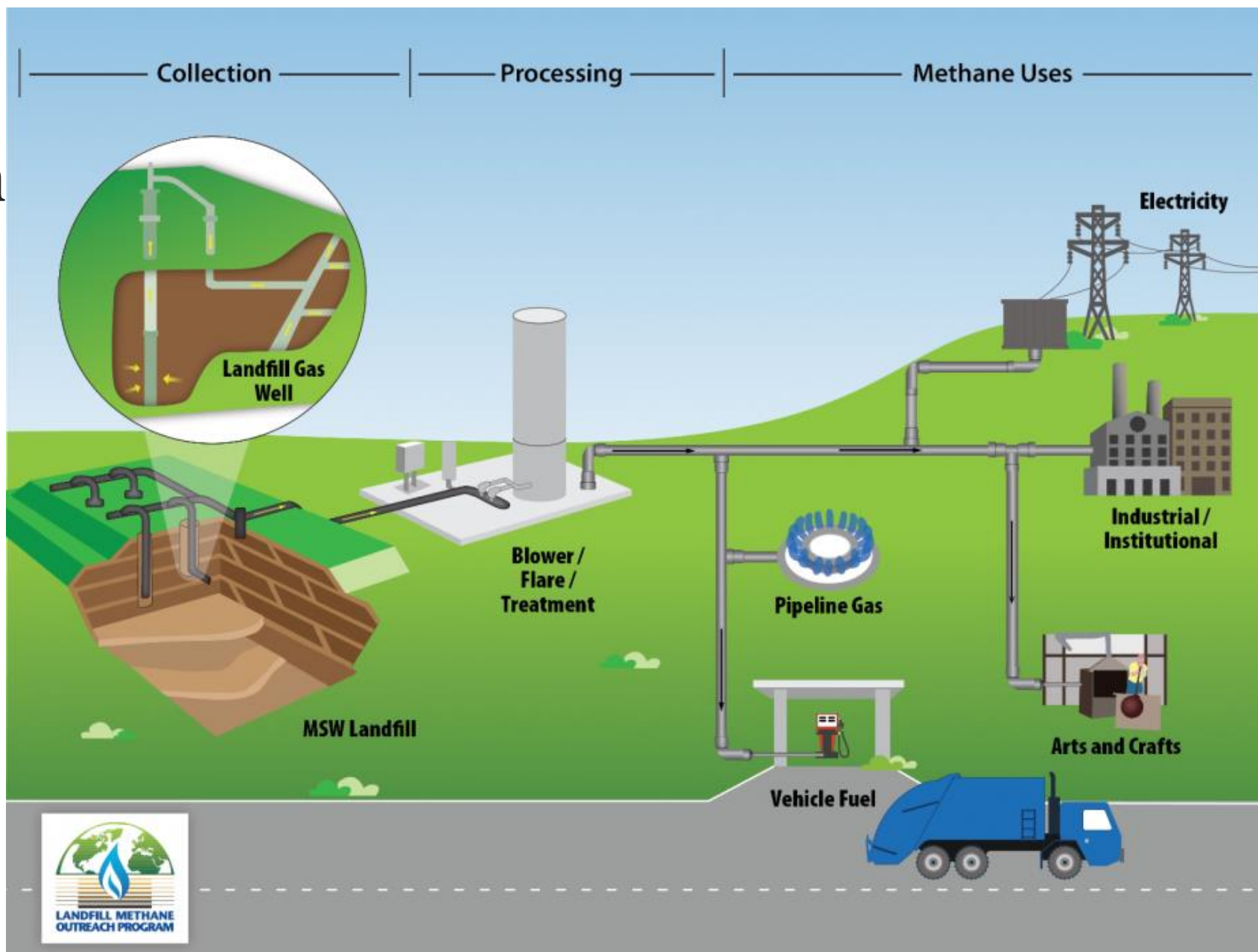
Source: Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2022.

Landfill Gas Composition



Source: *Guidance on Landfill Gas Flaring*,
Scottish Environment Protection Agency

Landfill Gas Collection



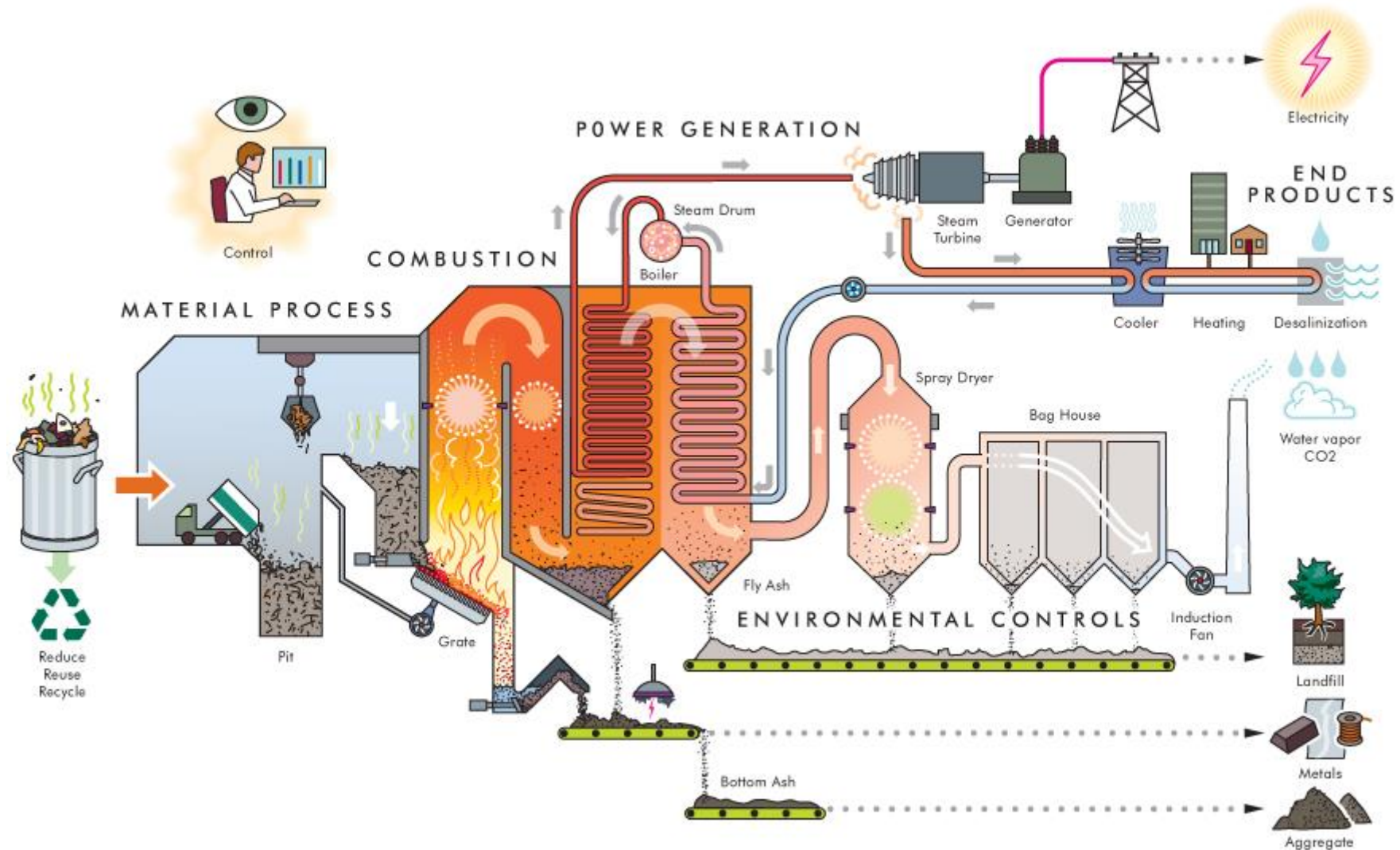
Source: Environmental Protection Agency Basic Information about Landfill Gas

Combustion with Energy Recovery

- Currently 75 facilities in the US, in 25 states
- Typical plant generates about 550 kilowatt hours (kWh) of energy per ton of waste
- 34 million tons of MSW combusted in the US in 2017
- Generates ash as final product
 - 15 to 25 % by weight
 - 5 to 15% by volume

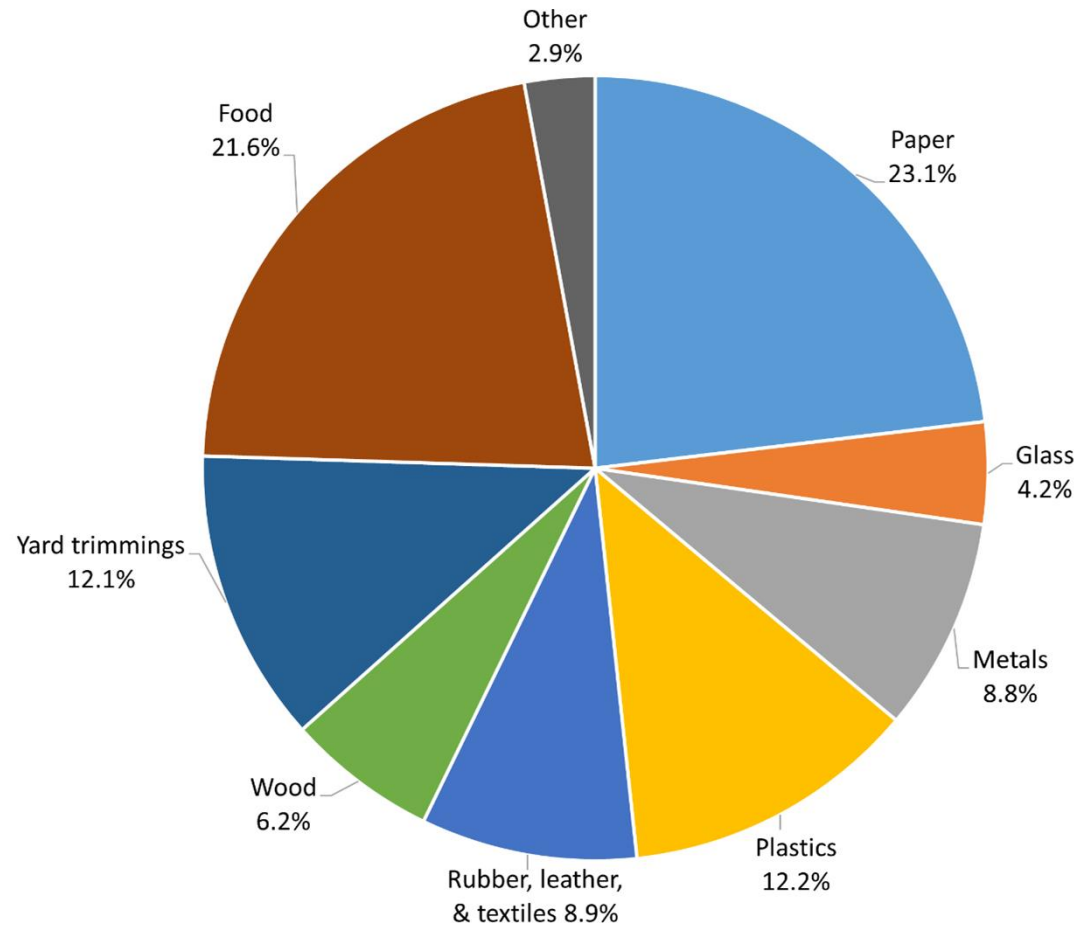
Source: Environmental Protection Agency

Incineration Process



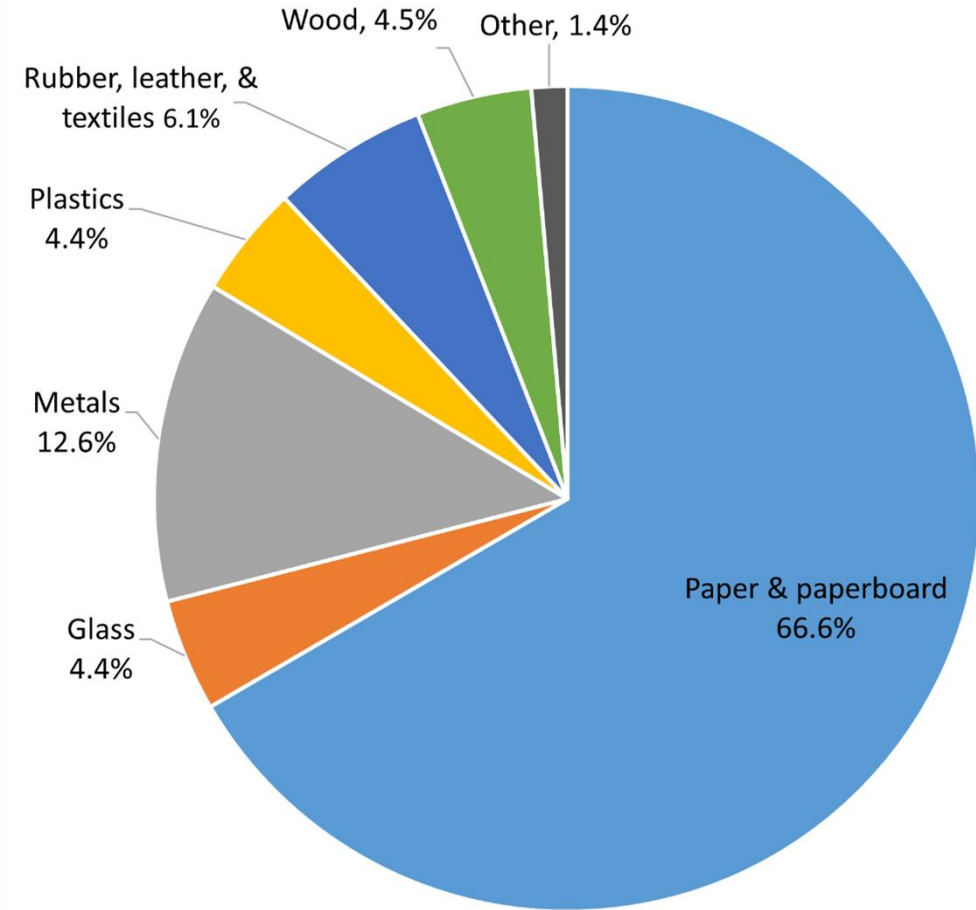
Source: Deltaway

Total Municipal Solid Waste Generated in the US, 2018



292.4 Million Tons

Total Municipal Solid Waste Recycled in the US, 2018



69.0 Million Tons

Source: US EPA Advancing
Sustainable Materials
Management 2018 Fact Sheet.

Items Banned from NC Landfills



- ABC beverage containers
- Appliances
- Antifreeze
- Aluminum cans
- Lead-acid batteries
- Discarded computer equipment
- Discarded televisions
- Oyster shells
- Plastic bottles
- Tires
- Used vehicle oil and filters
- Wooden pallets
- Yard debris

New Ban December 2026-
Lithium-ion batteries



Metro Site Fabricators facility in Commerce, Georgia, after a fire sparked by lithium-ion batteries.

January 10, 2024



MRF fire in Conway, Arkansas

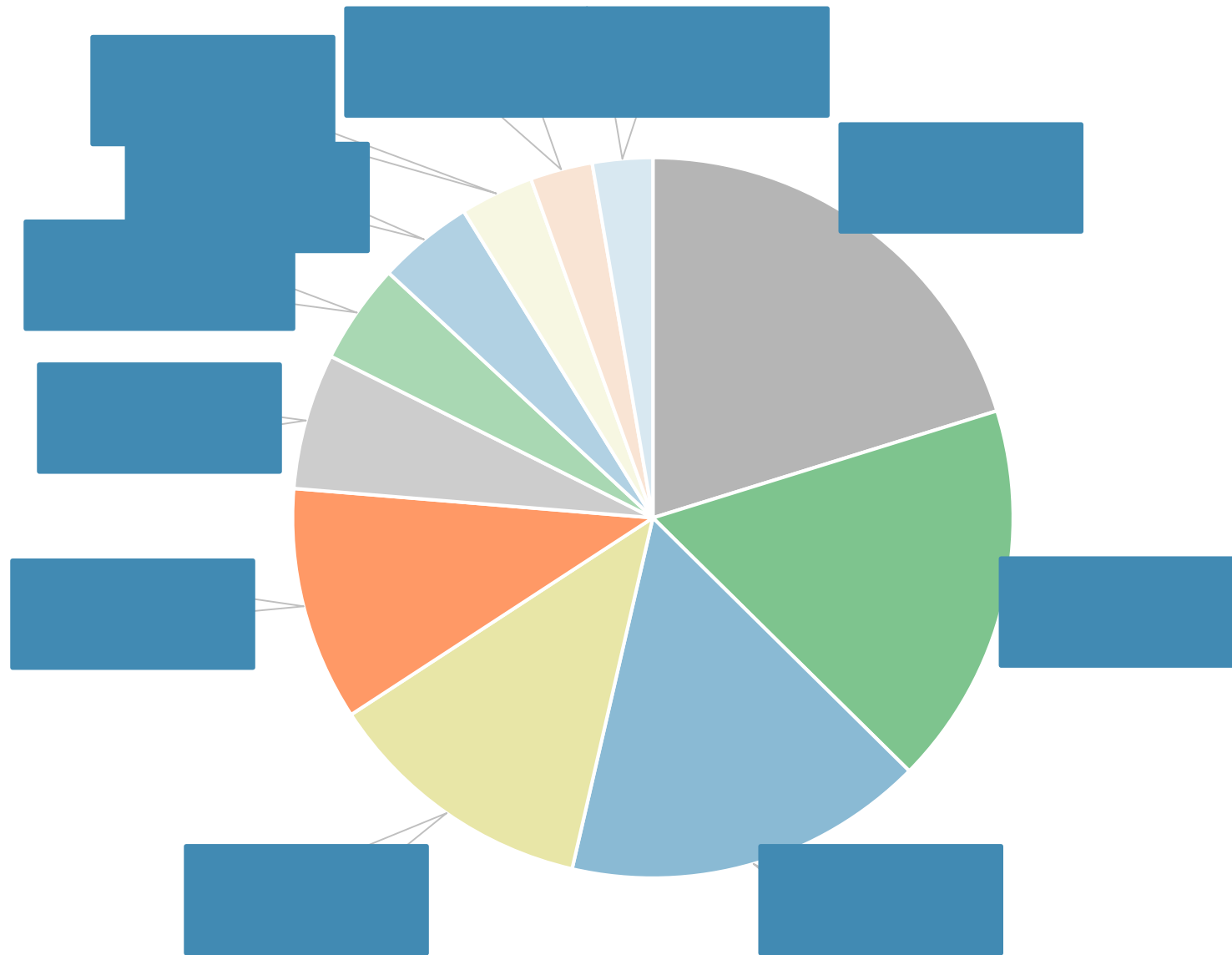
NWRA and RRS Release Report on Threat of Lithium Batteries to Waste and Recycling Infrastructure

Arlington, VA – A new report from the National Waste & Recycling Association (NWRA) and Resource Recycling Systems (RRS) estimates that more than 5,000 fires occur annually at recycling facilities. Materials recovery facilities (MRFs) process single stream recycling and, increasingly, these facilities experience catastrophic fires due to lithium-ion batteries erroneously placed by consumers in with their recyclables.

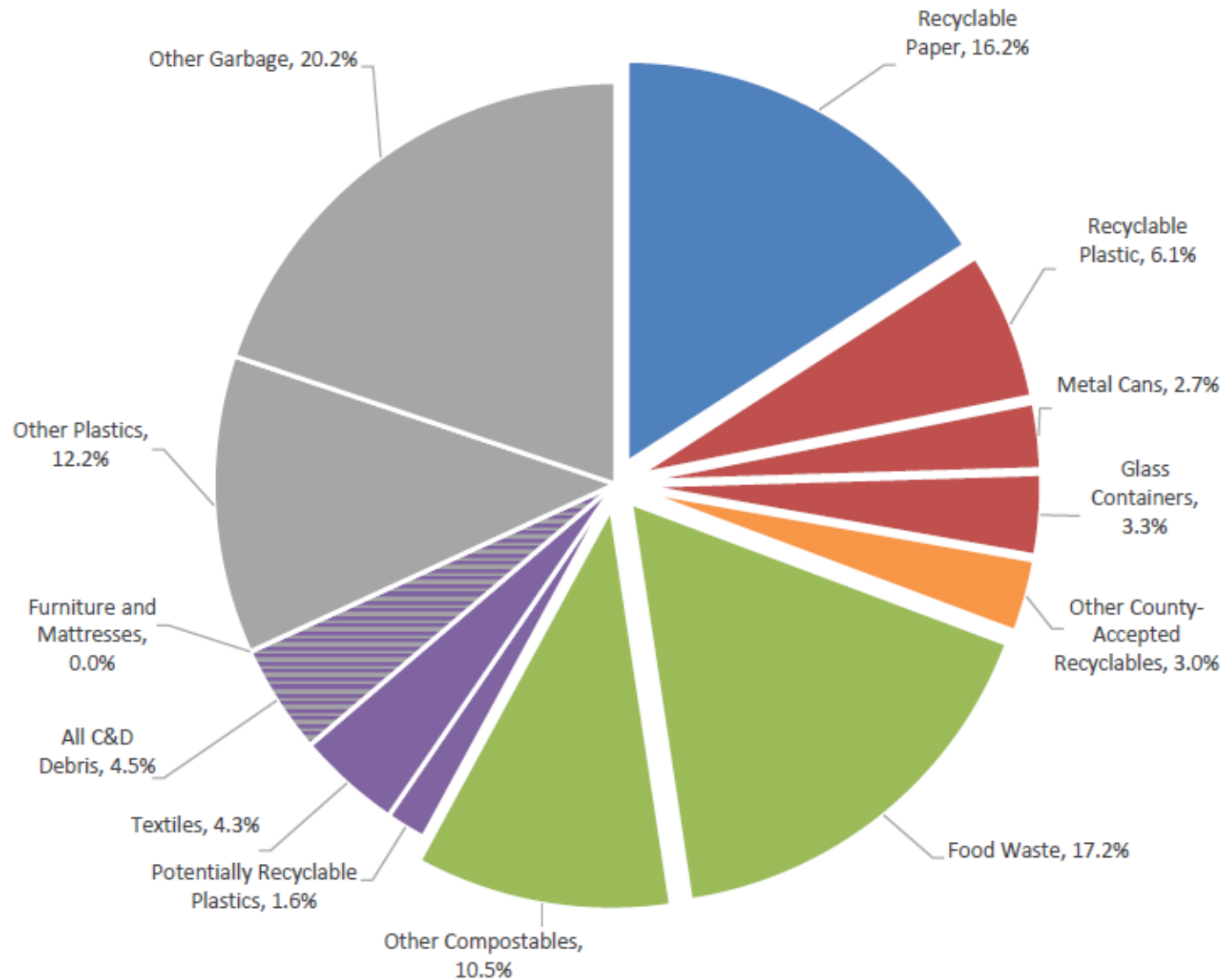
Every day, MRFs receive dozens of lithium-ion batteries due to public misconceptions about how to properly dispose of them. As lithium-ion battery usage grows, so will the risk of fires.

Break

Waste Pizza



Chatham County Collection Centers Waste Composition Study 2017

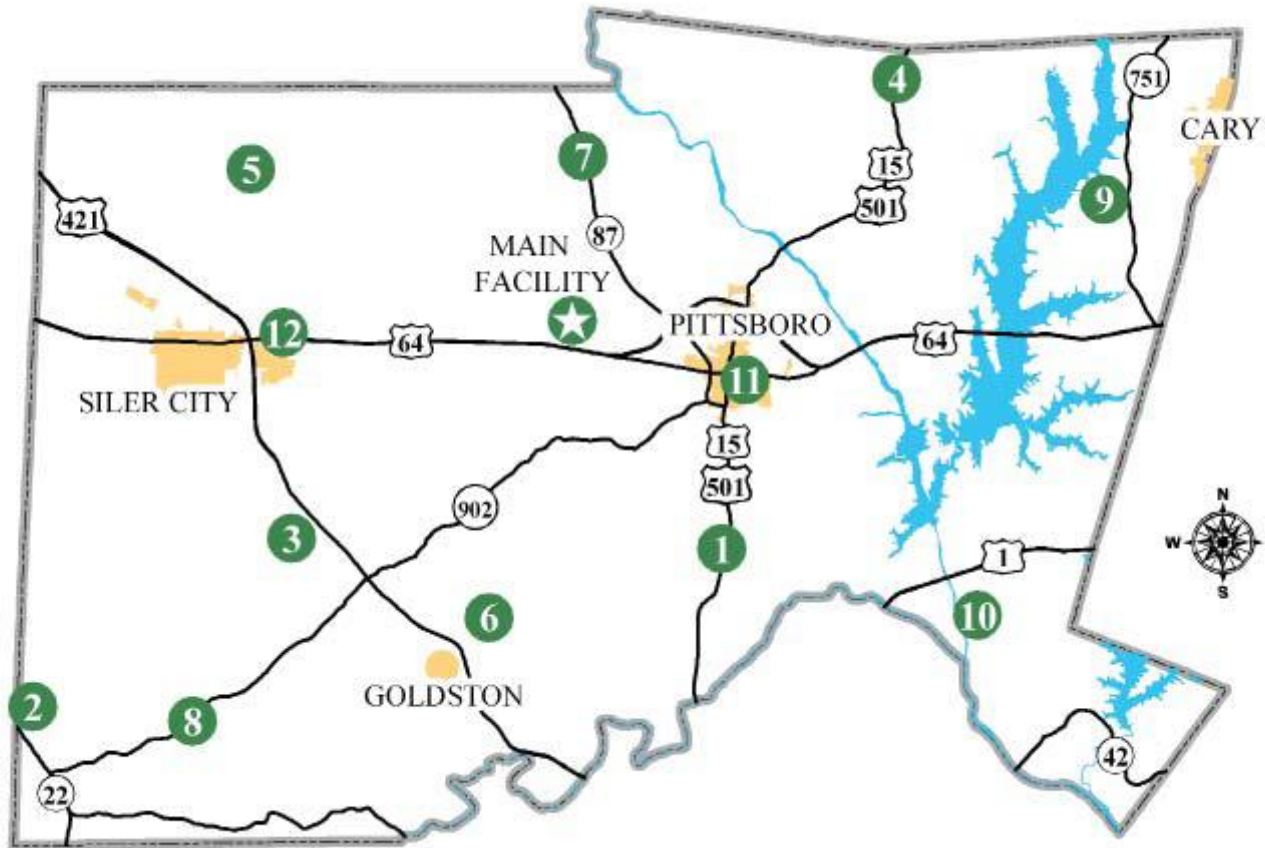


**Recyclable
material
disposed of in
the landfill:
31.3%**

Results from municipal solid waste compactors

How Chatham County Manages Waste

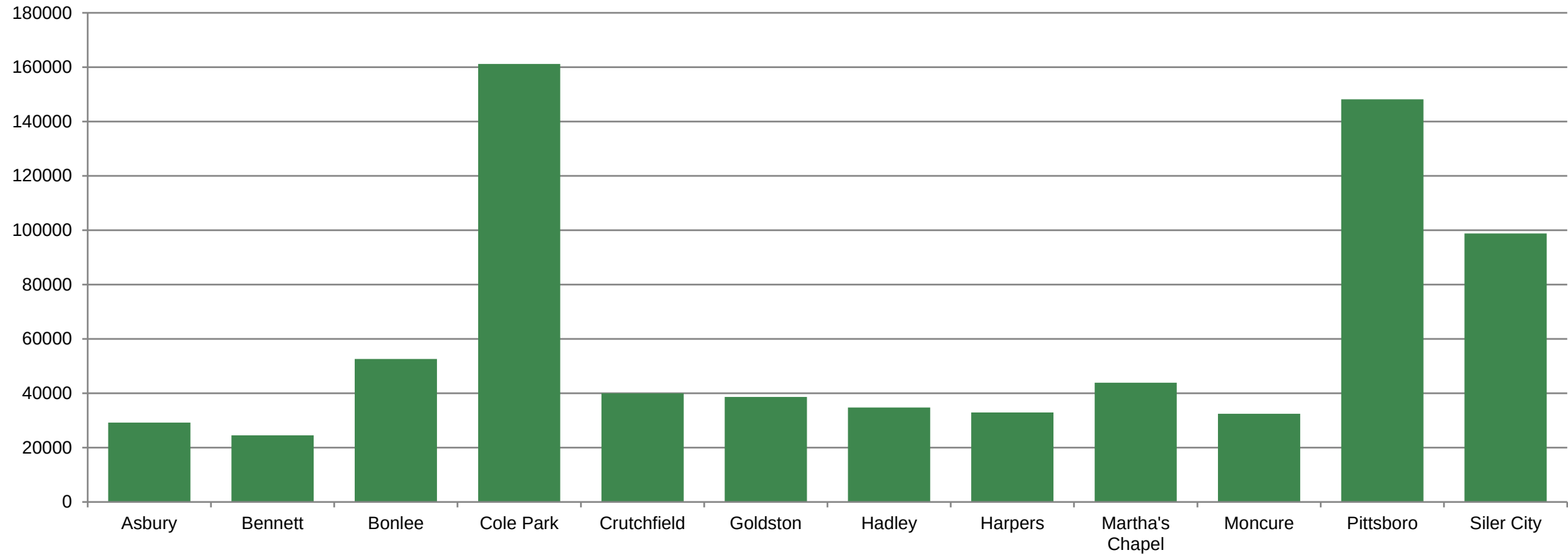
Collection Centers



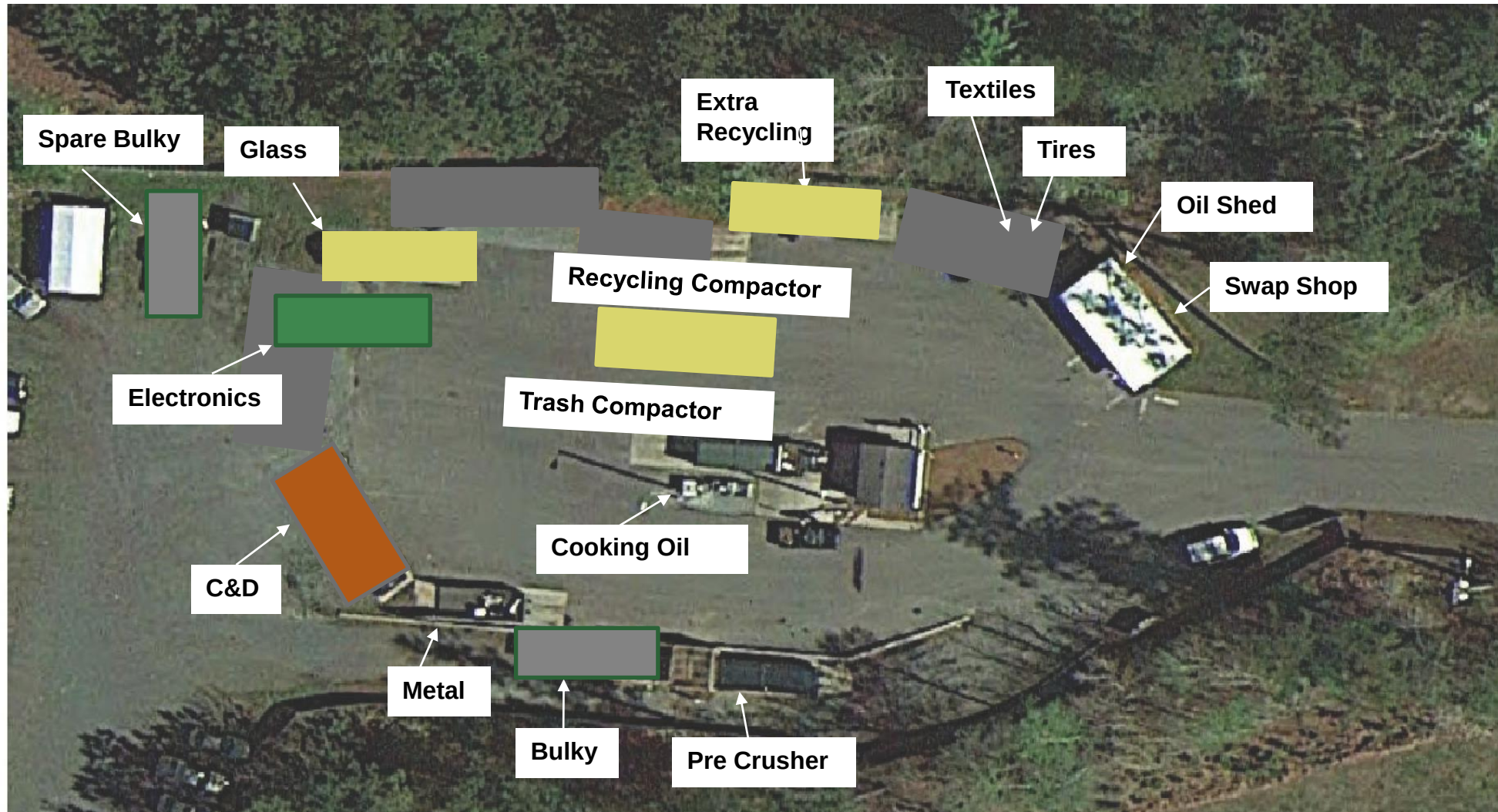
- 12 Collection Centers
- FY 2025
 - ~737,000 Visitors
 - ~11,700 tons of MSW
 - ~1,200 tons of mixed recycling
 - 404 tons of glass

Visitors by Collection Center- FY 24

FY 24-25 Totals by Center



Pittsboro Collection Center



Items Accepted at Collection Centers

- Trash (MSW)
 - Large Items (couch, rug, mattress, etc.)
 - Construction & Demolition (C&D)
 - Scrap Metal
 - Appliances
 - Motor Oil and Oil Filters
 - Batteries
 - Lightbulbs
 - Electronics
 - Cooking Oil
 - Tires
 - Clothing and Shoes
- For the Swap Shop:
 - Clothes
 - Shoes
 - Books
 - Furniture
 - Small Appliances
 - Small Electronics
 - Decorations
 - Movies, CDs, etc.

We don't have a landfill

A map of North Carolina showing major cities and highways. Four locations are marked: a blue circle near Greensboro, a purple star near Durham, a green triangle near Sanford, and a yellow circle with a 'V' near Raleigh. The map includes labels for cities like Greensboro, Durham, Raleigh, and Sanford, as well as highways such as I-85, I-40, and I-95.

- ★ Our location
- ▲ Durham Transfer Station
- ▲ Sanford Transfer Station
- Great Oak Landfill (Randleman)
- Sampson County Landfill

Solid Waste & Recycling Budget

All data from Fiscal year 2025
(July 1, 2024 – June 30, 2025)

- Total budget: \$4,905,831
- Enterprise fund
- Funding streams: solid waste fee, state-funded programs, recyclable sales, and grants.
- Solid Waste Fee: \$137 per dwelling*
- Total revenue from Solid Waste Fee: \$3,986,411
- Number of households provided decals: ~28,000
- Waste disposal cost: ~\$683,000
- Recycling revenue: \$185,899

Collection Center Decals



**You must show a decal
every time you use the
Collection Center.**

Main Facility

- Batteries
- Cooking Oil
- Electronics
- Fire Extinguishers
- Fluorescent Lightbulbs
- Helium Tanks
- Inert Debris
- Pesticide Containers
- Scrap Metal & Appliances
- Styrofoam
- Tires
- Yard Waste

The Main Facility CANNOT accept trash.

- 28 County Services Road, Pittsboro
- Open Monday through Friday from 7:00 am to 4:00 pm
- Mulch sales (and free give-a-ways)
- No decal required to use.

Learn how to properly dispose of items

Government » Departments & Programs: I-Z » Solid Waste & Recycling »

How Do I Dispose of...?

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"How do I dispose of..." is an online disposal guide. This information only applies to what can and cannot be disposed of at the Chatham County [Collection Centers](#), [Main Facility](#), and [Household Hazardous Waste](#) events. If you have curbside collection you should contact your private hauler to find out what you can and cannot put in their containers.

The [recycling](#) rules listed are for the Collection Centers. If you have curbside pickup, that is provided by a private hauler. However, you can follow all of the same rules we have listed, expect you would put your glass bottles and jars in your recycling bin as well. There is no need to separate glass bottles and jars at the curb.

If we cannot accept it and advise you to go to a facility that is not part of Chatham County Solid Waste & Recycling, we cannot guarantee they will accept the item. You should contact them directly for details.

How do I dispose of...?



How do I Dispose of...

[Expand/Contract Questions and Answers](#)

Aerosol Cans
Aluminum Cans
Aluminum Foil and Trays
Antifreeze
Asbestos
Ashes
Bags- animal food bags, chip bags, plastic bags, etc
Barrels and Drums
Batteries- auto, lawn, etc. (lead-acid batteries)
Batteries- household
Battery Backup
Boat
Books
Box Spring
Brick, Concrete, and Rock
Cabinets, Doors, and Windows
Cable or Satellite Box

How do I Dispose of...

Aerosol Cans



Empty aerosol cans can be placed in the **Scrap Metal** container. Must be empty.

If you have a current decal, you can take household recyclables to any of the 12 [Collection Centers](#).

If the aerosol can contains hazardous material, like spray paint, they must be brought to a [Household Hazardous Waste](#) event. No decal is required at HHW. Must show ID. For a complete list of items accepted visit the [HHW page](#). Do not bring empty containers to HHW events; throw them away with your regular trash.

If you DO NOT have a current decal, you can bring your recyclables to the [Main Facility](#). Businesses can also bring recyclables to the Main Facility. If a business has a large load of recycling you may be able to unload it onto our Recycling Station tipping floor. You must call prior to arriving at the Main Facility to see about availability- (919) 542-5516.

Quiz Time

<https://forms.office.com/r/DBL7rMiYqm>







Thank you!

