



# SOLID WASTE

# 2020

Prepared by:

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## Overview

The Solid Waste program addresses the generation, transfer and disposal of Lenawee County's overall solid waste. The program aims to reduce the amount sent for final disposal through reduction techniques, resource conservation, and resource recovery programs.

The **Solid Waste Coordinator** is charged with furthering the goals and objectives of the Lenawee County Solid Waste Management Plan, carry-out the administrative duties of the department and waste hauler licensing, as well as, propose, develop, and implement authorized recycling programs.

The **Lenawee County Solid Waste Coordinating Committee** oversees the implementation of the Solid Waste Management Plan and the Solid Waste Ordinance, oversees activities and duties of the Solid Waste Program, and approves recycling and resource recovery projects.

The **Lenawee County Board of Commissioners** appoints members to the LCSWCC, sets the annual budget, and approves any financially binding contracts.

The **Solid Waste Management Plan** was adopted in 1977 and recent amendments were submitted to the State of Michigan in 2016. <http://www.lenawee.mi.us/985/SWC-Committee>

The **Lenawee Solid Waste Ordinance** is available on <http://www.lenawee.mi.us/294/County-Ordinances>

## 2020 Year in Review

2020 was truly an unusual year. Faced with the COVID pandemic, the people of Michigan found themselves continuously adapting to new restrictions, regulations, and guidelines.

Most all of the 2020 Solid Waste Coordinating Committee meetings were held via ZOOM; which has been a new experience.

The Program Coordinator, Diana Schroeder, retired in August, and members Bob Knoblauch and Nathan Burd left the committee; their expertise will surely be missed.

In compliance to the Governor's Executive Orders the recycling drop off site was closed for nearly two months which caused a back-up of recycling materials.

The county fair is one of several public interactive events. During the county fair, the Solid Waste Department shares educational material, information, answers questions, and provides some sort of interactive game for children. Unfortunately, the 2020 fair was cancelled.

There were no county-wide collection events for household hazardous waste, tires, electronics, appliances, etc.

## Recycling Drop Off Site (DOS)

The Lenawee County Recycling Drop Off Site (DOS) is located at 307 River Street in Adrian. It is centrally located and currently the only recycling drop-off site open to all Lenawee County residents.

**Approximately 1,988 vehicles pass through the DOS in a week, or around 284 a day.**

The DOS is an un-manned, drive through facility, open seven (7) days a week. There are three collection bins with compactors. Two containers are open at a time, while the third remains locked in standby mode. One container collects **rigid materials such as plastics, glass, and tin**; while the other collects **fibrous materials such as cardboard, chipboard, and paper**. When a container becomes full, the third container is opened to collect materials on behalf of the full one.

The compactors are set up to automatically start compaction when the door closes; the system is prone to jams if this cycle is interrupted. Although compacting helps to ensure full loads are shipped, a person's judgement is required to determine if the container is at capacity or if a "bubble" is trapped within the container.



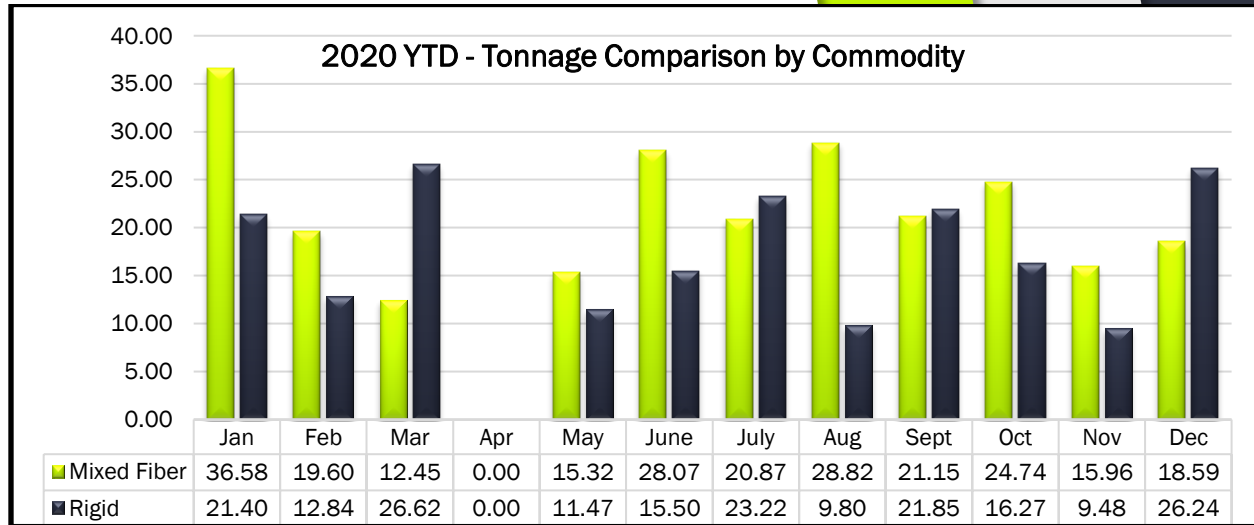
## DOS Maintenance

The compactors were installed in 2012 and are expected to have a long-life expectancy.

The Lenawee County Building and Grounds Department handles daily openings, reported jam issues, container replacement requests, maintenance, clean-ups, and closures of the drop off site. A contract employee handles weekend openings and closures.

An overall inspection of the compactors was conducted in December of 2020 and they were found to be in relatively good condition. Some preventative maintenance and minor repairs were made to all three machines.

## DOS Collections



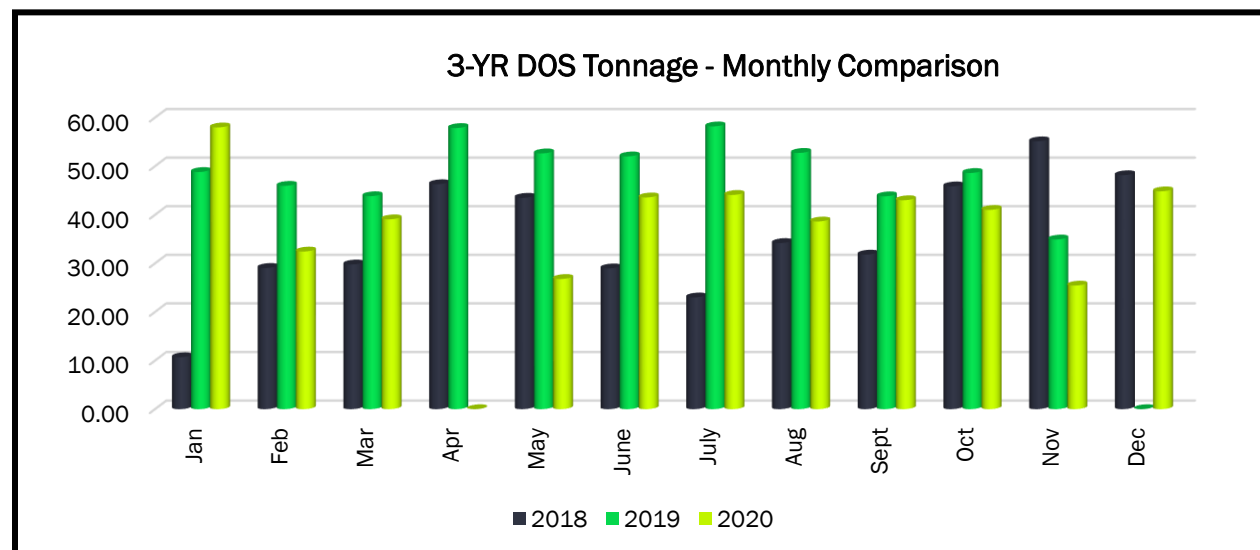
The DOS was closed the month of April and part of May due to state executive orders.

A total of 242.15 tons of mixed fiber materials and 194.69 tons of rigid materials were collected at the DOS in 2020.

There were 83 loads shipped; one load was contaminated and diverted to the landfill. The cost of shipping totaled \$18,224 and \$36,840 in processing the material.

Granger applies the current RISI value of corrugated cardboard which ranged between \$0-45 a ton in 2021. Approximately \$3,827 was credited to the cost of processing.

## Three-Year Comparison



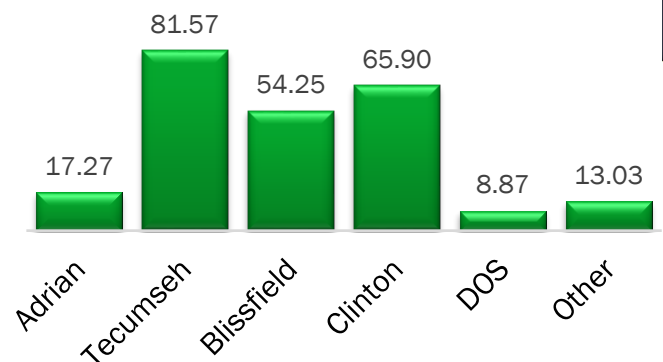
In December of 2019, the DOS was closed due to frozen hydraulics.

## County-Wide Recycling

Today there are few recycling options available for Lenawee County residents. There is one drop off site open to all county residents, and no satellite collection sites. Lenawee County residents in the Village of Blissfield and the City of Adrian have the option to subscribe for curbside recycling, while recycling is included in trash service for the residents of the Village of Clinton and the City of Tecumseh. Most waste haulers provide some sort of recycling through individual service contracts.

Waste haulers who provide curbside recycling with trash pickup determine what items to accept for recycling. Acceptable items vary with each hauler (i.e. some accept plastics #1 & #2 and cardboard ONLY, while another may ONLY accept cardboard.)

2020 Recycling lbs Per Capita



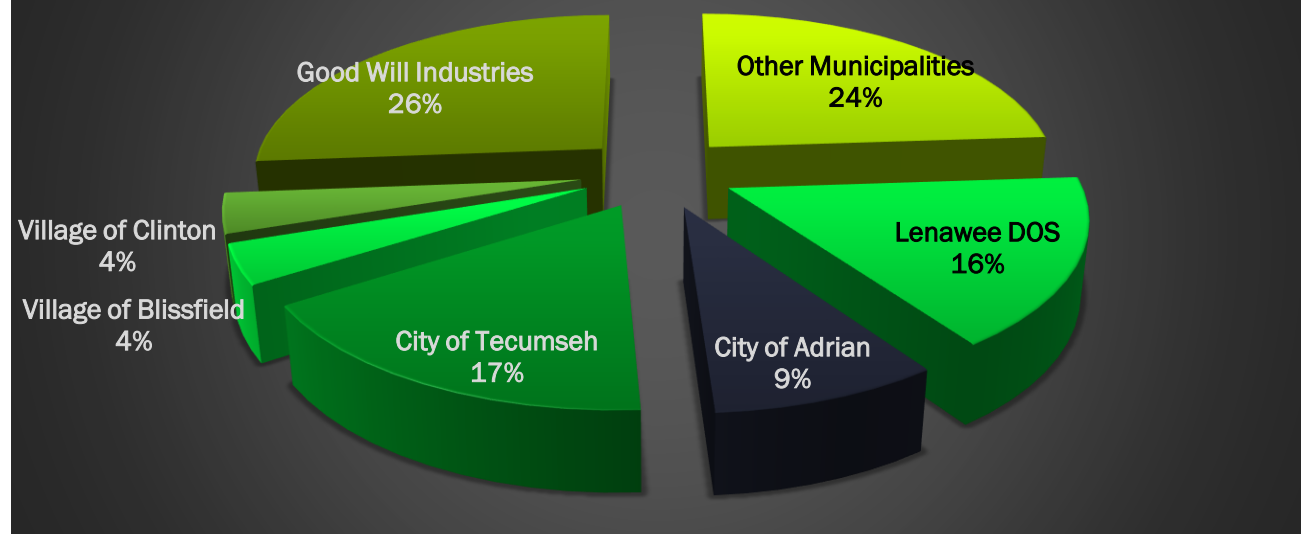
OTHER includes county-wide collections reported by haulers

Goodwill Industries reported 518,000 lbs. of cardboard in 2020 vs. 254,000 lbs. in 2019; 171,720 lbs. of paper; 415,000 lbs. of books; 228,000 lbs. of metal; and 73,800 lbs. of e-waste. This totals 703.26 tons of recyclables.

Goodwill's significant increase in cardboard recycling is partially attributed to Lenawee County DOS redirecting residents to take cardboard boxes to Goodwill for recycling in an attempt to avoid jammed compactors at the DOS.

There was a total of 2,679.84 tons of household recyclables reported.

2020 Household Recycling Tonnage



## Other Recycling

Scrap metals are reported from OMNI Source, R&M Recycling, and KECY Metal Tech on a regular basis. The total scrap metal from these three sources totaled **13,410.79 tons**.

There are local businesses and charitable organizations that collect recyclables but are not considered commercial haulers and therefore are not required to report monthly tonnage rates to the County.

Associated Charities, Salvation Army, Neighbors of Hope, Habitat for Humanity, Goodwill, and other organizations are all great sources for repurposing or recycling.

There are also other recycling opportunities offered through businesses such as Wholesale Battery, auto shops/ag stores, grocery stores, as well as, municipal composting sites.

Finally, there were no county-wide collection events held in 2020, which 2019 reports indicate the collections of

- 3.34 tons of metal
- .07 tons of freon
- .32 tons of styrofoam
- Fire extinguisher & gas cylinders,
- 4 gaylords packing materials
- Approximately 3,000 tires
- 26.7 tons Household Hazardous Waste

These are community-based events that could not be achieved without the support of local businesses, volunteers, and EGLE support.



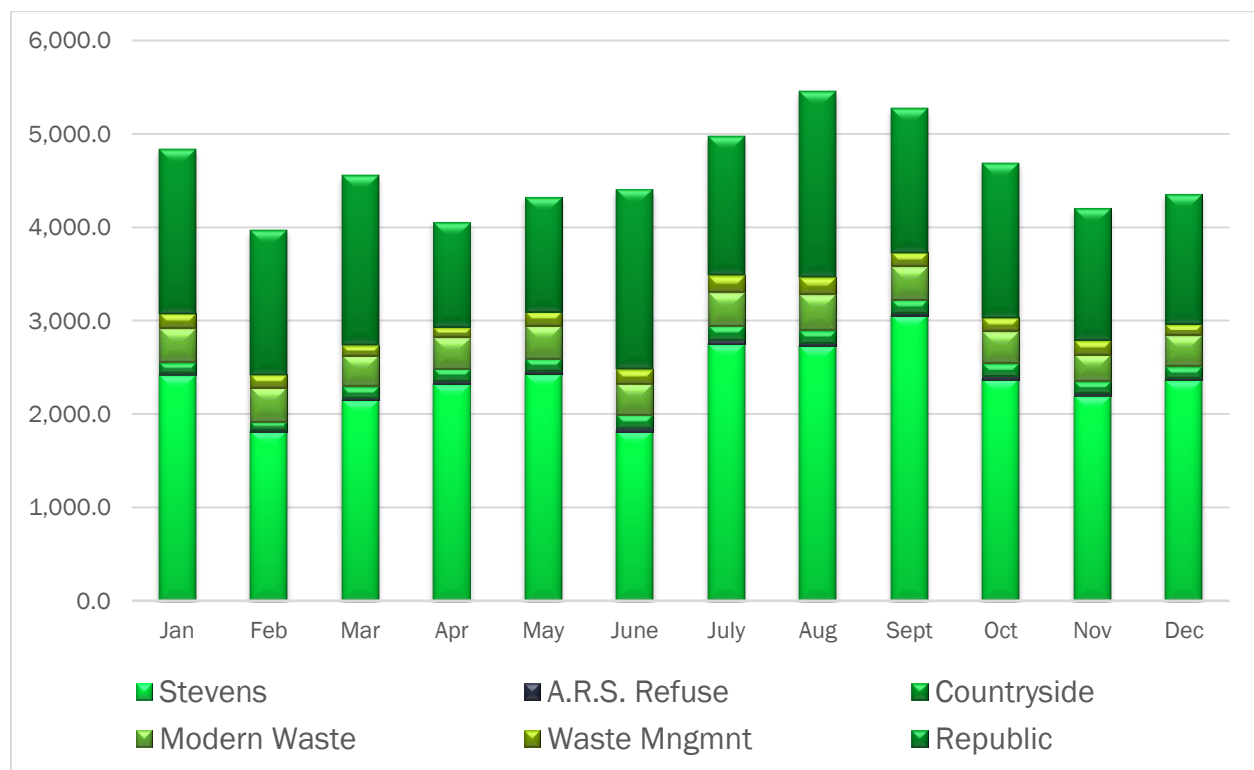
## Solid Waste Hauling

There is one landfill in Lenawee County, Adrian Landfill, owned by Republic Services and has been closed since 2013.

The Lenawee County Board of Commissioners find that import/export regulations and licensing of waste haulers provide a means by which sound data can be collected and waste haulers can be tracked in case of illegal disposal or dumping. The regulation of waste flow and hauler licensing are necessary for the County to meet its **Solid Waste Management Plan's** waste reduction goals and assure proper and safe waste disposal.

There are currently nine licensed commercial haulers in Lenawee County; six provide regular waste collection services to residents.

### Waste Hauler Tonnage Comparison by Company Generated in Lenawee County – Transported Out in 2020



## 2020 Budget

Account Number	Account Description	2019 Actual	2020 Amended Budget	2020 Actual	2021 Final Budget
REVENUES					
<b>Department: 525 - Solid Waste</b>					
485	Refuse Transport Licenses	900.00	1,100.00	900.00	1,100.00
540	State	2,064.00	0.00	0.00	0.00
642.650	Sales Materials	0.00	1,000.00	0.00	1,000.00
674	Contributions & Donations	9,113.00	2,500.00	0.00	2,500.00
699	Transfers In	30,000.00	0.00	0.00	0.00
699.100	Transfers In Appropriation	55,000.00	65,000.00	65,000.00	60,000.00
REVENUES Total		97,077.00	69,600.00	65,900.00	64,600.00
EXPENSES					
<i>Non-Personnel - Non-Personnel</i>					
727	Office Supplies	136.21	100.00	4.95	100.00
728	Postage	17.91	100.00	17.90	100.00
729	Public Education Material	756.88	1,000.00	0.00	1,000.00
743	Other Supplies	104.00	100.00	0.00	100.00
801	Professional & Contractual	7,564.00	2,000.00	0.00	2,000.00
808	Membership Dues	0.00	0.00	200.00	0.00
809	Service Contract	25,261.00	32,000.00	20,417.25	25,000.00
829	Insurance & Bonds	3,261.99	3,500.00	3,398.27	3,500.00
831	Recycling	45,976.50	24,900.00	36,839.87	26,900.00
843	Advertising & Publishing	4,623.96	2,000.00	409.00	2,000.00
846	Travel	0.00	200.00	0.00	200.00
848	Meals	258.92	200.00	0.00	200.00
850	Communications	1,467.02	1,200.00	1,505.50	1,200.00
900	Printing & Publishing	508.12	200.00	74.72	200.00
901	Copy Fees	98.15	200.00	117.10	200.00
920.300	Utilities Electric	2,119.42	1,400.00	1,882.11	1,400.00
931	Equipment Repair/Maint	3,388.06	500.00	3,079.88	500.00
940	Rent	500.00	0.00	0.00	0.00
955	Miscellaneous	958.35	0.00	0.00	0.00
EXPENSES Total		97,000.49	69,600.00	67,946.55	64,600.00
Fund REVENUE	Total: 232 - Solid Waste	97,077.00	69,600.00	65,900.00	64,600.00
Fund EXPENSE	Total: 232 - Solid Waste	97,000.49	69,600.00	67,946.55	64,600.00



## Goals

**Ordinance** – DOS recycling littering citation

**Website Updates**

**Implement a Capital Improvement Plan**

- Investigate Options for 4<sup>th</sup> Container
- Investigate Options for DOS Intercom System

**Volunteer sign up**

**Investigate / initiate recycling opportunities**

- Tire Collection event
- Promote/Sponsor Other Special Collections
- Boat shrink wrap recycling program
- Christmas light collection event
- Used cooking oil collection (after Thanksgiving)

**Investigate / implement / participate recycling education opportunities**

- 2021 County Fair
- Online programs / school-age focused
- Coordinate projects with art programs

**Support current community recycling collection programs**

- Goodwill Industries
- Habitat for Humanity
- GreenJak
- Neighbors of Hope