

# 2022 Houghton County Materials Management Data & Report



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On behalf of the Houghton County Materials Management Committee



## **Intent:**

The intent of this report is to capture all available data as accurately as possible to better understand the volume and flow of materials in the region and to aid in future planning efforts. As this information is compiled year after year increases or decreases in the volume and diversion of materials will be tracked.

## **Data Collection & Methodology:**

Data was collected directly from the government organizations and private businesses who work together to collect, haul, and process materials in the region. Thank you to all the individuals and organizations who contributed data to this project. Where specific data was not available estimations were included using best practices and methodology recommended by the federal Environmental Protection Agency (EPA) and Michigan's Department of Environment, Great Lakes and Energy (EGLE). This includes estimations for; the total number of bottles redeemed for recycling and the total amount of yard waste diverted from landfill disposal.

## **Data:**

This report categorizes data into the four categories listed below. Unless otherwise noted all data is reported in tons

- **Landfill:** typically referred to as “trash” or “garbage.” These materials are buried in the ground and are no longer able to be reused or recycled into new materials.
- **Single Stream Recycling:** are commonly recycled materials such as; plastic containers, metal cans, paper, cardboard etc. that are collected together and sorted in Marquette at the Recycle 906 Materials Recovery Facility (MRF). These materials are processed and used to manufacture new goods and materials.
- **Organics:** includes yard debris, wood, and food scraps. Organic materials can be broken down to generate solid compost/soils, liquid soil amendments and methane gas.
- **Hard to Recycle:** refers to recyclable materials that are not included in single stream recycling. These materials include; scrap metal, batteries, tires, and electronics among others. Like single stream recyclables these materials will be processed and used to manufacture new goods and materials. Bottles redeemed for deposit returns were included here because, like other hard to recycle materials, they are required to be dropped off a specific location.

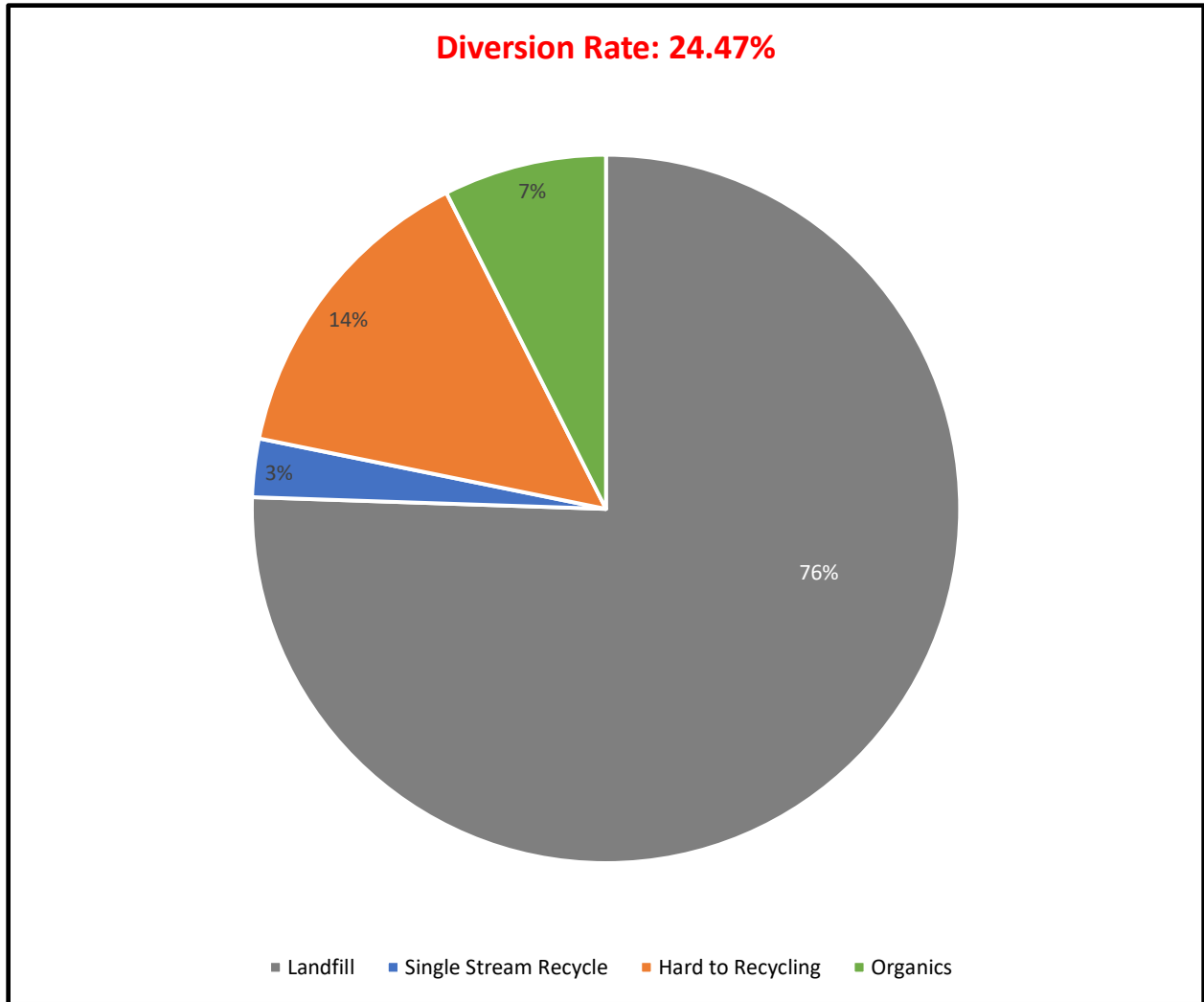
## 2022 Houghton + Keweenaw County Data:

Landfill		Single Stream Recycling	
City of Houghton	1090.27	City of Houghton	209.39
City of Hancock	672.6	City of Hancock	303.95
Houghton County Transfer Station - Residential	7796.53	Houghton County Transfer Station	51.6
Houghton County Transfer Station - C&D & Bulky	5370.26	Michigan Tech	119.36
Michigan Tech	757.68	Copper Harbor	24.43
Lake Linden Village	333.08	Lac Le Belle	2.1
Laurium Village	824.9	Eagle Harbor	20.86
South Range	350.63	Chassel Township	3.23
Torch Lake	1170.83	Aspirus Keweenaw-Laurium	3.04
Copper Harbor	140.78	County wide commercial + residential dumpster service	403.82
Lac Le Belle	77.49		
Eagle Harbor	117.09		
Chassel Township	85.01		
County wide commercial + residential dumpster service	11,324.80		
		Total pre MRF Contamination Rate	1141.78
MRF Contamination Rate (6.8%)	77.64104	MRF Contamination Rate (6.8%)	-77.64104
<b>2022 Total</b>	<b>30189.59104</b>	<b>2022 Total</b>	<b>1064.13896</b>

Organics		Hard to Recycle	
Michigan Tech	1.233	Bottle Deposits	570.609274
		Batteries	20.315
		E-waste	24.5245
		Tires	102.215
		Scrap metal	5007.4885
		Pallets	17.255
Total pre yard waste estimate	1.233		
Yard waste estimate	2973.86		
<b>2022 Total</b>	<b>2975.09249</b>	<b>2022 Total</b>	<b>5742.40727</b>

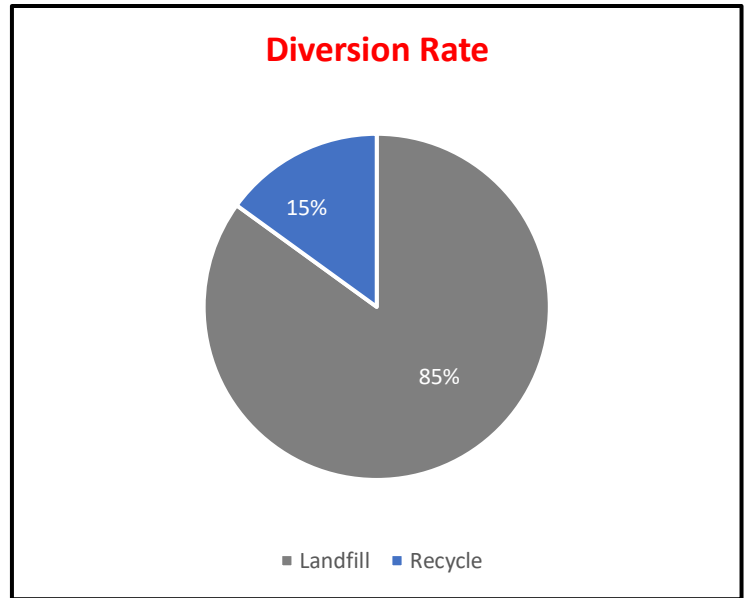
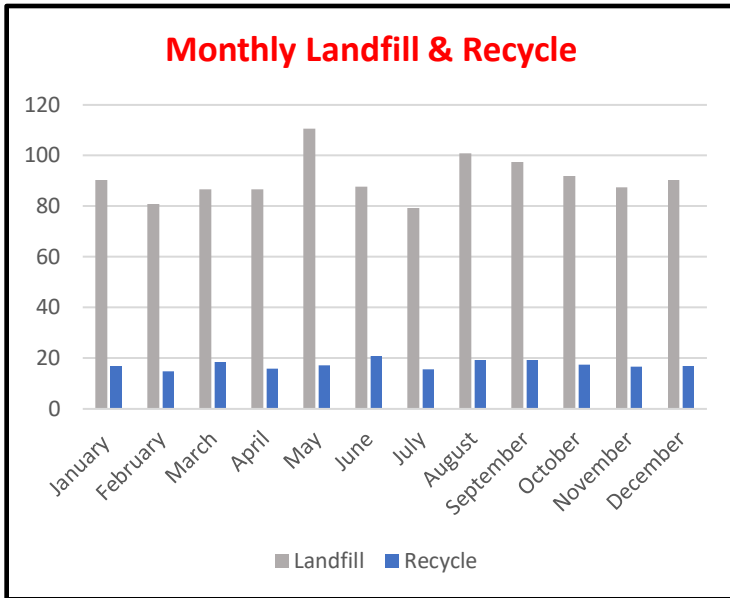
## 2022 Houghton + Keweenaw Diversion and Per Capita Data:



<b>Diversion Rate Totals</b>	
Landfill	30189.59
Single Stream Recycle	1064.14
Hard to Recycling	5742.41
Organics	2975.09
Total Recycling + Organics	9781.64
Total Waste	39971.23
<b>Diversion Rate</b>	<b>24.47%</b>

<b>Per Capita</b>	
Population (Includes Keweenaw)	39,420
Total pounds per year	79942459.54
Pounds per person	2027.9670
Pounds per person per day	5.5561
Landfill pounds per person	1531.6890
Landfill pounds per person per day	4.1964

## 2022 City of Houghton (City Program) Diversion and Per Capita Data:



### City Collection (all sectors)

	Landfill	Recycle
January	90.37	17.04
February	80.87	14.74
March	86.72	18.6
April	86.77	15.76
May	110.64	17.12
June	87.75	20.91
July	79.24	15.65
August	100.77	19.39
September	97.44	19.3
October	92.04	17.35
November	87.4	16.7
December	90.26	16.83
Pre contamination	<b>1090.27</b>	<b>209.39</b>
Contamination	14.23852	-14.23852
<b>2022 Totals:</b>	<b>1104.50852</b>	<b>195.15148</b>

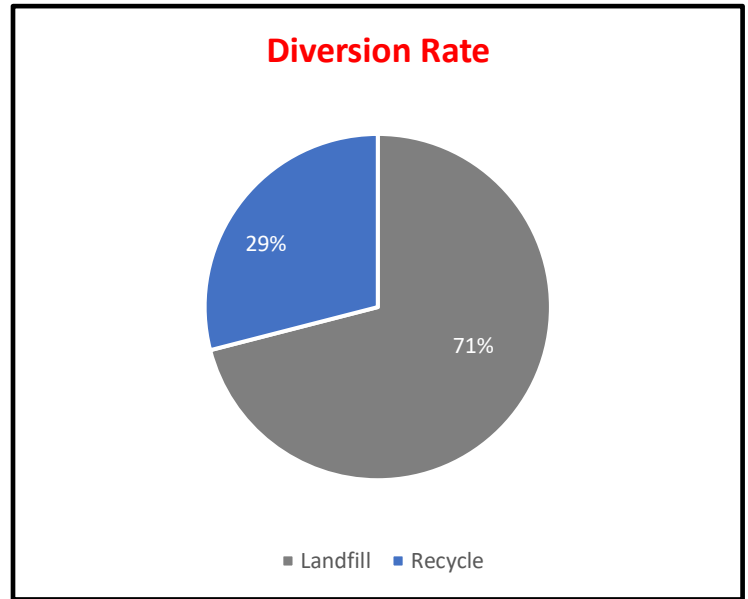
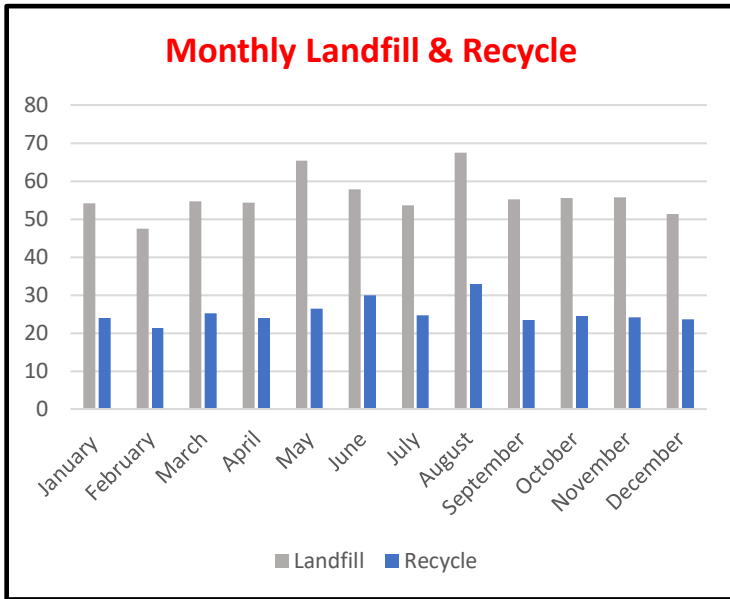
### Diversion Rate Totals

Landfill	1104.50852
Recycle	195.15148
Total Waste	1299.66
<b>Diversion Rate</b>	<b>15.02%</b>

### Per Capita

Population	7,622
Total pounds per year	2599320
Pounds per person	341.0286
Pounds per person per day	0.9343
Landfill pounds per person	289.8212
Landfill pounds per person per day	0.79403063

## 2022 City of Hancock (City Program) Diversion and Per Capita Data:



### City Collection (all sectors)

	Landfill	Recycle
January	54.21	24.03
February	47.49	21.27
March	54.66	25.22
April	54.23	23.95
May	65.42	26.33
June	57.77	30.01
July	53.62	24.6
August	67.4	32.83
September	55.2	23.38
October	55.49	24.56
November	55.77	24.14
December	51.34	23.63
Pre contamination	<b>672.6</b>	<b>303.95</b>
Contamination	20.6686	-20.6686
<b>2022 Totals:</b>	<b>693.2686</b>	<b>283.2814</b>

### Diversion Rate Totals

Landfill	693.2686
Recycle	283.2814
<b>Total Waste</b>	<b>976.55</b>
<b>Diversion Rate</b>	<b>29.01%</b>

### Per Capita

Population	4,498
Total pounds per year	1953100
Pounds per person	434.2152
Pounds per person per day	1.1896
Landfill pounds per person	308.2564
Landfill pounds per person per day	0.84453803



**2022 Townships and Villages without Curbside Recycling Data:**

<b>Lake Linden Village</b>		
	<b>Landfill</b>	<b>Recycle</b>
2022 Totals:	333.08	0.00

<b>South Range</b>		
	<b>Landfill</b>	<b>Recycle</b>
2022 Totals:	350.63	0.00

<b>Laurium Village</b>		
	<b>Landfill</b>	<b>Recycle</b>
2022 Totals:	824.9	0.00

<b>Torch Lake</b>		
	<b>Landfill</b>	<b>Recycle</b>
2022 Totals:	1170.83	0.00

**2022 Drop Off Site and Transfer Station Diversion Data:**

<b>Houghton County Transfer Station</b>			
	<b>Residential</b>	<b>C&amp;D/Bulky</b>	<b>Recycle</b>
January	711.11	105.67	2.48
February	597.07	129.63	2.41
March	777.33	168.28	4.08
April	813.35	406.46	3.78
May	1076.39	516.51	3.95
June	948.81	804.75	10.35
July	1020.75	622.01	3.94
August	1072.2	685.1	3.24
September	960.81	618.47	4.1
October	914.28	514.91	4.8
November	865.53	541.84	4.27
December	718.34	256.63	4.2
Pre contamination	<b>10475.97</b>	<b>5370.26</b>	<b>51.6</b>
Contamination	3.5088		-3.5088
2022 Totals:	<b>10479.4788</b>	<b>5370.26</b>	<b>48.0912</b>
<b>Total Landfill</b>	<b>15849.7388</b>		

<b>Aspirus Keweenaw-Laurium</b>		
<b>Month</b>	<b>Landfill</b>	<b>Recycle</b>
January	0	0
February	0	0
March	0	0
April	0	0
May	0	0
June	0	1.44
July	0	0
August	0	0.57
September	0	0
October	0	0
November	0	1.03
December	0	0
Pre contamination	<b>0</b>	<b>3.04</b>
Contamination	0.20672	-0.20672
2022 Totals:	0.20672	2.83328

## 2022 Drop Off Site and Transfer Station Diversion Data - Continued:

<b>Chassel Township</b>		
Month	Landfill	Recycle
January	21.76	0
February	18.94	0
March	20.95	0
April	23.36	0
May	0	0
June	0	0
July	0	0
August	0	1.07
September	0	0
October	0	0.87
November	0	0
December	0	1.29
Pre contamination	85.01	3.23
Contamination	0.21964	-0.21964
<b>2022 Totals:</b>	<b>85.22964</b>	<b>3.01036</b>

<b>Copper Harbor</b>		
Month	Landfill	Recycle
January	4.2	3.33
February	6.59	0
March	6.82	3.02
April	0	0
May	0	0
June	31.57	5.43
July	22.72	2.4
August	30.45	2.49
September	19.15	2.77
October	9.88	4.99
November	9.4	0
December	0	0
Pre contamination	<b>140.78</b>	<b>24.43</b>
Contamination	1.66124	-1.66124
<b>2022 Totals:</b>	<b>142.44124</b>	<b>22.76876</b>

<b>Eagle Harbor</b>		
Month	Landfill	Recycle
January	7.36	0
February	0	3.92
March	6.21	0
April	7.92	0
May	5.63	4.14
June	7.12	0
July	18.87	2.8
August	30.12	2.8
September	7.26	3.32
October	10.22	3.88
November	9.25	0
December	7.13	0
Pre contamination	117.09	20.86
Contamination	1.41848	-1.41848
<b>2022 Totals:</b>	<b>118.50848</b>	<b>19.44152</b>

<b>Lac La Belle</b>		
Month	Landfill	Recycle
January	4.61	0
February	11.26	0
March	9.84	0
April	0	0
May	0	0
June	6.04	0
July	5.69	0
August	18.61	0.88
September	8.59	1.22
October	8.34	0
November	4.51	0
December	0	0
Pre contamination	<b>77.49</b>	<b>2.1</b>
Contamination	0.1428	-0.1428
<b>2022 Totals:</b>	<b>77.6328</b>	<b>1.9572</b>