

DUPAGE COUNTY SOILD WASTE AND RECYCLING REPORT 2015

2015 ANNUAL REPORT

In Illinois, the 102 counties and the City of Chicago are responsible for the planning, adoption, and implementation of the Solid Waste Planning and Recycling Act (SWPRA). Enacted in 1991, SWPRA requires the above governmental entities to provide for landfill space, recycling programs and other landfill alternatives. More specifically, SWPRA states that each county must obtain a recycling rate of 15% within the first 3 years of implementation and a recycling rate of 25% within 5 years of implementation. DuPage County has exceeded this goal for several decades.

In recent years, counties have moved from landfill space planning to landfill diversion. Emphasis has been placed on finding new uses or methods of handling waste generated within county boundaries. Composting, recycling and reuse have become the standard approach for the management of waste.

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BACKGROUND

DuPage County has collected data on municipal and township waste and recycling for nearly 25 years. This data provides information on recycling and waste trends in the County along with comparative data for hauling contracts between municipalities. Participation in the survey is voluntary limited to what respondents provide.

RECYCLING AND WASTE PERSPECTIVES

There have been several studies completed over the past several years that have reviewed the attitudes of individuals toward waste and recycling. Below is a snapshot of the results from these studies.

- More than 80% feel proud when they recycle.
- More than 60% feel guilty when they throw a recyclable into the trash instead of recycling it.
- More than half are often successful recycling at work, but fewer than 25% are able to recycle when traveling or dining out.¹

A more recent attitude survey was conducted by the Glass Packaging Institute (GPI), which reflects the behavior and attitudes of recycling in the greater spectrum of glass but still has greater widespread applicability to recycling as a whole.



Figure 1: Glass Packaging Institute

¹ Executive Summary Report- Recycling, revised November 12, 2013. Harris Interactive, Environmental Industry Associations.

Other organizations such as the Carton Council have complete similar surveys as well. Results from the Carton Council were based on 2,500 adult participants and was utilized as a comparison to a similar 2013 survey. The 2015 survey indicated that 91% of consumers expect food and beverage brands to actively increase the recyclability of their packaging. This is up from 85% of respondents agreeing to this statement in 2013. Additionally 67% of consumers state that they would not, "assume a package is not recyclable if it did not have a recycling symbol or language on it." This is a nearly 10% increase from the 2013 results. These results continue to assist us in recognizing the way packaging affects consumer recycling behaviors and more importantly assist local government in determining where and how to offer recycling information.

- 57% of consumers look to the product packaging first for clues to its recyclability. The second location is a local community website at 34%, and then the company's website at 28%
- 90% of consumers report that recycling is at least somewhat important.
- 95% believe more people recycling helps the environment.



Programs such as How2Recycle² are utilizing these types of survey results and working directly with product and packaging companies to provide clear information that consumers can look to for how and where to recycle the multitude of products we purchase and use in daily life.

2015 WASTE AND RECYCLING DATA

This 2015 Annual Report showcases the progress DuPage communities have made since the first State recycling goal was set in 1991. Counties were mandated in the Solid Waste Planning and Recycling Act to achieve a 15% recycling rate within 3 years and 25% within 5 years of adopting a Solid Waste Management Plan.

A study commissioned by the Illinois Department of Economic Opportunity (DCEO) demonstrates that recycling has had a positive impact on our Illinois economy. While many industries suffered during the latest recession, recycling jobs remained stable. The 2010 DCEO study highlights the direct and indirect impacts of recycling and reuse industries in Illinois. These industries were responsible for:

- A total of 111,500 jobs;
- Payroll of \$3.6 billion;
- \$30.3 billion in additional gross receipts; and,
- Over \$1 billion in state and local taxes

² A part of GreenBlue's Sustainable Packaging Coalition, the How2Recycle initiative has over 45 participating companies and brands. More information can be found at www.how2recycle.info.

Below is a summary of how jobs, payroll, gross receipts and tax numbers break out:

Impact Type	Jobs	Payroll	Gross Receipts	State/ Local Taxes
Direct Effect	40,000	\$1.5 billion	\$17.1 billion	\$564.3 million
Indirect Effect	34,000	\$1.2 billion	\$7.1 billion	\$234.3 million
Induced Effect	37,500	\$886 million	\$6.1 billion	\$201.3 million
Total Effect	111,500	\$3.6 billion	\$30.3 billion	\$1 billion

Table 1: Impact of Recycling on Jobs³

DuPage County municipalities and townships conduct traditional curbside collections of materials such as paper, metals, plastics, landscape, and other special collection waste. Waste management companies track and provide weights of materials collected to either the municipality/township through obligation in reports, or upon request. Special, organized collections, such as electronics, have typically been provided in one-day collection events where weights are collected on site.

Number of respondents	Refuse collected in tons	Recycling collected in tons
16	130,585,.14	64,757.01

Table 2: 2015 DuPage County Waste and Recycling Survey

Tonnage amounts were supplied for refuse, recycling, electronics, yard waste, metal, and batteries. The graph below depicts the breakdown of these categories in the total percentage of recorded tonnage provided; 441,127.9. Of those that responded, the greatest amount of weight collected was electronics followed by refuse and then traditional recyclables. It should be noted that of the nineteen respondents only six provided tonnage for electronics. Nearly 60% of respondents used carts for collection of materials, although 30% had a

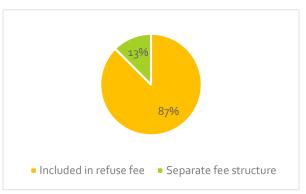


Figure 2: Fee structure of recycling programs from respondent communities.

combination type program that allowed for residents to use carts or stickers for refuse. Eighty-seven percent of municipalities incorporate their recycling fee into their waste fee.

³ http://www.illinois.gov/dceo/whyillinois/KeyIndustries/Energy/Recycling/Pages/REI.aspx

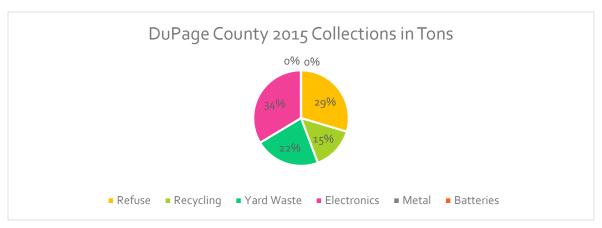


Figure 3: Tonnage collected across categories.

The below table provides information on individual respondents. The recycling rate has been calculated by dividing the total recycled tonnage by the total waste tonnage. The average recycling rate is 37% based on the data provided by the survey respondents.

	Tons of Refuse Collected	Tons of Recycled Collected	Landscape Waste Tons(4)	Total Recycled	Total Waste	Recycling Rate
City of Wood Dale	4565.63	1234.45	780.6	2,015.05	6,580.68	31%
Village of Lisle	7909	2845	533	3,378.00	11,287.00	30%
Bloomingdale	6508.48	2163.4	543.96	2,707.36	9,215.84	29%
Village of Roselle	7559.04	2576.27	835.9	3,412.17	10,971.21	31%
Clarendon Hills	2147.91	1139.36	542.38	1,681.74	3,829.65	44%
City of Wheaton	14670.9	14670.9	3520	18,190.90	32,861.80	55%
West Chicago	1407.75	724.17	65.88	790.05	2197.8	36%
Village of Lombard	10451	4451	2078	6,529.00	16,980.00	38%
Warrenville	2000	1200	400	1,600.00	3,600.00	44%
Village of Woodridge	4800	3450		3,450.00	8,250.00	42%
Oak Brook	2933.56	1197.19	129.55	1,326.74	4,260.30	31%
Village of Willowbrook	1017.17	552.6	28.6	581.20	1,598.37	36%
Addison	9801.48	2588.82	2253.97	4,842.79	14,644.27	33%
Carol Stream	5982.37	4742	276.5	5,018.50	11,000.87	46%
City of Naperville	36210.65	15872.47		15,872.47	52,083.12	30%
Elmhurst	12620.2	5349.38		5,349.38	17,969.58	30%
Total/Average				76,745.4	207,330.5	37%

Table 3 Waste and Recycling Totals

Recycling programs varied by the materials that are accepted. All programs accepted basic items such as glass, cardboard and newsprint, but cartons and plastics varied.

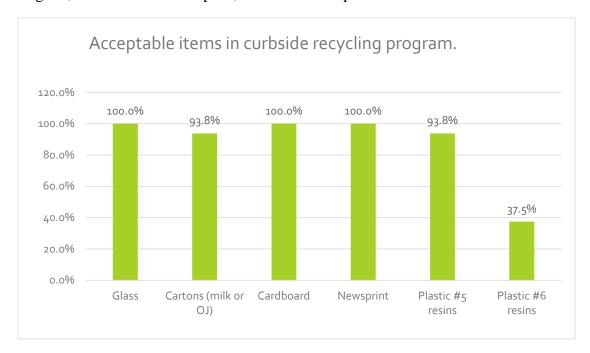


Figure 4: Accepted curbside recycling.

What is actually considered to be recyclable varies by hauler and community. In the majority of towns, cartons and plastics #1-5 are routinely collected while only 37.5% of communities collect plastic #6. Residents interested in recycling plastic #6 in underserved towns may utilize special drop offs or mail in programs. The variation in acceptable recycling streams has led to confusion and difficulty for residents determining what is allowable in their curbside recycling bin. This confusion has been noted by an average curbside recycling contamination rate of 20.7% ⁴. The advancement of various types of plastics and the ubiquitous nature of plastic used for packaging have not aided the matter either. As manufacturers begin to standardize labeling and include guides for how to recycle products, contamination is likely to decrease. Special collections can help residents recognize items that should not enter the curbside waste and recycling streams and assist in providing a convenient drop location.

⁴ Maxwell, Greg – Resource Management, Illinois 2016. Email communication, April, 12.

SPECIAL COLLECTIONS

Many municipalities offer residents special services through one-day collection events, seasonal or specific drop-off locations for items not allowed in curbside recycling or waste streams. 42% of respondents offered these types of services to residents. Figure 5 illustrates the various collection types offered through these special collection programs. Of the 42% of respondents that offered special collections, nearly all provided electronics recycling. As seen in figure 3, electronics are the largest percentage,

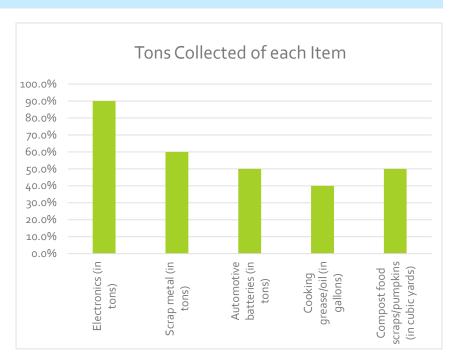


Figure 5: Special collection categories.

34%, of weight collected over-all based on survey responses.

ELECTRONICS

In recent years, residential access to zero cost electronics recycling has declined for multiple reasons. DuPage County had an open ended contract that was available to municipalities to utilize for collection. The program had been funded by manufacturers in accordance with the Electronic Products Recycling and Reuse Act ("Act"). However, the cost of recycling has increased as recycling markets have dropped resulting in an environment where supplemental funding from government or homeowners is necessary to continue to operate most programs that accept all electronics. The cost of recycling cathode ray tube devices has also increased and the valuable electronics can no longer make up the difference. Additionally, the landfill ban of electronics is forcing more equipment into the recycling stream than is being funded by the Act.

Several communities have incorporated electronics collection into waste hauling contracts or have limited collections to only their residents. Despite these changes in service, electronic recycling still struggles. The future of electronics recycling is unclear as the County continues to search for viable solutions with their municipal partners.

CONTRACT DETAILS

Municipalities and townships differ in their contract: design, cost, and specifics. Information is provided below on various contract differences between the responding government agencies.

Most communities, 55.5%, utilize Republic as their waste hauler. Waste Management was the second most popular hauler with service to 22.2% of respondents. Other waste haulers include; Flood Brothers, Allied Waste Services, Groot Industries, Inc., and Advanced Disposal. As stated previously this report, over 60% of respondents utilize carts in their waste and recycling program or a combination of carts and stickers are accepted. Only 12% solely utilize stickers. Senior citizen discounts were another distinct difference with 44% of respondents providing some type of discount and 56% not providing any type of special discount.

Other elected services found in waste and recycling contracts was curbside service for electronics or specialty goods. Two communities offered an electronics service, one with a fixed charge of \$30 for up to 6 e-waste items. Specialty items like white goods were typically mentioned in contracts with 88% of respondents were provided with curbside pick-up for these items which includes, refrigerators, freezers or dehumidifiers. In some municipalities the fee for these items was already incorporated into the price of the waste fee but for others a separate fee was required. Table 4 provides information on cost differentials for various white goods or specialty items.

Refrigerator	Freezer	Dehumidifiers	Other
1 sticker at \$2.95	1 sticker at \$2.95	1 sticker at \$2.95	
N/A	N/A	N/A	1 large item per week is acceptable
1 garbage/yard waste sticker	1 garbage/yard waste sticker	1 garbage/yard waste	
per item	per item	sticker per item	
\$25	\$25	\$25	
\$25	\$25	\$25	\$25
\$25	\$25	\$25	
\$20	\$20	\$20	
\$30	\$30		

Table 4: Pricing for curbside pick-up of white goods.

SUMMARY

Attitudes and beliefs regarding the benefit of recycling run high among DuPage County residents. This is displayed through the higher than national average recycling rate of 37% compared to a national rate of 34% by weight, and the numerous special collection types offered in various communities throughout the County. The recent decreased value of recycling has not hampered the ability of communities to provide this service to their residents with curbside pickup remaining in 87% of municipal contracts.

Within the next several years, the general waste characterization is expected to evolve as more food scrap and compostable material is separately collected. Small pilot projects have begun in various communities throughout the County and will be an asset in determining the future of Illinois landfills.

Overall, DuPage County recycling rate has dipped from previous years, 2011 with an average recycling rate of 42% and 2013 with a rate of 39%. Despite this dip, the County's recycling rate is still on par with the average rate across the State of Illinois as a whole which sits between 35% - 37%. Communities should seek to provide greater education to residents regarding recycling opportunities and acceptable materials. This is especially important as, "Illinois still generates 19% more waste per capita than the average state in the United States⁵."

⁵ Data provided form the Illinois Environmental Council; http://ilenviro.org/issues/reduce-reuse-recycle/ and the 2015 Illinois Commodity/Waste Generation and Characterization Study Update completed by CDM Smith.