

Indiana Department of Environmental Management

2023 Recycling Index Report

Overview of 2023 data reported by municipal solid waste recyclers required to report recycling activities to meet the 50 percent recycling goal mandated by the Indiana legislature.

Office of Program Support
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
November 1, 2024

Executive Summary

The 2023 Recycling Index Report provides information collected from municipal solid waste (MSW) recyclers. The recyclers are legislatively required to report recycling activities under IC 13-20-25.

The Indiana Department of Environmental Management (IDEM) completes the report to fulfill its requirement to give an overview of 2023 state recycling data as well as evaluate Indiana's progress in achieving a 50% recycling goal for municipal waste.

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In 2023, the MSW Generation from all sectors (residential, industrial, commercial, institutional) dropped from 9.2 to 8.7 million tons with approximately 7.1 million tons for landfill disposal, 1.3 million tons for recycling end-use markets and 0.3 million tons for waste-to-energy. The recycling rate of MSW Generation was 15.2% down from last year's rate of 19.5%.

The state's 5-year averages for per Capita MSW Generation and Recycling Rate were 7.3 lbs./person/day and 19%, respectively. Yearly metrics are shown in Figure 1. Most of the MSW Generation is disposed in landfills as shown in Figure 2.

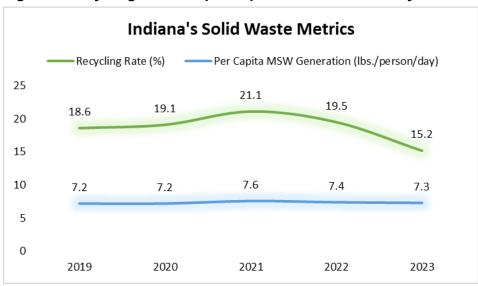
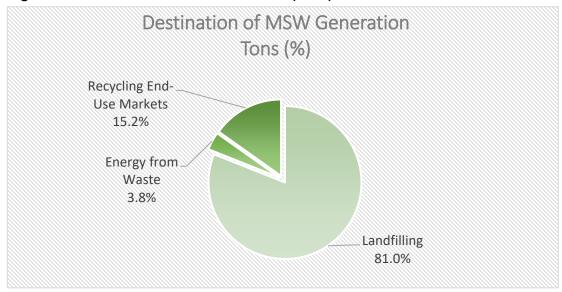


Figure 1: Recycling Rate and per Capita MSW Generation by Year

Figure 2: Destination of MSW Generation (2023)



A summary of Indiana's MSW Generation for 2023 from Indiana origins is given in TABLE 1 and broken out by material type from reported data that includes tonnage for final disposal and recycling end-use markets. It gives baseline data for determining the state recycling rate, which serves as a recycling index of materials management.

TABLE 1: Indiana MSW Generation Summary (2023)

	Total				
	Material	Tons	Tons	Percent	
Final	MSW to Landfill		7,100,218	81.0%	
Disposal	Energy from Waste (MSW)		332,909	3.8%	
Recycling	Recyclables (Commodity)		736,883	8.4%	
End-Use	Glass	62,205			
Markets	Metal Ferrous	4,514			
	Metal Non-Ferrous	18,851			
	Paper/Cardboard	539,801			
	Plastic	38,261			
	Single Stream/Mixed	73,251			
	Organics		524,157	6.0%	
	Wood Waste	270,071			
	Composting	254,086			
	Other Recycling		69,762	0.8%	
	Total		8,763,929	100.0%	

Indiana's recycling data for commodities (glass, metals, paper, plastics, single stream exports) are reported via recycling activity reports as submitted by 154 registered recycling facilities. The data are representative of the statewide infrastructure for what is collected and shipped through Indiana's regional MRFsheds, the areas around a material recovery facility (MRF) that funnels recyclables to a particular MRF.

Annual shipments of commodity recyclables, as shown in Figure 3, are from Indiana households and industrial, commercial, institutional (ICI) sectors. Shipments for end-use markets in 2023 were 736,883 tons. Most of the material was paper/cardboard (73%) followed by the sum amount of glass, plastics, and metals (17%). Single stream recyclables not sorted instate but sent to out-of-state MRFs were 10% of the total.

Single stream recycling generates almost 40% of the state's annual commodity recyclables such as collected through the MRFshed from curbside and drop-off programs for Indiana households.

Shipments in 2023 were 277,406 tons.

MRF Infrastructure for Recyclables

Indiana has seven MRFs that provide nearly all the in-state sorting of single stream recyclables.

Additionally, several other specialized MRFs take source-separated recyclables mostly for paper/cardboard (fiber) from the industrial, commercial, institutional (ICI) sectors.

Other supporting facilities include transfer stations and community recycling hubs.

More details about the MRFshed are given in the report by GT Environmental, "Indiana Recycling Infrastructure and Economic Study".

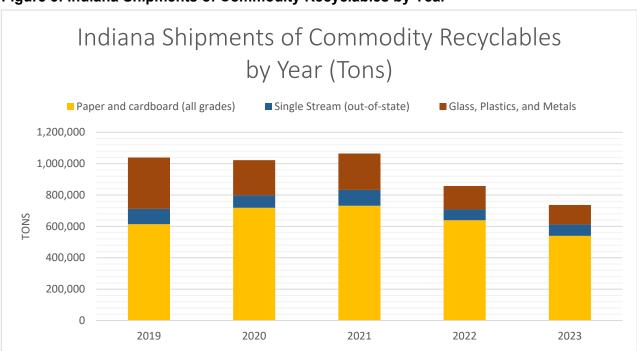


Figure 3: Indiana Shipments of Commodity Recyclables by Year

Shipments from in-state MRFs with single stream sorting were 211,178 tons, up 12% from last year as shown in Figure 4. The 5-year averages of single stream recyclables sorted by in-state MRFs and out-of-state MRFs were 207,766 tons per year and 72,646 tons per year, respectively.

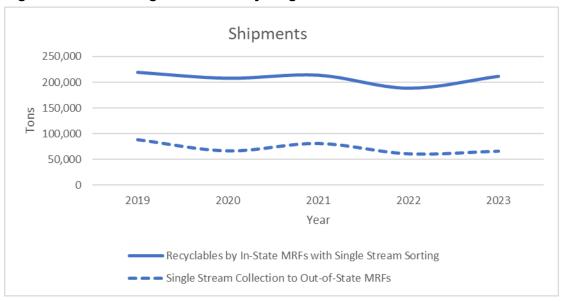


Figure 4: Indiana Single Stream Recycling

Source-separated recyclables generate about 60% of the state's commodity recyclables. They mainly originate from the ICI sectors. Shipments in 2023 were 459,477 tons. This includes shipments to end-use markets from specialized MRFs and recycling hubs as well as some direct haul shipments from retail distribution centers and manufacturers. The latter shipments can be arranged by brokers.

Indiana solid waste management districts (SWMDs) support the MRFshed. They may contract out for collection services or operate as a community recycling hub for receiving single stream and/or source-separated recyclables from drop-off, curbside, and/or commercial accounts. Route collection for drop-off and curbside services may also be offered. Other services may include collection of HHW and e-waste. Recycling shipments (not including compost and e-waste) in 2023 were 102,150 tons.

Indiana's recycling stream also involves organics and other materials. This includes wood waste, composting, food waste, e-waste, household hazardous waste (HHW), as well as recycling of emerging waste. All have unique infrastructure requirements.

Recycling rate measurement and results from recycling activity reports are further discussed in the report. This report is available at: IDEM: Recycle Indiana: Recycling Activity Reporting.

Wood Waste and Composting

For 2023, 524,157 tons were reported for organics recycling mainly as mulch, animal bedding, and compost.

Indiana has 115 registered compost facilities as well as wood grinding facilities for mulch.

Recycling Goal

According to **IC 13-20-25-1 State Recycling Goal**, which was passed by legislation (HEA 1183) in 2014, the goal of the state is to recycle at least fifty percent of its municipal waste. Per definition, the MSW originates from the operation of residential, municipal, commercial, or industrial establishments and community activities in the state.

IC 13-11-2-133 states:

"...municipal waste means any garbage, refuse, industrial lunchroom or office waste, and other similar material resulting from the operation of residential, municipal, commercial, or institutional establishments and community activities."

A recycling rate can be calculated to determine how Indiana is meeting its recycling goal by estimating the overall MSW generated against the materials reported as recyclable. The measurement standard established by the U.S. Environmental Protection Agency (U.S. EPA) is:

MSW Generation

is the sum of tonnage amounts for disposal and recycling end-use markets.

Solid waste metrics for the state are impacted by activities in the residential sector as well as the ICI sectors. Typically, about 40 to 50 percent of the MSW generation comes from the latter sectors.

Waste characterization studies can provide more insight into the MSW composition, especially for the residential sector.

Recycling Rate (%) = MSW Recovered for Recycling and Composting (tons) / MSW Generation (tons) x 100

For this report, the term "Recycling and Composting" refers to materials/feedstocks for "Recycling End-Use Markets," which includes commodity recyclables (glass, metals, paper, plastics), organics (wood waste and composting), and other materials from MSW. Having such a broad measurement means that we must have different types of infrastructure to be able to successfully collect and process all material. By monitoring how much we process annually, we can understand where our infrastructure needs to be improved to achieve a 50% recycling goal.

Materials not part of the MSW definition are excluded from the recycling rate measurement and can be evaluated by other materials management metrics. They include metals from construction and demolition (C&D) activities as well as concrete and asphalt, autobody, coal ash, foundry sand, and alternate daily cover.

¹ Standardized definitions for determining a recycling rate are described in the U.S. EPA publication, "<u>Measuring Recycling: A Guide for State and Local Governments</u>. Also, EPA's most recent report, "<u>Advancing Sustainable Materials Management: 2018 Fact Sheet,"</u> gives national statistics for MSW generation, recycling, and disposal. EPA's next, "Facts and Figures," report that includes an updated recycling methodology will be released in 2025.

Simplified Recycling Rate

Commodity recyclables (glass, metals, paper & cardboard, plastics) are typical of packaging materials such as reported in Re-TRAC, IDEM Solid Waste and Recycling Data Reporting program and defined by EPA at Containers and Packaging: Product-Specific Data | US EPA. A simplified recycling rate for commodities is material specific and decoupled from the MSW Generation baseline. References include:

- Studies by The Recycling Partnership (TRP) estimate the average single-family household generates about 838 lbs./year of PPP (packaging and printed paper) recyclables including film and flexible plastics. This represents what is available for recycling from the residential sector of a single-family household at a 100% capture ratio. However, the actual capture rate of recyclables per household is less and depends upon the locality, materials collected, type of collection (such as 96-gal carts vs drop-off), and education & outreach. According to the 2024 State of Recycling Report, the overall estimated residential recycling rate for PPP recyclables is 21% for the U.S. and 17% for Indiana.
- Eunomia's report in partnership with the Ball Corporation, "The 50 States of Recycling," December 2023, gives a state-by-state assessment of US packaging recycling rates. The recycling rate is the tons of recycling materials/feedstocks used by processors divided by the amount of material generated. They use a robust methodology that normalizes the per capita tonnage generation (recycling and disposal) from packaging material processors and a bottom-up approach with state data for recycling tonnage that accounts for contamination, sorting losses, and processing losses. In 2021, Indiana's estimated recycling rate for packaging materials was 24% without FFP (fiber and flexible plastics) and 37% with FFP. Most of the tonnage of packaging materials is from FFP, in which a large amount comes from the commercial sector.

Reporting Method/Data Collection

The solid waste and recycling infrastructure covers activities by private waste management companies, solid waste management districts (SWMDs), along with cities and towns to service drop-offs, curbside, and commercial accounts. On-going operations include 27 MSW landfills, 65 transfer stations, material recovery facilities, compost facilities and a waste-to-energy plant. In addition, numerous recycling hubs provide hub and spoke services. More details about the infrastructure with a list of Indiana landfills, MRFs, and community recycling hubs are given in the report by GT Environmental, "Indiana Recycling Infrastructure and Economic Study."

Indiana tracks the amount of waste and recycling in the state. Mandatory reporting by permitted solid waste facilities in the state, including MSW landfills, transfer stations, and waste-to-energy facilities, began in 1990. The reporting includes the origin (state and county), waste type (MSW, C&D, foundry waste, coal ash, flue gas desulfurization waste, and others), and amount of solid waste received. In addition, landfills report the amount of waste received for reuse such as alternate daily cover and

transfer stations report the amount of solid waste sent to other states. Mandatory reporting of recyclables from recycler facilities began in 2014.

Reports are submitted online through Re-TRAC, IDEM Solid Waste and Recycling Data Reporting Program. This gives a consistent basis to evaluate the solid waste and recycling infrastructure in the state. They include:

- 1. Solid Waste Land Disposal Facility Report
- 2. Solid Waste Processing Facility Report
- 3. Recycling Activity Report
- 4. Registered Composting Facility Report
- 5. Electronics Recycling Annual Report and E-cycle Collector/Recycler Registration (E-waste)
- 6. Annual Tire Report.

Tonnage estimates from Indiana origins are given in TABLE 2 and Figure 5 with supporting data references for each of the waste management classifications. Recycling end-use markets are the sum of commodities, organics, and other recyclables.

TABLE 2: Indiana MSW Generation and Classification Data (2023)

Classification	Tons	Data Reference
Disposal through Landfilling (in-state)	6,626,818	The data are aggregated from Solid Waste Land Disposal Facility Reports. This is the total amount of MSW from Indiana origins received at in-state landfills for disposal. It does not include non-hazardous industrial process wastes and construction and demolition (C&D) debris.
Disposal through Landfilling (out-of-state)	473,400	This amount was estimated from Indiana exports of MSW as reported by neighboring states. Other supporting data included the Solid Waste Processing Facility Report which consists of waste sent for disposal at out-of-state landfills from Indiana transfer stations.
Energy from Waste	332,909	The data are aggregated from Solid Waste Processing Facility Reports. This is the total amount of MSW from Indiana origins received at the Indianapolis Resource Recovery facility for disposal. It does not include non-hazardous industrial process wastes and C&D debris.
Commodities	736,883	The data are aggregated from Recycling Activity Reports for commodity recyclables. This is the total amount of recyclables as reported for end-use markets by shipments to (a) in-state manufacturers and users, (b) out-of-state destinations, and (c) arranged through brokers.
Organics	524,157	The data are aggregated from Registered Composting Facility Reports and Recycling Activity Reports. This is the total estimated amount of waste received at Indiana compost facilities including yard trimmings, food waste, and other organic materials as well as wood waste processed into mulch and animal bedding by recycler facilities.
Other Recyclables	69,762	The data are aggregated from Electronics Recycling Annual Reports as well as miscellaneous materials reported on Recycling Activity Reports.
Total	8,763,929	





The standard recycling rate calculation for MSW Generation is made accordingly, and results are shown below for 2023.

The 2023 Indiana Recycling Rate then is calculated as:

$$(1,330,802 tons / 8,763,929 tons) x$$

 $100 = 15.2$

Database references of reported data are listed at <u>IDEM: Recycle Indiana: Recycling Activity Reporting</u>. More detail about recycling activity reports for requirements, results, and county shipments are explained in Appendices A, B, and C respectively. Compost and E-waste information are available at <u>IDEM: Managing Waste: Yard Waste and Composting Facilities</u>, and <u>IDEM: Recycle Indiana: Indiana E-Cycle</u>, respectively.

MSW Generation is also affected by economic activity and population growth. Demographic info is given below.

Indiana	2021	2022	2023	
Population	6,805,985	6,833,037	6,862,199	
Per Capita Disposal (lbs.)	2,184	2,176	2,166	
Per Capita Diversion (lbs.)	583	525	388	
Per Capita Waste Generation (lbs./person/year)	2,766	2,701	2,554	

Discussion of Recycling Rate

Indiana's 2023 recycling rate was 15.2%, down from last year at 19.5%. MSW Generation was 8.8 million tons of materials from in-state origins. MSW final disposal was 6.6 million tons at Indiana landfills and 0.8 million tons for waste-to-energy and out-of-state landfills. Materials/feedstocks for recycling end-use markets were 1.3 million tons.

Landfill disposal is a major part of the MSW generation and impacts the recycling rate. Reported tons of MSW for disposal are "as received" from all sectors (residential and ICI). The tonnage may be inflated since what gets reported as MSW may contain a small percentage of non-MSW materials such as mixed C&D. This is typical for waste characterization reports of MSW and likely decreases the recycling rate as calculated. Overall, the per Capita disposal was slightly lower than last year.

The recycling stream is infrastructure specific for the following categories and involves data from multiple sources.

- Commodity recyclables (736,883 tons) consist of glass, metals, paper & cardboard (fiber), and plastics to be used as feedstock for recycling end-use markets. Also, it includes single stream recyclables shipped to out-of-state MRFs for sorting. Reported tonnages are from sourceseparated and single stream materials from all sectors.
- Organics wood waste and compost (524,157 tons) consist of material pathways for animal bedding, mulch, compost, and anaerobic digestion. Sources includes wood waste and food waste.
- Other materials (69,762 tons) consist of miscellaneous recyclables including HHW, ewaste, and other materials.

Appendix C

Data from 2023 Recycling Activity Reports are given. Shipments of recyclables are listed by county origin of reporting facilities and destination categories.

The reporting includes shipments sent to recycler facilities. This is another metric that helps discern local collection efforts from SWMDs, and cities & towns, especially for shipments of curbside recyclables to MRFs.

However, recycling shipments sent to in-state recycler facilities are not counted in recycling rate to avoid double counting in enduse markets.

Looking at the commodity recyclables in Appendix B, TABLE 3 for 2023, reported shipments to end-use markets were down 14% from last year, mainly from less paper and cardboard from source-separated materials in the ICI sectors. Ferrous metal shipments were down but would be higher if non-MRF facilities submitted reports. Metal salvage yards are exempted from mandatory reporting of recycled metals from the MSW stream.

Most shipments of Indiana's commodity recyclables to recycling end-use markets within the MRFshed are reported as required for recycler facilities. Direct shipments of recyclables by

generators such as from manufacturing facilities and/or distribution centers to recycling end-use markets are not required to be reported unless arranged through a broker. The latter activities are likely underreported. This includes recyclables collected on a corporate basis from Indiana big box retail stores and consolidated for shipment to end-use markets.

Organic tonnages for wood waste and composting were down from last year, as aggregated from recycling activity reports and compost facility reports. This does not include reporting of organics under land application/marketing & distribution permits. The latter reporting is separate from the IDEM Re-TRAC reporting system. Traditional reporting will need to be further evaluated to better measure food waste diversion.

Conclusion

IDEM compiles reporting data for recycling and waste materials management. The reporting helps to determine long-term infrastructure needs for sustainable materials management especially for the MRFshed. The information gives a conservative account and as the agency continues to better understand the recycling community, the numbers should not only increase but help recognize recycling efforts throughout the state.

Interim goals for Indiana should be infrastructure specific such as increasing commodity recyclables from households. Impact areas are further highlighted below.

Impact Area	Comments
Curbside/drop-offs Collection from Residential Sector and MRF Expansion	Funding, staffing, and resources are needed to implement projects. This can help increase the local supply of commodity recyclables for recycling end-use markets. Indiana is a leading manufacturing state that uses recyclables.
Sustainability Programs	The ICI sectors may generate 50% or more of the MSW. Indiana has a higher manufacturing output than most states. Opportunities include zerowaste landfill initiatives.
Organics (wood waste, food waste, other)	This includes tracking food waste and expanding efforts to divert organics from landfill disposal. Recycling pathways include anaerobic digestion, and composting. The IDEM, <i>Indiana Priority Action Plan</i> supports the reduction of organics in landfills.

The circular economy has become a driving force especially with today's focus on sustainability. Recycling is a crucial portion of the circular economy because it provides for local investments, avoids unwanted waste accumulation in the environment, creates jobs, conserves resources, and supplies materials/feedstocks for economic growth.

Appendix A: Recycling Activity Report Requirements

Recycling activities are required to be reported to IDEM during a calendar year (January 1 – December 31), either on an annual or quarterly basis. Recyclers must submit reports for each of their facilities that conduct recycling activities, whereas:

Recycling (IC 13-20-25-6) is the recovery of recyclable materials from the MSW stream, such as from garbage, refuse, industrial lunchroom waste, office waste, or other similar material, for use or reuse, conversion into raw materials, or for use in the production of new products.

A **recycler** is defined as the owner or operator of a facility where recycling may occur, including a landfill, an incinerator, a material recovery facility (MRF), or a solid waste management district. A recycler is also defined as a recyclable materials broker who arranges the collection, transportation, delivery, recycling, or reuse of recyclable materials.

Persons managing wastes not defined as municipal, such as those involved in automotive scrap metal processing, automotive salvage, C&D debris, or industrial wastes, are not required to report recycling of these wastes. However, they may do so voluntarily. IDEM compiles the data for all reported materials but does not count recycling of non-MSW materials towards the 50 percent recycling goal.

The recycler definition for reporting does not include manufacturers/end users that use recyclables as a feedstock to produce basic products such as glass container mills, fiberglass facilities, iron, and

Recyclers must report, in tons, the types of recyclable material from Indiana origins that it ships to in-state recycling facilities, in-state manufacturers/end users, or out-of-state destinations. IC 13-20-25 requires reporting the following types of recyclable materials:

- 1) Glass
- 2) Metal, including white goods (ferrous)
- 3) Metal (non-ferrous)
- 4) Paper and cardboard (all grades)
- 5) Plastic and plastic products
- 6) Single stream recyclable materials, and
- 7) Any other distinct type of recyclable material not specified in 1) through 6).

steel foundries, non-ferrous foundries, mini-steel mills, paper mills, and plastic processors for flake and pellets.

Generally, recyclables are collected and routed through MRFs on a regional basis with the exception of wood waste and organics that require material-specific processing. They originate from the residential sector and the industrial, commercial, institutional (ICI) sectors. The latter group may generate a large supply of recyclables as reported by the MRFs, especially with Indiana's strong manufacturing economy. However, some sources such as big-box retailers may directly ship their recyclables to end-users and not use MRFs, in which case the reporting is voluntary and may not be submitted.

Recyclers submit a recycling activity report through IDEM's Solid Waste and Recycling Data Reporting Program, a web-based materials management system for aggregating data. The submitted information includes the following.

- 1) Name and location of the recycler's establishment, and facility registration type. This includes landfill, transfer station, waste-to-energy plant, composting facility, processing facility, waste tire facility or recycler facility. The latter type is for facilities not included in the other categories.
- 2) Principal business activity at recycler location
- 3) Type of operation
- 4) Type of materials including glass, metal, paper, plastic, single stream (mixed), and other
- 5) Quantity, in tons, for each type of recyclable that was transported from the reporter's establishment, or in the case of a broker, the quantity of each type of material for which they arranged transportation or delivery, and where the material was transported, which would include other in-state recycler facilities, persons in Indiana that use the raw materials or reuse the product without further recycling, and out-of-state locations. The destination categories are defined as:
 - a. Recycler Facility This refers to a recycling facility such as an MRF with intermediate consolidating, sorting, shredding, or baling operations. The reporting included the location of the receiving recycler facility (name/city/state).
 - b. Broker This refers to shipments transported through a broker to final destinations. The reporting included the principal address of the broker (name/city/state).
 - c. Manufacturer/end user This refers to a production facility of basic products that used the recyclables as a raw material without further offsite recycling. Examples included glass container mills, foundries, steel mini mills, smelting and refining operations, plastic processors for flake and pellets, and pulp and paper mills. Reporting included the location of the receiving manufacturer/end user (state or foreign country).

The geographic grouping of communities for collection and processing of commodity recyclables through the same MRF is known as the MRFshed. More details about the Indiana MRF infrastructure are given in the report by GT Environmental, "Indiana Recycling Infrastructure and Economic Study." A list of MRF facilities is given in Table 1C-1 2019 MRF Tonnage. Also, Table 1C-3 2019 Community Recycling Hub Tonnage gives a listing of community recycling hubs such as operated by Solid Waste Management Districts.

Appendix B: Recycling Activity Report Results

The following section only covers the recycling data from Recycling Activity Reports. They do not include recycling data from E-waste reports and compost reports.

IDEM received recycling activity reports from 154 registered recycler facilities for shipments of recyclables from MSW in 2023. The facilities are grouped by principal business activity, as shown in TABLE 1.

TABLE 1: Recycling Activity Reports by Principal Business Activity

Principal Business Activity	Number of Facilities Submitting Reports
Solid Waste Management Company	45
Solid Waste Management District	64
Government	12
Business	24
Not-for-Profit	6
Brokers	2
College/University	1
Total	154

The reporting tracks recycling shipments by material type, amount, and destination category (recycler facility, broker arranged, and manufacturer/end-user). The data are further categorized for recycling rate measurement by shipments to end-use markets (broker arranged, in-state manufacturer/end-user, and out-of-state destinations) as shown in TABLE 2. In 2023, the total shipments of MSW recyclables for end-use markets were **1,048,860 tons**.

TABLE 2: Shipments of Recyclables by Material Type and Destination (2023)

Abec 2. Onlyments of Necyclables by Material Type and Destination (2023)								
	SHIPMENTS OF RECYCLABLES FOR END-USE MARKETS							
MATERIAL TYPE	Broker Arranged Shipments (Tons)	In-State Manufacturers/ End Users (Tons)	Out-of-State Destinations* (Tons)	Total (Tons)				
Glass	8,828	21,952	31,425	62,205				
Metal, including white goods (ferrous)	2,040	953	1,521	4,514				
Metal (non-ferrous)	768	138	17,945	18,851				
Paper and cardboard (all grades)	139,063	116,511	284,227	539,801				
Plastic	10,840	8,944	18,477	38,261				
Single Stream/Mixed	7,023	0	66,228	73,251				
Wood Waste	428	212,019	57,624	270,071				
Other	2,517	651	38,738	41,906				
Total	171,507	361,168	516,185	1,048,860				

^{*} Shipments for out-of-state destinations to recycler facilities and/or manufacturers/end users.

Three types of destinations are listed for end-use markets. Brokers often buy and sell recyclable materials then arrange to have them shipped from one location to another by haulers or processors. Recycling shipments are also tracked for supplying in-state manufacturers/end users and out-of-state destinations.

Shipments for commodity recyclables by material type (%) in 2023 are shown in Figure 1. Also, total annual shipments by material type and year are given in TABLE 3.

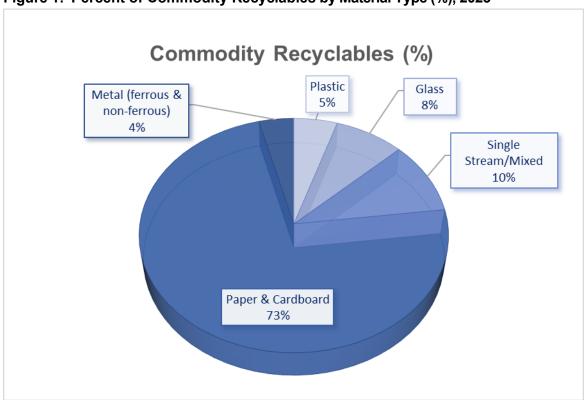


Figure 1: Percent of Commodity Recyclables by Material Type (%), 2023

TABLE 3: Total Shipments of Recyclables by Material Type and Year, Tons

Material Type*	2019	2020	2021	2022	2023
Glass	267,807	150,025	140,007	63,716	62,205
Metal, including white goods (ferrous)	18,624	27,722	25,295	23,806	4,514
Metal (non-ferrous)	2,675	4,133	21,754	15,418	18,851
Paper and cardboard (all grades)	614,283	718,912	731,358	639,081	539,801
Plastic and plastic products	38,169	40,540	44,908	46,385	38,261
Single Stream/Mixed	97,605	78,823	101,221	69,255	73,251
Wood Waste	183,794	250,445	480,195	537,738	270,071
Other	6,616	34,765	38,878	65,501	41,906
Total	1,229,224	1,305,365	1,583,616	1,460,900	1,048,860

^{*} Commodity recyclables are shaded.

Appendix C.
SHIPMENTS OF MSW RECYCLABLES GENERATED FROM EACH COUNTY (2023) as Reported by Recycling Activity Reports

County Location of Reporting Facilities Facilities Facilities Facilities Facilities Facilities Facilities Facilities Facilities (Tons) (Tons) (Tons) (Tons)						
Allen 4 760 6,992 25,442 38,598 Bartholomew 1 1,625 5 12 141 Benton 1 - - - 196 Blackford - - - - - Boone 4 7,895 - 37,782 6,462 Brown Carowl 1 305 - - 465 Carowl - - 465 Carowl -	Location of Reporting		to Indiana Recycler Facilities	through Brokers	Indiana Manufacturers / End Users	Out-of-State Destinations
Bartholomew 1 1,625 5 12 141 Benton 1 - - - 196 Blackford - - - - - Boone 4 7,895 - 37,782 6,462 Brown 1 305 - - 465 Carroll 1 65 - - - - Cass 1 421 - <	Adams	1	394	-		-
Benton 1 - - - 196 Blackford -	Allen	4	760	6,992	25,442	38,598
Blackford - - - - - - - - -	Bartholomew	1	1,625	5	12	141
Boone 4 7,895 - 37,782 6,462 Brown 1 305 - - 465 Carroll 1 65 - - - Cass 1 421 - - - Clark 1 - - - - - - Clark 1 -<	Benton	1	-	-	-	196
Brown 1 305 - - 465 Carroll 1 65 -	Blackford	-	-	-	-	-
Carroll 1 65 - - - Cass 1 421 - - - Clark 1 - - - - - Clay -	Boone	4	7,895	-	37,782	6,462
Cass 1 421 - - - 2,324 Clay - <	Brown	1	305	-	-	465
Clark 1 - - - 2,324 Clay - - - - - Clinton 1 18 - - - Crawford 1 18 - - - Daviess 1 101 - - - Dearborn 1 37 - - 1,302 Decatur 2 705 - 358 606 DeKalb 1 5 - - - - Delaware 1 1,224 - 4,572 322 Dubois 3 3,880 - - - - Elkhart 3 - 89,508 64,383 31,740 Fayette - - - - - - Floyd 2 - - - - - - Floyd 2 - - <th< td=""><td>Carroll</td><td>1</td><td>65</td><td>-</td><td>-</td><td>-</td></th<>	Carroll	1	65	-	-	-
Clay - - - - - - - Colliston 1 188 -	Cass	1	421	-	-	-
Clinton 1 18 - - - Crawford 1 13 - - 293 Daviess 1 101 - - - Dearborn 1 37 - - - Decatur 2 705 - 358 606 DeKalb 1 5 - - - Delaware 1 1,224 - 4,572 322 Dubois 3 3,880 - - 5 Elkhart 3 - 89,508 64,383 31,740 Fayette - - - - - Elkhart 3 - 89,508 64,383 31,740 Fayette - - - - - Floyd 2 - - - - Fayette - - - - - Floyd <t< td=""><td>Clark</td><td>1</td><td>-</td><td>-</td><td>-</td><td>2,324</td></t<>	Clark	1	-	-	-	2,324
Crawford 1 13 - - 293 Daviess 1 101 - - - Dearborn 1 37 - - 1,302 Decatur 2 705 - 358 606 DeKalb 1 5 - - - - Delaware 1 1,224 - 4,572 322 Dubois 3 3,880 - - 5 Elkhart 3 - - 5 Elkhart 3 - - 5 - - - 5 Elkhart 3 - 89,508 64,383 31,740 - <t< td=""><td>Clay</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></t<>	Clay	-	-	-	-	-
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Decatur 2 705 - 358 606 DeKalb 1 5 - - - Delaware 1 1,224 - 4,572 322 Dubois 3 3,880 - - 5 Elkhart 3 - 89,508 64,383 31,740 Fayette - - - - - Floyd 2 - - - - - Floyd 2 -	Dearborn	1	37	-	-	1,302
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Johnson	1	188	-	-	-
Knox	3	1,057	-	-	1
Kosciusko	2	577	12	-	-
LaGrange	-	-	-	-	-
Lake	9	21,815	9,547	20,120	31,520
LaPorte	2	840	-	-	6,975
Lawrence	1	773	80	-	-
Madison	2	8,795	189	-	-
Marion	18	30,762	-	79,554	141,329
Marshall	1	93	175	-	14
Martin	1	-	1,236	-	-
Miami	1	779	-	-	4
Monroe	3	7,604	-	-	858
Montgomery	1	10,189	-	-	2,046
Morgan	1	48	26	-	155
Newton	1	192	-	-	-
Noble	1	4	-	-	-
Ohio	-	-	-	-	-
Orange	1	232	_	_	_
Owen	_	_	_	_	_
Parke	-	_	_	_	_
Perry	_	_	_	_	_
Pike	1	-	205	-	_
Porter	5	886	28	5,920	16,907
Posey	1	77	631	10	104
Pulaski	1	467	-	-	18
Putnam	2	607	_	_	-
Randolph	1	1,067	_	<u>-</u>	<u>-</u>
Ripley	<u>'</u>	-	_	<u>_</u>	<u>_</u>
Rush	1	77	_	<u>-</u>	<u>-</u>
Scott	<u>'</u>		_	<u>_</u>	<u>_</u>
Shelby	2	3,275	4,630		
Spencer	1	132	1,130		142
St. Joseph	2	11,264	3,412		4
Starke	1	412	5,412	-	4
Steuben	1	4,118	_		9
Sullivan	1	62	-	-	37
		02	-	-	31
Switzerland	4	14,241	-	-	-
Tippecanoe			-	-	-
Tipton	1	610	-	-	-
Union	-	165	17 774	- 0.4	2.640
Vanderburgh	3	165 3	17,774	84	3,648
Vermillion	1		- 0.000	-	
Vigo	4	1,606	2,930	-	-
Wabash	2	4,617	-	-	42
Warren	1	15	-	-	532
Warrick	1	571	-	-	722
Washington	1	395	-	-	7
Wayne	3	490	411	-	279
Wells	1	113	-	-	176

White	1	51	137	143	975
Whitley	1	1,671	-	=	-
Other	5	49,665	24,626	50,411	196,439
Grand Total	154	208,259	171,507	361,168	516,185

Note: The data are aggregated from Re-TRAC, 2023 recycling activity reports for recyclables from municipal solid waste (MSW) by county location of each reporting facility. The number of recyclables is blank if the county was part of a multiple solid waste management district, had no reporting facilities, or submitted no data. The term 'Other' includes recycler facility accounts such as big-box retail stores and brokers that report corporate tonnages from Indiana locations.