

Existing System

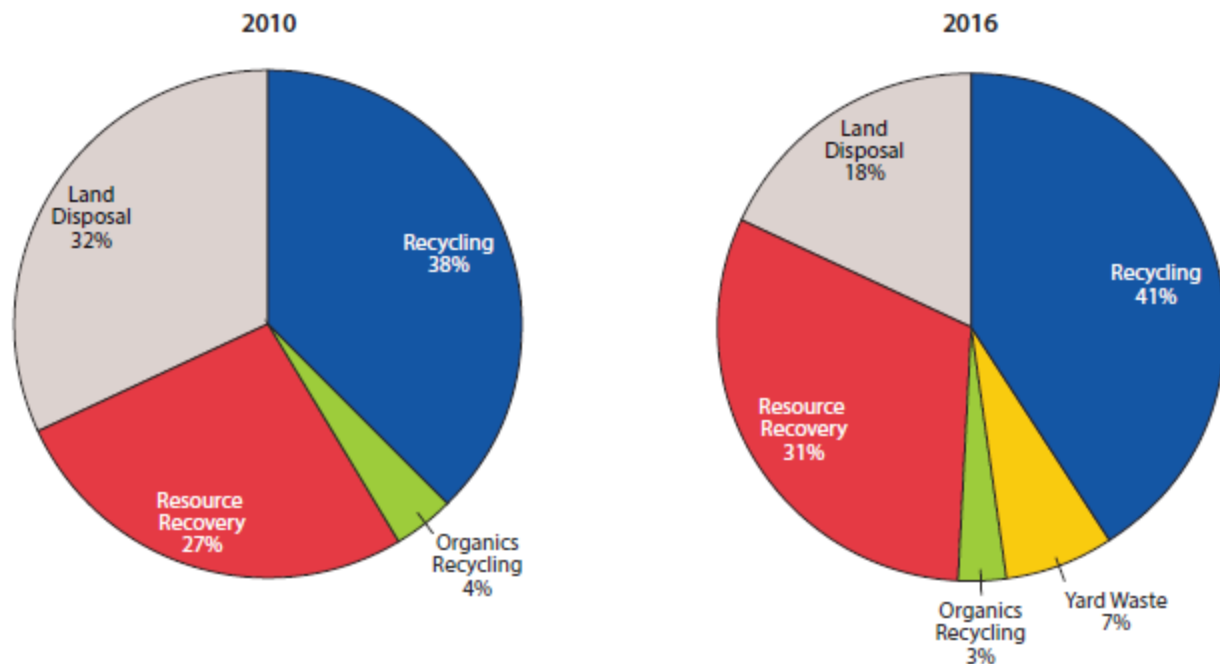
Many entities, public and private, have the responsibility for managing solid waste. These include state and local governments, the waste management industry, residents, manufacturers of products, retailers and other businesses, and environmental groups.

An integrated waste management system is an essential component of the infrastructure of a sustainable community. An integrated solid waste system protects public health, supports a vibrant economy, reduces emissions of air pollutants such as greenhouse gases, conserves energy and resources, and produces renewable energy. The solid waste management hierarchy emphasizes source reduction, reuse, recycling, organics recovery, and resource recovery over land disposal.

Waste generation

In 2016, 1.4 million tons of solid waste was generated in Hennepin County. The amount of waste generated per capita has decreased since the last master plan, and the county has made steady progress toward state goals. The county diverted 82 percent of waste from landfills in 2016, a rate on par with national leaders.

Waste management in Hennepin County



A number of waste composition studies have been conducted since 2010. Most recently in May 2016, the county partnered with the City of Minneapolis to discover what is left in the trash and identify the best opportunities to reduce waste and increase recycling.

Waste composition studies

- Hennepin/Minneapolis, 2016
- Ramsey/Washington, 2014
- Minnesota Pollution Control Agency, 2013
- HERC, 2012
- Brooklyn Park Transfer Station, 2011

Collection/hauling

Hennepin County licenses all garbage haulers in the county under Ordinance 17 and as part of the metropolitan area regional licensing program. The county licenses approximately 160 garbage haulers. Recycling and organics recycling haulers are not licensed. Under Ordinance 17, the conditions of the operating license include basics such as vehicle decals, written reports on operations upon request, language regarding cleanup charges, and the right to examine hauler records. Licensing does not currently require performance standards or reporting on waste quantities. Some cities in the county also license haulers.

Residential recycling, organics, and trash service depends on where you live. Cities provide recycling service to most houses and smaller multifamily buildings (typically those with two to eight units). This service is commonly referred to as single-family, curbside recycling. On the other hand, larger, multi-unit residential buildings have waste services provided by the property owner or manager.

Most cities allow residents to choose their garbage hauler, which is referred to as open collection. Some cities arrange for garbage service by contract or provide their own service, which is referred to as organized collection. Of the county's 44 cities, 18 have organized garbage collection. Only two cities use city employees for collection. The remaining cities contract for service. Residential recycling collection is provided through organized collection in 42 of the 44 cities. Only two cities, Eden Prairie and Richfield, have open recycling collection. Currently, there are nine cities where organics recycling is available citywide. Several other cities have limited availability of organics through one hauler on the open market.

There are no organized collection arrangements for commercial waste, although some cities allow small businesses access to organized collection services. The private sector, municipalities, and the county provide drop-off locations for one or more types of recyclables.

Facilities

A variety of facilities support an integrated solid waste management system. Most recyclables are taken directly to a Materials Recovery Facility (MRF). Organics are managed by food rescue organizations, food-to-animal-feed operations, and composting sites. After recycling and organics are separated, the remaining waste is hauled to a resource recovery facility or land disposal facility, unless it is first taken to a transfer station for compaction and transport to facilities located farther away.

Household hazardous waste

Waste that is hazardous as defined by federal and state laws and local ordinances pose environmental and public health and safety risks. Toxicity reduction is an effort to manage the risks associated with the hazardous character of waste. Household hazardous waste (HHW) collection programs play an

important role in removing toxic materials from the waste stream. Hennepin County has two drop-off facilities:

- Hennepin County Recycling Center/Transfer Station in Brooklyn Park
- South Hennepin Recycling and Problem Waste Drop-off Center in Bloomington

Of the waste received by the HHW facilities, a high percentage is recycled, fuel-blended, or taken from product exchange shelves for reuse. Approximately 10 to 15 percent of the HHW cannot be reused, recycled, or fuel-blended and is managed at hazardous waste incinerators or landfills.

Recycling

Recyclables collected are taken directly to a recycling market, a recycling broker, or to a Materials Recovery Facility (MRF). Presently, eight MRFs operate in the metro area:

1. Waste Management in Minneapolis
2. Allied in Minneapolis
3. Eureka Recycling in Minneapolis
4. Allied in Inver Grove Heights
5. DemCon in Shakopee
6. Randy's Sanitation in Delano
7. Dick's Sanitation (Recycle Minnesota) in Lakeville
8. Tennis Sanitation in Saint Paul Park

City recycling drop-off sites:

- Minnetonka/Hopkins Recycling Drop-off Center
- Maple Grove Recycling Drop-off Center
- Plymouth Recycling Drop-off Center

Yard waste

Yard waste is prohibited by state law from being mixed with the trash, landfilled, or processed at resource recovery facilities. Yard waste is collected either by garbage haulers using separate collection vehicles, special yard waste collectors (such as lawn services), or by residents who drop off yard waste at collection sites. A few haulers also offer the collection of yard waste mixed with other organics for composting. Yard waste is managed through municipal and private programs. The county does not operate yard waste collection sites.

Yard waste drop-off sites:

- SKB Malcolm Transfer Station
- Maple Grove Yard Waste Site (privately owned)
- The Mulch Store in Minnetrista
- City of Plymouth Yard Waste Site
- City of Minnetonka Public Works
- St. Louis Park Brush Drop-off Site
- City of Medina Yard Waste Site

Organics

Organic materials account for the largest portion of waste sent to landfills and resource recovery facilities. Organics recovery programs include food rescue, food-to-animals, and composting. The metro area is currently served by a number of food rescue organizations, five food-to-animals operations with garbage feeder permits (able to accept meat and vegetative food scraps), three large scale composting operations that are permitted to accept source separated organics, and many yard waste composting facilities.

Organics destination	Management	2016 tons
Specialized Environmental Technologies in Empire	Composting	11,220
Shakopee Mdewakanton Sioux Community	Composting	7,012
Full Circle in Becker	Composting	3,478
Hog farmers, north metro	Food to animals	14,273
ReConserve in Rosemount	Food to animals	10,035
Total		46,064

Transfer stations

A transfer station is a facility where solid waste is unloaded from smaller trucks and reloaded into larger vehicles for transport to a final disposal site. Waste transfer stations make solid waste collection more efficient and reduce overall transportation costs, air emissions, energy use, truck traffic, and road wear and tear.

The following transfer stations are located in Hennepin County:

- Republic Flying Cloud
- Brooklyn Park Transfer Station
- WM Maple Grove
- SKB Malcolm
- Minneapolis South
- Broadway Resource Recovery (Atomic)
- Commercial Container
- Veit
- Tubs

Resource recovery

In 2016, 460,000 tons of waste generated in Hennepin County were processed at resource recovery facilities, which include the Hennepin Energy Recovery Center (HERC), Great River Energy, and Newport.

Facility	2016 tons delivered
HERC	337,729
GRE	120,705
Newport	2,486
Total	460,920

The Hennepin Energy Recovery Center (HERC) facility in Minneapolis uses mass-burn technology to produce energy for district heating and electricity. The facility also recovers metal from the ash for recycling. HERC is limited by its state permit to burning 365,000 tons annually. Non-processible items

and excess waste (waste received that is over the daily processing capacity) from Hennepin County facilities are delivered to nearby landfills. Ash from HERC is delivered to the SKB landfill in Rosemount or the Allied Waste landfill in Sarona, Wisconsin. Residues, or the fraction of non-combustible waste resulting from the creation of refuse-derived fuel, are also land disposed.

The Elk River Resource Recovery Project (GRE-Elk River) is an RDF processing plant owned by Great River Energy (GRE). Mixed waste is sorted into processible and non-processible waste on the tipping floor and processed and separated into three waste streams: RDF, recyclable metal, and residue. The RDF is transported for combustion to GRE’s power plant in Elk River. The facility recovers ferrous and nonferrous metals for recycling, and unprocessable waste and residue from processing is delivered to a landfill. GRE-Elk River’s permitted capacity is 547,000 tons per year.

The Ramsey/Washington County Resource Recovery Facility (Recycling and Energy Center) is a refuse-derived fuel (RDF) facility owned by Ramsey and Washington counties. The facility was purchased by the two counties in 2016. Mixed waste is sorted into processible and non-processible waste on the tipping floor, processed, and separated into three waste streams: RDF, recyclable metal, and residue. The RDF is transported for combustion to Xcel Energy power plants in Red Wing and Mankato, where it is burned to generate electricity. The facility recovers ferrous and non-ferrous metals for recycling, and unprocessable waste and residue from processing is delivered to landfills. Recycling and Energy Center’s permitted capacity is 500,000 tons per year.

Landfills

There are no landfills operating in Hennepin County. Trash generated in Hennepin County is delivered to either local or out-of-state landfills. In 2016, 18 percent of the trash generated in Hennepin County was land disposed. Five landfills received trash, with 12 percent going to landfills located out of state. The table below shows which landfills received trash in 2016.

Landfill	Location	2016 tons
Republic Pine Bend	Inver Grove Heights, MN	108,436
WM Burnsville	Burnsville, MN	82,448
Advanced 7-Mile Creek	Eau Claire, WI	27,441
WM Elk River	Elk River, MN	24,817
Republic Lake Area	Sarona, WI	3,028
WM Spruce Ridge	Glencoe, MN	2,875
Total		249,045

The metro has two mixed municipal solid waste (MMSW) landfills, both located in Dakota County. The Pine Bend Sanitary Landfill is located in Inver Grove Heights and is owned by Republic. The Burnsville Sanitary Landfill is located in Burnsville and is owned by Waste Management (WM). Both landfills operate methane gas-to-energy systems that capture methane gas generated by the decaying waste. Two other Minnesota landfills that receive significant amounts of metro area trash are the WM Elk River Landfill in Sherburne County and the WM Spruce Ridge Landfill in McLeod County. These also operate methane gas-to-energy systems.

Two out-of-state landfills received trash in 2016: the Advanced Disposal Seven Mile Creek Landfill in Eau Claire, Wisconsin, and the Republic Services Lake Area Landfill in Sarona, Wisconsin.

Non-MSW management

The metro area is served by nine landfills that accept industrial wastes and/or construction and demolition (C&D) debris, or non-MSW. None of these are in Hennepin County. Non-MSW includes nonhazardous industrial waste, C&D waste, materials banned from disposal with trash, problem materials, infectious waste, and other waste streams that are not trash or otherwise defined or regulated as hazardous waste.

Materials separated for recycling at some C&D transfer stations and landfills include concrete, bituminous asphalt, aluminum, copper, steel, brick, mattresses, appliances, and tires. Other materials have the potential to be separated and recycled from the C&D waste. Private businesses own and operate most of the facilities that manage non-MSW. There is some public sector activity in managing certain non-MSW materials, such as tree waste processing and crushing, and recycling concrete or road base material.