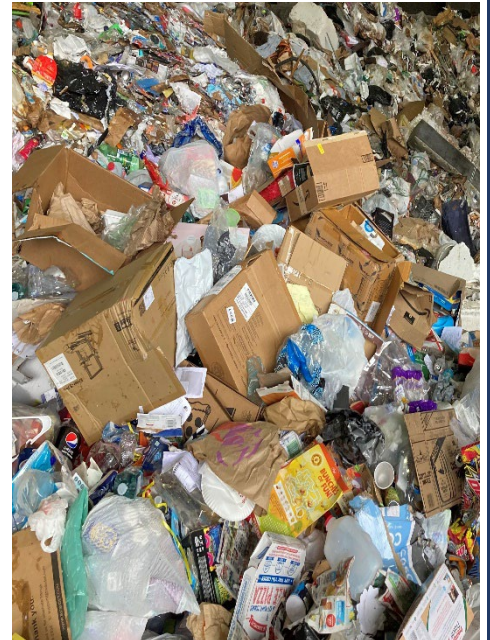




2022 Solid Waste & Recycling Annual Report



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INTRODUCTION

During recent years there have been challenges to the recycling system with supply chain issues, changing markets, and labor shortages. At the same time, Illinois has seen increasing interest in recycling with legislation being introduced to improve recycling access, clarify labeling to avoid confusion for residents, and a focus on composting to close the loop on food waste. As the US EPA sets their national recycling goal of 50% by 2030, it will take a combination of local, state, and national efforts to achieve it.

WASTE INDUSTRY IN 2022

Nationally

In 2022, the solid waste industry continued to adapt to the ever-evolving realities of inflation, labor shortages, supply chain issues, and more. Some of these issues are apparent in a commodity market that is seeing corrugated containers priced at an average of \$78 per ton compared to \$169 last year¹. These commodity prices aren't all historic lows but can put pressure on material recovery facilities.

Extended Producer Responsibility (EPR) for packaging was an impactful year with Colorado² and California³ passing legislation. Maine and Oregon, who passed EPR bills in 2021, both started a rulemaking process that will define many aspects of their programs. EPR typically requires manufacturers of a specific product to fund and administer recycling, and recovery programs for that product with government oversight. It currently is used in Illinois for mercury switches, mercury thermostats, consumer electronics and most recently for medications⁴. Heading into 2023, EPR bills are prevalent across the country covering batteries, paint, carpet and packaging.

Statewide

At a state level in 2022, a fire at an Illinois EPA contracted processing plant halted household hazardous waste (HHW) collection for the majority of the year. This impacted regional HHW facilities across Illinois in addition to one day events. Many residents across the state, especially those without access to a regional HHW facility, were left with limited or no way to dispose of these materials. Additional information on this is included in the HHW section for the regional facility in Naperville that serves

¹ RecyclingMarkets.net Staff. "More Price Drops for Recycled Paper and Plastic." *Resource Recycling News*, Resource Recycling, 10 Oct. 2022,

² Sarnoff, Rachel. "Colorado Legislature Passes Landmark EPR Bill for Packaging and Paper." *Product Stewardship Institute*, Product Stewardship Institute, 28 Dec. 2022,

³ California, State of. "SB 54: Plastic Pollution Prevention and Packaging Producer Responsibility Act." *CalRecycle*, <https://calrecycle.ca.gov/packaging/packaging-epr/>.

⁴ "Illinois EPA to Host Medication Take Back Program Stakeholder Meeting." *Illinois.gov*, 26 Oct. 2022, <https://www.illinois.gov/news/press-release.25614.html>.

DuPage County and the surrounding counties.

WASTE AND RECYCLING SURVEY

DuPage County surveys municipalities annually to collect contract services and weights. This report contains data from January 1, 2022- December 31, 2022, collected through a waste and recycling survey. Twenty-nine communities responded to the survey representing 281,457 single family homes. Table 1 provides a summary of those responses.

As part of this report, tonnage was requested for residential recycling and refuse. The quantity of refuse collected from the curb was measured at 235,099.46 tons. The curbside recycling totaled 78,546.92 tons, and landscape waste at 34,032.71 tons. These quantities do not include additional material collected at special drop-offs or other means. Special collection material is addressed later in this report and was calculated to be an additional 950.13 tons.

Respondent totals are provided in Appendix A. The recycling rate has been calculated by dividing the total recycled tonnage by the total waste tonnage. The average recycling rate based on the respondents is 32%. Two municipalities exceeded a 40% recycling rate.

Number of municipalities included	Refuse collected in tons	Recycling collected in tons
29	235,099.46	78,546.92

Table 1: Curbside and Waste Collection in Tons from 2022 Survey

Recycling

Contamination continues to be an issue for communities for the 3rd consecutive year as it ranked first among respondents as the topic area they want to address in 2023(see figure 1). Some cities are reporting residential recycling contamination costing 30,000 per month⁵. Contamination is an economic and environmental issue that continues to be the top priority for communities in the County. Material Recycling Facilities (MRF) and municipalities can see costs increase when contamination rates reduce the value extracted from materials. It's why efforts to educate residents on the worst offenders such as wires, lithium batteries, and helium tanks is important to keep MRFs operating and drive contamination rates down.

⁵ Fernández, Caleb J. "Contaminated Recycle Bins Are Costing Tucson Taxpayers \$30k Every Month." *KGUN 9 Tucson News*, KGUN 9 Tucson News, 16 May 2022,

Figure 1: Summary Responses of Question 2 in 2022 Annual Waste and Recycling Survey

During 2022, the County continued to participate in industry groups and work with other entities to produce educational material in an effort to combat contamination.



As new materials come into the market, it is important for haulers and local governments to provide education and outreach to residents in an effort to drive down contamination. As a part of this report, communities are surveyed to identify similarities and differences in contracts as they relate to educational material. Ninety-three percent of communities responded that their waste hauler provided educational material to the residents; eighteen had a dedicated flyer or a printed list of acceptable material and fifteen communities reported that their hauler provided a dedicated website.

To help inform residents, the County created educational media such as videos and posts recycling tips on social media platforms. The County provides and continually updates pages on acceptable material for a curbside bin, electronics and textile recycling, and a non-curbside/drop off recycling guide on the website. From January 1, 2022 – December 31, 2022, the County’s online recycling guide recorded a total of 15,089 unique pageviews and the electronics webpage recording 30,257 unique pageviews. This metric indicates that residents are seeking out recycling information and trying to ensure materials go to the right place.

Since all curbside recycling programs don’t have the same list of acceptable materials, communities are asked to provide that information in the survey. The differences are illustrated in Figure 2. In comparison to prior years the acceptance of cartons and glass have remained consistent for communities. Plastics #4 saw an increase in its acceptance with all materials staying at similar rates over the last few years. Overall, there is a consistency in accepted material for cartons and plastics #1-5.

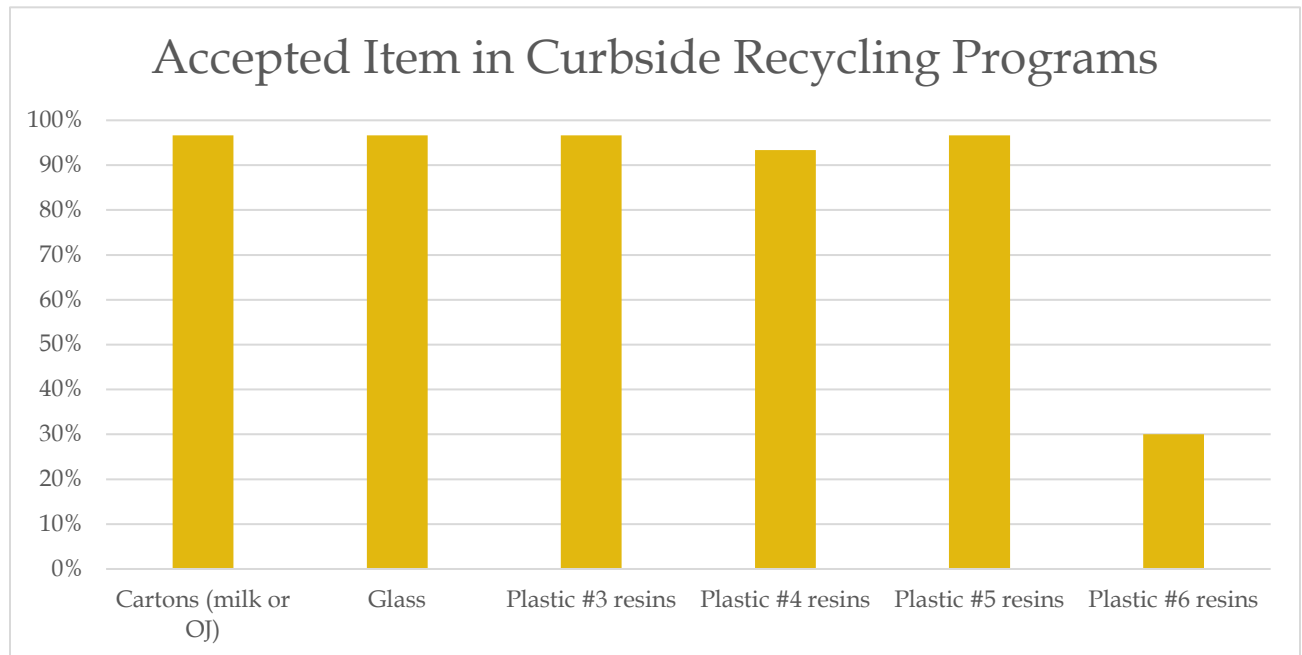


Figure 2: Accepted Material Survey Responses

Special Collections

Along with curbside waste and recycling collection, many municipalities provide other opportunities to dispose or recycle specific commodities. These items can vary and are prevented from being landfilled through dedicated recycling efforts or by necessity of a landfill ban. In most cases the special collections result in pre-sorted high volumes of a single item that is more valuable to a recycler. Across DuPage County there were fifteen communities reported that they had provided this opportunity to their residents. One-day events can include document shredding, textiles, electronics, foam packaging, and other miscellaneous items such as eyeglasses, flags, bikes, and propane tanks. In 2022, the County assisted with document shredding events by providing partial funding for 15 community events.

The County continued to be host location for waste tires collected by local governments. Tires were accepted at the County's Division of Transportation and the Illinois EPA provided a registered tire recycler. Through this program over 1,000 tires were recycled from 13 local government entities, which is an increase from 2021.

Medication

The HOPE Task Force and DuPage County Health Department offered the Rx Box Program for the collection of unused/expired medicines. The Illinois EPA provides a vendor to pick up and dispose of the medications which are collected from 18 partner locations. The program collected 5,656 pounds of medication for safe disposal which was substantially less than in 2021 but is attributed to the fire at the IEPA's processing facility causing collection to be halted for the second half of 2022. The drug take-back bill (IL HB 1780) was approved by the General Assembly as will go into effect January 1, 2024. The legislation shifts responsibility for programs from the government to drug manufacturers. Drop off locations are still being finalized.

Household Hazardous Waste (HHW)

The Regional HHW Facility in Naperville was fully operational for first half of 2022 until the fire at IEPA's Ohio processing facility caused a restricted list of accepted material to be collected from Illinois residents. There were 17,426 vehicles that dropped off waste to the site. The city reported that 10,839 of those cars were from DuPage County with the rest from other counties throughout Illinois. The site collected and processed more than 46,910 gallons of household hazardous waste (Appendix B). Overall, this is a decrease of 5,635 cars (3,065 from DuPage County) and 23,070 fewer gallons of waste collected compared to 2021. A rebound more in line with previous totals is expected in 2023 with the facility resuming collection of the full list of wastes as of March 13, 2023.

In addition to the one-day collections and the Regional HHW Facility, three communities included at-your-door collection of hazardous waste for residents Lisle, Lombard, and Roselle. Collection data was not collected as part of this report.

Electronics

DuPage County collection sites experienced a 22% decrease in total pounds collected compared to 2021 (see Table 2). Vehicle counts for the two weekday sites reported that 18,230 cars utilized the drop off sites, which surpasses the 2021 total by 1,892 cars. This drop in weight is attributed to the decreasing size and weight of electronics since participation increased.

Table 2: 2022 DuPage County Partner Electronics Recycling Collection Data

Partner Location	Total Collected in 2022 (lbs.)
Addison Township (3/year)	24,775
Bloomington Township (3x/year)	48,446
Burr Ridge Mon-Fri	163,355
Carol Stream (one-day event)	18,167
Elk Grove (eWorks) Mon-Fri	46,097
Elmhurst (quarterly)	72,498
Glendale Heights (one-day event)	10,373
Lisle (quarterly)	82,278
Naperville Mon-Fri	473,820
Westmont (3x/year)	54,558
Wheaton 1x/month	178,997
Woodridge/Christ the Servant (one-day event)	29,130
TOTAL	1,202,494

In addition, 18 communities offered curbside collection of electronics in their hauling contracts. This resulted in an additional 98,788 pounds of electronic material being recycled.

Food Scrap Collection

Food scrap collection is gaining momentum in DuPage County and the Chicagoland region as communities look to close the loop and reduce their greenhouse gas emissions. Fourteen communities responded that residential curbside food scrap collection is offered through their waste hauling program which is an increase from the eleven communities in 2021. Food scraps are often collected with landscape waste (usually called ride along), so weights are included in the reported landscape totals and recycling calculations.

To further support food scrap composting, the County partnered with The Conservation Foundation and Forest Preserve District of DuPage County to host a compost bin sale on May 19th, 2022.

Table 3: Community's Offering Food Scrap Collection

Bloomington, Village of
Clarendon Hills
Darien
Downers Grove, Village of
Elk Grove Village
Elmhurst
Glendale Heights
Glen Ellyn
Hinsdale
Lisle, Village of
Lombard
Naperville, City of
West Chicago
Westmont
Wheaton
Winfield, Village of

Contract Details

Acquisitions slowed for the County this year after activity in the last two. Figure 3 below reflects the contracts held by waste companies in DuPage. Appendix C highlights specific contract details including services provided and pricing.

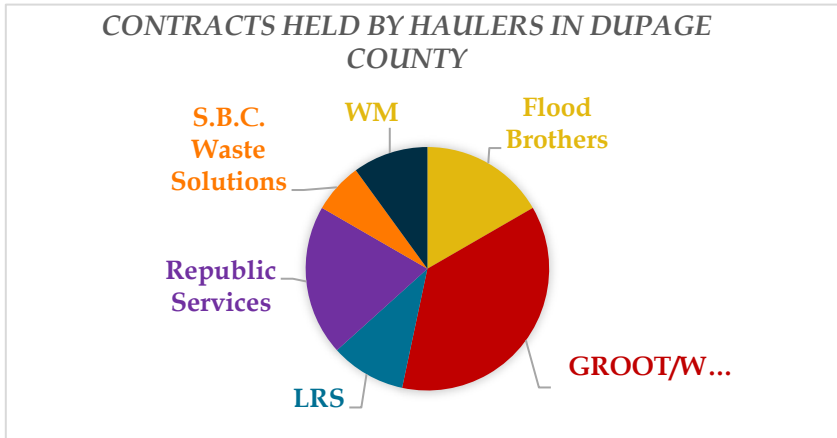


Figure 3: Identified hauler for each community respondent.

SUMMARY

DuPage County's recycling rate has remained relatively steady year-to-year with an average recycling rate for 2022 of 32%. Figure 4 reflects residential waste and recycling trends over the last 5 years. Recycling levels remained steady while waste saw a slight decrease back to 2020 levels. The overall trends reflect what is being seen by the US EPA nationally. The

EPA's most recent figures on trends from 2015-2018 show that the US recycling rate decreased from 34.7% in 2015 to 32.1% in 2018⁶. Efforts to improve recycling are reflected in EPA's

national recycling goals of 50% by 2030, and

grants for recycling education and infrastructure in an attempt to improve capture rates. For 2023, the County will continue to work with municipalities and businesses to further efforts in decreasing both commercial and residential waste.

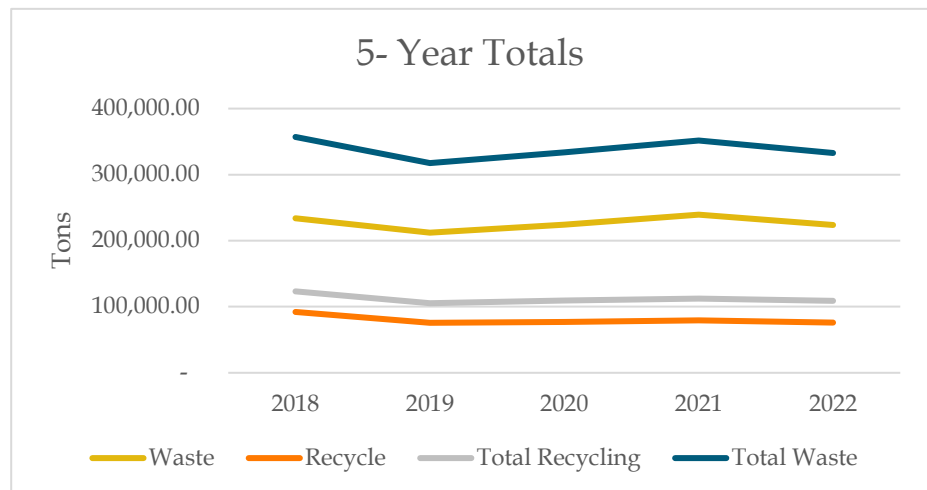


Figure 4: 5-yr compiled data from annual community surveys.

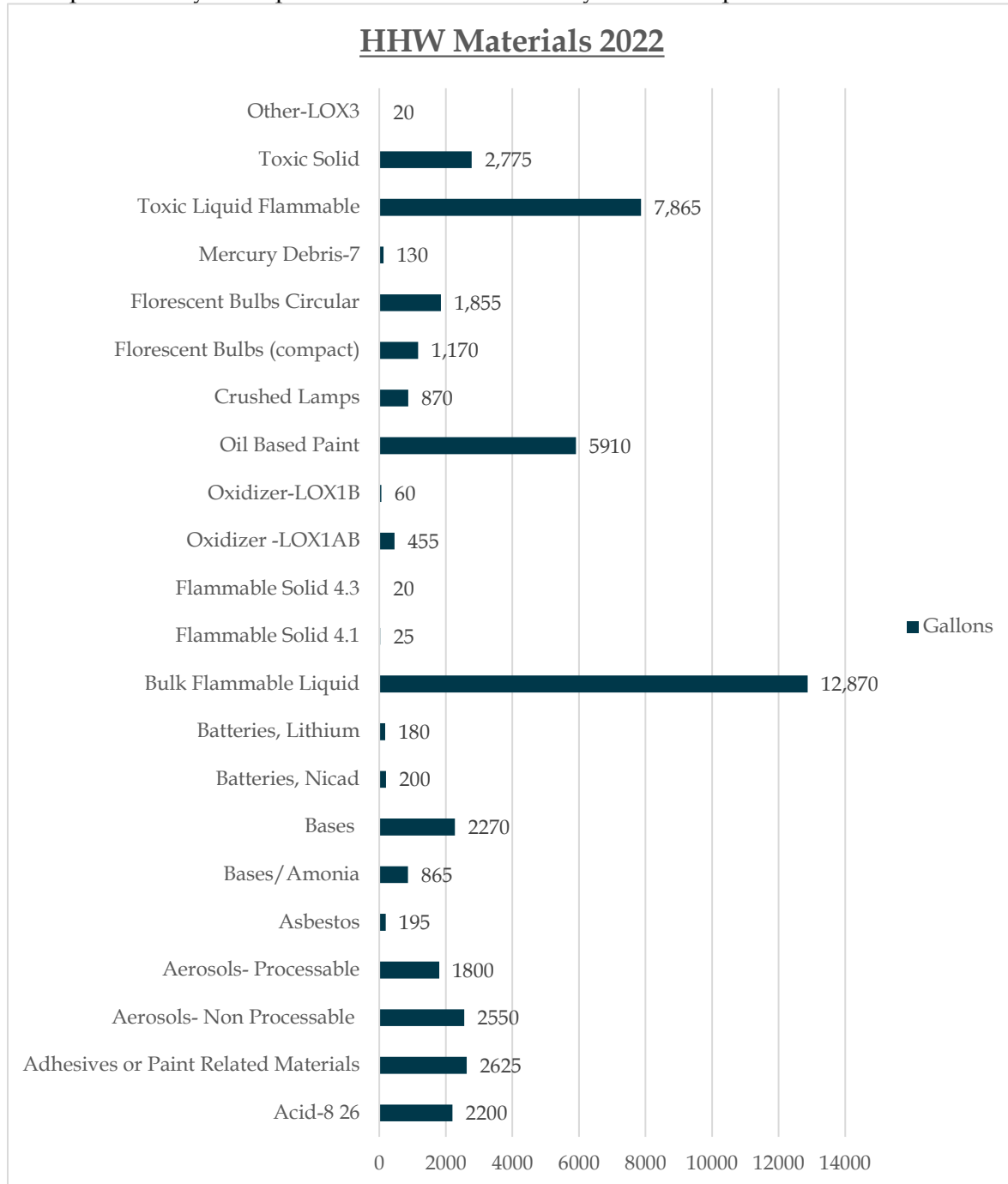
⁶ <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/national-overview-facts-and-figures-materials>

APPENDIX A

	Waste	Recycling	Landscape Waste	Total Recycling	Total Waste	Recycling Rate
<i>Bartlett</i>	12,754.3	3,588.3	1,722.9	5,311.3	18,065.9	29%
<i>Bensenville</i>	5,275	1,173	811	1,984	7,259	27%
<i>Bloomington</i>	5,983	1,933		1,933	7,916	24%
<i>Burr Ridge</i>	3,838.5	1,378.5	371.9	1,750.5	5,589	31%
<i>Carol Stream</i>	10,617.4	2,797.7	1,349.8	4,147.5	14,764.9	28%
<i>Clarendon Hills</i>	2,264.9	911.2	328.1	1,239.3	3,504.2	35%
<i>Darien</i>	5,642.3	2,291.7		2,291.7	7,934	29%
<i>Vil of Downers Grove</i>	12,282.6	5,144.8	1,770.7	6,915.5	19,198.1	36%
<i>Elk Grove Village</i>	11,141	2,726	811.9	3,537.9	14,678.9	24%
<i>Elmhurst</i>	12,755.3	4,680.9	1,522.1	6,203.1	18,958.4	33%
<i>Glen Ellyn</i>	6,420.7	2,942.4	1,265.9	4,208.3	10,629	40%
<i>Glendale Heights</i>	8,289.5	2,201.4	1,104.6	3,306	11,595.5	29%
<i>Hanover Park</i>	10,249	2,188	753	2,941	13,190	22%
<i>Hinsdale</i>	5,366.3	2,049	485.6	2,534.6	7,900.9	32%
<i>Lisle</i>	4,041	1,941	1,502	3,443	7,484	46%
<i>Lombard</i>	15,656	3,945	1,203	5,148	20,804	25%
<i>Naperville</i>	39,174	13,622	11,000	24,622	63,796	39%
<i>Oakbrook</i>	2,766.6	1,006.3		1,006.3	3,772.9	27%
<i>Oakbrook Terrace</i>	1,249.3	418.6	97.5	515.9	1,765.2	29%
<i>Roselle</i>	8,802.9	2,980.2	356.3	3,336.6	12,139.5	27%
<i>Warrenville</i>	3,460.8	1,318.3	600	1,918.3	5,379.1	36%
<i>West Chicago</i>	5,802	2,522	749	3,271	9,073	36%
<i>Westmont</i>	4,969.4	1,684.2	773.7	2,457.9	7,427.3	33%
<i>Wheaton</i>	10,852.6	5,026.17	1,623.8	6,649.9	17,502.5	38%
<i>Willowbrook</i>	1,404	292	165	457	1,861	25%
<i>Winfield</i>	2,687	927	664	1,591	4,278	37%
<i>Woodridge</i>	6,350.9	2,908.1	880.8	3,788.9	10,139.9	37%
<i>Wood Dale</i>	4,414.7	1,183.7	535.9	1,719.7	6,1344.4	28%
Average	8,106.9	2,708.5	1,173.5	3,882.1	11,988.9	32%
Total	235,099.5	79,546.9	34,032.7	112,579.6	347,679.1	

APPENDIX B

Excerpt from City of Naperville's 2022 HHW Facility Annual Report



APPENDIX C

Appendix C - Municipality Contract Spreadsheet
DuPage County Solid Waste & Recycling 2022

Community Name	Contractor	Program Type	Contract Expiration	Senior Rate	Landscape Waste	Landscape waste Specifics	White Goods	Bulk Items	Composting	Special Collections	Notes	Column1
Addison	Republic	Flat	2028	Y	April - November 30th	30-33 gallon, Sticker No Charge, \$3.45/mo	\$30.00/item	\$25/ yd	Y	\$25/yd	Composting Prices: 65 gal - \$14.68 95 gal - \$21.60 2 cu-yd dumpster - \$86.40	
Aurora	Groot	Hybrid	2027	Y	April - November (1st Fri)	30 gal Kraft yard bag, need sticker \$2.75	1 sticker/item	1 sticker/item	N	Call for pricing		
Barlett	Groot	Flat	2024	Y	April - November 30th	Stickers \$2/bag	Included	Included	N		E-waste accepted	
Batavia	Waste Management	Hybrid	2023*	N	April - November	Sticker \$3.28, or rent 65 gal tote \$32.27/mo		\$14.00/unit	Y	\$400/ton	E-Waste accepted/ Organics with Yard Waste	
Bensenville	Republic	Flat	2023	Y	April - November 5th	Garbage container 35 gal or Kraft bag- need Yard Waste decal	Included	Included	N	\$21.95/Cu Yd		
Bloomington	SBC Waste Solutions	Flat	2026	Y	April - November 30th	Can 34 gal or Kraft 33 gal bag - \$2.80/Sticker	Included	Call for pricing	N		E-Waste collected upon request 1 day per month.	
Bolingbrook	Flood Brothers	Flat	2029	N	April- December	33 gal bag Kraft bag - included	Included	Included	N			
Burr Ridge	Groot	Flat	2029	Y	April - December 15th	Included	\$28.29/item	Included	N			
Carol Stream	Flood Brothers	Flat	2024	Y	April-November	Stickers, \$1.21/bag for leaves and \$2.23/bag for yard waste	Included	\$5.20/item	N	\$19.73/Cu Yd (2 yd minimum)		
Clarendon Hills	Lakeshore Recycling Systems	Flat	2025	Y	April-December	\$2.92/bag or \$19.31/toter curbside pickup	Included	1 item/wk	Y	\$15.00/Cu Yd (2 yd Minimum)	composting no additional charg. Part of yard waste.	
Darien	Lakeshore Recycling Systems	Flat	2027	Y	April-December	Included WITH option for renting 65 or 95 gallon cart \$3.00 monthly	\$25.63/item	1 item/wk	Y	\$15.38/Cu Yd	Composting no additional charg. Part of yard waste. 2 e-waste home collections provided	
Downers Grove	Allied Waste/Republic	Hybrid	2026	N	April-December	Stickers \$4.10/bag OR Purchase Cart for the season	1 sticker/50 lbs	1 sticker/50 lbs.	Y	\$20.00/yd*3	Composting: 35g - \$19.96; 65g - \$22.16; 95g - \$29	
Elk Grove Village	Groot	Flat	2029	Y	April - December 15th	Kraft Bags, max 33 gal - Sticker \$3 or Cart \$175 annually	\$50.00/item	Included	N		2 E-Waste items weighing less than 50 pounds per home each week on an appointment basis. Items that exceed 50 pounds will require a fee.	
Elmhurst	Republic	Hybrid	2026	N	April- November 30th	Kraft Bag - Sticker \$3.50/bag	2 stickers/item	\$3.50/item	Y		Compost: \$19.00/mo	
Glendale Heights	Republic	Flat	2024	N	April- November	Included	Included	Included	N		E-waste every 2nd regularly scheduled collection day of the month with at least one day prior notice	
Glen Ellyn	Groot, Inc	Hybrid	2024	Y	April- November 30th	Yard Waste \$2.94/bag and leaf \$1.77/bag	1 sticker/item	1 sticker/item	Y		Composting Prices: 35 gal - \$12.38; 65 gal - \$14.39; 95 gal- \$17.91	
Hanover Park	Groot, Inc.	Flat	2025	Y	April- November 25th	Stickers \$3.02, waste cart \$30.68	\$42.44/item		N	\$28.11/Cu Yd	Leaf pickup free in November	Free Electronics Recycling of 2 items
Hinsdale	Republic Services	Hybrid	2023*	Y	April- November	32 gal Kraft bag or 34 gal container - Sticker \$3.65/bag	2 stickers	2 stickers	Y		Composting Prices: 65 gal- \$152/season; 95 gal- \$196/season	
Irasca*	Republic Services	Flat	2025	N	April- November	Included	Included	Included	N			
Lemont	Waste Management	Flat	2025	Y	April-November 30th	May rent 96 gal cart \$4.00/mo OR purchase for \$105	Included	Included	N	Subject to fee	HHW Door Collection	
Community Name	Contractor	Program Type	Contract Expiration	Senior Rate	Landscape Waste	Landscape waste Specifics	White Goods	Bulk Items	Composting	Special Collections	Notes	Column1
Lisle	Lakeshore Recycling Systems	Hybrid	2023*	N	Mid-March-November	Stickers \$3.24/bag	10 stickers/item	5 stickers/item	Y		Composting 65g - \$131.33/season; 95g - \$157.59/season	
Lombard	Waste Management	Hybrid	2024	N	April- November	Stickers \$2.57/bag	\$25.00/pick-up	\$20/pick-up	Y	\$10.00/Cu Yd	Composting - \$131.22/yr	
Naperville	Groot, Inc	Flat	2029	N	March- December	Stickers \$2.50/bag / free weekly pickup Nov. 7- second wk of Dec.	Included	Included	Y		Composting - 64g - \$185/year; 96g - \$225/year	
Oakbrook	Flood Brothers	Flat	2024	N	April- November	Stickers \$2.25/bag	Included	Included	N			
Oakbrook Terrace	Flood Brothers	No Charge	2029	N/A	April-December	Included	Included	Included	N	\$33/up to 3 cu yd	No Cost, but any additional container need \$2.00 refuse sticker	
Roselle	Flood brothers	Flat	2025	Y	April - November	Sticker \$2.45/bag, \$207.65/cart	Call Flood Brothers	Included	N	\$25.00/ Cu Yd	E-Waste \$25 up to 6 items. HHW \$25 up to 6 items	
Villa Park	Lakeshore Recycling Systems	Flat	2028	N	April- November	Bag or container - Sticker \$3.00	Call LRS	Included	N	\$30.00/ cu yd		
Warrenville	Groot	Flat	2026	Y	April- November 30th	Sticker \$2.91 or Container \$196.27/season	\$35.00	1 item/wk free	N	\$25.00/Cu Yd (2 yd Minimum, 1st yd free)	Additional bulk items will require 5 prepaid yard waste stickers	
West Chicago	Groot	Hybrid	2024	Y	April- November	Sticker \$2.51	10 stickers/item	1 sticker/item	N			
Westmont	Waste Management	Flat	2024	Y	April-November 30th	Stickers \$3.60	Call WM	Call for pricing	Y		1 yard waste sticker for 32-gallon container under 45 lbs OR resident may rent 64/96-gallon organics tote \$142.80/year	
Wheaton	Lakeshore Recycling Systems	Other	2024	N	April- December	Stickers \$3.05	10 stickers/item	5 stickers/item	Y		E-waste available; composting with yard waste	
Willowbrook	Groot, Inc.	Hybrid	2024	Y	April-December	\$3.08	\$41.00/item	1item/wk	N	\$22.55/Cu yd	2yd*3 of C&D collected/wk	
Winfield	SBC Waste Solutions	Other	2025	Y	April- November	\$3.00	Included		N		Electric, paint, batteries & lightbulb collection	
Wood Dale	Flood Brothers	Flat	2027	N	April- November	Included for bags under 4ft in length	Included	Included	N		Free pickup for small amounts of Construction Materials that do not exceed 35 gal and weigh less than 50 pounds	
Woodridge	Groot	Hybrid	2023*	N	April- December 15th	Sticker \$3.90	\$40.00/item	3 stickers/item	N		E-Waste brown bag of small electronics 5 stickers, TVs or monitors less than 50 pounds.	

* - RFP/extension in progress