Will County Solid Waste Management Plan 2017-2024



Prepared by Will County Staff

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by the Will County Board

Will County Solid Waste Management Plan 2017-2024

Jennifer Bertino-Tarrant – County Executive

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Will County Solid Waste Management Plan 2017-2024

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Executive Summary

Since 1988, the Resource Recovery & Energy (RRE) Division (formerly known as the Waste Services Division) of the Will County Land Use Department has been responsible for handling the County's solid waste planning efforts. This plan supersedes the initial plan adopted in 1991 and all subsequently approved solid waste plans and updates. Therefore, if any conflict or disparity exists between this plan and previously approved plans and/or updates, this plan supersedes and is the controlling Solid Waste Management Plan over all previous plans and updates.

This Solid Waste Plan provides goals and programs that responsibly manage waste generated within and traveling in or through Will County. Furthermore, this solid waste plan provides informational status reports on solid waste management programs, waste and recycling data, and demographics and projections to clarify county needs into the future.

Many traditional and innovative solid waste technologies are currently available to the residents of Will County, but some are not economically feasible. Solid waste management proven to be feasible and currently utilized within the County include: Biogas as a resource, Clean Construction & Demolition Debris (CCDD) & Uncontaminated Soil Fill Operation Facilities, Construction & Demolition (C&D) Recycling Facilities, Compost Facilities, Land Application sites, Transfer Stations, and Material Recovery Facilities (MRF), along with professionally engineered Landfills. Landfilling is still the most economical disposal option for non-hazardous solid waste in this area. Once the waste is reduced through participation in recycling or composting, the remaining waste is transported to a landfill. The Prairie View Recycling Disposal Facility (Prairie View RDF) provides a disposal option primarily for municipal solid waste, while the Laraway Recycling and Disposal Facility (Laraway RDF) provides a disposal option for non-hazardous contaminated soils and industrial wastes from the northeastern Illinois area. Lastly, the Renwick Landfill facility accepts only non-hazardous coal combustion waste.

Since 1991, Will County's solid waste management system has adapted to changing economic, market, and demographic conditions. Over this time, various disposal options, such as landfills and incinerators, throughout the State and the entire Midwest, have closed. In 2004, Will County opened the Prairie View RDF for non-hazardous waste disposal. Smaller companies have been acquired by larger competitors and some of the largest businesses have internalized the flow of waste and recyclables. These market changes have affected waste disposal options, including recycling, composting, the use of transfer stations, and the direction of waste to the County owned Prairie View RDF.

In response to residential and economic growth within the County, the RRE Division determined it necessary to enhance or implement modifications to existing programs as well as initiate some new programs. This includes, but not limited to: Collection/Recycling of Household Hazardous Waste (HHW), Electronics, Tires, Pharmaceuticals, Traditional Recyclables, Books, Textiles, Batteries, and Fire Extinguishers. There has been a significant increase in participation rates for some of these programs.

The County has also maintained a Delegation Agreement with the Illinois Environmental Protection Agency (IEPA) since 1988 to enforce the cleanup of open dumped waste and inspect and monitor compliance at IEPA permitted and permit exempt non-hazardous waste

management sites, while continuing partial state funding for this work through an IEPA grant. Furthermore, the IEPA Delegation Agreement allows for the County to maintain a more informed pulse on waste management activity within the local and regional waste industry.

Outreach to education programs and schools has been maintained and expanded to include in person presentations and workshops before community groups and events. Additionally, outreach continues through the RRE Division's www.willcountygreen.com website, Division newsletter, school newsletter, and social media platforms to provide relevant solid waste management information and education.

At the time of the adoption of the previous Plan (2007-2016) in 2017, residential and economic growth in the County was impacting waste generation and business projections. Those impacts are more obvious in this new plan, which also includes the most currently available demographic, waste & recycling projections within the Will County Service Area for Prairie View RDF generating a projected 2,522,354 tons (without recycling) by 2050. This assumes a generation rate of 9.192 lbs/capita/day. According to the latest waste hauler reports, the county recycling rate is 49%. As the County enhances recycling and diversion programs, it should continue to dispose of a smaller percentage of the waste generated by 2050.

Some legislative changes have occurred since the previous 2007-2016 Solid Waste Plan. State legislation approved in 2021 modified rules for general construction and demolition debris recycling facilities affecting their operational procedures. Legislation approved in 2022 mandated every Illinois County to have at least one medication collection location per 50,000 residents beginning December 1, 2023 and to be financed by pharmaceutical manufacturers. Additionally, state legislation passed in 2023 requires manufacturers of architectural paint to fund a paint collection program to be implemented in 2025.

Additionally, in 2018, the Federal Government effectively removed the previously imposed closure date of 2042 for the County owned Prairie View RDF. However, the currently IEPA permitted solid waste disposal capacity of the Prairie View RDF is estimated to be depleted as soon as the year 2034.

The County maintains its policy of only needing and allowing the three following landfills: the Renwick Landfill as the only landfill needed for off-site disposal of only non-hazardous coal combustion waste disposal, the Laraway RDF as the only landfill needed for non-hazardous, non-municipal solid waste disposal, and the County-owned Prairie View RDF as the only landfill needed in the County for non-hazardous, municipal solid waste disposal.

As such, in light of the need to develop and provide additional cost effective and convenient long term disposal capacity on a rolling basis as required by the Solid Waste Planning and Recycling Act and the Local Solid Waste Disposal Act in a timely and efficient manner, and to ensure an orderly transition from currently- permitted parameters of the Prairie View Recycling and Disposal Facility (RDF) to new long term solid waste disposal capacity within the next ten (10) years, and, at the same time, provide for protection of the public health and welfare and minimize impacts upon the environment, the County believes that either expanding the existing County-owned Prairie View RDF, or the siting, permitting and development of a new County-owned landfill facility best satisfies not only the goals and purposes of the Local Solid Waste Disposal Act, but the Illinois Environmental Protection Act and the Solid Waste Planning and Recycling Act as well.

It should be noted that each of these Acts contemplate that all of the policy considerations set out above are to be achieved by proper long term planning which emphasizes orderly transition between old and new disposal sources, and the orderly and proper evaluation of pertinent environmental factors, energy and life cycle costs, the economic advantages and disadvantages of solid waste management and disposal alternatives, as well as alternate development and financing options and methods available to accomplish these goals.

Again, the County believes that the goals and purposes noted above can best be achieved either by expanding the existing County-owned Prairie View RDF and/or the development of new and additional County-owned solid waste disposal capacity, and there is no need for the development of any other landfill or other permanent solid waste disposal facilities in Will County.

In addition, since the previous solid waste plan was approved in 2017, the County Board also approved the development of a Renewable Natural Gas (RNG) facility at the County-owned Prairie View RDF. The RNG facility began commercial operations in December 2022. The RNG facility generates renewable energy and non-taxpayer revenue through the sale of the RNG and the associated environmental attributes through the Federal Renewable Fuel Standard (RFS) program. The RNG facility processes the methane containing landfill gas (BioGas) into pipeline quality gas that is sold for use as a transportation fuel. The RNG facility reduces methane emissions and greenhouse gas generation.

As noted above, and as also consistent with the goals of the Local Solid Waste Disposal Act, the Solid Waste Planning and Recycling Act, and the Illinois Environmental Protection Act, the County believes that the safe, convenient, cost-effective and environmentally responsible disposal of solid waste generated in Will County is best served by development (as needed) of a network of solid waste transfer stations which are strategically located in Will County so as to provide convenient and cost-effective access to the Prairie View RDF for permanent disposal of waste collected at these transfer stations.

Siting and development of a network of transfer stations as noted above reduces the distance needed to be traveled between collection and pick up of solid waste at its point of generation and its ultimate point of permanent disposal, results in energy savings, reduction of transport vehicle emissions and also reduces wear and tear on area roadways, all of which result in favorable life cycle assessment outcomes, and which also facilitate carbon foot print reduction.

In summary, the County believes that the site location and development of transfer stations in Will County in the manner noted above best serves the goals and over-arching intent of the County Solid Waste Management Plan, and, in turn best serves the interests of the citizens of Will County.

The County's RR&E staff will continue to plan for and meet the solid waste needs of its residents, local governments, institutions, and commercial sector entities. The director and staff continually educate themselves on the latest enforcement, waste reduction, sustainability programs to create the best programs for the residents of Will County. Dave Hartke. RRE Division Director

Acknowledgements

The 2017-2024 Solid Waste Management Plan was researched and drafted by Marta Keane, Will County Recycling Program Specialist, and prepared under the direction of Dave Hartke, Director of the Resource Recovery and Energy Division www.willcountygreen.com

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Will County Land Use Department, David Dubois, Department Director

Chapter 1

Introduction and Background

The Illinois Solid Waste Planning and Recycling Act (415 ILCS 15/1 et seq.) was approved on August 23, 1988, and requires all Illinois counties to plan for the management of solid waste generated within the county for a 20-year planning period. Counties typically update their plans every five years. The plan must describe the current and proposed facilities for the management of the waste stream and evaluate the proposed solid waste facilities and programs. Finally, the plan must include a recycling program designed to recycle 25% of the waste generated within the County by its fifth year.

The State requires that all County plans conform to the State of Illinois waste management hierarchy, listed in descending order of preference (415 ILCS 20/1 et seq.):

- 1. Volume Reduction
- 2. Recycling and ReUse
- 3. Combustion with Energy Recovery or for Volume Reduction
- 4. Disposal in Landfill Facilities

Summary of Plan 1991

The Will County Board approved the first Will County Solid Waste Plan in January 1991. The County was then home to ten landfills. Seven communities had curbside recycling collection while five more offered drop-off recycling service to residents. This resulted in approximately 7% of the County's waste stream being recycled. Landscape waste had just been banned from landfills (Public Act 85-1430), and was expected to increase the overall recycling rate to 21% when added to recycling figures.

Prepared by Becker Associates, Inc. and consisting of seven total volumes, the Plan included seven major goals with 22 objectives to guide the development of recycling. It targeted residential and non-residential waste streams and calculated a 30-40% recycling rate with the implementation of more recycling and waste diversion programs.

Will County committed to ten actions to achieve the State and County recycling goals over 20 years:

- Public Education
- Economic Incentives
- Technical Assistance
- Demonstration Programs
- Grant and Loan Assistance

Per the Illinois Solid Waste Planning and Recycling Act

"Each plan must include a description of the volume of solid waste generated within the County's borders with a projection of the volume of waste that will be generated over the next 20 years."

- Elected Official Support
- Site Approval Support
- Government Implementation
- Market Development

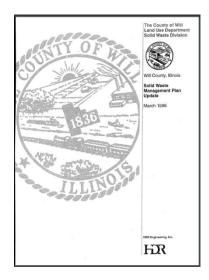
Additionally, the County recognized the need for long-term disposal within its 849 square mile jurisdiction. With support from the Municipal Advisory Committee, the County assumed the lead role in the development of a new landfill to provide a discounted price structure for waste generated within Will County borders. The plan concluded with a call for strong County leadership and cooperation with both the private sector and other units of government to meet both waste and recycling goals.

Summary of Plan 1996

When it came time to prepare the 1996 Plan Update, it was apparent the past five years had been a time of great change and improvement in the solid waste sector. Weekly curbside service was available in 23 communities with seven of those communities offering drop-off recycling for residents and businesses not serviced through the curbside contract. An additional seven communities offered a stand-alone recycling drop-off service. There were four composting facilities operating in Will County and three on-farm land-application operations recycling yard waste.

Several more materials had been banned by the Illinois General Assembly from landfills, including: appliances with CFCs, lead-acid batteries and whole tires. On a national scale, the ability to direct waste to a single facility was successfully challenged resulting in "no flow control" authority for the County. This meant that pursuit of a County landfill would be done without a guarantee of waste material. However, with population growth outpacing previous projections, five landfills closed since the previous plan, and the change in "flow control"; these changes did not alter the need to seek and obtain site approval for a County landfill.

The County was served by four permitted transfer stations, with a fifth station under construction, two operating Municipal Solid Waste (MSW) landfills, a temporarily closed MSW landfill, a special waste/MSW landfill and a fly ash landfill. Overall disposal capacity had diminished and a 455-acre site on a portion of the Joliet Arsenal was under consideration to be developed into a Will County landfill. The County Board approved the 1996 Will County Solid Waste Plan Update in March 1996.



Summary of Plan 2001

Over the five years between Updates, landfill disposal capacity had diminished considerably. The Wheatland Prairie Landfill, which had been temporarily closed, re-opened, filled to its permitted capacity and, ultimately, closed. Other MSW landfills closed or were reaching capacity. As the County relied on transfer stations to carry waste outside its borders, population growth continued to outpace past projections and the possibility of a third airport in the southeast area of the County further increased waste generation estimates. The County continued to pursue a County owned landfill at the Joliet Arsenal. Now named the Prairie View Recycling and Disposal Facility, it had passed the local siting process in March 1999. A deed restriction, added later that same year, restricted the facility's ability to accept out-of-county waste (with new deed restriction acceptable waste included waste generated from all areas of the County and the municipalities within Will County, including all waste from communities partially within Will County.) Although primarily designed for in-county waste, this new restriction, lack of "flow control" and other factors threatened the financial feasibility of the project.

The County had undertaken a dynamic education program to increase school and residential recycling and had successfully reached a 25% recycling rate. An ordinance required all waste haulers, landscapers and recyclers to report amounts collected within Will County every six months. This requirement resulted in more reliable and enhanced data collection.

This was the first plan update to include information on the County's Delegation Agreement with the Illinois Environmental Protection Agency (IEPA), which had been in effect since 1988. The Plan Update summarized and described the staff's many duties, including inspections of IEPA-permitted facilities and illegal dumpsites.



Summary of Plan 2007

The County delayed the next update one year as a study of the expansion of a private landfill was completed. In 2007, the new Solid Waste Plan included demographic information that demonstrated Will County was among the top ten fastest growing counties in the United States.

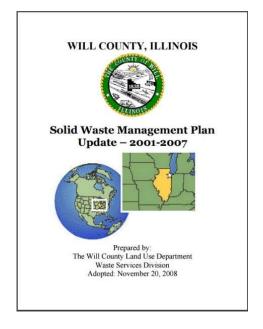
The Plan covered:

- New state laws that impacted inspections and addressed construction and demolition recycling.
- Demonstrated implementation of intergovernmental agreements to increase access to traditional recycling while also providing year-round electronic recycling services to residents for the first time.
- Addressed the need for promotion of commercial recycling, increased service for household hazardous waste collection along with an innovative new approach to year-round collection of medication working with private pharmacies, the Illinois EPA and local police departments.
- Expressed a desire to improve electronics recycling by switching from once a year, one-day collections to permanent collection sites located throughout the County.
- A record 36% average diversion rate.
- Continued School Education outreach activities.
- Continued outreach and collection service to residents and government organizations for the collection of books, textiles, tires and other hard-to-handle materials.

This was the first plan to include outreach to pharmacies and show an interest in developing permanent electronics collection sites. The Update set a goal of 40% diversion while continuing the approach of utilizing the Prairie View RDF as the means for meeting the next five years of disposal needs.

Summary of Plan 2016

This Update was delayed to allow decisions to be finalized on two significant waste disposal options: The recirculation of leachate at the Prairie View RDF, approved in late 2014 and a disposal capacity increase at Laraway RDF. During this period there were some changes in the division and a Gas-to-Energy facility was built in 2011 as originally intended at the Prairie View RDF.



The Plan covered:

- Innovative technologies became available including the use of biogas as a source of energy.
- An increase in food scrap composting by some generators.
- An increase in C&D recycling across Illinois and increasing use of CCDD sites.
- County's solid waste management infrastructure grew to accommodate more reuse and recycling options.
- The Federal Government changed the closure date of the county owned Prairie View RDF from 2027 to 2042.
- The Energy Efficiency Conservation Block Grant (EECBG) funded improvements at the Prairie View RDF, at County facilities and to recycling education programs.
- Participation at events grew due to the new website, <u>www.WillCountyGreen.com</u>, the new newsletter and social media.
- School education aided by components on the new website appreciated by teachers, libraries and environmental groups.
- Electronics were banned from disposal in Illinois.
- A record 43% average diversion rate.

Thanks to the federal EECBG grant, the Waste Services division of Land Use became the Resource Recovery and Energy Division, offering more collection programs and educational outreach than ever before. A new website was created to address waste reduction, reuse, recycling, composting, energy efficiency, water conservation and more. The Will County Green electronic newsletters began and grew. Facebook, Twitter, LinkedIn and YouTube social media outlets became beneficial to the educational outreach. The website offered children's games to teach proper recycling and a newsletter was offered improving adult education for those interested.

Staff continued to serve as inspectors for the Illinois EPA under the delegation agreement but also became part of a U.S. EPA Brownfield assistance program involving the Old Joliet Prison, made famous in the movie the *Blues Brothers*. The County indicated an interest lifting the federal restriction on out-of-county material. A statewide Waste Characterization study that included local data revealed a 7.56 lbs per capita per day. The County decided to increase their waste diversion goal to 55% noting that it would be difficult to reach without significant efforts but such a goal could prolong the life of the landfill.



Chapter 2 Legislative Changes of Interest

The State of Illinois has increased the passage of Extended Producer Responsibility (EPR) legislation over the past several years, including the Electronics law dating back to 2007, a pharmaceutical bill, and most recently, the Paint Stewardship Act and a Packaging EPR bill. In this section, these laws that are seen as impacting waste disposal, reuse, recycling and composting shall be explored. However, an appendix on Federal laws, Court decisions and many related Illinois laws is offered as an additional reference.



Electronics

In June of 2019 Public Act 100-592 known as the Consumer Electronics Recycling Act (CERA) was passed. This law improved residential electronics recycling across the State and assisted Will County in providing reliable service to residents. While it has room for improvement, it is considered one of the best electronics EPR laws in the United States. It is significant to note that this residential electronics EPR law sunsets in 2026. Staff expects to be involved in any evolution of this law to improve recycling and reduce costs to Will County.

Pharmaceuticals

The Illinois Drug Take Back Act was signed on June 10, 2022 and became effective the end of 2023. This EPR law placed the cost of collection and disposal of medications on the pharmaceutical manufacturers. Since 2007, Will County has promoted collection on behalf of the Illinois EPA and for all the years the County has funded Household Hazardous Waste collection events, the County has funded disposal of unwanted medication. This law provides service at local pharmacies across the state and continues to fund police department collections, saving the Illinois EPA over a million dollars a year, saving Will County money and improving collection convenience to all residents.

Paint

The Illinois Paint Stewardship Act passed in 2023 unanimously is an EPR law placing the cost of the collection of latex and oil-based paint and the recycling of paint on the paint manufacturers. The law will provide service at retail locations for both residents and businesses and is also expected to provide financial relief to Will County collection events and the regional HHW sites around the state. Nearly every home has leftover paint stored in a garage, basement or closet. The Illinois EPA ceased funding latex paint collection in 2001. This law improves residential options when people are cleaning out a home to sell, after a death or other transition that requires more convenience.

Packaging

In 2023 a bill began to create EPR for Packaging and Paper items. Similar legislation passed in other states and has the potential to provide financial relief to municipalities and counties engaged in providing curbside and drop-off recycling services. However, when compromise could not be reached, the bill became a law Public Act 103-0383 creating an Advisory Council to provide data and give a stronger foundation to a possible future EPR law. Will County is currently serving on the newly formed Advisory Council.

Pyrolysis or Gasification

In 2020 Public Act 101-141 was signed to allow a Pyrolysis or Gasification facility to be built in Will or Grundy County. The developers of such a facility have stated their intention is to recover plastic through drop-off from residents and businesses and "recycle" it to its molecular level. These technologies are discussed in the Appendix but it remains unclear how much energy will be needed and if the Illinois EPA or U.S. EPA will recognize this technology as recycling. It is important to note that Will County has not taken a stance on this technology but does view it as part of the Solid Waste Management infrastructure.

Reuse

As of the summer of 2023 retailers (such as grocery stores) and restaurants may allow customers to bring their own beverage containers, food containers and take-out containers to be used when purchasing food and beverages. The state created guidelines the end of 2023. This is another method to address packaging that is either not recyclable or difficult to recycle, as anyone utilizing their own containers should avoid receiving such material. Public Act 103-0524

Governor's Order

On March 20, 2020 Illinois Governor J.B. Pritzker announced a statewide Stay-at-Home Order due to the threat posed by a global illness known as COVID-19. This mandate included orders on what organizations would remain open to provide "essential services" during the shutdown. Sanitation and recycling services were included under this order as essential and were provided throughout the pandemic closure order. Many other states also recognized that recycling services provide supplies to manufacturers, including packaging materials needed throughout the health emergency.

Chapter 3 Waste Needs Assessment

This chapter is used as the foundation for understanding and projecting the solid waste service needs of the Will County community. Drawing from sources such as the U.S. Census, the Chicago Metropolitan Agency (CMAP), the Will County Economic Center (CED) and hundreds of reports submitted under the County's ordinance, this chapter shall provide information on Will County's material generation, disposal and recycling needs.

Demographic Trends

An area's population, housing and employment are linked to the amount of waste, recyclables and compostable materials generated. While Will County had experienced dramatic growth in both its resident and business populations since 2000 (slowing only a couple of years due to the 2008 recession and in 2020 due to a pandemic). Over the past two decades Will County has proven to be a desirable location for raising families and for economic investment as evidenced by the growth in both housing and employment.

Looking forward to the next 20 years, Will County is strongly positioned for economic growth due to many factors, including a diverse transportation network which includes national, state, county and some highly improved municipal roads and bridges. The County is home to the largest Inland Container Port in North America. There is significant rail, air, and water transportation in use. Power sources include nuclear, natural gas, and alternatives such as solar, wind, and renewable natural gas (RNG).

Utilizing data from CMAP, the County Transportation Department, the Will County CED, and the U.S. Census to determine the demographic growth experienced and expected through 2050. This data is the foundation for the projected rates of waste generation used in this Solid Waste Plan update.

When the Prairie View landfill opened in 2004, a Will County Service Area was defined consisting of all the communities within Will County in their entirety. This means that communities only partially in Will County are fully within the service area. Utilizing the sources mentioned previously to define the Will County Service Area, the communities Will County shares with a neighboring County are listed in two different data sets and then combined to create the Will County



Service Area. This data total is utilized to establish the estimates for waste and recycling volume generation. The following is a list of the 37 communities that comprise the Will County Service Area:

Aurora	Elwood	Mokena	Shorewood
Beecher	Frankfort	Monee	Steger
Bolingbrook	Godley	Naperville	Symerton
Braceville	Homer Glen	New Lenox	Tinley Park
Braidwood	Joliet	Orland Park	University Park
Channahon	Lemont	Park Forest	Wilmington
Coal City	Lockport	Peotone	Woodridge
Crest Hill	Manhattan	Plainfield	
Crete	Matteson	Rockdale	
Diamond	Minooka	Romeoville	

<u>Population</u>. According to U.S. Census data Will County has a population of 696,355, up from 685,419 in 2016. This population is projected to grow as more businesses and housing are developed on agricultural areas and existing communities engage in redevelopment. Several factors that could dramatically alter this projection exist and include:

- 1. The possibility of the development of a third Chicago metropolitan airport near Peotone.
- 2. The construction of a new highway connecting the growing intermodal area to Indiana
- 3. Several other redevelopment situations.

CMAP estimates that Will County's population will increase to approximately 1,431,609 by 2040. Table 3-1 depicts the projected population growth for the County and the Will County Service Area through the year 2050. (CMAP revised previous 2040 calculations shown in the last Solid Waste Plan Update.)

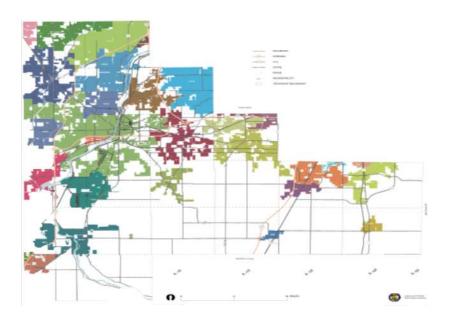


TABLE 3-1 WILL COUNTY/BORDER & SERVICE AREA POPULATION PROJECTIONS, 2010-2050							
Area	2010^{1}	2020 ^{1,2,3}	2030 ^{1,2,3}	2040 ^{1,2,3}	2050 ^{1,2,3}		
Population							
Will County	667,560	696,355	762,377	842,519	887,390		
Border Area	503,949	495,298	541,704	589,090	616,213		
Will County Service Area Source: 1. U.S. Cens	1,076,068	1,191,653	1,304,081	1,431,609	1,503,603		

2. CMAP

3. Will County GIS Department

Will County Service Area Population. According to 2020 U.S. Census data and Will County's GIS Department community percentage calculation, the population in the remainder of the Will County Service Area amounted to an additional 495,298 people. Thus, the entire Will County Service Area included 1,191,653 people in 2020 (696,355 Will County residents plus 495,298 non-Will County residents). By 2040, the Will County Service Area population is projected to increase to 1,431,609 (more than the previous projection of 1,035,187 shown in the previous Solid Waste Plan Update). Beyond revisions to the 2040 projections by CMAP, there are now 2050 projections shown in Table 3.1 as calculated from CMAP for the County and the boarder communities.

Employment. Will County has been experiencing an increase in the number of jobs available, as depicted in Table 3.2. The data provided by CMAP illustrates a substantial amount of job growth in the Will County Service Area. CMAP's data does not include numbers for the self-employed or stay-at-home family workers. From 2010 to 2020 there was an increase of nearly 20,000 jobs to reach 411,571 jobs and by 2040, this is expected to rise to 476,704. Table 3-2 also includes CMAP's most recent estimate for 2050 employment growth.

It should be noted that CMAP's projection of overall Will County Service Area employment by 2040 dropped from the projection in the last Solid Waste Plan Update from 697,433 in 2040 to the new more conservative estimate of 476,704 jobs in 2040.

TABLE 3-2 WILL COUNTY/BORDER & SERVICE AREA EMPLOYMENT PROJECTIONS, 2010-2050								
	2010 ¹	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$						
Will County	205,076	232,331	265,362	279,463	290,205			
Border Area	189,974	179,240	193,611	197,241	200,840			
Will County Service Area	395,050	411,571	458,973	476,704	491,045			

Source: 1. U.S. Census, Published 1991, 2001, 2011, 2021

2. CED: Census Longitudinal Employer-Household Dynamics Nov 2023

3. Will County GIS Department

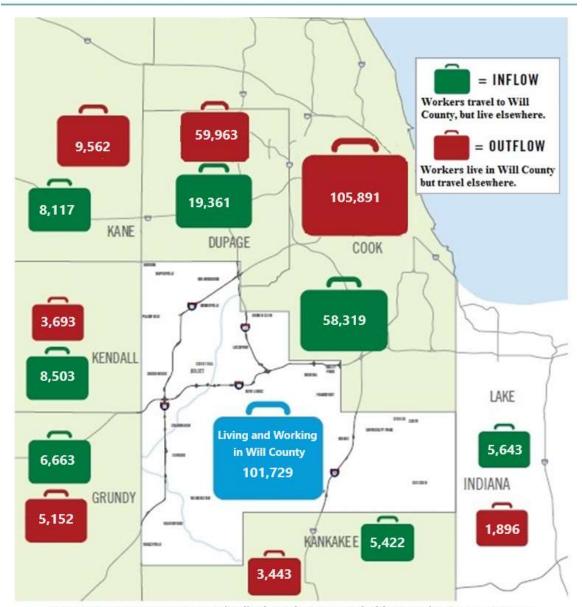
It is also important to note that Will County residents may work inside the County or travel to out-of-county communities for jobs. At the same time, some non-residents travel into Will County for work. The Will County Center for Economic Development tracks this data through the US Census Longitudinal Employer-Household Dynamics tool. The most recent data released in November 2023 is shown in Table 3-3

TABLE 3-3 EMPLOYMENT (2021)							
WILL COUNTY RESIDENTS TRAVEL TO WORK			COUNTY FR	ES IN WILL TRAVEL OM O WORK			
	Count	Share	Count	Share			
Within Will County	101,729	32.2%	101,729	32.2%			
Cook County, IL	105,891	33.5%	58,319	24.0%			
DuPage County, IL	59,963	19.0%	19,361	8.0%			
Kane County, IL	9,562	3.0%	8,117	3.3%			
Lake County, IL	5,707	1.8%	3,365	1.8%			
Grundy County, IL	5,152	1.6%	6,663	2.7%			
Kendall County, IL	3,693	1.2%	8,503	3.5%			
Kankakee County, IL	3,443	1.1%	5,422	2.2%			
All Other	20,712	6.6%	31,057	12.8%			

Source: Will County Economic Development & US Census Bureau

In 2021, 214,123 people that lived in Will County traveled to other areas to work while 140,807 people that lived outside Will County traveled to the area for work. Lastly, 101,729 people that lived in Will County remained in Will County to work. Out of a total of 315,852 employed Will County residents, 67.8% commuted outside the County for work. Of the 242,536 primary jobs located in Will County, 58.1% are filled by persons living outside Will County.

COMMUTING PATTERNS FOR COUNTY RESIDENTS AND COUNTY WORKERS (2021)



Source: US Census Bureau, Longitudinal Employer-Household Dynamics (LEHD) Program

Solid Waste Generation

Will County has a unique method for determining waste generation that was developed in 2000 and introduced through a County ordinance which requires any business or organization hauling unwanted material from a Will County home or business or other organization to report that information confidentially to the County. With over 20 years of data, this method of

calculation has the potential to be an effective means to gauge our diversion rate and project our future solid waste system needs.

TABLE 3-4 MATERIAL GENERATION POUNDS PER PERSON PER DAY				
	Average			
2018 U.S. EPA ¹	4.90			
2014 Illinois Waste Characterization Study	8.20			
2014 IL Study – Will County Area	7.56			
2016-2022 Will County Reports	9.18			

Source: The U.S. EPA national generation data is not considered applicable to local planning needs due to the variations in consumer behavior across the country.

This method is not foolproof. It is obvious when reviewing the data that some substantial amounts are not reported consistently. This means that the amounts reported are conservative as staff can assume some material was not reported. The number of reports gathered has steadily increased with the most reports ever gathered in the history of the ordinance included in the most recent six-year average.

It is widely accepted that the pandemic of 2020 increased waste generation although no new statewide study has been done, nor has the US EPA released a new data report. Industry news sources have consistently referred to the increase in Personal Protective Equipment (PPE) and the increase in single-use non-recyclable products along with a substantial adoption of home delivery of nearly every imaginable item, including weekly groceries. Home delivery packaging includes both recyclable and non-recyclable materials, both of which increase material generation overall.

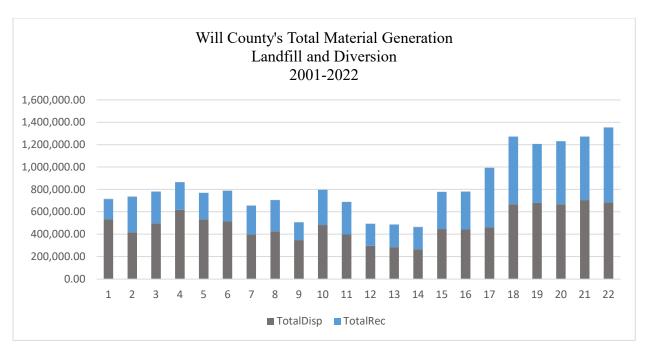


TABLE 3.5 – Tons of Material Reports Submitted to Will County							
Report Data 2016 2017 2018 2019 2020 2021 2022							2022
Reports Received	331	375	346	340	337	310	309
Material Disposed	442,079	460,474	667,100	678,485	666,980	705,381	684,987
Material Diverted	337,864	533,683	605,224	527,595	564,483	567,107	669,077
Percent Diverted	43%	54%	48%	44%	46%	45%	49%

To more fully understand where the material is being generated and how it is flowing through the system, the reporting system offers categories by sector. For the purposes of this plan, it is best to review the sectors through the collection system categories which are broken down into:

- Residential
- Commercial
- Landscape
- Food Scrap/Grease
- Textiles
- Construction/Demolition (C&D)

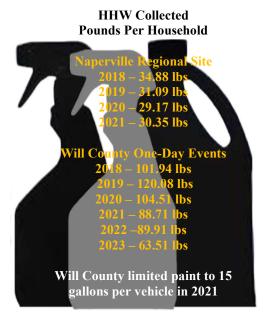


TABLE 3.6 – Tons of Material Reports Submitted to Will County							
Report Data	2016	2017	2018	2019	2020	2021	2022
Residential Disposed	205,837	223,994	366,587	365,111	385,815	403,548	371,974
Residential Recycled*	67,495	24,998	29,920	51,036	22,591	65,959	37,073
Commercial Disposed	236,242	236,480	300,512	313,374	281,165	301,833	313,013
Commercial Diverted	37,046	132,267	123,555	107,496	64,873	57,383	71,367
C&D Diverted	144,287	318,457	368,972	316,055	421,805	379,608	464,049
Landscape Recycled	85,023	51,626	76,266	45,931	47,831	43,610	48,368
Food Scrap/Grease	3,893	6,159	6,339	6,679	6,629	19,698	47,326
Textile Diverted	119	186	171	398	754	848	894
Total Generation** Pounds per Person	779,943	994,167	1,272,323	1,206,080	1,231,463	1,272,487	1,354,064
per Day	6.38	7.89	10.09	9.57	9.69	10.00	10.65

^{*}Data fluctuations are due to variability in waste reporting from year to year

The Commercial data includes all material collected from dumpsters located at office buildings, retailers, restaurants, schools, institutions, nursing homes, hotels, roll-off collection containers and large apartment buildings. While studies indicate that 75% of material generated in a typical office building is recyclable, most offices do not contract for recycling service and even those that make such arrangements are charged penalties for contamination to their recycling. Contamination, of course, has always been a concern, but after the 2018 China Sword initiative, which cut world markets for materials off from China, the items considered contaminants increased and the value of commodities decreased. While markets have been improving, haulers have instituted penalties for plastic bags in commercial collection containers and with customers of all kinds, including schools, which have reported to staff that they have ceased programs due to penalties. Apartment buildings with more than 4 units often lack recycling access and those that have offered it, find contamination causes extra fees. Consequently, we have seen an increase and then a decrease in the amount of commercial diversion.

In the past Solid Waste Plans, institutional waste (material from schools and universities) was broken out but this proved to be

^{**}Rounding results create 0-2 ton total calculation difference: Table 3.6 to Table 3.7

consistently unreliable as the reported material is collected in the same collection vehicle serving a wide variety of commercial sites and apartment complexes. However, in recognition that schools are a significant generator of material, and the Solid Waste Plan requires that an extra effort is made to address this sector, a survey was done in preparation of this Solid Waste Plan update. The survey included all public and private schools serving Will County from pre-school through 12th grade. It is also important to note the US EPA has expressed a desire to see more food scrap composting but also to see more recovery of usable food. In response, County staff has offered waste audit assistance to schools, along with encouraging them to institute a food sharing table for items students or faculty may not want that may be packed in their lunch or served as part of a meal. Not all schools responded to the survey but of those that did, they represented 49% of Will County students.

- Number of Students (75,461) represented in surveys.
- Number of Students (18,795) reported to have recycling service.
- This indicates that only 25% of Will County students in schools serving our area are given the opportunity to recycle.
- Five school districts reported having at least one Share Table in one or more of their schools.
- Surveys indicated that 25,346 students were receiving some food service items on compostable materials instead of non-recyclable plastic.

Over the past six years, an effort was made to introduce composting service for food scraps to dozens of schools, including a nine-month pilot program in a high school. However, none of the schools reported utilizing food scrap composting service, including the pilot school which ended the program when the County funding ended. This service remains an expensive program but represents an opportunity to further divert material in the future.

It should be noted that Lewis University in Romeoville began a food scrap composting program with their food service staff in 2013 and contracts with a collection service to have the material taken to a commercial compost site. This program has resulted in the diversion of at least 677.17 tons of organic food scraps over 10 years. Some grocery stores also send food that cannot be donated to commercial compost sites but data was not provided when surveys were attempted.



Donations address Food Waste and Human Welfare

Textiles is a new breakout category on the reporting forms, although clothing and shoes have been part of the Will County recycling and reuse program since 2005. Again, the US EPA has flagged textiles as an important part of the waste stream that could be recovered to be used again as is, recycled into factory rags, insulation, or other products. Today, over a dozen name brands advertise they make new fashion products with recycled materials, along with many types of shoes. Over the years, there has been an increase in recovery of textiles. Part of this rise occurred when people were stuck at home during the pandemic, cleaning out unwanted and unused items of all sorts. Some of it is also attributed to less office attire demand due to the continuing trend of people working from home.

The resulting summary of data shown in Table 3-7 utilizes the categories cited in past plans and incorporates the focus on emerging areas. Summarizing the data smooths the volatility of economic and global forces on the measurement.

TABLE 3-7
WILL COUNTY SERVICE AREA
SOLID WASTE GENERATION, Reports from 2016 - 2022 (TONS)

Sector	Tons Generated	Percent of	Generation
Sector	– 7 years	Total	Rate 1
Residential	2,621,938	32.33%	2.972 PCD
Commercial/Institutional	2,576,606	31.77%	6.383 PED
Construction/Demolition	2,413,233	29.75%	2.735 PCD
Landscape/Food/Grease Material	495,378	6.11%	0.561 PCD
Textiles Collected	3,370	0.04%	0.004 PCD
Total Average Waste Generation	8,110,525 2	100.0%	9.192 PCD

Notes:

- 1. PCD refers to pounds per capita per day; PED refers to pounds per employee per day. Will County's residential; commercial & institutional & industrial; construction/demolition generation; and landscape collection information was used to determine material generation in the Will County Service Area.
- 2. Municipal waste generation refers to the sum of all categories of material generated. Source: Will County Land Use Department, Resource Recovery and Energy Division, 2023

Staff's conclusion, based on the 2,348 reports received covering the past seven years, is that Will County is generating an average of 9.192 pounds of material per capita per day. This is the amount the Will County Solid Waste Plan will utilize for the purposes of meeting the State of Illinois mandate to forecast the needs over the next 20 years.

Waste Generation Projections

A key component of any Solid Waste Plan is a determination of the waste generation. This is commonly based on population and employment trends along with data on disposal and recycling.

Population and Employment Projections

The population and employment projections used in this Solid Waste Plan come from CMAP (Chicago Metropolitan Area Planning)'s ON TO 2050 comprehensive regional plan, the US 2020 Census Data, and the Will County CED (Center of Economic Development). The CMAP ON TO 2050 Plan was adopted in October of 2022 under state and federal planning mandates.

The Illinois Solid Waste Planning and Recycling Act (SWPRA) requires every county to adopt a plan to manage the solid waste generated within its boundaries. These plans are important tools for local planning endeavors and are required

- A description of the origin and types of waste generated.
- A recycling program.

to include:

- The facilities for currently handling waste within the county.
- A description of programs planned to handle waste over the next twenty years.
- An evaluation of the environmental, energy, life cycle, and economic advantages and disadvantages of the programs.
- A schedule for implementing the proposals.
- The potential location for sites necessary to implement the proposals.
- The identity of the governmental entity responsible for implementation.

Job and population growth has continued since the last Will County Solid Waste Plan update adopted in December of 2017. CMAP projections are lower than previous forecasts but this has been a trend in forecasting in general. CMAP also altered their methodology, incorporating Moody's Analytics into it, which also may have impacted the growth projections. The Will County CED has reported several outstanding years of job growth and a significant uptick in transportation infrastructure investment which is expected to contribute to continued business and residential growth throughout Will County. It should be noted that there remains an area near Peotone in eastern Will County that is being considered as the site of a third

regional airport which could impact job and residential growth and such growth is not calculated into the CMAP figures.

Under the CMAP ON TO 2050 Plan, Will County population is expected to expand from the 2020 census of 696,355 to the 2050 projection of 887,390. The service area includes population on the borders of Will County inside communities that are partially in Will County, but may also be outside the County and referred to as the Will County Service Area/Service Area. As shown in Table 3-1, the population was 1,191,653 for the Service Area and is expected to reach 1,503,603 by 2050.

Employment information was depicted in Table 3-2 clearly showing that jobs are expected to continue to grow. The 2020 Service Area number of jobs are 411,571 and the number projected for the Service Area in 2050 are 491,045. To determine the projection of waste generation in the Service Area, please see Table 3-8 where population and employment numbers are multiplied to the "PCD" (pounds per capita per day). Again, it should be noted that 2050 projections are lower than in the Solid Waste Plan update adopted in 2017 due to a reduction in population and employment number projections even though the PCD and PED rates are higher.

Table 3-8	2050
Material Generation Projection	Annual Tons
9.192 PCD multiplied by Will County Only	
Population multiplied by 365 days divided by 2000	1,488,632
lbs equals TOTAL TONS to be generated in 2050	
9.192 PCD multiplied by the full Will County	
Service Area Population multiplied by 365 days	2,522,354
divided by 2000 lbs equals TOTAL TONS expected	

There has <u>not</u> been a new Illinois Waste Characterization Study since 2014. While we understand that the waste stream has changed, it would be to the detriment of this study not to at least apply the 2014 data to the projected increase in material to gain some insight into how to address the needs in our waste system. This effort is depicted in Table 3-9.

TABLE 3-9
2014 WASTE CHARACTERIZATION STUDY
APPLIED TO POPULATION PROJECTIONS USING 9.192 PCD

Material	Percentage	2030	2040	2050
Paper (includes cardboard/paperboard and more)	23%	512,907	563,065	591,381
Non-Metal Containers/Plastic/Glass	16%	342,432	375,919	394,824
Metal (includes containers)	4%	97,626	107,173	112,563
Organics (includes landscape)	22%	487,621	535,306	562,226
Textiles	5%	99,154	108,851	114,325
Inorganics (includes Electronics/White Goods/Tires)	6%	138,937	152,523	160,194
Household Hazardous Waste	1%	21,327	23,412	24,590
Construction/Demolition	22%	487,644	535,331	562,253
Total Waste Generation	100%	2,187,648	2,401,581	2,522,354

Notes: Please refer to the 2014 Waste Characterization Study located on the Illinois Recycling Foundation website at https://illinoisrecycles.org/wp-content/uploads/2014/10/2015-Waste-Characterization-Update-FINAL.pdf for more detailed information. Table is based on single year population projection.

Chapter 4 Waste System Assessment

The primary system utilized by most of Will County and our boarder area is collection at generation point, use of an Illinois Environmental Protection Agency (IEPA) permitted transfer station and disposal in an IEPA permitted recycling and disposal facility, also known as a landfill. Of course, some waste is directly hauled to the landfill, other waste is taken out of the County to landfills located elsewhere and a substantial amount of material is taken to recycling facilities and compost sites. In this chapter, a list of the numerous methods of handling unwanted materials shall be listed, defined and noted if currently available or expected to become available within the next five years.

Material Collection

The majority of solid waste collection in Will County is performed by the private sector, except for some small quantities of landscape material that is collected by municipal, township and county crews. The amount and types of material vary widely, but refuse is generated, collected and hauled the most frequently. The waste haulers offering municipal collection are listed below in alphabetical order:

Several of these firms operate under more than one name:

- 1. Flood Brothers
- 2. Waste Connections (a.k.a. Groot Industries)
- 3. Homewood (a.k.a. Heartland, NuWay, Star)
- 4. LRS (a.k.a. Lakeshore Recycling Systems purchased Environmental Recycling and Disposal)
- 5. Republic (a.k.a. Allied Waste, BFI, Groen, Citiwaste)
- 6. Waste Management

A survey of all the municipalities in Will County was conducted over the summer of 2023 to learn more about the services offered by these companies to municipalities and to the two townships that currently contract for residential services for their unincorporated residents.

Two communities reported that they do not offer their residents refuse collection service under a franchise agreement: Godley and Steger





Three communities reported not offering their residents recycling collection service under a franchise agreement: Godley, Rockdale, and Steger

Will County's Solid Waste Plan has encouraged all municipalities and townships to competitively bid garbage, landscape waste, and recycling collection services to ensure all residents have affordable, accessible and dependable collection service. This is a health issue and a nuisance issue as the absence of these services often results in illegal dumping, illegal burning, and other unwanted outcomes.

The average monthly cost to a single-family home in 2022 was \$24.04 and the service included at least 95-gallons of refuse disposal weekly, and weekly (25 communities) or bi-weekly (11 communities) recycling collection. Some contracts included landscape service April through November at no additional cost while others included an option to subscribe to such a level. Many offered bagged landscape collection service with a tag fee that allows residents to pay only when they have the need for service. (Some specific municipal information is within Appendix B.)

Will County's Solid Waste Plan has consistently encouraged weekly recycling service at the same volume as garbage service because at least half of all unwanted residentially generated material is recyclable.

Will County's Solid Waste Plan has also encouraged backyard composting and landscape collection Pay-As-You-Throw (PAYT) tag systems. This is intended to meet all residential needs and to reduce the burning of landscape materials as residents with respiratory ailments, infants and the elderly are advised not to breathe particulate matter associated with the burning of landscape material.

Nearly every contract included appliance recycling weekly and year-round except for Elwood (seasonal) and University Park. Appliances have been banned from Illinois landfills under the State White Goods law since July 1, 1994. It is clearly stated that the law is intended to address the proper handling of mercury switches and chlorofluorocarbons (CFCs), refrigerant gas (Freon) and polychlorinated biphenyls (PCBs) commonly found in refrigerators, freezers, wine coolers, air conditioners, and dehumidifiers. If not properly removed, these pose serious health and environmental risks.



It is important to note that some people take appliances from the curbside and turn them into scrap yards for the value of the metal. Unincorporated residents outside of Lockport and Wheatland Townships lack appliance service altogether. It is important that scrap yards employ certified staff or companies to remove any refrigerants legally and properly. The waste collection firms with municipal contracts report few appliances collected due to removal of the appliances from the curb by "scrappers".

Residential electronics recycling service has also become a service offered as part of municipal collection contracts. While the County offers eight collection sites year-round and several Saturday collection events, eleven communities include the cost of service in their monthly overall fee allowing residents to make appointments for collection from their front door. Several other communities offer this level of service for a fee, as does the County. This allows people unable to transport items to a drop-off the access to electronic recycling.

The level of residential recycling service decreases considerably when reviewing inclusion of apartments, townhomes and condominiums in residential collection contracts. While most communities include all Townhome and Condo residential units in buildings of four or less total units, there are some that exclude them. As for apartments, many communities include small buildings of four units or less in their collection contract, but some do not. This is especially true if dumpsters are in use. Apartments of more than four units are excluded by many residential contracts and this results in less service overall. Most private apartment buildings do not provide recycling service to residents. These residents tend to reside in more densely populated communities that also lack recycling drop-off options.

With the understanding that the commercial service area can be considered all material collected from dumpsters and therefore encompasses the majority of the waste generation, it includes residential collection from dumpsters, retail and restaurant service, school, institutional, business, construction and office collection service. This does exclude landscape material. With jobs and population growth, the projection of unwanted material generation is expected to grow as well.

Will County has a considerable infrastructure in place for concrete, wood, brick, stone, metal, uncontaminated soils, and





other materials common to this category. Table 4-1 offers a list of Clean Construction and Demolition Debris (CCDD) and Uncontaminated Soil Fill Operation (USFO) sites. Some of these sites do not accept CCDD or soil from third party customers.

TABLE 4-1 CCDD & USFO Sites Serving Will County				
Site	Incorporated*	Location	Operator	
119th Street Materials LLC CCDD	No	Plainfield	Ladd of Illinois, LLC	
AZ Stone CCDD	Yes	Bolingbrook	By Design-Solutions	
Black Forest Uncontaminated Soil USFO	Yes	Joliet	Black Forest Investments	
Chicago St. CCDD	Yes	Joliet	Chicago Street CCDD	
Elmhurst Chicago Stone CCDD	Yes	Bolingbrook	Elmhurst Chicago Stone	
Heidelberg Materials CCDD	Yes	Romeoville	Heidelberg	
Richard St CCDD	No	Joliet	Ferro Construction	
Vulcan Bolingbrook Quarry CCDD	No	Naperville	Vulcan	
Willow Ranch CCDD	No	Romeoville	JMC Operations	
*Incorporated refers to a facility or property located within the corporate boundaries of a municipality.				

While Table 4-2 offers a list of Construction and Demolition Recycling sites, where many materials are sorted and marketed for reuse or to be recycled into new products.

TABLE 4-2 General C&D Sites Serving Will County				
Site	Incorporated	Location	Permit Number	
Alpha LM, Inc	Yes	Joliet	2012-085-OP	
Aurora Recycling Center		Aurora		
Lockport Recycling & Scrap Services	No	Romeoville	2012-209-DE/OP	
Prairie Trails C&D Facility		Matteson		
River's Edge	No	Plainfield	2012-035-OP	
West DuPage Recycling & Transfer		West Chicago	2015-124-OP	
Notes: Some General Construction and Demolition Debris (General C&D) recycling sites may be permitted as a				

Notes: Some General Construction and Demolition Debris (General C&D) recycling sites may be permitted as a Transfer Station.

Commercial refuse, not sent through a waste diversion process or system, is frequently sent to a landfill. Most of the collection companies serving Will County utilize a MSW permitted transfer station to reduce hauling costs. A collection truck is one of the heaviest vehicles on the road and traveling from the collection point to the landfill may be costly compared to utilizing a transfer station where the material is consolidated into a semi-trailer and taken for disposal in a more economical manner.

TABLE 4-3 Transfer Stations Serving Will County				
Site	Permit Number*	Location	Operator	
Alsip Transfer Station		Alsip	Waste Management	
DisposAll		Forest View	Heartland Recycling	
Joliet Transfer Station/Material Recycling Facility	1993-517- DE/OP	Joliet	Waste Management	
Citiwaste Transfer Station	1994-019- DE/OP	Joliet	Republic	
Prairie Lakes		Matteson	Waste Management	
Homewood		Park Forest	Homewood Disposal	
Eldamain Transfer Station		Plano	Groot / Waste Connections	
Tri-State Disposal		Riverdale	Tri-State Disposal	
Rockdale Transfer Station	1993-109- DE/OP	Rockdale	Waste Management	
Moen Transfer Station	2016-272-OP	Rockdale	LRS	
Hydrite Chemical Transfer Station**	2011-410- DE/OP	University Park	Hydrite Chemical Co	

Notes: All Transfer Stations are Permitted by IEPA

Will County provides a cost-effective local location for the disposal of unwanted materials, known as the Prairie View Recycling & Disposal Facility (Prairie View RDF, also referred to as the Prairie View Landfill). This landfill is located on a former federally owned arsenal, meaning the land itself is recycled and designed to take in the residential and commercial waste generated within the Will County Service Area. A change in federal law related to the land conveyed to Will County allows the County to determine the length of time the site will continue to serve the service area and contribute to the stability of disposal costs in support of the area's economic development.

As stated previously, most refuse is not directly hauled to the landfill for economical reasons, but comes in through transfer stations. It was also noted that some of the transfer stations direct waste to other landfills. The reason for this is related to the ownership of the transfer station and the designated landfill and to competitive forces in the marketplace. Nevertheless, the operating status of Prairie View Landfill has an impact on this marketplace.

Table 4-4 offers a list of operating IEPA permitted landfills in Will County and the surrounding area.

^{*} Permit Numbers are included for transfer stations located within Will County.

^{**}Facility transfers non-hazardous waste, but not municipal solid waste.

TABLE 4-4 Operating Non-Hazardous Waste Landfills Serving Will County				
Site	Permit Number*	County	Estimated Closure Date	Notes*
Laraway Recycling and Disposal Facility	B-141R- M	Will	2029	Accepts non-hazardous special waste and non-special waste and construction & demolition debris.
Prairie View Recycling & Disposal Facility (Prairie View Landfill)	1999-291- LF	Will	2034	Accepts municipal solid waste, construction or demolition debris, industrial waste and sludge.
Renwick Landfill	1995-444- LFM	Will	TBD	Accepts coal combustion waste only.
DeKalb County Landfill		DeKalb	2054	
Livingston Landfill		Livingston	2036	

LaSalle

Newton, IN

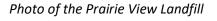
2030

2034

Will County owns a landfill (the Prairie View Landfill) on the former Joliet Arsenal site, which opened in 2004. It is currently estimated to meet the needs of Will County residents and businesses for the next 10 years relying on increasing reuse and recycling by all in Will County. Will County is fortunate to have a local solution on a parcel of land that otherwise was impacted by the operations of a munitions production facility.

Notes: * Permit numbers and notes listed for facilities in Will County only.

Each year, the Illinois EPA releases a Disposal Capacity Report for the State. In addition to reviewing this document, RRE staff monitor available disposal capacity at pollution control facilities in northern Illinois and northwest Indiana that currently service or may service the residents and businesses of Will County.



LandComp Landfill

Newton County Landfill



It should be noted that while Will County has disposal capacity, some of the waste generated in the County is transported to landfills outside the County. These landfills may have fees lower than those in Will County or they may be owned by companies that haul refuse and cost internalization may make the longer distance economically viable.

Landscape waste, including tree branches, leaves, brush chips, grass clippings, weeds, bushes, and vegetative debris are all banned from disposal in a landfill in Illinois. These materials may be handled on-site, decomposing naturally or composted. If they are collected, they must be taken to a permitted compost facility or land application site. It should be noted that Christmas trees and house plants are exempt from the landscape waste ban and are considered decorative. Some communities include Christmas tree collection for two weeks after the holiday requiring their vendor to chip or compost the material.

TABLE 4-5 Compost Sites & Land Application Sites Serving Will County			
Site	Materials	Location	Operator
Christensen Farms*	Landscape & Food	Peotone	Larry Christiansen
Green Organics*	Landscape & Food	Bristol	Green Organics, Inc
Plum Valley Landscape	Land Application	Crete	Tim Van Baren
Smits Farms & Vegetables	Land Application	Beecher	Carl Smits
Quarry Compost Facility*	Landscape & Food	Romeoville	Waste Management
Notes: * Indicates Compost Facilities			

The remaining material includes traditional recyclables such as fiber items, containers, and specific items such as electronics, appliances, textiles, hazardous waste, tires, scrap metals, polystyrene, and plastic film. Some of these products are taken curbside to Material Recovery Facilities (MRFs) to be sorted and sent to recycling markets.

The common items taken curbside are considered Traditional Recyclables and include clean fiber items (paper, envelopes, magazines, greeting cards (without metal or glitter or batteries), cardboard and chipboard) and containers (glass, aluminum cans, steel cans, plastic bottles, plastic tubs, cartons). These are the recyclable items processed at MRFs.





TABLE 4-6 MRFs Serving Will County				
Site	Material	Location	Operator	
Crete Lions Club*	Traditional except cartons	Crete	Crete Lions Club	
Homewood	Traditional Items	Homewood	Homewood Disposal	
Groot	Traditional Items	McCook	Waste Connections/Groot	
Recycle America	Traditional Items	Calumet City	Waste Management	
Groot Plainfield	Traditional Items	Plainfield	Waste Connections/Groot	
Resource Management Companies	Traditional Items	Chicago Ridge	RMC	
Loop / Paper Retriever	Traditional	Joliet / Chicago	Loop Paper Recycling	
	except glass and			
	cartons			
Notes: *Does not have commercial scale or high volume processing capacity.				

Scrap Metal Recycling has existed since ancient times when metal was first brought into use for tools. Although not ancient, Will County's history includes the Joliet Iron Works, which ran from 1869 to 1936 and was, at one point, the second largest steel mill in the United States. Today, Will County is home to a variety of scrap metal recyclers and auto recycling facilities to provide recycling for scrap aluminum, copper, steel and more. These materials are generated by both residents and businesses. Will County offers residents scrap metal recycling once/twice a year at one day events titled Recyclepalooza.

TABLE 4-7 Scrap Metal Firms Serving Will County			
Operator	Special Items Accepted	Location	
Ace Iron & Metals	No Electronics	Joliet, IL 60433	
All American Recycling	Some Electronics. No TVs or Monitors	Joliet, IL 60433	
Belson Steel Center Scrap	Electronics in Kankakee County Wind Farm Decommission Services	Bourbonnais, IL 60914	
BL Duke Industrial Scrap	No Electronics		
E-Z Recycling	Some Electronics. No TVs or Monitors	Tinley Park, IL	
Fairway Recycling	No Electronics	Morris, IL	
FAMCe	Some Electronics. No TVs or Monitors	Morris, IL	
Gaby Iron & Metal	Some Electronics. No TVs or Monitors	Chicago Heights, IL 60411	
Lemont Scrap	No Electronics	Lemont, IL	
Lockport Metal Recycling	No Electronics	Lockport, IL	
S & S Metal Recyclers	No Electronics	Aurora, IL 60505	
Universal Metal Recycling	No Electronics	Aurora, IL 60505	
Notes: This table does not include auto recycling/salvage businesses, which may also offer a scrap metal recycling			

service. Some of these businesses may no longer be in business due to market conditions.

Electronics were banned from Illinois landfills in 2012 creating the need for a system to collect and recycle the many and varied devices. While the law covered services for residents, schools and businesses along with all other organizations generating electronic devices are obligated to hire an electronics recycler. Will County is home to several electronics recycling businesses. These facilities are generally not permitted by the Illinois EPA, however any facility that disassembles the older type of Cathode Ray Tube (CRT) TVs has the potential of exposing employees to lead and is subject to OSHA regulations. Fires may also be a concern due to batteries within many of the devices.



Electronics Recycling Facilities Serving Will County		
Operator Material Generator Location		
A-Team Recyclers	Schools & Business & Residents	Shorewood
ATEN	Schools & Businesses	Tinley Park
AVA E-Recycling	Businesses	Joliet
Best Buy	Businesses	Aurora, Bolingbrook,
		Joliet, Orland Park,
		Tinley Park
Cloudblue	Business	Joliet

TARLE 4-8

Notes: A-Team and Best Buy operate under CERA to serve residents, retailers charge fees for TVs. Will County opts into the Illinois EPA CERA program to provide FREE electronics recycling to all residents. Some of the operators may no longer be in business due to market conditions. There are additional companies located outside Will County that also provide services.

Businesses

Schools & Business & Residents

Schools & Businesses

Textile reuse and recycling have also been part of the existing solid waste system. Over the years, both non-profit and for-profit businesses have evolved to provide drop-off services for all types of clothing, including hats, coats, shoes, sneakers, boots, belts, jackets, slacks, dresses, skirts and more. Textiles also include blankets, pillows, drapes, table linens and more. Some retailers operate as consignment shops, only accepting items in high quality condition, while others accept items in any condition, marketing items in poor condition outside of the United States or recycling the items through downstream manufacturers into insulation and factory rags, among other things.

E-Scrap Technologies

Midwest Recyclers

Kuusakoski (merged Vintage Tech)



Bolingbrook

Plainfield

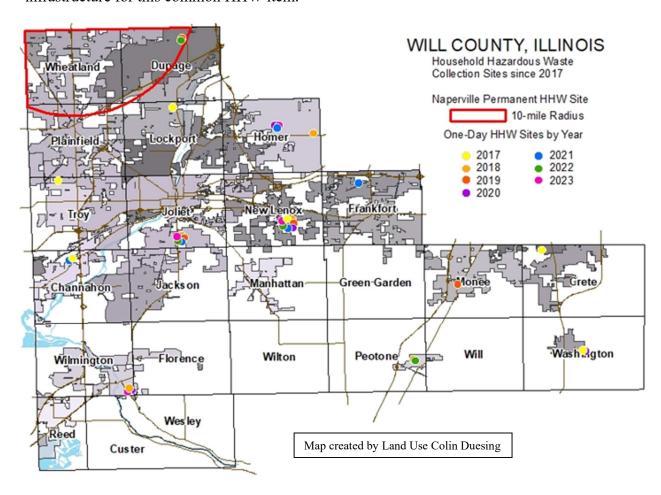
Joliet

TABLE 4-9 Textile Recovery, Reuse, Recycling Sites Serving Will County			
Operator Quality Accepted Location			
Clothes Mentor	Accepts women's clothes in good condition for local resale	Aurora, Crest Hill, Orland Park	
Goodwill	Accepts all textile items in any condition, prefers items in good condition for local resale. Markets globally Bolingbrook, Joliet, Frankfort, Lemont, Naperville, New Lenox, Orland Park, Plainfield, Romeoville, Woodridge		
Helping Hands Clothing Bins	Accepts items in all conditions. Collection Boxes in nearly Markets locally and globally every community		
Morning Star Treasure Chest	Accepts textiles in good condition for local resale	Joliet, New Lenox	
Once Upon a Child	Accepts children's clothes in good condition for local resale Bolingbrook, Crest Hill, Naperville, Orland Park		
Plato's Closet	Accepts items for teenagers in good condition for local resale Crest Hill, Naperville, Orland Park		
Savers Thrift Store	Accepts items in good condition for local resale Orland Park		
St. Vincent de Paul Thrift Store	Accepts items in any condition for local and global reuse, resale	Aurora, Joliet	
ShareFest Will County	Accepts items in good condition for local giveaway events and some items for animal shelters	One-day giveaways have been held in Joliet, Lockport, New Lenox, Monee	
US Again Notes: Several shops have closed	JS Again Accepts items in all conditions. Collection Boxes in several Markets locally and globally communities		

There are many other stores that sell used items, such as music records and CDs or musical instruments. Some of the communities within Will County have garage sale annual events to encourage reuse (this may also happen in a neighborhood to improve sales).

On a related and important note, there are several small businesses that focus on repair. They may specialize in electronics or appliances. Shoe repair and leather refurbishment for handbags to furniture. There are scissor sharpening services and the local community college is beginning to offer Repair Events. Repair is an essential part of the reuse system.

Lastly, the community requires access to hazardous waste handling services. The Illinois EPA has offered one-day collection events for residents, but they have been sporadic since they began in the late 1980s. In 1992 they funded the first permanent regional collection site in the City of Naperville with the community funding the personnel, building and equipment costs. In 1995, the site was opened to all Illinois residents and shortly thereafter, Will County began assisting with funding to the city for their portion of the costs. Will County also funded one-day collection events for Household Hazardous Waste and conducts four to six events annually around the County as many residents find the regional site to be a lengthy drive. The County also lists automotive service locations that accept motor oil on the WillCountyGreen.com website to provide infrastructure for this common HHW item.



Businesses in need of hazardous waste service may choose from several companies around the larger multi-state area. Some specialize in specific chemicals while others are equipped to take a broad range of materials.

TABLE 4-10 Hazardous Waste Firms Serving Will County		
Operator	Location	
Clean Earth, Inc.	Darien, IL 60561	
Clean Harbors	Dolton, IL 60419	
GFL Environmental	Mokena, IL 60488	
HWH Environmental	Tinley Park, IL 60477	
Heritage Environmental	Lemont, IL 60439	
Safety-Kleen Systems, Inc.	Dolton, IL 60419	
Tradebe Treatment and Recycling, LLC.	East Chicago, IN 46312	
US Ecology	Harvey, IL 60426	
Veolia Environmental Technical Solutions	East Chicago, IN 46312	
Notes: This table does not include companies that specialize in motor oil only.		

Anerobic Digestion systems are most commonly in use at wastewater treatment facilities. Anaerobic digestion is a natural process that uses an oxygen deficient environment to separate organic material, such as wastewater, agricultural waste, and food waste, into methane gas and a liquid or solid by-product. For more than a decade there has been increased focus on implementing anaerobic digestion at large food waste generation sites, such as restaurants, food processing operations, nursing homes and hotels. Will County is home to a small anerobic digester at the Joliet Junior College Culinary Arts School.

Chapter 5 Will County's Solid Waste Management System

The first four chapters of the Solid Waste Plan lay a firm foundation in historical goals along with demographic details providing insight into the area's service needs. This chapter explains the current practices and future goals based in the political, social and economic realities of 2024. (Appendix D offers a summary matrix of all the previous Plans and current goals.)

The Will County Land Use Department's Resource Recovery and Energy Division (RRE) is designated with the responsibility to implement the County's Solid Waste Plan. Since 1988 it has enforced Illinois (non-hazardous) solid waste regulations through a delegation agreement with the Illinois Environmental Protection Agency (Illinois EPA). RRE is also responsible for coordinating the review of applications for local siting in unincorporated areas of Will County, pursuant to the Illinois Environmental Protection Act (415 ILCS 5/39.2).

This Solid Waste Management Plan (2017 – 2024) supersedes all previous County approved solid waste management plans and conforms to the waste management hierarchy established in the Illinois Solid Waste Management Act [415 ILCS 20/2(b)]. All recommendations listed in this Plan are contingent upon adequate funding and staffing levels. This Plan includes the following sections:

- Funding Mechanisms
- Tasks (Administrative, Programming, Reduction Recommendations)
- Pollution Control Facility Recommendations
- Future Goals

FUNDING MECHANISMS

The RRE Division is not funded through property taxes. Operational expenses are covered by a combination of:

- Prairie View Landfill disposal fees and host agreement contractual fees
- Laraway Recycling & Disposal Facility disposal fees
- CCDD disposal fees
- Illinois EPA Delegation Agreement Grant funds
- Other Grants when available
- Cost sharing agreements with local jurisdictions
- Renewable Natural Gas facility commodity and environmental attribute revenue

Required Goals

Provide sufficient detail and direction to facilitate the efficient and effective implementation of the waste reduction and final disposal components detailed in this Plan.

Allow enough flexibility to accommodate new, expanded or modified programs and facilities.

Under the host agreement and amendments to the host agreement, for Prairie View landfill, the landfill operator, Waste Management of Illinois, pays the RRE Division a landfill oversight fee and the maximum allowable fee for every ton of "commercial solid waste" received in the form of a surcharge fee.

Pursuant to the Illinois Environmental Protection Act [415 ILCS 22.51b], Will County has also enacted an ordinance to collect a fee on CCDD material permanently disposed of within the County.

Under a negotiated host agreement with the Moen Transfer Station located in Rockdale, the operator is required to pay the County for every ton of applicable waste received above a 600 ton per day average. If the operator ceases providing free waste disposal to the Village of Rockdale residents, the operator will be required to pay the County on every applicable ton of waste received per day.

The Illinois EPA reimburses the County on a quarterly basis for work performed under the delegation agreement. Occasionally other revenue is received from the State of Illinois, the Federal Government or local governments within Will County. These funds are offered in a cost-sharing format and used for a myriad of recycling and conservation programs and administrative costs related to such programs. When these funds are available, the RRE Division is able to provide a greater assortment of programs to a wider variety of residential and business constituents.

The RRE Division also receives revenue from the sale of renewable natural gas and environmental attributes, known as Renewable Index Numbers (RINS) through the Federal Renewable Fuels Standard (RFS) program. Revenue generated by the facility is first utilized to pay for operating costs related to the operations of the Renewable Natural Gas (RNG) facility and debt service related to the construction of the RNG facility and associated structures.

TASKS AND GOALS ENCOMPASSED BY THE SOLID WASTE PLAN

	mentation Status of Tasks Required in the So	
ID	Recommendation	Status of Implementation
1	Assistance to Local Government The Will County Recycling Program Specialist is certified to assist municipalities, townships and school districts with bidding and contract documents addressing solid waste, recycling and landscape waste collection needs. The position strives for consistent education on materials accepted and understanding of recycling programs. Since the last Plan Update, this position has assisted several townships and municipalities with implementing new residential collection agreements and improving agreements either being bid or negotiated. It has also provided educational presentations and materials for disbursement through utility bills or other methods	
1-A	Affordable access to waste disposal for all residents.	Continue
1-B	Weekly Curbside Recycling Collection 23 municipalities offer weekly service 2 townships offer weekly service 12 municipalities offer every other week service 1 municipality offers ONLY a drop-off 1 municipality doesn't provide waste or recycling service 22 townships do not provide waste or recycling service	Continue to encourage municipalities and townships to offer weekly recycling service
1-C	Recycling Carts of Equal or Greater Size to garbage carts to accommodate recycling materials 23 municipalities that offer weekly service offer similar size carts 2 townships that offer weekly service offer similar size carts All others offer less space for recyclables, resulting in less recovery	Continue
1-D	Collection Service for White Goods (appliances) to ensure recycling and safe recovery of hazardous components. 31 municipal contracts include service, most weekly 2 township contracts include weekly service	Continue
1-E	Collection of Landscape Materials weekly minimum April 1-Nov 30. 34 municipalities offer landscape collection service 2 townships offer landscape collection service Note: some public works departments also collect leaves in the Fall.	Continue
1-F	Christmas Tree collection for mulching	Continue

	(Illinois excludes them from the disposal ban on landscape material.) Some communities require trees free of decorations to be collected and mulched. 17 municipalities designate this service in collection contracts 2 townships designate this service in	
	collection contracts	
1-G	Allow Food Scraps in Landscape Collection. (Illinois law allows permitted compost sites and land application sites to accept a diminutive amount of food waste.) 2 municipalities offer food scrap service as a separate, stand-alone service 1 municipality offers "ride along" service in landscape carts	Continue with emphasis on "ride along" adoption
1-H	Inclusion of Recycling Service at all Municipal Sites in residential contract. 34 municipalities include service in their residential contracts	Continue
1-I	Inclusion of Downtown Street Garbage and Recycling collection service in municipal contract. 15 municipalities include garbage collection from street containers in residential service contract. 1 municipality also includes service of their recycling containers.	Continue
1-J	Consideration of a Modified Volume-Based System (PAYT or Modified) 16 municipalities report offering different size capacity carts but not all have different prices, indicative of a modified volume-based garbage system 9 municipalities offer tag only landscape service which is considered a pure volume-based system or PAYT	Continue
1-K	Inclusion of all apartment buildings in residential service contract 3 municipalities report inclusion of all residential units in collection contract services	Continue
1-L	Inclusion of businesses with separate fee system to encourage recycling 1 municipality is a closed community, with one hauler but no requirement on businesses to recycle	Continue
1-M	Maintain a listing on the WillCountyGreen website of all residential service contracts in the County to assist residents and	Continue (This information was updated most recently in the summer of 2023)

	communities when negotiating or bidding their contracts	
1-N	Maintain a listing of various service providers for residents, businesses and communities on the WillCountyGreen website. This listing covers disposal, reuse and a wide variety of recycling services from traditional, to construction and demolition to electronics and more.	Continue The Green Guide Database is updated throughout the year as new companies are added or staff is notified of closings. The guide is available 24/7 and averages nearly 40,000 visits a year
		The GIS department assisted RRE in creating a map version of the information to promote easier use and possible reduction in transportation distance for unique drop-off items.

2 Assistance to Schools / Outreach to Children

An Environmental Educator position is part of the RRE staff and involved in providing education to students in grade levels of pre-K to 12 at both public and private schools, as well as in Park District and Library settings. Since 1997 the position has awarded Earth Flags to schools that meet a variety of waste reduction and recycling criteria. Prior to COVID in 2020, the program awarded nearly 50 Earth Flags each year and has been building back up the past two years, offering in-classroom and outside group education programs to meet all needs.

The Environmental Educator often offers compost education, encouraging classroom worm bins for vermicompost experience, along with encouraging pollinator garden and fresh food gardens, which are also great places to compost. Since the last Solid Waste Plan Update, the Environmental Educator worked with a school district that had four high schools with the intention to implement food scrap composting in all four high schools. For one school year, RRE funded a grant to cover the cost of compostable collection bags and several staff took turns monitoring the lunchroom with volunteer students, faculty and maintenance staff working to make separation of food scraps from reusable, recyclable and garbage items clear to all involved. The Environmental Educator also encouraged the use of food reuse tables in the school lunchroom and offered parents information on packing waste-free lunches. The program was considered a success, however, the district decided not to expand or fund it on their own, as the program costs were greater than simple disposal..

Often teachers ask the Environmental Educator to offer information on water conservation, energy efficiency and climate change. Efforts are made to meet these requests. The Educator is also requested to provide presentations to youth organizations, such as scout troops, and to staff booths at STEM fairs along with a variety of kid-friendly events.

	<u> </u>	y
2-A	Promote the Earth Flag program to all	Continue
	schools.	
	Nearly 40 schools awarded Earth Flags	
	annually.	
	COVID impacted the program but the	
	Educator offered outdoor educational	
	alternatives.	
	Program recovered by the 2022- 2023 school	
	year.	
2-B	Introduce elementary school students to	Continue
	vermi-composting.	

	Average distribution of vermi-composting	
2-C	bins to 8 schools annually. Encourage schools to grow a garden for	Continue
2-0	pollinators and/or fresh foods.	Continue
	2 schools annually add gardens through	
	partnering with others and RRE efforts.	
2-D	Presentations to students at Park Districts	Continue
	and Libraries.	
	15 average number of presentations	
	annually.	
2-E	Encourage schools and/or School Districts to	Continue
	adopt a Solid Waste Plan to track garbage	
2-F	and recycling data. Encourage Schools to offer a Share Table to	Continue
2-1	reduce food waste.	Continue
	87 Schools offer Share Tables.	
2-G	Encourage Schools to try food scrap	Continue
	composting.	
	1 High School tested this effort for one	
	school year under a pilot grant program with	
	RRE.	
2-H	Encourage students to teach parents and	Continue
	friends proper recycling and composting	
	techniques. 2,000 Average annual number of students	
	receive a presentation on recycling.	
	1,500 Average annual number of students	
	receive a presentation on compost	
2-I	Encourage Schools to participate in Trex	Hold
	plastic bag recycling.	
	The Trex program changed recently and	
	continues to be promoted as all schools have	
	film plastic that can be recycled when collected and sent to the proper type of	
	recycler.	
	9 Average number of schools participating	
	annually.	
2-J	Write a newsletter for schools, a minimum of	Continue
	twice a year.	
	The newsletter is produced twice a year and	
	emailed to one or more faculty members at	
2-K	schools in the County. Information on applying to be an Earth Flag	Continue
2-IX	School, school newsletters, packing a waste-	Continue
	free lunch, composting, vermi-composting,	
	environmental games and lessons offered on	
	WillCountyGreen website.	
	The Environmental Educator, Energy	
	Specialist and the Recycling Program	
	Specialist all add new information to the	

	WillCountyGreen education pages when appropriate.	
2-L	All schools maintain garbage and recycling services. Schools bidding garbage and recycling services are referred to the Recycling Program Specialist for assistance.	Continue

	Assistance to Non-Profits and Private	
3	The Recycling Program Specialist is tasked with assisting organizations of all types with contracting for services, handling unusual situations, and introducing them to new innovations that may reduce their costs. The WillCountyGreen website provides a Business-to-Business only mode when searching for ways to dispose, reuse, compost or recycle materials. There are also pages dedicated to employee education on ways to reduce waste, reuse and recycle in the office. Several items are designed for lunchrooms to encourage waste-free lunch practices, energy efficiency and water conservation that may save organizations money. In 2011 RRE developed a Green Business Star program but promotion of the program became sporadic and efforts to learn more about individual businesses waste reduction, recycling and efficiency became difficult to maintain. Today, the Recycling Program Specialist and the Energy Specialist respond to direct inquiries and post information in the RRE electronic newsletter to inspire adoption of conservation programs.	
3-A	Respond to inquiries for assistance. 1 average annual in-person visit. 12 average annual calls for assistance with unique situations.	Continue
3-B	Increase the number of organizations contracting for recycling services in Will County.	Continue. Staff has been unable to substantiate much growth in these efforts. In fact, there were reports of a decline in 2018 due to increases in the cost of service related to value of material falling dramatically. COVID has also had an impact but there has been some re-establishment of business recycling programs.
3-C	Encourage the purchase of recycled content paper, letterhead, envelopes, office furniture and construction materials.	Continue
3-D	Encourage electronic over paper use and double-sided printing.	Continue. Staff has been unable to substantiate a local difference in printing, but all indications are for a significant increase in the adoption of electronic filing, electronic signatures, and more paperless transactions.
3-E	Discourage the printing of emails.	Continue. Staff has been unable to substantiate a local difference in printing. but indications, thanks to advances in saving technology in the "cloud" and on computer systems, indicates a reduction.
3-F	Encourage Electronic Billing and processing of invoices.	Continue. Staff has been unable to substantiate but internal billing has become increasingly electronic which indicates improvement.
3-G	County Board consideration of an ordinance to require commercial	Continue, as markets have stabilized, it shall be considered to improve the recycling diversion rate for Will County.

	recycling services be offered or adopted. Due to the Chinese National Sword policy and the complications of	
	COVID, staff did not pursue this goal.	
3-Н	Offer Business Star Program for businesses willing to complete an application sharing success at reuse, recycling, or other conservation goals	Continue, but recognize there has been mixed success with the current program. Staff needs to re-design the application and conduct more promotion along with consider way to improve reward program.
3-I	Encourage restaurants to only provide straws and water when by request to save resources.	New
3-J	Encourage restaurants to offer take out and left-over containers made from compostable material to reduce polystyrene use understanding it is very difficult to recycle.	New
3-K	Find interested commercial sites to demonstrate higher recycling rates, with a goal of 70% diversion for office buildings.	New
3-L	Encourage restaurants, conference centers and caterers to donate food	New

4 Brownfields

Sites that have been contaminated by former industrial or other uses may be hampered by real or perceived contamination problems, rending them unable to generate tax revenue. Such sites may be designated at Brownfields, in need of some remediation before being utilized as recreational areas or as productive tax bases in the industrial and commercial sectors.

The County obtained technical assistance in the past to address some possible Brownfield sites, including funding for specific information addressing some aspects of the Old Joliet Prison site on Collins Street. This was done in conjunction with a County hired Environmental Consultant to see what portions could be utilized as a tourist attraction or for recreational use. Eventually the Joliet Area Historical Museum was able to turn part of this site into a Tourist attraction.

Currently, RRE is not involved in any Brownfield projects but is aware that the Will County Center for Economic Development (CED) received a \$400,000 grant from the U.S. EPA. This is a community-wide Brownfield Assessment Grant. Typically these grants provide funding to

inventory, characterize, assess, conduct a range of planning activities, develop site-specific cleanup plans, and conduct community engagement related to brownfield sites.

Airiel view of the south portion of the Joliet Prison.



4-A	Provide Brownfield technical	Continue
	assistance as needed and as available	
	staffing, time, and budget permits.	

5 Illegal Dumping Complaints

Will County recognizes that the mishandling of waste of material may pose an environmental and health risk to people, wildlife, land, air and water. Complaints received from residents are taken seriously. This is demonstrated in the following manner:

- Will County's RRE Division staff includes inspectors that are partially funded by a grant from the Illinois EPA to conduct inspections on behalf of the state agency.
- Local delegated inspections improve the response time for Will County.
- Complaints received may either be transferred to other enforcement divisions, other jurisdictions, or are recorded and assigned to an inspector within the RRE Division, depending on the complaint details and parameters.
- An initial investigation of a complaint determines the next step.
- If compliance at a complaint site is pursued through the terms of the delegation agreement the property owner will receive a notice requestion corrective actions.
- Resolution of complaints at the County level is considered more efficient than a resolution involving the Illinois EPA, due to their greater jurisdictional area to cover.

Burning of garbage is prohibited under State law and County ordinance. The State of Illinois regulations allow the burning of onsite generated landscape waste only, such as tree debris, leaves, grass, & bushes grown on the property. The County Nuisance Ordinance further restricts burning to only dry leaves, branches, and bushes originating on an owner's property, if specific requirements are met. Small recreation fires are allowed by the Ordinance if specific requirements are met. Furthermore, the State of Illinois allows prescribed burns for habitat restoration and agricultural waste to be burned if certain criteria are met.

Smoke from burning leaves, grass, brush, and most plants contain high concentrations of pollutants such as carbon monoxide, particulate matter and photochemically reactive chemicals. Some of these are known carcinogens and some contribute to smog formation. Exposure to carbon monoxide can result in reduced oxygen flow. Particulate matter can become embedded in lung tissue. Smoke from leaves contains some chemicals that are commonly found in cigarette smoke and linked as a major factor in lung cancer. In response to this health threat and to better manage the waste stream, modification to the County Nuisance Ordinance may be considered for implementation in the future to further restrict open burning in densely populated, unincorporated areas.

5-A	Encourage communities to prohibit the								
	burning of garbage, leaves, grass and								
	brush	while	allowing	controlled					
	recreati	onal fire	es.						

The following communities prohibit garbage, leaf, grass and brush burning, while most allow recreational fires:

IIICS.		
Aurora	Lockport	Plainfield
Beecher	Manhattan	Romeoville
Bolingbrook	Mokena	Shorewood
Crest Hill	Monee	Steger
Crete	Naperville	Tinley Park
Frankfort	New Lenox	University Park
Joliet	Orland Park	Wilmington
Lemont	Peotone	Woodridge

Divisions of Land Use Department and the Sheriff's Office commonly respond to complaints in unincorporated areas where residents are burning landscape materials, which generate smoke or airborne particulate matter that is a nuisance and can inflame respiratory ailments, such as asthma and emphysema. Residents of these areas may only burn dry twigs and logs for small recreational fires. Wet landscape materials should not be burned because wet materials increase smoke and may cause increased respiratory irritation to neighbors. Burning of wet landscape materials is prohibited by the County Nuisance Ordinance.

Table 5-1: Will County Non-Permitted Complaint Site Inspections

Report Year Data	2016	2017	2018	2019	2020	2021	2022	2023
Complaint Site*	194	139	105	88	122	92	76	75
Sites Restored to								
Compliance	63	53	50	42	49	45	42	28
Clean-Up Yards	35,265	28,136	9,737	2,955	3,139	6,540	8,215	18,865
Tires Cleaned-up	2,283	951	71	91	39	113	207	661

*Indicates the number of complaint site inspections that resulted in the generation of a formal inspection report or notice of violation under the IEPA delegation agreement. This number does not include the numerous inspection activities conducted that are follow-up inspections, site meetings, result in an unjustified complaint outcome, or result in enforcement of County Nuisance Ordinance.



Complaint Received/Inspection



Site Restored to Compliance

6 Collection Programs

The RRE staff offer an array of reuse and recycling collection programs each year. Some are dependent on budget constraints while others are less costly or become available through grants. Staff also conduct efforts to provide programs requested by communities or non-profit groups. The following is a list of programs offered over the past sixteen years:

- Battery Recycling for Rechargeable Batteries decreased
- Book Reuse & Recycling Event same
- Carpet and Padding Collection ceased
- Compact Fluorescent Lamps (CFLs) decreased
- Composting and Gardening Programs increase
- Electronics Recycling increase participation
- Fire Extinguisher Collection & Recycling new
- Home Goods Collection for Reuse same
- Household Hazardous Waste Collection similar
- Medical Equipment Collection for Reuse same
- Paint new law passed, expect improvement
- Pharmaceutical Take-Back new law, improvement
- Polystyrene (Styrofoam) Recycling same
- Pumpkin Compost Collection same
- Scrap Metal Collection same
- Shredding Event reduced
- Textile Collection for Reuse and Recycling same
- Thermostat Collection same
- Tire Recycling same
- Traditional Recycling Drop-Offs same
- Wood Recycling same

RRE Division staff works with other local government agencies to provide collection programs that result in the reuse and recycling of materials. These collection programs may be weekly, monthly, annually, or every few years if ample opportunities exist elsewhere. Efforts should be made to address toxic products, hard-to-recycle items and services not available to apartment residents or unincorporated residents. When possible, business materials may be included but cost considerations to such expansion of service must be a heavily weighted factor, with residential service rated highest concern.

6-A **Battery Recycling**

Demand from residents for both single-use and rechargeable battery recycling remains high. While single-use batteries have not had significant hazardous components for over a decade, rechargeable batteries are made with hazardous components and must be recovered and recycled. The increasing number of lithium batteries is a concern as these have been linked as the cause of many fires.

Prior to 2017 the battery manufacturers funded a collection program for rechargeable batteries but since then, the program ceased and the County has had to purchase collection boxes and find locations willing to accept rechargeable batteries and all types of lithium batteries. This program has struggled due to the fear of fires, which are avoided when tape is placed on the ends of the batteries.

Will County has always accepted rechargeable batteries as part of the Household Hazardous Waste Collection program and they are taken at the Regional HHW sites. Staff is working with other counties and municipalities to pass legislation requiring manufacturers to collect and

recycle all types of batteries. A page of the WillCountyGreen.com website is dedicated to Battery information, including proper disposal and recycling options. Staff is working with peers in other Illinois counties to enhance education on all types of batteries. This is expected to eventually include information on the growing number of bike and scooter batteries. It will also include information on what to do with damaged batteries that may pose a risk of fire or explosion. Sealed Lead Acid [SSLA/PB] Up to 11 Metal lon Nickel [Li-lon] Hydride Cadmium [Ni-MH] [Ni-Cd] Zinc [Ni-Zn] 6-A1 Educate the public on Social media and WillCountyGreen website information is battery chemistry. done on a recuring basis. 6-A2 Provide Rechargeable RRE has purchased boxes and made them available to battery recycling. libraries and other offices of local government along with County offices. Some were used as intended, others were not. COVID reduced the number of locations hosting collections. The WillCountyGreen website offers information on a page 6-A3 Provide information on other battery disposal and recycling dedicated to batteries. In 2023, the County partnered with members of the Illinois Products Stewardship Council to options. offer more in-depth information on batteries, along with disposal and recycling information. The County supports EPR legislation for comprehensive 6-A4 Legislative Solution battery collection and recycling through battery manufacturers. 6-B **Book Reuse & Recycling Event** Since 1999 staff have offered residents and schools a way to keep books in circulation after they have become unwanted by their owner. This began as a one-day annual collection and evolved into a three-day program in partnership with the Joliet Park District. Large contributors are given times to drop-off by appointment before the public opening to accommodate the volume. Any books remaining on Sunday afternoon are either donated for reuse or transported off site to be recycled. This event encompasses the goal of reuse and contributes to a circular economy. RRE encourages others to host their own give away events and promotes them to further these goals of reuse and circularity. 6-B1 Educate the public on reuse and Social media and WillCountyGreen website information is recycling of books. done on a recuring basis.

6-B2				Reuse and Three-day event offered in partnership with the Joliet Park								
	Recyclin) Fetimet		ld annually . unty Book F	Yvant Dantie	oinants				
	2015	2016	2017	2018	2019	2020	2021	2022	2023			
	1,600	1,800	1,300	1,200	1,250	n/a	2,000+	1,400	1,800			
					volunteers Tables are "cookbook set aside fo	n RRE and to assist with a labeled w	th unloading the broad confiction of the broad confiction books.	g and sorting ategory namen" and an en	g of books. les such as tire room is			
					Counting participants is difficult, it is estimated that nea 2,000 bring and take books over the course of the weeke event. (Due to COVID, the event was canceled in 2020 resumed in 2021 with the use of tents to allow greater soc distancing. A record crowd of participants and boo resulted!)							
6-B3		offer a	organizati a reuse/r		Since 2007, ShareFest Will County (an independent community group) has been offering a giveaway event that includes reused books. The group often distributes books to a variety of people and organizations throughout the year, including hospitals and nursing homes. Recently they opened a facility in New Lenox where they are able to distribute clothing, food, books and other items year-round.							
6-C	Will Co caused Recycles governm	unty was the mark rs marke nent as i	ket to de t the nylo t has mor	to offer c stabilize. on carpet,	carpet or pace Several Commore commity, but the	dding recycl onstruction nonly purcha PET Carpet	ing since 20 and Demol	015 when plition Recycl	astic prices ers (C&D) inesses and			
	Support carpet	legisl manufac	ation r	equiring o fund	Several at carpet man recycling These attermade from frequently percent of areas). Unway the Co	tempts have nufacturers to program thre empts have to n fossil fuel . The US EI the volume to til extended pounty will be naterial is w	o assist in fough legislate output of the course of the cours and is reported to the cours and is reported to the cours and fill or of the cours and the cours are the cours and the cours are the course of the cou	ation at the ressful so far placed by he it as controls (more in negislation passablish a programmer)	llection and state level. r. Carpet is omeowners ibuting two netropolitan es, the only ram for this			
6-D	Collection Site on County Property The goal of offering collections of hard-to-recycle items on a County owned site was identified in 2016 when the electronics collection program lost all host sites. A budget item was approved for creating an architectural drawing for identified location but the funds had to be reallocated and the drawings were never created. Will County continues to rely on host communities for collection of materials, which limits the materials that can be targeted or tested. However, the											

		s for a more proximal drop off location for the items they do						
		site remains a goal in the Solid Waste Plan.						
6-D1	Have plans drawn for a Collection Site	Need to put in budget and bid and award						
6-D2	Build a Collection Site	Continue as a goal to improve service						
6-E	Compact Fluorescent Lamps (CF	Ls)						
	Hazardous Waste collection programation qualified them as an item collected programs. Most retail collection programs. Will County is dedicated to enterms. Businesses should recycle the							
6-E1	Will County continue to provide collection of CFLs from residents	CFLs and LEDs are collected at HHW events and at the regional sites funded by the Illinois EPA						
6-E2	Educate residents and businesses about recycling of CFLs and LEDs	Will County offers information for residents and a list of service providers for businesses on the WillCountyGreen.com website.						
6-F	Composting and Gardening Programs Organic material is easily recycled and most gardeners compost, using finished compost and/or vegetable and fruit food scraps in their gardens. Since the 1990s when landscape materials were banned from Illinois landfills, the County and many municipalities have encouraged backyard composting as a means to reduce the amount of material collected and capture valuable nutrients from grass clippings, brush and some food scrap items. Large amounts of leaves are often cited as the reason people burn landscape waste, which often results in complaints. Staff encourages several alternatives to reduce air pollution issues and complaints, including composting.							
6-11	Educate the public on back yard composting and vermi-composting.	Detailed information is offered 24/7 on the WillCountyGreen website with a page dedicated to composting instruction, additional education material and vermi-composting. Several staff members from Land Use have offered educational presentations on backyard composting, vermi-composting and gardening. During the Fall, staff utilizes social media and the Will County Green electronic newsletter to encourage mowing leaves, mulching leaves, and composting them as Fall is the best season to begin composting. The Pumpkin collection was created as an additional educational outreach program. See it listed below.						
6F2	Promote local food gardening.	Outreach to churches and park districts has also been done to encourage community food gardens. Staff have also partnered with the Farm Bureau, the University of Illinois Extension Office Master Garden program, and others to promote composting and gardening.						
6-F3	Engage in the sale of compost bins to promote back yard composting.	For the past decade, RRE has partnered with the Conservation Foundation, a local non-profit, to sell Compost Bins and Rain Barrels. Ordering is done through the WillCountyGreen.com website.						

6-F4	Seek ways to compost food waste				RRE staff have encouraged the County's Adult Detention
	generated at County owned			owned	Facility, Juvenile Detention Center, and Sunny Hill Nursing
	facilities.				Home to consider contracting for food waste composting
					services or install an Anaerobic Digestion (AD) system.
					Staff continues to seek grant opportunities for the AD
					system

6-G Electronics Recycling

As the US EPA became concerned about electronics filling landfills and the increasing amount of components unrecovered, various communities in Illinois began to offer residential electronics collection events. Naperville held the first one-day event in October 1996 and Will County offered them annually beginning in 2000. In 2008, a state law was passed requiring manufacturers to assist in covering the cost to recycle some of the electronic materials designed for obsolescence, many of which were replaced within three years. In 2012, a variety of electronic devices were banned from disposal in Illinois.

Will County had already established a growing year-round program in partnership with various communities to collect CPUs, keyboards, hard drives, compact disc devices, typewriters, adding machines, telephones, stereo components, speakers, cameras, VCRs, televisions, cables, and other similar devices. By 2013, Will County had 13 sites open on weekdays, a few with weekend hours and the County offered several Saturday collection events to make dropping off electronics as convenient as possible.

However, many communities outside of Will County lacked electronic recycling services and Will County joined other local governments to advocate for changes in the law that provided year-round service regardless of weight goals. In 2016, a year after the County earned the title of accepting the most residential electronics in the State, the program ended due to the issue in the law itself. Will County joined the disadvantaged areas, losing access to the program established by the law. Fortunately, the County was able to rejoin the manufacturer funded program in May with the City of Lockport being the only collection site able to adhere to the manufacturer requirements.

Due to the creativity of the staff and cooperativeness of the community, along with the support of the County Executive and County Board, the Electronics Collection program expanded with a new and unique approach. The County entered new intergovernmental agreements with units of local government to host mini-weeknight collections on a recurring basis, bid as Turn-Key collection events. In addition, several communities added collection service to their curbside recycling contracts but requiring appointment pick-up scheduling.

A rewritten state law, known as CERA (Consumer Electronics Recycling Act) was passed in 2017 to prevent the underserved situation from occurring. CERA has a sunset clause in 2026. This latest approach requires all counties to opt-in to it by March 1 of each year with a plan for service covering the period 9 to 21 months in the future.

Under CERA, Will County spends more money to properly collect, sort and pack the electronics material than had been spent under previous versions of the Electronics recycling law. While the law is considered one of the best in the United States, it still fails to capture many items that residents expect to be taken, including microwaves, landline telephones, telecommunication equipment, ink and toner cartridges, media storage devices, projectors, routers, backup systems, uninterrupted power supply units, film cameras, solar lights, radios, vapes, and more. Will County continues to accept nearly all items, striving to meet residential demand while recycling as many electronic devices as possible.

While CRTs are the costliest item to recycle, production of them ceased years ago and many are expected to complete their useful life within the next five years. Already, we see a significant drop in the number of CRTs being turned into the program. It is important to note that flat screen TVs tend to last only 5-7 years and are expensive to dismantle. Their increasing size also makes packing them challenging.

The ban on electronics covers 17 electronic items generated by residents, businesses, schools, churches, and non-profit organizations. The CERA only covers residential material. Electronic recycling providers serving non-residential entities are offered on the WillCountyGreen.com website to assist those in need of collection in finding a certified recycler.

The County staff will continue to participate in statewide meetings related to CERA. Will County's multi-faceted approach has been an example to others. The Recycling Program Specialist serves on the State's Electronic Task Force and will continue to work to improve the EPR legislation with a goal of lowering the County's costs and improve the list of items accepted

6-G1 Provide a year-round collection of electronic devices for residents.

This is done through CERA and a bid process for Turn-Key collection service, along with a network of intergovernmental agreements

	Table 5-3: Will County Total Pounds of Electronics Collected											
2016	2016 2017 2018 2019 2020 2021 2022 2023											
2,160,019	2,001,042	1,722,532	1,216,595	1,164,942	1,038,233	846,840	824,269					

NOTE: Will County had the <u>only</u> continuously operating electronics collection program in Illinois in 2020

As CRTs are eliminated, overall weights will continue to decline.

Devices of all types are expected to continue to fail at a frequency requiring attention and renewal of the state recycling law.

List of Current Partnership Sites:

Bolingbrook Park District Channahon Township Frankfort Township Lockport Public Works Manhattan Township New Lenox Township Peotone Police Department Wilmington City Hall



6-G2 Provide Saturday collection for electronic devices.

This is done through CERA and a bid for one-day collection events

6-G3 Provide a pick-up option for residents with very large electronic devices.

This is done through CERA and a bid process, allowing the selected contractor to set a rate for the large item, with a carry along free service for up to 7 non-television electronic items. Current cost is \$40

6-G4	Educate residents and businesses on electronic recycling options.	This is done through the WillCountyGreen website with a page dedicated to residential recycling options and a search tool for finding electronic recyclers serving businesses, schools and other organizations Brochures are also printed and distributed at various venues, including partnership sites				
6-G5	Improve legislation to reduce County costs to offer services to residents and improve data collection overall.	Staff is involved in efforts to improve legislation. The Recycling Program Specialist is on Statewide Electronics Task Force				
6-H	fire extinguishers. These items have brochure and website include opera	ing with interested local governments to recover and recycle we been an item of concern for some of our residents. The ting safety tips as well as collection site information.				
6-H1	Provide a fire extinguisher recycling program for residents and small businesses	Will County contracts with a firm located in Will County for collection on an as needed basis from host collection sites.				
	List of Current Partnership Sites: Crete Fire District New Lenox Township Peotone Police Department Wheatland Township Collected first year - 2023 61 Extinguishers = 492 pounds					
6-H2	Educate residents and businesses on fire extinguisher recycling options	This is done through the WillCountyGreen website with a page dedicated to residential recycling options and a search tool for finding fire extinguisher collection sites or service providers. Brochures are also printed and distributed at various venues, including partnership sites				
6-1	redistribute small home goods, suggrown and established a large for available to residents year-round. The bi-annual Recyclepalooza collmaintains a list on the WillCounty	ared with ShareFest Will County to occasionally collect and ch as cookware and toys. This non-profit organization has od giveaway location with clothes and small home goods the organization brings in volunteers to assist the County at ection events. In addition to this partnership, the County of Green.com website of reuse retail locations to encourage me goods as well as purchase used items to reduce the energy				
6-I1	Educate residents and businesses on furniture reuse and recycling options	WillCountyGreen website offers listings of companies that accept and sell used furniture, as well as purchase and sell used office furniture.				
		Social media is used to highlight reuse options through garage sales, and thrift stores that offer furniture.				
		The Will County Green newsletter highlights reuse options several times a year.				

6-12 Provide collection programs for residents for small home goods, toys, cookware, and knick-knacks.

When possible, this collection option is offered with the annual weeklong Textile collection.

The one/two annual Recyclepalooza events include these collections through ShareFest Will County

6-J Household Hazardous Waste (HHW) Collection

Nearly every home has a variety of products that are considered toxic, poisonous, corrosive or flammable. These may be cleaning fluids, pesticides, lawn and pool chemicals, drain cleaners, oil-based paint, stains, varnishes, automotive fluids, batteries, medications, mercury containing lamps (tube lights or CFLs), thermostats and thermometers, etc. These items may cause fires, explosions, release toxic gases or pose a risk if placed in standard garbage carts.

In 1992 the City of Naperville piloted a permanent HHW collection site with funds from the Illinois EPA covering the cost of disposal of materials. This site opened to all Illinois residents in 1995. In 1996, Will County began hosting one-day HHW collection events with the Illinois EPA. In 1998, the Prairie View Landfill operator began reimbursing the County for at least two HHW events each year. In 1999, Will County approved funding for the Regional Permanent HHW in Naperville to assist with operating costs, along with DuPage County and Kane County. In 2006, the City of Chicago opened a permanent HHW site in partnership with the Illinois EPA. That facility does not receive any funding from Will County, but some residents have utilized the site's services.

While the regional sites serve many Will County residents, many others, especially in rural areas, request one-day collection events closer to their communities. In order to meet some of the demand, RRE began partnering with communities to fund collection events. First New Lenox Township, and then the Village of New Lenox and the Village of Homer Glen. This has resulted in funding towards events held in these communities. Homer Glen has typically elected to offer the event every other year while New Lenox partners with the County every September to offer a Recyclepalooza and HHW collection event.



6-J1 Educate residents and businesses on reducing use of hazardous products.

WillCountyGreen website offers a page dedicated to "green cleaning alternatives".

RRE provides a brochure that is popular with residents, especially at environmental fairs.

The Will County Green newsletter highlights reuse options several times a year.

Social media is used to highlight alternatives

6-J2	Offer One-	-Day HHW	collection	n Will	County of	fers 4 to	6 one-day	HHW c	ollections
	events and s				lly and pro				support to
	in Napervil				gional site i				
					usehold Ha				
	Will Co	2016	2017	2018	2019	2020	2021	2022	2023
	# Events	5	6	6	2 25 (2 020	5	2 020	1 207
	Participants Pounds	5,095 356,203	4,197 411,178	2,724 277,690	2,356 282,917	2,039 213,300	2,890 255,093	2,030 182,324	1,807 114,771
	Cost	\$259,732	\$289,839	\$223,631	\$192,268	\$166,551	\$229,436	\$173,652	\$158,836
	Naperville	Ψ237,732	Ψ207,037	Ψ223,031	Ψ192,200	ψ100,331	Ψ227,130	Ψ173,032	Ψ130,030
	Participants	20,762	21,404,	22,426	23,764	22,662	23,061	17,426	19,727
	Will Only	3,699	3,894	3,975	4,217	3,928	4,061	5,332	2,958
	Est Will lbs	159,797		***	42.5	44.5		***	**
6.70	Will Cost	\$25,000	25,000	\$25,000	\$25,000	\$25,000	\$25,000	,\$25,000	\$30,000
6-J3	Offer seve			I	linois EPA		•		•
	events annu				County in o		•		
	the Illinois	EPA or fun	ded by Wi	I	County has			day events	annually
	County				ding on bud	_			
6-J4	Find ways			nd The C	County has	partnered	with New	Lenox Vi	llage and
	improve ser	rvice for res	sidents	Towns	ship to offe	r an event	every Sept	ember.	
				Home	Glen partn	ers with th	e County e	very other	year
					1		1 .	1 .	
					ative characturers in				
6-K	Medical Ed	auinment (Collection			the conect	ion and rec	overy emo	11.
0-K	Eyeglasses,					a lifta ma	dical bada	and mara a	ra naadad
		_							
	by many ar organization							ised inroug	in various
	Educate res				ountyGreen			age of orge	anizations
	Ludeate les	idents on re	use option		ccept used 1			igs of orga	amzanons
					1	1	1		
					media is				s through
				garage	e sales, and	thrift store	s that offer	furniture.	
				The W	7:11 Carreta	C	144 1	L1: ~l.4~	
					/ill County		sietter nig	niights reus	se options
				severa	ıl times a ye	ear.			
6-L	Paint								
-	In 2014, RI	RE decided	to add lat	ex paint ba	ack to the r	nix of iten	ns collected	l after dror	oning it in
	2001 at the			•					
	participants								
	most comm								
	hazardous.								
	of statewide								
	January of 2								
	and the Illin 2025 at any					mieciurai]	Jamis COVE	rea unaer	ine iaw III
	2020 at ally	21 111011 108	5. J. 1111	51105 01	- / -1100.				
	Update on	Pilot Latex	Paint Pro	gram: In 2	2013, RRE	worked w	ith New L	enox Town	nship and
	ShareFest V								
	that had ne								
					٠. ٠ - ١٠٠		j -		

	and given away for reuse in 5-gallor each year through 2019 but ended b	n containers. The program ran from April through October of by mutual agreement in 2020.							
	With the passage of the Paint Stewardship Act, residents and businesses will have access to both latex paint and oil-based paint collection services. We anticipate retail collections to be utilized for both residents and business, while the one-day HHW collections will continue be only for residents.								
6-L1	Educate residents on paint recycling options. WillCountyGreen website offers a page dedicated to Pain recycling and disposal information.								
		A brochure on Paint recycling to be offered at Environmental Fairs.							
		The Will County Green newsletter highlights paint options.							
		Social media is used to highlight paint options.							
6-L2	Educate businesses on paint recycling options.	The WillCountyGreen website has a listing of businesses that offer paint recycling and disposal services to businesses and organizations.							
6-L3	Offer collection and recycling or	These products are part of the one-day events.							
	disposal for latex paint, oil-based paint, and aerosol paint	5-year pilot program for latex was discontinued.							
6-L4	Pursue Illinois EPA for more	Continuing.							
	events or a permanent HHW site in Will County.								
6-L5	Actively seek legislative solution.	Closely monitor implementation of the Paint Stewardship Act and collection locations in Will County.							
6-M	Pharmaceutical Take-Back	The and concerns recarding in will country.							
0 1/1		a USGS report at a conference showing 80% of fresh water							
		ontamination. While it was not considered a threat to human							
		l counties were asked to improve education, awareness and							
		here possible. RRE staff met with pharmacies and police							
		nty became Illinois EPA's first partner to provide Medication see, non-controlled medications had always been accepted at							
		ill County's one-day collections but through these new							
		clean out unwanted medications year round. This initiative							
		ressing drug theft, accidental use of expired medications and							
	, ,	fered rules to allow pharmacies to take back all medications.							
	· ·	however, solid waste programs were not included in the DEA been able to easily obtain a permit to collect controlled ine, etc.							
	In 2016, Walgreens voluntarily begonly at some locations. CVS began staff began to work with the variou February of 2020 the County's Substitution.	gan offering customers a full service take-back program but a program at select locations within a couple of years. RRE as stakeholders to address this need on a statewide basis. In stance Use Director joined RRE staff to provide testimony in s the "opioid overdose situation continues to worsen, more							

	In 2022 the Drug Take-Back Act passed in Illinois. The pharmacies that began voluntarily taking medications back from customers are expected to continue. The law does not require all pharmacies to participate but it does require them to be part of a statewide program ensuring convenient service to residents throughout the state. RRE staff worked with a representative of the manufacturers' group plan to identify and connect police and pharmacies in Will County to ensure expanded, safe and reliable collection service to all year-round by the end of 2023.								
6M- 1	Educate residents on pharmaceutical disposal options and safety. WillCountyGreen website offers a page dedicated medication disposal information and sharps disposal. Staff creates a brochure on medication and sharps disposal offered at Environmental Fairs.								
		The Will County Green newsletter highlights medication and sharps information. Social media is used to highlight medication and sharps disposal options.							
6- M2	Educate pharmacies on pharmaceutical collection and disposal options they may offer to the public.	Staff outreach to pharmacies has been reduced in recent years but will increase depending on the level of collection offered under the Drug Take-Back Act.							
6- M3	In coordination with the Illinois EPA, offer collection and disposal of pharmaceuticals through police and retail pharmacies.	Staff entered numerous intergovernmental agreement with local police departments but this ended in 2023 as they converted to the manufacturer program offered under the Drug Take-Back Act. Many medications were taken as part of the HHW program but this sunset at the end of 2023 due to the implementation of the Drug Take-Back Act.							
6- M4	Seek a legislative solution to reduce program costs and improve service	Closely monitor the Drug Take-Back Act implementation and recommend improvements as necessary to the Illinois EPA or through appropriate statewide organizations.							

6-N Polystyrene (Styrofoam) Recycling

This lightweight plastic packaging commonly used as meat trays, for some egg cartons and most take-out containers is not accepted in traditional curbside and drop-off recycling programs but frequently demanded by residents to be recycled. Since 2014 Will County has partnered with Dart, a plastic manufacturer with facilities in North Aurora that makes polystyrene products. This site has a densifier machine that is capable of slowly turning clean foam products into blocks that can be recycled into pellets and used to make non-food grade polystyrene products such as fill

for shipping, foamboard packaging and stuffing in toys or furniture.

In 2018, a local company, which used to accept this material for recycling, ceased collection services due to the China Sword policy banning global imports of plastics to China. RRE staff continue to seek an incounty solution that is cost effective and more convenient. In recognition of the difficulty of recycling this product, especially if it is contaminated with food or dirt, RRE staff will continue to encourage schools, businesses, and residents to avoid it and utilize plant-based compostable or durable alternatives.



6-N1 Educate residents to reduce use of polystyrene in recognition of the difficulty recycling it and the US Dept of Health finding styrene to be a toxic, linked to various cancers.

WillCountyGreen website has a page dedicated to polystyrene information.

The Will County Green newsletter occasionally highlights alternatives and reduction suggestions.

The Will County Green social media outlets offer alternatives and reduction suggestions.

6-N2 Educate residents, schools and businesses on polystyrene recycling options.

Durable or Compostable options are encouraged.

The WillCountyGreen website directs those interested to utilize Dart's free collection site in North Aurora.

6-N3 Offer a collection program for clean, marketable polystyrene foam items.

Social media is used to highlight recycling.

RRE offers a Recyclepalooza event each Spring and Fall to

meet some of the consumer demand.

RRE continues to consider year-round collection and recycling options with the intention of establishing one on our own property or a willing host site within the County.

6-O Pumpkin Compost Collection

The U.S. EPA has drawn attention to the issue of food waste for over ten years. The State of Illinois has expressed interest in addressing this concern by increasing public awareness of food scrap composting, donation of edible food and increased efforts to minimize spoilage. To encourage food scrap recycling awareness and composting, Will County began offering a pumpkin collection a week after Halloween each November. The first event was held in 2014 at the County Building on a Friday morning. Subsequent events have been held at Lewis University in Romeoville as a way of featuring the University's ongoing campus year-round food scrap

6-01	collection and participants of pumpkins to document de awareness. The instruction or introduce resident and fill dispose and color annual Pumpartnerships of the partnerships of the partn	he option of a compost estruction as he Univers in compost idents and sal. lents to red ompost thr inpkin Eve	of catapult site. Wea and electrity of Illin ing to atter businesse uce food an ent and	will Cour Some year Extension promotion This even This even This even Green nev	ins into a constitution into a constitution attervel in the constitution attervel in the constitution attended in the constitution a	dumpster the dance, and he event or the RRE is expected od scrap consistence with Lew arm Burea and others ance with on the Will sed in newspurpose are	hat was be d RRE has to increas Environm d to continuous vis Universu, the Urshave p this event. CountyGreas media oute featured	ing used to a added core e participa ental Educ nue as a fu as an alter ity each Naiversity of rovided e	o haul the infidential ation and ator offer in way to mative to ovember. Illinois ducation,
		Tabla 5	5 Dumple	This even	t is promot			otod	
	Year	2016	2017	2018	2019	2020	2021	2022	2023
	Participants	103	112	129	295	295	335	218	307
	Pounds	1,840	2,000	3,800	4,000	6,400	7,300	2,000	3,300
6-O2	Promote othe				CountyGree				-)
	being held to composting.							mes aware	of them.
6-O3	Seek collection	on data fro	om other					events held	
	events.			County	including	number	of partic	ipants, w	eight of
				pumpkins	, education	al efforts.			
6-P	Scrap Metal								
	From car part								
	waste stream.								
	some resident	•					•		
	staff is worki		•	_		•	•	•	
6-P1	Educate resi							h for scra	
	metal is recy	clable but	NOT in					vice provid	
		e or Tr			a	_	•	11	1. 1
	Recycling Dr	op-Off pro	grams.		•			onally high ace in curb	•
					l recycling		•	ice in curt	osiuc allu
				The news	letter occa	sionally hi	ghlights so	crap metal	recyclers
				for metal		at are no		d in curb	
				G 1	41. 1	14.1111	.1.4.41 124		1. 11
					edia is used metal recy			fference in	curbside
	I			and scrap	inclai iccy	oning opin	711 3 .		

	T- 11 12				
6-P2	Provide information on scrap metal services.	This is done on the media mentioned a	e website, in the newsletter and in social		
6-P3	Provide scrap metal recycling				
0-13	collection events.	one-day events.	recycling is provided once or twice a year at the		
	concetion events.	one-day events.			
		Municipalities and	d townships are encouraged to allow		
		residents to recycle scrap metal at their public wo			
			e County Transportation Division is also		
		encouraged to allow	w residents utilize their scrap metal area.		
6-Q	Shredding Event				
			nt destruction events due to fear of identity		
		nts in various ways at different locations, the cost has increased			
	dramatically.				
	T4 := :				
			ycling carts and dumpsters is seldom the cal ID theft tends to be done in-person and		
			idential papers can be recycled curbside.		
	oninie. Residents should feel com	nacht that their conn	dential papers can be recycled curoside.		
	RRE responded to resident reques	ts and added a docun	nent collection program to the Book Reuse		
			ecure containers offered beneficial, others		
			E offered on-site document destruction at		
	several Bluestem festivals. A	gain, while this			
	satisfied some residents, the gener		STEPS FOR CONFIDENTIAL		
	nearly as high as the rest of the ev	_	DOCUMENT DESTRUCTION		
	as it had been at the Book Event.				
	to the community and began pro				
	other entities that agreed to be pub to provide residents with oppo				
	documents free of charge. A list		Tear items with social security or bank account		
	provide the service to residents		or medical account numbers on them.		
	WillCountyGreen website's Gree		Place one half in one paper bag and the other half in another paper bag.		
	In 2016, Document Destruction		3. Fold the bags or staple shut, place one in		
	pumpkin collection event as a 1		your Recycling Cart each week.		
	awareness of the food scrap co	ollection event in	ldentity theft is a concern to everyone. It often occurs on line. Be careful but be confident		
	general. Several other groups wer	_	that paper taken at your curb is washed, de-inked, and recycled safely.		
	event for a few years but this wa				
6.01	favor of curbside recycling educa				
6-Q1	Educate residents to recycle		ntyGreen.com event calendar up to date on		
	confidential documents in curbside or in Traditional	shreading opportur	nities offered by others.		
	Recycling Drop-Off programs.	Keen the website	Green Guide Database up to date on		
	Receyching Drop-Off programs.	customer paid shre	•		
		sacciner para sine	201.1000		
		The newsletter sha	ll occasionally highlight proper recycling		
			techniques for confidential documents.		
		•			
			continue to occasionally highlight proper		
		recycling technique	es for confidential document recycling.		

6-Q2			an annua		RRE shall continue to include on-site shredding of					
	shredding event for confidential			al confide	confidential documents at the annual Pumpkin Event.					
	documen	documents.								
		1			-6 Shred Event Pounds Collected					
	Year	2016	2017	2018	2019	2020	2021	2022	2023	
	Events	1	2	1	3	2	2	2	1	
	Pounds	2,990	7,160	4,900	11,700	9,000	13,000	4,500	6,900	
6-R	The U.S. furniture and recycled, condition though so donated t and USA with a go landfill w like a me This even Free Mar They give	Textile Collection for Reuse and Recycling The U.S. EPA recognizes that a significant amount of clothing, shoes, bedding, table linens and furniture coverings are discarded to disposal and encourages recovery of these items for reuse and recycling. Since 2006, Will County has engaged in a textile collection for reuse and recycling. It began as a Gym Shoe collection but quickly expanded to all shoes in 2007 and by 2010, it was all textiles. Every May, at the Will County Office Building, for one week, residents, schools and businesses are invited to bring clothing and shoes in any condition to be reused or recycled. The program educates residents on the ability to recycle all clothing, regardless of condition. It enhances reuse because people often discard items they wouldn't wear again even though someone in a different economic situation would be grateful to have the item. Clothing is donated to reuse organizations such as Goodwill, Helping Hands, St. Vincent DePaul, Savers, and USAgain. A website page on WillCountyGreen.com is dedicated to donation information with a goal of reducing the amount of cotton, polyester, and other fabrics from being sent to the landfill when many are reusable and recyclable. Cotton, specifically, can be recycled many times, like a metal can and saves an enormous amount of resources. This event has inspired other collections. Both ShareFest Will County and the Really, Really Free Market in Plainfield offer collections of clothing, toys, cookware and small home goods. They give these donations away to the Will County community and donate the remaining items								
	to local organizations. This program serves the Solid Waste Plan waste reduction goals while also serving those in need around the County.									
6-R1										
						reuse and				
	Will County Green social media is used to highlight terreuse and recycling information.						ght textile			
6-R2	Promote alternative reuse and recycling textile collections. The WillCountyGreen website calendar includes information on community garage sales, special collection events, such as the Really, Really Free Market, Love Monee, the County Executive's coat drive or "dress for success" interview wardrobe drive when RRE staff are informed of events						ts, such as e County interview			
6-R3	Offer an annual event for textiles in any condition to stress the recyclability of textiles.									
		7	Table 5-7:				ction Even	ts		
İ	Year	2016	2017	2018	2019	2020	2021	2022	2023	
	Pounds	4,095	5,955	7,800	12,298	34,752	13,740	18,068	18,882	
		, , ,	-)	,	,	,	- ,	- ,	- , = = =	

Note: 2020 event held in July, moved from the County Office Building lobby to parking lot due to COVID. This set a record due to the pandemic home cleaning. All five-day events since have been held in the normal May timeframe but in the parking lot instead of the lobby. 6-S Thermostat Collection From 2014 through the end of 2023, the Illinois EPA offered a thermostat recycling take-back program. This program included a rebate at retail locations of \$5 per thermostat returned. The Illinois EPA and Will County have always accepted mercury containing thermostats as part of HHW collections. RRE also became involved in a manufacturer funded mercury thermostat program, offering year-round service at the Land Use Will County & Illinois EPA's Thermostat Recycling Drop-Off office. This program serves to increase awareness that Save Energy mercury thermostats should not be placed in the Protect the Environment garbage. The manufacturers of mercury thermostats created a group known as Thermostat Recycling Corporation to accept, process and recover the mercury. They have reported statewide data showing a steady decrease in the number of items being turned into their Illinois collection program as many homes and businesses convert to digital devices. 6-S1 Educate residents and businesses The WillCountyGreen website offers information. A screen on the Land Use permit office display offers information. The Will County Green newsletter covers the topic occasionally. The Will County Green social media platforms highlight the program occasionally while making a plea for energy efficiency improvements to switch to digital. 6-S2 Offer collection service RRE offers a collection box at the Land Use office for building contractors and the public to turn in unwanted mercury thermostats. (Digital thermostats are recycled with electronics.) HHW programs offered by the Illinois EPA and Will County accept mercury thermostats. 6-T **Tire Recycling** In 1992 the State of Illinois banned whole tires from landfills and required all tire retailers to collect a fee on every tire sold to cover the cost of cleaning up tire piles and recycling them. (Illinois P.A. 87-727) Residents are expected to return tires when purchasing tires, but some decide to keep old tires. All tires left outdoors have the potential to become mosquito breeding areas which can contribute to the spread of West Nile Virus and other ailments, making them a health concern. Some residents accumulate tires resulting in enforcement complaints. Enforcement action may require the landowner to clean up the tires at their own expense. Since the 1990s, the Illinois EPA has offered to conduct tire recycling events within counties for their residents, however, over the years these have decreased. Will County continues to work with our communities and townships to secure an annual tire event funded by the Illinois EPA that accepts illegally dumped tires from these entities to assist with the disposal and recycling of

	tires that they have removed from the roadways within their jurisdiction. The County's Department of Transportation also benefits from this annual tire drop off event.								
	Periodically, about every four to five years, the County funds a residential tire drop off event with promotional support from the Farm Bureau in an effort to encourage the removal and clean-up of tires by property owners within the County. The cost of this event usually exceeds the cost of any other one-day event offered by RRE but results in far fewer breeding grounds for mosquitos and assists property owners, including farmers, that have been victims of illegal dumping.								
6-T1			tire	WillCount e informat eeding insi	ion includ	ing the he	_		_
			pu Gı	listing of ti blic is on uide Datab	the WillC	ountyGree	en website		
6-T2	Offer assistance to and municipalities wi dumped tires when are available	th illegally	Co	ontinue					
6-T3			Co	ontinue					
	Table 5-8: Will Co	unty Tire (Colle	ection Eve	nts (not w	eight – es	stimated 1	number o	f tires)
		016 20		2018	2019	2020	2021	2022	2023
	1 1 1	300 6,25	55*	6,800*	4,700	4,400	5,000	5,000	3,500
	Resident Tires			<u> </u>	18,500	W:11 ' C'	4. E. 1	1 11	6,500
6-T4	* South Suburban Mayors Association participated with Will in State Funded collection.								
0-14			E will also monitor other state Tire EPR legislation to ermine if residents and businesses could be better served						
		•	by a change in our law.						
6-T5	Encourage the State to the development of end markets for tire recycling.	additional reuse and	Co	ontinue	V W	-			
6-U	Traditional Recyclin	g Drop-Of	fs						

Since the first Will County Solid Waste Plan in 1991 the County has encouraged all residents to utilize curbside and drop-off recycling services. The County recognizes that the unincorporated residents do not always have curbside service offered to them or it is at an additional cost. The County has also drawn attention to the lack of service available to residents in apartments and even in some condominiums and townhouse housing structures. Even residents in municipalities that provide curbside recycling may only receive the service every two weeks leaving them with no space for all their recyclables. Therefore, RRE partners with municipalities, townships, and park districts to offer public recycling drop-offs that accept cardboard, chipboard, paper, glass bottles, aluminum and tin cans, plastic containers, and carton containers. There are currently eight recycling drop-offs in Will County. Six are operated in partnership with the County paying for

collection service and the host site supervising participation. Waste Management, Inc. services one site through the County's Prairie View RDF host agreement. The Village of Crete is home to the oldest Recycling Drop-off in Illinois and is operated by the Crete Lions Club. The City of Naperville operates a site on the DuPage County side of their community.

While improvement has been made with two townships passing resolutions and contracting for curbside collection of waste and recycling, most unincorporated areas have no access to landscape collection service from their selected garbage hauler, and mixed access to curbside recycling service. Staff receive calls from urban apartment residents and small businesses seeking access to recycling. There continues to be a need for more recycling drop-offs or ordinances that require recycling services for these specific areas.



6-U1	Educate residents and businesses on traditional recycling options.	Offer information on WillCountyGreen website.
	J 5 1	Offer information in Will County Green newsletter.
		Offer information on social media platforms.
		Offer in-person power point presentation explaining confusing and conflicting information.
6-U2	Partner with municipalities,	Continue and expand if possible.
	townships, park districts to offer	
	drop-off sites for traditional	List of Partnership Sites
	recyclables.	Currently Operating
	,	
		Channahon Township
		Godley Park District
		Godley Park District City of Lockport
		Godley Park District City of Lockport New Lenox Township
		Godley Park District City of Lockport New Lenox Township Reed-Custer School/Reed Twp
		Godley Park District City of Lockport New Lenox Township

6-U3	Attend conferences and participate in statewide organizations address recycling.	The RRE Staff is active on several statewide organizations including the Illinois Recycling Foundation, the Contamination Task Force, the Illinois Product Stewardship Council, the SRNA Advisory Council, ILCSWMA, SWANA.		
6-V	Wood Recycling			
		Will County began accepting all types of wood in September of 2011 at a one-day event. The		
	program's vendor mulches the clean wood, recovering wood with nails and screws as well as lumber scraps. The painted, stained and treated			
	lumber is taken to a biomass gener			
	to make electricity. This program	has expanded from		
	one 30-yard dumpster to three 30-			
	requests for it have increased. It was added to the			
	Spring Recyclepalooza Event but a permanent collection site for collection has remained elusive.			
	Connection site for confection has remained efficiency. Commercial recycling access is increasing through			
	the opening of more C&D facilities. Some of these			
	may also allow residents to receive service for a fee.			
6-V1	Educate residents and businesses	Information is offered on the WillCountyGreen website.		
	on wood recycling options.			
		Information is occasionally offered in the Will County Green newsletter.		
		newsietter.		
		Information is occasionally offered on social media		
		platforms.		
6-V2	Offer a wood recycling event to	Offered at Recyclepalooza events.		
6-V3	residents. Pursue a year-round drop-off for	Continue		
0- v 3	wood.	Continue		

Construction and Demolition Program

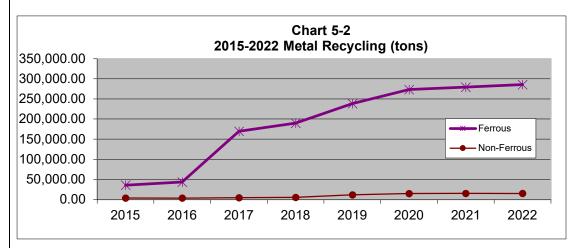
The Construction of new homes and commercial properties is expected to continue as the population grows. Demolition of existing structures is also expected to increase as property

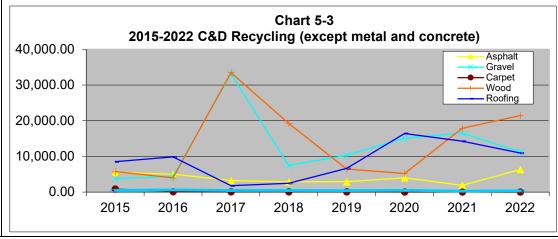
escalate and locations demand redevelopment. Many of the materials generated by these activities are recoverable, reusable, and recyclable. RRE will continue to list outlets for these materials on the WillCountyGreen.com website. See the charts compiled through the County's Hauler Reporting Ordinance #00-398 to see the growth of this material recovery.



Photo of Silver Cross Hospital Demolition – Credit to Patch online news 2018







7-A	Educate residents and businesses on recycling options for construction and demolition materials.	Information is offered on the WillCountyGreen website. Information is occasionally offered in the Will County Green newsletter. Information is occasionally offered on social media platforms.
7-В	Inform residents and business of shingle recycling law.	1
7-C	Encourage development of C&D recycling facilities within Will County to improve service.	Continue
7-D	The Land Use staff will encourage those seeking building permits in unincorporated areas to contact C&D recyclers rather than simply send everything to the landfill.	Continue

8	County Office Waste and Recycling P	Program		
o de la companya de l	Will County passed Resolution 02-537 in November 2002 to establish a requirement that all County employees recycle. Over the years, RRE has worked to ensure recycling is offered in every facility and in nearly every office. State grant funds were secured and used to purchase containers and, in 2007, a grant funded a cardboard baler at the Adult Detention Facility which has relieved pressure on the facility's garbage compactor, possibly extending its life while also saving the facility money. RRE will continue to work with Building Maintenance and contractors to receive accurate record keeping and cost-effective service in all future county waste/recycling collection contracts.			
8-A	Contract for Refuse and Recycling at all County owned and leased facilities (add recycling if not in lease). Include landscape waste collection for select locations. Include Appliance recycling.	, , , , , , , , , , , , , , , , , , ,		
8-B	Work with different departments to ensure recycling containers are beside all waste collection containers in offices, meeting rooms, lobby areas and at front entrances.	Consider grant opportunities for large scale projects, use of RRE funds for minor replacements.		
8-C	Educate all employees on recycling.	Offer presentations on lunch or at staff meetings.		
8-D	Work with Record Management to address shredding needs at other offices. If possible, send confidential material to Records Management for shredding to ensure recycling.	This new goal recognizes that shredded paper is not recovered from office recycling programs.		
8-E	Baler at Records Management for lower cost cardboard recycling.	The ADF grant funded baler has been successful and if constraints to the Records Management building can be alleviated, this should be pursued.		
8-F	Anerobic Digester at Sunny Hill Nursing Home.	Continue		
8-G	Anerobic Digester at ADF.	Continue		
8-H	Anerobic Digester at River Valley Juvenile Detention Facility.	Continue		
8-I	Hold custodial vendors servicing County buildings accountable for proper recycling.	Continue		
8-J	Implementation of Electronics collection at all facilities.	Continue		
8-K	Implementation of Plastic Film collection at all facilities.	Pilot program in process, review and continue.		
8-L	Implementation of Battery collection at all facilities.	Pilot program, review, and continue.		
8-M	Establishment of a Collection Site to serve residents and facilities.	Continue to search for pilot site.		
8-N	Receive data on traditional recycling from County facilities.	Continue, pursue improved data reporting.		
8-O	Receive data on light recycling from County facilities.	Implement		

Data Collection In 2000, Will County established the Waste and Recycling Ordinance (#00-398) to require all organizations involved in hauling waste or recyclables to submit their collection data on a report every six months. The purpose of this ordinance remains vital to RRE for maintaining accurate and timely waste generation, collection, and disposal records from Will County service providers. This data is then utilized to track the County's progress towards the waste reduction goals found in this Plan and the State of Illinois Solid Waste Planning and Recycling Act (415 WILL COUNTY WASTE & RECYCLING CONTRACTOR REPORTING FORM ILCS 15/1 et seq.). This information allows the County to provide complete listings to residents and businesses of the services and providers available. In addition, this data aids in the determination of adequate service supply and allows RRE staff to target areas that need service improvement. Over the years, as recycling, composting and reuse options have expanded the number of electronics recyclers, C&D recyclers and plastics recyclers has grown. For all the value of this reporting mechanism, RRE is continually challenged by compliance. While RRE staff have worked to make online submittal of report data easier, there are always reports missing, data entered incorrectly by those reporting, and occasions of 6E 68 05 defiant non-compliance. In light of these difficulties, RRE has mailed certified letters and have pursued options to encourage compliance. 9-A Collect Confidential Hauling Reports Continue and enter them into secure system to produce aggregated data. 9-B Fund certified mail to non-compliant Continue organizations. 9-C Utilize intern(s) to assist with pursuit Continue of reports every few years. 9-D Work with legal counsel to pursue Continue those in non-compliance. 9-E Consider passage of an ordinance to Continue require all organizations subject to the (Effort not pursued due to stress on industry caused by current ordinance to be permitted and China Sword 2018 and COVID 2020) report figures annually instead of every six months to improve listing of organizations active in Will County compliance with reporting and requirements. 9-F Consider Statewide legislation to New improve commercial reporting of data on a statewide basis, improving municipal and commercial

measurements and consistency.

10 Delegation Agreement with the Illinois EPA

Will County shall continue to maintain a delegation agreement with the Illinois EPA to conduct inspections and enforce provisions of the Illinois Environmental Protection Act (415 ILCS 5/1 et seq.) at the Illinois EPA- permitted facilities, no further remediation (NFR) sites, and complaint sites. The RRE Division conducts inspections at: clean construction & demolition debris (CCDD) facilities, Illinois EPA registered uncontaminated soil fill operation sites, general construction & demolition debris recycling facilities, non-hazardous solid waste landfills, transfer stations, landscape waste and food waste compost and on-farm compost/land application facilities and properties that have received NFR notices from the Illinois EPA Leaking Underground Storage (LUST) Program. Through these efforts, since the delegation agreement program began in 1988, RRE has enforced the cleanup of thousands of cubic yards of material and tires (along with Illinois EPA contractor assistance when available) while attempting to keep all permitted facilities in compliance. The delegation agreement provides an enforcement program of state regulations that is more accountable to local residents due to increase familiarity with the local area and community, which results in a more prompt response to citizen complaints or concerns and clean-up of potentially harmful conditions.

10-A	Renew Delegation Agreement with the Illinois EPA.	Continue
10-B	Inspect all Illinois EPA permitted active sites.	Continue
10-C	Inspect all Illinois EPA permitted closed sites still	Continue
	required to be inspected.	
10-D	Accept and respond to illegal dumping complaints.	Continue
10-F	Prosecute with the legal counsel under the authority	Continue
	of the Illinois EPA violations.	
10-G	Adopt additional inspections as dictated by the	Continue
	Illinois EPA Delegation Agreement.	

11 Disposal Capacity Monitoring

The Illinois EPA releases a Disposal Capacity Report for the State annually listing all sites in Illinois. In addition to reviewing this document, RRE maintains a list of all permitted disposal sites in and around Will County to monitor available disposal capacity at pollution control facilities in northern Illinois and northwest Indiana that currently service or may service the residents and businesses of Will County.

residents and businesses of will County.				
TABLE 5-8: List of Will County Landfills Subject to Inspection				
FACILITY	PERMIT	ESTIMATED		
	STATUS	CLOSURE YEAR		
Beecher Landfill, Unit III	Closed			
CDT Landfill, 005	Closed			
CDT Landfill, 006	Closed			
Laraway Recycling and Disposal Facility	Operating	2047		
Accepts non-hazardous soils, industrial waste, and	-			
demolition debris.				
Lincoln Stone Quarry/Midwest Generation	Operating	TBD		
Only accepts coal combustion waste from adjacent				
non-operating coal combustion facility.				
Prairie View Recycling & Disposal Facility	Operating	2034		
Accepts municipal solid waste, construction &				
demolition waste, industrial waste and sludge.				
Renwick Landfill	Operating	TBD		
Only accepts coal combustion waste.				

	Wheatland Prair	ie Landf	ĭll	Closed	
	Please Note: While Will County has disposal capacity,			me of the waste	generated in the County
	is transported to landfills outside the County. These landfills may have fees lower than those in				fees lower than those in
	Will County or they are owned by companies that haul refuse, such companies may use cost				
	internalization to make a longe	nternalization to make a longer distance drive more economically viable.			
	TABLE 5-9: Pe	rmitted	Landfills Oper	ating near Wi	ll County
	FACILITY		COUNTY	EXPECTE	D CLOSURE YEAR
	DeKalb County Landfill		DeKalb		2049
	Livingston Landfill		Livingston		2048
	LandComp Landfill		LaSalle		2041
	Newton County Landfill	Newton, IN			2074
11-A	RRE staff shall inspect per	ermitted Continue			
	disposal sites within Will	County			
	under the Illinois EPA Dele	egation			
	Agreement				
11-B	RRE staff shall monitor disposal		Continue		
	capacity utilizing the Illinois D	isposal			
	Capacity Report and information at				
	local conferences or statewide	group			
	meetings.				

12	Education and Outreach			
	RRE has several staff tasked with developing and conducting educational programs for park			
	districts, community groups and service organizations. They are the Environmental Educator,			
	Recycling Program Specialist, and the Energy Specialists. The topics vary based on the interests			
	of the groups and the programs of concern to Resource Recovery and Energy. Since the 2018			
	recycling market shift, the Recycling Program Specialist has done many presentations on what			
	is accepted and not accepted curbside, verses what can be taken to drop-off locations. Each year			
	all of the education staff collaborate on a Water Conservation program in partnership with the			
	City of Joliet. Other topics include: Backyard composting, hazardous products, proper disposal			
	of medication, solar, EV adoption, and much more. Typical presentations are given to groups of			
	15 to 40 people and an item is given to attendees with the WillCountyGreen.com website			
12.4	imprinted on it. These giveaway items are usually made with recycled content.			
12-A	Offer a variety of educational methods to reach residents, businesses, schools and other			
	organizations where they may hear or see it.			
12-B	Brochures			
12-0	RRE staff create double-sided, tri-fold pamphlets on many of			
	the division's specific programs, as well as one on the division.			
	These are printed in-house. These are provided at various			
	outreach events from collections to table displays, as well as in			
	many local government offices. The printed brochures cover			
	why a program exists and what options residents have to access			
	the program. The division's direct phone line and address are			
	always included, along with the website, on all printed			
	materials.			
12-	Utilize program icon graphics and create brochures Continue			
B1	specific to a program to offer a tactile experience			
	and gain attention.			

12-	Print in-house on r	ecycled content par	per.	Continue	
B2		, P••F			
12-		groups, units of loca		Continue	
В3	•	ipating in tabling ev	ents.		
12-C	Booths (Tabling)				
				y attempted to offer En	
	including a couple at the County Building on Board Meeting days. As Saturday collection events				
	increased, this effort subsided with staff finding it more beneficial to educate the public at environmental fairs hosted by other organizations. Over the years, this has included Expo events,				
		•	_	d Sustainability events a	*
				tion as part of business	
	events, at Church	events, Forest Prese	rve events and	at the County Fair.	·
	On rare occasions,	RRE may provide a	collection of a	material as part of their	educational tabling
	event. Items that	have been collected	d include Medi	cation (with Police ass	istance), Batteries,
				s, if service is not availa	
	\mathbf{c}		•	made with recycled con	
				by one or two people an	
12-	2023 Booth Events		p for the electro	onic newsletter and take Bluestem Festival	printed brochures.
C1	2023 Booth Events	s KKE started.		Frankfort Earth Day Fa	air
				Kidzfest	*11
				New Lenox Safety Fair	r
				Slammers Water Conse	
				Stemfest	
10				Will County Fair	
12- C2	^	to staff a booth/ta		Continue	
12-	***	as budget and time content giveaway		Continue	
C3		WillCountyGreen		Continue	
	enhance outreach.	w incounty Green	website to		
12-D	Social Media				
	As a strategy to e	conomically reach	more people an	nd businesses throughou	t Will County, the
				ach efforts in Septembe	
			•	s Twitter), YouTube (u	
				d, as of 2015, RRE laun	
				nect the County in more	•
	_	_		cations and exploration or engagement occurs. T	_
				vers. Several of the pla	
				mely responses. This pr	
				topics independent of co	
			•	sharing of information	
				sts, municipal water cons	
	many others. Topics covered include: recycling, energy efficiency, solar, composting, reuse,				
	transportation, wat			her local environmental	happenings.
	F. 1 1			tlets in Use in 2023	V T 1
	Facebook	Instagram	LinkedIn	Twitter / X	YouTube
	6,500	687	247 / 206	443	696

ed the			
estment			
WillCountyGreen.com website developed as part of the American Recovery and Reinvestment Act (ARRA) federal grant program designed to create transformative improvements in waste			
III waste			
ractices,			
ractices,			
١			

annually. The department relied on newspaper ads, inserts of a popular printed Waste and Recycling Pages, along with printed brochures and a 2007 Business Recycling Pages document

downloadable as .pdf documents.

The new website was an instance success with more visitors in the first month than in annual views previously. It grew to average 40,000 users per year and in 2023 had 163,000 total views. Adults utilize it frequently to find information on recycling, instructions on composting, how to improve energy use and even how to pack a waste-free lunch. Paper brochures, still popular at some in-person tabling events, are viewed as a page, often with links to more information if the user desires to learn more. The site contains information on storm water practices that meet federal MS4 permit requirements. It is over 250 pages of information with regular updates to offer information on upcoming collection events, public educational programs and community events requested to be posted appropriate to the goals of the site.

Staff worked with the developers of the site to add a section for the haulers to report data in a highly confidential manner. Later, RRE staff worked with the GIS division of the County to create a mapped feature for complaints and to search for recycling and disposal sites.

The website also has a section devoted to childhood education and, at the time of the launch had several cutting-edge games for children and adults to learn about recycling, composting and energy efficiency. As platforms change, some of these features, trusted by many parents and teachers, have become inoperable and funds have not been budgeted for updates to the games or to the base platform of the website.

Top 20 Searches on WillCountyGreen.com

163,718 Views in 2023

Home Page Electronic Recycling Info FAO Spring Recyclepalooza Event Household Hazardous Waste Fall Recyclepalooza Event Hauler Reporting Recycling Center Search Traditional Recycling Sites Homer Glen E&HHW Event Green Guide City & Township Info Land Use – RRE Wilmington E&HHW Event Medication Take-Back Festival Recycling Info Recycle More Paint Recycling Textile Event **Book Event**

For the 50th anniversary of Earth Day the RRE staff worked closely with the Forest Preserve to develop a Passport of events being held by both organizations and others celebrating nature and

environmentally beneficial actions. It was meant as a game and fun event, built on the efforts of many to educate and serve. Then the pandemic took most of the events off the table. The paper Passport, intended to be delivered to school students and community organizations was not needed. Instead, RRE turned the project into a feature linked to the website where everyone

could find activities and be given points for prizes by logging ways they were reducing waste, recycling, learning about nature, planting a gard

Earth Day 1970 2000

learning about nature, planting a garden or taking a bike ride onto the website. Today, a summary of the effort is available on the website.

The second of th

Given the popularity and utility of the website, offering both waste and recycling information; it is a valued part of the Solid Waste Plan. WillCountyGreen.com has proven its usefulness over the past 14 years and should be funded to remain useful over the next decade.

12-	RRE Division staff shall keep the WillCountyGreen	Continu	ıe
E1	website updated with events on the calendar and		
	information on subject pages.		
12-	When possible, budget for an update to the RRE	Continu	ıe
E2	Division website to improve usefulness on cell		
	phones.		
12-	Promote the website in all educational and	Continu	ie
E3	promotional materials.		
12-	Consider ways the website can be used for	Continu	ie
E4	interactive programs such as it was for the 50 th		
	anniversary of Earth Day in 2020.		
12-F	Newsletter: Long gone are the days when the div	ision pr	inted and mailed a newsletter to
	residents. In 2010, an electronic newsletter was crea		
	consistency, RRE subscribed to the Constant Contact		
	Specialist to write and email electronic newsletters		
	from several hundred to over 11,000 people during the	•	•
	sent to over 1,000 County employees. This newslette		2,
	become a key advertising vehicle with up to 50		50
	registrants for events signing up after receiving		willcountygreen.com The will power to retained, retown, endure and stockle.
	newsletter in their emails.		Vinit Our Website
			Make everyday Earth Day - Green your Choices - Save Resources - Be Happy
	In addition, the RRE staff creates a newsletter one to	three	A New Year filled with Choices
	times a year in a printed and mailed format to all	ll the	While many may engage in New Year resolutions that fizzle within days or weeks; we offer you opportunities to make better environmental choices every day without such pressure. For instance, instead of becoming a vegetarian, you choose meatless
	schools along with specific teachers. These newsletter		Monday as a goal to cut back on the resource load attributed to cattle. You add insulation, install water saving flucets, or recycle responsibly. If buying a car, you try a layfind play-in, go completely electric or simply get one with over 30 mpg
	then placed on the WillCountyGreen.com websit		average. If you've got bike paths accessible to your office or other frequent destination, you try bicycling a couple days a week or car pooling with a friend. We
	anyone to access.		appland all your "green" choices and ask you to join us in applauding the retirement of our Environmental Educator, Joan O'Keefe.
			Visit Our Website
	Both newsletters include information on upcoming e	vents	Electronic Recycling
	being offered by RRE. While the School newsletter h		While we may struggle with losing weight, our electronic devices have been steadily reducing. Thankfully, the Illinois Extended
	periodic information, such as the Earth Flag applic		Producer Responsibility (EPR) law was changed in 2016 from a weight based law to a comprehensive take-back service. This has
	and list of Schools that achieved it, the Monthly Elect	ronic	resulted in more programs and participation but less weight totals. In 2022, Will County's eight electronics collection sites served at
	newsletter has set details on a variety of colle	ection	lesst 9.100 households and accepted over 720,000 pounds of electronics. These 8 uites accept string lighth year-round. Currently, the County offers three additional locations
	programs and topics. Both newsletters include inform	nation	the County offers three additional locations in Joliet to increase convenience. Collection carts are inside the entrances at: December 3, 2022 - January 31, 2023
	to engage audiences on topics of environmental interes	est.	
12-	The RRE Staff shall continue to write and email the	Continu	ie
F1	Will County Green newsletter covering RRE		
	programs and a wide variety of environmental		
	topics, accepting suggestions from various related		
	organizations within and around Will County with a		
	goal of emailing the newsletter each month.		
12-	The Environmental Educator shall continue to write	Continu	ie
F2	and email the school newsletter known as		
	Environews approximately twice a year.		
12-	The RRE staff shall post the Will County Green and	Continu	ıe
F3	Environews newsletters on the WillCountyGreen		
	website.		
12-G	Digital Film Media		
	The VHS, CD and DVDs occasionally disseminated		
	on various waste and recycling topics have		
	WillCountyGreen.com website launched, federal gr	ant fund	Is were used to create a few 30-

12- G1 12-H		these were placed or chool educational semicreated several Power. Occasionally YouTu reserve of Will Count goals of the Solid Wasten.com, or in the RRI themselves, staff expole to place them on a certainly be placed our linked through news to educate residents aff time allow. The semicropie of the solid wasten.com, or in the RRI themselves, staff expole to place them on a certainly be placed our linked through news to educate residents aff time allow. The semicropie of the solid wasten.com, or in the RRI themselves, staff expole to place them on a certainly be placed our linked through news to educate residents aff time allow. The solid wasten wasten wasten wasten to a recording the recycling. When events a certainly wasten and appoint the solid wasten	n the Will C inar offered Point prese abe channels by, The Constee Plan and E newsletter pects to make twork teles on the YouT sletters and Continue Swering a value of the YouT sletters and Continue after listen are offered, nament causaks to our war, are equip	county Green YouTube channel by the Environmental Educator intations and posted them to the soffered by organizations RRE servation Foundation and others. Energy Efficiency Plan. These is or in Will County Green social keep more of these digital videos, vision, the videos may be aired ube channel where they may be the website. The ariety of phone inquiries. This stions for recycling or disposing rom disposal. It was determined eallers the option of pressing a sting to the recording, the most there is commonly an uptick in see an increase, especially from rebsite, not generating as many ped with voice mail.
	Year Calls Received by RRE	2017 Nearly 2,30	00	2022 Nearly 3,000
12- H1	Utilize an automatic phone to respond to calls 24/7 with informatic person during normal business larger person during normal business larger and larger to answer the staff to answer the	mation on electronic o function to reach a hours.	Continue	
H2	coming through the main numb		Continue	
12- H3	Return Voice Mail messages in		Continue	

13 Legislative Involvement and Tracking

The RRE Division staff take active roles in tracking and responding to related state legislation. Items that staff members have been involved in writing, negotiating and/or testifying on include:

- Each version of the State Electronics law
- Several versions of the Clean Construction and Demolition Debris (CCDD) laws
- Pharmaceutical Take-Back Act
- Paint Stewardship Act
- Packaging and Paper Stewardship Act
- Battery Recycling legislation (currently)

RRE Division is an active member of the Product Stewardship Institute. This national organization opened a local statewide chapter to assist members with legislation on items such as electronics, hazardous waste, packaging, batteries, paint and more. The organization offers monthly calls on these topics and how different states are working with manufacturers to fund collection programs through state laws and voluntary actions. Membership in this organization has helped Will County collaborate with counties throughout the state in common solid waste related services and legislation. Successful legislation has proven to save the County money while improving services to residents.

	while improving services to residents.	
13-A	RRE staff shall track legislation related to all topics	Continue
	contained within the Solid Waste Plan.	
13-B	RRE staff shall recommend action to be taken by the	Continue
	County Executive's office in support or opposition to	
	active state and federal legislation impacting topics	
	contained within the Solid Waste Plan (when	
	authorized, staff may submit witness slips on behalf	
	of Will County)	
13-C	RRE staff shall testify on legislation when	Continue
	appropriate and relevant to services in Will County.	
13-D	RRE staff shall submit comments to the Illinois	Continue
	Pollution Control Board when appropriate and	
	relevant to services in Will County and with	
	permission of the County Executive.	
13-F	RRE staff shall be active members of the Illinois	Continue
	Product Stewardship Council to pursue program	
	improvements.	
13-G		Continue
	Executive and County Board related to legislation	
	and shall continue to prepare summaries of	
	legislation and recommendations for action to the	
	Will County Executive's Office and the County	
	Board Legislative Committee. This may include	
	interaction with County lobbyists and State	
	legislators, along with outreach to the Will County	
	Governmental League.	

14 Procurement

The Solid Waste Plan for Will County has always included a goal of improving the County's investment in materials made from recovered items. When products with recycled content are purchased, it creates demand, supporting recycling, reduces mining and other extraction processes. Furthermore, it creates a circular economy which is far more sustainable than a linear

one. The purchasing division under the County Executive Office does not usually become involved in purchases for other elected offices unless specifically requested. This makes streamlining the purchase of items more challenging. Some of the items currently available, often at competitive prices are:

Recycled Content Printing Paper

Recycled Content Color Paper

Recycled Content Letterhead

Recycled Content Business Card paper

Recycled Content Envelopes

Recycled File Folders

Recycled Notepads and Legal pads

Recycled Content Toilet Paper and Paper Towels

Recycled 3-Ring Binders

Recycled Latex Paint

Recycled Ink Cartridges

Retread Tires

Compost

And more...



Many items are proven to be as high quality as virgin content products. Some do cost more, while others cost less or are cost neutral. While the County purchasing ordinance defines recycled content, it does not require vendors to offer both in response to bids, nor does it include language to favor recycled content over virgin materials. This should be changed.

Purchasing of single use plastic items when compostable materials are an option should also be given review. While the County offices do not currently have compost collection service, the compostable materials would contribute more favorably to the RNG facility at the County owned landfill. Simply passing a policy that departments purchase paper plates and cups instead of plastic could be a positive investment.

The State of Illinois procurement process may offer some procurement options favoring recycled content and compost-ability already. County staff and departments/divisions should work together to modify the procurement ordinance to encourage the purchase of the above favored items. Purchase compost for landscaping when necessary along highway construction work and county buildings.

	to unity our unity.	
14-A	Purchase recycled content paper for all paper	Continue
	material needs. This includes letterhead, envelopes,	
	color and glossy paper.	
14-B	Request vendors to quote virgin and recycled	Continue
	content when recycled content products are	
	available, such as paint, construction materials,	
	*	
	office furnishings, etc.	
14-C	Continue to purchase Recycling Services with	Continue
	Garbage Service targeting: Paper, Cardboard	
	primarily, Cans and Plastic secondarily.	
14-D	Ask all departments to adhere to a double-sided	Continue
	copy policy (many copiers are set with this as a	
	default).	
115		
14-E	Discourage the printing of emails.	Continue
14-F	Encourage electronic billing and processing of bills.	Continue

14-G	Encourage electronic responses to RFPs, RFQs, and	Continue
	formal bids.	
14-H	Landscape using drought resistant plants.	Continue
14-I	Avoid purchasing sod .	Continue
14-J	Purchase compost for landscaping when necessary	Continue
	along highway construction work and county	
	buildings.	

15 Renewable Natural Gas (RNG) Facility

The RRE Division oversaw and managed the development, design, construction, and commissioning of an RNG processing facility at the County owned Prairie View RDF to receive and process the biogas produced by the decaying waste within the landfill. The RNG facility commenced commercial operations on December 2, 2022. The RRE Division continues to oversee the operations and maintenance of the RNG Facility and associated structures. The RNG facility processes and upgrades the biogas into RNG that is compressed and injected into a pipeline for delivery and commercial sale. The RNG is then sold for use as a transportation fuel. The source and use of the RNG allows for the achievement of Q-RIN (qualified renewable index numbers) status through the US EPA RFS (renewable fuel standard) program allowing for the sale of environmental attributes, known as RINS (renewable index numbers). Since the source of the gas is a solid waste landfill, the RNG is designated as a D3 RIN within the US EPA RFS program. The RNG Facility reduces carbon dioxide emissions at the landfill and the sale of RNG and D3 RINS provides County revenue.

RRE staff shall oversee the operations and New

15-A RRE staff shall oversee the operations and maintenance of the RNG Facility and associated structures.

15-B RRE staff shall ensure the fuel sold qualifies under the US EPA renewable fuel standard.

16 Pollution Control Facility Recommendation

This 2017-2024 Will County Solid Waste Management Plan update supersedes all Solid Waste Management Plans or Solid Waste Management Plan Updates previously approved by the Will County Board. The County owned Prairie View Recycling & Disposal Facility, also known as the Prairie View Landfill, provides an environmentally responsible and economically viable option for non-hazardous solid waste disposal for County residents, businesses, industries, institutions, and all other organizations. The County plans to continue preparing for future economic growth while protecting human health and the environment. Furthermore, due to changes in law, demographic and economic growth and expected waste generation, the current Illinois EPA permitted disposal capacity of the County-owned Prairie View Landfill has been estimated to be fully utilized and depleted within approximately the next ten years.

As such, in light of the need to develop and provide additional cost effective and convenient long term disposal capacity on a rolling basis as required by the Solid Waste Planning and Recycling Act and the Local Solid Waste Disposal Act in a timely and efficient manner, and to ensure an orderly transition from currently- permitted parameters of the Prairie View Recycling and Disposal Facility (RDF) to new long term solid waste disposal capacity within the next ten (10) years, and, at the same time, provide for protection of the public health and welfare and minimize impacts upon the environment, the County believes that either expanding the existing County-owned Prairie View RDF, or the siting, permitting and development of a new County-owned landfill facility best satisfies not only the goals and purposes of the Local Solid Waste

Disposal Act, but the Illinois Environmental Protection Act and the Solid Waste Planning and Recycling Act as well.

It should be noted that each of these Acts contemplate that all of the policy considerations set out above are to be achieved by proper long term planning which emphasizes orderly transition between old and new disposal sources, and the orderly and proper evaluation of pertinent environmental factors, energy and life cycle costs, the economic advantages and disadvantages of solid waste management and disposal alternatives, as well as alternate development and financing options and methods available to accomplish these goals.

Again, the County believes that the goals and purposes noted above can best be achieved either by expanding the existing County-owned Prairie View RDF and/or the development of new and additional County-owned solid waste disposal capacity, and there is no need for the development of any other landfill or other permanent solid waste disposal facilities in Will County.

In regards to other pollution control facilities, as noted above, and as also consistent with the goals of the Local Solid Waste Disposal Act, the Solid Waste Planning and Recycling Act, and the Illinois Environmental Protection Act, the County believes that the safe, convenient, cost-effective and environmentally responsible disposal of solid waste generated in Will County is best served by development (as needed) of a network of solid waste transfer stations which are strategically located in Will County so as to provide convenient and cost-effective access to the Prairie View RDF for permanent disposal of waste collected at these transfer stations.

Siting and development of a network of transfer stations as noted above reduces the distance needed to be traveled between collection and pick up of solid waste at its point of generation and its ultimate point of permanent disposal, results in energy savings, reduction of transport vehicle emissions and also reduces wear and tear on area roadways, all of which result in favorable life cycle assessment outcomes, and which also facilitate carbon foot print reduction.

In summary, the County believes that the site location and development of transfer stations in Will County in the manner noted above best serves the goals and over-arching intent of the County Solid Waste Management Plan, and, in turn best serves the interests of the citizens of Will County.

16-A	County shall provide oversight of the County owned	Continue
	Prairie View Recycling and Disposal Facility	
	operations.	
16-B	County shall reconcile payments from the County	Continue
	owned Prairie View Recycling and Disposal Facility	
	operations with incoming tonnage documentation.	
16-C	County shall determine best course of action to	Continue
	develop and provide cost effective and convenient	
	long term County-owned disposal capacity on a	
	rolling basis as required by the Solid Waste Planning	
	and Recycling Act and the Local Solid Waste	
	Disposal Act in a timely and efficient manner.	
16-D	County shall ensure an orderly transition from	Continue
	currently- permitted parameters of the Prairie View	
	Recycling and Disposal Facility (RDF) to new long	

	term County-owned solid waste disposal capacity within the next ten (10) years, and, at the same time, provide for protection of the public health and welfare and minimize impacts upon the environment.	
16-E	The County shall consider expanding the existing County-owned Prairie View RDF and/or develop new and additional County-owned solid waste disposal capacity.	Continue
16-F	County believes that the safe, convenient, cost-effective and environmentally responsible disposal of solid waste generated in County is best served by development (as needed) of a network of solid waste transfer stations which are strategically located in the County so as to provide convenient and cost-effective access to the Prairie View RDF for permanent disposal of waste collected at these transfer stations.	Continue
16-G	County shall research and consider private-public partnerships to recover metal and plastics after they have entered the landfill site. This may include a limited dirty MRF or landfill mining operation if economically favorable.	New

17 Environmental, Energy and Lifecycle Section

Under the Illinois EPA's direction, all new County Solid Waste Plans are to incorporate information on the environmental, energy, and life cycle impacts of solid waste programs.

In 2009, EPA reallocated the Greenhouse Gas (GHG) Emissions Inventory using a systems-based approach. EPA found that more than 40 percent of U.S. GHG emissions result from production, transportation, use, and disposal of material goods. A Sustainable Materials Management approach focuses on using and reusing resources efficiently and sustainably from extraction to end of life. It aims to generally minimize material use and all associated environmental impacts, including impacts to climate change.

The Illinois legislature passed Bill 3068 in 2019, which created the Statewide Materials Management Advisory Committee (MMAC). In 2021, the MMAC released recommendations that included a diversion matrix showing potential GHG reductions from various actions related to the management of solid waste. (Table 17 on page 214 of the MMAC Report on the Illinois EPA website). Aluminum and paper recovery ranked highest for GHG reduction but any efforts to reduce waste are considered the most beneficial. Instead of purchasing new items, repairing existing items, utilizing used items from libraries, from rental stores, from thrift shops and donating unwanted items are all forms of reuse. The County's efforts to encourage this through direct programs and educational programs certainly reduces GHG emissions that contribute to Climate Change, while also reducing any land, air or water pollution associated with the production of new items. This also saves the energy needed to make new materials and reduces the amount of material transported to a MRF or compost site or landfill. Finally, this approach often saves money.

Recycling materials, even after calculating the energy needed to transport them to MRFs and remanufacturing facilities is more energy efficient than mining or growing new raw materials,

getting them to a manufacturing facility and turning them into new products. For instance, using broken glass to make new glass allows the glass furnace to run at a lower temperature then when make glass directly from sand. The furnace lasts longer, reducing replacement needs, saving more materials and energy. The same is true when making metal from iron or bauxite.

Composting organics such as leaves, branches, and food scraps is also more beneficial from a lifecycle approach. The many nutrients in the materials are able to be captured and any methane gas production is reduced or eliminated depending on the composting technique. Will County strongly encourages backyard composting for residents, on-site Anerobic Digestion for large food generators such as restaurants and collection service for those that are unable to utilize these methods. Our annual pumpkin event, coupled with a compost bin sale and website pages dedicated to instructions demonstrate our commitment to composting education and adoption.

Finally, the County takes responsibility for the waste generated that cannot be reused, recycled, or composted through its ownership of a landfill on a former federal arsenal site. Not only has the County repurposed the land but has ensured that residents and businesses have a local, cost-effective means of disposing materials. Instead of transporting the materials long distances across the state or over state lines, the communities within Will County are provided with a reliable and safe local option that generates energy, sold as a Renewable Natural Gas product.

	safe local option that generates energy, sold as a Renewable Natural Gas product.		
17-A	RRE staff shall work with the Metropolitan Mayors	New	
	Caucus under the Climate Action Plan to establish,		
	if possible, GHG emissions related to all Solid		
	Waste Systems identified in this Plan		
17-B	RRE Staff shall work with the Illinois EPA to	New	
	establish, if possible, GHG emissions related to all		
	Solid Waste Systems identified in this Plan		
17-C	RRE Staff shall work with the Illinois Sustainable	New	
	Technology Center (ISTC) to establish, if possible,		
	GHG emissions related to all Solid Waste Systems		
	identified in this Plan		
17-D	RRE Staff shall work with the US EPA and it's	New	
	WARM model to establish, if possible, GHG		
	emissions related to all Solid Waste Systems		
	identified in this Plan		

18 Additional Overarching Solid Waste Plan Efforts

This plan acknowledges that Will County did not reach the Goal of 55% diversion for a variety of reasons, but did average 47% over the past seven years, a significant improvement over the 43% previously achieved. It is with this in mind that the goal shall remain 55% to be reached through increased recycling and composting.

This information is found in Table 3-5 within Chapter 3.

No single goal will boost the recycling rate consistently to 55%. It will take a variety of efforts stemming from each of the waste reduction, reuse, composting, and recycling efforts described throughout the Solid Waste Plan. Such efforts shall result in residents and businesses making the best use of resources. With the support of the County, the municipalities, schools, businesses and leaders, Will County shall continue to strive towards a circular economy.

18-A Report annual recycling diversion Continue based on hauler reports

18-B	Take steps outlined in the Solid Waste	Continue
	Plan to improve recycling diversion.	
18-C	Encourage the Illinois EPA to engage	New, staff has engaged already and this may occur in
	in a statewide Waste Characterization	2025.
	Study including offering access to the	
	County owned landfill for data every	
	five years.	
18-D	Pursue a Waste Characterization Study	New
	for Will County if unable to secure a	
	State or Federal funded study	

APPENDIX A: Legislation & Case Law

Details are provided herein for informational purposes only. The County does not have an opinion on the decision of any of the items listed herein. The details listed below are not meant to be a comprehensive listing, or a comprehensive or thorough explanation or description of the legislation or case law.

Illinois Pollution	Background and Final Decision
Control Board	
(IPCB) Court Case	
September 19, 2017	D&L Landfill v. Illinois Pollution Control Board, (Illinois Appellate Court 5 th 160071) D&L Landfill appealed a IPCB decision that denied their request for a certificate of completion of post-closure care due to groundwater contamination at their landfill, claiming that Section 22.17(a) of the Illinois Environmental Protection Act only required 15 years of groundwater monitoring and that a specific regulation was required to change that. The Court agreed with the Board's decision that if a board regulation requires monitoring for more than 15 years, than so does Section 22.17 (a).
July 5, 2018	Will County & Waste Management of Illinois, v. Village of Rockdale, Board of Trustees of the Village of Rockdale, Environmental Recycling and Disposal Services, Inc., & Illinois Pollution Control Board The County of Will and Waste Management of Illinois appealed a decision by the IPCB that affirmed the Village of Rockdale's siting approval for ERDS's waste transfer station, claiming that the Village did not have jurisdiction and that the statutory criteria for the siting was not met (i, ii, v, viii). The Court affirmed the IPCB's decision and stated that the Municipality did have jurisdiction over the siting, that the Village's imposition of conditions was proper, and that all criteria were met.
April 2018	Illinois Environmental Protection Agency v. Illinois Pollution Control Board and Brickyard Disposal and Recycling (2018 Ill App 2018 170144) The Illinois Environmental Protection Agency appealed the Board's decision that Brickyard Disposal and Recycling Inc, did not need to attain local government approval to fill a wedge area in their landfill with municipal solid waste instead of inert material as Brickyard was not seeking to expand its landfill's boundaries. The Appellate Court ruled in favor of the board and found that there is "no statutory language indicating local siting approval is necessary for the inner workings of an operating pollution control facility." (¶ 41). The "wedge" was a separate berm between the two units of their landfill permitted for holding municipal solid waste and the permit granted by the Agency required this berm for independent groundwater monitoring. It was referred to as the "wedge" by both parties in this case. Brickyard sought to fill the "wedge" with waste instead of keeping it as a separation.

County of Will v. Pollution Control Board. (Illinois Supreme Court 2019) The Pollution Control Board adopted rules for use of CCDD and uncontaminated soil as fill material. The County of Will and the State of Illinois sought to add a requirement for "backend" groundwater monitoring. The Illinois Supreme Court ruled against the County, and groundwater monitoring is not required for CCDD and US fill at CCDD sites.	
US EPA Rule, May 10, 2016, 81 Fed. Reg. 28720: USEPA Revised the maximum term of an RD&D permit from 12 years to 21 years. This was adopted by IPCB in 2017	
IPCB adopted final rules for permitting, operating, and closing general construction or demolition debris recovery facilities at part 820 of Title 35 of the Illinois Administrative Code	
West Virginia V. EPA (June 30th, 2022 – Supreme Court of the United	
States)	
West Virginia sued the EPA over its Clean Power Plan established by the Obama	
Administration and its ability to devise emissions caps. The Supreme Court ruled	
in favor of West Virginia, and held that Congress did not grant the EPA the	
authority to devise emissions caps in the Clean Air Act based on the approaches	
in the Clean Power Plan.	
Sackett v. EPA (2023 - Supreme Court)	
The Clean Water Act extends to only those wetlands with a continuous surface	
connection to bodies that are waters of the United States in their own right, so	
that they are indistinguishable from those waters. ¹	
¹ https://supreme.justia.com/cases-by-topic/climate-change-environment/	
Facilities used exclusively for transferring comingled landscape waste and food scrap will not be a "pollution control facility" under the Environmental Protection	
Act.	
Changes how the disposal of asphalt roofing shingles should be handled in the	
Environmental Protection Act.	
Amends Consumer Electronics Recycling Act by providing that any	
manufacturer or manufacturer clearinghouse will not be subject to damage,	
liability, or scrutiny under federal or state anti-trust law if they are engaged in	
activities related to a manufacturer's e-waste program under the act.	
Amends the Consumer Electronics Recycling Act to; 1. Allows manufacturers to	
accept through a manufacturer e-waste program, residential covered electronic	
devices collected through specific drop-off or curbside program operated by a	
third party and a municipality. Also provides requirements for collection programs.	
This act amends the Environmental Protection Act by saying that municipal	
waste incineration emissions standards do not apply to industrial incineration	
facilities that burn material or fuel derived from that material.	

D 111 A 1404 405			
Public Act 101-137			
July 26, 2019	recycling facilities unless said facility accepts lead-acid batteries.		
Public Act 101-141			
July 1, 2020	site in Will or Grundy County. These provisions are repealed if the project has		
	not commenced by July 1st, 2025. Additionally, uncontaminated plastics		
	processed by this facility are considered recycled.		
Public Act 102-	The DEAs Deduction Act records to the use of Class D fine fighting from to		
Public Act 102- 0290	The PFAs Reduction Act regulates the use of Class B firefighting foam to minimize PFAS exposure to humans and reduce PFAS releases to the		
January 1, 2021	environment. Illinois EPA and the Office of the State Fire Marshal have jointly		
January 1, 2021	developed a fact sheet on Firefighting Foam and PFAS which provides		
	information about firefighting foam, PFAS, and the new law.		
	information about intelligiting foam, 11 AS, and the new law.		
	As of January 1, 2022, any person, unit of local government, fire department, or		
	State agency that discharges or releases Class B firefighting foam that contains		
	intentionally added PFAS chemicals must notify the Illinois Emergency		
	Management Agency (IEMA) within 48 hours of AFFF discharge or release,		
	including use at an emergency incident. To report a discharge or release to		
	IEMA, call 1-800-782-7860.		
Public Act 102-310	Defines "general construction or demolition debris recovery facility" and		
August 6, 2021	modified the rules for permitting those facilities.		
Drug Take Back	Beginning <i>December 1, 2023</i> , every Illinois county will be entitled to at least one		
Act	medication collection location per 50,000 residents that is financed by		
HB1780	pharmaceutical manufacturers. These collection locations will accept both		
June 10, 2022	controlled and non-controlled substances free of charge.		
	Will Control of the c		
	Will County supported the passage of this legislation to reduce costs associated		
	with the previously established program done in partnership between the County,		
	over a dozen of our municipal police departments, through our one-day HHW		
	events with funding from the IEPA and the County. Residents will now have		
	more convenient drop-off sites for unwanted medication throughout the County		
	at police and pharmaceutical locations, some of which are open seven days a		
Paint Stewardship	week. ardship Beginning January 1, 2025 manufacturers of architectural paint sold online or a		
Act	retail locations to Illinois locations will be funding a collection program for		
SB 836	unwanted paint. Manufacturers will work through their designated P.R.O.		
July 28, 2023	(Producer Responsibility Organization), in this case, PaintCare. The IEPA		
	approves a plan to provide residents throughout Illinois access to drop-off		
	locations for oil and latex paint.		
Public Act 103-	Allows restaurants and retailers to fill or refill a consumer-owned container with		
0524	ready-made food. Allows clean consumer-owned containers provided or returned		
August 11, 2023	to a restaurant or retailer for filling or refilling to be filled or refilled and returned		
	to the same consumer if the consumer-owned container is filled or refilled by		
	either an employee of the restaurant or retailer or the owner of the consumer-		
	owned container. Directs the Department of Public Health to produce materials		
	for restaurants and retailers on or before January 1, 2024 indicating that		
	consumer-owned containers are not prohibited for use under Illinois law and		
	specifying best practices for food safety requirements for consumer-owned		
	containers.		

Public Act 103-By July of 2024, the state's agriculture and public health departments must 0208 publish information that encourages food manufacturers to use uniform labeling that specifies the date a product actually expires, versus when a product should be consumed for best quality. This is to reduce food waste created by confusing labels. Public Act 103-Packaging and Paper Stewardship / Recycling Needs Assessment Act 0383 This legislation began as the Packaging and Paper Stewardship Act tasking the Illinois EPA to gather data and administer extended producer responsibility (EPR) that would require producers of specific packaging materials to be financially responsible for collection and recycling costs. The bill was altered in recognition of the data required for such EPR legislation, becoming the Statewide Recycling Needs Assessment Act and creating an Advisory Council to provide advice and recommendations to the Illinois EPA in the drafting, amendment, and finalization of the Statewide Recycling Needs Assessment. The Director of the Illinois EPA had to appoint thirty members of from specific sectors to the Advisory Council by January 1, 2024. Provides that the Agency shall issue a competitive solicitation to select a qualified consultant to conduct a statewide needs assessment to assess recycling needs in the State for packaging and paper products, including identifying current conditions and an evaluation of the capacity, costs, gaps, and needs associated with recycling and

December 1, 2026, the Statewide Recycling Needs Assessment Advisory Council shall prepare and submit a report of its findings and recommendations to the General Assembly and the Governor, which shall include an opportunity for a minority report. Sets forth findings and purpose. Defines terms. Makes a corresponding change in the Environmental Protection Act. Effective immediately.

To secure resources to support its obligations under the Statewide Recycling Needs Assessment Act, the IEPA applied for and received a Solid Waste Infrastructure Recycling (SWIFR) Grant from U.S. EPA. States that received a SWIFR Grant are authorized to expend grant funds on, among other items, data

the diversion of packaging and paper products. Provides that on or before

Infrastructure Recycling (SWIFR) Grant from U.S. EPA. States that received a SWIFR Grant are authorized to expend grant funds on, among other items, data collection efforts that demonstrate progress towards the National Recycling Goal and Food Loss and Waste Reduction Goal. In its SWIFR Grant application, the IEPA proposed using any awarded funds to conduct a holistic statewide needs assessment to evaluate contemporary materials generation rates and infrastructure needs for the universe of materials identified in Appendix H of the Illinois Materials Management Advisory Committee's (MMAC) July 2021 report. The IEPA designed its proposal to encompass its obligations under the Statewide Recycling Needs Assessment Act while also including additional materials that are a significant portion of the Illinois waste stream. The objective of the needs assessment is to collect appropriate information and use it to render programmatic decisions that will lead to minimization of the volume of materials that are landfilled, thus progressing towards achieving the National Recycling Goal and Food Loss and Waste Reduction Goal.

Federal Legislation

Public Law 115-232	Modified conditions of land conveyance of landfill parcel from Joliet Army		
Passed January 2018	Ammunition Plant to Will County by removing landfill service area restrictions		
	and date of landfill closure.		
Save Our Seas 2.0	Requires new reports and studies on marine debris, establishes a pilot to		
Act	incentivize fisherman collecting and disposing of plastic found at sea. It also		
Passed December	provides new funds for innovation and authorized the NOAA Marine Debris		
2020	Program to work on marine debris globally.		
Infrastructure	A wide ranging legislative initiative with		
Investment and	A. \$350 Million for solid waste and recycling grants		
Jobs Act			
Passed November			
15, 2021			
Inflation Reduction	A wide ranging legislative initiative with:		
Act	A. \$5 Billion in grants for pollution reduction that can be used for organic		
Passed in August	waste bans and building local composting facilities. (Statutory location		
2022	60114)		
	B. \$20 Million in funding for methane monitoring at landfills (Statutory		
	location 60105 e)		



WILL COUNTY, ILLINOIS

APPENDIX B: Municipal Information for Service Area

Survey as of	Monthly	Unlimited	Recycling	Landscape
Summer 2023	Cost per	Garbage &	Service	March/April
MUNICIPALITY	Household	Recycling	Frequency	thru Nov/Dec
City of Aurora	\$22.10*	No	Weekly	Apr-Dec
Village of Beecher	\$19.93	No	Bi-Weekly	Apr-Nov
Village of Bolingbrook	\$20.29	Yes	Weekly	Apr-Dec
Village of Braceville	\$21.92	No	Weekly	Apr-Nov
City of Braidwood	\$22.20	No	Bi-Weekly	Apr-Nov
Village of Channahon	\$21.62	No	Weekly	Mar-Dec
Village of Coal City	\$22.96	No	Weekly	Apr-Nov
City of Crest Hill	\$21.15	No	Bi-Weekly	Apr-Nov
Village of Crete	\$20.78	No	Bi-Weekly	Apr-Nov
Village of Diamond	\$20.56	Yes	Weekly	Apr-Nov
Village of Elwood	\$24.87	No	Weekly	Apr-Nov
Village of Frankfort	\$15.83	Yes	Weekly	Apr-Nov
Village of Godley	Do not	franchise	for garbage	or recycling
Village of Homer Glen	\$28.00	Yes	Weekly	Apr-Nov
City of Joliet	\$24.55	Yes	Weekly	Mar-Dec
Village of Lemont	\$31.87	Yes	Weekly	Apr-Dec
Lockport Township*	\$23.03	No	Weekly	Apr-Nov
City of Lockport	\$26.10	No	Weekly	Apr-Dec
Village of Manhattan	\$28.14	No	Weekly	Apr-Dec
Village of Matteson	\$23.12	Yes	Bi-Weekly	Apr-Nov
Village of Minooka	\$25.19	No	Bi-Weekly	Apr-Nov
Village of Mokena	\$20.45	Yes	Weekly	Apr-Nov
Village of Monee	\$22.82	cart size	Bi-Weekly	Apr-Nov
City of Naperville	\$14.45	Yes	Weekly	Mar-Dec
Village of New Lenox	\$22.82	cart size	Bi-Weekly	Apr-Nov
Village of Orland Park	\$98.56	Yes	Weekly	Apr-Dec
Village of Park Forest	\$25.87	No	Bi-Weekly	Apr-Nov
Village of Peotone	\$23.09	Yes	Bi-Weekly	Apr-Nov
Village of Plainfield	\$29.42	Yes	Weekly	Apr-Dec
Village of Rockdale	\$0.00	No	No Curbside	Apr-Nov
Village of Romeoville	\$27.75	Yes	Weekly	Apr-Dec
Village of Shorewood	\$27.88	No	Weekly	Apr-Dec
Village of Steger		non-responsive		
Village of Symerton	\$20.00	Yes	Weekly	N/A
Village of Tinley Park	\$27.16	Yes	Weekly	Apr-Nov
Village of Unv Park	\$24.00	Yes	Bi-Weekly	Apr-Nov
Wheatland Township*	\$22.71	No	Weekly	Apr-Nov
City of Wilmington	\$23.54	Yes	Weekly	Apr-Nov
Village of Woodridge	\$28.00	No, 1 cart free	Weekly	Apr-Dec

^{*}Townships with franchise agreements are included in survey



APPENDIX C: Solid Waste Disposal Systems

Anaerobic Digestion

Anaerobic digestion is a biological conversion technology whereby microorganisms digest organic material in the absence of oxygen, producing a solid byproduct (digestate), a gas (biogas), and reclaimed water. The fundamental objectives of anaerobic digestion are to produce a large quantity of methane-rich biogas (for production of electricity or for use as a fuel), and to produce a small quantity of well-stabilized digestate (which can be used to produce compost).

Anaerobic digestion technologies are considered emerging technologies for the conversion of municipal solid waste in the United States. There are a variety of controlled systems where anaerobic technology is currently utilized in the United States, which include primarily wastewater treatment facilities and dairy manure digesters. In some other countries (Canada and some European nations), anaerobic technology is more widely utilized in municipal solid waste digesters to produce energy and to reduce the volume of solid waste that must be landfilled. Anaerobic digestion may offer certain potential environmental advantages as a waste conversion technology when compared to traditional technologies. Some states are actively encouraging development of the technology for organic materials.

The anaerobic digestion process occurs in an enclosed, controlled environment. The process may be either "wet" or "dry", depending on the percent of solids in the digester. The biogas produced from anaerobic digestion is primarily methane and carbon dioxide. Biogas is commonly burned in an internal combustion engine to generate electricity, similar to the production of electricity from combustion of landfill gas.

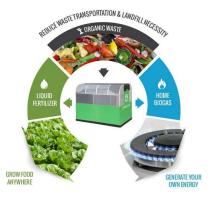
Subject to regulatory approval, digested material may be used as a soil conditioner, or compost, after a period of aerobic stabilization. However, high-volume markets for compost produced from municipal solid waste are not yet well established in the United States. The quality of the compost, including concentration of metals and presence or absence of man-made foreign material (e.g., small pieces of plastic and glass), will impact the marketability of the compost and approval by the Illinois EPA. Anaerobic Digestion, apart from some agricultural implementation, has not



been widely adopted in Illinois primarily due to the low cost of landfilling material and low energy prices.

Biogas

Biogas is the gas vapor produced when organic matter decomposes in the absence of oxygen. Biogas may be considered a renewable energy source as it can be produced from regionally available raw materials and waste. Biogas is produced by the anaerobic digestion of degradable materials such as manure, sewage, municipal waste, green waste, plant material, and crops. Due to the high concentration of methane present, the biogas may be processed, upgraded into a gas similar to natural gas that is compressed into CNG and used as a transportation fuel. Since biogas is considered a renewable fuel, it usually qualifies for renewable energy credits.



Clean Construction & Demolition Debris (CCDD) and Uncontaminated Soil Facilities

CCDD facilities are allowed to accept uncontaminated broken concrete without protruding metal bars, bricks, rock, stone, reclaimed or other asphalt pavement, and soil generated from construction/demolition activities. Uncontaminated Soil Fill sites accept only soil (CCDD sites can accept uncontaminated soil, too) that does not contain contaminants in concentrations that pose a threat to human health and the environment. The CCDD Facilities and Uncontaminated Soil Fill Sites are within inactive/active quarries and former borrow pits. These types of Facilities are not required to go through the siting process but have become more regulated in the past 9 years, with the IEPA requiring a permit (or, at minimum, to register with the IEPA) to operate, implement screening procedures for incoming loads, have a closure plan and to place final cover.



Compost Sites and Land Application Sites

Since 1990 the State of Illinois has banned landscape materials, such as grass clippings, limbs, brush, and leaves from landfill disposal. Compost sites are permitted by the IEPA to accept these materials. Odors from the compost sites may vary from an earthy smell similar to a freshly planted garden to an offensive odor from high nitrogen concentrations. The offensive odors tend to occur in the summer when grass is mowed and can take a week to be collected and have begun to decompose. Compost sites that are well maintained will cover fresh loads quickly with leaves or brush (high carbon containing materials). When these are mixed the odor improves. Some compost sites also use liquid sprays to reduce odors.



Land Application Sites are different from compost sites in that they are on agricultural farm fields and not subject to the same level of regulations. However, they are limited in the amount of landscape or food organic material they may accept. A farm will spread organics over the fields at the appropriate agronomic rate and may also till the material into the soil, depending on the time of the year. Odor issues from these sites are less common. Will County currently has five compost and/or land application sites.

Construction and Demolition (C&D) Recycling Facilities

General C&D Recycling Facilities are Illinois EPA permitted sites that accept materials from construction or demolition projects and are designed to sort through materials that are recyclable within certain specified timeframes and transport waste and recyclables offsite within the requirements of Section 22.38 of the Illinois Environmental Protection Act. These facilities are not required to go through the siting process, however local zoning or setback requirements do apply.



Gasification

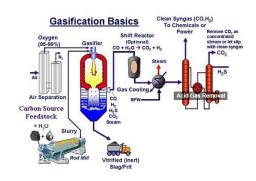
Gasification is a thermal conversion technology. Thermal technologies encompass a variety of processes that use or produce heat to change the composition of waste, resulting in the production of energy. Common descriptors for emerging thermal technologies include gasification, pyrolysis, thermal cracking, and plasma. For the purpose of this review, the common descriptor of "gasification" is used.

Gasification technologies are emerging for the management of municipal solid waste. Gasification is not commonly in commercial use in the United States for municipal solid waste, but is being used in some areas of Europe and Japan. In general, gasification occurs in a high-temperature reaction vessel. Air or oxygen may be intentionally added or omitted from the reaction vessel to influence the composition of the resulting products. The inorganic fraction of the waste (including certain recyclables such as glass, ferrous metal and aluminum) may be sorted out prior to treatment or may be treated along with the organic fraction. Within the reaction vessel, the organic fraction of the waste is converted to a synthesis gas ("syngas") composed of hydrogen, carbon monoxide and carbon dioxide gases. The syngas (and other products of the gasification process) represent un-oxidized or incompletely oxidized compounds, which in most cases differentiate the innovative thermal technologies from the more complete combustion attained in traditional waste-to-energy projects.

In addition to syngas, the gasification process may produce char, which is a carbon-based solid residue, and organic liquids such as light hydrocarbons. If the inorganic fraction of waste is also processed in the reaction vessel, additional byproducts will be generated such as vitrified silica (slag or aggregate), mixed metals, salts, and chemicals. These byproducts may comprise up to 20% by weight of the incoming MSW, depending on the characteristics of the waste delivered. These byproducts may have beneficial uses, with slag potentially used as a sand substitute in concrete or bituminous paving material (subject to regulatory approval), and metals, salts and chemicals marketed to various industries. Such beneficial uses would require acceptance by the marketplace and in some cases, approval by Illinois EPA. Market development work is required. Depending upon product characteristics and market conditions, some of these products could still require landfill disposal.

Landfill

The placement of waste materials in a designated area is as old as civilization. Putrescible waste is a health concern and it is every government's basic responsibility to ensure that residents and businesses have safe collection and disposal options for the waste that they generate. In the 1970s the US EPA promulgated rules, known as RCRA (Resource Conservation and Recovery Act). These rules turned dump sites into engineered landfills. Contrary to popular belief, most garbage placed in a landfill does not get buried below ground level. Instead, protection of the land and water, such as an engineered and modern bottom liner system consisting of compacted clay, a synthetic liner, drainage layer and leachate drainage and collection system, is placed within the





excavated area before the waste. The waste is placed in "cells" or "phases" and covered daily to prevent birds and animals from reaching it. The cells eventually build a hill on the site causing more waste to be above ground level than below, thus utilizing air space allowed by permits associated with the siting of a landfill.

The landfill is monitored throughout its use and for a minimum of 30 years after its closure. Groundwater monitoring wells surround all landfills to monitor groundwater quality. The rainwater that falls on the top of an open and operating landfill is collected in pipes and pumped to be treated in the same way wastewater from homes and businesses is treated. In more recent years, some operating landfills have taken to recirculating this liquid, known as leachate, to increase the speed that the waste in the landfill decomposes. This can lead to greater production of methane gas, which is flared off or captured for energy conversion or as a fuel source. Furthermore, rainwater that falls on a closed landfill with a modern final cover system is diverted off the top of the landfill as storm water and does not come into contact with any waste.

As mentioned above, decomposing waste creates methane gas which is a highly potent Greenhouse Gas and regulated under Subtitle D of RCRA. The regulation allows the methane gas to be consumed by an onsite flare, converted into electricity, and/or upgraded into a biogas to be utilized as a transportation fuel.

Manure Management

Manure is generally generated at farms with livestock. Such sites usually have enough space to utilize the material as a fertilizer on nearby agricultural fields. In the few locations producing excess manure, the material is sent to the landfill or a compost site.

Material Recovery Facility (MRF)

Recyclables are taken from homes and businesses then delivered to a sorting facility, known as a MRF. The mix of paper, plastic containers, glass bottles, aluminum cans, steel cans and aseptic packaging is placed on a series of conveyors where a variety of methods is employed to sort them into marketable material categories. Once they are sorted, they are usually baled (like a large hay bale) and placed into semi-trailers then sent to manufactures or additional processing facilities depending on the level of contamination and market demands.

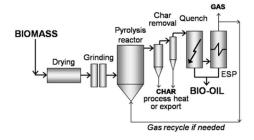
Pyrolysis

Pyrolysis is the heated decomposition of organic material in the absence of oxygen (or any halogen). It involves the simultaneous change of chemical composition, and is irreversible. It refers to separating through heat basis elements of a product and results in returning an item to it basis chemical composition.

In general, pyrolysis of organic substances produces gas and liquid products and leaves a solid residue richer in carbon content. Extreme pyrolysis, which leaves mostly carbon as the residue, is called carbonization. The process is used heavily in the chemical industry, for example, to produce charcoal, activated carbon, methanol, and other chemicals from wood, to convert ethylene dichloride into vinyl chloride to make PVC, to produce coke from coal, to convert biomass into syngas and biochar, to turn waste into safely disposable substances or other useful forms, and for transforming medium-weight hydrocarbons from oil into lighter ones like gasoline. These specialized uses of pyrolysis may be called various names, such as dry distillation, destructive distillation, or cracking.

Pyrolysis differs from other high-temperature processes like combustion and hydrolysis in that it usually does not involve reactions with oxygen, water, or any other reagents. (In practice, it is not possible to achieve a completely oxygen-free atmosphere. Because some oxygen is present in any pyrolysis system, a small amount of oxidation occurs.) In the solid waste and recycling context, Pyrolysis is being explored for the recovery of resources from mixed waste and from specific, difficult-to-recycle items, such as contaminated plastic. The University of Illinois in Champaign has demonstrated its use on a small scale to recover oil and natural gas from plastic grocery bags. This technology remains to be proven cost effective on a large scale. It is not expected to be competitive with landfill disposal within the timeframe of this Solid Waste Plan. It has shown promise as a next step option for MRFs with plastic bales of contaminated materials that cannot be marketed for recycling. Dirty bags and food encrusted plastic items





could be sent through a Pyrolysis system to recover the oil and natural gas. Costs still remain a hurdle to implementation.

Transfer Stations

Collection vehicles often utilize transfer stations rather than direct hauling to disposal and recycling sites for higher efficiency. A Transfer Station is a permitted facility where municipal solid waste or landscape waste is unloaded from collection vehicles and reloaded onto larger long-distance transport vehicles for shipment to disposal facilities, such as regional landfills or compost sites. Some recycling collection vehicles go to non-permitted transfer sites where recyclables can also increase efficiency by placing several loads into one semi-trailer to take to a Material Recovery Facility (MRF). By combining the loads of several individual collection trucks into a single shipment, money can be saved on the labor and operating costs of transporting the material to a distant disposal site.



APPENDIX D: Component Status Summary MatrixSTATUS REPORT ON ALL PAST GOALS AND 2017-2024 PLAN COMPONENTS

Will County released the first Illinois EPA required Solid Waste Management Plan in 1991. The goals of the plans were revisited with each subsequent plan. Some of the original Plan's recommended system components are no longer relevant, applicable, necessary, or have proven to be inappropriate. Updates to legislation, technological advances and tools for measurement have caused some changes. The matrix following this paragraph captures all the goals ever considered, any significant change to them, such as removal of the goal or changes to the goal (for example, the diversion rate has increased over time). The format allows insight at-a-glance to past goals and the current 2017-2024 recommendations to implement, modify, or remove the previous Plan components from further consideration. Finally, while this Plan supersedes all previous plans and is required to consider waste generation, recycling, composting and other advancements in treatment, diversion and reuse over the next 20 years, this plan should be revisited every five years in order to adapt to the unforeseen changes in the Solid Waste industry and to comply with the intent of the Will County Board with regards to Plan implementation. Therefore, the columns of information (shown on the following pages) summarize the Plan Components; depicting additions, eliminations and modifications to reflect current conditions.

NOTE: Definitions of Terms Used in the Status Report

Add – means to create a new goal.

Delete – means to delete this goal in its entirety.

Continue – means to continue to pursue previous actions described, already implemented.

Implement – means to begin action described.

Modify – means to change the action described slightly, includes description of action taken.

COMPONENTS:

Source Reduction and Reuse
Recycling and Landscape Material and Food Scrap
Anerobic Digestion
Gasification/ Pyrolysis
Incineration
Landfill
Household Hazardous Waste
Transfer Stations
Collection in Unincorporated Areas
Municipal Services
Plan Updates

APPENDIX D: TABLE 1.

SUMMARY OF WILL COUNTY SOLID WASTE MANAGEMENT PLAN COMPONENT STATUS (1991 Solid Waste Plan – 2016 SW Plan Update and 2024 Solid Waste Management Plan) (Plan components discontinued in 1991 to 2016 plan/plan updates are not listed below)

	program in 2007 and modified to include front-	
	door service as a fee option. Implement/expand in-house recycling program;	Continue
	modified to include all County offices have	
	recycling services and diversion goal of 40%.	
	Offer grants or loans for recycling program with	Continue
	record keeping requirements. Develop support of recycling programs for	Continue
	elected officials (examples include presentations	Continue
	to the County Board, support of state and federal	
	legislation through the Legislative Committee,	
	sharing information with state officials when	
	appropriate).	Continue
	Promote "Pay-By-The-Bag" and modified volume-based collection programs in	Continue
	unincorporated areas in cooperation with	
	Townships.	
	Identify/implement demonstration programs for	Continue
	recycling; modified to include Textiles,	
	Electronics, Wood, Carpet, Mattress, Latex Paint, and more as become available.	
	Prepare "general use" recycling educational	Continue
	materials	Continue
Recycling,	Provide site approval support for recycling and	Continue
Landscape	landscape material and food scrap facilities	
Material, and		M 1:C F
Food Scrap Composting	Provide market development assistance for recycling industry, emphasis on C&D materials	Modify: Encourage/support efforts to develop markets for
Composting	related to County's growth.	C&D material reuse and/or
		recycling.
	Increase Food Scrap recycling, with a goal of	Continue, goal of 2030
	10% by 2022.	
	Encourage In-Vessel Food Scrap	Continue
	Recycling/Composting. Consider building a Collection Site on County	Continue
	owned property to offer collection of several	
	recyclable items	
Anerobic	Consider large scale and small-scale	Continue
Digestion	implementation for Food Scraps and Organics if	
	economically feasible	Add: Consider small scale
		system for use at County owned
		high food generation sites such
		as the ADF and the Sunny Hill
Conification	Consider assification of marking of the	Nursing Home
Gasification / Pyrolysis	Consider gasification of portions of the waste stream for element recovery and energy if	Continue
1 91 019 515	economically feasible	
Incineration	High cost. Not to be pursued for volume	Continue
	reduction.	

Indinaudian f	Limited to Diamons and anter constitution	Continue
Incineration for	Limited to Biomass and only consider if	Continue
Energy (WTE)	economically feasible for elements of the waste	
	stream recovered for energy recovery in	
	conjunction with recycling. (See Ch. 4 Wood	
Landfill	Recycling in Collection Programs Section) The County shall develop and own a landfill that	Continue
Landilli	The County shall develop and own a landfill that	Continue
	is privately operated.	Modify, After achieving man
	Operator of County owned landfill shall assume all costs of siting, permitting and construction.	Modify: After achieving non- appealable siting approval, operator of a County owned
		landfill shall assume all costs,
		such as but may not be limited to, development, permitting,
		development, permitting, compliance, construction, and
		operation. Cost of siting will be
		borne by operator if deemed
		beneficial by County.
	County owned landfill will operate until 2042	Modify: Any County owned
	per Federal legislation.	landfill will operate until
		permitted capacity has been
		reached (see Federal Legislation
		within Appendix A above).
	Any pollution control facility applicant will	Modify: Any pollution control
	assume all costs of siting, permitting and	facility applicant for a privately
	construction.	owned facility will assume all
		costs, such as but may not be
		limited to, costs of siting,
		development, permitting, compliance, construction, and
		operation.
	County will prepare siting application.	Modify: County may prepare
	county win propare string approaction.	siting application if determined
		to be beneficial by County.
,	Volume reduction processing methods are to be	Modify: County will consider
	considered at landfill.	volume reduction processing
		methods.
Operating agreements, such as host agreements		Continue
	and amendments, between the County and the	
	County's landfill operator(s) shall determine	
	fees.	
	The County shall assist in remediation of	Modify: County may assist in
	brownfield sites as grant funding allows. Pursue	remediation of brownfield sites if
	additional grant funds when available.	brownfield grant funding has
	The Country automatical and a state of	been secured by the County.
	The County entered joint agreement with the	Delete. Joint agreement amended
	operator to turn landfill gas into electricity.	in 2021 to redirect all landfill gas
	Funds from the project may be utilized for energy efficiency projects.	to an RNG facility that upgrades
	The County and landfill operator shall explore	the gas into a fuel. Modify: The County shall
	the possibility of turning methane gas into fuel.	continue to upgrade landfill gas
	me possibility of turning mediane gas into fuel.	commue to apgrade failumi gas

	Explore the possibility of allowing out-of-county waste into Prairie View Landfill and increasing air and land capacity.	from County owned landfill at County owned RNG facility for use as a fuel. Modify: Service area for County owned landfill shall be defined by host agreements and amendments between County and operator. Explore, consider, and pursue options to increase County owned landfill disposal capacity.
Household Hazardous Waste	The landfill contractor will provide funding for 2 mobile HHW collections and 1 Electronics collection annually; additional collections will be sought directly from Illinois EPA or funded by the County when budget allows.	Continue
	The County will continue funding the regional permanent HHW site in Naperville; County will pursue permanent HHW site within Will County. Landfill contractor may be asked to modify funding to support permanent electronic and HHW sites.	Modify: The County will continue funding the regional permanent HHW site in Naperville as long as County funding is approved in budget; County may pursue permanent HHW site within Will County. Landfill contractor may be asked to modify funding to support permanent electronic and HHW sites.
	The cost to offer one-day HHW collections are borne by the landfill operator, the Illinois EPA, and/or the Solid Waste Fund Utilize Solid Waste Funds and Illinois EPA to provide Medication Take-Back through pharmacies and police departments.	Modify: New legislation passed making pharmaceutical manufacturers responsible for collection and disposal through
	Began accepting latex paint in one-day HHW collections in 2015 and then began a pilot latex	pharmacies and police departments. Solid Waste Funds used only for education. Modify: Ended pilot program in 2019. Passed new legislation in
	paint program in partnership with a non-profit and township; utilizing Solid Waste Funds to reduce latex paint disposal and meet residential need.	2019. Passed new legislation in 2023 requiring paint manufacturers to be responsible for collection, recycling, and disposal of oil based and latex architectural paint beginning in 2025. Solid Waste Funds used to continue accepting this material at one-day HHW events and for education.

	Accept rechargeable batteries at partner locations and in select county buildings as well as at HHW collection events.	Modify: Work on legislation to require battery manufacturers to be responsible for implementing a battery collection and recycling program for single use and rechargeable batteries while continuing to accept rechargeable batteries at HHW events and educate the public on battery safety and additional options for recycling.
	Accept hand-held propane cylinders at HHW collections.	Modify: Work on Extended Producer Responsibility legislation to implement a program accepting all types and sizes of cylinders from residents.
Transfer Stations	The County recognizes the need for Transfer Stations to be located in the northern and eastern parts of the County.	Modify: County believes that it will be best served by development (as needed) of a network of solid waste transfer stations which are strategically located in the County so as to provide convenient and cost-effective access to the Prairie View RDF for permanent disposal of waste collected at these transfer stations.
	Allow state permitted C&D recycling facilities without siting and some Transfer Stations have sought and are seeking siting changes to handle waste and C&D materials.	Modify: Allow development and operation of C&D recycling facilities in accordance with all applicable, ordinances, laws, rules, and regulations.
Collection in Unincorporated Areas	County will encourage townships to explore residential franchise opportunities alone or in partnership w/municipalities. If necessary, the County will pursue special service areas for waste, recycling and/or landscape collection services.	Continue
	Implement recycling Drop-off programs for townships and municipalities and pursue curbside collection franchises or municipal contract expansions into unincorporated areas under appropriate conditions.	Continue
Municipal Services	County will assist & encourage communities to explore or improve residential waste & recycling service contracts. County will encourage municipalities with residential contracts to explore partnerships w/townships	Continue

	Encourage municipalities with residential collection contracts to add food scrap service, especially to landscape service.	Continue
	Encourage municipalities with residential collection contracts to add condominiums, townhouses and apartments to service.	Continue
Additional Plan Components	Update this Plan as needed (Plan update goal of 5-year intervals or due to significant departure from following a goal(s) of the Plan or due to significant change in laws impacting the solid waste system).	Continue
	Volume reduction goals set in 1991 were deleted in recognition that many products were reducing the weight of the packaging and record keeping was inherently challenging. Recycling record keeping to be maintained.	Continue
	Review technological advances for volume reduction through the solid waste management system.	Continue

APPENDIX E: Example Ordinances

Will County recognizes that reaching 55% diversion of materials from disposal is not possible without passage of new ordinances at the city and county level. To this end, the appendix is intended as a means to encourage such action.

The County already has an ordinance requiring all departments to recycle but to truly support recycling, materials made with recycled content need to be purchased. Each jurisdiction within Will County is encouraged to pass a policy or ordinance to both contract for recycling services and to purchase items made with recycled content when possible and reasonable.

Purchasing Recycled Content Items Policy Multi-Family Recycling Service through License Policy Food Scrap Ride-Along Composting Policy

PURCHASING POLICY EXAMPLE

A. All the <u>City or County</u> departments will use recycled and recyclable products whenever reasonably practical.

- B. To the extent practical, all imprinted letterhead paper, envelopes and business cards used by the *City or County* departments shall be recycled paper and shall bear an imprint identifying the paper as recycled.
- C. <u>City or County</u> departments shall ensure that the title page of each report printed or copied on recycled paper bears an imprint identifying the recycled content of the paper whenever reasonably practical.
- D. The City or County shall encourage its contractors and consultants to:
 - 1. Use recycled paper for proposals and for any printed or photocopied material;
 - 2. Use both sides of paper sheets (default copiers and printers to double side setting);
 - 3. Where possible, include an imprint identifying the paper as recycled; and
 - 4. Recommend recycled alternatives to virgin materials specified in the *City or County*'s bids and purchase orders.
- E. Departments shall use both sides of paper sheets whenever reasonably practical.
- F. The <u>City or County</u> shall promote the use of recycled products and recyclable products by publicizing its procurement programs. Materials produced for advertising, conferences, trade fairs, press releases, and other communications with clients and citizens can make references to the <u>City or County</u>'s commitment and leadership in the use of recycled products.

Designated recycled products.

As applicable, <u>City or County</u> departments shall purchase the following recycled products whenever reasonably practical:

- A. Paper and paper products;
- B. Remanufactured laser printer toner cartridges;
- C. Recycled plastic refuse containers and container liners;
- D. Re-refined antifreeze;
- E. Lubricating oil and hydraulic oil with re-refined oil content;
- F. Outdoor-wood product substitutes made with recycled plastic;
- G. Re-crushed cement concrete aggregate and asphalt;
- H. Cement and asphalt concrete containing glass cullet, recycled fiber or plastic tire rubber, or fly ash;
- I. Building insulation products;
- J. Remanufactured tires and products made from recycled tire rubber;

- K. Compost;
- L. Re-mixed paint;
- M. Other products designated by the *City or County* departments.

Designation of Duties of the Procurement Officer.

The County Resource Recovery and Energy Division shall be a source of information to the <u>City or County</u> Purchasing. The Procurement Officer shall coordinate the implementation of the <u>City or County</u>'s Recycled Product Procurement Policy. The Procurement Officer shall:

- A. Maintain and update the designated recycled products list as needed;
- B. Inform departments of their responsibilities under this policy, provide departments with information about recycled product procurement opportunities, develop reporting procedures with departments; and C. Assemble an annual report on the status of implementation by the *City or County* to be provided to the Land Use Department's Resource Recovery and Energy Division.

The *City or County*, through each of its departments, shall:

- A. Purchase recycled paper products whenever reasonably practical;
- B. Evaluate each designated recycled product to determine the extent to which the product may reasonably be practicably used by the *City or County* and its contractors;
- C. Periodically review with the Procurement Officer the progress of policy implementation, and any reports, including:
 - 1. The results of product evaluations;
 - 2. The status of efforts to maximize recycled product procurement; and
 - 3. Total purchases of recycled products and nonrecycled products.
- D. Ensure that contracts issued by the City require recycled material content wherever reasonably practical and that contractors provide certification and reports of content and amounts used.

Definitions.

- A. "Recycled products" are products manufactured with waste material that has been recovered or diverted from the solid waste stream. Waste material may be derived from post-consumer waste (material that has served its intended use and been discarded by a final consumer), industrial scrap, manufacturing waste, or other waste that would have otherwise been discarded.
- B. "Recyclable products" are products which, after their intended end use, can demonstrably be diverted from the solid waste stream for use as a raw material in the manufacture of another product.
- C. "Practical" refers to efforts to implement the purposes of the policy in a reasonable and efficient manner and cost. While sufficiency of performance and reasonableness of cost must be established at the discretion of departmental management, a ten percent (10%) price preference for recycled products is suggested.

Exemptions.

- A. Nothing in this policy shall be construed as requiring the <u>City or County</u> or a contractor to procure products that do not perform adequately or are not available at a reasonable price.
- B. Nothing contained in this policy shall preclude the <u>City or County</u> or any of its departments from requiring recycled material content as a purchasing specification.

LICENSE HAULERS TO IMPROVE REPORTING DATA AND RECYCLING

A City or County may choose to adopt an ordinance creating a License for any waste or recycling hauler servicing the community. This license can become a tool to improve recycling, allowing a residential contract to serve all condos, townshomes, and apartments. This can reduce or eliminate the need for residential recycling drop-off sites.

LICENSE EXAMPLE

It is unlawful for any person, firm or corporation to engage in the business of refuse collector, namely, the collection or disposal of animal, human or vegetable refuse, or offal, or refuse of any kind, without having first secured a license therefor. A license may not be assigned, transferred or conveyed in any manner without the consent and approval of the <u>City Council or County</u> Board.

Types of license—Limitation on number.

A. Residential license: A residential license permitting the refuse collector to collect garbage and refuse, compostable material and recyclable material from any location within the City. There shall be only one (1) residential refuse collection license issued by the City in effect at any time. B. Non-residential license: A non-residential license, permitting material and recyclable material from any location in the City other than single-family dwellings and multiple-family dwellings, except that holders of a non-residential license may collect home remodeling, construction and repair materials from single-family or multiple-family dwellings, provided said materials exceed two (2) cubic yards in volume. Textile and home good collection organizations for reuse are exempt. There shall be no more than seven (7) non-residential refuse collection licenses issued by the City in effect at any one time.

Recycling requirement for non-residential

A. All holders of a non-residential refuse license shall offer recycling services to customers within the City, which shall include at least two (2) materials. At the time of applying for renewal of any such license, the application shall include two (2) reports, one will detail the amount of refuse collected, while the second report details the types and quantities of recyclables collected during the period from April 1, of the prior year through March 31 of the year during which renewal is requested.

B. The refuse collector shall indemnify and hold harmless the City, Illinois, its employees and agents from and against any and all claims and demands whatsoever, including costs, litigation expenses, counsel fees and liabilities incurred in connection therewith, arising out of injury to, or death whatsoever, or damage to property of any kind by whomsoever owned, caused in whole or in part by the acts or omissions of the refuse collector, or any other person directly or indirectly employed by them, while engaged in the performance of the work or any activity associated therewith or relative thereto.

Unlawful removal of recyclable material.

It shall be unlawful for any refuse collector, except as authorized by the City Council, to remove any item of recyclable material including newspaper, aluminum or bimetal cans, glass bottles or plastic milk containers placed in or adjacent to city recycling containers.

License—Application—Issuance—Renewal.

Application for such license shall be made to the City Clerk, prior to May 1st of a calendar year, and shall be referred by him to the Mayor and City Council. A renewal license may be issued by the Mayor provided the licensee has duly completed the required application, given the information required and paid the appropriate fee. In the event the same has not been completed on or before May 1 of the license year, the Mayor shall conduct a public hearing by the Mayor and City Council with a three-day written notice to the licensee, affording the licensee an opportunity to appear and defend such notice to begin the day following delivery by certified

mail or by the city Police Department acting as agent for the Mayor and City Council. No more than eight (8) refuse collectors' licenses shall be in force in the City at any one time. Each collector must file with the City Clerk a list of its charges for commercial, business and industrial establishments on or before May 1 of each calendar year.

License—Fee.

The annual fee for the residential refuse collector license shall be five hundred dollars (\$500.00). The annual fee for a non-residential license shall be five hundred dollars (\$500.00).

FOOD SCRAP RIDE-ALONG COMPOSTING POLICY

A simple way to improve composting of food scraps is to allow food scraps to be deposited with landscape materials in landscape collection carts. The State of Illinois allows small amounts of food scraps in all compost sites.

Example from the City of Naperville: Residents with yard waste carts may compost food scraps and regular yard waste together in one container. Materials accepted include standard yard waste and compostable food scraps such as fruits, vegetables, pastas, breads, crackers, and cereals. Meat products and/or bones are not accepted at this time. (2024)

This type of collection program adjustment to a municipal collection contract may run from sometime in March through sometime in November, diverting compostable food waste to composting sites without the need of an additional collection vehicle. This keeps costs lower and reduces any related collection air pollution concerns.



APPENDIX F: Public Outreach Actions & Public Comments Received

Over the course of 2024 a variety of public outreach regarding the development and presentation of the Will County Solid Waste Management Plan was done by the County staff. The following list demonstrates examples of this outreach,

May 2, 2024, The Landfill Committee met, and the Resource Recovery and Energy Division presented the completed draft of the Will County Solid Waste Management Plan 2017-2024. This was an open public meeting.

June 2024, the Landfill Committee was canceled but the agenda listed the Plan as a topic, and it was published again as part of the agenda on the Will County Board's website.

July 3, 2024, the Will County Solid Waste Plan 2017-2024 update was listed as an agenda item as part of the public Landfill Committee meeting but was tabled without discussion and no public comment was made at this meeting.

August 1, 2024, the Will County Solid Waste Plan 2017-2024 update was discussed in detail with several questions by Board Members that were answered by County staff and a consultant. No public comment was made at this meeting.

August 5, 2024, the Draft Plan was posted on the WillCountyGreen.com website and on social media with minor typographical errors corrected. Email notices of the Plan's publication were sent to all communities and townships within or partially within Will County. In addition, email notices were sent to several groups that had expressed interest in receiving the Plan for review. These include: Will County Farm Burau

The Conservation Foundation

CMAP

Will County Center of Economic Development (CED)

Will County Governmental League

September 5, 2024, the Will County Solid Waste Plan 2017-2024 update was listed as an agenda item for approval of the County Board on the Landfill Committee Meeting and was briefly discussed and then postponed to the next meeting.

COMMENTS RECEIVED (Staff Comments/Responses in *italics*)

Via Email:

8/5/24

Marta, I read over the sections with manure and increased recycling of food and scraps and did not see any issues. The only area on food scraps, be aware we do not feed these to livestock with the rules and regulations (Illinois Public Act 48-7), but some do if they are using the animals for their

own consumption. If someone asks, why don't we feed this to livestock the answer has been we cannot if we are selling to the open market.

Thanks for the opportunity to review and comment. Mark Schneidewind, Will County Farm Bureau

8/7/24

As a service provider in the waste sector with 17 years of experience collaborating with local governments across a dozen states, I can confidently say that Will County is among the most organized and proactive when it comes to waste reduction and recycling. The County's programs are not only cost-effective but also forward-thinking. Their sincere dedication to the environment is apparent in every aspect of their initiatives. I take pride in living in Will County, knowing that the leaders in waste management and planning are dedicated to securing a sustainable future for us and our children.

Jimmy Larkin, A-Team Recyclers

8/22/24

Chapter 5 - Will County's Solid Waste Management System

Tasks and Goals

3-H. Offer Business Star Program for businesses willing to complete an application sharing success at reuse, recycling, or other conservation goals

ADD: Expand the program for non-profits like HOA's and other residential communities, citing increased resale values for environmentally sustainable communities.

- This suggestion may be pursued within the existing Plan Goals.
- 3-I. Encourage restaurants to only provide straws and water when by request to save resources. ADD: Encourage restaurants to offer reusable straws for sale, and to encourage diners to bring their own straws.
- This suggestion may be pursued within the existing Plan Goals.
- 3-J. Encourage restaurants to offer take out and left-over containers made from compostable material to reduce polystyrene use understanding it is difficult to recycle.

ADD: Encourage restaurants to offer reusable take out and left-over containers for sale, and to encourage diners to bring their own containers.

- This suggestion may be pursued within the existing Plan Goals.
- 5-A. Encourage communities to prohibit the burning of garbage, leaves, grass and brush while allowing controlled recreational fires.

CHANGE: "while allowing controlled recreational <u>and environmental</u> <u>management</u> fires." Environmental management fires are controlled fires for prairie restoration and management and invasive plant removal. [This is my own definition intended to express the idea. These types of fires need to continue with proper authorization.]

- This statement within the Plan is not meant to address professionally controlled burning.

6. Collection Programs

ADD: Increase education and communication efforts for all collection programs. Identify/create opportunities for pooling materials to be transported to recycling events in Will County (i.e.,

designated neighborhood collection with volunteers transporting materials to events - especially for over-55 communities).

- This suggestion may be pursued within the existing Plan Goals within safety guidelines.

6-I1 Educate residents and businesses on furniture reuse and recycling options.

ADD: Identify new education and communication mechanisms beyond the WillCountyGreen website and social media that are accessible to non-technically proficient and/or low-income residents. For example, the City of Naperville mails recycling information with electric bills. Consider other methods for widespread communications.

- This suggestion may be pursued within the existing Plan Goals, and it should be noted that staff have previously worked with municipalities to utilize their utility bill as a means of education.

6-J4 Find ways to reduce costs and improve service for residents.

ADD: Work with existing collection services (e.g., Groot, Waste Management) for alternatives to charging residents for recycling "mistakes." E.g., require collection services to offer education services to communities.

- This suggestion may be pursued within the existing Plan Goals.

6-M Pharmaceutical Take-Back

ADD: Expand pharmaceutical take-back programs to include supplements and other non-pharmaceutical products (tablets, capsules, creams, gels, lotions).

- This suggestion may be pursued within the existing Plan Goals.

6-R Textile Collection for Reuse and Recycling

ADD: Expand existing events to include scrap fabric (e.g., sewing scraps, small rags, etc.).

- This suggestion may be pursued within the existing Plan Goals, and it should be noted that many of the Textile Collection Event vendors utilized for the County's week-long event in May have accepted sewing scraps and rags.

6-U1 Educate residents and businesses on traditional recycling options

ADD: Identify new education and communication mechanisms beyond the WillCountyGreen website and social media that are accessible to non-technically proficient and/or low-income residents. For example, the City of Naperville mails recycling information with electric bills. Consider other methods for widespread communications: e.g., post information at local supermarkets, hardware stores and other businesses, offer public library presentations, train businesses in how to educate customers, etc.

- This suggestion may be pursued within the existing Plan Goals, and it should be noted that staff have previously worked with municipalities to utilize their utility bill as a means of education.

Thanks for the opportunity to participate Linda Negele, Carillon Resident

8/29/24

I am both delighted and impressed by all that the county is doing, and I am excited to see these programs keep expanding.

<u>Chapter 4</u> (pg. 38)

"... the local community college is beginning to offer Repair Events"

This is such an amazing resource for our Will County residents. Joliet Junior College is an official member of the international Repair Café movement. We will be offering events twice a year (April and October) at our Romeoville campus. Our goal to keep expanding beyond the events with repair workshops and resources for the community.

We believe the Repair Café fosters appreciation for personal possessions, reduces avoidable waste, facilitates knowledge transfer of invaluable repair skills, and engages community of all ages.

- The Resource Recovery and Energy division was able to support the April 2024 Repair Café as well as assist in educating residents of the effort through our newsletter and social media. We hope to continue to provide support as this program is supported by the County's Solid Waste Management Plan Goals. This suggestion may be pursued within the existing Plan Goals.

1-G Food scraps in Landscape Collection (pg. 44)

It would be nice to see this expanded to other municipalities.

- Thank you for showing support for this effort.

1-L Inclusion of businesses (pg. 44)

How can we get more businesses to participate? What incentives can we create? Residents are discouraged when they do their best to recycle and then see businesses throw out a years' worth of recyclables in a matter of weeks.

- Staff will continue to explore ways to improve business recycling. The passage of the Packaging legislation known as Public Act 103-0383, offers a path forward on this very issue. Originally envisioned to improve both residential and commercial fiber, glass, metal, and plastic packaging, it created an Advisory Council charged with building a foundation for improved recovery of these materials through additional EPR legislation. Will County's Recycling Program Specialist serves on the newly formed Advisory Council.

1-N Maintain a listing ... on the WillCountyGreen website. (pg. 45)

I love the website and share the link with anyone and everyone that asks me about what, where, when, and how to recycle!

- Thank you for showing support for this effort.

2 Assistance to Schools (pg. 45)

What can we do to establish a relationship between Will County and the public and private institutions of higher education in the county? This might be a great opportunity to work with SMHEC (South Metropolitan Higher Education Consortium) as the four colleges and universities are all members.

- Thank you for showing support for the school outreach effort, beginning on page 45. The RRE Division's Environmental Educator currently focuses on education for children, Pre-K to High School.

3 (pg. 47) would any of this apply to #2 above?

- Institutes of higher education are part of the Adult Education efforts and outreach for assistance does fall under Section 3 Assistance to Non-Profits and Private Businesses. This outreach and consulting are performed by the Recycling Program Specialist. Thank you for supporting these efforts.

6-A Battery Recycling (pg. 51)

Joliet Junior College has been absorbing the cost of battery recycling for a few years, collecting 100's of pounds a semester. This is not sustainable, and we are excited to see how we can reduce or eliminate the cost and open our collection to the community.

- Thank you for financially supporting battery recycling and education through your own collection. Please know that the 2024 Battery Stewardship Act passed and was signed into law. It should provide relief to your budget in 2025 or 2026 depending on the efforts by the Illinois EPA to approve a manufacturer statewide collection and recycling plan.

6-B Book Reuse & Recycling Event (pg. 52)

Maybe we can do something with schools.

- The annual book event includes outreach to schools and libraries that usually donate books a day or two prior to the event being opened to the public. All suggestions for improvements are welcome and appreciated.

6-F Composting and Gardening Programs (pg. 54)

What about incentives or funding to procure anaerobic digesters? This would be a great solution for schools and businesses.

- Incentives such as grant funds may be possible depending on budget restrictions or state and federal grant programs. We appreciate the suggestion.

6-1 Home Goods Collection for Reuse (pg. 57)

Have you thought about working with the Habitat Restore?

- We have promoted the Habitat Restore in our newsletter and social media. We are open to working with the Joliet location and provide additional promotional support.

17 Environmental, Energy and Lifecycle Section (pg. 57)

YES. Let us encourage repair and reuse BEFORE we consider recycling and disposal!

- Thank you for your support and efforts to make the most use of our resources and your support of these goals.

Maria Rafac, Joliet Junior College Sustainability Coordinator and Professor of Architecture

9/5/24

I'm just sending a few comments on what I have already talked to you about so that you can forward them along.

Updated Will County Green Website - mobile phone friendly please.

- Efforts are underway to evaluate several possible updates to the website. Thank you for your insight.

Electronic Recycling & Household Hazardous Waste (HHW) needs to be more readily available & accessible to all areas of Will County, not just the larger cities & towns but to the small unincorporated areas. Example: Godley is the furthest southwest corner & there is neither available on a regular basis here. More events in more locations spread throughout Will County from the far northeast corner to the far southwest corner - Please & thank you.

- It may be possible to add additional electronic collection sites, but the County relies on intergovernmental agreements with local cities, townships, park districts, libraries and other units of local government to host our programs. Cost is also a serious factor so budget restrictions also impact expansion of services. Household Hazardous Waste collection events

are far more expensive to provide, and the County continues to encourage the Illinois EPA to provide service while also exploring Extended Producer Responsibility (EPR)legislation for financial relief and improved service.

Having ONE Permanent HHW Drop Off in Naperville with weekend hours only is NOT good enough for all of Will County.

- Due to the high operational and disposal costs, the Illinois EPA currently funds disposal at only five permanent HHW collection sites within the entire State of Illinois. The local host community, City of Naperville, funds staffing and infrastructure costs for the site. Several counties, including Will County, assist with a portion of those staffing and infrastructure costs to help keep the Naperville site open or viable. In addition, Will County offers one-day collections to overcome the challenges residents have traveling to this or the Chicago HHW site. Over the years, Will County began a year-round Medication Take Back program that has become an Extended Producer Responsibility (EPR) state law, improving service to all residents. Will County has supported Battery EPR legislation, which just passed, and will improve services to all areas of the County. Please be aware that staff is engaged in exploring the possibility of HHW EPR legislation to improve services and reduce costs to the County.

Broader advertisement of the recycling of electronics with data on them. I didn't know until speaking directly to Will County Green that the recycling of hard drives or other data on electronics is taken care of properly by the companies in contract with Will County Green.

- We appreciate your concern and will explore more ways to reassure residents beyond our brochure and website page.

Tire Recycling - need more of this period.

- Thank you for supporting this program that was originally fully funded by the Illinois EPA. Tire disposal/recycling fees collected by vehicle tire retailers for each tire sold is deposited into a state fund. With these funds, the state provides an annual tire collection event for local governments within the county. Residential tire drop-off events are expensive and there are many retailers that offer tire recycling. Therefore, we only offer this program every few years as funding allows. Staff is looking at options, such as a statewide Tire EPR law, that could result in improved services to residents.

At this time - I'm sure there are more concerns I have but just can't think of them all as I currently am writing this email - but should I remember I will email those as well!

- Comments and suggestions for improvement are always welcome.

Thank you for your time! Gretchen Schmeckpeper, Godley Resident

9/18/24

At our monthly CARE group meeting, Ellen Rendulich mentioned that public comments were still open about the Plan that is before the Landfill Committee. So, I would like to offer my comments.

I have gone over the proposed Plan online. And there are only a few issues I would like to comment on.

1. No new Landfills. We are already expanding existing Landfills, and I feel we should be doing way more to recycle a lot of what is currently going into these Landfills. My feeling is

that we must be working towards the circular economy and not just keep doing what we have always done. We need to recycle more and find ways to use less new materials.

- Thank you for the comment and concern regarding landfills and the request for more recycling along with working towards a circular economy. Existing Plan Goals include efforts for more recycling and waste reduction efforts leading towards a circular economy and reducing reliance on landfills.

On August 27th and 28th I attended the ReCell Industry Collaboration Meeting at Argonne National lab. It is an annual event. Without going into great detail, the main thrust of the meetings was how to get to Direct Recycling without degrading or destroying all the materials in batteries. Especially Lithium batteries.

You cannot think of recycling these types of batteries like you would recycle an automobile. Of which we currently do not even recycle the entire vehicle. At best we may be getting 86% reuse. But with proper procedures, 100% of the batteries can be recycled. But currently, getting these recycling centers built is a major reason recycling is actually not happening.

Since an EV vehicle manufacturer, Lion, currently is located in Will County, they would be a good site for both a recycling facility along with new Lithium battery manufacturing. They would go together. The new battery plant using all of the material created by the recycling facility. I would suggest you contact Jeff Spangenberger (ReCell Center Director and Group Leader in Material Recycling) for both more information and a tour of what ReCell is doing in terms of recycling battery technology.

- Thank you for supporting Battery Recycling, EV Battery Recovery and Recycling and Automobile Recycling. We appreciate the possible opportunity for economic growth and environmental benefit your suggestion offers. We recognize that Lion is an independent business but incentives at the federal, state or local level could help if economic benefits are not incentive enough.
 - 2. I would like to also see Solar Panels be completely recycled. While it is also not currently easy to recycle them, I know that unless local governments take the Lead, they will simply be dumped into Landfills. This is not only adding to Landfill waste, but critical and valuable material is once again wasted.
- Thank you for supporting Solar Panel recycling. Staff and officials have been involved in promoting this idea for several years. The best method of keeping any material out of landfills is to ban the material at the State level and to do that, alternative infrastructure must be established. Staff has proposed pursuit of Extended Producer Responsibility (EPR) legislation for recovery and recycling of the materials utilized in solar panels while also keeping informed on the developing infrastructure which includes a few Electronic Recycling firms expanding their capabilities.
 - 3. Pyrolysis and Gasification. Beyond room temperature recycling methods should no longer be encouraged. They are wasting energy, which usually comes from fossil fuel burning, and also emitting gases. The polystyrene recycling plant in Channahon is the type of recycling facility I no longer wish to see built. All we are doing is encouraging more polystyrene to be made and the oils created burned.

- Thank you for expressing your concerns about the developing plastic recycling technologies. The Will County Solid Waste Management Plan does not take a position on these methods but does promote reuse and waste reduction.
 - 4. Instead of gasification of gases emitted from Landfills, I would like to these gases used to power Fuel Cells. It would be easy to use the gases to power solid oxide fuel cells. An example would be what Southern California Edison and Los Angeles Department of Water are doing. They are operating a 40-kilowatt phosphoric acid fuel cell. Or there are also other examples of fuel cells being powered by Landfill gases. And I am sure Argonne can be of assistance there as well.
- Over the past few years Will County has invested significant funds to convert the methane gas at our County owned landfill to a fuel, replacing Compressed Natural Gas, a fossil fuel, with an EPA certified Renewable Natural Gas. This investment is expected to generate significant revenue to the County over the next 30 years while reducing fossil fuel use.

It is my hope that Will County, and possibly Lockport, will consider dealing with these issues in a 21st Century manner. We need to be using technology to do things better. We cannot simply keep wasting critical and valuable materials. They can be recycled. And I would like to see Will County government leading on this matter.

Kind regards, Randy Juras Lockport, Illinois.

9/22/24

These are my comments about the Will County Solid Waste Management Plan.

- 1. Recycling options should be required on-site for people who live in apartment complexes and condominium complexes. (I know of a condominium complex off of Ingalls Ave. that does not have any dumpsters for recycling.)
- This recycling service is encouraged within the existing Plan Goals. On Page 44, Chapter 5, Section 1-K calls for municipalities to include all multi-family units in their residential collection contracts. The enactment of such a requirement would necessitate the approval of an ordinance by the local authority with jurisdiction.
- 2. Encourage restaurants and caterers to donate food to homeless shelters.
- Page 24, Chapter 3 offers information on current donations of food that staff has been able to track through reporting. Educational efforts are made to inform residents and the business community that food donations are protected under the Good Samaritan Act. Your suggestion also touches on Chapter 5, Section 3-I and 3-J which discusses direct education efforts to restaurants. The Solid Waste Management Plan is capable of encompassing food donation and direct education with these other efforts.
- 3. Implement a plan to reduce litter in Will County. Some ideas to consider are as follows.
 - Appeal to residents not to litter by taking pride in their neighborhood, through a public education program. This could start in elementary schools.
 - Have police officers enforce anti-littering laws by fining people for littering.
 - Post signs telling people what the fine is for littering.

- Engage student groups at high schools and local colleges to pick up litter for community service hours.
- The Solid Waste Management Plan is silent on the topic of litter with the closest reference being on Page 44, Chapter 5 in Section 1-I where it calls on communities to place public garbage and recycling containers on their streets. Such action does reduce litter. Littering/litter occurs on roadways, other public property, and private property and therefore, falls within the jurisdiction of the responsible public or private entity.

Sincerely,

Jenifer Garlitz Director C.A.R.E. (Citizens Against Ruining the Environment) Joliet, IL 60435

Via Facebook:

8/6/24

A suggestion: the announcement of the EPA's wasted food scale brings valid opportunity to work towards food waste PREVENTION. How about incorporating this into your outreach & education goals going forward? Can be residential, institutional and business driven impact to reduce greenhouse gas emissions.

Amy Bartucci

- Staff reference: https://www.epa.gov/sustainable-management-food/wasted-food-scale
- Promotion of Share Tables in schools is one of the ways staff is, and has been, engaged in food waste prevention. Page 46 Section 2-F
- Add section 3-L to encourage restaurants, conference centers and caterers to donate food

8/8/24

Should the Plan have a new "by date" to increase Food Scrap recycling? Draft says "with a goal of 10% by 2022."

Amy Bartucci

- Staff reference: Page 103 Section Recycling, Landscape Material, and Food Scrap Composting
- Table 3.6 Tons of Material on page 23 is a record of the totals provided through the Will County Reporting Ordinance for a combination of Food Scraps and Grease. Based on the Total Generation, we achieved our highest recycling rate in 2022 when we reached 3.5%.
- Page 103 Section Recycling, Landscape Material, and Food Scrap Composting was corrected to read Continue with a goal of 10% with the date changed to "by 2030."

Via Instagram:

8/6/24

How about including prevention of wasted food? Residential, business and institutional ... the EPA's wasted food scale says it all.

0g amy.bartucci

- This suggestion was addressed when received through Facebook comments.