



# KANE COUNTY

WOJNICKI, Weber, Allan, Barreiro, Hernandez, Kious, Sanchez

## ENERGY AND ENVIRONMENTAL COMMITTEE

FRIDAY, AUGUST 14, 2020

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County Board Room

Agenda

9:00 AM

Kane County Government Center, 719 S. Batavia Ave., Bldg. A, Geneva, IL 60134

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1. **Call to Order**
2. **Approval of Minutes: June 12, 2020, July 17, 2020**
3. **Environmental (J. Wollnik)**
  - A. August Watershed Group Update
4. **Recycling/Solid Waste (J. Jarland)**
  - A. Presentation: KC Solid Waste Plan 2020 Update - Initial Draft (attached)
  - B. Presentation: Recycling Events and Presentations (attached)
5. **Sustainability (J. Mino)**
  - A. FREP September Meeting
  - B. Presentation: Salt Symposium Summary (attached)
  - C. Presentation: Solarize Chicagoland Update (attached)
  - D. Discussion: Green Building Policy Update (attached)
6. **New Business**
7. **Public Comment**
8. **Reports Placed on File**
9. **Executive Session (If Needed)**
10. **Adjournment**

# COUNTY OF KANE

## KANE COUNTY DIVISION OF ENVIRONMENTAL & WATER RESOURCES



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**Jodie L. Wollnik, P.E., CFM**  
**Director**

TO: Energy and Environment Committee

FROM: Jodie Wollnik and Rob Linke – Water Resources

DATE: August 6, 2020

RE: Watershed Planning Report & Campton Township Monitoring Well Report

### **Fox River Study Group**

The Fox River Study Group is coordinating an extensive water quality and biological monitoring program to document the pre & post project conditions at the Carpentersville Dam, which is being removed by the Kane County Forest Preserve District in 2021 once permits are secured. The data will be used to support the FSRG's water quality modeling of the Fox River as the group is refining its recommendations for management scenarios to bring the Fox River into compliance with the IEPA's water quality standards. The IDNR Fisheries Division was at the dam site sampling above and below the dam on August 6<sup>th</sup> and the FRSG has contracted with Deuchler Environmental to conduct in stream continuous water quality monitoring and grab samples, which began the last week of July and extends through September.

### **Campton Township Monitoring Well Report**

Final draft of the report is in process by ISWS. It is anticipated that the report will be presented to NWPA in October. For consideration: Should the report be published on the ISWS website or viewed as an internal letter report available from the County or Township? Recommend giving some thought to the recommendations in the report that will indicate well construction standards, how do we apply this information, Health Department issues permits but most developments are in the Village of Campton Hills.

# Kane County 2020 Solid Waste Plan DRAFT

Energy & Environmental Resources Committee

August 14<sup>th</sup>, 2020

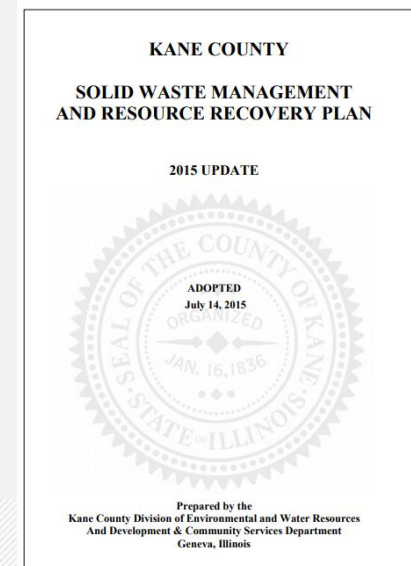
# Kane County 2020 Solid Waste Plan Project Schedule

- 8/14 EEC meeting, present Initial Draft to Committee for Review
  - Please email edits or questions to Jennifer before EOD Friday 8/28.
- 9/11 EEC meeting, present Final Draft  
& Open Public Comment Period (9/11-10/26)
- 10/16 Public Hearing (during EEC Meeting)
- 10/26 Close of Public Comment Period
- 11/4 Finalization of Plan w/ incorporation of public comments
- 11/13 EEC meeting, Resolution to Approve
- 12/8 KCB meeting, Final Approval

# Kane County Solid Waste Plans 1992-2015

## *Solid Waste Plans*

- *2015 Kane County Solid Waste Management and Resource Recovery Plan Update*
- *2009 Kane County Solid Waste Plan Update*
- *2004 Kane County Solid Waste Plan Update*
- *1997 Kane County Solid Waste Plan Update*
- *1992 Kane County Solid Waste Plan*



# Invitation to comment

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**KANE COUNTY SOLID WASTE  
MANAGEMENT AND RESOURCE  
RECOVERY PLAN**

**DRAFT - August 5, 2020**

**ADOPTED - (planned - December 8, 2020)**

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**Prepared by the**  
**Kane County Division of Environmental and Water Resources**  
**(Geneva, Illinois) and**  
**Aptim Environmental & Infrastructure, LLC**



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**Kane County**  
**Division of Environmental & Water Resources**

Jodie Wollnik; Division Director

Jennifer Jarland; Recycling Coordinator

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## EXECUTIVE SUMMARY

The Illinois Solid Waste Planning and Recycling Act was adopted in 1988 and requires all Illinois counties to plan for the management of solid waste generated within their borders. Solid waste management plans are also required to be updated every 5 years to reflect current waste generation and waste management practices, review implementation status of plan recommendations, and identify modified or new recommendations based on current conditions.

Kane County adopted its first Solid Waste Management Plan in 1992. Plan Updates have since been adopted in 1997, 2004, 2009, and 2015. This 2020 Plan Update supersedes all previous Plan Updates and reflects the current recommendations and policies of Kane County related to municipal waste management.

Kane County seeks to foster a strong policy and plan for sustainable materials management within the County and the surrounding region through the current Plan Update. A number of factors have impacted, and continue to impact, waste generation and management trends and practices in Kane County and the region, as well as nationally. Emerging concepts such as the Circular Economy, and an eye to material management beyond the traditional waste management view, will continue to shape the landscape of solid waste management for the coming 5 years and beyond, and the current Plan Update takes these into consideration.

The 2020 Plan Update follows a similar format to the 2015 Plan Update and includes the following elements:

- Identification of notable impacts on solid waste planning over the past 5-year planning period;
- A summary of the implementation status of recommendations from the 2015 Plan Update;
- Updated waste generation, diversion, and waste flows information;
- A summary of materials management practices, including services provided by private waste and recycling companies and by Kane County;
- Review of public education and information to advance diversion programs and increase environmental awareness throughout the County;
- Discussion of economics and funding considerations; and
- Identification of recommendations in every key focus area of the 2020 Plan Update.

Kane County's Division of Environmental and Water Resources has the primary responsibility for developing and implementing the County's Plan Updates. Through the efforts of the County's Recycling Coordinator, the County engages in a number of activities related to solid waste management, as outlined in Figure ES.1.

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**Figure ES.1 - Kane County's Role in Municipal Waste Management**

**Kane County Does:**

- Update and drive initiatives within the Kane County Solid Waste Plan.
- Require, by ordinance, all residential, commercial, and institutional properties to recycle, and to contract for separate recycling service.
- License waste and recycling haulers that operate in Kane County.
- Collect data from licensed haulers regarding waste, recycling, and organics collection quantities and accounts served.
- Plan, promote, and operate (with County staff and contractors) recycling programs for non-traditional recyclable materials, including permanent collection facilities and one-day events.
- Participate in local, regional, and state-level organizations and stakeholder groups to advance waste reduction and diversion.
- Promote waste reduction, increase diversion, and ensure continued public awareness of waste management and diversion alternatives available to the County.
- Manage the curbside hauler contract for Mill Creek Special Service Area, in order to secure the lowest price and best service for the residents in this unincorporated county community.

**Kane County Does Not:**

- Collect waste, recyclables, or organics from residential, commercial, or institutional properties.
- Manage franchised hauler contracts for cities or townships, which are generally managed by municipal public works departments and township solid waste disposal districts, or supervisors on behalf of the residents.
- Own or operate any active waste transfer or disposal facilities.

Kane County continues to grow rapidly, and with this population growth comes projected increases in materials to be managed. The county's population has grown nearly 70% over the past 30 years, from 317,471 in 1990 to 532,403 in 2019<sup>1</sup>. Population is projected to grow nearly 50% more by

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<sup>1</sup> U.S. Census, Annual Estimates of the Resident Population for Counties in Illinois: April 1, 2010 to July 1, 2019, <https://www.census.gov/data/tables/time-series/demo/popest/2010s-counties-total.html>, accessed May 27, 2020.



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2050, to a projected 780,678 people<sup>2</sup>. The impact of this population growth will be significant on the County's resource management infrastructure because it will continue to increase the demand for managing solid waste, recyclables, and compostable organic materials generated within the County.

Based on the current population and a calculated waste generation rate of 8.21 pounds per capita per day, the County generated approximately 798,000 tons of materials to be managed in 2019. Of this, approximately 37% was diverted through recycling and composting; the remaining 503,000 tons of waste was disposed. There are no landfills operating in Kane County; as a result, all waste is transported to neighboring counties for disposal, which increases the economic cost and environmental impact of disposal. Two privately-owned transfer stations are currently operating in the County, providing increased efficiency to transport waste to regional landfills outside of Kane County. The County also relies on a number of waste and diversion facilities outside its borders to manage materials.

While Kane County does not provide broad-based collection or disposal services, the County has historically provided a number of diversion opportunities through special collection events and permanent drop-off operations to supplement services provided by the private sector. These programs typically serve "non-traditional" recyclable materials such as electronics, household hazardous waste, and various hard-to-recycle materials that are not collected in curbside programs. Over the past 5 years, County programs have diverted more than 7.7 million pounds of materials from disposal.

For the coming 5-year planning period, the 2020 Plan Update has identified 26 recommendations in 14 different areas of focus. A number of these recommendations are ongoing recommendations geared towards sustaining current activities of the County in solid waste management. However, 9 of the recommendations are new and highlighted as "deliverable" recommendations for the planning period. These recommendations will receive particular implementation focus during the planning period to enhance the County's solid waste management system.

Deliverable recommendations for the 2020 Plan Update include the following:

- 1. **Waste Minimization** - Engage in discussions with other area counties and statewide organizations regarding development of the Circular Economy regionally, and bring together stakeholders from the business community, local governments, and policy makers to dialog on the Circular Economy.*
- 2. **Residential Recycling** - Conduct one-on-one outreach to municipalities with below average residential diversion rates based on review of annual hauler reports to identify how the County can assist in promoting increased waste reduction and lower contamination rates through education and outreach efforts.*

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<sup>2</sup> Chicago Metropolitan Agency for Planning, *On to 2050 Local Forecasts*, October 2018.

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3. **Commercial Recycling** - Determine and implement a method of confirming commercial and multi-family dwelling tonnage data provided in the annual tonnage reports by haulers is comprehensive, potentially by cross referencing with tonnage estimates from area transfer stations obtained through future annual surveys of these facilities.
  4. **Organics** - Research the feasibility of incorporating food scrap collection at existing Kane County Drop-off locations.
  5. **Textiles** - Incorporate additional textile drop-off locations around the County if 2020 pilot appears successful; apply lessons learned during 2020 pilot and from other area counties.
  6. **Electronics** - Explore the feasibility of opening an additional permanent recycling location for electronics in Kane County, to create increased convenience to residents in the southern portion of the County.
  7. **Non-Traditional (Hard-to-Recycle) Materials** - Explore the feasibility of developing a Kane County Recycling & Renewable Energy Center to serve as a one-stop-drop for residents to deliver predominantly non-traditional materials for reuse and recycling.
  8. **Public Information and Education** - Create series of online educational videos targeted at various sectors, on topics such as: repair & share solutions; recycling guidelines and activities for students; recycling guidelines and tips for residents and for businesses; and how to compost at home and at work.
  9. **Economics and Funding** - Establish additional funding sources to support delivery of recycling program services, including through the following methods:
    - Pursue grant opportunities as available and appropriate to support implementation of Plan recommendations (e.g., Closed Loop Fund, USEPA grants, The Recycling Partnership, etc.).
    - Explore feasibility of a local governmental partner contribution to county recycling programs that serve their residents. This funding source would be established using a mechanism similar to the household hazardous waste clause in municipal waste hauler contracts which is applied to collection of household hazardous waste and other materials undesirable in curbside programs.

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## **SECTION 1**

### **INTRODUCTION AND BACKGROUND**

#### **1.1 Planning Background and Purpose of Update**

With the passage of the Illinois Solid Waste Planning and Recycling Act (SWPRA) (415 ILCS 15/) in 1988, all Illinois counties were required to plan for the management of solid waste generated within their borders, and were required to update their plans every five (5) years. Kane County adopted its first Solid Waste Management Plan in 1992, and has since adopted required updates in 1997, 2004, 2009, and 2015. This 2020 Plan Update supersedes all previous Plan Updates and reflects the current recommendations and policies of Kane County related to municipal waste management.

The 2020 Plan Update serves to summarize existing materials management systems, infrastructure, and opportunities; related policies and programs; status of recommendations from the previous update; and to propose new recommendations that assist staff with strategic planning and guide development of future policies and programs.

#### **1.2 Plan Development Process**

The Kane County Recycling Program Coordinator, within the Division of Environmental and Water Resources, is responsible for implementing the recommendations in the Solid Waste Management and Resource Recovery Plan and for producing five-year updates to the plan.

This 2020 Update was developed in partnership with Aptim Environmental & Infrastructure, LLC (APTIM). This is the first time since the original 1992 Plan that a consultant was contracted to provide professional expertise in resource management planning, with a focus on advising Kane County on how to foster a strong sustainable materials management movement within the county and surrounding region. The 2020 Update is a result of the collaborative effort of the Kane County Recycling Program Coordinator and APTIM, with the roles of each as follows:

- The Recycling Program Coordinator worked closely with APTIM, managing progress through bi-weekly check in meetings. The Recycling Coordinator drafted content for the main body of the plan, provided all data and other resources available on file in the recycling office to supplement those provided by the consultant, while managing all supervision and guidance of the project to assure alignment with County intentions and capabilities.
- APTIM contributed to the development of the Update by analyzing the effectiveness of current and proposed programs, updating waste generation and diversion rates and developing future tonnage projections, offering counsel on national and regional best practices, providing sound data in support of recommendations, and contributing to the graphic design, organization, and final presentation of the Update.

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APTIM's services to the County were performed under contract as a result of a competitive, qualifications-based procurement process. The contract value was established by the County at an amount not to exceed \$34,000. In addition to the tasks included in completion of this document, APTIM's services also included attendance and presentation at select Kane County Energy and Environmental Committee meetings to brief the Committee on planning elements and progress and to present the draft plan.

Data for this update were sourced from internal county program reports and surveys, regional reports, state reports, national census information, and reports compiled and supplied by APTIM. County staff, with support from APTIM, reviewed current research, analysis, and best practices from regional, state, and national programs.

The Director of the Division of Environmental and Water Resources along with the Energy and Environmental Committee reviewed this plan update and advised throughout the process. The plan was reviewed publicly during a 45-day review period. The public review period running from September 11, 2020 to October 26, 2020, was advertised through public notice, website posting, and email to all municipalities, townships, solid waste districts, waste haulers, and interested parties.

At the October 16, 2020 public meeting of the Energy and Environmental Committee, a call was made for comments to be made in person.

Written feedback was received and incorporated. See Appendix D.

This *Kane County Solid Waste Management and Resource Recovery Plan: 2020 Update* was passed (planned) by the Kane County Board on December 8, 2020.

### 1.3 Terminology and Scope

It is worth noting that regional, national, and global trends towards rethinking the management of our resources has led to greater use of terms such as “resource management,” “materials recovery,” “materials management,” or “sustainable materials management,” in addition to “solid waste management” and “municipal waste management.” This plan may use these terms interchangeably.

With respect to quantities and material management methods described in the 2020 Plan Update, the following key terms are utilized:

**Generation:** Refers to tonnages of all materials discarded, including through disposal or diversion. Generation includes waste, recyclable materials, and organic materials managed through landfilling, recycling, and composting from the residential, commercial, and construction and demolition sectors (see subsequent definitions of these sectors below).

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**Generation Rate:** Calculation of the amount of generation on a unit basis; in this 2020 Plan Update, generation rate are expressed on a pounds per capita per day basis based on the County's estimated population.

**Diversion:** Refers to tonnages of materials segregated from the disposed waste stream and captured through collection programs for recycling, composting, and reuse (in limited cases, such as non-traditional material recovery). Diversion quantified in this Plan does not include source reduction, at-home composting, or recycling/reuse that falls outside of County programs and is not tracked by the County.

**Diversion rate:** Calculation of the amount of diversion relative to all generation. The diversion rate is reported on a percentage basis, dividing the tonnage of material diverted by the tonnage of material generated.

The Kane County Plan is applicable to **municipal waste management** in all geographic areas of Kane County (refer to Figure 1.1). Municipal waste is waste generated from the sectors defined below. Tonnage data and management practices for these sectors are reviewed and described in Sections 3 and 4 of this Plan Update. Historically, the Kane County Plan has not addressed the management of other waste streams, including industrial wastes, agricultural wastes, wastes generated from wastewater treatment operations, and the like; the 2020 Plan Update is consistent with this approach and does not consider or apply to management of these streams, most of which are separately regulated through other local and/or state policies and programs.

**Residential:** Includes landfill trash, single-stream recycling, and organics (including yard waste and food scraps) from single-family residences, generally including residences with 1 to 4 living units, in incorporated and unincorporated areas of Kane County. Residential diversion rates reflect the percentage of the waste stream diverted from landfills by both single-stream recycling and organic wastes collected through curbside programs. Residential data reported to Kane County includes material collected from cities and villages through municipal franchise contracted services, as well as unincorporated residential material. Residential data does not include tonnages from multi-family dwellings (MFDs) such as apartment and condominium complexes, which haulers typically service with commercial accounts and are therefore traditionally reported as part of the commercial sector.

**Commercial:** Includes business, industry, institution, and multi-family dwelling weights for landfill trash, single-stream recycling, yard waste, and commercial food scraps.

**Construction and Demolition (C&D):** Includes materials recovered from structural construction, demolition, or deconstruction projects within Kane County. This sector excludes materials from road and utility construction projects, as these are not traditionally included in the municipal waste stream or managed at municipal waste facilities. C&D data reported to Kane County include landfilled tons and recycled tons.

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**Materials and management methods** in this Plan Update are further subdivided into two categories:

**Traditional material:** Includes materials that are collected from generators by waste and recycling haulers typically as part of a regularly-scheduled service. These materials include (1) residential curbside single-stream recycling, organic waste, and solid waste; (2) commercial recycling, organic waste, and solid waste; and (3) construction and demolition recycling and solid waste materials.

**Non-traditional material:** Includes materials managed through County drop-off facilities, home collection programs, one-day events managed by the County, and other programs operated by private sector collectors. These materials include batteries, bikes, books, confidential documents, electronics, fluorescent tubes and bulbs, household hazardous wastes (HHW), paint, scrap metal, scrap wood, shoes, Styrofoam, textiles, tires, tools, and other hard-to-recycle materials.

**Figure 1.1 - Map of Kane County**



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## 1.4 Factors Impacting Solid Waste Management Planning

This update was prepared in the wake of the 2013 Green Fence and 2017 National Sword policies enacted in China, which set and enforced strict quality and contamination standards for recyclable materials and banned several material categories, including many grades of plastics and mixed paper. Historically, about 25% of U.S. recyclable material on average was being sent to China<sup>3</sup>, and when that flow was disrupted by the new policies, waste haulers moved to increase costs for residential recycling services, and across the nation programs have been disrupted and degraded.

Observations relevant to the solid waste and recycling industry since completion of the last Plan Update in 2015, including those related to the effects of foreign policy changes, include:

- Sustained, significant downturn in commodity value across most material markets as a result of the reduction in available outlets for materials
- Increased service costs for recycling due to commodity market pricing drop and increased processing effort required to meet quality standards
- Increased effort to reduce contamination in curbside recycling stream through customer outreach, education, and cart tagging programs
- Expansion of domestic recycling and remanufacturing infrastructure, particularly in mixed paper and plastic recycling

It is also significant to note that this 2020 Update was developed during the 2020 COVID-19 global pandemic, which has greatly affected market conditions including service delivery and tonnages in both residential and commercial sectors. It is not yet known how sustained these impacts will be, creating some uncertainty for the planning of future programs. Specific impacts of the pandemic, observed through the first half of 2020, include:

- Increase of residential waste tonnage and decrease of commercial waste tonnage
- Increase of contamination from PPE inclusion in the recycling stream
- Reduced events and drop-off opportunities for electronics, clothes, and household hazardous waste (HHW) during stay-at-home mandate period in March-May 2020
- Modifications to service delivery including the implementation of heightened safety protocol at recycling events, and the cancellation of shredding events in 2020 due to logistics connected to safe delivery of services

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<sup>3</sup> SWANA Applied Research Foundation, “Resetting Curbside Recycling Programs in the Wake of China”, September 2019



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This Update recognizes a continued need to review County programs and services to ensure waste and recycling services and opportunities are provided in a socially equitable manner. This is envisioned to include:

- Increasing accessibility to underserved communities and demographics across the County
- Providing program outreach and education using a range of delivery platforms to increase information accessibility for all residents

Finally, in an effort to promote a cohesive and effective course of action for materials management within the state of Illinois, the Solid Waste Planning and Recycling Act was amended (415 ILCS 15/4.5 new) to mandate the formation of a Statewide Materials Management Advisory Committee in 2020, and require them to prepare a Materials Management Report for the State of Illinois, which shall include the following:

- Recommendations for expanding waste reduction, recycling, reuse, and composting in Illinois in a manner that protects the environment, as well as public health and safety, and promotes economic development
- Recommendations for the form and contents of county waste management plans

The Report will inform the future development of Solid Waste Plans for Illinois counties, including Kane, and influences thereof may be apparent in the next update, or sooner if this current plan is revised to adopt recommendations in the state report. The Kane County Recycling Coordinator is an active member of the Advisory Committee, which shall meet and collaborate until completion of the required Report in mid-2021.

Additional legislative actions that have shaped the current waste management landscape are highlighted in Appendix A.

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## SECTION 2

### PLAN UPDATES AND IMPLEMENTATION

#### 2.1 History of Plan Updates

##### 2.1.1 1992 Kane County Solid Waste Management Plan

On November 10, 1992, the Kane County Board adopted the County's first Solid Waste Management Plan. Major recommendations of that plan included: (1) a 47% diversion goal; (2) expansion of permitted capacity at Settler's Hill landfill in Geneva; and (3) initiation of a site selection process for a future landfill facility.

The County Board approved an expansion of Settler's Hill landfill in 1994. This approval was appealed to the Illinois Pollution Control Board. The County Board's decision to approve the expansion was upheld in September 1997. A subsequent agreement (County Board Resolution 97-269) between Kane County, the City of Geneva, and Waste Management of Illinois, Inc. (WMI) states that (1) Settler's Hill will permanently close on or before December 31, 2006; (2) WMI is prohibited from operating any waste incineration, waste transfer or composting facilities at Settler's Hill; and (3) WMI shall not seek permitting for any other landfill or transfer station site within Geneva Township.

A study to identify preferred sites for a new landfill was completed in August 1995. Following review of that study, in September 1995, the County Board adopted Resolution 95-247 which states in part:

“The Kane County Board will not pursue the acquisition of property, the development of, or siting approval for a new landfill facility in Kane County”.

This resolution also stated that in subsequent Solid Waste Management Plan updates, “reduction, reuse, and recycling of solid waste are to be given primary importance. Alternate technologies for the disposal of solid waste are to be given a fair and unbiased review.”

##### 2.1.2 1997 Plan Update

In 1996, the County commissioned Andrews Environmental Engineering, Inc. to conduct a feasibility analysis of alternative technologies for municipal solid waste management. The technologies evaluated were mixed waste composting, separate collection and composting of food waste, waste-to-energy, and advanced recycling.

The study found that none of these approaches would eliminate the need for a landfill; all would require a complex site selection process; all would be susceptible to the impact of waste flow control; and that tipping fees would be substantially higher than landfill tipping fees.

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The 1997 Plan Update was adopted by the Kane County Board on March 10, 1998. This Update continued a strong emphasis on waste reduction and recycling; it found that adequate landfill capacity existed in the State of Illinois to meet the County's long-term disposal needs; and it recommended that a series of waste transfer stations owned and operated by the private sector be encouraged to access this existing landfill capacity.

### **2.1.3 2004 Plan Update**

This plan update was initiated in 2002, by the Kane County Department of Environmental Management. However, in June 2002, the County received an application for siting approval for a transfer station at the Woodland Landfill near South Elgin. The planning process was put on hold, pending the outcome of this siting application. The Kane County Board denied the application on December 10, 2002.

The plan update process was then resumed, and an update was adopted by the County Board on May 11, 2004. This update included ten recommendations to increase recycling levels and a reaffirmation of the 1995 resolution opposing any future landfills in the County. It further called for reliance on private sector transfer stations to manage the County's waste needs, recommended the County provide assistance to the waste industry with identification of potential future transfer station locations, and established criteria for future siting applications for transfer stations.

The Kane County Solid Waste Management Plan was subsequently amended by County Board Resolution 05-462 on December 13, 2005. This resolution required a host agreement be approved between the County and the applicant for pollution control facilities located anywhere in Kane County. The host agreement must be in place prior to the determination of plan consistency being made by Kane County.

### **2.1.4 2009 Plan Update**

The next five-year plan update prepared by the Kane County Department of Environmental Management was adopted by the Kane County Board on November 10, 2009. This update included eight (8) recommendations to increase recycling levels and one (1) recommendation concerning alternative disposal technologies. This update cited the resolution opposing any future landfills in the County, addressed the final closure of the Settlers Hill Landfill in 2006, and incorporated the 2005 amendment regarding host agreement requirements. It further included sections on waste transfer stations, siting approval, and host fees.

The 2009 Plan Update included information about household hazardous waste (HHW) drop off sites and HHW pick-up service, and it included a new section on food waste and textile recycling.

### **2.1.5 2015 Plan Update**

The next five-year plan update prepared by the Kane County Division of Environmental and Water Resources was adopted by the Kane County Board on July 14, 2015. This update included recommendations in eleven (11) categories that focused on waste minimization, recycling,

ordinance enforcement, organics, textiles, construction and demolition, electronics, household hazardous waste, infrastructure, alternative technologies, and education. The intention was that these goals could feasibly be accomplished by Kane County, with management from the Kane County Recycling Coordinator and approvals as necessary from the Kane County Energy and Environmental Committee and/or Kane County Board, in the span of 5 years.

Section 2.2 contains a summary of the implementation status of each 2015 recommendation and indication of whether the recommendation has been implemented, partially implemented, or not implemented.

## 2.2 Implementation Status of the 2015 Plan Update

Table 2.1 - Implementation Status of 2015 Recommendations	
Recommendation	Accomplishments
<b>2015 Recommendation 5.1 - Waste Minimization</b>	
<p><i>A. Promote waste minimization through education and outreach to encourage reduced consumption and creative reuse of materials.</i></p> <p><b>Implemented</b></p>	<p><b>Green Guide:</b> The topic of waste minimization is the headline message of the annual Green Guides over 4 years 2016-2019.</p> <p><b>Public Presentations:</b> 38 public presentations given, reaching over 1200 people, over 4 years 2016-2019, all with a focus on minimizing waste &amp; ReThinking.</p> <p><b>Kane County Connects:</b> 15 out of 101 total articles were written on the topic of waste minimization or reuse in the county's online blog and newsletter, with a 20,000 person readership, over 2 years 2018-2019.</p>
<b>2015 Recommendation 5.2 - Recycling</b>	
<p><i>A. Improve current programs and develop new programs to maximize recycling, to the extent practically and economically feasible, in order to increase diversion of materials from landfills. This recommendation targets no specific material, but directs the recycling coordinator to research current opportunities for the recycling of non-traditional materials and to develop programs where feasible.</i></p> <p><b>Implemented</b></p>	<p><b>Extravaganza materials accepted:</b> added batteries and garden tools in 2018, and scrap metal in 2019.</p> <p><b>Fluorescent Tube Recycling:</b> in partnership with Ace Hardware in Geneva and Fluorecycle, started a pilot recycling drop off in late 2015 that continues to present. Have collected 14,000 light tubes and bulbs in the 4 years, 2016-2019.</p> <p><b>Clothing, shoes and used textiles:</b> added textile recycling to the permanent electronics drop off locations as of December 2019.</p> <p><b>Small Appliances:</b> Small household appliances are now back on the list of acceptable items at the electronics drop-off locations, as of 2019.</p>

**Table 2.1 - Implementation Status of 2015 Recommendations**

Recommendation	Accomplishments
	<p><b>Tires:</b> Internal governmental partners tire recycling day, funded by the IEPA, organized by County to allow municipal, township, and park departments to drop-off dumped tires for recycling, free of charge. Events held on 11/14/16, 12/12/17, 8/9/19, collected over 1000 tires including car, truck and tractor tires.</p>
<p><i>B. Continue to work in cooperation with other regional planning agencies and area counties where appropriate, in order to share resources and evaluative information concerning solid waste and recycling programs and services.</i></p> <p><b>Implemented</b></p>	<p><b>ILCSWMA, Illinois County Solid Waste Management Association:</b> maintained involvement with this association, Kane County Recycling Coordinator acting as secretary of the board from 2016 to present.</p> <p><b>Illinois Task Force for Recycling Contamination Solutions:</b> KC recycling Coordinator an active participant, helping to design statewide recycling guidelines, and produce the Dirty Dozen articles to educate on the 12 worst non-recyclable materials commonly found in the recycling carts.</p>
<b>2015 Recommendation 5.3 - Ordinance Enforcement</b>	
<p><i>A. Enforce the Kane County recycling ordinance (95-157) to increase the volume of recycling in multi-family residential buildings and commercial establishments by working with the waste and recycling haulers.</i></p> <p><b>Implemented</b></p>	<p><b>Enforcement:</b> done on a report-basis. A total of 16 cases in the 3 years, 2017 to 2019, involving apartment buildings and businesses, resulted in compliance and provided recycling service to over 1500 households and thousands of clients of businesses such as X-Sport Fitness.</p> <p>Through the course of enforcing the ordinance, several of the hauler representatives or account managers needed to be contacted and informed of the requirements of the ordinance, so some outreach was accomplished in this way.</p> <p>Ordinance Revision in 2018 added mobile home parks into the rule, bringing 40 homes in Oak Park Terrace in Batavia recycling service.</p> <p>Developed a procedure for tracking compliance, including a consultation, and an inspection process, with a letter of compliance issued at completion.</p>

**Table 2.1 - Implementation Status of 2015 Recommendations**

<b>Recommendation</b>	<b>Accomplishments</b>
<p><i>B. Utilize the mandates in the Solid Waste Hauling and Recycling Program Act (415 ILCS 12/1 et. seq.), which requires each waste hauler to offer commercial recycling services to businesses, commercial property owners and institutional facilities, to support this enforcement on a county level. Work with haulers to provide information on the Kane County ordinance to business owners.</i></p> <p><b>Partially Implemented</b></p>	<p><b>Hauler outreach:</b> Interviews with hauler representatives about this idea were conducted but the actual application of this goal was not accomplished, due to lack of time and resources needed to start a large hauler-based partnership education plan, including the development of a tool kit that haulers would use to do the outreach.</p> <p>One-on-one contact was made with hauler representatives to inform them of the details of the ordinance, and hauler compliance requirements.</p>
<b>2015 Recommendation 5.4 - Organics</b>	
<p><i>A. Develop avenues of outreach to Kane County commercial food service establishments to encourage separation and collection of food scraps for composting or anaerobic digestion and make connections between businesses and haulers.</i></p> <p><b>Not Implemented</b></p>	<p><b>Business food scrap composting:</b> This goal was not accomplished. While there are resources for helping businesses start composting (like the Illinois Food Scrap Coalition's We Compost tool kit), the (hauler &amp; processor) infrastructure is not yet robust enough to support year-round organics hauling service. Other barriers to the management of such a program include access to contact lists for businesses, limits to staff time and resources for this project, and cost to the businesses.</p> <p>Commercial food scrap composting has taken root in the region however, and there are several groceries and hospitality venues in the County that are currently participating in food scrap compost programs.</p>
<p><i>B. Monitor any pilot program carried out on a municipal level that will serve to inform future County food scrap collection programs.</i></p> <p><b>Implemented</b></p>	<p><b>Municipal Programs:</b> On the residential side, there are over 50 curbside collection programs for food scrap in the greater Chicago region. In Kane County, the following communities now have residential curbside food scrap composting services. These are all "ride-along" programs, with food scrap being included in yard waste collection carts during the yard waste collection season.</p> <p><a href="#">Mill Creek SSA</a>  <a href="#">City of Batavia</a>  <a href="#">City of Geneva</a>  <a href="#">Village of Elburn</a>  <a href="#">Kaneville Township</a></p> <p>The Mill Creek Program was the first community to offer this service in Kane County; the Division of</p>

**Table 2.1 - Implementation Status of 2015 Recommendations**

<b>Recommendation</b>	<b>Accomplishments</b>
	<p>Environmental and Water Resources manages the hauler contract for this Special Service Area, and after negotiations with the hauler in 2015, the program was added to existing services at no additional charge.</p> <p><b>Backyard Composting:</b> The county continues to supply subsidized backyard compost bins for sale to residents, distributing an average of 30 per year, to divert food scraps from the landfill.</p>
<p><i>C. Continue to actively engage in the Illinois Food Scrap Coalition, in order to remain connected to state and regional developments.</i></p> <p><b>Implemented</b></p>	<p><b>Illinois Food Scrap Coalition:</b> The Kane County Recycling Coordinator is currently the Chairman of the board for IFSC, driving progress and development that fosters the growth of food scrap composting in the state.</p>
<b>2015 Recommendation 5.5 - Textiles</b>	
<p><i>A. Develop or encourage new programs to increase textile recycling, including clothes, linens, shoes, and accessories.</i></p> <p><b>Implemented</b></p>	<p><b>Textile Recycling Program:</b> In December of 2019 textiles were added as acceptable material at the electronics recycling drop-off locations (2 locations – Batavia &amp; West Dundee) that are open 5-days a week, 8 hours a day. This is considered to be a pilot project for the year 2020, and is entirely managed and tracked by eWorks, the County’s contracted electronics recycler.</p>
<p><i>B. Assess all potential opportunities for revenue-share.</i></p> <p><b>Implemented</b></p>	<p><b>Revenue-share Opportunities:</b> Research into this avenue for revenue share showed that the struggling global markets do not offer this opportunity at present.</p>
<b>2015 Recommendation 5.6 - Construction and Demolition</b>	
<p><i>A. Conduct outreach to area construction and demolition contractors to encourage recycling of materials, and connect them to the facilities that process such materials.</i></p> <p><b>Partially Implemented</b></p>	<p><b>Outreach:</b> In 2013, in the wake of Cook County’s 2012 Demolition Debris Diversion Ordinance, Kane County Environmental Resources Division staff explored the idea of a C&amp;D recycling ordinance for Kane County. It was determined that due to a number of factors including lack of facilities; potential of cost impact to builders; and low current landfill tipping rates, an ordinance was not advisable at this time. However a voluntary approach has been encouraged. The “<a href="#">Recycling Construction and Demolition Debris</a>” document is inserted into each building permit packet and is posted on the Kane County</p>



**Table 2.1 - Implementation Status of 2015 Recommendations**

<b>Recommendation</b>	<b>Accomplishments</b>
	Recycles webpage. This document serves as a guide to contractors and homeowners, on locations that they can utilize to recycle or dispose of their construction materials.
<p><i>B. Further the development of C&amp;D recycling and deconstruction efforts in Kane County, depending on availability of funds and priorities, in order to increase diversion of construction and deconstruction-related materials.</i></p> <p><b>Not Implemented</b></p>	<p><b>Development of construction waste diversion program,</b> not implemented.</p>
<b>2015 Recommendation 5.7 - Electronics</b>	
<p><i>A. Continue to work with the contracted electronics recycler to assure the most cost-effective program possible for Kane County.</i></p> <p><b>Implemented</b></p>	<p><b>Maintain Program:</b> In addition to 8 events a year (monthly April – November), the county has 2 permanent drop-off locations.</p> <p>Through an excellent working relationship the county and their contractor, eWorks, have continuously made adjustments to the program to assure that it remains sustainable and best serves the public. In 2016, after a period of statewide upheaval and program disruptions due to failings of the weight-based law, a user-fee for the recycling of TVs and monitors was introduced by Kane County’s recycler, which ensured the survival of the program, and led to its ongoing sustainability. The contract remains a no-cost-to-county contract.</p>
<p><i>B. Secure, at time of contract expiration, the most cost-effective program possible for Kane County at that time.</i></p> <p><b>Implemented</b></p>	<p><b>Cost-effective contract:</b> After a publicly bid process, won by the County’s existing electronics recycler, a new three-year contract was signed with two additional extension years possible, for a total of five years (01/14/18 – 01/13/23). This contract is a no-cost, no-pay contract, with eWorks offering both collection (site staffing and management) and recycling services. The contract terms align with the mandates of the Illinois Consumer Electronics Recycling Act.</p>

**Table 2.1 - Implementation Status of 2015 Recommendations**

<b>Recommendation</b>	<b>Accomplishments</b>
<p><i>C. Engage actively with the Illinois Product Stewardship Council and the Electronics Recycling Subcommittee to monitor and contribute to the amendment process mandated for the Illinois Electronic Products Recycling and Reuse Act (PA 95-0959).</i></p> <p><b>Implemented</b></p>	<p><b>State law:</b> A new law came into effect in 2018, called the Consumer Electronics Recycling Act (CERA) that replaced the Electronic Products Recycling and Reuse Act. The new law is a convenience standard-based law requiring a certain number of permanent collection sites and/or events in each county. Kane County recycling Program Coordinator was highly involved in conversations around the drafting of the law, attended meetings in Springfield and Chicago and spoke for the working model that had been developed here in 2016, which represented a prototype for the kind of program idealized by the new law.</p>
<b>2015 Recommendation 5.8 - Household Hazardous Waste</b>	
<p><i>A. Research feasibility of and secure funding in order to collect fluorescent tubes at the quarterly residential recycling events, and other permanent drop-offs (i.e. select hardware stores), in order to fill the need currently unsupported by limited available recycling opportunities.</i></p> <p><b>Partially Implemented</b></p>	<p><b>Fluorescent Tube Recycling:</b> in partnership with Ace Hardware in Geneva and Fluorecycle, started a pilot recycling drop off in late 2015 that continues to present. Have collected 14,000 light tubes and bulbs in the 4 years, 2016-2019.</p> <p>Fluorescent tubes continued to be collected at the summer recycling extravaganza each year, and 4800 tubes were collected in the 5 years 2015-2019.</p> <p>No headway was made towards establishing more drop-off locations/partnerships or towards collecting tubes at more than one event per year (the Extravaganza), due to staff limitations.</p>
<b>2015 Recommendation 5.9 Infrastructure</b>	
<p><i>A. Review, update, and readopt a Host Community Benefit Agreement and requirements pertaining to siting of transfer stations before the next plan update.</i></p> <p><b>Not Implemented</b></p>	<p><b>Host Community Benefit Agreement:</b> revision not completed due to lack of resources and staff time.</p>

Table 2.1 - Implementation Status of 2015 Recommendations	
Recommendation	Accomplishments
<b>2015 Recommendation 5.10 Alternative Technologies</b>	
<p><i>A. Monitor and assess developments in alternative waste management technologies, including waste-to-energy and waste-to-fuel technologies over the next five to ten years to ensure that opportunities are not missed.</i></p> <p><b>Implemented</b></p>	<p><b>Alternative Technologies:</b> continue to develop slowly. Kane County Recycling Coordinator keeps the Director of the Division apprised of the state of that technology.</p> <p>Meetings with technological companies and developers were held on an as-requested basis with three entities over the 5-year planning period, though no developments have emerged. cursory research was conducted into developments in policy and technology.</p> <p>To date there have not been any proposed resolutions.</p>
<b>2015 Recommendation 5.11 Public Information and Education</b>	
<p><i>A. Support in-school recycling efforts and foster recycling awareness in local schools.</i></p> <p><b>Implemented</b></p>	<p><b>School Education on Recycling:</b> The school education program has been defunct for some years now, due to a lack of funding. However, the county began supplying all schools with printed copies of the Kane County Recycles Green Guide in 2014 to distribute to the teachers and students. To date, nearly 30,000 copies have been distributed to schools. It is expected that around 4,000 copies of each new guide will be distributed to schools on an annual basis.</p> <p>Two to three presentations a year are given to school aged audiences. The recycling coordinator works with teachers to brainstorm classroom activities and provide direction for student projects related to recycling education to fellow students.</p>
<p><i>B. Secure funding where possible to reinstate a Kane County school recycling education program.</i></p> <p><b>Not Implemented</b></p>	<p><b>Secure Funding:</b> During this planning period, funding for this program was not secured.</p>

## SECTION 3

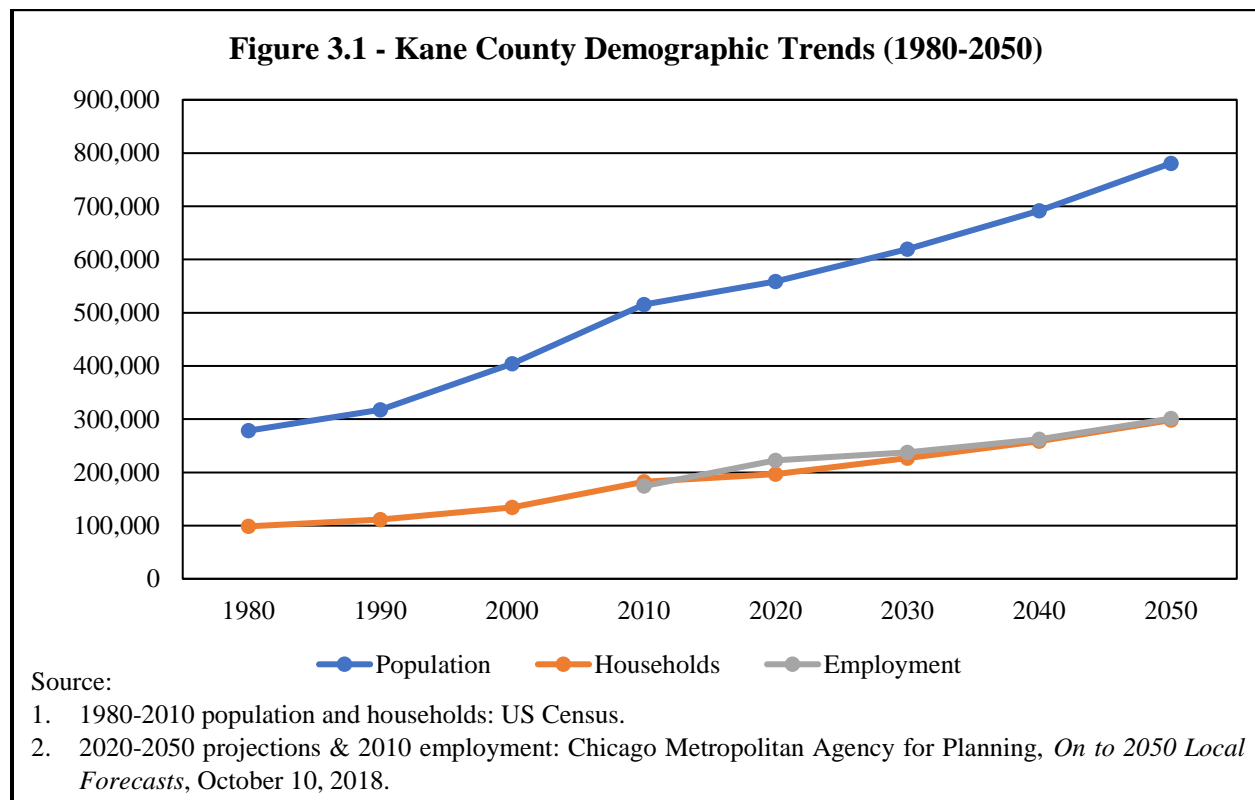
### SOLID WASTE GENERATION, COMPOSITION, INFRASTRUCTURE, AND CAPACITY

This section of the plan covers Kane County's demographic trends, waste generation estimates, infrastructure, and capacity to provide a holistic vision of current solid waste management quantities and available facilities to manage this material in and around the County. This context is vital to accurately identify challenges and opportunities going forward.

Please refer to Section 1.3 above for clarification on the data subsets analyzed throughout this section.

#### 3.1 Demographic Trends

A primary variable affecting the amount of solid waste in Kane County is the growth in population, households, and employment. Kane County has experienced significant growth since its original Solid Waste Management Plan was adopted in 1992, and growth is projected to continue (see Figure 3.1 and Table 3.1).



**Table 3.1 - Long-Term Demographic Projections (2010 - 2050)**

	2010	2050	Increase (Number)	Increase (%)	Annual Growth
Population	515,269	780,678	265,409	51.5%	1.1%
Households	182,047	298,212	116,165	63.8%	1.3%
Persons per Household	2.83	2.62			
Employment	174,234	301,050	126,816	72.8%	1.4%
Source: 1. 1980-2010 population and households: U.S. Census. 2. 2020-2050 projections & 2010 employment: Chicago Metropolitan Agency for Planning, <i>On to 2050 Local Forecasts</i> , October 10, 2018. 3. Persons per household calculated by dividing population by the number of households.					

As of 2019, Kane County was estimated to have approximately 532,403 residents<sup>4</sup>, 190,970 households<sup>5</sup>, and 220,315 jobs<sup>6</sup>. Demographic growth is forecasted to be greater than 1 % per year in all demographic factors through 2050 (see Table 3.1), making Kane County one of the fastest growing counties in the Chicago metropolitan area. The impact of this demographic growth on the County's resource management infrastructure will be significant because it will continue to increase the demand for managing the solid waste and recyclable materials generated within the County.

## 3.2 Waste Generation

This section summarizes waste generation and composition inclusive of municipal solid waste, single-stream recycling, and landscape/organic waste from residential sources, commercial / institutional / multi-family sources, and construction and demolition sources. Regulated special wastes, industrial process wastes, agricultural wastes, and sludges are excluded from the definition of municipal solid waste and therefore not included in the Kane County Solid Waste Management Plan.

### 3.2.1 Generation

Waste generation equates to the quantities of waste disposed and diverted through recycling and composting from generators in Kane County. The diversion rate equates to the percentage of waste diverted compared to the total amount of waste generated.

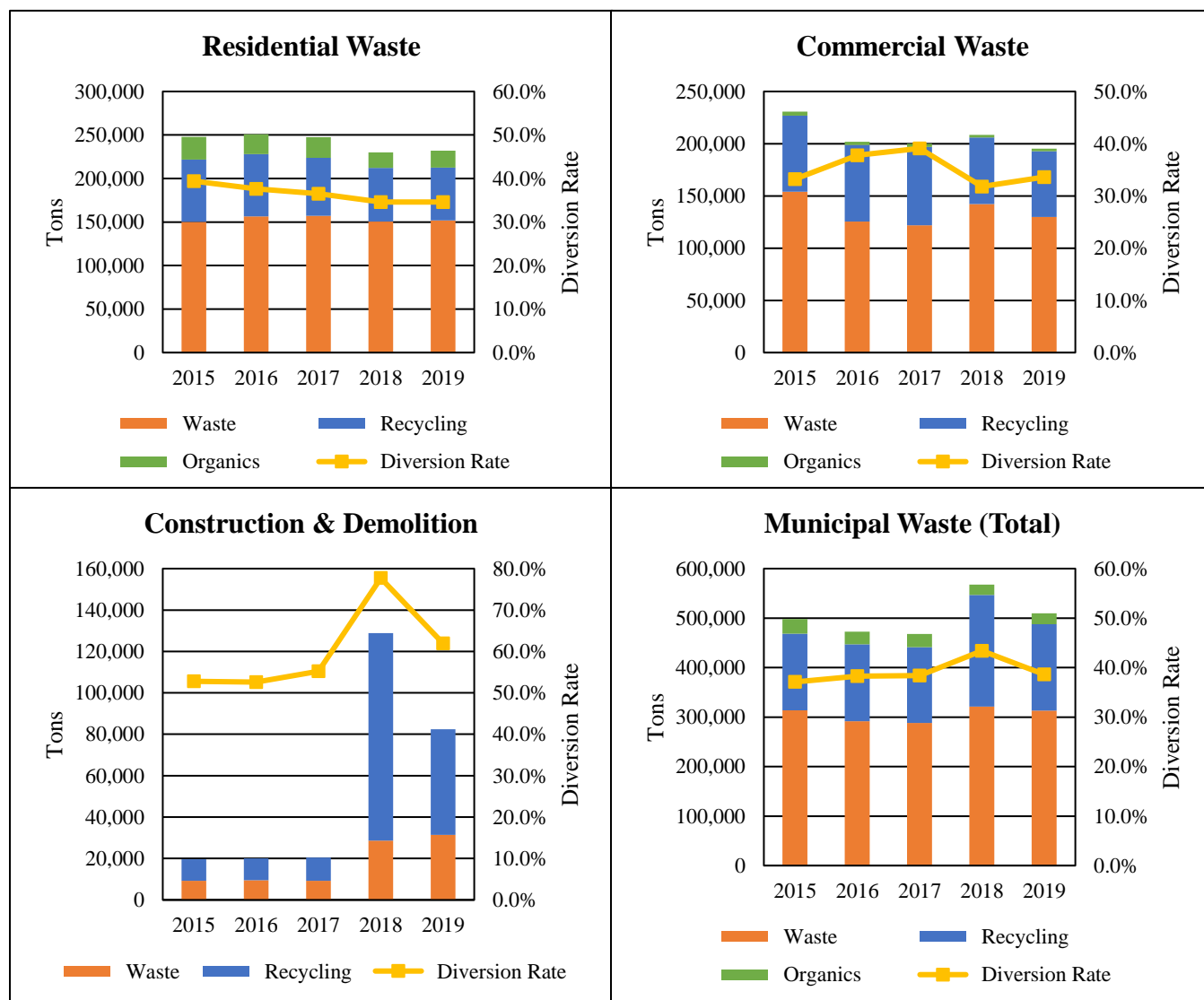
<sup>4</sup> U.S. Census, Annual Estimates of the Resident Population for Counties in Illinois: April 1, 2010 to July 1, 2019, <https://www.census.gov/data/tables/time-series/demo/popest/2010s-counties-total.html>, accessed May 27, 2020.

<sup>5</sup> U.S. Census, Annual Estimates of Housing Units for Counties in Illinois: April 1, 2010 to July 1, 2019, <https://www.census.gov/data/tables/time-series/demo/popest/2010s-total-housing-units.html>, accessed May 27, 2020.

<sup>6</sup> Chicago Metropolitan Agency for Planning, *On to 2050 Local Forecasts*, October 2018. Year 2019 employment estimated by linear interpolation of 2015 employment estimate and 2020 employment projection.

Kane County collects annual tonnage data from licensed waste and recycling haulers operating in the County. The annual reports include quantities of material collected for landfilling, recycling, and composting from residential, commercial, and construction and demolition (C&D) sources. Reported hauler tonnage data by sector and corresponding diversion rates for the past 5-year planning period (2015-2019) are depicted in Figure 3.2.

**Figure 3.2 - Waste Generation and Management from Licensed Hauler Reports, by Sector (2015-2019)**



Review of the annual data in Figure 3.2 indicates that there is variation from year to year in the tonnages reported by haulers, with total reported waste generation ranging from a low of 467,700 tons to a high of 567,400 tons. Prior Kane County Solid Waste Management Plan Updates have also identified similar variation. Variability from year to year may occur because hauler collection routes do not follow county boundaries, and therefore haulers must make estimations when

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reporting their collection quantities that were generated in the County each year. As routes change, and depending on consistency of the parameters haulers utilize to estimate their reporting annually, it is possible that some tonnage is not captured.

Other trends and data limitations are also noted based on review of waste and recycling hauler data over the past five years:

- Reported tonnage increased significantly in the C&D sector from 2017 to 2018. While C&D tonnage dropped in 2019, it continued to remain much higher than prior year levels. Though this sector will be impacted by the amount of construction activity from year to year and therefore may vary, it would be unlikely to see the level of increase shown in the data from 2017 to 2018 due to changes in construction activity alone. It is more likely that intensified enforcement of the reporting requirement resulted in increased, and more accurate, tonnages being reported.
- Not all collected material tonnages are likely being reported to the County. For example, landscaping companies providing landscaping maintenance services to properties across the County often haul away yard waste for composting, and these companies are not required to report tonnages they collect to the County.
- Additional non-traditional materials are managed outside of the private hauler network and are not captured through hauler reports. These materials include batteries, electronics, hazardous waste, pharmaceuticals, scrap metal, textiles, tires, and many other materials dropped off directly by contractors or residents at collection sites. Kane County does collect some of these materials through collection events and programs it operates and tracks quantity data on these collections. Quantities collected through Kane County's events and programs over the period 2015-2019 are summarized in Section 4.

Based on the reported hauler data alone, waste generation in Kane County in 2019 would be calculated to be approximately 5.6 pounds per capita per day (pcd). Of this, approximately 3.5 pcd was disposed and 2.1 pcd (38%) was diverted through recycling and composting. The calculated generation rate, however, is likely low for the reasons noted previously. It is also low compared to generation rates calculated in other counties in the Chicago metropolitan area<sup>7</sup>. As a result, additional data sources were considered to determine a more representative generation rate to be applied for solid waste planning purposes in Kane County.

A statewide waste characterization and composition study was performed in 2009 and updated in 2015. The 2015 Illinois Commodity / Waste Generation and Characterization Study Update estimated municipal waste generation rates for each county in Illinois, based on measured waste composition and local economic indicators. The study, which excludes C&D material, estimated Kane County's waste generation rate to be 7.68 pcd. Based on 2019 hauler reports, C&D material contributes an additional 0.53 pcd of generation in Kane County. Scaling up the hauler-reported

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<sup>7</sup> Lake County reported a waste generation rate of 8.92 pcd based on 2018 data. Will County reported a generation rate of 7.56 pcd based on 2014 data.



tonnages based on the new estimated Kane County generation rate of 8.21 pcd<sup>8</sup> results in the estimated per capita waste generation, disposal, and diversion rates by generator sector shown in Table 3.2. Reported diversion rates are based on the quantity of material collected for recycling and have not been adjusted to account for contamination in recyclables; therefore, the quantity of generated waste actually diverted may be less than indicated in Table 3.2.

<b>Table 3.2 - Per Capita Generation and Material Management by Sector (2019)</b>					
	Disposal	Recycling	Organics	<b>Total</b>	Diversion Rate
Residential	2.72	1.08	0.36	<b>4.16</b>	34.6%
Commercial	2.01	0.98	0.05	<b>3.04</b>	33.9%
C&D	0.48	0.53	0.00	<b>1.01</b>	52.5%
<b>Total</b>	<b>5.21</b>	<b>2.59</b>	<b>0.41</b>	<b>8.21</b>	<b>36.5%</b>
Source:					
1. Kane County 2019 licensed waste and recycling hauler reports, received in 2020.					
2. CDM Smith, 2015 Illinois Commodity / Waste Generation and Characterization Study Update, March 30, 2015.					
Notes:					
1. All rates stated in pounds per capita per day (pcd) based on 2019 population.					
2. Organics includes both yard waste and food scraps collected from residential and commercial generators.					

This generation rate calculation is consistent with the approach utilized in the last plan update, and includes more recent statewide information than was available at the time of adoption in 2015. Applying the generation rates in Table 3.2 to the County's estimated 2019 population and projected 2050 population results in the waste quantity estimates by sector in Table 3.3 below, assuming no change in material management methods over time.

<sup>8</sup> Concurrent with development of the 2020 Plan Update, Kane County is pursuing LEED for Communities certification through the U.S. Green Building Council. The LEED certification requires calculation of the municipal waste generated in tons per year per capita as well as the percent of municipal solid waste diverted for the base year. The method of calculating generation varies from the approach described previously in this Plan Update, because LEED for Communities guidelines stipulate that C&D is to be excluded from the calculations. In addition, the population base for the LEED calculation is greater because it includes not only resident population but also transient population (e.g., tourists and employees working in the County but living outside the County). The LEED-based population to be utilized is 564,780. Excluding C&D materials and adjusting for the population difference, the County's generation rate for LEED is 1.24 tons per year per capita. The diversion rate is 34.3%.

<b>Table 3.3 - Kane County Generation and Material Management by Sector (2019 and 2050)</b>				
	Disposal	Recycling	Organics	Total
<b>2019 Waste Generation Quantities</b>				
Residential	264,285	104,937	34,979	404,201
Commercial	195,299	95,220	4,858	295,377
C&D	46,639	51,497	0	98,136
<b>Total</b>	<b>506,223</b>	<b>251,654</b>	<b>39,837</b>	<b>797,714</b>
<b>2050 Projected Waste Generation Quantities</b>				
Residential	390,378	153,872	49,866	594,116
Commercial	286,372	138,200	5,698	430,270
C&D	69,812	75,511	0	145,323
<b>Total</b>	<b>746,562</b>	<b>367,583</b>	<b>55,564</b>	<b>1,169,709</b>

Table 3.4 summarizes the historical estimates of municipal waste generation rates and annual quantities from prior Kane County Solid Waste Management Plans. It also reflects the tons of municipal waste estimated to have been generated in the County in 2019 and projected to be generated in 2050 based on the updated generation rate of 8.21 pcd. Review of historical and current generation rates indicate that generation rates have declined since the 1990s and have been fairly consistent from 2001 through the current period.

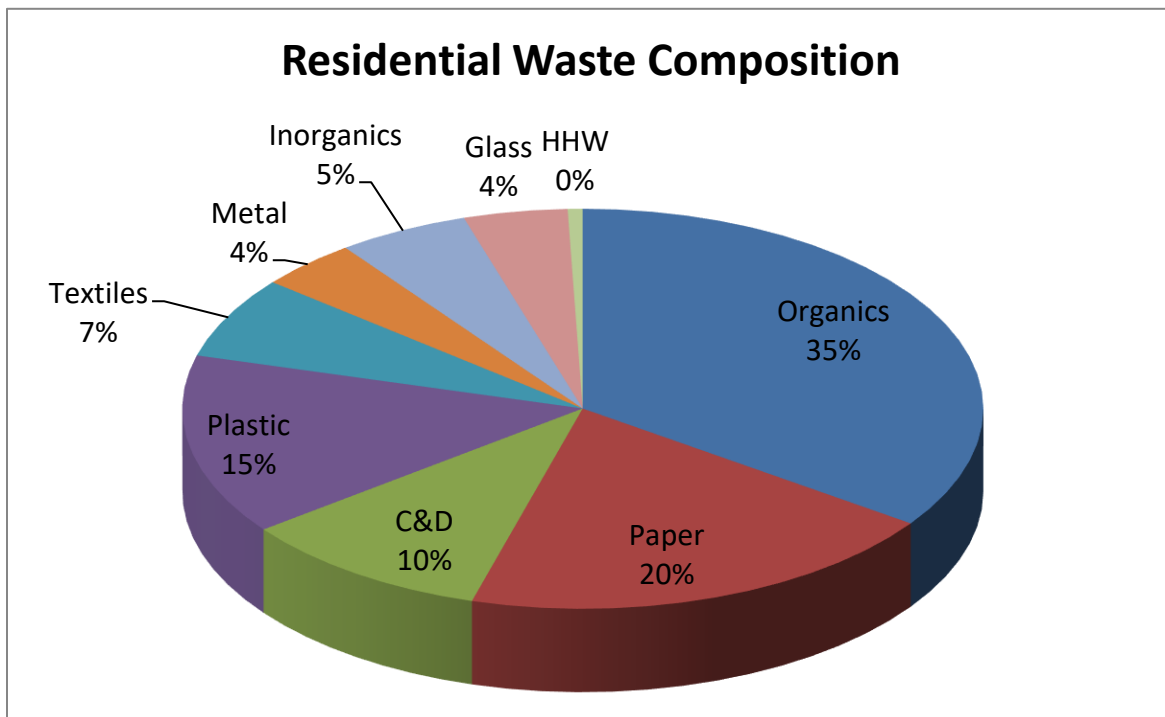
<b>Table 3.4 - Historical Municipal Solid Waste Generation Estimates</b>				
<b>Data Year</b>	<b>Population</b>	<b>MSW Generation</b>		<b>Source</b>
		<b>Pounds per Capita per Day</b>	<b>Tons per Year</b>	
1989	320,000	8.40	490,820	1992 Plan
1997	363,428	8.63	572,390	1997 Update
2001	413,727	8.16	616,122	2004 Update
2009	507,579	8.10	750,329	2009 Update
2015	521,561	8.10	770,998	2015 Update
2019	532,403	8.21	797,714	2020 Update
2050	780,678	8.21	1,169,709	2020 Update

### 3.2.2 Composition

The 2015 Illinois Commodity/Waste Generation and Characterization Study Update evaluated the quantity and composition of waste in the State of Illinois, as an update to the original 2009 study. As a part of that study, samples of residential and commercial waste were sorted at landfills and transfer stations to identify the material components in waste that is disposed. The data in Figures 3.3 and 3.4 are for the subset of the characterization study from urban areas.

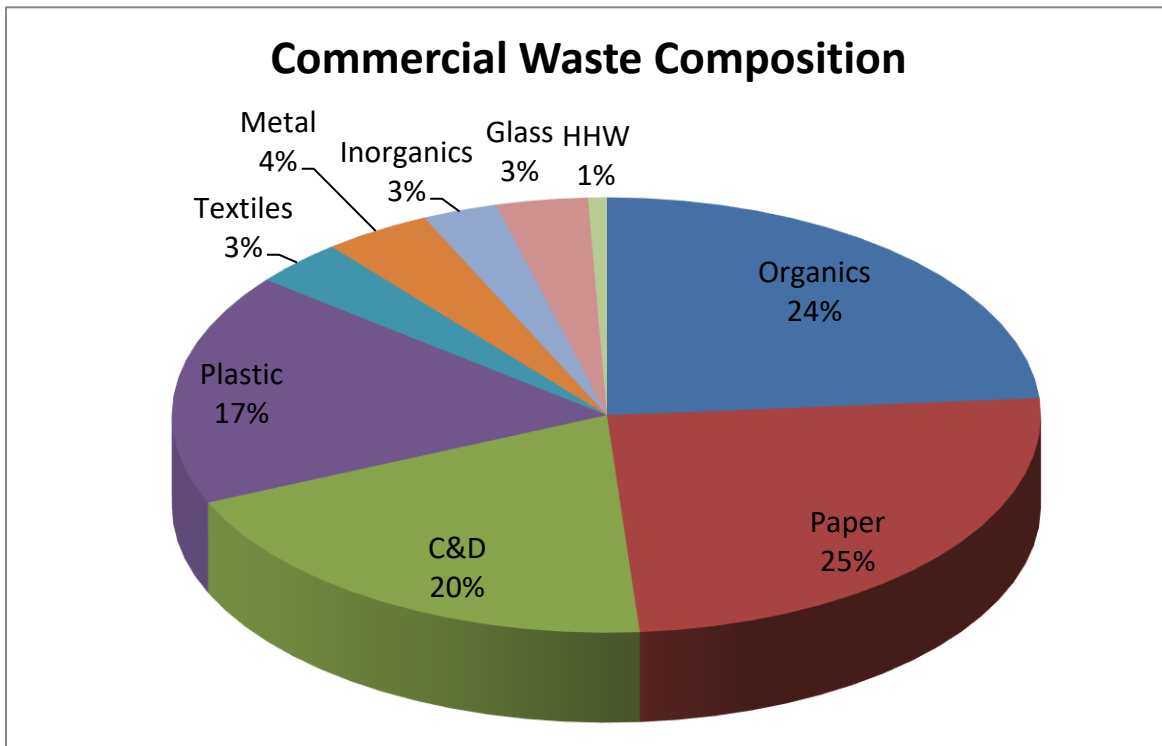
These data suggest that organics (including food scrap), paper, plastics, and C&D waste are among the larger components of the overall waste that is disposed from both the residential and commercial sectors. Compared to composition of the waste stream in the prior 2009 characterization study, paper, C&D, and textiles now constitute a smaller fraction of the waste stream while organics and plastics have grown in prevalence in the waste stream.

**Figure 3.3 - Landfilled Urban Residential Waste Composition**



Sourced from the 2015 Illinois Commodity/Waste Generation and Characterization Study Update.

**Figure 3.4 - Landfilled Urban Commercial Waste Composition**



Sourced from the 2015 Illinois Commodity/Waste Generation and Characterization Study Update.

### 3.3 Disposal Capacity

The Illinois Environmental Protection Agency (IEPA) produces an annual report on landfill capacity in Illinois. As of January 1, 2019, there were approximately 1,021,000,000 gate cubic yards of available capacity in 38 Illinois landfills. These landfills disposed of approximately 47,700,000 gate cubic yards of waste in 2018. Based on this rate of disposal and the remaining capacity at in-state landfills, the landfills in Illinois have a life expectancy of 21 years; this was the same estimate of remaining landfill life as was available at the time of the 2015 Plan Update. However, statewide figures include many landfills outside those facilities relied upon by Kane County. Instead, a regional perspective is more appropriate to consider for Kane County.

The Illinois Solid Waste Management Act requires the IEPA to report on landfill capacities on a regional basis. There are seven IEPA administrative regions as indicated in Figure 3.5. The amount of waste each region accepted in 2018 is indicated in Table 3.5.

**Figure 3.5 - Illinois EPA Regions**



**Table 3.5 - Landfill Disposal Volume and Life by Region (as of January 1, 2019)**

Region	Landfills Accepting Waste in 2018	Landfill Life (Years)	Waste Accepted in 2018 (Gate Cu. Yds.)	Waste Share of State Total
1. Northwestern Illinois	7	20	16,989,312	36%
2. Chicago Metropolitan	4	10	8,451,041	18%
3. Peoria/Quad Cities	7	30	4,898,765	10%
4. East Central Illinois	7	27	6,161,183	13%
5. West Central Illinois	4	15	1,715,503	4%
6. St. Louis Metro East	4	23	7,831,042	16%
7. Southern Illinois	5	49	1,682,666	4%
Total	38	21	47,729,512	100%

Source:

1. IEPA, 2019 Illinois Landfill Disposal Capacity Report, September 2019.

Notes:

- Landfill life (in years) calculated by dividing remaining capacity by waste disposed. This indicates how long a region may be served by local landfills at current disposal rates, barring capacity adjustments, until capacity is depleted.

Kane County is located in IEPA Region 2, which had only 10 years of landfill life remaining as of January 1, 2019. However, very little waste from the County is disposed in landfills in Region 2. The majority of landfills receiving waste from Kane County are located in IEPA Region 1, and one landfill in IEPA Region 4 is likely receiving waste from the County also. Table 3.6 identifies the landfills that are likely to be accepting waste from Kane County based on prior surveys of waste haulers in the County and locations of landfills utilized by the transfer stations nearest the County.

**Table 3.6 - Landfill Capacity and Disposal Volume at Facilities Used by Kane County Waste Haulers (as of January 1, 2019)**

<b>Landfill Name</b>	<b>Reported Capacity (as of 1/1/2019, Gate Cubic Yards)</b>	<b>Waste Received (2018, Gate Cubic Yards)</b>	<b>Remaining Life (as of 1/1/2019, Years)</b>	<b>IEPA Region</b>	<b>County</b>	<b>Landfill Operator</b>
Orchard Hills LF	46,936,408	6,855,671	7	1	Ogle	ADS
Lee County LF	53,841,410	562,749	96	1	Lee	Republic
Winnebago LF	96,351,322	4,992,417	19	1	Winnebago	WCNX
Rochelle Municipal LF	12,015,547	159,658	75	1	Ogle	WCNX
DeKalb LF	72,422,596	2,290,580	32	1	DeKalb	WM
Prairie View RDF	41,642,937	2,423,280	17	2	Will	WM
Livingston LF	71,879,491	3,270,101	22	4	Livingston	Republic
Total	395,089,711	20,554,456	19			

Source:

1. IEPA, 2019 Illinois Landfill Disposal Capacity Report, September 2019.

Notes:

1. ADS = Advanced Disposal Services; Republic = Republic Services; WCNX = Waste Connections; WM = Waste Management.
2. Two of the landfills (Rochelle Municipal Landfill and Prairie View RDF) are publicly owned and privately operated. All other landfills are privately owned and operated.

The calculation of remaining life for the landfills utilized by Kane County is relevant to the County because as one facility reaches capacity and closes, other facilities will see an increase in waste intake and therefore a reduction in life. Remaining life on a combined basis for the landfills currently utilized by Kane County was approximately 19 years as of January 1, 2019 (or approximately 17 years as of the date of adoption of this 2020 Plan Update).

For the term of this update, it appears that landfill capacity in Northern Illinois is sufficient to meet the disposal needs for non-recyclable waste generated within Kane County. The availability of regional landfill capacity should continue to be tracked as part of future plan updates to ensure sufficient capacity is available for disposal of the County's waste.

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### 3.4 Waste and Diversion Infrastructure

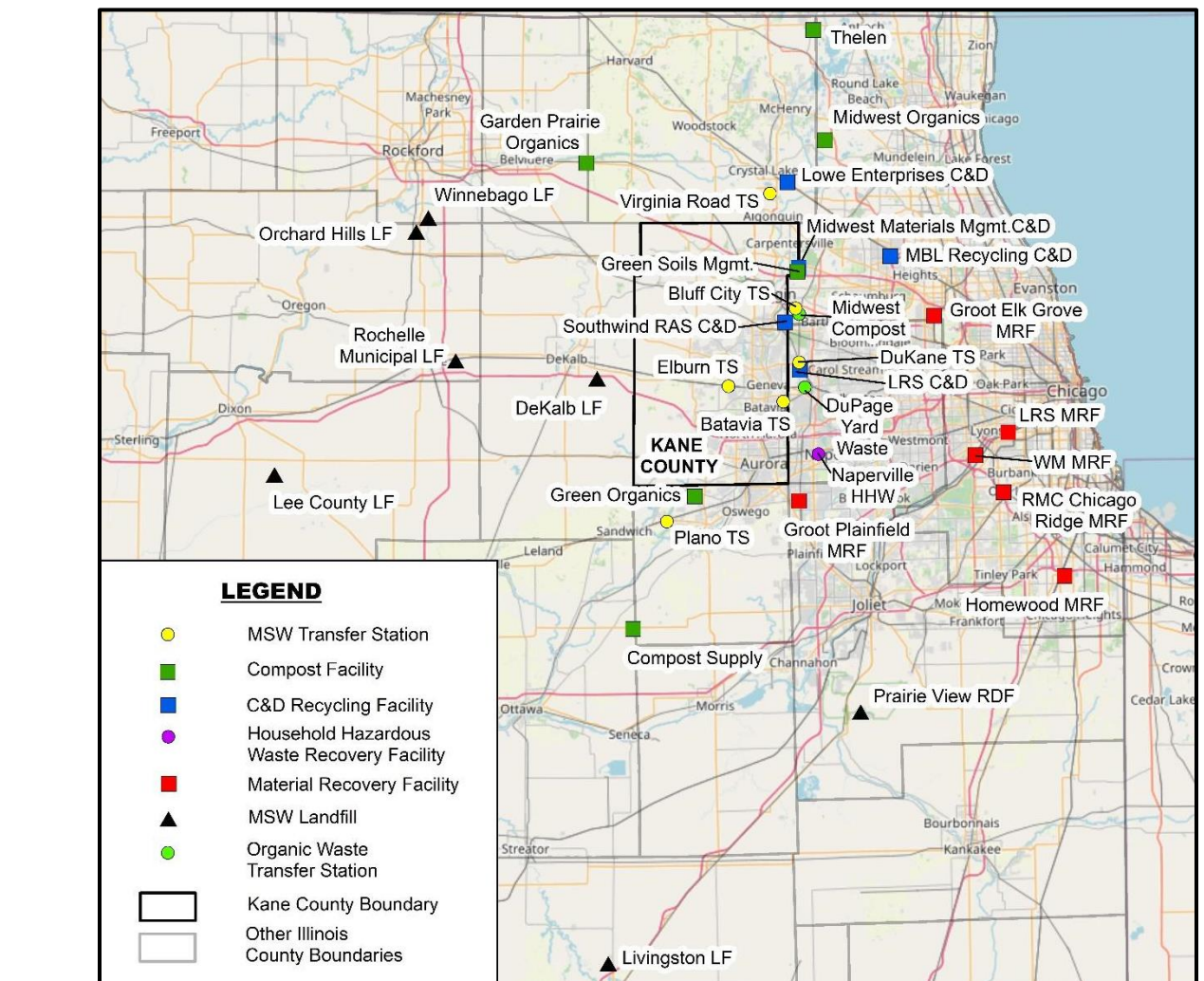
Kane County haulers rely on a number of facilities to manage their waste, recycling, and organics. Facilities in and around Kane County that are known or reasonably likely to receive materials from the County are shown in Figure 3.6.

Of note when considering the facilities serving Kane County is the limited number of facilities located within Kane County. In-county facilities include just two permitted transfer stations: the Elburn Transfer Station located between Elburn and Geneva in unincorporated Kane County that is owned and operated by Waste Management and the Batavia Transfer Station located in Batavia that is owned and operated by Advanced Disposal Services.

Other waste collected in Kane County is delivered to facilities outside of the County; though a number of these facilities are just east of Kane County in DuPage County. Landfills likely to be receiving waste from Kane County were identified in Table 3.6 in the previous section. Recyclables are delivered to various material recovery facilities (MRFs) for processing and separation prior to shipment to end markets; MRF infrastructure is largely located in Cook County as shown in Figure 3.6. Organics (including landscape waste and food scraps) are also delivered to a number of composting facilities outside of Kane County shown in Figure 3.6; additional information on compost facilities can also be obtained from the Illinois Food Scrap Coalition at <http://illinoiscomposts.org/haulers-processors/>.

In April 2019, Waste Management and Advanced Disposal Services announced a planned merger, with Waste Management to purchase Advanced Disposal Services. As of June 2020, the purchase is expected to close by the end of September 2020. The U.S. Department of Justice must provide regulatory approval of the purchase and will be requiring divestiture of a portion of the companies' assets to maintain competition in many markets. GFL Environmental has been named as the likely purchaser of substantially all divested assets, though a list of facilities to be divested has not been publicly released. If one of the transfer stations in Kane County is acquired by GFL, this would result in the introduction of a new waste services company to the Kane County market, potentially increasing competition for waste and recycling services, though full implications of this shift are as yet unapparent. Kane County will continue to follow these developments with particular attention to potential economic impacts to the residents of Kane County.





Kane County benefits from being located close to the Naperville Household Hazardous Waste Facility in DuPage County, which is relatively close for Kane County's southern residents. This is the primary household hazardous waste facility used by Kane County residents out of the four permanent HHW facilities in the state<sup>9</sup>.

Additional infrastructure to support diversion of non-traditional recycling materials is also located in and around the County but not shown on the map in Figure 3.5. These include but are not limited to scrap metal companies that collect ferrous and non-ferrous metals for recycling including appliances; textile recycling companies; electronics recyclers; battery recyclers; and building material repurposing and resale facilities. More information on programs and services for these non-traditional recycling materials is provided in Section 4.3.3.

<sup>9</sup> The other three permanent HHW facilities located in Illinois are in Chicago, Gurnee, and Rockford.



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### **3.4.1 Siting Approval for Future Infrastructure Development**

The Kane County Solid Waste Management Plan recognizes the need for additional transfer station capacity to be developed to accept waste generated by the residents and businesses of Kane County. Further, the Kane County Solid Waste Management Plan opposes the siting and/or construction of any new landfill capacity within Kane County, as has been the County's policy since the adoption of its original Solid Waste Management Plan. If other types of pollution control facilities to serve the municipal waste stream are proposed to be developed in Kane County, these facilities may be considered on a case-by-case basis.

Waste facilities that are defined as pollution control facilities under the Illinois Environmental Protection Act, including waste transfer stations, must secure local siting approval as well as IEPA permit approval. If a pollution control facility is proposed to be located in unincorporated Kane County, the County is vested with siting authority. If a pollution control facility is proposed to be located in an incorporated area, the municipality is the appropriate siting authority. (Note that the siting authority is different from parties with whom an applicant is required to enter into a host agreement with, as outlined in section 3.4.2 below.

Section 39.2 of the Illinois Environmental Protection Act (the Act) governs the local siting process. In order to receive local siting approval, pollution control facilities must demonstrate compliance with 9 separate criteria. Kane County has adopted a local siting ordinance (Kane County Code, Chapter 11, Article V) to implement the requirements of Section 39.2 of the Act. Kane County wishes to insure that sufficient information is presented on proposed facilities, and that siting applications comply with statutory requirements to include "sufficient details" demonstrating compliance with the 9 criteria of Section 39.2 of the Act.

The required content of applications for local siting approval of municipal waste facilities meeting the definition of pollution control facilities to be located within unincorporated Kane County was established through the adoption of the 2004 Kane County Solid Waste Management Plan Update; current requirements are contained in Appendix B of this 2020 Plan Update. Unless a siting application contains all the information as defined in Appendix B - *Required Content of Applications for Local Siting Approval of Pollution Control Facilities for Municipal Waste to be Located within Kane County*, the application is incomplete and does not contain the necessary information for the siting authority to adequately review and objectively rule on the proposed facility. Furthermore, any application for local siting approval for a municipal waste facility filed within Kane County which does not contain all of the information specified therein is inconsistent with the County's Solid Waste Management Plan.

Upon receiving local siting approval, a facility is required to obtain development and operating permits from the IEPA. A facility may also require additional approvals such as storm water permits, building permits, and occupancy permits. After they are constructed and commence operations, pollution control facilities are inspected by the IEPA.

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Transfer stations which are used exclusively for landscape waste, and at which landscape waste is not stored for more than 24 hours, are exempt from the Section 39.2 local siting process. Such facilities must obtain zoning approval, however, as well as IEPA permit approval. Transfer stations which are used exclusively for recycling purposes are also exempt from the siting process, though zoning approval may be required for these facilities depending on local requirements of the jurisdiction in which they are located.

### **3.4.2 Host Community Benefit Agreements**

By their nature, pollution control facilities may have external impacts that extend beyond the limits of the property and beyond municipal boundaries. A host agreement between the County and owner of a pollution control facility for the management of municipal waste provides mitigation of such external impacts. As established in prior Plan Updates, a host agreement is required to be entered into by an applicant for local siting approval for a pollution control facility managing municipal waste and located anywhere in the County, whether Kane County is the siting authority or if the facility is located in an incorporated area, in order for the facility to be consistent with the Kane County Solid Waste Management Plan.

A Generic Host Community Benefit Agreement was adopted by County Board Resolution 05-216 on June 14, 2005. The Generic Host Community Benefit Agreement automatically terminated and expired November 30, 2008, and the 2015 Plan Update recommended an update of the agreement be completed. This did not occur during the most recent planning period.

This 2020 Plan Update includes a Sample Host Community Benefit Agreement (see Appendix C) providing initial guidance for the elements to be included in a negotiated project-specific agreement between the County and an applicant for a pollution control facility for the management of municipal waste that is proposed to be located anywhere in Kane County. The Sample Host Community Benefit Agreement replaces the prior, expired Generic Host Community Benefit Agreement and is adopted in conjunction with and as part of the 2020 Plan Update.

## SECTION 4

# MATERIALS MANAGEMENT

### 4.1 Sustainable Materials Management and Circular Economy

Global models of waste management continue to shift from the old paradigm of linear solid waste management towards closed-loop sustainable materials management models based on the principles of sustainability and the circular economy. In this move away from the current take-make-waste extractive industrial model, material reuse and recycling are important components of natural ecosystem protection and are essential strategies for ongoing economic development and prosperity.

According to the Ellen MacArthur Foundation<sup>10</sup>, “a circular economy aims to redefine growth, focusing on positive society-wide benefits. It entails gradually decoupling economic activity from the consumption of finite resources, and designing waste out of the system. Underpinned by a transition to renewable energy sources, the circular model builds economic, natural, and social capital. It is based on three principles: Design out waste and pollution; Keep products and materials in use; Regenerate natural systems.” The principles of material flow in a circular economy are depicted in the graphic in Figure 4.1.

**Figure 4.1 - Material Flow in a Circular Economy**



Sourced from European Parliament, <https://www.europarl.europa.eu/news/en/headlines/economy/20151201STO05603/circular-economy-definition-importance-and-benefits>.

<sup>10</sup> Ellen MacArthur Foundation, <https://www.ellenmacarthurfoundation.org/circular-economy/concept>.

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Kane County recognizes that the development of a circular economy will directly benefit our residents through waste and carbon emission reduction, job creation, and a preservation of resources for future generations. The following sections describe a number of elements of Kane County's current material management system which can contribute to the advancement of the circular economy. True development of a circular economy will extend beyond activities at the County level and must also engage other stakeholders to be successful.

***Deliverable:*** *In this planning period, Kane County will engage in discussions with other area counties and statewide organizations regarding development of the Circular Economy regionally, and bring together stakeholders from the business community, local governments, and policy makers to dialog on the Circular Economy.*

## 4.2 Waste Minimization

Reflecting an awareness of the above concepts, waste reduction is identified as the most preferred method of materials management in the Illinois Solid Waste Management Act. The following measures are elemental in promoting waste reduction:

- Education and outreach
- Share and Repair programs
- Organics management (landscape waste and food scraps)
- Pay-as-you-throw (PAYT) billing structures, based on the volume of trash discarded
- Zero Waste initiatives
- Product Stewardship

Kane County will continue to promote waste minimization through education and outreach to encourage reduced consumption and creative reuse of materials through improved online resources targeted at various sectors.

## 4.3 Traditional Material Recycling & Diversion

Traditional materials are defined as those materials that are collected from the generator by waste and recycling haulers. These materials include (1) residential curbside single stream recycling, organic waste, and solid waste; (2) commercial recycling, organic waste, and solid waste; and (3) construction and demolition recycling and solid waste materials.

The Illinois Solid Waste Planning and Recycling Act, as currently written, requires that county solid waste plans include a 25% recycling goal (referred to as a diversion goal in this 2020 Plan Update), and designate a recycling coordinator for the County.

The 1992 Kane County Solid Waste Plan adopted a countywide diversion goal of 47.3% by 2000. The 1997 Plan Update raised the diversion goal to 52% by 2003. Subsequent updates did not change the diversion goal; therefore the goal has remained at 52%, and has yet to be attained. Moving forward, the County should work to increase utilization of current programs and develop

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new programs to maximize recycling, to the extent practically and economically feasible, in order to increase diversion and make continued progress towards this goal.

In Kane County, the percent of the traditional waste stream (hauler-collected material from residential, commercial, and construction sources) being recycled grew from an estimated 9% in 1989 to an estimated 40% in 1998 and has remained nearly level over the last 20 years. Over the past five-year planning period (2015-2019), the diversion rate fluctuated between 37% and 43% as shown previously in Figure 3.2.

#### **4.3.1 Ordinance**

The [Kane County Recycling and Hauler Licensing Ordinance](#) (95-157), further outlined in Appendix A, requires licensed haulers to provide collection of recyclables and organics from all residential and commercial accounts to which they provide waste service. The Ordinance also stipulates that Kane County annually license all waste and recycling haulers within the County, and specifies that annual hauler tonnage reports be completed.

The Kane County Recycling Coordinator will continue to license haulers, collect tonnage data on an annual basis, and promote compliance with the ordinance. Efforts to develop a practical mechanism to enforce the provisions of the ordinance on a wide-spread basis have not been successful to date, though the 2014 Solid Waste Hauling and Recycling Program Act (415 ILCS 12/1 et. seq.), requiring that waste haulers provide or offer commercial recycling services to commercial accounts, may be used to foster participation and compliance in this sector.

#### **4.3.2 Collection and Processing**

Twenty private sector hauling companies were issued hauler licenses in 2020, and completed required tonnage reports for 2019.

These companies provide services for residential curbside recycling, commercial waste removal, and construction waste removal. The recyclable materials collected in this system are usually transferred to regional material recovery facilities (MRFs) where the materials are sorted and shipped to secondary material processors before entering end-use markets. Yard waste and food scraps are usually taken to a municipal waste or organics transfer station and from there to an organics processing facility. Municipal waste is often taken to transfer stations before ultimate disposal at one of several regional landfills outside of Kane County (refer to Table 3.6). Also see infrastructure discussion in Section 3.4 above.

#### **4.3.3 Residential Recycling and Contamination**

The residential sector includes landfill trash, single-stream recycling, and organics (including yard waste and food scraps) from single-family residences, generally including residences with 1 to 4 living units, in incorporated and unincorporated areas of Kane County.

All municipalities and several townships in the County contract for trash and recycling service, including separate yard waste collection for single-family residents. All municipal curbside programs are now collecting single stream recycling, with an average recycling cart size of 65 gallons. These municipal waste and recycling contracts are managed by municipal public works departments and township districts. The Mill Creek SSA contract is managed by the Kane County Recycling Coordinator. Municipally-contracted haulers by community as of July 2020 are listed in Table 4.1.

Table 4.1 - Municipal Franchise Haulers (as of July 2020)		
Contracted Hauler	Communities Served	
Advanced Disposal Services	<ul style="list-style-type: none"> <li>• Batavia</li> <li>• Mill Creek SSA</li> </ul>	<ul style="list-style-type: none"> <li>• Prestbury</li> </ul>
Flood Brothers Disposal Co.	<ul style="list-style-type: none"> <li>• East Dundee</li> </ul>	<ul style="list-style-type: none"> <li>• Pingree Grove</li> </ul>
Groot Industries	<ul style="list-style-type: none"> <li>• Algonquin</li> <li>• Aurora</li> <li>• Big Rock</li> <li>• Burlington</li> <li>• Carpentersville</li> </ul>	<ul style="list-style-type: none"> <li>• Sleepy Hollow</li> <li>• South Elgin</li> <li>• West Dundee</li> <li>• Elgin Township</li> </ul>
Lakeshore Recycling Systems	<ul style="list-style-type: none"> <li>• Campton Township</li> <li>• Elburn</li> <li>• Geneva</li> <li>• Montgomery</li> </ul>	<ul style="list-style-type: none"> <li>• Plato Township</li> <li>• St. Charles</li> <li>• Sugar Grove</li> <li>• Virgil Township</li> </ul>
MDC Environmental Services	<ul style="list-style-type: none"> <li>• Gilberts</li> </ul>	<ul style="list-style-type: none"> <li>• Huntley</li> </ul>
Waste Management	<ul style="list-style-type: none"> <li>• Elgin</li> <li>• Hampshire</li> <li>• Kaneville</li> </ul>	<ul style="list-style-type: none"> <li>• Maple Park</li> <li>• North Aurora</li> <li>• Sun City / Del Webb</li> </ul>

Residents in the unincorporated areas of townships without franchise agreements contract individually for waste and recycling collection services. Based on 2019 licensed hauler data, haulers serve just over 10,000 unincorporated residential homes under such independent contracts.

Based on the annual tonnage report data over the last five years the amount of recyclables and organics collected in curbside residential programs averages 85 pounds per household per month and the amount of trash collected averages 147 pounds per household per month. Tonnage report data show that residential diversion has been slowly declining, from approximately 39% in 2015 to 35% in 2018 and 2019 as shown previously in Figure 3.2. This decline may possibly be influenced by a number of factors such as increased waste generation rates, lightweighting of materials (ie. thinner plastic used in water bottles), or complacency.

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The diversion rates noted in the previous paragraph represent the weight of material set out and collected for recycling and are not adjusted to remove contamination. Contamination of single-stream recycling has risen over the years, as consumer products and packaging take new forms that are either not easily sorted with current technology or that do not have a viable market. The issue is further exacerbated by “wish-cycling”, or the practice of putting unaccepted items in the recycling cart in the hopes that they might get recycled. Contamination in curbside recycling has been reported to be around 20-25% or more in many communities in the region<sup>11</sup>.

Following the enactment of the Chinese National Sword legislation, an Illinois state task force was formed in 2018 to address recycling contamination. The Task Force - made up of stakeholders that included waste and recycling haulers, MRF operators, agency and industry representatives, recycling coordinators and educators – set out to improve the quality of the recycling stream through streamlining, standardizing, and disseminating public educational information on how to recycle right.

The group developed a new cohesive state-wide recycling guidelines poster, were consulted on a parallel online resource produced and hosted by the IEPA, and created a series of articles based on the top 12 non-acceptable “Dirty-Dozen” materials commonly found in curbside recycling, to be used for social media outreach. The group continues to work on improving the quality and quantity of recyclable materials collected; accountability initiatives like cart-tagging programs and advanced marketing strategies are being implemented. The Kane County Recycling Coordinator has been an active member of this group, and spearheaded the “Dirty-Dozen” series.



**Recyclables Awaiting Processing at a MRF**

Kane County, through education and outreach, will continue to promote the state-wide recycling guidelines to positively affect the quality of the recycling stream.

***Deliverable:*** Conduct one-on-one outreach to municipalities with below average residential diversion rates based on review of annual hauler reports to identify how the

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<sup>11</sup> Sources include: SWALCO, WM-Grayslake MRF tonnage reports, 2019; Greg Maxwell, Resource Management, “Residential Curbside Recycling”, presentation to Village of LaGrange, June 13, 2019; Susan Robinson, Waste Management, “State and Future of Northeast MRFs - 2018”, presented at Northeast Recycling Council Fall Conference, October 30, 2018.



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*County can assist in promoting increased waste reduction and lower contamination rates through education and outreach efforts.*

#### **4.3.4 Commercial Sector**

The commercial sector includes business, industry, institution, and multi-family dwelling weights for landfill trash, single-stream recycling, yard waste, and commercial food scrap. The commercial sector generates approximately 46% of all solid waste in Kane County, based on 2019 hauler tonnage reports. As previously noted, tonnage data reported for the commercial sector in particular varies from year to year and may not represent the entirety of the commercial stream generated in the County. Refer to Section 3.2.1 for further discussion of the limitations of data gleaned from the hauler tonnage reports and see the Deliverable below that aims to improve upon these reported data.

Multi-family buildings with more than 4 units are commonly considered part of the commercial sector by waste haulers. Because these buildings are not typically included in municipal franchises, private commercial contracts for trash and recycling service are made between the property management and a hauler. Recycling in multi-family buildings is consistently more problematic than for single-family residences. Recycling containers are used for garbage if the garbage dumpster is full, and high turnover rates among tenants make education an on-going issue. Licensed haulers in 2019 reported 100 multi-family accounts, of which 69 have recycling (69%), but it is likely that this overall accounting is an estimate by haulers due to accounts being served alongside other commercial accounts and being reported with the commercial numbers below.

The composition of commercial waste is quite different from residential waste and can vary significantly among different establishments. The commercial waste stream often contains large amounts of recyclable material, such as office paper and cardboard, glass and aluminum containers, and other non-traditional recyclable materials like pallets and plastic film. Licensed haulers reported in 2019 a total of 7,358 commercial accounts, of which 3,190 have recycling service in addition to trash service (43%). Considering that the Ordinance (sec. 4.3.1) states that haulers must provide recycling service to any account for which they provide trash service [11-112, (b) 3], this rate is very low.

Kane County will work to further expand availability of recycling in multi-family residential buildings and commercial establishments, and increase the volume of recycling, by working with haulers to provide information on recycling requirements and guidelines to business and property owners to support compliance with the Kane County Recycling and Hauler Licensing Ordinance (95-157) and the Illinois Solid Waste Hauling and Recycling Program Act (415 ILCS 12/1 et. seq.).

***Deliverable:*** *Determine and implement a method of confirming commercial and multi-family dwelling tonnage data provided in the annual tonnage reports by haulers is comprehensive, potentially by cross referencing with tonnage estimates from area transfer stations obtained through future annual surveys of these facilities.*



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### 4.3.5 Organics

Landscape waste (or yard waste) was banned from Illinois landfills in 1990 by Public Act 85-1430. This ban led to the development of infrastructure that is currently composting over 600,000 tons of landscape waste and 69,000 tons of food scraps per year<sup>12</sup>.

Residentially generated organic material is collected at the curb along with trash and recycling through municipal contacts. The waste and recycling industry continues to trend towards a three bin system that facilitates the use of automated trucks for trash, recycling, and organics. Some communities still allow for the use of Kraft bags for yard waste, often requiring a prepaid sticker. Municipal public works and township road districts conduct separate collection programs for leaves or brush in many areas. Additionally, a significant portion of residents and commercial establishments employ private landscapers who include removal as part of their service. The collected material is required by law to be taken to a permitted organics processing facility.

Free collection and drop-off programs divert seasonally-generated large-volume organic waste into mulching or composting. Christmas tree collection programs are provided within the scope of most municipal or township hauler contracts. Kane County consistently promotes tree collection programs through education and outreach. The County will continue to conduct pumpkin composting events annually in November.



**Annual Pumpkin Collection Event**

Food scraps are the largest single component of the landfilled municipal waste stream in urban counties (including Kane County) in Illinois, comprising 17.7% of landfilled municipal waste according to the 2015 Illinois Commodity/Waste Generation and Characterization Study Update.

Food waste originates from residential, commercial, and institutional sources. Reasons to divert this material from landfills include the following: to increase landfill capacity, reduce methane emissions, and to recover valuable resources for composting (which returns nutrients to the soil) or anaerobic digestion (which produces energy in addition to compost).

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<sup>12</sup> IEPA, Compost Facility Annual Report data for 2018, obtained through personal communication with James Jennings, July 2020. Food scraps reported in cubic yards and converted to tons assuming a density of 1 ton per cubic yard.



**Food Scrap at a Compost Facility**

In 2012, the Illinois Food Scrap Coalition (IFSC) was formed by Illinois county recycling program coordinators and other stakeholders to advance food scrap composting. The Coalition is working to create networks between generators, haulers, and processors, while also working on education and outreach and advancing end-markets for the finished compost. The Kane County Recycling Coordinator is an active member of IFSC.

There are over 50 curbside collection programs for food scrap in the greater Chicago region, most of which are “ride-along” programs, wherein the food scraps are combined with yard waste for collection at the curb. To date, six Kane County communities have implemented residential curbside food scrap composting services: Mill Creek SSA, City of Batavia, City of Geneva, City of St. Charles, Village of Elburn, and Kaneville Township.

Kane County will continue to support and promote the inclusion of curbside food scrap collection in all municipal or township contracts, and look for additional diversion opportunities for food scraps within the county, including seasonal organic waste diversion programs.

***Deliverable:*** *In this planning period, Kane County will research the feasibility of incorporating food scrap collection at existing Kane County Drop-off locations.*

#### **4.3.6 Construction & Demolition Sector**

The Construction and Demolition sector includes materials recovered from structural construction, demolition, or deconstruction projects within Kane County. Construction and demolition waste includes materials such as asphalt shingles, brick, concrete, metal, pallets, wood, and wallboard/drywall. This sector excludes materials from road and utility construction projects, as these are not traditionally included in the municipal waste stream or managed at municipal waste facilities. C&D data reported to Kane County include landfilled tons and recycled tons.

In Kane County, materials contained in the construction and demolition (C&D) waste stream comprise approximately 22% of the overall generated municipal waste stream, according to the 2015 Illinois Commodity/ Waste Generation and Characterization Study Update. By comparison, the generation rate calculations in Table 3.2 indicate C&D waste comprises approximately 12% of generation in the County. The difference in these values arises because the C&D waste generation rate in Table 3.2 is based on the tonnage of material specifically managed and tracked as C&D, while the composition data from the 2015 Illinois Commodity/ Waste Generation and Characterization Study Update reflects material types present throughout the waste stream. As a result, the composition data will include additional C&D generation such as materials generated from home remodeling projects that is collected with regular residential curbside collections and

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larger construction projects where C&D materials are not separately managed or tracked as C&D by the hauler and are instead reported as part of the commercial waste stream, particularly if they are taken to a municipal waste transfer station rather than a C&D recycling facility after collection).

Generally, C&D recycling capacity has been developed by the private sector in Illinois and recycling activity in this sector has been market-driven. There is one privately owned processing facility in Kane County, and three other facilities within accessible distance to Kane County. See Figure 3.5.

Amendments have been made to state legislation to encourage the recycling of C&D materials. Section 22.38 of the Illinois Environmental Protection Act provides that general construction/demolition debris processing facilities located in Cook County and adjacent counties are exempt from having to obtain local siting approval, provided they meet certain location requirements and recover at least 75% of the incoming construction/demolition materials. Some counties have adopted ordinances requiring the recycling and reuse of C&D materials; for example, Cook County requires a minimum of 70% of C&D waste from all building projects to be diverted from landfill disposal, while the City of Chicago requires a minimum of 50% of C&D waste from larger residential and commercial construction projects to be diverted<sup>13</sup>.

Kane County currently promotes a voluntary approach to C&D recycling. Policy is not being pursued at this time due to a number of limiting factors including lack of facilities, potential of cost impact to builders, and low current landfill tipping rates.

In order to increase diversion of C&D materials, Kane County provides an online guide to contractors and homeowners that provides a list of facilities at which they can recycle, repurpose, or dispose of construction materials. This information is also provided to contractors and homeowners through the building permit application process managed by Kane County Development Department.

Based on Kane County hauler tonnage reports (see Section 3.2.1), in 2015 through 2017 C&D constituted approximately 4% of the total Kane County traditional material waste stream collected by haulers; the 2015 Plan Update showed consistent data, with C&D constituting 3% of the waste stream. Greater C&D tonnages were reported in 2018 and 2019, with C&D averaging 23% of the waste stream in 2018 and 16% of the waste stream in 2019. Of the reported tonnage of material over the period 2015 through 2019, 68% is recycled and 32% is landfilled.

Deconstruction is becoming more prevalent as a method of recovering building materials such as cabinets, doors, fixtures, fittings, and lumber from buildings that are being torn down or remodeled. Rather than demolishing the buildings as in the past and landfilling the materials, the buildings are carefully deconstructed and materials are recovered and reused. Further there are reuse industries that collect and resell used building materials from deconstructions, and other bulk items that are diverse and reusable.

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<sup>13</sup> Delta Institute, Cook County Solid Waste Management Plan 2018 Update, undated.

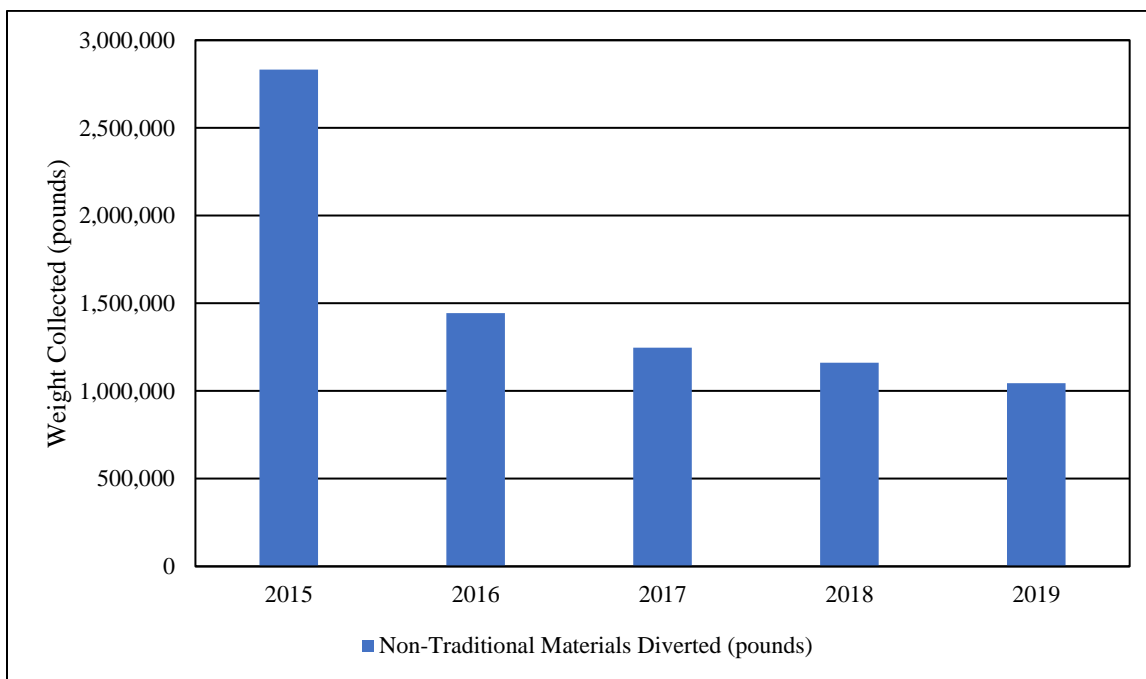
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## 4.4 Non-Traditional Materials Management

Non-traditional material includes materials managed through County drop-off facilities, home collection programs, one-day events managed by the County, and other programs operated by private sector collectors. These materials include batteries, bikes, books, confidential documents, electronics, fluorescent tubes and bulbs, household hazardous wastes (HHW), paint, Styrofoam, textiles and shoes, and other hard-to-recycle materials. Quantities of non-traditional materials collected and managed through County programs for the period 2015-2019 are shown in Figure 4.2. The decline in diversion over this period is largely attributed to the reduction in electronics recycling weights over this period due to the fact that older, heavier CRT-containing devices are now dwindling and that individual electronic items and personal computers now collected have been replaced with lighter and smaller devices.

The following sections break down materials commonly diverted from landfills, many of them through County recycling programs, which collected a total of 7,730,000 pounds (3,865 tons) of non-traditional material over the last 5 years.

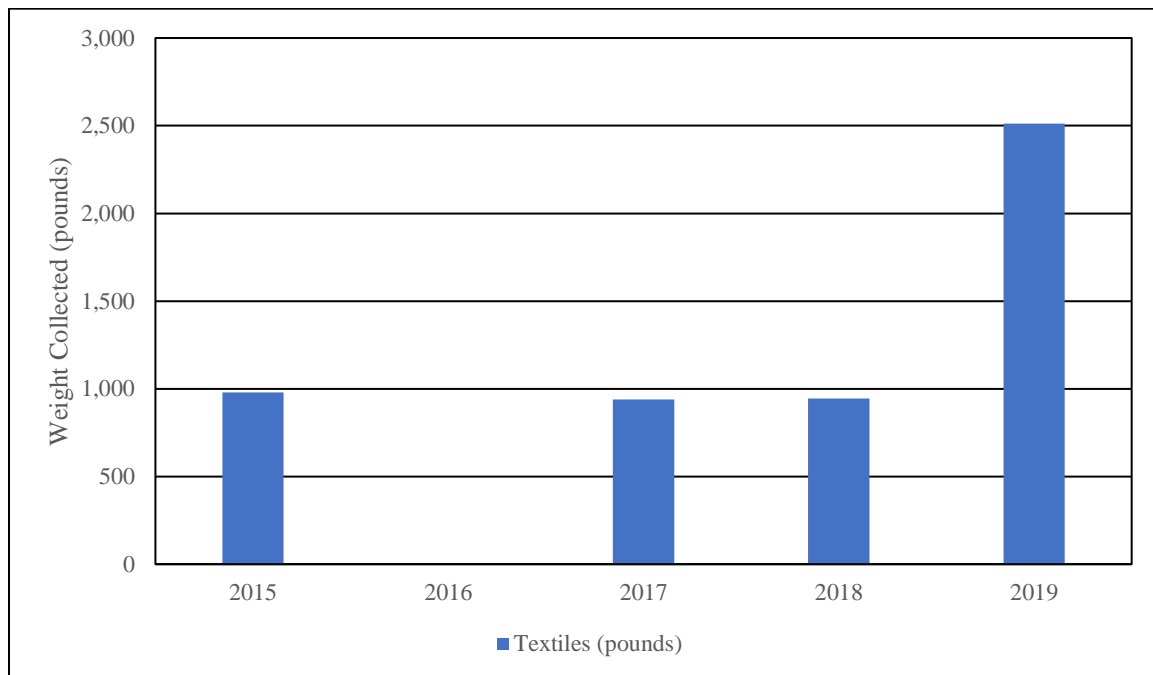
**Figure 4.2 - Non-Traditional Materials Diversion (2015-2019)**



#### 4.4.1 Textiles

Used clothing, shoes, and other textiles represent an estimated 5% of landfilled solid waste<sup>14</sup>. These items are highly reusable and recyclable. However, current efforts result in the diversion of only about 15% of the available material<sup>15</sup>. Kane County has collected textiles at the annual recycling extravaganza four out of the last five years, through which effort over 5,000 pounds of clothing, shoes, and textiles were diverted from landfill into reuse and recycling. Annual textile collection weights are shown in Figure 4.3.

**Figure 4.3 - Textiles Recycling (2015-2019)**



Starting in 2020, Kane County began a pilot program to take textiles at the two permanent electronics recycling drop-off locations and at recycling events. Kane County's electronics recycler, eWorks partners with RewearAble to collect clothing and textiles for reuse and recycling. Both organizations are non-profits that provide sustainable employment for adults with disabilities. From December 2019 through July 2020 (with a two-month closure due to COVID-19 in April and May), over 40,000 pounds (20 tons) of textiles were collected through the events and at the drop-offs to be sent for reuse and recycling, a significant increase in material collected compared to prior collections, using an efficient and cost-free partnership program.

***Deliverable:*** Incorporate additional textile drop-off locations around the County if 2020 pilot appears successful; apply lessons learned during 2020 pilot and from other area counties.

<sup>14</sup> CDM Smith, 2015 Illinois Commodity/Waste Generation and Characterization Study Update, March 30, 2015.

<sup>15</sup> RRS, Textile Recovery in the U.S.: A Roadmap to Circularity, June 2020.

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#### 4.4.2 Electronic Equipment

Kane County began conducting collection events for end-of-life electronics in 2000. Between 2000 and 2009, 65 collection events served a total of 30,716 residents and collected about 3.6 million pounds of material.

In 2009, the Illinois General Assembly passed *Electronic Products Recycling and Reuse Act* (Public Act 95-0959). This law banned 17 categories of electronic equipment from Illinois landfills, beginning in 2010, and required product manufacturers to establish programs to recycle a certain poundage of electronics per year. During the following five years from 2010 to 2014 Kane County conducted 60 events, which, in addition to permanent drop-off locations, served 69,000 residents and collected over 6.5 million pounds of electronics.

In 2016, many programs statewide including Kane County's had to be suspended as the weight of the influx of CRT televisions overshot manufacturers' weight-based obligations and left many local governments covering more and more of the costs for programs. In response, Illinois replaced the requirements of the Electronic Products Recycling and Reuse Act with a new program that focused the manufacturer obligations on convenience standard (convenient recycling locations based on population density). The *Consumer Electronics Recycling Act* (415 ILCS 151/) became effective in January 2018, and allowed collectors to charge residents for recycling TVs and computer monitors, with all other accepted items remaining free of charge. Under the law, Kane County is required to have 4 permanent locations or an equivalent combination of permanent locations and events, with four events equaling one drop-off location. As of the writing of this plan, Kane County has two drop-off locations and schedules 8 events per year in order to meet the requirements of the law.

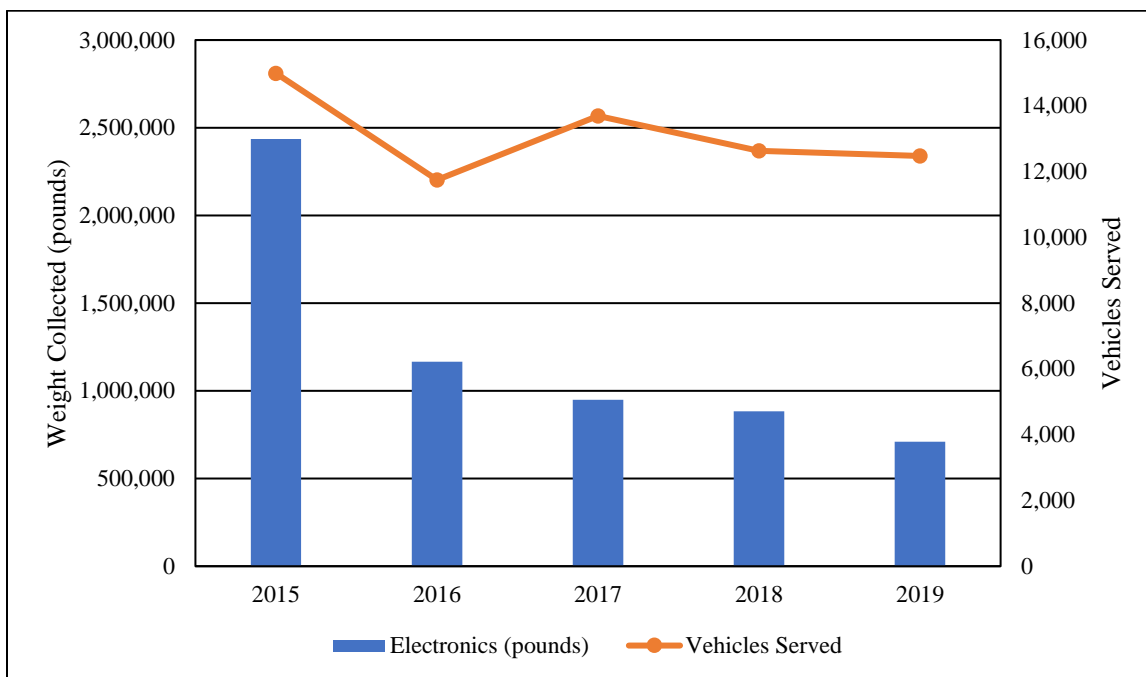


**Electronics Collection Event**

During the last five years from 2015 to 2019 Kane County conducted 40 events, which, in addition to permanent drop-off locations, served 75,654 residents and collected over 6.23 million pounds of electronics.



**Figure 4.4 - Electronics Recycling (2015-2019)**



Kane County will continue to provide county residents with comprehensive, convenient, and cost-effective electronics recycling opportunities through proactive program management under the mandates of the Illinois Consumer Electronics Recycling Act (CERA).

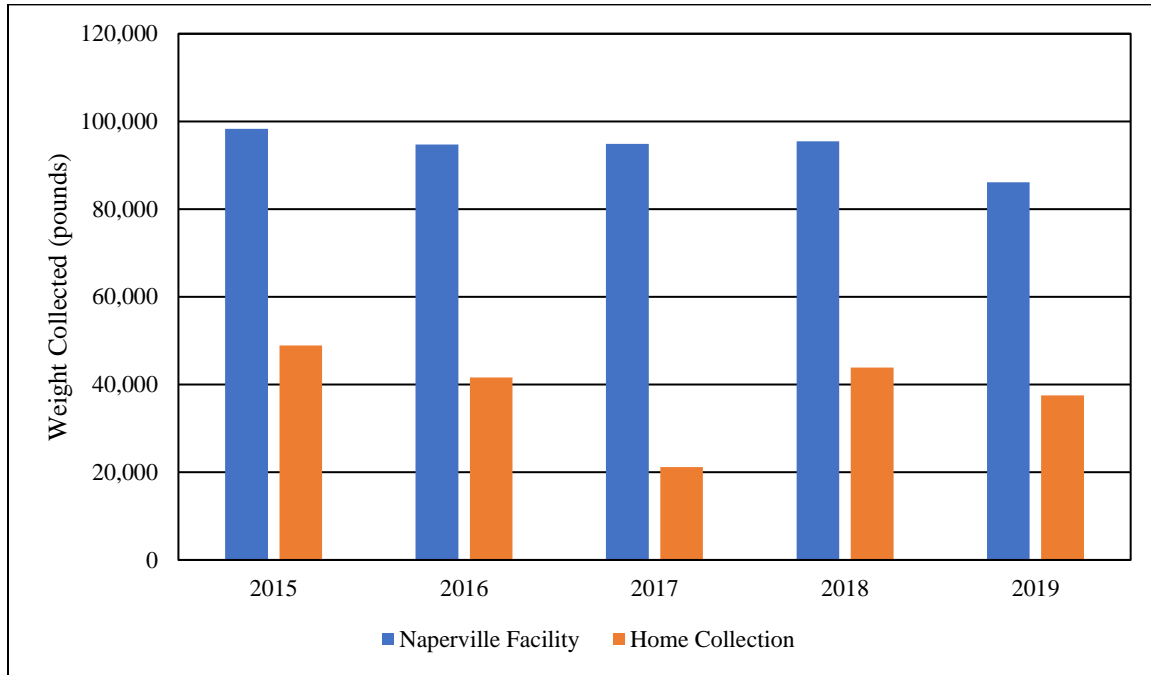
***Deliverable:*** Explore the feasibility of opening an additional permanent recycling location for electronics in Kane County, to create increased convenience to residents in the southern portion of the County.

#### 4.4.3 Household Hazardous Waste

The County's Solid Waste Plan and subsequent updates have maintained a consistent goal to reduce the volume and toxicity of waste destined for disposal. Since 1992, the County has used several different approaches for the management of Household Hazardous Waste (HHW) material, including utilizing the permanent facility in Naperville, a home collection service for certain eligible areas, and one-day collection events. These residential programs have been funded by various combinations of state, county, and municipal funding.

The programs described below are for residential waste only. Businesses and organizations must contact a certified hazardous waste company that can serve small quantity business generated hazardous materials. Annual HHW collection weights by service type are shown in Figure 4.5 (note that data is not available for home collection quantities in the City of Elgin in 2017; annual collection in Elgin has been approximately 12,000 tons per year in other years).

**Figure 4.5 - HHW Collection Through Permanent Facility & Home Collection Service (2015-2019)**



**Permanent Facility:** There are currently four permanent collection sites in Illinois sponsored by the IEPA for household chemical waste, located in Chicago, Gurnee, Naperville, and Rockford. The Naperville facility (156 Fort Hill Dr., Naperville, IL 60540) is assumed to be the primary site utilized by Kane County residents and is represented in the graph above.

In 1998, Kane County entered into an agreement with the City of Naperville to join with other partners to provide financial support for the operation of the City of Naperville HHW facility. Other partners include the IEPA (they pay for recycling/disposal), City of Aurora, City of Naperville, DuPage County, and Will County (funds contributed by partners pay for the operational costs).

Since the beginning of this partnership, over 47,000 Kane County residents have used this facility. In the last five years, from 2015 to 2019, 14,233 residents have used the facility to responsibly dispose of 469,524 pounds of hazardous waste, which averages 33 pounds per user.

Kane County's involvement in this program is expected to continue over the next five years of this update period.

**Home Collection:** Since 2000, the County has provided a home collection program, provided by a qualified contractor to serve residents in towns, villages and unincorporated portions of the six most northern townships of Burlington, Dundee, Elgin, Plato, Rutland, and Hampshire. In 2012, the Mill Creek Special Service Area was added to the County program. In 2017 the City of Geneva and in 2018 the City of Batavia were added as well, by paying into the county program. To date



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the City of Elgin maintains a separate program for Elgin residents, having incorporated the program through Waste Management's At-Your-Door service into their current residential collection contract.

From 1999 to 2019, a total of 11,059 households have used this service, including the numbers from the City of Elgin. In the last five years, from 2015 to 2019, 2,203 residents have used these services to responsibly dispose of 193,071 pounds of hazardous waste, which averages 88 pounds per user. This is a significant increase in pounds per user over the Naperville drop-off, which averaged 33 pounds per user over the same period. Resident feedback cards received on the home collection program show an overwhelmingly positive response, and also indicate that much of the material has been held for over 10 years.

Funding for this program is secured in partnership with the Villages of South Elgin, Carpentersville, and West Dundee; the Cities of Geneva and Batavia, as well as the Mill Creek Special Service Area through HHW fees written into the curbside hauler contracts. This program is expected to continue over the next five years of this update period.

**One-Day Collection Events:** Kane County has historically worked with the IEPA to offer one-day collection events for residents. From 1992 through 2008, 25 of these events were conducted at various locations in Kane County, were attended by 30,528 total residents, and diverted an estimated 3,000,000 pounds of material from landfills. These events ended in 2008, as the funding from the IEPA was no longer available. In 2019, Kane County was once again awarded an IEPA-funded event and partnered with the Village of East Dundee. The event, held on June 1, 2019, served 393 cars representing 475 households and collected 23,647 pounds of household hazardous waste for recycling or proper disposal. Another event scheduled for May 2020 was postponed due to COVID-19 and will be rescheduled in 2021.

Kane County will continue to promote healthy alternatives to commonly used products classified as household hazardous waste, through education and outreach including resources for alternatives to chemical cleaners.

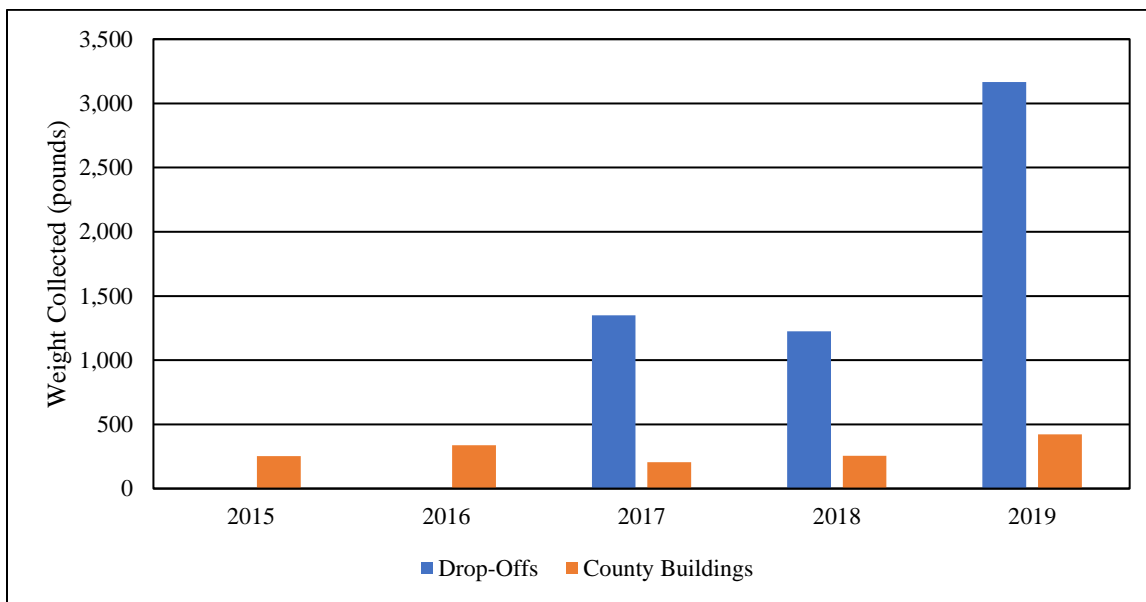
#### **4.4.4 Non-traditional (Hard-to-Recycle) Materials**

**Batteries:** Battery recycling diverts heavy metals including cadmium, lead, and mercury from the waste stream. The County does not have a public collection program for alkaline batteries, but municipalities, townships, and retail outlets have programs that serve residents. It is not expected that the County will fund public battery recycling programs beyond the inclusion of battery recycling in the annual extravaganza event, but will continue to promote existing options to residents. The Kane County Recycling Coordinator will continue to track national product stewardship programs for this material.

Kane County government operates a county office recycling program for alkaline batteries used by County staff in the course of business. Since it began in 2012 through the end of 2019, this program has diverted 2,122 pounds of batteries from the landfill.

Annual weights of batteries diverted from 2015 through 2019 through both the annual extravaganza collection events (with tracking beginning in 2017) and County government office programs are shown in Figure 4.6.

**Figure 4.6 - Battery Recycling (2015-2019)**



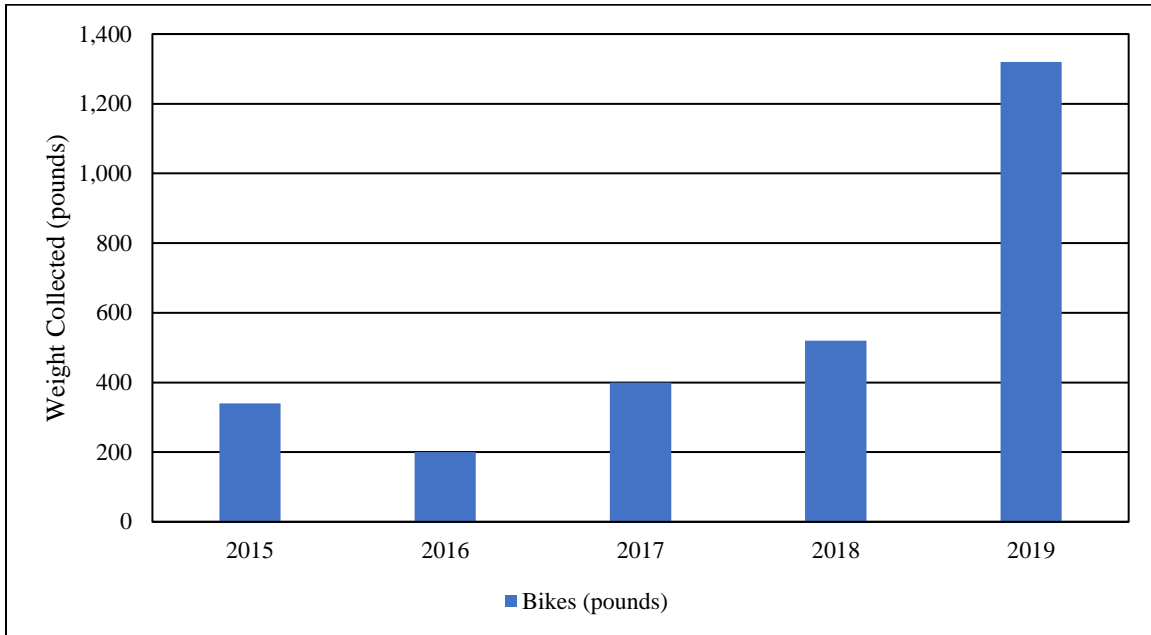
Public Act 86-723 banned the landfilling of lead-acid batteries effective September 1, 1990. Lead-acid batteries (such as those found in cars) are recyclable at some hardware stores and automotive service/parts stores. The County does not track quantities of lead-acid batteries recycled.

**Bikes:** Bikes, bike parts, helmets, baskets and other accessories are all reusable and/or recyclable. The County has worked with Working Bikes out of Chicago since 2012 to collect these items at the annual recycling extravaganzas. Annual bike recycling quantities are shown in Figure 4.7.



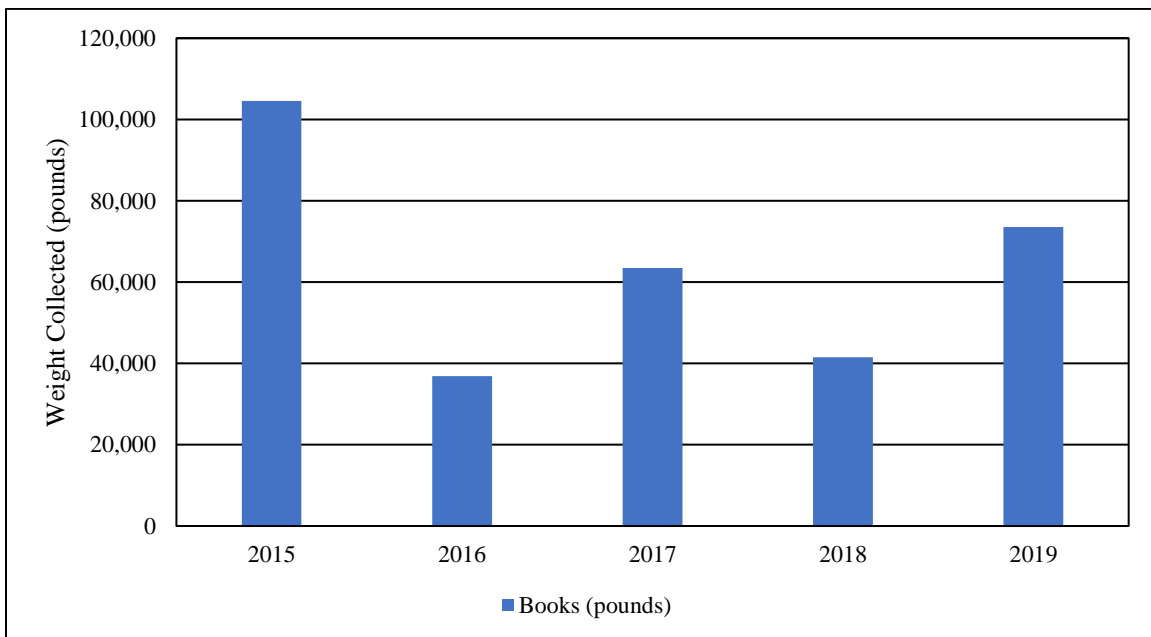
**Bikes and Books Collected for Recycling**

**Figure 4.7 - Bike Recycling (2015-2019)**



**Books:** While books are recyclable in curbside programs, there is potential for reuse when collected during the monthly electronics recycling events. From 2004 through 2019, approximately 1,192,000 pounds of books have been recovered for reuse and/or recycling. About 10% of the books collected are reused and the rest are recycled. Quantities of books collected for reuse and recycling through the County's events for 2015-2019 are shown in Figure 4.8.

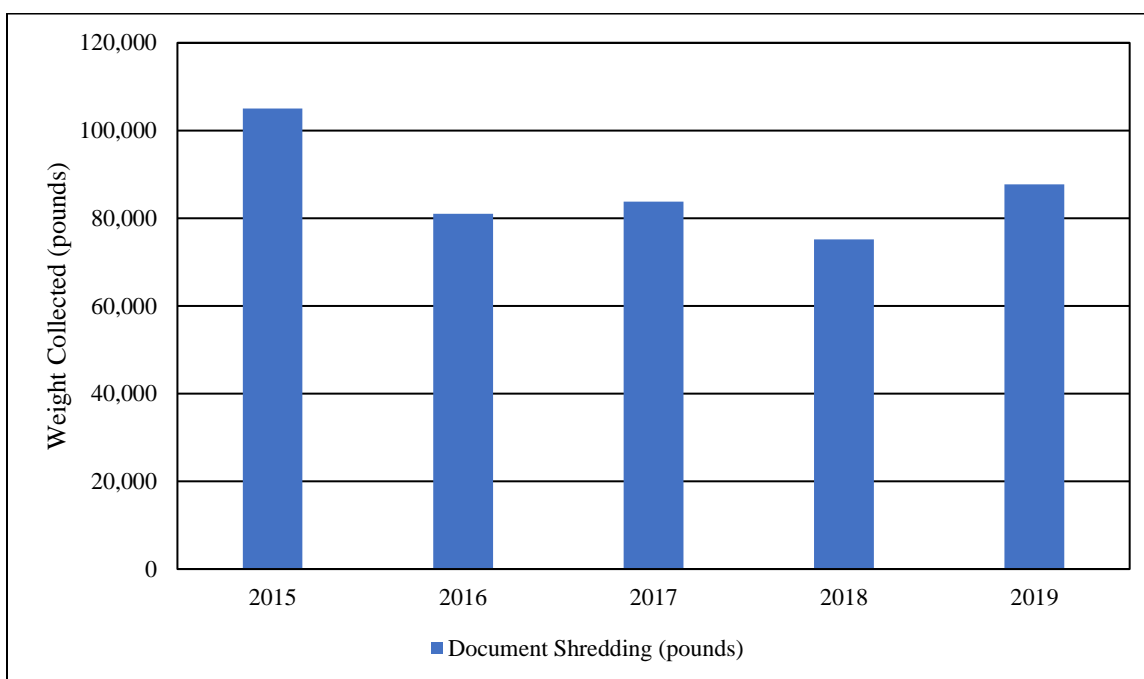
**Figure 4.8 - Book Recycling (2015-2019)**



**Carpet and Padding:** Efforts have been made to stimulate carpet and padding recycling in Illinois, including formation of a Carpet Recycling Working Group in 2013 that the Kane County Recycling Coordinator co-chaired. However, carpet recycling has been challenging to establish, largely due to industry struggles with separation and management of large quantities of polyethylene terephthalate (PET) carpet made from plastic bottles. This carpet has no recyclable value and because it is hard to distinguish from other carpet types, feasibility of collections is low.

**Confidential Documents:** Kane County began offering free on-site confidential document shredding service at the annual extravaganzas in 2012 and then quarterly in 2014. From 2012 through 2019, a total of 577,110 pounds of paper have been collected for recycling. This program insures that the paper is being recycled rather than burned or thrown away. Annual quantities of documents collected for shredding from 2015 to 2019 are shown in Figure 4.9.

**Figure 4.9 - Document Shredding (2015-2019)**



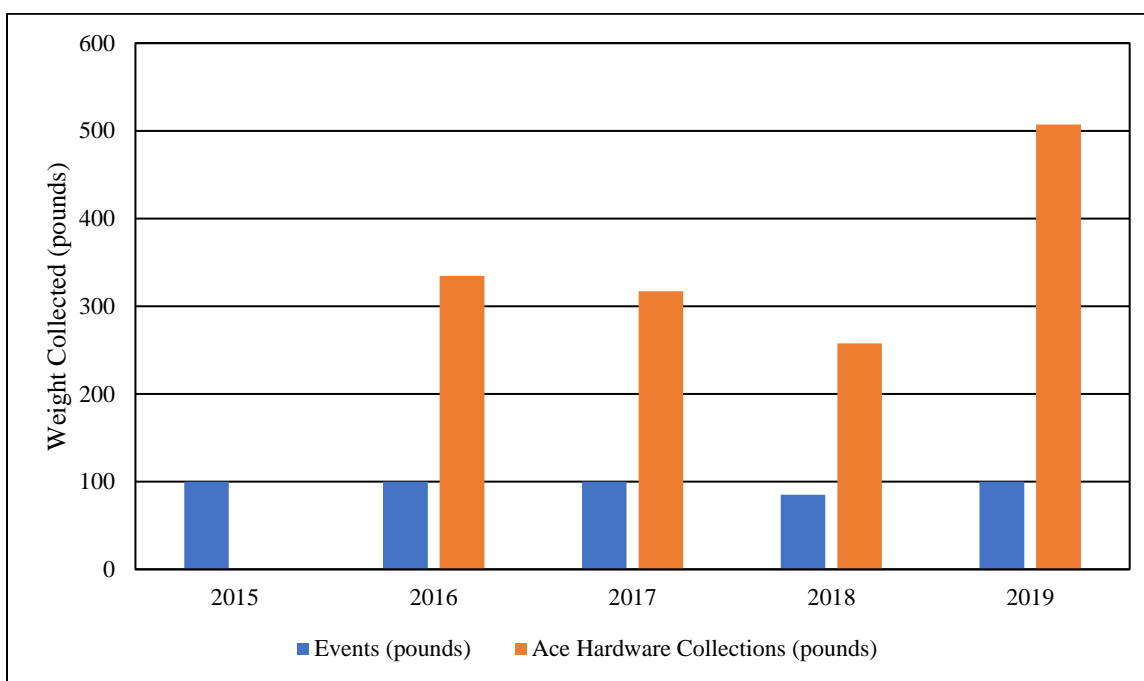
**Fluorescent Bulbs:** Fluorescent tube lamps are universal waste and banned from landfill disposal from commercial sources, but are exempt from the landfill ban when generated by residents. However the USEPA recommends that they be responsibly disposed of through a HHW program. Fluorescent tubes are acceptable in the HHW programs listed above, yet other programs in the retail community are sparse and residents frequently request more convenient options.

In response to this need, starting in 2013 Kane County began offering fluorescent tube recycling at the annual recycling extravaganza events, and in 2016 initiated a partnership with the Geneva Ace Hardware store to serve as a drop-off location for compact fluorescent light bulbs (CFLs), LEDs, and fluorescent tubes. Annual quantities of bulbs collected through the County's events and at drop-offs at Ace Hardware from 2015 to 2019 are shown in Figure 4.10.



**Fluorescent Bulb Recycling**

**Figure 4.10 - Fluorescent Bulb Recycling (2015-2019)**

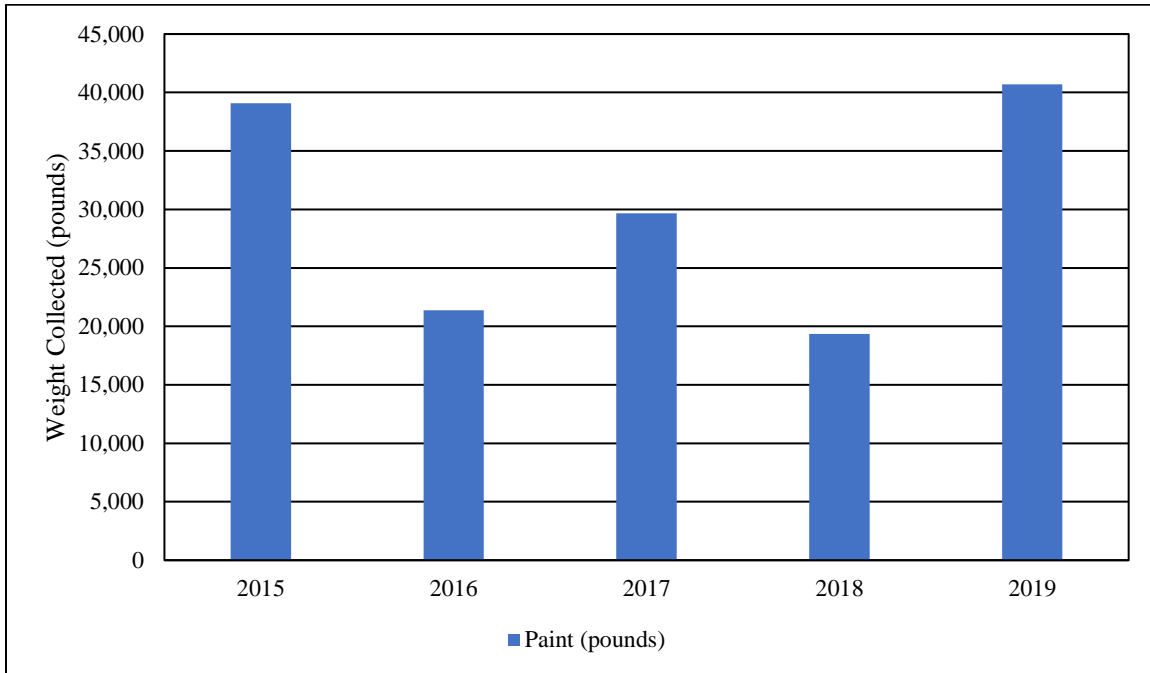


**Latex Paint:** Latex Paint can be dried out and placed with municipal solid waste (lids off, 1-2 cans per week in trash). Resource-conscious residents may drop liquid latex paint for a per-can recycling fee at a number of participating hardware stores. Kane County began offering latex paint recycling at events, starting in 2012. Residents are required to pay a per-can fee to recycle this material at Kane County events. Latex paint quantities collected by the County over the period 2015-2019 is shown in Figure 4.11.



**Latex Paint Collection**

**Figure 4.11 - Latex Paint Recycling (2015-2019)**



**Motor Oil:** Public Act 87-1213 prohibits, beginning July 1, 1996, persons from knowingly mixing liquid used oil with any municipal waste that is intended for collection and disposal at a landfill. From 1994 - 2008, the County conducted 65 one-day collection events for used motor oil (in an effort to divert this material from the more-expensive one-day HHW collection events) which were attended by 13,348 people and collected 183,700 gallons of used oil. During that time, there were no private businesses in the County that would accept used oil from the public at no charge.

Numerous private businesses now accept used motor oil from the public at no charge. With the development of municipal and private sector options, the County has eliminated its used oil collection events, and does not track amounts recycled through private businesses.

**Pharmaceuticals:** There are seventeen locations listed on the County recycling webpage for safe disposal of expired or unwanted pharmaceuticals, five of which are open only to host city residents. These programs are not managed by the County but are promoted on the webpage and in other outreach materials. Quantities of pharmaceuticals collected through the various drop-off locations are not tracked by the County.

**Tires:** Public Act 86-452 (1989) banned whole used or waste tires from landfills effective July 1, 1994. In the past, the County conducted occasional free tire drop-off days as a convenience to residents, but does not intend to do so in the future because retailers are required to take back used tires when new tires are purchased. In addition, many tire retailers will accept extra used tires for a fee. Weights of tires collected through these programs are not tracked by the County.



**Other Materials:** In addition to the programs and services identified above, Kane County maintains an online A-Z list of a range of other materials that are readily reusable or recyclable at various drop-offs in the area, such as scrap metal, scrap wood, furniture, appliances, packing materials and plastic film, and dozens of other materials. That list is also printed in the annual Kane County Recycles Green Guide.

The Kane County Recycling Coordinator will continue to research current opportunities for the recycling of non-traditional materials and develop programs where feasible to increase the quantity of recycling and maximize landfill diversion to the extent practically and economically feasible, by improving current and developing new County-managed recycling programs.

**Centers for Hard-to-Recycle Materials:** One option that may be of interest to the County, and that may provide an additional permanent drop-off opportunity for many of the County's programs, may be to develop a County-owned Recycling & Renewable Energy Center. Such facilities have been developed in other communities in the U.S. to consolidate a range of diversion options and promote reuse and recycling to residents. Examples include the Center for Hard-to-Recycle Materials (CHaRM) operated by a non-profit entity in Boulder, Colorado and the El Cerrito Recycling and Environmental Resource Center in El Cerrito, California (see Figure 4.12 for photos of these facilities). Each facility is situated on approximately 2.5 acres of property and provides segregated collection of a number of non-traditional recyclable materials. They may also incorporate renewable energy options such as through installation of solar panels on the material collection awnings or other areas of the site.

**Figure 4.12 - Example Facilities for Non-Traditional Material Diversion**



**EcoCycle CHaRM Facility (Boulder, CO)**



**El Cerrito Recycling & Environmental Resource Center (El Cerrito, CA)**

***Deliverable:*** Explore the feasibility of developing a Kane County Recycling & Renewable Energy Center to serve as a one-stop-drop for residents to deliver predominantly non-traditional materials for reuse and recycling.

## 4.5 Disposal

All municipal waste collected within Kane County that is not recycled or composted is disposed of in landfills. No operating landfills remain in Kane County. The last operating landfill in the County was Settler's Hill landfill in Geneva, owned by the County and operated under contract by Waste Management of Illinois, Inc. Settler's Hill Landfill was closed in December 2006.

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The original Kane County Solid Waste Management Plan opposed the siting and/or construction of any new landfill capacity within Kane County. This plan update maintains the past recommendation that the County continue the policy established by resolution 95-247 which states, in part, that: “The Kane County Board will not pursue the acquisition of property, the development of, or the siting approval for a new landfill facility in Kane County.”

Solid waste collected in Kane County is delivered to transfer stations in and around Kane County and then taken to numerous landfills, including facilities in Ogle, Lee, Winnebago, Livingston, Will, and DeKalb Counties. See Section 3.3 on Disposal Capacity for details on the landfills utilized by haulers operating in Kane County for ultimate disposal of landfill trash.

While recycling and other diversion efforts significantly reduce the volume of solid waste requiring disposal, continued population growth will likely create an increased need for disposal of the non-recyclable portion of the waste stream. Since all solid waste in Kane County is collected, recycled, transferred, and landfilled by private companies, the greatest need is to ensure sufficient competition for both waste transfer and landfilling in the private sector. Competition serves to control price increases, and also maintains a high quality of service in both the residential and commercial sectors.

Kane County will continue to rely on the private sector to develop additional transfer capacity as needed to serve the waste needs of Kane County and maintain competition for transfer and disposal services. Proposed facilities must meet the requirements of Section 3.4.1 and 3.4.2 of this Update, as applicable.

## **4.6 Alternative Technologies**

Alternative disposal methods that reduce the volume of waste disposed in landfills include those that convert waste-to-energy (WTE) or waste-to-fuel (WTF). These alternative technologies typically convert waste materials into useable heat, electricity, or fuel through a variety of processes, including combustion, gasification, pyrolysis, anaerobic digestion, and landfill gas recovery.

If alternative disposal technologies are considered for future waste management and are classified as pollution control facilities under state regulations with a requirement to secure local siting approval, such facilities must meet the applicable requirements in Section 3.4.1 and 3.4.2 of this Plan Update to be consistent with the Kane County Solid Waste Management Plan.

Kane County will continue to monitor the status of emerging, alternative technologies for management of municipal waste. To the extent that alternative disposal technologies are demonstrated to be viable in the future, these technologies do not displace recycling and reuse, and should be considered as one part of a comprehensive solution.



## SECTION 5

### PUBLIC EDUCATION AND INFORMATION

#### 5.1 Public Education Portfolio

Public education is critical to the continued success of recycling programs, especially in areas such as Kane County which are experiencing high rates of population growth and turnover in existing homes. Important educational messages include reminders of what materials can (and cannot) be recycled in the household recycling bin and at various drop-off locations, the benefits of recycling, and results of current recycling programs.

The County publishes an annual Green Guide to local recycling programs (30,000 paper copies are distributed Countywide as well as published online). Program information is posted on the Kane County website (<http://www.countyofkane.org/Recycling>), and press releases are issued for individual collection events. The online Kane County Connects blog and newsletter (over 20,000 readership) and other local media outlets provide a forum for outreach through social media at a level unprecedented in the past. In addition, program information is distributed via email to all local governments, libraries, schools, churches, and waste haulers, which has resulted in an established referral network through which the County receives thousands of telephone and e-mail inquiries each year.

The Kane County Recycling Coordinator participates in public green events, and delivers public presentations to large groups in person or online, as time allows.

Kane County will continue to maintain a high-quality public educational outreach portfolio distributed via the Kane County Recycles Green Guide, the Kane County Recycles website, the online Kane County Connects newsletter, and press releases as applicable.

### Kane County Recycles Green Guide 2020

Kane County Recycles: [recycle@countyofkane.org](mailto:recycle@countyofkane.org) • 630-208-3841 • [www.countyofkane.org/recycling](http://www.countyofkane.org/recycling)

#### Awareness rising around waste & resources!

Good news! Awareness is increasing around our waste problem, particularly around plastic waste and pollution. The movement to stop using plastic straws has been a poster child for the greater work being done to minimize waste and to get better at recycling. And you are a part of it all. See page 11 for how you can do more.

You help when you reconsider purchases, rethink waste, maximize reuse and repair, compost food scraps, and recycle right! Recycling goes far beyond what you can place in your curbside cart, so be sure to look at the A-Z list of recycling and reuse opportunities on pages 12-15.

The Recycling Guidelines poster on pages 8 & 9 is a statewide guide that makes it easier to understand what can and cannot be recycled in curbside programs. Please follow the guidelines closely and spread the word. It is really important to keep the NO items out of the recycling bin, and find other options for recycling or disposal. Remember when recycling at the curb: if in doubt leave it out, rather than "wish-cycling."

Food scrap composting is taking off in Kane County! The communities of Batavia, Geneva, Mill Creek, Elburn, and Kaneville can now add food scraps to their curbside landscape waste collection programs, and there are several other towns exploring the option. You can also compost in your backyard with a Soil Saver bin, see page 6.

Our thoughtful and effective response to the waste problem is to change our habits and improve how we do things. Every time we eliminate or minimize waste, it takes weight off of the avalanche of consumer-product-based trash headed for landfills, saves resources and money, and really does have a significant impact. Thank you for your awareness and your efforts!

Sincerely, Jennifer Jarland, Kane County Recycling Coordinator

#### Municipal Waste & Recycling Haulers

Hauler	Contact	City or Township Service Area
Advanced Disposal Services	630-587-8282	Batavia, Mill Creek S.S.A., Prestbury
DC Recycling Systems (a Lakeshore Recycling Systems company)	815-759-7274	Sugar Grove, Montgomery, Virgil & Plato Townships
Flood Brothers Disposal Co.	630-261-0578	East Dundee, Pingree Grove
Groot Industries	877-775-1200	Algonquin, Aurora, Big Rock, Burlington, Carpenterville, Sleepy Hollow, South Elgin, West Dundee, Elgin Township
Lakeshore Recycling Systems	630-581-8650	Elburn, Geneva, St. Charles
MDC Environmental Services	815-568-7274	Gilberts, Huntley
Waste Management	800-964-8988	Elgin, Hampshire, Kaneville, Maple Park, North Aurora, Sun City/Del Webb, Campion Township

This list may be subject to change, check website for updates. Unincorporated County residents may contract with any of the licensed haulers operating in Kane County. See: <http://www.countyofkane.org/Recycling/Documents/Licensed-Haulers.pdf>

#### 2020 Event Dates:

- Apr 11 - Electronics & Books only
- Apr 25 - Document Shredding only
- May 9 - Electronics, Books, Paint
- May 16 - Household Hazardous Waste Special Event at alternate location
- Jun 13 - Electronics, Books, Document Shredding
- Jul 11 - Annual Extravaganza (NO Shredding), Electronics, Books, Paint, Bikes, Foam, Batteries, Bulbs, Textiles, Metal
- Aug 8 - Electronics, Books, Document Shredding
- Sept 12 - Electronics, Books, Document Shredding
- Oct 10 - Electronics, Books, Paint
- Nov 14 - Electronics & Books only

For more information on these events please see page 2.

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This Guide is printed on 100% post-consumer recycled content paper.

#### Kane County's 2020 Green Guide



**Public Presentation to Build Awareness**

## **5.2 Alignment of Messaging**

In the wake of the Chinese National Sword legislation outlined in Section 4.3.3 on Contamination, an Illinois state task force was formed in 2018 to address recycling contamination. A central mission of the task force was to streamline and standardize public educational information.

As a next step in aligning the messaging on recycling, Kane County will seek to ensure that accurate recycling program information is available and easily accessible through multiple channels by conducting one-on-one outreach to request that all municipal, township, and community partners provide a link on their website to the Kane County Recycles home page by 2021, rather than inserting text on programs on their pages.

## **5.3 School Programs**

Schools are an important setting for establishing recycling habits at an early age. From 1994 to 2005, the County conducted a comprehensive program designed to increase the level of recycling in schools, and to inform students and staff about the importance of recycling at school, at home, and in the workplace. This program was discontinued due to budgetary limitations.

Due to barriers including limited County resources and staff time, school recycling education programs are not currently able to be offered through the County. The importance of such programs is recognized to be a key element in successful public education, and Kane County will bear this in mind with aim to develop a train-the-trainer program in the future.

***Deliverable:*** Create series of online educational videos targeted at various sectors, on topics such as, but not limited to: repair & share solutions; recycling guidelines and activities for students; recycling guidelines and tips for residents and for businesses; and how to compost at home and at work.

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## SECTION 6

### ECONOMICS AND FUNDING

#### 6.1 Conditions Effecting Waste Quantities

During periods of economic growth, waste quantities increase, often at a faster rate than population growth. Similarly, during periods of economic downturn and recession, waste quantities will often decrease due to reduced consumption and slowed construction. In Illinois, for example, there was a consistent upward trend in waste disposal from 1996 up until about 2006 or 2007, after which waste quantities declined due to the housing crisis, Great Recession and prolonged economic downturn. Waste quantities leveled off beginning in 2010 and have been growing again in recent years. Early information during 2020, however, indicates that waste quantities may show another decline due to stay-at-home mandates and significant restriction in commercial activity through the first half of the year in response to the COVID-19 global pandemic.

Though the economy is a significant driver for waste quantities, a number of other factors also come into play, including:

- Increased diversion from landfill disposal due to changes in collection practices (for example, as seen with implementation of cart-based recycling collection), recycling of select materials as niche recycling operations develop (such as asphalt shingles), and implementation of disposal bans (for example, landscape waste and electronic wastes);
- Changes in the composition of products to utilize fewer materials or lighter materials (referred to as light-weighting);
- Reductions in packaging for consumer goods;
- Increased reuse of packaging and shipping materials;
- Changes in availability of markets for recovered materials; and
- Cost-effectiveness of diversion options.

The County will continue to track waste quantities and market conditions to ensure proper planning for waste management needs in the County over the current and future planning periods.

#### 6.2 Waste and Recycling-based Economic Activity

Waste management, pre-cycling, reuse, and recycling provide opportunities for economic development because local management of waste materials keeps jobs local by processing the materials nearby. Furthermore recycling is a significant source of jobs in Illinois. A 2010 study of

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recycling economic impacts in Illinois<sup>16</sup> estimated that the combined direct, indirect and induced impacts of Illinois's recycling, recycling reliant, and reuse industries contribute:

- A total of 111,500 jobs<sup>17</sup> where 40,000 are direct, 34,000 are indirect and 37,500 are induced;
- Payroll of \$3.6 billion;
- \$30.3 billion in additional gross receipts; and
- Over \$1 billion in state and local taxes.

A 2016 study of economic impacts of food scrap diversion in Illinois<sup>18</sup> similarly estimated the impact of increases in food scrap diversion to recover from 35% to 85% of generated food scrap on jobs, wages, and economic output, estimating increased food scrap diversion to contribute:

- A total of 1,600 to 4,165 jobs;
- Payroll of \$82 million to \$207 million;
- \$114 million to \$290 million in total value added;
- \$152 million to \$380 million in economic output; and
- \$3 million to \$14 million in state and local taxes.

In addition, the study stated “For every 12,250 tons of organics processed, 1 new business will be created and will sustain 18.3 employees annually with an average salary of \$50k.”

Kane County will explore how it may increase waste related jobs by attracting additional recycling and waste management activity into the County by sensibly expanding waste management infrastructure to promote the larger goal of reducing waste disposed in landfills. Promotion of a Circular Economy, as described in Section 4.1, is central to this objective, and the County will engage in regional and broader discussions around this topic.

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<sup>16</sup> 2010 Recycling Economic Information Study Update for Illinois, Final Report, November 2010 commissioned by Illinois Department of Commerce & Economic Opportunity prepared by DSM Environmental under contract to Illinois Recycling Association.

<sup>17</sup> Direct jobs are jobs at recycling facilities. Indirect jobs are jobs at facilities which produce materials, equipment, and services used in recycling-related work. Induced jobs are jobs created when employees in direct and indirect jobs circulate their earnings in the economy to purchase consumer goods and services.

<sup>18</sup> Skumatz Economic Research Associates, Inc., Economic Impact and Market Study Report: Elements of the Case for Advancing Food Scrap Composting Industry and the Link to Building Illinois' Local Food Economy, December 2016.

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## 6.3 Funding Sources

County recycling programs are funded almost entirely by Grand Victoria Riverboat Grant funds, a source that is decreasing each year and that is always in question by nature of being grant-based. Wages for the Recycling Coordinator are funded through the solid waste fees collected when Settlers Hill Landfill was in operation, a finite and dwindling account. These sources will not support the cost of recycling programs into the future.

Kane County should examine and where determined appropriate, pursue all reasonably available sources of interim and long-term funding to implement and sustain programs recommended in the Solid Waste Management and Resource Recovery Plan, including revenue from resource recovery; facility host fees; grant funds from regional, state, and federal sources; program user fees; and local government partner contributions on either a countywide or voluntary community-by-community basis.

Consideration of these funding options should include the sustainable nature of the funding and the potential costs of programs to be supported over a several year period to ensure programs can be delivered consistently and with minimal financial risk to the County.

***Deliverable:*** Establish additional funding sources to support delivery of County-provided recycling program services, including through the following methods:

- 1. Pursue grant opportunities as available and appropriate to support implementation of Plan recommendations (e.g., Closed Loop Fund, USEPA grants, The Recycling Partnership, etc.).*
- 2. Explore feasibility of a local governmental partner contribution to county recycling programs that serve their residents. This funding source could be established using a mechanism similar to the household hazardous waste clause in municipal waste hauler contracts which is applied to collection of household hazardous waste and other materials undesirable in curbside programs.*

## 6.4 Partnerships and Intergovernmental Assistance

Kane County, primarily through work of its Recycling Coordinator, regularly participates in regional and state-level planning and programming around solid waste management. This occurs through participation in organizations such as the Illinois Counties Solid Waste Management Association (ILCSWMA), Illinois Recycling Association (IRA), Illinois Chapter of the Solid Waste Association of North America (IL-SWANA), Illinois Food Scrap Coalition (IFSC), and Illinois Product Stewardship Council (IPSC). In addition, working groups such as the Illinois Recycling Contamination Task Force and the Illinois Materials Management Advisory Committee have formed, and the County is an active participant in these initiatives.

Through active engagement in regional and state solid waste and recycling efforts, the County maintains a broad understanding of current issues and opportunities in solid waste management. The County is also positioned to be able to serve as a resource to its cities and townships to further drive diversion and responsible management of waste and resources.

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The County will continue to work in cooperation with other regional planning agencies and area counties where appropriate to share and source research and resources concerning solid waste and recycling programs and services.

The County will also seek to form partnerships with its largest cities to implement solid waste plan initiatives and collaboratively provide services.

To further enhance solid waste management in the County, the following services are recommended for implementation or continued consideration for inclusion in future solid waste plan updates, should appropriate funding and staffing become available:

- Provide a tool kit of resources for municipalities to utilize based on their program interests (i.e. model ordinances, model commercial franchise contracts, residential contract components).
- Evaluate joint contracting for smaller communities, township franchise agreements, and unincorporated county franchise hauling.
- Encourage all communities to secure proposed pricing for addition of organics ride-along programs and year-round organics collection in their next contract bids to assist in expanding curbside food waste collection to more County municipalities.
- Track recycling performance by community and offer technical assistance to lower-performing communities.
- Provide collection contract support to County municipalities, including model RFP development, cost analysis and benchmarking, and tracking of service levels and contract rates Countywide.
- Provide technical support to municipalities on cart tagging, if not part of their hauler contract.
- Prepare a draft C&D recycling ordinance and encourage the County and municipalities to adopt it to require the implementation of a recycling program at new construction and/or demolition sites within their communities and increase C&D diversion.



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## SECTION 7 RECOMMENDATIONS

This section identifies the recommendations for Kane County's Solid Waste Management and Resource Recovery Plan 2020 Update. Recommendations are based on the data reviewed and presented in this Update<sup>19</sup>, an analysis of industry trends, and needs revealed through public feedback. Deliverable items noted below indicate recommendations that shall be completed in this planning period. Other ongoing or generalized recommendations offer direction, focus, and priority for the management and development of programs.

### 7.1 Waste Minimization (Section 4.2)

- A. **Deliverable:** Engage in discussions with other area counties and statewide organizations regarding development of the Circular Economy regionally, and bring together stakeholders from the business community, local governments, and policy makers to dialog on the Circular Economy.
- B. Promote waste minimization through education and outreach to encourage reduced consumption and creative reuse of materials, including providing online resources targeted at various sectors.

### 7.2 Residential Recycling (Section 4.3.3)

- A. **Deliverable:** Conduct one-on-one outreach to municipalities with below average residential diversion rates based on review of annual hauler reports to identify how the County can assist in promoting increased waste reduction and lower contamination rates through education and outreach efforts.
- B. Improve the quality of the recycling stream through County-wide education and outreach. Continue working with the Illinois Recycling Contamination Task Force (and similar groups that may form over the planning period) to streamline and standardize public educational information.

### 7.3 Commercial Recycling (Section 4.3.4)

- A. **Deliverable:** Determine and implement a method of confirming commercial and multi-family dwelling tonnage data provided in the annual tonnage reports by haulers is comprehensive, potentially by cross referencing with tonnage estimates from area transfer stations obtained through future annual surveys of these facilities.

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<sup>19</sup> If this Update is being viewed in an electronic format, Recommendations subheadings can be clicked on to readily view the applicable Update subsection in Sections 4 through 6 from which the recommendation is derived.

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- B. Expand availability of recycling in multi-family residential buildings and commercial establishments, and increase the volume of recycling, by working with haulers to provide information on recycling requirements and guidelines to business and property owners to support compliance with the Kane County Recycling and Hauler Licensing Ordinance (95-157) and the Illinois Solid Waste Hauling and Recycling Program Act (415 ILCS 12/1 et. seq.).

#### 7.4 Organics (Section 4.3.5)

- A. Continue to support seasonal organic waste diversion programs, like Christmas tree mulching (January), Pumpkin composting (November). These programs may be managed by municipality, township or county services.
- B. Continue to actively support and promote the inclusion of curbside food scrap collection in hauler contracts within the county.
- C. **Deliverable:** Research the feasibility of incorporating food scrap collection at existing Kane County Drop-off locations.

#### 7.5 Construction and Demolition (Section 4.3.6)

- A. Increase diversion of construction and deconstruction-related materials by continuing to distribute updated C&D recycling information that supports the need for reuse and recycling and provides a list of facilities that process such materials. This information is currently provided to contractors and home owners through the building permit application process managed by Kane County Development Department, and this distribution method is recommended to continue.

#### 7.6 Textiles (Section 4.4.1)

- A. **Deliverable:** Incorporate additional textile drop-off locations around the County if 2020 pilot appears successful; apply lessons learned during 2020 pilot and from other area counties.

#### 7.7 Electronics (Section 4.4.2)

- A. Provide Kane County residents with comprehensive, convenient, and cost-effective electronics recycling opportunities through proactive program management under the mandates of the Illinois Consumer Electronics Recycling Act (CERA).
- B. **Deliverable:** Explore the feasibility of opening an additional permanent recycling location for electronics in Kane County, to create increased convenience to residents in the southern portion of the County.



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## 7.8 Household Hazardous Waste (Section 4.4.3)

- A. Promote healthy alternatives to commonly used products classified as household hazardous waste, through education and outreach including resources for alternatives to chemical cleaners.

## 7.9 Non-Traditional (Hard-to-Recycle) Materials (Section 4.4.4)

- A. Research current opportunities for the recycling of non-traditional materials and develop programs where feasible to increase the quantity of recycling and maximize landfill diversion to the extent practically and economically feasible, by improving current and developing new county-managed recycling programs.
- B. **Deliverable:** Explore the feasibility of developing a Kane County Recycling & Renewable Energy Center to serve as a one-stop-drop for residents to deliver predominantly non-traditional materials for reuse and recycling.

## 7.10 Disposal (Section 4.5)

- A. Continue to rely on the private sector to develop additional transfer capacity as needed to serve the waste needs of Kane County and maintain competition for transfer and disposal services.
- B. Continue the policy established by Resolution 95-247 to oppose the siting and/or construction of new landfill capacity in Kane County.
- C. Require an applicant for any pollution control facility proposed to manage municipal waste located anywhere in Kane County to negotiate and enter into a host agreement consistent with the requirements of Section 3.4.2 of this Plan Update.

## 7.11 Alternative Technologies (Section 4.6)

- A. Continue to monitor the status of emerging waste-to-fuel technologies. The County should not seek to invest in or direct development of such a facility, instead relying on private developers to determine whether a project in the County would be viable and pursue its development in accordance with local requirements and state statutes and regulations.

## 7.12 Public Information and Education (Section 5)

- A. Continue to maintain and improve a high-quality public educational outreach portfolio distributed via website, online newsletter, and press release.
- B. Ensure that accurate Kane County-sponsored program information is available and easily accessible through multiple channels by conducting one-on-one outreach to request that all municipal, township, and community partners provide a link on their website to the Kane County Recycles home page by 2021, rather than hard copy text on programs.

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- C. **Deliverable:** Create series of online educational videos targeted at various sectors, on topics such as: repair & share solutions; recycling guidelines and activities for students; recycling guidelines and tips for residents and for businesses; and how to compost at home and at work.

### 7.13 Economics and Funding (Section 6.3)

- A. **Deliverable:** Establish additional funding sources to support delivery of recycling program services, including through the following methods:
1. Pursue grant opportunities as available and appropriate to support implementation of Plan recommendations (e.g., Closed Loop Fund, USEPA grants, The Recycling Partnership, etc.).
  2. Explore feasibility of a local governmental partner contribution to county recycling programs that serve their residents. This funding source would be established using a mechanism similar to the household hazardous waste clause in municipal waste hauler contracts which is applied to collection of household hazardous waste and other materials undesirable in curbside programs.

### 7.14 Partnerships and Intergovernmental Assistance (Section 6.4)

- A. Continue to work in cooperation with other regional planning agencies and area counties where appropriate to share research and resources concerning solid waste and recycling programs and services.
- B. Form partnerships with Kane County's largest cities to implement solid waste plan initiatives and collaboratively provide services.

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## **Appendix A**

### **Regulatory Component: Local Ordinances and State Legislation**

#### **Kane County Recycling and Hauler Licensing Ordinance (95-157) Synopsis**

##### [Kane County Code, Chapter 11, Article 4.](#)

To address recycling opportunities for residents and businesses, the Kane County Board adopted a mandatory recycling ordinance in 1994, under authority of the Illinois Code (Public Act 86-962; 55 ILCS 5/5-8002 to 5-8007). In 2019 the ordinance was amended to increase the hauler licensing fee in accordance with the Illinois Code. Fees had previously not been raised since the ordinance was originally adopted.

**Haulers:** The ordinance requires that haulers operating in the county be licensed by the county and report annual weight data on all materials collected. It further requires haulers to provide recycling service to all clients served with trash service, including municipal residential, commercial, institutional, industrial and multi-family residential accounts.

**Commercial Businesses:** The ordinance requires any commercial businesses, wherein commerce is conducted (both profit and not for profit, including, but not limited to, stores, markets, offices, restaurants, shopping centers, theaters, schools, churches, government offices, and manufacturing facilities) in Kane County to separate and recycle materials, and to arrange collection services for those materials by a licensed hauler as per above list.

**Multi-family Dwellings:** The ordinance requires that the managing body or owner of all apartments, condos, and like-dwellings provide recycling service along with trash service to the residents of that dwelling, and further requires the residents to comply by separating the recyclables from the trash and placing them in the correct receptacle.

#### **Summary of Illinois' Solid Waste Legislation**

Illinois does not have an omnibus law that deals with solid waste management issues; many separate pieces of legislation focus on waste reduction and recycling.

The three major laws that impact and guide the programs and functions of the Division of Recycling and Waste Reduction, Illinois Energy Office, Illinois Department of Commerce and Economic Opportunity's (DCEO) are the Illinois Solid Waste Management Act (415 ILCS 20/1 et seq.), the Illinois Solid Waste Planning and Recycling Act (415 ILCS 15/1 et seq.), the Illinois Environmental Protection Act (415 ILCS 5/1 et seq.), and the Solid Waste Hauling and Recycling Program Act (415 ILCS 12/1 et. seq.).

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There are several other material-specific laws relating to solid waste management and resource recovery for:

- Yard Waste (PA 85-1430),
- Food Scrap (PA 98-0146),
- Compost/biogas (PA 98-0317),
- Compost/Food Scrap - Farm Compost (PA 98-0484),
- Compost/Food Scrap - Siting (PA 96-0418),
- Composting - Urban Farm & Community Garden (98-0239),
- Construction and Demolition Debris (PA 96-1416),
- Electronic Products (415 ILCS 150/1 et seq.),
- Lead-Acid Batteries/Car Batteries (PA 86-0723),
- Mercury Thermostats (415 ILCS 98/1 et seq.),
- Waste Tires (PA86-0452),
- White Goods (PA 87-0858),
- Used Oil (PA 87-1213), and
- Task Force on the Advancement of Materials Recycling Act (PA 97-0853).

For more detail on above laws, see the source list at: [Illinois.gov](http://Illinois.gov) - [Summary of Illinois' Solid Waste Legislation](#).

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## **Appendix B**

### **Required Content of Applications for Local Siting Approval of Pollution Control Facilities to be Located within Kane County**

Note: \* denotes that a graphic presentation or figure is required within the application text.

- I. The facility is necessary to accommodate the waste needs of the area it is intended to serve
  - a. Introduction
  - b. Economic benefits of facility
  - c. Service area identification \*
  - d. Demographics of service area
  - e. Waste generation rates of service area
  - f. Existing waste disposal network for service area
  - g. Future waste disposal network for service area
  - h. Conclusion, signed by professional expert
  
- II. The facility is so designed, located and proposed to be operated that the public health, safety and welfare will be protected
  - a. Introduction
  - b. Site legal and general description\*
    - i. Survey plat with existing structures\*
    - ii. Identification of property owners
    - iii. Existing topography of site (minimum two foot contours)\*
    - iv. Title search of property
  - c. Existing conditions of site and adjacent properties\*
    - i. Historical property uses
  - d. Location Standards
    - i. Residential properties\*
    - ii. Floodplain limits\*
    - iii. Airport review
    - iv. Endangered species review
    - v. List covenants recorded with the property deed
    - vi. Identification of wetlands on property
  - e. Site Design
    - i. Entrance\*
    - ii. Landscaping plan\*
    - iii. Access roads and interior traffic circulation areas\*
    - iv. Security measures to be implemented
    - v. Weigh station location and design\*
    - vi. Parking on site\*
    - vii. Vehicle stacking procedures\*

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- viii. Utilities on site\*
  - ix. Office structures
  - x. Proposed structure(s) and detailed floor plan(s)\*
  - xi. Water supply, water capacity, and facility's water requirements
  - xii. Stormwater management measures
    - 1. 100-year, 24-hour design
    - 2. Basin design and release rate
    - 3. Sediment control measures
    - 4. Erosion control measures (on-site and off-site)
    - 5. Drainage flow off-site\*
    - 6. Site location on USGS 7.5-minute quadrangle map
  - f. Operations
    - i. Hours of operation
    - ii. Quantity of wastes accepted
    - iii. Anticipated quantities of waste received by waste type
    - iv. Identification of acceptable waste types
    - v. Waste screening procedures
    - vi. Waste handling operational plan\*
    - vii. Overnight storage of waste on site
    - viii. Waste volume throughput analysis
    - ix. Identification of disposal sites (as applicable)
    - x. Identification of proposed railroad activities
    - xi. Recycling activities on site
    - xii. Equipment requirements
    - xiii. Facility cleaning procedures
    - xiv. Load checking program
    - xv. Traffic pattern (on-site)\*
    - xvi. Facility for employees
    - xvii. Fueling procedures
    - xviii. Litter control
    - xix. Vector control procedures
    - xx. Indoor air quality
    - xxi. Outdoor air quality
    - xxii. Odor control procedures
    - xxiii. Noise control procedures
    - xxiv. Training personnel
    - xxv. Fire control protection
    - xxvi. Lockout/tagout procedures
    - xxvii. Insurance coverage
    - xxviii. Record keeping procedures
      - 1. Daily tonnage receipts by waste type
      - 2. In-county daily tonnage receipts
      - 3. All regulatory correspondence

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- 4. All environmental and regulatory inspections
      - 5. Wastewater generation and disposal records
      - 6. Load inspection and load discrepancy records
      - 7. Accident records
    - xxix. Wastewater generation and handling
      - 1. Wastewater generation calculations
      - 2. Wastewater storage procedures
      - 3. Wastewater disposal/treatment procedures
    - xxx. Operational contingency plans
      - 1. Equipment failure
      - 2. Interruption of utility service
      - 3. Inclement weather
    - xxxi. Proposed life of facility
    - xxxii. Final closure
      - 1. Waste removal
      - 2. Equipment removal
      - 3. Equipment cleaning
      - 4. Cost estimate
      - 5. Schedule
    - g. Operator information and experience
      - i. Articles of incorporation
      - ii. Pollution control facility experience within Illinois for facilities of the type being proposed
      - iii. Summary of pollution control facility environmental violations in Illinois
      - iv. Experience with similar facilities outside Illinois
    - h. Conclusion, signed by professional expert
  - III. The facility is located so as to minimize incompatibility with the character of the surrounding area and to minimize the effect on the value of the surrounding property
    - a. Introduction
    - b. Land use/zoning/planning study
      - i. Site zoning
      - ii. Adjacent and surrounding zoning\*
      - iii. Adjacent and surrounding land uses\*
      - iv. Landscape plan\*
      - v. Setbacks\*
      - vi. Compatibility with the Kane County Land Resource Management Plan
    - c. Real estate impact study
      - i. Proposed improvements
      - ii. Chicago metropolitan area data and Kane County area data
      - iii. Pollution control facility site area study
      - iv. Property value impact study
    - d. Conclusion, signed by professional expert



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- IV. The facility is located outside the boundary of the 100-year floodplain or the site is flood-proofed
    - a. Introduction
    - b. Location of 100-year floodplain\*
    - c. Conclusion, signed by professional expert
  
  - V. The plan of operations for the facility is designed to minimize the danger to the surrounding area from fire, spills, or other operational accidents
    - a. Introduction
    - b. Fire prevention measures
    - c. Spill prevention measures
    - d. Accident prevention/risk management
    - e. Operational contingency plan
    - f. Conclusion, signed by professional expert
  
  - VI. The traffic patterns to or from the facility are so designed as to minimize the impact on existing traffic flows
    - a. Introduction
    - b. Methodology used
      - i. Traffic characteristics of the facility
      - ii. Traffic assignment and analysis
      - iii. Roadway and site access requirements
    - c. Site Accessibility
      - i. Site location\*
      - ii. Area roadways\*
      - iii. Proposed roadway improvements\*
      - iv. Existing traffic volumes
    - d. Develop traffic characteristics
      - i. Directional distribution
      - ii. Estimated site traffic generation
      - iii. Future growth
    - e. Accident history of key intersections to and from facility
    - f. Traffic impact analysis
      - i. Site access
    - g. Identification of anticipated primary routing to disposal facility (if applicable)
    - h. Gap study
    - i. Conclusion, signed by professional expert
  
  - VII. If the facility will be treating, storing or disposing of hazardous waste, an emergency response plan exists for the facility which includes notification, containment and evacuation procedures to be used in case of an accidental release
    - a. Introduction

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- b. Emergency response plan
  - c. Conclusion, signed by professional expert
- VIII. If the facility is to be located in a county where the county board has adopted a solid waste management plan consistent with the planning requirements of the Local Solid Waste Disposal Act or the Solid Waste Planning and Recycling Act, the facility is consistent with that plan
- a. Introduction
  - b. Benefits of facility
  - c. Consistency with the solid waste plan
  - d. Conclusion, signed by professional expert
- IX. If the facility will be located within a regulated recharge area, any applicable requirements specified by the Board for such areas have been met
- a. Introduction
  - b. Location of regulated recharge
  - c. Conclusion, signed by professional expert.

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## Appendix C

### Sample Host Community Benefit Agreement

07/2020

#### HOST COMMUNITY BENEFITS AGREEMENT

This HOST COMMUNITY BENEFITS AGREEMENT ("Agreement") is made as of the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ between KANE COUNTY, ILLINOIS ("County") and \_\_\_\_\_, a \_\_\_\_\_ ("Company").

#### R E C I T A L S

WHEREAS, the Company desires to construct and operate a solid waste transfer facility (the "Transfer Facility") in unincorporated Kane County, Illinois on all or some of the property that is legally described on Exhibit A (the "Subject Property"), attached hereto and made a part hereof; and,

WHEREAS, the Company desires to provide certain environmental protection and compensation to the County with respect to the Transfer Facility, if the Transfer Facility obtains all required approvals and commences operation; and,

WHEREAS, the County is desirous of obtaining such environmental protections and compensation, provided that the County shall have no obligation to grant site location approval of the Transfer Facility unless and until, through the local site location review process, it finds that the Transfer Facility meets or exceeds all criteria required by 415 ILCS 5/39.2. Regardless of whether site location approval is granted, this Agreement survives the local site location review process; and

WHEREAS, the parties acknowledge and agree that the siting of the facility is subject to the approval of the KANE COUNTY BOARD, pursuant to Section 39.2 of the Environmental Protection Act, which provides in pertinent part, that:

\* \* \*

No permit for the development or construction of a new regional pollution control facility may be granted by the [Illinois Environmental Protection] Agency unless the applicant submits proof to the agency that the location of such facility has been approved by the County Board of the County if in an unincorporated area, or the governing body of the municipality when in an incorporated area, in which the facility is to be located in accordance with Section 39.2 of this Act.

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Except for...new pollution control facilities governed by Section 39.2...the granting of a permit under this Act shall not relieve the applicant from meeting and securing all necessary zoning approvals from the unit of government having zoning jurisdiction over the proposed facility....

\* \* \*

WHEREAS, the parties acknowledge and agree that the Act, at Section 39.2(a), sets forth nine (9) criteria for the grant of such local siting approval with respect to each new pollution control facility, including waste transfer stations such as the facility, as follows:

- (1) The facility is necessary to accommodate the waste needs of the area it is intended to serve;
- (2) The facility is so designed, located and proposed to be operated that the public health safety will be protected;
- (3) The facility is located so as to minimize incompatibility of the character of the surrounding area and to minimize the effect on the value of the surrounding property;
- (4) The facility is located outside the boundary of the 100 year flood plain or the site is flood proofed;
- (5) The plan of operations for the facility is designed to minimize the danger to the surrounding area from fires, spills or other operational standards;
- (6) The traffic patterns to or from the facility are so designed as to minimize the impact on existing traffic flow;
- (7) If the facility will be treating, storing or disposing of hazardous waste, an Emergency Response Plan exists for the facility which includes notification, containment, and evacuation procedures to be used in case of an accidental release;
- (8) If the facility is to be located in the County where the County Board has adopted a Solid Waste Management Plan consistent with the planning requirements of the Local Solid Waste Disposal Act or the Solid Waste Planning and Recycling Act, the facility is consistent with that plan; and,
- (9) If the facility will be located within a regulated re-charge area, any applicable requirements specified by the Board for such areas have been met.

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In addition, Section 39.2(a) provides that, in making its determination as to whether the proposed Transfer Facility meets the second (2) and fifth (5) criteria outlined above, the County Board may also consider as evidence the previous operating experience and past record of convictions or admissions of violations of the Company and any subsidiary or parent operation of the Company in the field of waste management.

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth, the County and the Company agree as follows:

## **ARTICLE 1**

### **INCORPORATION OF RECITALS, DEFINITIONS AND TERM OF AGREEMENT**

#### **Section 1.1 Incorporation of Recitals**

The County and the Company agree that the foregoing recitals are material to this Agreement, and are hereby incorporated and made part of this Agreement as if they were fully set forth herein.

#### **Section 1.2 Definitions**

**“Act”** as used in these definitions and this Agreement, shall mean the Illinois Environmental Protection Act (415 ILCS 5/1, et seq.).

**“Agreement”** means this Host Community Benefits Agreement.

**“Anniversary Date”** means the date that Solid Waste is first received at the Transfer Facility.

**“Construction or Demolition Debris”** means “clean construction or demolition debris” as defined by the Act, or “general construction or demolition debris,” as defined by the Act, or any other type of waste that is defined under state or federal law in this category or a similar category during the term of this agreement.

**“Unacceptable Waste”** means the following as defined by the Act (or as otherwise noted): (a) “hazardous waste” (as defined by the Act or by 35 IAC 721.03); (b) “industrial process waste”; (c) “pollution control waste”; (d) “sludge”; (e) “potentially infectious medical waste”; (f) “special waste”; (g) “polychlorinated biphenyls” (as defined in the Toxic Substances Control Act, 15 U.S.C. Sections 2601-2692, or regulations promulgated thereunder); (h) source, special or byproduct nuclear materials, radioactive waste, high-level or low-level radioactive waste, or transuranic waste (as defined in the Atomic Energy Act, 42 U.S.C. Sections 2014, et seq., or regulations promulgated thereunder); (i) “asbestos” (as defined in 40 CFR 763.83), or (j) any other type of waste that is defined under state or federal law in this category or a similar category during the term of this Agreement.

**“IAC”** as used in these definitions and this Agreement, shall mean the Illinois Administrative Code.

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**“IEPA”** means the Illinois Environmental Protection Agency.

**“IPCB”** means the Illinois Pollution Control Board.

**“Landscape Waste”** means “landscape waste” as defined by the Act, or any other type of waste that is defined under state or federal law in this category or a similar category during the term of this Agreement.

**“Municipal Waste”** means “municipal solid waste,” as defined by the Act , except that such waste does not include Construction or Demolition Debris, Recyclables, Unacceptable Waste, or Landscape Waste. Municipal Waste includes non-hazardous industrial waste, or any other type of waste that is defined under state or federal law in this category or a similar category during the term of this Agreement.

**“Recyclables”** means any material, which would otherwise be disposed of or discarded, which is separated from Municipal Waste at the source of generation, so as to render it usable in a process, or alone, such that it can be returned to the economic mainstream in the form of raw materials or products. Examples of recyclables are: newspaper, glass bottles, High Density Polyethylene containers, aluminum food and beverage containers, chipboard, and corrugated containers. Recyclables do not include any of the following, and do not include any materials removed or separated from, or containing the following: Unacceptable Wastes, Landscape Wastes, or Construction or Demolition Debris.

**“Solid Waste”** means Municipal Waste, Landscape Waste, Recyclables, and Construction or Demolition Debris, as those terms are defined in this Section, or any other type of waste that is defined under state or federal law in this category or a similar category during the term of this Agreement.

**“Subject Property”** means the site described and shown in Exhibit A.

**“Transfer Facility,”** means “transfer station” as defined by the Act, including the property on which the transfer station is located, which may include some or all of the property as described and shown in Exhibit A.

### **Section 1.3    Term**

This Agreement commences on the date executed and continues in effect to such time as the County, at its sole option, terminates this Agreement. The County will not exercise its termination option, unless: (a) the Transfer Facility has not received Solid Waste for more than six consecutive calendar months, or (b), the Company is in default of this Agreement as provided in Section 4.2. The terms of this Agreement that are specifically extended beyond termination (i.e., as provided in Sections 2.1, 2.3, 4.6, 4.7, 4.8, 4.9, and 5.2), survive this term provision. In addition, the Company agrees that this Agreement continues to be in full force and effect even if the Company annexes the Transfer Facility into the boundaries of a local government entity other than the County. The Company agrees that, should this Agreement be terminated, the Company will immediately remove all Solid Waste from the Transfer Facility and stop its operations and receipt

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and acceptance of Solid Waste, until such time as it successfully renegotiates a new host community benefit agreement with the County, if any. Such agreement may contain no less favorable terms (including, but not limited to fee provisions) as what would have been in this Agreement, should this Agreement have been active at the time of renegotiation. As part of any new host community benefit agreement between the Company and County, resulting from the termination of this Agreement and required closure of the Transfer Facility, the Company agrees that the County, at its discretion, may require that the Company: file and obtain County approval on a pollution control facility site location application (even if for the same Transfer Facility which is the subject of this Agreement), pursuant to Section 39.2 of the Act, any applicable County ordinances, and any other laws or regulations which are applicable at the time of re-filing; and, submit applications and obtain approval from the IEPA (or other government entity or agency reviewing permit applications at that time) for new development and operation permits for the Transfer Facility. The County is under no obligation to renew or extend the term of this Agreement.

## **ARTICLE 2**

### **ENVIRONMENTAL PROTECTIONS**

#### **Section 2.1 Compliance with Laws**

The Company shall comply, at all times in connection with the development and operation of the Transfer Facility, with all federal, state and local laws, ordinances, final and non-appealable conditions of this site location, should it be approved by the County, conditions and requirements of any permit that is issued for development or operation of the Transfer Facility, modified or amended, rules and regulations and ordinances of any Federal, state or local governmental agency or authority relating to the development, operation, monitoring remediation or closure of the Transfer Facility and this Agreement. In addition, should the Company obtain approval from the County, pursuant to Section 39.2 of the Illinois Environmental Protection Act, but contest one or more conditions, if any, placed on such approval on appeal, the Company agrees that it will not commence development or operation of the Transfer Facility, until the appeal on the conditions has been decided by Illinois Pollution Control Board (IPCB) or the highest applicable court of review in the Illinois court system, provided, however, that the Company will take any and all actions required to come into compliance with any condition(s) which are held to be unenforceable by the IPCB but are enforceable as a result of an appeal of the IPCB decision in the Illinois court system. With respect to the termination or closing of the Transfer Facility, the Company agrees to comply with any government ordinance, rule, law or directive as to post-closure requirements and pay the entire costs associated therewith. This Section 2.1 survives the termination of this Agreement.

#### **Section 2.2 Waste Acceptability**

The Company shall only allow Solid Waste to be accepted at, transported to, stored at, or otherwise present at the Transfer Facility. All Solid Waste, except when being transported to or from the Transfer Facility, must be kept inside (i.e., within a fully enclosed area of) the Transfer Facility. Under no circumstances shall Unacceptable Waste knowingly be accepted at, transported to, stored at, or otherwise present at, on, under, or in the Transfer Facility. Any violation of this



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prohibition of knowingly accepting Unacceptable Waste is a material breach of this Agreement and enforceable by injunction, or any other legal theory, to force the closure of the Transfer Facility, and the enforceability of this provision survives the expiration or termination of this Agreement.

### **Section 2.3    Defense and Indemnification**

The Company covenants and agrees to defend, indemnify and hold harmless the County, individual members of the County Board, and any and all employees, agents, officers or representatives of the County, from and against all claims, suits, actions, administrative enforcement proceedings, losses, damages of all kinds, costs, expenses, fines and penalties, attorneys' fees and any expense of litigation, of any nature whatsoever, relating in any way directly or indirectly to the Transfer Facility or any condition or occurrence thereat, any release or emission at, onto, into, above, under, through or from the Transfer Facility, the County's or the Company's execution, performance, or non-performance of this Agreement or of any conditions placed on siting, ( should the facility be approved or the operations of the Company conducted at the Transfer Facility), including, without limitation, claims of injury to any person or property or violation of or non-compliance with any law, ordinance, rule or regulation (including without limitation any environmental, health, anti-trust, civil rights, employment or trade law, or statutory or common law obligation or liability). Unless otherwise directed in writing by the County, the Company shall, at its own cost and expense defend any such suit, action or proceeding as contemplated herein and pay all fees, costs, damages and other expenses arising therefrom; and if any judgment, decree, fine or penalty of any kind shall be entered or levied against the County, any member of the County, or any representative officer, agent or employee of the County, in any such action or actions, the Company shall, at its own cost and expense, promptly satisfy and discharge the same. The County shall give prompt notice of the service of any suit upon it to the Company, and shall give reasonable notice of any claim, action, administrative proceeding, loss or other damages. The Company shall not be responsible for indemnification of any injury or damage resulting from the County's willful and wanton acts. The defense and indemnification obligations of the Company hereunder shall survive the expiration or termination of this Agreement. The County and Company specifically agree that this Section should lie construed as a global defense and indemnity provision, ( except as respects indemnification of willful and wanton acts of the County), and that it requires the Company to defend and indemnify the County even in circumstances which include allegations of the sole acts or omissions of the County, regardless of whether such allegations are groundless, false or fraudulent; however, should the agreement expressed in the prior sentence of this Section be determined by a court to be invalid, then it is severable from the remainder of this Section, and the remainder of this Section should not be invalidated, and thereby still require the Company to defend and indemnify the County for acts or omissions of persons other than the County. In addition, nothing in this Agreement should be construed as a waiver of any common law or statutory immunity the County may have as to any alleged liability.

### **Section 2.4    Insurance**

- (a) At a minimum, the Company shall purchase and maintain at all times during the term of this Agreement, the following types and amounts of insurance:

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- (i) Commercial General Liability Insurance in an amount not less than \$3,000,000.00 per occurrence and a combined single limit of \$5,000,000.00 in aggregate, and excess liability insurance covering claims in excess of the underlying insurance described previously, with a \$5,000,000 limit; and,
  - (ii) Workers' Compensation Insurance, including employer's liability; and,
  - (iii) Environmental Impairment and Liability Insurance in an amount not less than \$3,000,000 per occurrence and a combined limit of \$5,000,000 in the aggregate.
- (b) The liability insurance described above shall be primary insurance and shall cover the County as an additional named insured by endorsement. The liability insurance coverage described above shall indemnify the Company and County against loss or liability of the Company or County or any of its employees, agents or sub-contractors for damage on account of death and bodily injury to persons, personal injury, and damage to property. Such insurance shall be provided on a comprehensive, broad form policy written by an underwriter carrier, reasonably satisfactory to the County.
- (c) The Company shall file with the County evidences of insurance certifying to the coverage required hereunder with the County named as an additional insured. All evidences of insurance shall be certified by an authorized officer, agent or qualified representative of the insurer and shall certify the names of the insured, the type and amount of coverage, the locations and operations to which the coverage applies and the expiration date of the policy, and shall state that the insurer shall give, by registered mail, notice to the County at least 60 days prior to the effective date of any cancellation, lapse, or material change in the policy.

### **ARTICLE 3**

#### **HOST FEE**

##### **Section 3.1 Purpose**

In consideration of the additional fees and costs to be incurred by the County, should the Kane County Board approve the Transfer Facility site location, including but not limited to road maintenance, and building, public health and environmental department inspections, the Company agrees to pay the County the following fees.

##### **Section 3.2 Quantity-Based Fees**

**Municipal Waste and Construction and Demolition Debris:** The Company shall pay to the County a base fee for each ton of Municipal Waste and Construction or Demolition Debris received at the Transfer Facility (whether received in the same or separate vehicles) from the Anniversary Date through the termination of this Agreement. This per-ton fee is specifically designated below. Beginning \_\_\_\_\_ after the Anniversary Date, the annual increase

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provision in Section 3.3 will be used to determine the per ton fee. To the extent any Municipal Waste or Construction or Demolition Debris received at the Transfer Facility contains Landscape Waste or Recyclables (i.e., non-source segregated\_ Landscape Waste or Recyclables), even if the Landscape Waste or Recyclables is source separated, but commingled in the same container on the collection vehicle as Municipal Waste or Construction or Demolition Debris (e.g., a “blue bag” program), then those materials shall be included in determining the tonnage and fees for purposes of this Section.

**Per Ton Fee**

Year 1

\$\_\_\_\_\_

**Landscape Waste and Recyclables:** The Company shall not be required to pay a fee for source segregated Landscape Waste or source segregated Recyclables entering the Transfer Facility, unless the amount of Landscape Waste or Recyclables being received at the Transfer Facility, either individually or combined, is 50% or more of the combined tonnage of Solid Waste. In such an event, the same fees to be paid with respect to Municipal Waste and Construction and Demolition Debris will be paid with respect to Recyclables and Landscape Waste, on a per ton basis for every ton over the 50% combined tonnage figure. The percentages described above will be calculated on a calendar year basis and the Company will pay the County any fees incurred pursuant to this Section no later than the thirtieth day of the calendar year following the year for which the percentages have been calculated. For example, if during a calendar year, the Company's combined tonnage of Solid Waste receipts is 1,000 tons and 52% (520 tons) of that is Landscape Waste or Recyclables combined, then on or before January 30th of the following calendar year, the Company will pay the County the per ton fee for 2% (20 tons) of the total tonnage.

**Section 3.3    Annual Increase**

Beginning as of \_\_\_\_\_ after the Anniversary Date, and annually thereafter, the per ton fees described in Section 3.2, above, will be adjusted from the per ton fee of the previous year by the percentage change during the previous year in the Revised Consumer Price Index for All Urban Consumers (CPI-U) published by the United States Department of Labor-Statistics, provided, however, that at no time shall there be a downward adjustment made to the subject fees. The unadjusted percent change from the month of the Anniversary Date of the calendar year, prior to the year of the increase, to the month of the Anniversary Date of the year of the increase shall be used to determine the percent change in this Section and apply retroactively to any time of the year of the increase that passed prior to the Department of Labor publishing that information in the year of the increase and the determination of the increase being made (e.g. for the adjustment being made in January 2021, the CPI-U, unadjusted 12-month percent ending January 2021 will be used. Since this publication is not typically published until mid-February 2021, and the determination of what increase to apply will not be made until after the publication of the CPI-U for January 2021, the increase under this Section will apply retroactively to the period of time that has passed prior to it being determined, which in this example would be January 1, 2021 to sometime at or after mid-February 2021). If the Consumer Price Index for All Urban Consumers shall cease to be published at the timeframe described above the County and Company shall

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designate a comparable timeframe or index, which shall then be used for determining the annual rate of adjustment.

### **Section 3.4    Other Increase**

In the event the Company has heretofore entered into or hereafter enters into any agreement to pay money, equivalent services or like-kind contributions, or other equivalent fees such as fees typically described as “Host Community Benefits” to another county, township or municipality in the Counties of Cook, DeKalb, DuPage, Kane, Kendall, Lake, McHenry, or Will for a solid waste transfer facility (i.e., a transfer facility accepting any one or more of the types of wastes contained in the definition of Solid Waste) and the payment terms of said Agreement are more favorable to such other unit of local government, (even if those terms are only more favorable on a current rather than future term) then the payment terms contained herein that are not as favorable as those in the other agreement shall be changed to the more favorable terms under such other agreement, however, the other terms in this Agreement which are equal to or more favorable to the other agreement shall remain in this Agreement. The Company has an obligation to report such terms to the County at a time any such agreement is entered into, and this Agreement shall automatically be amended as of the date of such other agreement, to incorporate the more favorable terms of the other Agreement. The term “more favorable terms” means a greater host fee(s), whether calculated per ton, per truck, annually or otherwise, taken as a whole or individually, whichever is greater.

### **Section 3.5    Identification and Weight of Receipts**

The Company shall weigh all receipts of Solid Waste on a certified scale, which is inspected at least once each calendar year. In addition, the Company shall identify, for the County, in writing, a listing of all receipts categorized by date, type of Solid Waste and other material in each receipt (if not Solid Waste), and weight of Solid Waste (or other material if not Solid Waste) in each receipt, so that the County can determine by its review of these records, the number of incoming vehicles, the type of vehicle, the load weight and total weight of each vehicle, and type of waste or material contained on each vehicle received at the Transfer Facility each calendar day. The County reserves the right to inspect the scale, at any time, without notification to the company.

Further, the Company shall keep records of outgoing Solid Waste, such that the County can determine by its review of these records, the number of outbound vehicles, the type of vehicle, the destination of each vehicle, and the type of waste contained on each vehicle leaving the Transfer Facility each calendar day. In addition, should the County request records concerning the load weight and total weight of each outbound vehicle, the Company agrees to provide that information, from weights measured at the Transfer Facility or at the destination of the vehicles leaving the Transfer Facility, from the time the Company receives the County's request on a moving forward basis for any time period(s) designated by the County.

### **Section 3.6    Auditing**

The Company shall keep complete and accurate books and records relating to the determination of the fees described in Article 3, in an auditable form, including those records described in Section 3.5. The Company shall permit the County and its designated representative's

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access to such books and records (paper and electronic version) for inspection and copying. In the event that such inspection reveals any underpayment(s) of the fees described in Article 3, the Company shall promptly pay the County the amount(s) of such underpayment(s), and reimburse the County for its costs and expenses of such inspection and, if necessary, collection, including any professional and technical fees (including attorneys' fees) in connection therewith. In the event that such inspection reveals any overpayment(s) of the subject fees, the Company may credit the amount of such overpayment(s) against the payments of the subject fees in subsequent quarters.

### **Section 3.7    Payment Schedule for Fees**

The fees described in this Article shall be paid on a monthly basis. The payment shall be made not later than thirty (30) days after the last day of the preceding month and shall be limited to the solid waste transferred during the month to which it applies, and any approved adjustments.

### **Section 3.8    Inspection & Enforcement & Other Fees and Costs**

The Company shall pay the County upon demand, all of the reasonable and necessary costs incurred by the County in the siting process and this Agreement, including, but not limited to, engineering and/or witness fees and expenses, attorneys' fees and expenses, the hearing officer's fees and expenses, the wages, hourly rate and benefits per hour for any County employees or officers, except County Board members, and such other reasonable fees and expenses, if any.

If the Company is charged by the County with having violated any County law, ordinance, rule or regulation, or any of the Company's permit or site location approval conditions, and if found by a Court or administrative body (such as IPCB), to be guilty of such violation, the Company shall reimburse the County for all fees and costs associated with the County's investigation and prosecution of such violation, including, but not limited to, attorneys' fees, litigation expenses and expert or opinion witness fees.

## **ARTICLE 4**

### **MISCELLANEOUS**

#### **Section 4.1    Assignment**

The Company shall not assign or attempt to sublet this Agreement or any interest in this Agreement or any right or privilege appurtenant to this Agreement without first obtaining the County's written consent. In addition, no transfer of any ownership or other interest in the Transfer Facility may be made without the prior written approval of the County. The right to seek assignment or approval may occur only if all payments to the County by the Company have been made and if the Company is not otherwise in default in connection with obligations under this Agreement. If the Company requests the County's consent to an assignment of this Agreement or approval of a transfer of ownership or other interest in the Transfer Facility, the Company shall submit written notice containing at least the following information, plus any information required by the County pertaining to such assignment request.

- (1)    The name of the proposed assignee or transferee;

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- (2) The terms of the proposed assignment or transfer;
  - (3) The nature of business of the proposed assignee or transferee and the proposed use by the assignee or transferee; and
  - (4) Information relating to the financial responsibility and general reputation of the proposed assignee or transferee that County may require.

In the event of the County's agreement to assignment or approval of a transfer, the proposed assignee or transferee shall agree to the following:

- (1) To assume all obligations and duties of the Company under this Agreement and any conditions placed on the site location approval by the County to be bound as an original party to this Agreement;
- (2) To make any and all payments due under this Agreement and/or assignment to County directly at its offices in Geneva, Illinois, as such payments become due.

Subject to the provisions of this Agreement limiting the right to assign or transfer, this Agreement shall be binding on and inure to the benefit of the parties and their heirs and successors. However, the Company shall remain primarily responsible for all obligations and liabilities under this Agreement and for any approved assignment or transfer. Furthermore, in the event of an approved assignment or transfer, the Company shall remain primarily responsible for all obligations and liabilities of this Agreement, which accrue prior to or after the execution of any approved assignment or transfer. Transfer of a fifty percent (50%) or greater interest in the Company to another owner or owners shall be deemed an unpermitted transfer under this Section, unless made with the approval of the County under this Section 4.1. The County may require an additional written commitment from by the assignee or transferee to assume and comply with the duties and obligations of this Agreement. The County shall not unreasonably withhold approval of a proposed assignment or transfer but retains the sole authority and discretion in determining whether an assignment shall occur.

#### **Section 4.2    Default**

The occurrence of any one or more of the following constitutes a “default” by the Company under this Agreement. Should the Company be found by the County to be in default of this Agreement, the County may, at its sole discretion, terminate this Agreement.

- (a) The failure by the Company to pay any fee due and payable under this Agreement; or,
- (b) The failure by the Company to observe or perform in any material respect the provision provided in Paragraph 2.1 of this Agreement and any other provision of this Agreement, and if the Company does not cure such failures within thirty (30) days after notice thereof from the County to the Company, unless such failures cannot reasonably be cured within thirty (30) days, in which case the Company must, before the thirtieth day: notify the County that it cannot complete its cure, present the County with a plan and timeline (which meets with the approval of the County) for completing the cure and implementing

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a plan to prevent the same or a similar failure from occurring again, and diligently continues to cure such failures during the initial thirty (30) day cure time period and any additional period beyond the thirty (30) days approved by the County. However, to the extent the Company's default under this Agreement concerns its failure to comply with Section 2.2 (Waste Acceptability), the more restrictive provision (this or Section 2.2) shall control in determining whether the Company is in default of this Agreement;

- (c) The levy upon or execution or the attachment by legal process of any interest in the Company to the Transfer Facility or its premises, or the filing or creation of a lien in respect of such property interest, such levy, attachment or lien shall not be released, discharged or bonded against within thirty (30) days from the date of such filing;
- (d) The Company admits in writing its inability to pay its debts as they mature and makes an assignment for the benefit of creditors or applies for or consents to the appointment of a trustee or receiver for the Company or a major part of its property;
- (e) A trustee or receiver is appointed for the Company or for a major part of its property, and it is not discharged within ninety (90) days after such appointment;
- (f) Bankruptcy, reorganization arrangement, insolvency or liquidation proceedings or other proceedings for relief under any bankruptcy law, or similar law, for the relief of debtors are instituted by or against the Company and, if instituted against the Company, are allowed against it or are not dismissed within 180 days after such institution;
- (g) If, during the term of this Agreement, any governmental entity assesses on or on behalf of the County of Kane a fee, surcharge or tax against Company as the operator of the facility, the facility or the site on which the facility is located, then such fee, surcharge or tax shall not affect the obligations of the Company to pay the County. Additionally, such fee, surcharge or tax shall be the sole and complete responsibility of the Company to pay and this Agreement shall remain in full force and effect.

### **Section 4.3    Notice**

Any notice to be given hereunder by either party to the other shall be in writing and be sent by personal delivery, by overnight delivery service or by registered or certified mail, postage prepaid, return receipt requested, and shall be deemed communicated when delivered or as two (2) business days from the date of mailing, whichever is earlier. Notices shall be addressed as set forth below, but each party may change its address by written notice to the other in accordance with this Section:

**To the County, notice shall be sent to both the County and the State's Attorney at the following addresses:**

County of Kane	Kane County State's Attorney
719 Batavia Avenue	Kane County Judicial Center
Geneva, IL 60134	37W777 Route 38
Attention: Chair, Kane County Board	St. Charles, IL 6017 5



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**To the Company, notice shall be sent to the following:**

**Section 4.4    Agreement Controls**

This Agreement constitutes the entire understanding of the parties hereto relating to the subject matter contained herein, except that it does not, in any way, constitute the County's agreement or obligate the County to approve the Company's site location application, if such application is filed with the County and if such application is approved by the County, this Agreement is to be read as an additional obligation and not as superseding or controlling in any way, the Company's obligation to comply with any conditions of the County's site location approval and any laws, ordinances, rules or regulations applicable to the site or Transfer Facility.

**Section 4.5    Captions**

Captions of the Articles, Sections and paragraphs of this Agreement are for convenience of reference only, and the words contained therein shall in no way be held to explain, modify, amplify or aid in the interpretation, construction or meaning of the provision of this Agreement.

**Section 4.6    Enforcement of Siting Conditions**

The Company agrees that, should the Transfer Facility receive site location approval pursuant to Section 39.2 of the Act from the Kane County Board, that any final and non-appealable conditions imposed on the Transfer Facility or Company as part of such approval are enforceable by the County against the Company, in the same manner in which the County's ordinances or this Agreement are enforceable, or pursuant to a County ordinance, should one be in effect at the time of the enforcement. Section 4.6 survives the termination of this Agreement.

**Section 4.7    Governing Law and Form for Litigation**

This Agreement shall be governed by and construed in accordance with the laws of Kane County and the State of Illinois. Any litigation filed by the Company or County against the other party and involving this Agreement shall only and exclusively be filed in a court of competent jurisdiction in Kane County, Illinois. Section 4.7 survives the termination of this Agreement.

**Section 4.8    Severability**

The provisions of this Agreement shall be deemed to be severable, and the invalidity or unenforceability of any provision shall not affect the validity and enforceability of the other provisions hereof. Section 4.8 survives the termination of this Agreement.

**Section 4.9    Binding Effect**

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This Agreement shall inure to the benefit of and be binding upon the respective parties hereto, their successors and assigns. However, nothing in this Section should be construed to allow Company to assign or transfer interest in this Agreement or the Transfer Facility, unless done pursuant to Section 4.1 of this Agreement. Section 4.9 survives the termination of this Agreement.

#### **Section 4.10 Force Majeure**

Neither party hereto shall be deemed to be in default or to have breached any provision of this Agreement as a result of any delay, failure in performance or interruption of services resulting directly or indirectly from acts of God, acts of civil or military authority, civil disturbance, or war, which are beyond the control of such non-performing party.

#### **Section 4.11 No Third Party Beneficiaries**

Nothing in this Agreement, whether expressed or implied, is intended to confer any rights or remedies under or-by reason of this Agreement on any persons other than the parties and their respective successors and assigns, nor shall any provision give any third persons any right or rights of action against any party to this Agreement.

#### **Section 4.12 Expenses**

The Company agrees to reimburse the County for attorney fees and any other professional fees incurred in connection with the drafting and negotiation of this Agreement up to a maximum of \$\_\_\_\_\_.

#### **Section 4.13 Records**

In addition to those records described in Sections 3.5 and 3.6, above, the Company shall provide to the County, upon the County's request, free of charge and in a timely manner, copies of all of the following documents in any manner connected with the Transfer Facility:

- (1) Documents submitted or received by the Company, its representatives, agents, attorneys, employees, or consultants to or from any state or federal government, or any regulatory or administrative agency; and
- (2) Documents submitted or received by the Company, its representatives, agents, attorneys, employees, or consultants to or from any citizen residing within the borders of Kane County pertaining to the development or operations of the Transfer Facility, particularly comments or complaints concerning such development or operations and including but not limited to the inbound or outbound vehicles to the Transfer Facility.

#### **Section 4.14 County Plan**

The County acknowledges that the Transfer Facility proposed by the Company is consistent with the Kane County Solid Waste Management Plan, as amended and updated, provided that it is designed, constructed and operated consistent with applicable local, County and State laws and regulation, and siting conditions.

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**Section 4.15 Pre-filing Review**

The County and the Company agree that prior to the formal submittal of the Transfer Facility siting application by the Company to the County pursuant to Section 39.2 of the Act, there shall be an opportunity for a pre-filing review to be conducted. The pre-filing review shall consist of the Company submitting a final draft of the siting application to the County for its review and comment. The County shall have thirty (30) days, from the date the final draft is submitted to the County, to conduct its review and provide comments to the Company. The Company and the County agree to communicate and meet as necessary in order to complete the review process within the 30-day deadline. The Company and the County agree that the Company may, at its own discretion, make changes in the siting application as may be recommended by the County during its 30-day review and comment period. The Company shall reimburse the County for up to \_\_\_\_\_ (\$\_\_\_\_\_) dollars of costs incurred by outside consultants retained by the County in conducting the pre-filing review.

**Section 4.16 Covenants Run with the Land**

The Company and County agree that the covenants, agreements and understandings contained in this Agreement, including without limitation the obligation to pay the per-ton fee, touch and concern the Subject Property, and that such covenants, agreements and understandings shall run with the Subject Property. The Company agrees that the County may prepare, and the Company shall promptly execute duplicate originals of an instrument; in a recordable form, which will constitute a memorandum of Host Community Benefits Agreement, attaching an executed copy of this Agreement as an exhibit, and record such Memorandum in the Office of Kane County, Illinois Recorder of Deeds.

**ARTICLE 5****AUTHORITY & GUARANTY OF PAYMENT****Section 5.1: Authority to Enter Into Agreement**

The Company hereby represents and warrants that it is a valid and existing \_\_\_\_\_, in good standing, and that the individuals executing this Agreement have been duly authorized by the Company to act on its behalf and enter into this Agreement. In addition, the Company agrees to provide the County, at the time of execution of the Agreement, with a copy of the \_\_\_\_\_ resolution authorizing the execution of this Agreement.

**Section 5.2: Guaranty of Payment**

As additional consideration for and assurance of performance of this Agreement, the Company and its corporate parent, tender to the County and the County accepts, the Guaranty of Payment attached to this Agreement as Exhibit \_\_\_\_\_.

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IN WITNESS WHEREOF, the parties hereto have executed this instrument on the day and year first written above.

KANE COUNTY, ILLINOIS

By: \_\_\_\_\_

Board Chairman

Attest: \_\_\_\_\_

Printed Name: \_\_\_\_\_

(Signature)

\_\_\_\_\_  
(COMPANY NAME)

By: \_\_\_\_\_

Its: \_\_\_\_\_

Attest: \_\_\_\_\_

Printed Name: \_\_\_\_\_

(Signature)

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**GUARANTY OF PAYMENT**

\_\_\_\_\_, for valuable consideration, the receipt of which is hereby  
acknowledged, does hereby unconditionally guarantee the payment by \_\_\_\_\_  
of all sums due and owing to Kane County, Illinois, pursuant to the Host Community Benefits And  
Reimbursement Agreement entered into between \_\_\_\_\_ and Kane County  
on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_, hereby represents and warrants that it is a valid and existing  
\_\_\_\_\_, in good standing, and that the individual executing this Guaranty of  
Payment have been duly authorized by \_\_\_\_\_ to act on its behalf and enter into  
this Guaranty of Payment. In addition, \_\_\_\_\_ agrees to provide the County, at  
the time of execution of this Guaranty of Payment, with a copy of the resolution authorizing the  
execution of this Guaranty of Payment.

\_\_\_\_\_  
(NAME OF GUARANTOR)

By: \_\_\_\_\_

Dated: \_\_\_\_\_

Its: \_\_\_\_\_

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## **Appendix D**

### **Public Comment Record**



# **RECYCLING EVENTS, DROP-OFF CENTERS & VIDEO PRESENTATION**

**IN 2020  
THE YEAR OF COVID**



# SAFETY PROTOCOL - PUBLIC

## COUNTY OF KANE

DIVISION OF  
ENVIRONMENTAL & WATER RESOURCES  
Jodie L. Violinik  
P.E., Director



RECYCLING PROGRAM OFFICE  
Jennifer Jarland,  
Recycling Program Coordinator

County Government Center  
719 S. Batavia Avenue  
Geneva, IL 60134  
[www.countyofkane.org](http://www.countyofkane.org)

Departmental Office Phone : (630) 208-5118  
Recycling Programs Office: (630) 208-3841  
FAX: (630) 208-3837  
[www.countyofkane.org/Facilities](http://www.countyofkane.org/Facilities)

### Kane County Recycling Center Rules of Use

#### COVID-19 Safety Protocol

In the safe delivery of services plan reviewed and revised by the Kane County Health Department and reviewed by State's Attorney's Office, steps are outlined that minimize contact. Staff will wear and renew fresh masks and gloves, and will regularly sanitize their hands and the tablet computer they use for transactions, using products from the US EPA list. Residents are asked to follow the below safety protocol in order to utilize the drop-off locations and the events.

#### Safety Rules for Residents

In order to assure the health and safety of all, residents shall follow the below required guidelines. Workers may refuse service if resident fails to comply with the below rules.

- **Materials to be recycled must be in the hatchback area or trunk of the vehicle.** Items placed in passenger seats or back seats will not be accepted.
- Residents will remain in the vehicle with windows up and our workers will unload for you.
- Residents will unlock/open the trunk from inside the vehicle to allow worker to unload.
- Residents must wear a mask. If you have to communicate with event workers or make an onsite payment, you must have your mask on.
- Clothes and textiles must be clean and neatly bagged, with the bags tied securely closed.
- All small loose electronics, cables, cords, remotes, etc. must be bagged and tied closed.
- Please be patient with event staff and volunteers, as the line will be moving a bit slower than normal in order to assure an appropriate spacing between workers.
- If residents are not comfortable allowing our workers to unload their recyclable materials from their car (the truck or hatch back area) then please do not attend events or utilize drop-offs.

- **Residents under quarantine or isolation protocol are not allowed to attend the event.**

If you have had COVID-19 in your household, you must be symptom free for at least two weeks before delivering your electronics or clothes to a recycling drop-off or event. In addition, do not attend the event if you are experiencing the following symptoms: fever, cough, shortness of breath/ difficulty breathing, sore throat, headache, rigors, myalgia, loss of taste, loss of smell, or have been exposed to someone that has tested positive for COVID-19.

### TV & Monitor Payment Guidelines

**Costs:** TVs and Monitors cost ~~\$1~~ \$25 (under 21" measured diagonally) or \$35 (21" or over). All other acceptable items ~~are~~ free to drop off.

- o In order to eliminate points of contact, [pay online](#) in advance if at all possible for any TVs or monitors and **bring your printed receipt** to the drop-off with you. You will show your printed receipt through the window.
- o If you need to pay by credit card at the time of delivery because you do not have a way to print your receipt, staff will limit contact while processing transactions. Only your card will come into contact with the electronic chip reader device and you will not need to sign physically.
- o Cash payments are highly discouraged for the safety of the workers. If you have to pay with cash, it must be the exact amount. Change will not be given. In order to avoid direct contact, you will insert the cash into a slotted box held out by the staff person.

**Why is there a fee on TVs and Monitors?** TVs and monitors contain lead and/or mercury and must be processed as hazardous material, a more expensive process that makes the consumer-based fee a necessity. The fee is paid directly to the County's contracted electronics ~~recycler~~ ~~sWorks~~, a non-profit that employs people with developmental disabilities. You are helping a good cause and responsibly disposing of your used electronics.



# SAFETY PROTOCOL - STAFF

## Kane County Recycling EVENTS – Safe Delivery of Service Plan

This plan outlines the best practice procedure for how to safely operate and manage Kane County recycling for electronics and clothes, books, document shredding, and other materials.

### Shred Events Cancelled Until Further Notice

Confidential document shredding will not be offered at events until further notice. Due to the anticipated volume of vehicles that attend, it is logistically prohibitive to offer this service under the safety protocol required in the current phase of the re-opening plan. But we are still having the events and will be recycling electronics, clothes, and books on the below dates. We will continue to monitor the situation and will resume shredding if possible as things change throughout the year.

### Recycling Events Details

**Location:** Kane County Circuit Clerk & Traffic Court, 540 S. Randall Road, St. Charles, IL 60174

**When:** Saturdays, as listed below, from 8am – 12 Noon

**Jun 13** - Electronics, Clothes & Textiles, Books  
**Jul 11** - Electronics, Clothes & Textiles, Books, Paint  
**Aug 8** - Electronics, Clothes & Textiles, Books  
**Sep 12** - Electronics, Clothes & Textiles, Books  
**Oct 10** - Electronics, Clothes & Textiles, Books, Paint  
**Nov 14** - Electronics, Clothes & Textiles, Books

### Kane County Electronics Recycling Events: COVID-19 Safety Protocol

The following protocol will be implemented at upcoming Kane County Recycling events.

Precautions are being taken in light of COVID-19 to minimize contact between visitors/residents and staff/volunteers (workers). Workers will wear personal protective gear, and maintain 6-foot social distance spacing. The layout and operating procedures for the event will reflect this protocol.

While this is an event, it is **not** a gathering: Cash payments are highly discouraged residents will be asked to stay in their vehicles and to drive through this drop-off event with windows up so that direct contact will be minimized. Residents must have material to be recycled in the hatchback or trunk area of vehicle for event workers to unload.

### Safety Rules for Residents

In order to assure the health and safety of all, residents shall follow the below required guidelines. Workers may refuse service if resident fails to comply with the below rules.

- **Materials to be recycled must be in the hatchback area or trunk of the vehicle.** Items placed in passenger seats or back seats will not be accepted.
- Residents will remain in the vehicle with windows up and our workers will unload for you.
- Residents will unlock/open the trunk from inside the vehicle to allow worker to unload.
- Residents must wear a mask. If you have to communicate with event workers or make an onsite payment, you must have your mask on.
- Clothes and textiles must be clean and neatly bagged, with the bags tied securely closed.



- All small loose electronics, cables, cords, remotes, etc. must be bagged and tied closed.
- Please be patient with event staff and volunteers, as the line will be moving a bit slower than normal in order to assure an appropriate spacing between workers.
- If residents are not comfortable allowing our workers to unload their recyclable materials from their car (the truck or hatch back area) then please do not attend this event.
- **Residents under quarantine or isolation protocol are not allowed to attend the event.** If you have had COVID-19 in your household, you must be symptom free for at least two weeks before delivering your electronics or clothes to a recycling drop-off or event. In addition, do not attend the event if you are experiencing the following symptoms: fever, cough, shortness of breath, difficulty breathing, sore throat, headache, rigors, myalgia, loss of taste, loss of smell, or have been exposed to someone that has tested positive for COVID-19.

### TV & Monitor Payment guidelines

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- If you need to pay by credit card at the time of delivery because you do not have a way to print your receipt, staff will limit contact while processing transactions. Only your card will come into contact with the electronic chip reader device and you will not need to sign physically.
- Cash payments are highly discouraged for the safety of the workers. If you have to pay with cash, it must be the exact amount. Change will not be given. In order to avoid direct contact, you will insert the cash into a slotted box held out by the staff person.

**Why is there a fee on TVs and Monitors?** TVs and monitors contain lead and/or mercury and must be processed as hazardous material, a more expensive process that makes the consumer-based fee a necessity. The fee is paid directly to the County's contracted electronics recycler, eWorks, a non-profit that employs people with developmental disabilities. You are helping a good cause and responsibly disposing of your used electronics.

### Safety Protocol for Staff and Volunteer Workers

- No worker will attend the event if they or anyone in their household is under quarantine isolation protocol. In addition, do not attend the event if you are experiencing the following symptoms: cough or shortness of breath, or at least two of the following symptoms: fever, chills, repeated shaking with chills, muscle pain, headache, sore throat, new loss of smell, new loss of taste or if a diagnosis of COVID-19 or there has been exposure to a confirmed case of COVID-19.
- Workers will be asked about cough or shortness of breath, whether they have at least two of the following symptoms: fever, chills, repeated shaking with chills, muscle pain, headache, sore throat, new loss of smell, or new loss of taste, or if they have had a diagnosis of COVID-19 or exposure to a confirmed case of COVID-19.



- Upon arrival, all staff and volunteers report to the outdoor sign-in station to pick up safety vests, masks and gloves. The space will be arranged and the ground marked so as to maintain 6-foot social distance around workers.
- Workers temperature will be checked on arrival with a no contact infrared thermometer. Those who have a temperature greater than 100.4°F are not allowed to work.
- Staff and volunteers will be trained in the proper use of all personal protection supplies and proper donning and doffing procedures.
- Workers (including the Office of Emergency Management Traffic Officers) will wear masks and gloves throughout the event, and will have access to wash and sanitize their hands at the new clean portable restroom station.
- Workers may wear disposable nitrile gloves under their work gloves. All gloves will be changed every hour or at break times, whichever is sooner.
- Bottled water will be provided for workers. If food is provided, it will be individually packaged.
- Hand sanitizer will be available for break times. The portable restroom station will have a handwashing station attached to it.
- One worker will be assigned to maintain and clean the break area and to monitor the event work-stations, checking that everyone is following protocol, and reminding them to do so as needed. Hand-sanitizer, wipes, and fresh gloves will be offered twice per hour of the 4-hour event.
- Lines of cars will be managed in a way that safeguards the unload area workers, in that only 6 cars will be allowed into the unload area at a time, staggered so they are not right next to each other.
- There will be one worker unloading per car. In the instances where two workers are required for large TVs or other heavy items, a floater staff will be assigned to step in as the second worker, and both will have on masks and gloves. They will be able to maintain some distance from either side of the large item.
- We will have traffic officers to direct cars into the unload area to maintain distance.
- Electronics will have minimal onsite sorting so that they will be able to unload more quickly, and have less chance of accidental proximity.
- Vendors that take direct payments from residents (eWorks and ePaint solutions) will sanitize the tablet computer they use for transactions (after each contact by a resident!), using products from US EPA list N (link).

# RECYCLING CENTERS

## **Batavia, Fabyan Parkway**

**Location:** 517 E. Fabyan Parkway, Batavia, IL 60510

**Hours:** M-F 8am-4pm

## **West Dundee Public Works**

**Location:** 900 Angle Tarn, West Dundee, IL 60118

**Hours:** M-F 7am-3pm

## **Naperville Public Works (open to Kane County residents)**

**Location:** 156 Fort Hill Drive, Naperville, IL 60540

**Contact:** eWorks at 217-364-7543

**Hours:** M-F 7am-3pm





# RECYCLING EVENTS

Where: 540 S Randall Rd, St. Charles, IL 60174

When: Second Saturdays of month; 8am-12noon.

<b>Aug 8</b>	electronics, clothing, books
<b>Sept 12</b>	electronics, clothing, books
<b>Oct 10</b>	electronics, clothing, books + paint
<b>Nov 14</b>	electronics, clothing, books

# SPECIAL EVENTS

<b>Aug 10</b>	Tire Recycling (not a public event) @ KC Fairgrounds
<b>Nov 7</b>	Pumpkin Recycling (tentative) @ Pushing the Envelope Farm



# VIDEO PRESENTATION



## Contents of presentation

- Rethink, Reduce, Reuse, Recycle, Compost
- Guidelines – DOs and DON'Ts
- Recycling Tips
- Recycling in the Time of COVID
- Beyond the Bin – Resource Recovery
- 2020 Event Dates (and drop-offs)
- Household Hazardous Waste
- KCR Green Guide, KC Connects, pass it on!

## RECYCLING IN THE TIME OF COVID

Do not recycle PPE

### Do not recycle Personal Protective Equipment

**Gloves** - Use reusable, washable gloves.



**Masks** - Ideally you could sterilize them with alcohol and use multiple times. Or make a reusable cloth mask, to wash and wear.



**Medical Supplies** - CPAP masks, ventilator tubes, or any other PPE or medical equipment are trash. Do not recycle.



**Wipes** - disposable sanitizer wipes go in the trash

The average American creates 4.5 pounds of landfill trash every day. But what if you tried to reduce & rethink?



[https://mymedia.waubonsee.edu/media/Rethink%2c+Reduce%2c+Reuse+and+Recycle+Right%21/I\\_ucbtyoqn](https://mymedia.waubonsee.edu/media/Rethink%2c+Reduce%2c+Reuse+and+Recycle+Right%21/I_ucbtyoqn)

<https://www.youtube.com/watch?v=qmGuyjbyPHU&feature=youtu.be>

**CONTACT:  
JENNIFER JARLAND**

[recycle@countyofkane.org](mailto:recycle@countyofkane.org)

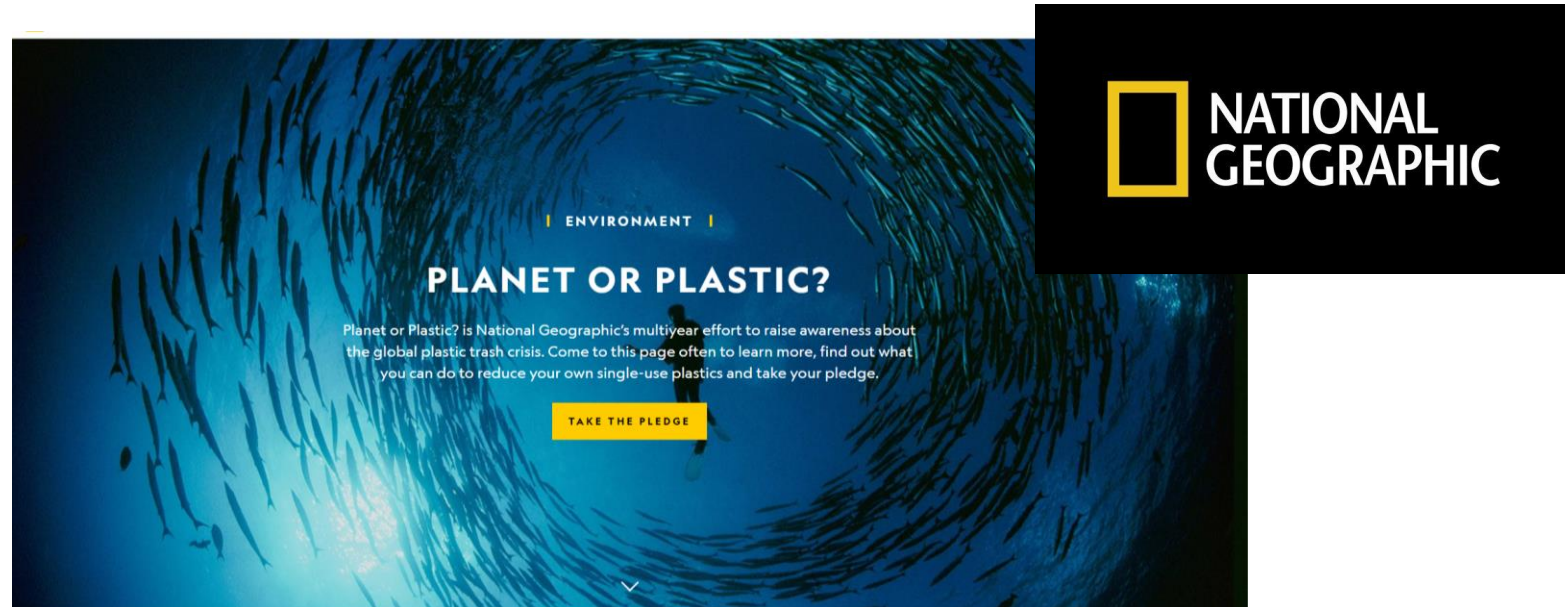
630-208-3841





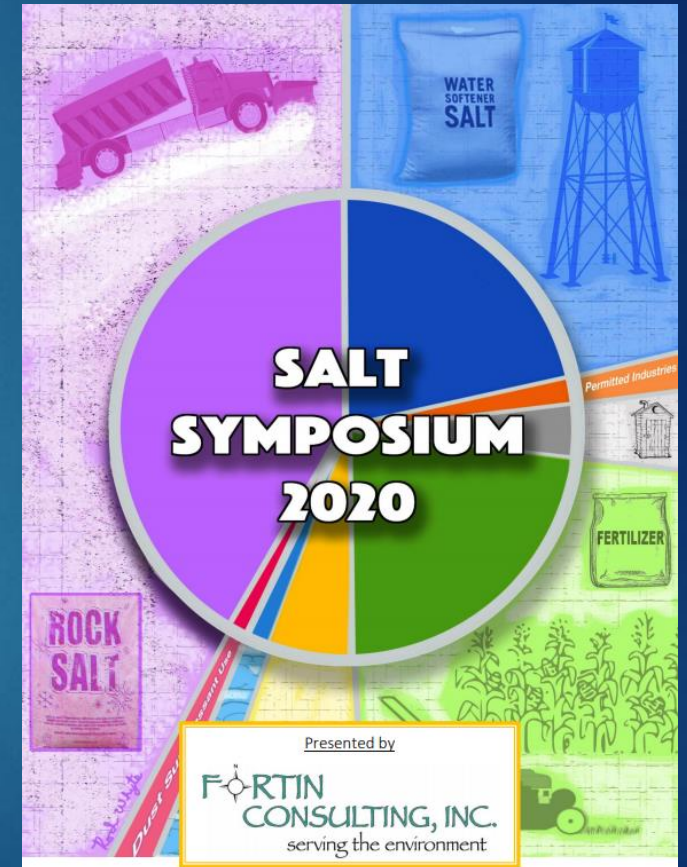
*Wednesday September 9<sup>th</sup>  
Membership Meeting & Program  
via Zoom*

**Plastics in Our Watershed**  
*[foxriverecosystem.org](http://foxriverecosystem.org)*



# Salt Symposium

SUMMARY OF CHLORIDE IMPACTS AND MANAGEMENT





# Why is chloride a problem?

- ▶ **Drinking water** – Contaminates groundwater
- ▶ **Aquatic life** – Toxic to fish, aquatic bugs, and amphibians in our streams, lakes, and Fox River
- ▶ **Plants** – Toxic to plants and trees, which can change the plant community structure
- ▶ **Wildlife** – Some birds can die from ingesting deicing salt
- ▶ **Soil** – Salt-laden soil can lose ability to retain water and store nutrients, increasing the threat of erosion
- ▶ **Pets** – Sickens pets that consume it and irritates their paws
- ▶ **Infrastructure** – Corrodes road surfaces and bridges, damages reinforcement rods, and increases maintenance/repair costs

# Why is chloride a problem?

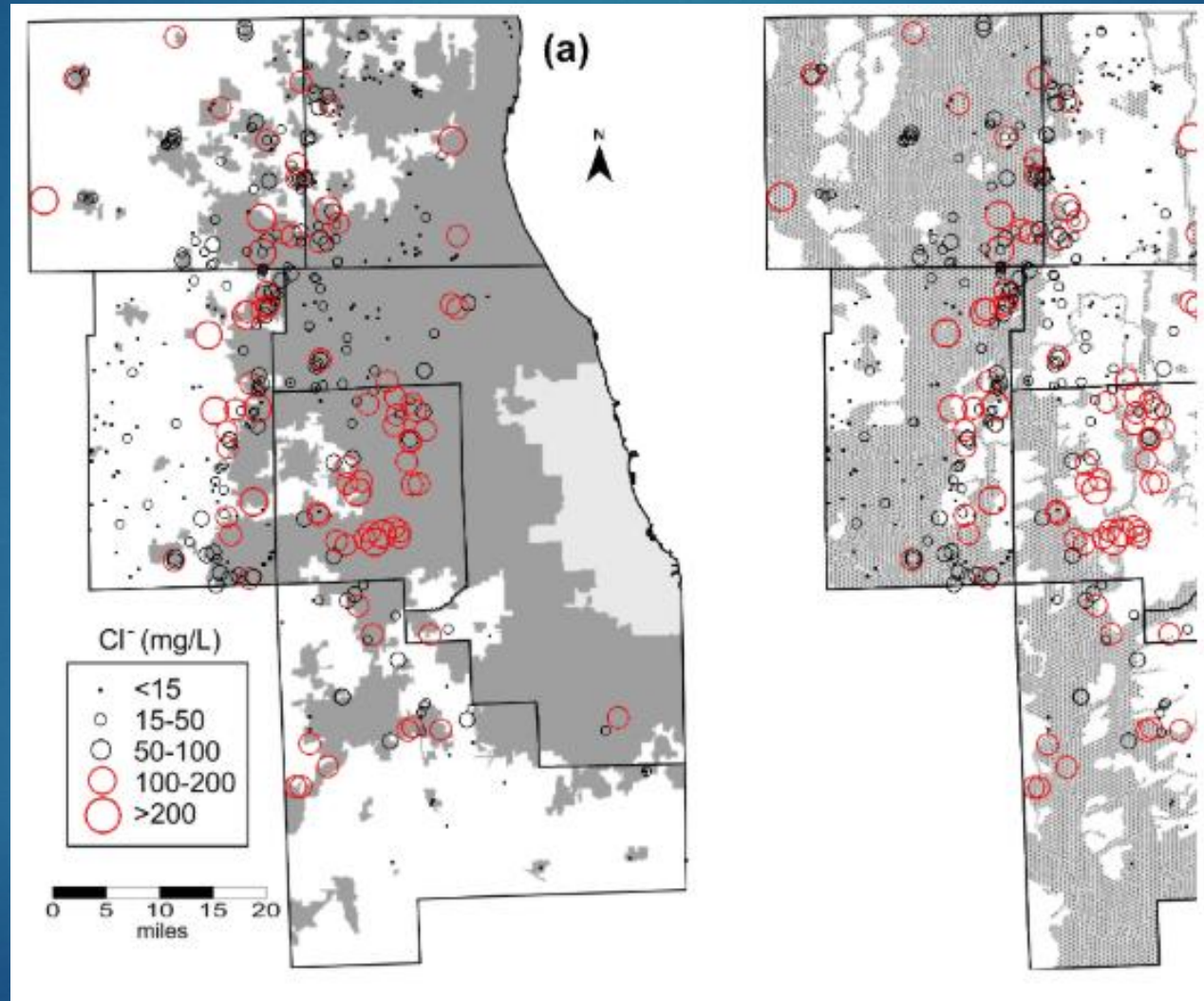
## **\* Permanent Pollutant \***

One teaspoon of salt  
permanently pollutes five gallons of water



*Once in the water, there is no easy way to remove.*

# Impacts in Illinois



Road Salt in Groundwater (Part 2)

DEC 19, 2011 2:00 PM BY WALT KELLY



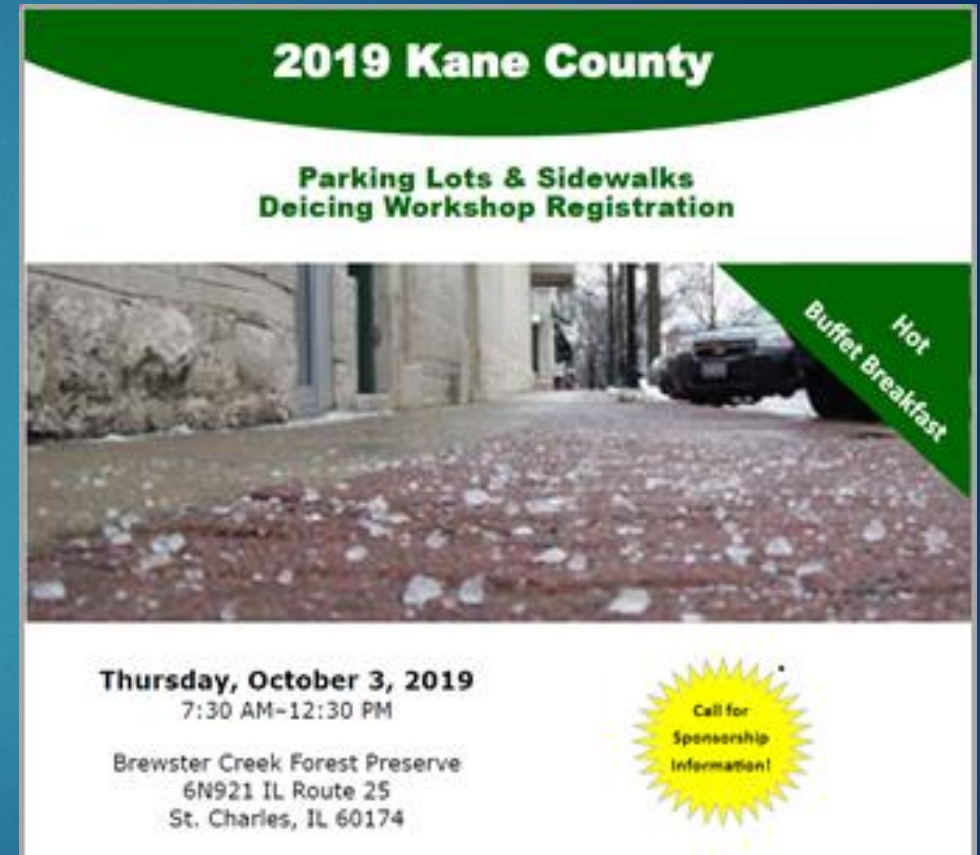
# What we can do

- ▶ Track sources and water quality conditions
- ▶ Track progress long term to determine if our management measures are working
- ▶ **Road Salt Management**
- ▶ **Fertilizer management**  
(agricultural, commercial, and residential)
- ▶ Centralized water softening
- ▶ WWTP monitoring and removal
- ▶ Diet adjustment



# Kane County Actions

- ▶ Staff training
- ▶ Training for municipality public works, facilities/grounds management, and private contractors
- ▶ Community outreach and managing expectations
- ▶ Collaboration



**2019 Kane County**

**Parking Lots & Sidewalks  
Deicing Workshop Registration**

Hot  
Buffet Breakfast

**Thursday, October 3, 2019**  
7:30 AM-12:30 PM

Brewster Creek Forest Preserve  
6N921 IL Route 25  
St. Charles, IL 60174

Call for  
Sponsorship  
Information!

The poster features a photograph of a snowy parking lot with a building in the background. A green banner at the top contains the title, and a green diagonal banner on the right side advertises a hot buffet breakfast. A yellow starburst graphic in the bottom right corner encourages calls for sponsorship information.



# Individual Actions

- ▶ Responsibly salt home walkways and driveway (Shovel first!)
- ▶ Minimize or eliminate use of fertilizers with Potassium [K] (frequently derived from mureted potash with chloride base)
- ▶ Talk to others
- ▶ Encourage your municipality public works to attend the Deicing Workshops



## 4 Steps to Be Salt Smart

- 1 Shovel first.** Clear all snow from driveways and sidewalks before it turns to ice.



- 2 Size up.** More salt does not mean more melting. A 12-ounce coffee mug of salt should be enough for a 500 sq ft driveway or about 10 sidewalk squares.



- 3 Spread.** Distribute salt evenly, not in clumps.



- 4 Switch.** Rock salt stops working if the temperature is below 15 degrees. When temperatures drop that low, switch to a different deicer formulated for colder temperatures.



Learn more at [saltsmart.org](https://saltsmart.org)

# Individual Actions

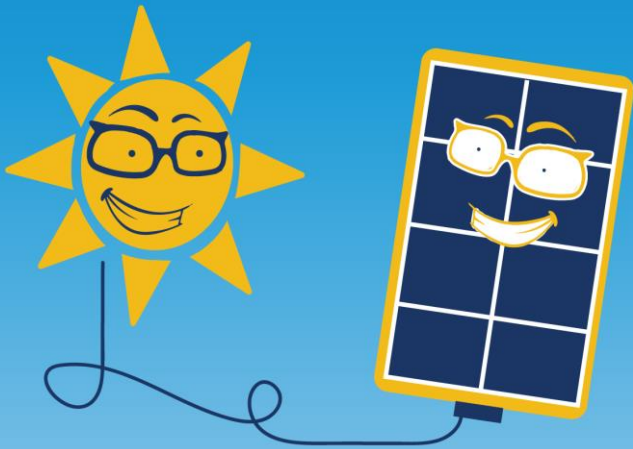
- ▶ Winter Salt Watch:

[iwla.org/water/stream-monitoring/winter-salt-watch](http://iwla.org/water/stream-monitoring/winter-salt-watch)

- ▶ Citizen Science program – FREE test kit (easy to use test strips)



SAVE MONEY.  
MAKE A DIFFERENCE.  
**GO SOLAR!**



# Solar Power Hour Webinar

Presented by the  
**Batavia Environmental Commission**

**Wednesday, August 19**  
6:00-7:00pm

Additional information and registration links at:  
[www.growsolar.org/chicagoland/](http://www.growsolar.org/chicagoland/)







# Green Building Policy

## August 2020 Update

- Guidance and draft policies provided by USGBC Policy team
  - Examples from other communities in our region  
(Cook County 2003, Yorkville 2008, Bartlett 2008)
  - Policies available for: New Construction, Renovations, Updating Existing Buildings, and incentives for green building across the wider community
- **Striving for New Construction Policy draft to present/discuss at September 2020 E&E Committee meeting**