



# WINNEBAGO COUNTY

— ILLINOIS —

## AGENDA

Winnebago County Courthouse  
400 West State Street, Rockford, IL 61101  
County Board Room, 8<sup>th</sup> Floor

**Thursday, November 10, 2022**  
**6:00 p.m.**

1. **Call to Order** ..... Chairman Joseph Chiarelli
2. **Invocation and Pledge of Allegiance** ..... Board Member John Butitta
3. **Agenda Announcements** ..... Chairman Joseph Chiarelli
4. **Roll Call** ..... Clerk Lori Gummow
5. **Awards, Presentations, Public Hearings and Public Participation**
  - A. Awards – None
  - B. Presentations – None
  - C. Public Hearings – None
  - D. Public Participation –
6. **Approval of Minutes** ..... Chairman Joseph Chiarelli
  - A. Approval of October 13, 2022 minutes
  - B. Layover of October 27, 2022 minutes
7. **Consent Agenda**..... Chairman Joseph Chiarelli
  - A. Raffle Report
  - B. Auditor’s Report
8. **Appointments (Per County Board rules, Board Chairman appointments require a 30-day layover unless there is a suspension of the rule).**
9. **Reports of Standing Committees**..... Chairman Joseph Chiarelli
  - A. Finance Committee ..... Jaime Salgado, Committee Chairman
    1. Committee Report
    2. Resolution Approving Sidewalk Patching for Courthouse and Public Safety Building
    3. Resolution to Fund Water Resources Strategic Plan with ARPA Funds

4. Resolution Authorizing Settlement of Pending Litigation (Rosemary Hunter v. Officer Maureen Ashby et al.)

**B. Zoning Committee .....Jim Webster, Committee Chairman**  
Planning and/or Zoning Requests:

1. Committee Report

**C. Economic Development Committee.....John Sweeney, Committee Chairman**  
1. Committee Report

**D. Operations and Administrative Committee.....Keith McDonald, Committee Chairman**  
1. Committee Report  
2. Resolution Authorizing a Project Management Services Agreement with Region 1 Planning Council to Provide a Connection Feasibility Study for the East Riverside Multi-Use Path  
3. Resolution Adopting the Regional Solid Waste Management Plan: A Plan for Boone and Winnebago Counties 2022-2042  
4. Resolution Authorizing the Chairman of the County Board to Execute an Amended Delinquent Tax Sale Trustee Agency Intergovernmental Agreement Between the County of Winnebago, Illinois and Region 1 Planning Council

**E. Public Works Committee .....Dave Tassoni, Committee Chairman**  
1. Committee Report

**F. Public Safety and Judiciary Committee.....Burt Gerl, Committee Chairman**  
1. Committee Report

**10. Unfinished Business .....Chairman Joseph Chiarelli**

**A. Zoning Committee**

1. Z-04-22 A map amendment to rezone 5.46 +-acres from the AG, Agricultural Priority District to the RA, Rural Agricultural Residential District (a sub-district of the RA District) for a portion of the property that is commonly known as 11834 Winslow Road, Durand, IL 61024 in Harrison Township, District 2, Laid Over from 10/27/22

**B. Appointments**

1. Winnebago County Health Department, Compensation: None
  - a. Derrick Kunz (New Appointment), Rockford, Illinois, October 2022 to October 2025
2. Seward Sanitary District, Compensation: None
  - b. Kelsey Heslop (New Appointment), Pecatonica, Illinois, May 2021 to May 2024
  - c. Dennis Hille (Reappointment), Seward, Illinois, May 2022 to May 2025

**11. New Business.....Chairman Joseph Chiarelli**  
**(Per County Board rules, passage will require a suspension of Board rules).**

**12. Announcements & Communications ..... Clerk Lori Gummow**  
A. Correspondence (see packet)

13. Adjournment .....Chairman Joseph Chiarelli

Next Meeting: Tuesday, November 22, 2022

RESOLUTION

TO THE HONORABLE COUNTY BOARD OF WINNEBAGO COUNTY:

Your County Auditor respectfully submits the following summarized report of the claims to be paid and approved:

	<u>FUND NAME</u>		<u>RECOMMENDED FOR PAYMENT</u>
001	GENERAL FUND	\$	408,635
101	PUBLIC SAFETY TAX	\$	64,520
103	DOCUMENT STORAGE FUND	\$	9,608
106	RECORDERS DOCUMENT FEE FUND	\$	13,236
107	COURT AUTOMATION FUND	\$	298
111	CHILDREN'S WAITING ROOM FUND	\$	7,870
114	911 OPERATIONS FUND	\$	25,728
115	PROBATION SERVICE FUND	\$	15,623
116	HOST FEE FUND	\$	350,000
120	DEFERRED PROSECUTION PROGRAM	\$	3,296
123	STATE DRUG FORFEITURE ST ATTY	\$	3,375
126	LAW LIBRARY	\$	4,191
131	DETENTION HOME	\$	18,496
155	MEMORIAL HALL	\$	3,858
156	CIRCUIT CLERK ELECTRONIC CITATION	\$	13,464
158	CHILD ADVOCACY PROJECT	\$	1,683
161	COUNTY HIGHWAY	\$	46,212
163	FEDERAL AID MATCHING FUND	\$	3,399
164	MOTOR FUEL TAX FUND	\$	36,866
165	TOWNSHIP HIGHWAY FUND	\$	285,612
169	HIGHWAY REBUILD IL GRANT	\$	5,330
181	VETERANS ASSISTANCE FUND	\$	13,634
185	HEALTH INSURANCE	\$	198,009
194	TORT JUDGMENT & LIABILITY	\$	55,436
196	MENTAL HEALTH TAX FUND	\$	8,584
253	2018 PENSION OBLIGATION BONDS	\$	750
301	HEALTH GRANTS	\$	129,785
302	SHERIFF'S DEPT GRANTS	\$	992
309	CIRCUIT COURT GRANT FUND	\$	11,091
313	AMERICA RESCUE PLAN	\$	872,665
314	CJCC GRANTS FUND	\$	27,087
401	RIVER BLUFF NURSING HOME	\$	312,888
410	ANIMAL SERVICES	\$	128,286
420	555 N COURT OPERATIONS FUND	\$	8,940
430	WATER FUND	\$	1,506
501	INTERNAL SERVICES	\$	74,776
743	CAPITAL PROJECTS FUND	\$	63,055
	TOTAL THIS REPORT	\$	3,228,784



The adoption of this report is hereby recommended:

  
William Crowley, County Auditor

ADOPTED: This 10th day of November 2022 at the City of Rockford, Winnebago County, Illinois.

\_\_\_\_\_  
Joseph Chiarelli, Chairman of the  
Winnebago County Board of  
Rockford, Illinois

ATTEST:

\_\_\_\_\_  
Lori Gummow, Clerk of the Winnebago  
County Board of Rockford, Illinois



## Resolution Executive Summary

**Prepared By:** Facilities Department  
**Committee:** Finance Committee  
**Committee Date:** November 3, 2022  
**Resolution Title:** Resolution Approving Sidewalk Patching for Courthouse and Public Safety Building  
**County Code:** Winnebago County Purchasing Ordinance  
**Board Meeting Date:** November 10, 2022  
**Budget Information:**

<b>Was item budgeted?</b>	Yes – CIP Funded	<b>Appropriation Amount:</b>	\$30,795 (PSB) \$28,913.00 (Courthouse)
<b>ORG/OBJ/Project Code: 82200-46310-C2103- Public Safety Building 82200-46310-C2111- County Courthouse</b>			

### Background Information:

Inspection of the sidewalks surrounding the Winnebago County Courthouse and the Public Safety Building revealed numerous trip hazards in need of repair.

This was on the Capitol Improvement Projects (CIP) list for 2022 and has been carried forward into Fiscal Year 2023. The Facilities Department obtained five (5) quotes for each individual project. N-Trak Group was deemed to be the lowest responsive and responsible bidder for each project. A \$14,000 contingency was added for possible unforeseeable expenses.

### Recommendation:

The County Facilities Engineer, Shawn Franks, has reviewed the quote responses received for the projects and recommends awarding the sidewalk repairs for both the Courthouse and Public Safety Building to N-Trak Group.

### Contract/Agreement:

Purchase Orders will be issued to N-Trak Group for sidewalk repairs to both the County Courthouse and Public Safety Building. Work is expected to be completed in November.

**RESOLUTION**  
**of the**  
**COUNTY BOARD OF THE COUNTY OF WINNEBAGO, ILLINOIS**

Sponsored by: Jaime Salgado, Committee Chairman

Submitted by: Finance Committee

2022 CR

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**RESOLUTION APPROVING SIDEWALK PATCHING FOR COURTHOUSE AND PUBLIC SAFETY BUILDING**

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**WHEREAS**, the Winnebago County Facilities Department is responsible for the upkeep of all County buildings and their surrounding properties; and,

**WHEREAS**, the sidewalks surrounding the County Courthouse and the Public Safety Building are in dire need of repair; and,

**WHEREAS**, the Finance Committee has reviewed the quotes (Resolution Exhibit A) for the aforementioned service and recommends awarding the projects as follows:

**N-TRAK GROUP**  
**1523 WINDSOR ROAD**  
**LOVES PARK, ILLINOIS 61111**

**NOW, THEREFORE, BE IT RESOLVED**, by the County Board of the County of Winnebago, Illinois that the County Board Chairman is authorized to execute, on behalf of the County of Winnebago, Purchase Orders with N-TRAK GROUP, 1523 WINDSOR ROAD, LOVES PARK, ILLINOIS 61111, in the amount of FIFTY NINE THOUSAND, SEVEN HUNDRED AND EIGHT DOLLARS (\$59,708.00).

**BE IT FURTHER RESOLVED**, that this Resolution shall be in full force and effective immediately upon its adoption and the Clerk of the County Board is hereby authorized to prepare and deliver certified copies of this Resolution to the Facilities Engineer, Director of Purchasing, Finance Director, County Board Office, and County Auditor.

Respectfully Submitted,  
**FINANCE COMMITTEE**

**AGREE**

**DISAGREE**

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JAIME SALGADO, CHAIRMAN

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JAIME SALGADO, CHAIRMAN

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STEVE SCHULTZ, VICE CHAIRMAN

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STEVE SCHULTZ, VICE CHAIRMAN

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PAUL ARENA

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PAUL ARENA

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JOHN BUTITTA

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JOHN BUTITTA

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JEAN CROSBY

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JEAN CROSBY

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JOE HOFFMAN

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JOE HOFFMAN

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KEITH McDONALD

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KEITH McDONALD

The above and foregoing Resolution was adopted by the County Board of the County of Winnebago, Illinois this \_\_\_\_ day of \_\_\_\_\_ 2022.

ATTESTED BY:

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**JOSEPH CHIARELLI**  
CHAIRMAN OF THE COUNTY BOARD  
OF THE COUNTY OF WINNEBAGO, ILLINOIS

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**LORI GUMMOW**  
CLERK OF THE COUNTY BOARD  
OF THE COUNTY OF WINNEBAGO, ILLINOIS

**RESOLUTION EXHIBIT A**

**QUOTE SUMMARY**  
**SIDEWALK PATCHING FOR COURTHOUSE AND PUBLIC SAFETY BUILDING**

<b>VENDORS</b>	<b>N-Trak Group (Loves Park)</b>	<b>Cream City Concrete Contractors (Rockford)</b>	<b>Creative Concrete &amp; Landscaping (Rockford)</b>	<b>Olmecca Concrete, Inc. (Belvidere)</b>	<b>Campos Construction, Inc. (Rockford)</b>
<b>PROJECT 1 PUBLIC SAFETY BLDG</b>	<b>\$30,795.00</b>	\$36,586.00	\$36,954.00	\$61,590.00	\$39,275.00
<b>PROJECT 2 COURTHOUSE FRONT</b>	<b>\$11,088.00</b>	\$11,766.00	\$23,562.00	\$22,176.00 +\$1,500.00	\$15,525.00
<b>PROJECT 3 COURTHOUSE SIDE</b>	<b>\$3,825.00</b>	\$6,000.00	\$6,300.00	\$7,200	\$7,350.00
<b>GRAND TOTAL</b>	<b>\$45,708.00</b>	\$54,352.00	\$66,816.00	\$92,466.00	\$62,150.00
<b>TIMELINE:</b>	<b>Oct. 20 – Nov. 4</b>	TBD – Nov. 26	Sept. 23 – Oct. 26	Sept. 12 – Sept. 28	Sept. 15 – Oct. 28



## Resolution Executive Summary

**Prepared By:** Lafakeria S. Vaughn  
**Committee:** Finance Committee  
**Committee Date:** November 3, 2022  
**Resolution Title:** Resolution Authorizing Settlement of Pending Litigation (Rosemary Hunter v. Officer Maureen Ashby et al.)  
**County Code:** Not Applicable  
**Board Meeting Date:** November 10, 2022

### Budget Information:

<b>Was item budgeted?</b> Yes	<b>Appropriation Amount:</b> \$257,500
<b>If not, explain funding source:</b> N/A	
<b>ORG/OBJ/Project Code:</b>	<b>Budget Impact:</b> Within budgeted amount

**Background Information:** Settlement of claims by the Plaintiff against the County and several Sheriff Office Defendants.

**Recommendation:** Staff concurs

**Contract/Agreement:** N/A

**Legal Review:** Legal review conducted by the State's Attorney's Office

**Follow-Up:** N/A

**RESOLUTION  
OF THE  
COUNTY BOARD OF THE COUNTY OF WINNEBAGO, ILLINOIS**

2022 CR \_\_\_\_\_

SUBMITTED BY: FINANCE COMMITTEE

SPONSORED BY: JAIME SALGADO

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**RESOLUTION AUTHORIZING SETTLEMENT OF PENDING LITIGATION  
(Rosemary Hunter v. Officer Maureen Ashby et al.)**

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**WHEREAS**, *Rosemary Hunter v. Officer Maureen Ashby et al.* is a pending civil action against Winnebago County and Sheriff Office Defendants, filed in the United States District Court for the Northern District of Illinois, as case number 3:21-cv-50233; and

**WHEREAS**, the Plaintiff therein have agreed to settle all claims she has against the County and all officials, agents and employees, for the sum of Two Hundred Fifty-seven Thousand Five Hundred Dollars (\$257,500.00); and

**WHEREAS**, the Finance Committee, after having reviewed the facts and circumstances of the aforementioned case and after having conferred with the Winnebago County State's Attorney, through his assistant, has determined it is in the best interests of the citizens of Winnebago County to settle this case on the terms set forth above.

**NOW, THEREFORE BE IT RESOLVED**, by the County Board of the County of Winnebago, Illinois that the Winnebago County State's Attorney is hereby authorized to settle the aforementioned lawsuit by paying the Plaintiff therein the sum of Two Hundred Fifty-seven Thousand Five Hundred Dollars (\$257,500.00).

**BE IT FURTHER RESOLVED**, that the Winnebago County Treasurer, Winnebago County Clerk, and Winnebago County Finance Department are authorized and directed to prepare and deliver to the Winnebago County State's Attorney one or more County Warrants totaling Two Hundred Fifty-seven Thousand Five Hundred Dollars (\$257,500.00); payable as directed by the State's Attorney.

**BE IT FURTHER RESOLVED**, that this Resolution shall be in full force and effect immediately upon its adoption.

**Respectfully submitted,**

**FINANCE COMMITTEE**

**AGREE**

\_\_\_\_\_  
Jaime Salgado, Chairman

\_\_\_\_\_  
Steve Schultz

\_\_\_\_\_  
John Butitta

\_\_\_\_\_  
Paul Arena

\_\_\_\_\_  
Joe Hoffman

\_\_\_\_\_  
Jean Crosby

\_\_\_\_\_  
Keith McDonald

**DISAGREE**

\_\_\_\_\_  
Jaime Salgado, Chairman

\_\_\_\_\_  
Steve Schultz

\_\_\_\_\_  
John Butitta

\_\_\_\_\_  
Paul Arena

\_\_\_\_\_  
Joe Hoffman

\_\_\_\_\_  
Jean Crosby

\_\_\_\_\_  
Keith McDonald

The above and foregoing Resolution was adopted by the County Board of the County of Winnebago, Illinois, this \_\_\_\_ day of \_\_\_\_\_, 2022.

\_\_\_\_\_  
Joseph V. Chiarelli, Chairman of the  
County Board of the  
County of Winnebago, Illinois

ATTEST:

\_\_\_\_\_  
Lori Gummow, Clerk of the  
County Board of the  
County of Winnebago, Illinois





# Resolution Executive Summary

**Prepared By:** Winnebago County Highway Department

**Committee:** Operations and Administrative Committee

**Committee Date:** Thursday, November 3, 2022

**Resolution Title:**

RESOLUTION AUTHORIZING A PROJECT MANAGEMENT SERVICES AGREEMENT WITH REGION 1 PLANNING COUNCIL TO PROVIDE A CONNECTION FEASIBILITY STUDY FOR THE EAST RIVERSIDE MULTI-USE PATH

Cost: \$40,200

C.B. District 7, 8, 20

**Board Meeting Date:** Thursday, November 10, 2022

**Budget Information:**

<b>Was item budgeted?</b>	<b>yes</b>	<b>Appropriation Amount:</b>	<b>\$40,200</b>
<b>If not, explain funding source:</b>			
<b>ORG/OBJ/Project Code:</b> ARP- Chairman's initiative 61300-43480-RP041			
<b>Budget Impact:</b>			

**Background Information:**

At the initiative of County Board member John Butitta, this is for a feasibility study for a multi-use path along Riverside Blvd across I-90, which will connect the Perryville Path to Sportscore II complex. R1PC, in coordination with the Highway Department, sent out a request for qualifications to various consultants. Two proposals were received. A committee consisting of R1PC staff, Winnebago County Engineer, representatives from the cities of Loves Park and Rockford, and County Board member John Butitta selected Baxter & Woodman, Inc. R1PC and the consultant entered into an agreement for a not to exceed amount of \$40,200. This agreement will authorize reimbursements to R1PC.

**Recommendation:**

Approval is recommended.

**Contract/Agreement:**

After County Board approval

**Legal Review:**

By the State Attorney's office.

**Follow-Up:**

**RESOLUTION**  
**of the**  
**COUNTY BOARD OF THE COUNTY OF WINNEBAGO, ILLINOIS**

Sponsored by: Keith McDonald

Submitted by: Operations & Administrative Committee

2022 CR

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**RESOLUTION AUTHORIZING A PROJECT MANAGEMENT SERVICES  
AGREEMENT WITH REGION 1 PLANNING COUNCIL TO PROVIDE A  
CONNECTION FEASIBILITY STUDY FOR THE EAST RIVERSIDE MULTI-USE  
PATH**

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**WHEREAS**, the County of Winnebago, Illinois is desirous to develop a multi-use path along East Riverside Blvd. over I-90 Tollway connecting the Perryville path to the Sportscore II complex; and

**WHEREAS**, Winnebago County desires to obtain project management and fiscal agent services from Region 1 Planning Council (RPC) to provide a connection feasibility study, which is required by the Illinois State Toll Highway Authority (ISTHA) for the above noted multi-use path to cross I-90; and

**WHEREAS**, Region 1 Planning Council has the knowledge, skill, and capability to perform such services for Winnebago County; and

**WHEREAS** it would be in the public interest to enter into the attached Project Management Services Agreement with Region 1 Planning Council to provide a connection feasibility study for the above noted multi use path at a not to exceed price of \$40,200.

**WHEREAS** American Rescue Plan (ARP) funds from the Chairman's initiative for the Economic Impact Program, Group 1, will be used as approved by the County Board on July 28, 2022 by resolution No. 2022 CR 083.

**NOW, THEREFORE, BE IT RESOLVED** by the County Board of the County of Winnebago, Illinois; that the Chairman of the County Board is hereby authorized to execute on behalf of the County of Winnebago the attached Project Management Services Agreement with Region 1 Planning Council to provide a connection feasibility study for the above noted multi use path at a not to exceed price of \$40,200, in substantially the form attached hereto; and

**BE IT FURTHER RESOLVED** that the AGREEMENT entered into shall not become effective and binding unless and until the respective parties have executed them; and

**BE IT FURTHER RESOLVED** that this Resolution shall be in full force and effect immediately upon its adoption and the Clerk of the County Board is hereby authorized to prepare and deliver certified

copies of this Resolution to the Chief Financial Officer, County Administrator, Director of Purchasing, Finance Director, County Board office, County Auditor and County Engineer.

Respectfully Submitted,

**OPERATIONS & ADMINISTRATIVE COMMITTEE**

**AGREE**

**DISAGREE**

\_\_\_\_\_  
KEITH McDONALD, CHAIRMAN

\_\_\_\_\_  
KEITH McDONALD, CHAIRMAN

\_\_\_\_\_  
JOHN BUTITTA, VICE CHAIRMAN

\_\_\_\_\_  
JOHN BUTITTA, VICE CHAIRMAN

\_\_\_\_\_  
PAUL ARENA

\_\_\_\_\_  
PAUL ARENA

\_\_\_\_\_  
JEAN CROSBY

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JEAN CROSBY

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JOE HOFFMAN

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JOE HOFFMAN

\_\_\_\_\_  
DOROTHY REDD

\_\_\_\_\_  
DOROTHY REDD

\_\_\_\_\_  
JAIME SALGADO

\_\_\_\_\_  
JAIME SALGADO

The above and foregoing Resolution was adopted by the County Board of the County of

Winnebago, Illinois this \_\_\_\_\_ day of \_\_\_\_\_ 2022.

\_\_\_\_\_  
**JOSEPH CHIARELLI**

**CHAIRMAN OF THE COUNTY BOARD  
OF THE COUNTY OF WINNEBAGO, ILLINOIS**

ATTESTED BY:

\_\_\_\_\_  
**LORI GUMMOW**

**CLERK OF THE COUNTY BOARD  
OF THE COUNTY OF WINNEBAGO, ILLINOIS**



## Project Management Services Agreement

Contract #: **2022-04 Riverside Path**

Project Name: **Riverside Boulevard Bicycle/Pedestrian Path Feasibility Study**

This Project Management Services Agreement (the "Agreement") is made and entered into \_\_\_\_\_, **2022**, (the "Effective Date") by and between Region 1 Planning Council ("RPC") and **Winnebago County** ("Client").

WHEREAS, the Client wishes to obtain the Project Management and Fiscal Agent services of RPC; and,

WHEREAS, RPC has the knowledge, skill, and capability to perform such services for the Client.

NOW THEREFORE, in consideration of the foregoing, RPC agrees to provide Project Management and Fiscal Agent services to the Client under the terms and conditions of this Agreement.

1. **Services.** The Client hereby retains RPC to provide Project Management services ("Services") as follows:

- (a) **Purpose:** RPC staff shall work with designated the Client representatives to manage consulting services for conducting a feasibility study for placement of a bicycle/pedestrian path on or adjacent to Riverside Boulevard and the bridge over the I-90 Tollway, connecting the Perryville Bicycle Path to the Sportscore II complex.
- (b) **Scope:** This project shall include R1 staff providing project management of Baxter & Woodman, the consulting firm selected through an RFP process at the request of the Winnebago County Highway Department (see exhibit A). The following work products shall be produced, including:
  - Final report and recommendation(s) for placement of a bicycle/pedestrian path on or adjacent to Riverside Boulevard
- (c) **Completion Date:** Services to be performed under this Agreement shall be completed no later than **February 1, 2023**, or sooner pending the level of participation by primary sources.

Materials required by RPC from the Client to complete the proposal will be requested in writing (via email). Information required to meet the standards of a third-party, independent analysis will be provided by the Client to the RPC on a timely basis. Without timely reply, RPC cannot guarantee timely completion of the analytical report and accompanying recommendations.

RPC will make a written request (via email) to the Client to provide RPC with data, documents or other materials needed to complete the scope of work. The Client shall provide materials to RPC within 48 hours of RPC's written request. If the Client requires additional time to gather requested materials, Client shall notify RPC within 24 hours to negotiate a mutually agreed upon timeframe for the delivery of materials.

- (d) **Estimated Cost:** The Client shall reimburse RPC, as Fiscal Agent, for work performed by Baxter & Woodman at the following rates:

Services	Rate	Estimated Hours	Estimate
Required direct consulting expenses incurred	At cost	-	Up to \$40,200

If for any reason more time is needed to prepare and submit the proposal, RPC shall inform the Client of the reason for the deviation, the estimated amount of additional time needed, and the associated cost difference as soon as the need for the change is known. The Client will be afforded the opportunity to amend this agreement to accommodate the change or to cancel the project with no further obligation to RPC for any additional services rendered.

(e) Assignment of Personnel: RPC may, at its sole discretion, assign RPC personnel to perform the Services under this Agreement. However, RPC shall not transfer this Agreement or performance of this Agreement to another individual or firm.

(f) Maximum Price: In no event shall the total amount charged for work performed under this Agreement exceed \$40,200 unless agreed to in writing by the parties.

2. **Term.** This Agreement will begin on the Effective Date and will remain in full force and effect until the Completion Date unless the Agreement term is extended by mutual written agreement of the parties or is terminated in accordance with Section 6.
3. **Payment.** RPC shall issue monthly invoices to Client for work performed under this Agreement. Fees shall be paid by Client *subject to the Local Government Prompt Payment Act, 50 ILCS 505/1 et seq.* Services may be suspended pending receipt of account balance paid in full.
4. **Confidentiality.** Unless otherwise required by law, RPC will exercise reasonable effort to maintain in confidence information disclosed or submitted to RPC by the Client as confidential information. Confidential information does not include information that:
  - (a) is generally available in the public domain or becomes available to the public through no act of RPC; or
  - (b) is independently known by RPC prior to receipt; or
  - (c) made available to RPC as a matter of lawful right by a third party.

Unless otherwise required by law, all reports, documents, and other deliverables created by RPC pursuant to the terms of this Agreement shall be treated as confidential and will not be made available to any unintended third party without the prior written approval of the Client.

5. **Intellectual Property.** No reports or other documents produced in whole or in part pursuant to the terms of this Agreement shall be the subject of an application for copyright by either party.
6. **Termination.** Either party may terminate this Agreement for material breach upon thirty (30) days written notice, during which time the party alleged to have breached may cure. Additionally, either party may terminate this Agreement without cause upon sixty (60) days written notice to the other party. Upon termination, the Client shall promptly pay RPC for all Services rendered up to and including the effective date of termination pursuant to the Local Government Prompt Payment Act.
7. **Relationship of the Parties.** The parties acknowledge and agree that the Services performed by RPC, its employees, agents, and sub-contractors shall be that of an independent contractor. Neither party is an agent or representative of the other party and has no authority to bind or commit the other party to any agreements or other obligations except those that are within the scope of Services to be provided under this Agreement. Each party shall have the right to publish, distribute, advertise, or otherwise disclose the relationship and the general services created and performed under this Agreement.
8. **Indemnification.** The Client agrees to indemnify and hold RPC and its employees harmless from any loss, claim,

damage, or liability arising out of or in connection with the action or inaction of the Client under this Agreement, including but not limited to provision of data and information used for research and analysis purposes. The Client shall indemnify and hold RPC and its employees harmless from any loss, claim, damage, or liability arising out of or in connection with the Client's use of deliverables provided under this Agreement. If the Client fails to provide information that is needed for the completion of the project, or such information is incorrect, RPC is not liable unless RPC was aware of the inaccuracy or was unaware of the inaccuracy as a result of gross negligence. The Client shall indemnify and hold RPC and its employees harmless from any loss, claim, damage, or liability arising out of or in connection with this failure to provide information if it results in an inability to submit the project by the submission deadline.

RPC shall indemnify, hold harmless the Client, the Client's elected and appointed officials, employees and agents from any and all liability, claims, suits, demands, proceedings and actions, including costs, reasonable fees and expenses of defense arising from any loss, damage, injury, death or loss or damage to property (collectively the "Claims"), to the extent such Claims result from the performance of this Agreement or those Claims are due to any act or omission, neglect, willful acts, errors or misconduct of RPC in its performance under this Agreement.

In the event that the Client elects to cancel the Agreement for any reason other than a material breach, RPC is hereby indemnified from any losses, potential or actual, incurred by the Client as a result of the project not being completed. RPC is further indemnified from any losses, potential or actual, incurred by the Client as a result of research and analytical report materials that are incomplete or of poor quality due to termination of the Agreement.

**9. Representations and Warranties.** RPC represents and warrants that:

- (a) it will perform the Services with reasonable care and skill; and
- (b) the Services and related materials provided under this Agreement will not infringe or violate any intellectual property rights or other right of any third party.

**10. Limitation of Liability.** Either party's liability in contract, tort, or otherwise (including negligence) arising directly out of or in connection with this Agreement or the performance or observance of its obligations under this Agreement and every applicable part of it shall be limited in aggregate to the applicable insurance limits.

**11. Severability.** The invalidity or illegality of one or more provisions of this Agreement shall not affect the enforceability of the remaining provisions.

**12. Applicable Law.** This Agreement shall be governed by the laws of the State of Illinois.

**13. Entire Agreement; Amendments.** This Agreement constitutes the entire understanding between the parties concerning the subject matter hereof. No amendments or changes to this Agreement shall be effective unless made in writing and signed by an authorized representative of each party.

**14. Counterparts.** This Agreement may be executed in counterparts (including facsimile signatures), each of which shall be deemed to be an original and both of which shall constitute one and the same Agreement.

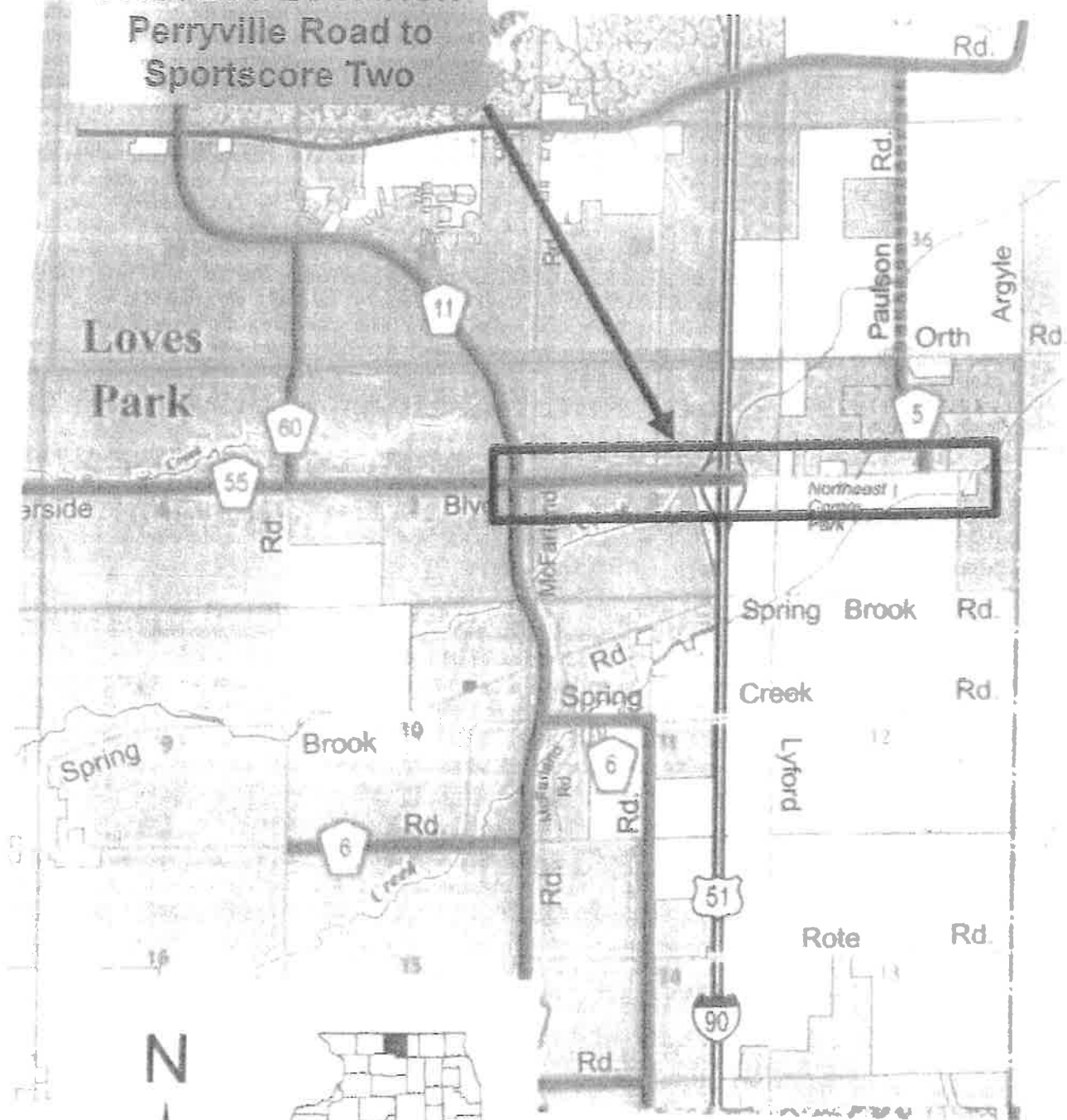
IN WITNESS WHEREOF, the parties hereto have executed this Agreement by proper persons duly authorized.

Authorized Signors & Designated Contacts			
Party	Region 1 Planning Council	Party	Winnebago County
Signature		Signature	
Date Signed		Date Signed	

Signor Name	Michael Dunn Jr.	Signor Name	Joseph Chiarelli
Signor Title	Executive Director	Signor Title	<b>Chairman of the County Board</b>
Agreement	Michael Dunn Jr. <a href="mailto:mdunn@r1planning.org">mdunn@r1planning.org</a> (815)319-4180	Agreement	Joseph Chiarelli <a href="mailto:KElyea@admin.wincoil.gov">KElyea@admin.wincoil.gov</a> (815) 319-4234
Services	Eric Tison <a href="mailto:etison@r1planning.org">etison@r1planning.org</a> (815) 319-4195	Services	Carlos Molina <a href="mailto:cmolina@hwy.wincoil.gov">cmolina@hwy.wincoil.gov</a> (815) 319-4031
Billing	Accounting <a href="mailto:accounting@r1planning.org">accounting@r1planning.org</a> (815) 319-4180	Billing	Deb Grinnell <a href="mailto:dgrinnell@hwy.wincoil.gov">dgrinnell@hwy.wincoil.gov</a> (815) 319-4031
Mail	127 N Wyman St, Ste 100 Rockford, IL 61101	Mail	<b>424 N. Springfield Ave</b> <b>Rockford. IL 61101</b>

**PROJECT LOCATION**

Perryville Road to  
Sportscore Two



**Location Map**





8678 Ridgelle Road, Crystal Lake, IL 60012 • 815.459.1260 • baxterwoodman.com

August 11, 2022

Mr. Eric Tison  
Project Coordinator  
Region 1 Planning Council  
127 N Wyman Street, Suite 100  
Rockford, Illinois 61101

***Subject: Region 1 Planning Council (R1PC) - Proposal for Riverside Boulevard Multi-Use Path Feasibility Study***

Dear Mr. Tison:

The Region 1 Planning Council (R1PC) is seeking the services of a licensed engineering consulting firm to conduct a feasibility study for the placement of a multi-use path adjacent to Riverside Boulevard and the bridge over the I-90 Tollway, connecting the Perryville Bicycle Path to the Sportscore II complex.

#### **Project Summary**

The study will address infrastructure needs and requirements at the proposed location adjacent to Riverside Boulevard to allow for construction of a multi-use path and bridge from the Perryville Path on the west of the I-90 tollway to the Sportscore II complex and hospital on the east side of the Tollway. The study will be consistent with Tollway requirements and guidelines.

#### **Scope of Services**

Laying out a logical plan is the key to the smartest and most cost effective approach to the project. Below is our anticipated scope of services to successfully complete this study.

#### **1. EARLY COORDINATION AND DATA COLLECTION**

- A. ***Data Collection:*** Obtain, review, and evaluate the following information provided by R1PC for use in design:
- 1) Utility Atlases
  - 2) Existing Roadway and Structural Plans
  - 3) GIS Shape files surrounding the project limits
  - 4) Aerial Photography
  - 5) County Contours
  - 6) Environmental Studies
  - 7) Hydraulic and Hydrologic information and calculations
  - 8) ROW, GIS, and property data

- B. *Field evaluation:* Perform a field evaluation of the condition of existing topography, access, drainage, sidewalk, multi-use path, and guardrail. Observe and photograph the project area and immediate surroundings.
- C. *Topographic Survey:* Topographic survey will not be performed within the scope of this project. Schematic drawings will be developed from aerial photography and field verified at select locations.

## **2. AGENCY COORDINATION**

- A. *Illinois State Toll Highway Authority (ISTHA):* Coordinate, and if necessary, attend one meeting with a representative of ISTHA to identify constraints and guidelines that will be required for each alternative.
- B. *R1PC Steering Committee:* Coordinate with stakeholders of the R1PC Steering Committee to identify constraints and guidelines that will be required for each alternative. Stakeholders include Winnebago County, City of Loves Park, and the City of Rockford. No in-person meetings are included under the scope of this sub-deliverable.

## **3. DEVELOP PROPOSED ALTERNATIVES**

- A. *Identify Existing Constraints:* Identify and review the following constraints within the project limits:
  - 1) Existing utility infrastructure
  - 2) Site topography and existing detention locations
  - 3) Environmental conditions including wetlands, floodways, and floodplains
  - 4) Existing right-of-way and easements
  - 5) Land Use and zoning
- B. *Alternative Geometric Development:* Analyze and schematically develop alternative alignments, configurations, and geometrics along Riverside Boulevard right-of-way. Alternatives will be developed on aerials and based upon materials from the Early Coordination and Data Collection. The following multi-use path alignment alternatives will be developed:
  - 1A. The north side of Riverside Boulevard
  - 1B. The south side of Riverside Boulevard
  - 2A. Widening of the existing I-90 bridge
  - 2B. Construction of a separated pedestrian bridge
  - 3. Potential 3<sup>rd</sup> alternative
- C. *Alternative Meeting:* Meet in person with the R1PC Steering Committee after alternative 1A and 1B have been developed to determine the preferred alternative. Alternative 2 will be developed based upon the preferred alternative 1.

### **3. DRAFT FEASIBILITY STUDY**

- A. *Prepare Draft Feasibility Study:* Prepare the Draft Feasibility Study that includes data, analysis, methods, and recommendations with exhibits. Submit electronically to the R1PC Steering Committee. The Draft Feasibility Study will include the following sections:

- 1) Introduction
- 2) Project Existing Conditions and Challenges
- 3) Evaluation of Alternatives including preliminary cost estimates for alternative 2.
- 4) Funding Opportunities
- 5) Recommendations and Next Steps

### **4. FINAL FEASIBILITY STUDY**

- A. *Review Comments:* Review and address comments provided by the R1PC Steering Committee. 1-2 rounds of comments are included in the scope of this project.
- B. *Draft Feasibility Study Meeting:* Meet in person with the R1PC Steering Committee to discuss the Draft Feasibility Study review comments.
- C. *Prepare Final Feasibility Study:* Prepare the Draft Feasibility Study and submit electronically to the R1PC Steering Committee.

- 5. MANAGE PROJECT** – Plan, schedule, and control the activities that must be performed to complete the project including budget, schedule, and scope. Coordinate with R1PC and project team to ensure the goals of the project are achieved. Prepare and submit monthly invoices and provide regular updates to R1PC.

- 6. DELIVERABLES** – Following is a list of anticipated final deliverables to R1PC for this project:

- A. Electronic files used in project development including Exhibits.
- B. Electronic Record of Design files including memos, exhibits and final report (pdf or as appropriate). Baxter & Woodman utilizes an electronic filing system in lieu of hard copies.

- 7. NOT INCLUDED** – The following items are not included within the scope of this project but can be provided as additional services to the contract.

- A. Topographic Survey
- B. Wetland Delineations
- C. Drainage and Detention Calculations
- D. Meetings not identified in the deliverables above
- E. Additional alignments not identified in the deliverables above
- F. Public Outreach
- G. Funding Applications



### Schedule

We will complete the above tasks within seven months of authorization to proceed as outlined in Attachment A.

### Engineering Fee

Our engineering fee for the above scope of services is based on our hourly billing rates for actual work performed plus reimbursement for out-of-pocket expenses including mileage, will not exceed **\$40,200**. Optional services such as additional alternatives, visualization, or drone imagery can be added for an additional fee.

Thank you for the opportunity to submit our proposal for this project. Upon your written authorization to proceed, we will begin working immediately. Please contact me if you should have any questions or need additional information.

The attached Standard Terms and Conditions apply to this proposal. If you find this proposal acceptable, **please sign and return one copy for our files.**

Sincerely,

BAXTER & WOODMAN, INC.  
CONSULTING ENGINEERS

A handwritten signature in black ink, appearing to read "Jason J. Fluhr".

Jason J. Fluhr, P.E.  
Vice President

Attachment

REGION 1 PLANNING COUNCIL

ACCEPTED BY:

A handwritten signature in black ink, appearing to read "Eric Tison".

TITLE:

A handwritten signature in black ink, appearing to read "Executive Director".

DATE:

A handwritten signature in black ink, appearing to read "August 11, 2022".

\\corp.baxwood.com\project\Azure\RE1PC\220931-Riverside Blvd Bike Ped Path  
Feasibility\Contracts\Work\220931.30\_RiversideBlvdBikePedPathFeasStudy.docx

# Attachment A: Project Schedule

 Design
  Submittal

Task	2022												2023	
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb					
<b>Feasibility Study</b>														
Consultant Selection & Kickoff Meeting														
Agency Coordination														
Develop Alternatives 1A and 1B														
Alternative Meeting														
Develop Alternatives 2A and 2B														
Prepare Draft Feasibility Study														
Draft Feasibility Study Meeting														
Prepare Final Feasibility Study														

## STANDARD TERMS AND CONDITIONS

PLEASE READ THESE STANDARD TERMS AND CONDITIONS ("TERMS") CAREFULLY BEFORE EXECUTING THE LETTER PROPOSAL PRESENTED BY BAXTER & WOODMAN, INC. ("BW"). BY EXECUTING THE LETTER PROPOSAL, OWNER AGREES TO BE BOUND BY THESE TERMS. THE PROVISIONS OF THE LETTER PROPOSAL, AND THE PROVISIONS OF ANY DOCUMENT REFERRING TO THESE TERMS OR THE LETTER PROPOSAL, ALL OF WHICH SHALL COLLECTIVELY CONSTITUTE THE "AGREEMENT".

**Owner's Responsibility** - Provide BW with all criteria and full information for the "Project", which is generally otherwise identified in the Letter Proposal. BW will rely, without liability, on the accuracy and completeness of all information provided by the Owner (as defined in the Letter Proposal) including its consultants, contractors, specialty contractors, subcontractors, manufacturers, suppliers and publishers of technical standards ("Owner Affiliates") without independently verifying that information. The Owner represents and warrants that all known hazardous materials on or beneath the site have been identified to BW. BW and their consultants shall have no responsibility for the discovery, presence, handling, removal or disposal of, or exposure of persons to, unidentified or undisclosed hazardous materials unless this service is set forth in the Letter Proposal.

**Schedule for Rendering Services** - The agreed upon services shall be completed within a reasonable amount of time. If BW is hindered, delayed or prevented from performing the services as a result of any act or neglect of the Owner, any Owner Affiliate, or force majeure event, BW's work shall be extended and the rates and amounts of BW's compensation shall be equitably adjusted in a written instrument executed by all Parties.

**Invoices and Payments** - The fees to perform the proposed scope of services constitutes BW's estimate to perform the agreed upon scope of services. Circumstances may dictate a change in scope, and if this occurs, an equitable adjustment in compensation and time shall be agreed upon by all Parties by written agreement. No service for which added compensation will be charged will be provided without first obtaining written authorization from the Owner. BW invoices shall be due and owing by Owner in accordance with the terms and provisions of the State of Illinois Local Government Prompt Payment Act (50 ILCS 505/1 et seq.).

**Opinion of Probable Construction Costs** - BW's opinion of probable construction costs represents its reasonable judgment as a professional engineer. Owner acknowledges that BW has no control over construction costs or contractor's methods of determining prices, or over competitive bidding, or market conditions. BW cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from BW's opinion of probable construction costs.

**Standards of Performance** - (1) The standard of care for all services performed or furnished by BW will be the same care and skill ordinarily used by professionals practicing under similar circumstances, at the same time and in the same locality on similar projects. BW makes no warranties, express or implied, in connection with its services; (2) BW shall be responsible for the technical accuracy of its services and documents; (3) BW shall use reasonable care to comply with applicable laws, regulations, and Owner-mandated standards; (4) BW may employ such sub-consultants as BW deems necessary to assist in the performance or furnishing of the services, subject to reasonable, timely, and substantive objection by Owner; (5) BW shall not supervise, direct, control, or have authority over any contractors' work, nor have authority over or be responsible for the means, methods, techniques, sequences, or procedures of construction selected or used by any contractor, or the safety precautions and programs incident thereto, for security or safety at the site, nor for any failure of any contractor to comply with laws and regulations applicable to such contractor's furnishing and performing of its work; (6) BW neither guarantees the performance of any contractor nor assumes responsibility for any contractor's failure to furnish and perform the work in accordance with the contract documents; (7) BW is not acting as a municipal advisor as defined by the Dodd-Frank Act. BW shall not provide advice or have any responsibility for municipal financial products or securities; (8) BW is not responsible for the acts or omissions of any contractor, subcontractor, or supplier, or any of their agents or employees or any other person at the site or otherwise furnishing or performing any work; (9) Shop drawing and submittal review by BW shall apply only to the items in the submissions and only for the purpose of assessing if, upon installation or incorporation in the Project work, they are generally consistent with the contract documents. Owner agrees that the contractor is solely responsible for the submissions (regardless of the format in which provided, i.e. hard copy or electronic transmission) and for compliance with the construction documents. Owner further agrees that BW's review and action in relation to these submissions shall not constitute the provision of means, methods, techniques, sequencing or procedures of construction or extend to safety programs or precautions. BW's consideration of a component does not constitute acceptance of the assembled item; (10) BW's site observation during construction shall be at the times agreed upon in the Project scope. Through standard, reasonable means, BW will become generally familiar with observable completed work. If BW observes completed work that is inconsistent with the construction documents, information shall be communicated to the contractor and Owner for them to address.

**Insurance** - BW will maintain insurance coverage with the following limits and Certificates of Insurance will be provided to the Owner upon written request:

Worker's Compensation:	Statutory Limits	Excess Umbrella Liability:	\$10 million per claim and aggregate
General Liability:	\$1 million per claim	Professional Liability:	\$5 million per claim
	\$2 million aggregate		\$5 million aggregate
Automobile Liability:	\$1 million combined single limit		

In no event will BW's collective aggregate liability under or in connection with this Agreement or its subject matter, based on any legal or equitable theory of liability, including breach of contract, tort (including negligence), strict liability and otherwise, exceed the contract sum to be paid to BW's under this Agreement. Any claim against BW arising out of this Agreement may be asserted by the Owner, but only against the entity and not against BW's directors, officers, shareholders or employees, none of whom shall bear any liability and may not be subject to any claim.

**Indemnification and Mutual Waiver** - (1) To the fullest extent permitted by law, BW shall indemnify and hold harmless the Owner and its officers and employees from claims, costs, losses, and damages ("Losses") arising out of or relating to the Project, provided that such Losses are attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property, including the loss of use resulting therefrom, but only to the extent caused by any grossly negligent act or omission of BW; (2) To the fullest extent permitted by law, Owner shall indemnify and hold harmless BW and its officers, directors, employees, agents and consultants from and against any and all Losses (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to the Project provided that any such Losses are attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property, including the loss of use resulting therefrom, but only to the extent arising out of or occurring in connection with the Owner's, or Owner's officers, directors, employees, consultants, agents, or others retained by or under contract to the Owner, negligent act or omission, willful misconduct, or breach of this Agreement; (3) To the fullest extent permitted by law, Owner and BW waive against each other, and the other's employees, officers, directors, insurers, and consultants, any and all claims for or entitlement to special, incidental, indirect, enhanced, punitive, or consequential damages, in each case regardless of whether such party was advised of the possibility of such losses or damages or such losses or damages were otherwise foreseeable, and notwithstanding the failure of any agreed or other remedy of its essential purpose; (4) In the event Losses or expenses are caused by the joint or concurrent fault of the BW and Owner, they shall be borne by each party in proportion to its respective fault, as determined by a mediator or court of competent jurisdiction; (5) The Owner acknowledges that BW is a business corporation and not a professional service corporation, and further acknowledges that the corporate entity, as the party to this contract, expressly avoids contracting for individual responsibility of its officers, directors, or employees. The Owner and BW agree that any claim made by either party arising out of any act of the other party, or any officer, director, or employee of the other party in the execution or performance of the Agreement, shall be made solely against the other party and not individually or jointly against such officer, director, or employees.

**Termination** - Either party may terminate this Agreement upon ten (10) business days' written notice to the other party in the event of failure by the other party to comply with the terms of the Agreement through no fault of the terminating party. A condition precedent to termination shall be conformance with the Dispute Resolution terms below. If this Agreement is terminated, Owner shall receive reproducible copies of drawings, developed applications and other completed documents upon written request. Owner shall be liable, and shall promptly pay BW, for all services and reimbursable expenses rendered through the effective date of suspension/termination of services.

**Use of Documents** - All BW documents (data, calculations, reports, Drawings, Specifications, Record Drawings and other deliverables, whether in printed form or electronic media format, provided by BW to Owner pursuant to this Agreement) are instruments of service and BW retains ownership and property interest therein (including copyright and right of reuse). Owner shall not rely on such documents unless in printed form, signed or sealed by BW or its consultant. Electronic format of BW's design documents may differ from the printed version and BW bears no liability for errors, omissions or discrepancies. Reuse of BW's design documents is prohibited and Owner shall defend and indemnify BW from all claims, damages, losses and expenses, including attorney's fees, consultant/expert fees, and costs arising out of or resulting from said reuse. Project documents will be kept for time periods set forth in BW's document retention policy after Project closeout.

**Successors, Assigns, and Beneficiaries** - Nothing in this Agreement shall be construed to create, impose, or give rise to any duty owed by Owner or BW to any third party, including any lender, contractor, subcontractor, supplier, manufacturer, other individual, entity or public body, or to any surety for or employee of any of them. All duties and responsibilities undertaken pursuant to this Agreement are for the sole and exclusive benefit of the Owner and BW and not for the benefit (intended, unintended, direct or indirect) of any other entity or person.

**Dispute Resolution** - All disputes between the Parties shall first be negotiated between executives who have authority to settle the dispute for a period of thirty (30) days. If unresolved, disputes shall be then submitted to mediation as a condition precedent to litigation. The mediation session shall be held within forty-five (45) days of the retention of the mediator, and last for at least one (1) full mediation day, before any party has the option to withdraw from the process. If mediation is unsuccessful in resolving a Dispute, then the parties may seek to have the Dispute resolved by a court of competent jurisdiction.

**Miscellaneous Provisions** - (1) This Agreement is to be governed by the law of the state or jurisdiction in which the project is located; (2) all notices must be in writing and shall be deemed effectively served upon the other party when sent by certified mail, return receipt requested; (3) all express representations, waivers, indemnifications, and limitations of liability included in this Agreement will survive its completion and/or termination for any reason; (4) any provision or part of the Agreement held to be void or unenforceable under any laws or regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon the Owner and BW, which agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that expresses the intention of the stricken provision; (5) a party's non-enforcement of any provision shall not constitute a waiver of the provision, nor shall it affect the enforceability of that provision or of the remainder of this Agreement; (6) to the fullest extent permitted by law, all causes of action arising under this Agreement shall be deemed to have accrued, and all statutory periods of limitation shall commence, no later than the date of substantial completion, which is the point where the Project can be utilized for the purposes for which it was intended; (7) this Agreement, together with any other documents incorporated herein by reference, constitutes the sole and entire agreement of the parties with respect to the subject matter of this Agreement and supersedes all prior and contemporaneous understandings, agreements, representations and warranties, both written and oral, with respect to such subject matter; (8) no amendment to or modification of this Agreement is effective unless it is in writing and signed by each party.

**RESOLUTION  
OF THE  
COUNTY BOARD OF THE COUNTY OF WINNEBAGO, ILLINOIS**

2022 CR \_\_\_\_\_

SUBMITTED BY: OPERATIONS AND ADMINISTRATIVE COMMITTEE

SPONSORED BY: KEITH MCDONALD

---

**RESOLUTION ADOPTING THE REGIONAL SOLID WASTE MANAGEMENT PLAN:  
A PLAN FOR BOONE AND WINNEBAGO COUNTIES 2022-2042**

---

**WHEREAS**, the Illinois Solid Waste Planning and Recycling Act (415 ILCS 15/) requires all Illinois counties to update their 20-year comprehensive solid waste management plan every five (5) years; and

**WHEREAS**, Boone and Winnebago counties partnered with the Region 1 Planning Council (R1PC) to create a regional plan update on behalf of both counties; and

**WHEREAS**, the Regional Solid Waste Management Plan: A Plan for Boone and Winnebago Counties 2022-2042 was prepared in accordance with the Solid Waste Planning and Recycling Act and utilizes guidance set forth in the Illinois Materials Management Advisory Committee's July 2021 Report to the General Assembly; and

**WHEREAS**, the Operations and Administrative Committee recommends approval of the Regional Solid Waste Management Plan.

**THEREFORE, BE IT RESOLVED**, that the County Board of the County of Winnebago, Illinois, hereby adopts the Regional Solid Waste Management Plan: A Plan for Boone and Winnebago Counties 2022-2042.

**BE IT FURTHER RESOLVED**, that the Resolution shall be in full force and effect immediately upon its adoption.

**BE IT FURTHER RESOLVED**, that the Clerk of the County Board shall prepare and deliver certified copies of this Resolution to the County Board Office, County Administrator and the Executive Director of Region 1 Planning Council.

Respectfully submitted,  
**OPERATIONS AND ADMINISTRATIVE COMMITTEE**



**AGREE**

\_\_\_\_\_  
Keith McDonald, Chairman

\_\_\_\_\_  
John Butitta, Vice Chairman

\_\_\_\_\_  
Jean Crosby

\_\_\_\_\_  
Paul Arena

\_\_\_\_\_  
Joe Hoffman

\_\_\_\_\_  
Dorothy Redd

\_\_\_\_\_  
Jaime Salgado

**DISAGREE**

\_\_\_\_\_  
Keith McDonald, Chairman

\_\_\_\_\_  
John Butitta, Vice Chairman

\_\_\_\_\_  
Jean Crosby

\_\_\_\_\_  
Paul Arena

\_\_\_\_\_  
Joe Hoffman

\_\_\_\_\_  
Dorothy Redd

\_\_\_\_\_  
Jaime Salgado

The above and foregoing Resolution was adopted by the County Board of the County of Winnebago, Illinois this \_\_\_\_\_ day of \_\_\_\_\_, 2022.

\_\_\_\_\_  
Joseph V. Chiarelli, Chairman of the  
County Board of the County of Winnebago,  
Illinois

ATTEST:

\_\_\_\_\_  
Lori Gummow, Clerk of the  
County Board of the  
County of Winnebago, Illinois



# Regional Solid Waste Management

---

Appendices A-F

*Final Draft September 2022*

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# Appendix A: A Report on Waste-to-Energy & Waste Utilization Options in the Rockford Region

## Executive Summary

Boone and Winnebago Counties are currently exploring waste-to-energy (WTE) and waste utilization infrastructure options to increase waste diversion, boost energy resilience, and address the finite nature of landfill capacity and the associated negative environmental impacts of waste infrastructure. Current solid waste management assets in the region lack WTE components; instead, materials with diversion potential are placed in local landfills. Based on initial research conducted by the National Renewable Energy Laboratory (NREL) and waste diversion potential modeling from the University of Illinois-Chicago, Northern Illinois has the opportunity to transform and use waste for the region's energy needs (Refer to Appendix E: Public Survey, Comments & Data Methodology for more detailed information). In order to properly evaluate WTE technology and waste utilization options, and address community concerns, the composition of waste produced and routed to Boone and Winnebago Counties must be studied better through increased participation in data reporting. This is a critical recommendation, as waste stream compositions affect the success of WTE technology.

Based on current policy, incentives and regulations, NREL analysis, local feedback, and waste composition projections, the following WTE recommendations should be explored further:

1. Increase Knowledge of Local Waste Stream Compositions
2. Adapt Landfill Infrastructure for Landfill Gas Capture
3. Conduct Further Anaerobic Digestion Siting & Feasibility Analysis
4. Conduct Further Composting Siting & Feasibility Analysis

WTE opportunities for both Boone and Winnebago Counties include the adaptation of existing, traditional waste infrastructure while exploring anaerobic digestion and composting methods. Information regarding environmental impacts, waste origins, facility location, limited landfill capacity, odor control and energy resilience were taken into account in order to appropriately address local needs and concerns. This criteria should be continually re-evaluated in further pursuit of WTE options and opportunities.

## Introduction

Energy recovery from waste is the conversion of non-recyclable waste materials into usable heat, electricity, or fuel through a variety of processes, including combustion, gasification, pyrolysis, anaerobic digestion (AD), and landfill gas (LFG) capture.<sup>i</sup> There are roughly 75 combustion facilities in the United States, with Florida and New York leading the industry.<sup>ii</sup>

Energy recovery is penultimate in the waste management hierarchy, meaning that other methods (e.g. source reduction) must be exhausted before utilizing waste treatment and disposal methods. However, WTE processes are growing in number with advancing technology, but remain dependent on material in waste stream compositions. For example, a waste stream with a large amount of organic material may be more suited to composting as a waste utilization method, as opposed to a waste stream with mostly non-recyclable, non-organic material. Due to the nature of the largely privatized waste industry and new technology costs, WTE technology has been fairly limited in the Northern Illinois region. Existing waste utilization efforts in the region are almost exclusive to converting wastewater sludge into fertilizer or compost through sanitation authority facilities (The Four Rivers Sanitation Authority and the City of Belvidere's Waste Water Sanitation District). Though outside both Boone and Winnebago Counties, Ameresco Inc. built a landfill gas-to-energy facility near Rockford (Davis Junction) in 2016, converting landfill gas into electricity.<sup>iii</sup> Moreover, increasing the local presence of WTE technology can



A Landfill in Winnebago County.

address many issues Northern Illinois residents face, a few of which are:

- Finding new sources of renewable energy generation;
- Mitigating waste-related odors and emissions;
- Dealing with diminishing landfill capacity; and
- Adapting sunsetting landfill infrastructure.

This report analyzes potential WTE/waste utilization options based on a targeted Cost-Benefit Analysis (CBA) conducted by NREL. The report also considered other factors such as public feedback, Solid Waste Advisory Committee (SWAC) suggestions, existing infrastructure, financial incentives, best practices, waste diversion rates, waste material projections, and public policy. Landfill gas capture, anaerobic digestion, and composting are each detailed in a SWOT analysis to inform which WTE technology or waste utilization method should be considered in order to support Northern Illinois' future waste management practices.

## Data & Methodology

### Internal Methodology

Environmental impacts, location size required, energy needs, odor control, and cost were all considered in the evaluation of each WTE method. Currently, waste is largely managed through the traditional landfill process. This process has a finite capacity and results in environmental and aesthetic impacts in addition to long term costs. These factors played a significant role in analysis, as constructing a new facility with the same constraints will potentially lack public support and feasibility. This criteria, in addition to the supporting data provided by UIC and NREL, allowed for a multi-layered initial evaluation of WTE technology for Boone and Winnebago Counties.

### UIC Projections

Dr. Ning Ai and PhD candidate Junjun Zheng formed a series of waste composition and diversion projections based on historical waste generation rates in Illinois and projected population, housing units, and employment in duo counties. For more detailed information, refer to Chapter 1: Introduction within Regional Solid Waste Management: A Plan for Boone & Winnebago Counties, in addition to Appendix E: Public Survey, Comments & Data Methodology.

### Cost-Benefit Analysis by National Renewable Energy Laboratory

The WTE methods and subsequent feasibility detailed in this report were made possible through technical assistance provided by a research team at the National Renewable Energy Laboratory (NREL). NREL provided a cost-benefit analysis (CBA) of food waste for various methods such as landfill gas capture, composting, and anaerobic digestion. CBA assesses a full slate of costs and benefits, including societal impacts and willingness to pay (WTP), to generate a net present value (NPV). In the CBA provided by NREL, NPV is presented as the sum of annualized costs and benefits for each facility in dollars per ton. More information regarding this CBA can be found in Appendix E: Public Survey, Comments & Data Methodology.

## Low Carbon Fuel Standard

The State of California accepts fuel from other regions, provided it is used as a transportation fuel in the state. In other words, the fuel can be produced in another state, transported via pipeline or other means, and then utilized in California to obtain credits.

*Source: NREL*

## Applicable Waste Regulations, Policy, & Incentives

The large-scale, societal benefits that renewable and sustainable energy provide are often realized without relevant compensation, and there is no exception for WTE technologies. For instance, the capture of methane derived from decomposing organic solid waste, like food waste, reduces greenhouse gas emissions and improves environmental conditions. However, there are few if any incentives available on a national scale to promote the capture of methane. Market incentive programs adopted in other regions provide a glimpse at the potential policy changes and economic incentives Region 1 could employ in order to increase the implementation of WTE practices. While the EPA and IEPA acknowledge the benefits of diverting waste from landfills, both agencies remain in favor of source reduction over WTE practices.

## Federal Considerations

The US EPA recommends and encourages communities to adopt "integrated waste management" systems tailored to their needs.<sup>iv</sup> An integrated waste management system may include waste combustion for energy recovery. The overall goal of an integrated waste management system is to use a combination of methods to safely and effectively manage municipal solid waste, prioritizing waste reduction and diversion prior to energy recovery. However, policies that push for a clean energy economy, which have yet to be implemented at a federal level, could prove to be beneficial to the creation and advancement of WTE efforts. Waste streams are as complex as the humans that produce them, which means no single method can appropriately accommodate all waste. A combination approach to prioritize waste reduction allows for more diversion opportunities and appropriate technical management and oversight for non-traditional, hazardous waste.

## Renewable Identification Numbers

The EPA's Renewable Fuel Standard (RFS) Program requires a specific volume of renewable fuel to replace or reduce the quantity of petroleum-based fuel. Renewable Identification Numbers (RINs) were created for the energy industry to reliably comply with RFS. A RIN is a ticket for a set volume of biofuel produced. Every petroleum-based energy refinery is required to blend a certain quantity of renewable fuel with non-renewable fuel, and use RINs to verify their compliance to the EPA. This makes RINs valuable to energy refiners and provides an incentive to renewable energy producers. Methane generation from WTE sites qualify as a renewable energy source for RIN credits. These RINs can be sold to refiners who have not met their blending RFS.

One drawback to programs that utilize carbon-backed currencies is their reliance on the existence of a carbon emitting network. RINs work as mechanisms to monetarily quantify carbon and its negative externalities during the transitional period from petroleum-based energy generation to renewable energy generation. However, as carbon emission standards become increasingly more strict, infrastructure that relies on said incentives may no longer benefit from carbon-backed currencies.

## State Considerations

The IEPA has several comprehensive forms of legislation to examine waste management impacts and operations in Illinois. Similar to the Federal EPA, 'Combustion with Energy Recovery' is the third order of waste diversion preference behind 'Recycling and Reusing' and 'Volume Reduction at the Source,' as established in the Illinois Solid Waste Management Act. The State of Illinois excludes municipal solid waste (MSW) combustion for eligibility in renewable portfolio standards that include solar thermal energy, wind, tree waste, hydropower, organic waste biomass, and anaerobic digestion.<sup>v</sup> Outside of agricultural composting sites, most composting facilities require an IEPA permit. Anaerobic digestion facilities require a permit if food scraps are collected from off-site. However, no permit is required if the digester is at the same source as the food scraps AND no off-site materials are accepted.<sup>vi</sup> This clearly favors decentralized digestion sites, where the excess methane can be collected and utilized by the facility.

## Cap and Trade Programs

Cap and trade programs similar to those in California and Oregon allow jurisdictions to set a total amount of carbon dioxide (CO<sub>2</sub>) emissions for polluters as well as a per ton price on carbon. Those who are reducing or mitigating emissions can sell unused emissions credits.<sup>vii</sup> As the respective governing body nears its zero-emissions target, the allowed carbon to be emitted decreases. Profit-seeking emitters are initially incentivized to reduce emissions and make their production methods more sustainable congruent to the expected decrease in carbon allowances. Under current market scenarios outside of this framework, firms that make their production processes less carbon intensive earn few tangible and fiscal benefits proportional to their efforts.

With cap and trade programs, those same firms are rewarded for decreasing their emissions so that their spare allowances (which can expire) can be sold to less successful or more polluting firms who have exceeded their own allowances. WTE facilities that seek to process methane for fuel may collect allowances for reducing GHG emissions while selling the excess energy. Those emission allowances can be sold throughout the established market to generate additional revenue for the facility. While the establishment of a cap and trade market can occur at a federal level, its likelihood and impact is greater at a state and regional level.

## Renewable Energy Credits

The State of Illinois' Renewable Energy Credit (REC) procurements are another form of market incentives for WTE efforts. A single REC is produced when a renewable energy source generates one megawatt-hour of electricity and delivers it to the grid. RECs are a way to track and monetize the environmental benefits of avoiding carbon or pollution and compensate the generators. Once created, RECs can be purchased by businesses seeking to reduce their carbon footprint. Whereas cap and trade incentivizes carbon emitters to reduce their emissions, RECs are given to sustainable energy producers to increase their profitability to support the positive benefits renewable energy provides. RECs can provide additional revenue for facilities that produce renewable energy from unaltered organic waste, anaerobic digestion, biodiesel, and landfill gas (generated within Illinois).<sup>viii</sup>

## WTE & Waste Utilization Options

This section provides an overview of several existing waste to energy (WTE) technologies and waste utilization options specific to organic waste. The impacts and requirements associated with WTE technologies such as landfill gas capture, anaerobic digestion, and composting technologies vary and are discussed further. Lastly, an evaluation of the feasibility of these options is conducted by weighing all factors, including cost and profits.

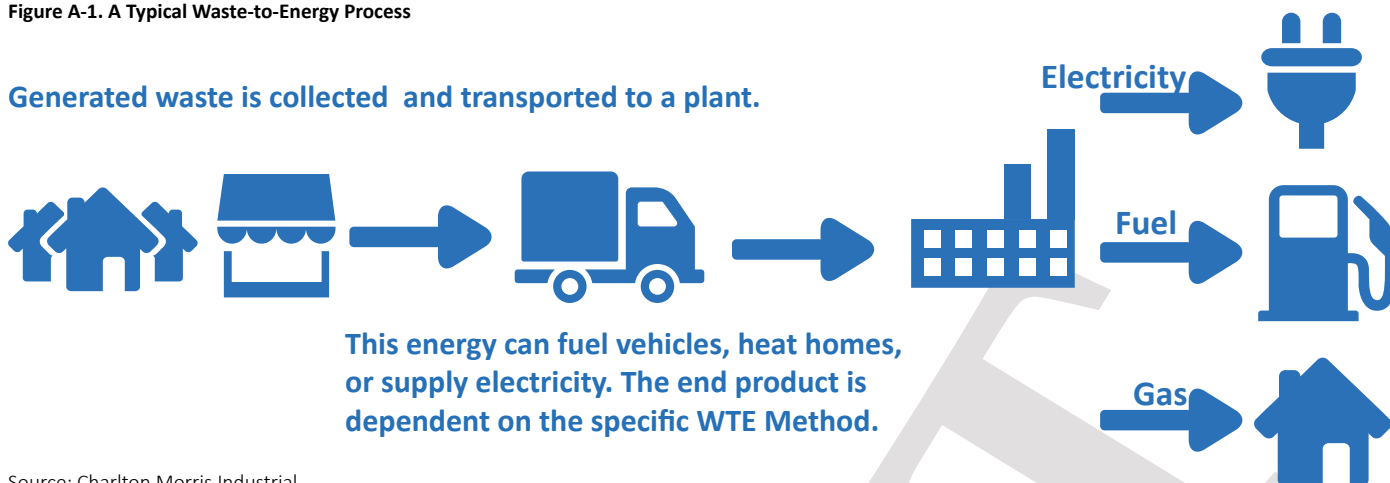
## Landfill Gas Capture

Landfill gas capture is a WTE system in which the gases produced from landfills are utilized to create power, heat, and transportation fuels. The decomposition of organic waste under anaerobic conditions in landfills produces landfill gas (LFG). This gas is composed of approximately 50 percent methane and 50 percent CO<sub>2</sub>, with a very small percentage of other gases.<sup>ix</sup> Methane produced by this biological process can be converted into energy through the establishment of a gas capture system.

As of October 2021, there were 2,630 landfills located in the United States.<sup>x</sup> Most of these sites passively vent LFG and only 550 sites have LFG collection system in place.<sup>xi</sup> Some of these LFG projects flare the collected gas, while others use it beneficially to generate various forms of energy. Locally, Winnebago Landfill has a gas collection system to flare LFG, but it does not yet produce energy from this process.



Figure A-1. A Typical Waste-to-Energy Process



Source: Charlton Morris Industrial

Landfill flares are intended to control the amount of landfill gas that is produced and is a component of a larger WTE process. Landfills are required to capture emitted gases and ignite them using a flare, regardless of whether using a LFG energy system. Excess methane is ignited by a flare, converting the methane into CO<sub>2</sub>, a less potent GHG. Landfill flares are especially important to sites expanding their WTE systems, as they aid in the control and handling of LFG.

Facilities that utilize the LFG rather than flaring it will transport gas through a well using blowers or vacuum systems to the location where the gas will be treated further. The end product that is generated varies according to the WTE pathway utilized.<sup>xii</sup> The pathways analyzed in this report are electricity, compressed natural gas, and combined heat and power (CHP). Further information regarding the specifications and feasibility of these pathways are detailed in this section.

### Landfill Electricity

As of September 2021, approximately 70 percent of the 550 U.S. landfill facilities with WTE technology generate electricity. Landfills with existing gas collection systems have the potential to harness LFG for energy. The sale of LFG-generated energy acts as an additional revenue stream to landfills.

The waste stream must contain enough organic matter to eventually break down into LFG.<sup>xiii</sup> This system has associated capital, product, and O&M costs that must be offset by the revenue from tipping fees and product profits in order to be considered economically feasible.

### Landfill Renewable Natural Gas

Approximately 13 percent of landfills with LFG capture systems treat LFG until it is of comparable quality to fossil natural gas. This process consists of removing CO<sub>2</sub> and other impurities from the captured LFG. The resulting renewable natural gas (RNG) can be injected into the natural gas pipeline system or used as a transportation fuel in the form of compressed or liquefied natural gas, CNG or LNG, respectively. Profits originate from tipping fees, product profits, and government incentives. One advantage to this method includes the direct creation of an estimated 15.7 jobs, and the indirect creation of approximately 45 to 55 jobs that are related to the construction and operation of landfill CNG.<sup>xiv</sup>

Landfill CNG facilities may increase profitability from a Low Carbon Fuel Standards (LCFS) program by earning credits for producing fuel with a lower carbon standard (provided there is

a market for landfill CNG). Though Governor Pritzker proposed a Midwestern LCFS in 2020, it is not in operation as of 2021. Two factors that impact a landfill CNG system's cost-profit ratios are sensitivity to changes in methane potential and its efficiency of the gas disposal system. Additionally, government incentives may experience fluctuations in demand-based prices. Similar to other landfill gas pathways, this is a stop-gap solution to solve the larger issue of waste reduction and diversion.

### Landfill Combined Heat & Power

In the U.S., approximately 17 percent of landfills with ongoing LFG-to-energy practices directly use LFG via CHP systems.<sup>xv</sup> The heat produced from the LFG-to-energy process can create a more energy-efficient facility in addition to heating local businesses via pipeline (within approximately 5 miles from the landfill). The costs and revenues associated with this pathway are sensitive to change and may not always be profitable. The product capital cost for nonresidential food waste is significant and makes this option less feasible than residential or total food waste.

### Strengths, Weaknesses, Opportunities, & Threats

#### Strengths

The Federal Clean Air Act (CAA) specifies that landfills over a certain size must have gas collection systems in place to reduce air pollution. Since these gas collection systems are already in place, the first step of LFG-to-energy is fulfilled. The utilization of LFG collection as an energy source can provide several benefits for landfills and the community. Among government incentives, RIN credits for the RFS program can be earned, traded, and sold for profit.<sup>xvi</sup> WTE processes may provide additional revenue streams to landfills and reduce operating costs. LFG-to-energy has many applications. The generated heat can be used directly, electricity can be used on-site, sold to the grid or power electric vehicles, and transportation fuels can power natural gas vehicles. Participating residents may also experience lower energy costs. Additionally, LFG capture systems can economically benefit the local community through job creation (via construction and facility operations). LFG-powered energy also benefits the local environment through better air quality, reduced methane emissions, and providing an alternative option to fossil fuels.<sup>xvii</sup> From a global perspective, this method positively impacts climate change efforts, as it reduces GHG emissions in the atmosphere.

#### Weaknesses

While landfill gas capture reduces harmful methane emissions, it is less effective for energy generation compared to other WTE methods that take multiple material types, such as combustion. This is attributed to the fact that LFG capture only yields energy from the biodegradable materials in a landfill. Like many WTE options, landfill gas capture is also dependent on waste streams entering the landfill. A constant stream of waste is needed to sustain energy generation, and it is important that the waste contains enough organic matter, as non-organic waste will not contribute to LFG energy generation.<sup>xviii</sup>

LFG capture systems of energy generation are dependent on the mass disposal of waste. Limited landfill capacity also presents an issue. It may not be feasible for a landfill approaching the end of its life expectancy to install WTE processing systems.



Landfill Gas Capture System Component in Winnebago County

Issues regarding land use for waste management systems may also pose a potential weakness as landfills often garner unfavorable public opinions from local residents.

Cost to install and operate WTE systems can pose a threat to economic feasibility. For example, the capital costs of processing equipment for landfill RNG projects are approximately \$6,200 to \$8,300 per cubic foot per minute. Operation and maintenance (O&M) costs vary on facility size, but can range from \$1.4 million to \$7.4 million annually. The nature of increasingly limited landfill capacity makes this method only feasible as an adaptation strategy for sunseting traditional waste infrastructure.

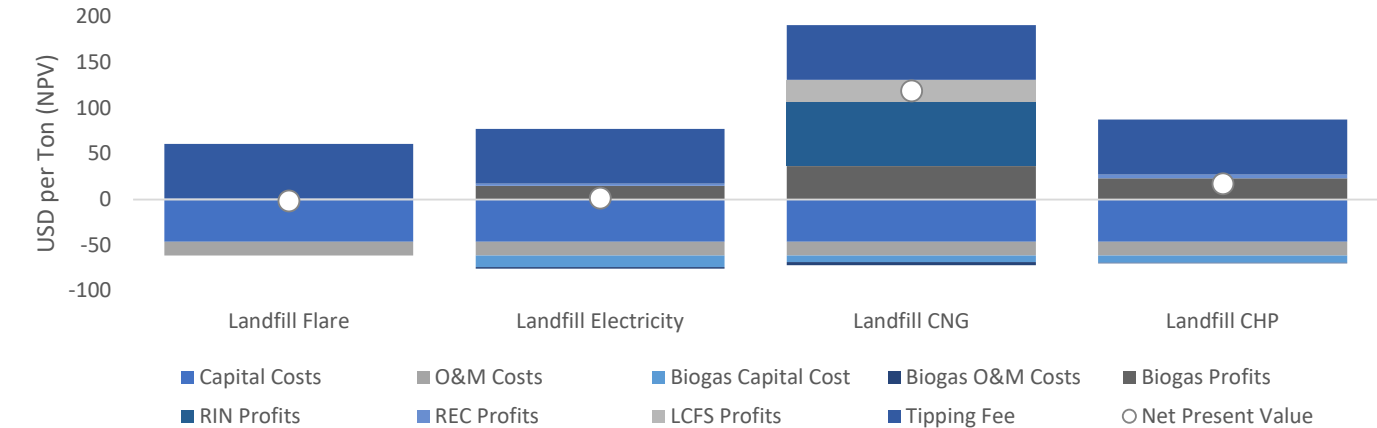
Opportunities

The feasibility of LFG energy production will vary depending on the methods of LFG collection and use, all of which have different operating and maintenance costs associated with them. This is heavily influenced by the efficiency of the gas capture system, which is estimated to have an average rate of efficiency of 75 percent but may range from 50 to 95 percent.<sup>xi</sup> Many landfills, including Winnebago Landfill, already have an existing gas capture system due to their size, which presents an opportunity to build upon existing infrastructure.

Threats

In order to capture LFG to generate energy, a facility must undergo several changes. The installation of new equipment and training of additional staff comes at a significant financial cost, making this goal unattainable to some landfills. In the past, environmental groups have voiced concerns about whether or not this system will effectively reduce GHG emissions, along with concerns of possible methane leaks to the atmosphere. Moreover, an energy system reliant on mass disposal rates is, by principle, unsustainable and undermines the importance of waste diversion.<sup>xx</sup> Safe system operations range from medium to high complexity, warranting rigorous staff training to ensure success and avoid negative environmental impacts.

Figure A-2. Cost-Benefit Comparison of LFG Pathways (Total Food Waste)



Source: National Renewable Energy Laboratory

## Anaerobic Digestion

Anaerobic digestion (AD) is the chemical breakdown of organic materials by microorganisms in an anaerobic environment.<sup>xxi</sup> In an oxygen-absent environment, microorganisms undergo a chemical reaction to produce biogas. This gas is mostly composed of methane and CO<sub>2</sub>, with small quantities of other gases. The generated biogas is stored in a tank, and depending on the end use of the gas, it may be upgraded through treatment. During treatment, CO<sub>2</sub> and other imperfections in the biogas can be removed, leaving only methane. Similar to LFG capture systems, excess biogas can be flared and converted from methane to CO<sub>2</sub>. Due to the nature of its production, biogas is considered to be a renewable resource. It can be utilized as a direct source of energy or it can be treated further to be used for other purposes. Biogas produces energy that can be used for electricity, heat, and to power machines. With further treatment, it can be converted to fuel or transported in natural gas pipelines. This process also yields a byproduct called digestate. This wet, nutrient-rich substance can be separated out into liquid and solid states for a variety of purposes. The resulting product can be profitably sold to produce fertilizer, soil amendments, animal bedding, and more. The two main characterizations of feedstock or inputs for AD are wet and dry. For AD to be considered a dry system, the composition of the feedstock must be greater than 15 percent solids.<sup>xxii</sup> For the purposes of this report, only dry AD will be analyzed, as wet AD is not economically feasible under the assumed given conditions.

### Dry Anaerobic Digestion Electricity

AD harnesses biogas which can be converted to energy by utilizing combustion engines, gas turbines, and fuel cells.<sup>xxiii</sup> This energy can be utilized onsite by the facility to power operations, or sold to businesses and industry for profit. Revenue is generated through tipping fees, digestate sales, and product profits. This method has associated costs in the form of capital, product, and O&M costs. These costs may not be fully offset by system revenue, as associated product costs may not allow for a net profit.

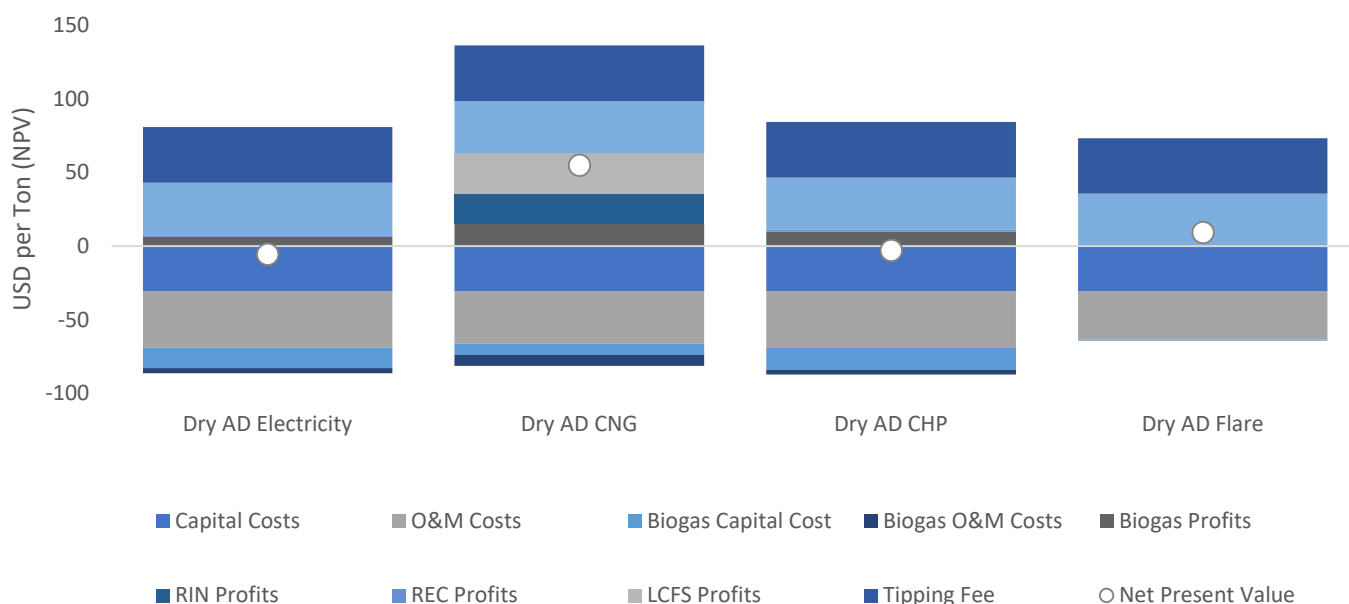
## Dry Anaerobic Digestion Renewable Natural Gas

Biogas produced from AD can be treated to yield RNG. This is accomplished by removing imperfections from the gas such as water vapor, CO<sub>2</sub>, hydrogen sulfide and other impurities. RNG quality is comparable to natural gas and can be injected into natural gas pipelines or used to create fuel alternatives in the form of compressed natural gas (CNG). AD that produces CNG has the highest profit potential in comparison to other listed AD methods. This process has capital and O&M costs associated with it, but these are likely to be offset by the revenue potential. There are also costs associated specifically with the WTE systems at the facility. This includes product capital cost and product O&M costs. Revenue is derived from tipping fees, digestate sales, product profit, and government incentives. Production of RNG is incentivized with government programs such as RFS to generate RINs, which are credits that can be traded and sold. LCFS are utilized in some areas, such as California, and have been proposed for the Midwest region as well.

### Dry Anaerobic Digestion Combined Heat & Power

The biogas generated by AD can be burned to produce heat for the facility and surrounding areas. The biogas can also be converted to energy for CHP use. This can reduce energy costs of local businesses and industry since CHP produced can power heating and combustion equipment. The revenue collected from this process originates from tipping fees, sale of compost products, and product profits. Associated costs include capital, product, and O&M for the AD facility to function.

**Figure A-3. Cost-Benefit Comparison of All Anaerobic Digestion Pathways (Total Food Waste)**



Source: National Renewable Energy Laboratory



# Strengths, Weaknesses, Opportunities, & Threats

## Strengths

AD diverts organic waste (e.g. food waste, animal manure, sewage sludge, organic industry residuals) from landfills while simultaneously producing two useful, profitable materials: biogas and digestate. Organic fats, oils, greases, and paper are also accepted, but some facilities may deny disposal if the batch contains more than 30 percent paper products.<sup>xxiv</sup> This process provides a renewable source of energy that reduces the reliance on less sustainable energy sources, such as fossil fuels. AD has the potential to be a supplemental technology fulfilling local, sustainable energy resilience goals. After initial setup, AD can produce its own energy needed to power the process. The use of digestate as a natural fertilizer also reduces the amount of synthetic fertilizer used and produced.<sup>xxv</sup> In addition to the two revenue streams provided by the sale of biogas and digestate, AD systems that produce RNG can make additional profit in the form of government incentive programs such as RFS (via RINs) and LCFS.

This process also benefits local communities by creating jobs through the construction and operation of AD facilities. Local industry and businesses may experience financial benefits from close proximity to an AD facility in the form of energy and heat generation savings. Additionally, AD uses far less land area at three to six acres, compared to traditional waste management.

## Weaknesses

While AD has the potential to be a viable, profitable WTE option, certain factors may inhibit the efficiency of the process. One weakness to note is that source separation of MSW must take place prior to digestion. Materials such as wood, plastic, metal, glass, sand, bone waste, soil, and contaminants must be removed to the greatest degree possible. Failure to separate out these materials may result in complications with the anaerobic digesters, ranging from clogs and contamination to decreased efficiency. The risk of contamination is also present when producing biogas and digestate. If there is contamination in the feedstock, the resulting products risk contamination as well. Regular monitoring of pH levels and substances (such as nitrogen, methane, volatile fatty acids, ammonia, etc.) is conducted to ensure these contaminants are identified. Ammonia and hydrogen sulfide contaminants can impact the efficiency of biogas generation and can cause damage to equipment. Contaminated digestate beyond feasible treatment must be landfilled.

## Opportunities

As the U.S. continues to produce high quantities of organic waste and looks for sustainable energy alternatives, there are opportunities for a growth in AD facilities. As of 2019, t209 AD facilities operate across the United States. After observing local waste streams, there are further diversion opportunities for organics. For example, food waste is a significant, growing portion of the local waste stream. There is also a significant agricultural industry in both Boone and Winnebago Counties, making animal and yard waste another contributing asset to this method. Furthermore, potential opportunities exist for partnerships with local hospitals and universities to utilize the large quantities of food produced for AD purposes.

## Threats

Emissions are produced throughout the AD process. Both the transportation of waste to an AD facility and the transport of digestate to its destination emit CO<sub>2</sub>. During the curing stage, methane and nitrous oxide emissions may be released, and biogas leaks are possible. Land application of digestate also contributes to nitrous oxide emissions, which can have an adverse environmental effect if not offset by the reduced emissions in the other steps of the process.<sup>xxvi</sup> Additionally, increased community traffic and odor concerns may be a point of controversy for location and general public support.

## Composting

Composting is the process of combining organic materials to create a homogenous fertilizer.<sup>xxvii</sup> More specifically, aerobic composting is a biological process in an open-air environment where microorganisms break down biodegradable material in the presence of oxygen.<sup>xxviii</sup> Compost material is made from a mixture of organic waste that can feed soil to support plant growth. Compost consists of three components: equal parts browns (dead leaves, branches, etc.) and greens (grass clippings, vegetable waste, fruit scraps, coffee grounds, etc.), with some water. Financial and economic considerations involved in composting include capital costs, O&M costs, compost product, jobs created, and tipping fees as profits. The following sections discuss three different composting methods.

### Windrow Composting

Windrow composting involves creating rows of organic waste and aerating the material by turning the piles. This type of composting is designed for larger volumes of waste collected on a community scale at minimum. Commonly utilized materials are yard trimmings, grease, liquids, and animal byproducts.<sup>xxix</sup> This method requires a considerable amount of land, labor, and careful monitoring for effective waste ratios and methods. O&M and tipping fees have the largest influence on NPV. Windrow composting is less costly for residential waste in comparison to nonresidential waste. While this method ranks second in profitability among the other two composting methods, the process requires a significant amount of land (15-20 acres) and tends to emit powerful odors, greatly reducing the feasibility of implementing.

### Aerated Static Piles (ASP) Composting

ASP composting is when organic waste is mixed in a large pile with bulking agents, such as shredded newspaper, layered in between the organic material to allow air flow. This layering helps the material break down evenly. ASP composting can also be conducted over a network of pipes that circulate air through the organic material. It has the highest NPV when incorporating all food waste (residential and nonresidential). O&M costs are the largest expenses associated with ASP composting. These can be offset with appropriate tipping fees, which has the largest impact on profits. This method requires a significant amount of staffing, making labor rates a significant cost driver. From an economic perspective, ASP composting has the highest profitability potential in comparison to windrow and in-vessel composting methods. Odor control is possible with this process, but it requires about six to eight acres of land.

Further information regarding land capacity and siting within Boone and Winnebago Counties must be obtained in order to determine if this is a feasible WTE method.

## In-Vessel Composting

In-vessel composting involves placing organic material into a large container (or vessel) and turning it mechanically. This composting method has the advantage of being very adjustable in scale. Containers can range in size and consequently setting. While this method is versatile and produces minimal odor, it can be costly and requires experienced management. O&M for this method is costlier in comparison to the other two methods. While this method is less profitable, it requires a smaller amount of land (three to six acres) and does not present an odor control issue. This addresses both land capacity issues and community concerns.

## Strengths, Weaknesses, Opportunities, & Threats

### Strengths

Composting is versatile and has the advantage of scalability, so regions with varying population density can participate. This method also provides a low barrier for participation: Residential composting with appropriate labeling is fairly straightforward. Not only does composting reduce waste and result in negative net GHG emissions, it also produces cheaper, organic fertilizer as compared to chemical fertilizers. Composting enhances soil quality and structure, supports sustainable farming practices, produces higher crop yields, provides odor control, generates revenue, and suppresses plant diseases and pests. This method generally requires lower levels of training to run and manage and less land in comparison to traditional waste management practices. Composting may address multiple concerns traditional waste management cannot, such as odor control, GHG emissions, fossil fuel energy use, and finite land capacity.

### Weaknesses

Though composting can address many regional waste management concerns, every option has challenges. Waste streams can fluctuate by season and other local factors. Beyond that, there are no current residential or commercial options for food waste collection. More data is needed to determine the composition of all waste within the two counties.

In the absence of proper maintenance, compost products may attract wildlife, become a fire hazard, and emit unpleasant odors.<sup>xxx</sup> Finally, while energy input is required to create the compost product, it cannot supply energy in the way other organic waste utilization methods. These weaknesses could potentially be mitigated when paired with other renewable options (i.e. solar, wind) could sustainably supplement the energy needed. Additionally, stringent policy, monitoring, and appropriate operating procedures are preventative strategies to address these weaknesses.

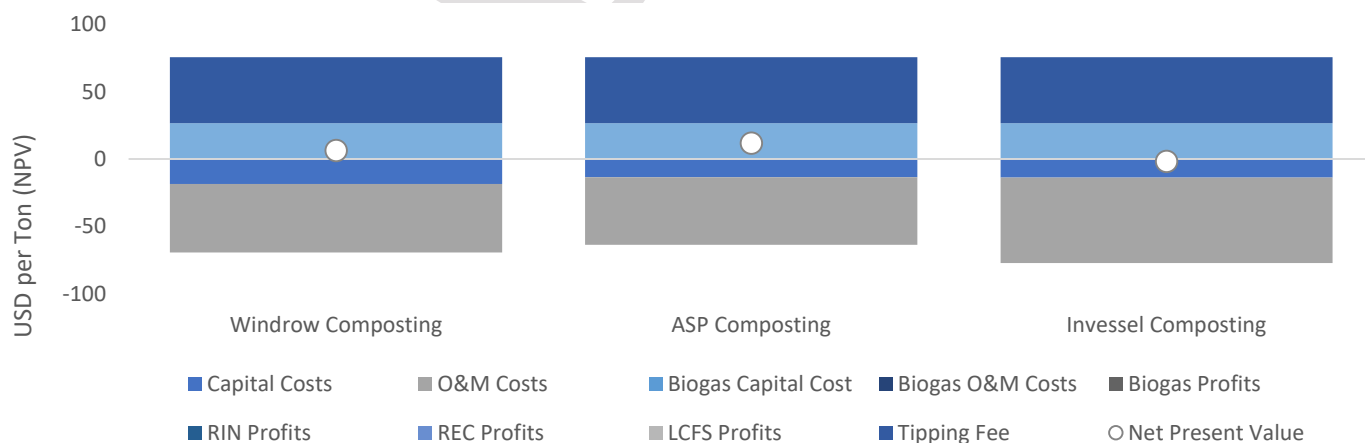
### Opportunities

The main application of compost is to support soil and plant growth. There are many potential opportunities to incorporate both residential and commercial composting into the Northern Illinois region. Within Boone and Winnebago Counties, some municipalities allow community members to participate in a yard waste collection program or drop offs. There are virtually no options for food waste diversion as of 2022, yet there is a large volume of food waste (see Figure A-5). Food waste is a prominent, growing category in local waste streams, illustrating a need for material source reduction and diversion. The scalable nature of composting provides an opportunity to address the needs of the diverse communities within Boone and Winnebago Counties. The area's limited composting infrastructure offers a pathway to larger scale collaboration efforts and potential cost savings through information sharing and exploring renewable energy incentives.

### Threats

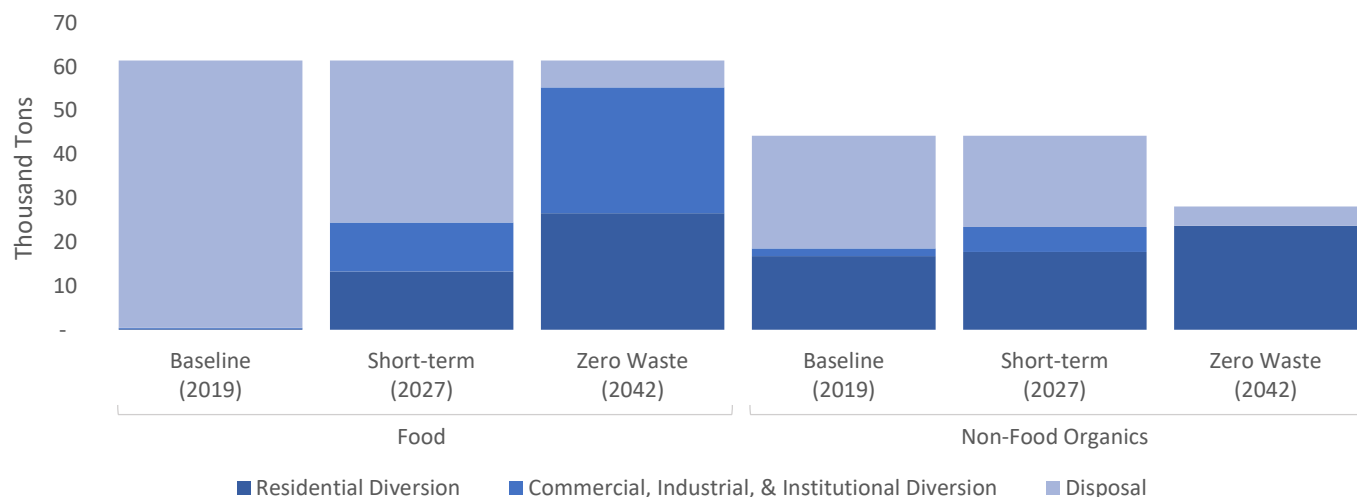
There are a variety of threats related to the effectiveness of composting as a WTE method. Currently, there are no incentives or penalties for both consumers and the commercial sector to separate organics from other waste materials. Composting is not a part of the local waste management system at this time; therefore, funding and capacity remain key barriers in enabling this method. Stricter regulation on contaminants in composting could also compromise method effectiveness and profitability. Reductions in food waste could lead to less input availability to achieve economies of scale in compost operations. Since waste from surrounding areas are disposed of at the Winnebago Landfill, this may not be an issue. Any new waste management facility will raise concerns regarding things like location and increased community traffic, potentially affecting public support.

Figure A-4. Cost-Benefit Comparison of All Composting Food Utilization Pathways (Total Food Waste)



Source: National Renewable Energy Laboratory

Figure A-5. Diversion Rate Breakdowns of Organics in Boone & Winnebago Counties



Source: Ning Ai, PhD- UIC 2021

## Other Waste to Energy Options

Gasification, pyrolysis, and combustion are other WTE methods not considered in this report. This report examines primarily organic waste utilization options.

### Gasification

Gasification is a WTE process that converts specific waste types that contain carbon (i.e. coal, petroleum, plastics, biomass) into synthesis gas, ethanol, and hydrogen.<sup>xxxix</sup> Syngas can be converted to diesel, jet fuel, electricity, and steam. These products are derived from MSW. While this method utilizes organic material, it also releases more intensive GHG emissions compared to other methods.

### Pyrolysis

This WTE process converts plastic waste or biomass into fuel by heating material at very high temperatures in an oxygen free environment.<sup>xxxix</sup> The result is a liquid oil commonly known as “bio” or “pyrolysis” oil. Bio oil is very acidic and corrosive, which makes the material costly and challenging to transport. Equipment and infrastructure handling the crude oil also have shorter life spans.<sup>xxxix</sup> This method contributes to air pollution with carbon-intense emissions from burning at a comparable level to traditional combustion. The impact on air quality varies, as it is dependent on material separation and composition. Pyrolysis is not as energy efficient compared to other WTE methods: 20 to 30 percent of burned material by weight results in fly ash, which is typically landfilled but may be reused.<sup>xxxix</sup> These facilities still divert a significant amount of waste while existing as a revenue generation source. For example, the WTE facility in Lee County, Florida diverted approximately 58 to 75 percent of waste on a quarterly basis between 2016 and 2022.<sup>xxxix</sup> Limited regulatory and monitoring capacity is a barrier, as these facilities must be carefully monitored to mitigate public health, environmental, and safety risks.

### Combustion

The historical WTE method of municipal solid waste (MSW) combustion for heat and electricity generation is less common today with emerging technology alternatives and the push toward waste reduction. Public perception remains wary of this method.

Early iterations of combustion technology caused public health concerns and negative environmental impacts via emissions, however combustion technology has significantly advanced since.<sup>xxxix</sup> One demonstration of this progress is Palm Beach’s Renewable Energy Facility No. Two. In 2020, the facility diverted 194,229 garbage trucks of waste from landfills.<sup>xxxix</sup> The facility produces fewer emissions compared to other sources within the County, falling 31 to 99 percent below federal standards. Though burning MSW does not address the volume of waste produced, it can provide a solution for the current waste volumes produced as communities move toward waste reduction practices.

## Conclusion & Recommendations

WTE and waste utilization opportunities for Boone and Winnebago Counties involve adapting existing, traditional waste infrastructure to explore AD and composting methods. All of the methods detailed in this report have impacts that should be weighed against their benefits. Concerns regarding environmental impacts, waste origins, facility location, limited landfill capacity, odor control, and energy resilience were taken into account in order to appropriately address local needs. This criteria should continually be evaluated in further pursuit of these options.

### Recommendations

Based on current policy, incentives and regulations, NREL analysis, local feedback, and waste composition projections, the following recommendations should be explored further.

#### 1. Increase Knowledge of Local Waste Stream Compositions

More data on waste that Boone and Winnebago Counties produce and import is essential to accurately evaluating appropriate WTE options, as specific volumes of waste are necessary for sufficient energy output. Enacting or enforcing ordinances that require data hauler reporting can assist with these efforts. Additionally, conducting waste audits can be useful in gathering more data on local waste stream composition.

Waste stream compositions also change depending on the season and other external factors, making data beyond projections or audits necessary for further informed evaluation.

## 2. Adapt Landfill Infrastructure for Landfill Gas Capture

Winnebago Landfill has an estimated 16 years of capacity left. The site currently has an existing gas collection system, which is a necessary infrastructure component for the WTE method of LGC and moves it one step closer to implementation. The State of Illinois' REC program specifies fuel from landfill gas as a renewable energy and the EPA's RFS Program offers an additional opportunity for WTE regarding landfill infrastructure. Resulting profits from these programs may be used to further waste diversion efforts, launch new community health initiatives, or offset previous adverse impacts from waste management practices in the surrounding community. Examples of this include funding trash clean ups, additional studies on the impact of waste in the region, and implementing better waste management and diversion technology.

## 3. Conduct Further Anaerobic Digestion Siting & Feasibility Analysis

The AD process can address community concerns that traditional waste management currently does not, specifically pertaining to odor control and negative environmental impacts. This method yields negative net GHG emissions, diverts waste, uses less land in comparison to a landfill, and the process is self-sustaining in regards to feedstock. Additionally, federal and state policies can provide funding for local governments and companies to leverage. Large organic waste producers, such as schools, hospitals, golf courses, and manufacturers may benefit from AD programs. Permits are not required for self-contained sites with unaltered organic waste products, with the added benefits of reduced waste disposal costs, a smaller emissions impact, and the financial leverage profits from RIN credits offer. Based on these benefits and potential impacts, it is recommended that further siting and feasibility analyses be completed in order to determine whether AD could support WTE efforts in the region.

## 4. Conduct Further Composting Siting & Feasibility Analysis

As noted by local residents through public engagement efforts, traditional landfills can cause several issues, including odor. In an effort to mitigate further odor nuisances, only in-vessel and ASP composting should be explored, as significant odors are associated with windrow composting. Composting yields negative net GHG emissions, allows for economies of scale with proper organic waste utilization, and has a relatively low barrier to training for operation. This method does require energy input for operation and therefore does not address future energy resilience needs. Based on these benefits and potential impacts, it is recommended that further siting and feasibility analyses be completed in order to determine whether composting could support organic waste utilization efforts in the region. Additionally, the presence of a Commercial Food Digester on commercial sites (large food waste producers) should be explored to divert organic waste. Sites that choose not to have Commercial Food Digesters could pay an extra tipping fee that helps fund future waste reduction efforts or address current or prevent negative environmental impacts related to waste.

## 5. Gather Information from Best Practice Communities

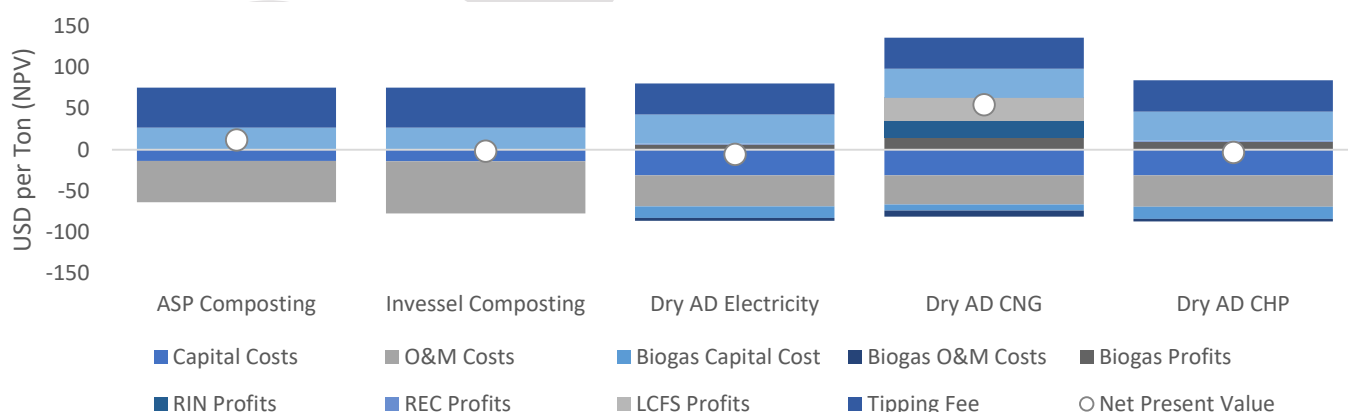
The waste-related needs and issues discussed in this report are not unique to Northern Illinois. The following best practice communities should be contacted for additional insight and knowledge on how implementing WTE technology and waste utilization methods address concerns such as odor, energy resilience, negative environmental impacts, and funding.

### Example Communities

#### Ogle County, Illinois

Ogle County has made significant progress in recent years regarding waste education, reduction, and programming. Due to proximity, Ogle County may have similar barriers, funding, and partnership opportunities to explore. Additionally, the Orchard Hills Landfill, in Northeast Ogle County, addresses material diversion utilizing WTE technology via the Orchard Hills Generating Station.<sup>xxxviii</sup> Organic material decomposes in landfill cells and collection systems capture the resulting methane (CH<sub>4</sub>), directing the energy eventually to the energy grid.

Figure A-6. Cost-Benefit Comparison of In-vessel Composting, ASP Composting, Dry AD (Total Food Waste)



Source: National Renewable Energy Laboratory

The facility also produces preprinted manifests (forms detailing waste types, quantities, handling instructions and involved party signatures) and computerized waste tracking for all disposed waste.

### **Boulder County, Colorado**

#### **Green Star Schools Program**

This program is run through Eco-Cycle, a non-profit that provides environmental education and curbside collection.<sup>xxxix</sup> Green Star Schools and other educational Eco-Cycle programs are funded by local government, a school district, and multiple grant sources. This program is relevant to food waste reduction efforts, and represents a successful model in a comparable public school district size.

### **Richmond, California**

#### **Free Residential Recycling & Composting**

All Richmond residents are eligible for free weekly recycling and composting services.<sup>xl</sup> The City of Richmond exclusively works with Republic Services, and many aspects of this model, including price exceedances, are enforced via local ordinance.<sup>xli</sup> This is relevant to see low to no costs in the context of private waste management.

### **Austin, Texas**

#### **Zero Waste Event Rebate**

The City of Austin offers a rebate as an incentive for organizers to reduce waste at their events.<sup>xlii</sup> Event organizers can receive rebates of up to \$750. Applicants must convey that waste collection exceeds minimum requirements, and the event must be outdoors, public, within city limits, in compliance with local ordinances, and with a minimum attendance of 500 people. Rebates can be used for waste collection, equipment, or labor related to composting. This is relevant to larger community events in Northern Illinois with similar attendance. xxxvii palm beach



# Appendix B: Proposed Implementation Tactics & Timelines

## Waste Programming Until 2042

Boone and Winnebago Counties will continue to utilize the Winnebago Landfill and the current systems that locally manage waste disposal. The counties will continue to pursue alternative waste disposal methods and implement them as the landfill reaches capacity.

## Other Potential Programs Planned to Handle Waste Until 2042

### **Program 1: Evaluating the Expansion of Existing Collection Efforts and Coordinated Food Scrap Collection Program**

Both counties and relevant stakeholders will evaluate the potential of a food scrap collection in coordination with existing waste services to reduce and utilize food waste. Food scraps may be transported to local gardens and farms, edible food may be diverted to local food pantries and other supportive services.

#### *Environmental, Energy, and Life Cycle Costs*

Diverting organics would result in reduced GHG emissions at the local landfill. Refer to Appendix A for more information regarding these costs.

#### *Economic Impacts*

The local economic impacts of food scrap collection are complex, requiring further analysis. Implementing this program would create local employment opportunities, generating renewable energy and putting cost savings back into local residences and businesses.

### **Program 2: Planning for Increased Educational Efforts**

Boone and Winnebago Counties will evaluate various methods for public outreach and education, collaborating with local government, schools, residents, and large waste generators to educate the public on their options, increasing awareness and intergovernmental collaboration.

#### *Environmental, Energy, and Life Cycle Costs*

The result of increased education regarding waste diversion may result in reduced confusion surrounding recycling and therefore more effective individual sorting outcomes, shown in the survey detailed in Appendix E. In a 2014 survey conducted by the Institute of Scrap Recycling Industries and Earth 911, 65 percent of respondents stated they do not understand what plastics are acceptable in curbside collection.<sup>1</sup>

Many recyclers easily mistake the Resin Identification Number (RIN) as a recycling symbol. This number identifies the type of polymer, not necessarily their ability to be recycled. The range of polymers able to be recycled depend on a variety of factors, such as the hauler and inventory of waste disposal infrastructure. Educating various stakeholders on how, what and where to recycle, in addition to process transparency, may assist in increased participation and subsequent diversion rates.

#### *Economic Impacts*

The general economic impacts of increased educational efforts include reduced machine repair and maintenance, the potential creation of jobs regarding the formation and distribution of educational materials, and potential program expansions.

### **Program 3: Exploration of an Organics Compost or Processing Facility**

Constructing an organics compost facility will allow for food waste and other organic material diversion. The National Renewable Energy Laboratory (NREL) provided technical assistance to evaluate various impacts of several waste utilization methods. Boone and Winnebago Counties will further explore establishing a waste utilization facility based upon the findings in Appendix A: A Report on Waste-to-Energy & Waste Utilization Options in the Rockford Region. An exploration of environmental and economic impacts can also be found in Appendix A. Next steps include further identifying the scale of the facility, location and mechanisms of implementation.

## Potential Facility Locations

The two counties are exploring the feasibility of optimal facility types for the future of waste disposal as the Winnebago Landfill reaches capacity. Materials recovery facilities, drop-off facilities, compost facilities, waste utilization facilities, and metal scrapyards are all options under current consideration. The area under consideration is west of Interstate 39 between Rockford International Airport and the Winnebago County line.

**Table B-1. Funding Scale**

<b>Funding Scale</b>	This funding scale is subject to the scope of each specific action.
<b>\$</b>	\$0- \$20,000
<b>\$\$</b>	\$20,000- \$100,000.
<b>\$\$\$</b>	\$100,000 +

**Table B-2. Public Education & Outreach**

<b>Goal 1</b>	Educate the public on waste diversion practices, program information and local waste systems to increase participation in waste diversion efforts.				
<b>Rec. 1</b>	Design and implement community-focused adult and youth solid waste management educational programming and workshops using IEPA and other relevant resources.				
#	Action	Responsible Parties	Support	Funding	Timeline
<b>1.1A</b>	Review existing toolkits to identify framework and general topics.	Boone County, Winnebago County	Region 1 Planning Council	\$	5 Years
<b>1.1B</b>	Identify community partners to host and gather residents for these workshops.	Boone County, Winnebago County	Region 1 Planning Council, Community Leaders, Public Library	\$	5 Years
<b>1.1C</b>	Identify funding mechanisms and sources to support educational programming efforts.	Boone County, Winnebago County	Region 1 Planning Council	\$\$	5 Years
<b>1.1D</b>	Promote backyard composting programs with subsidized compost bin sales/workshops.	Boone County, Winnebago County	Commercial Composters	\$\$	5 Years
<b>Rec. 2</b>	Explore, produce, and standardize informative signage for waste and recycling bins within Boone and Winnebago Counties.				
#	Action	Responsible Parties	Support	Funding	Timeline
<b>1.2A</b>	Explore benefits and examples of standardized signage in the context of local waste infrastructure (standard informational stickers for bins, standardizing the bin itself, etc.)	Winnebago County	Boone County, Waste haulers, Landfill and Recycling Facilities	\$\$	5 Year
<b>1.2B</b>	Review and assess large residential bin management strategies, programs, and costs.	Winnebago County	Boone County	\$\$	5 Year
<b>1.2C</b>	Form a strategic approach to standardizing signage across counties.	Winnebago County	Boone County, Region 1 Planning Council, Waste haulers, Landfill and Recycling Facilities	\$\$	5 Year
<b>Rec. 3</b>	Create, distribute, and regularly update solid waste educational information for Boone and Winnebago Counties' websites.				
#	Action	Responsible Parties	Support	Funding	Timeline
<b>1.3A</b>	Review existing website examples and templates.	Boone County, Winnebago County	Region 1 Planning Council	\$	1 Year
<b>1.3B</b>	Compile and post information on disposal-related resources in the area, links to the Solid Waste Management Plans, and additional tools.	Boone County, Winnebago County	Area partners	\$	1 Year
<b>1.3C</b>	Promote youth research projects and contests on creative ways to divert or reduce food waste, textiles, and plastics.	Winnebago County	Region 1 Planning Council	\$\$	Ongoing
<b>1.3D</b>	Work with clothing donation centers to encourage criteria for clothing/textile donation.	Boone County, Winnebago County	Region 1 Planning Council	\$\$	Ongoing
<b>Goal 2</b>	Engage regularly with area residents, business owners and community leaders regarding local solid waste issues, targeted materials, needs and opportunities.				
<b>Rec. 1</b>	Create a low barrier participation citizen engagement committee (CEC ) to connect with communities on a regional scale.				
#	Action	Responsible Parties	Support	Funding	Timeline
<b>2.1A</b>	Review and identify where a CEC could be housed in the Counties or in collaboration with Region 1 Planning Council.	Boone County, Winnebago County	Region 1 Planning Council, Area Partners	\$	1 Year
<b>2.1B</b>	Identify areas of needed representation and roles.	Boone County, Winnebago County	Area partners, general public	\$	1 Year
<b>2.1C</b>	Identify who will potentially lead this committee, discuss goals, framework, and expectations.	Winnebago County	Boone County	\$\$	1 Year
#	Action	Responsible Parties	Support	Funding	Timeline
<b>2.1D</b>	Conduct periodic community surveys to understand waste-related community perceptions and educational impacts.	CEC	Region 1 Planning Council	\$\$	Ongoing
<b>2.1 E</b>	Identify the largest waste generators in commercial, industrial, and institutional sectors and their contacts.	Winnebago County	Boone County	\$	1 Year

<b>Rec. 2</b>	Educate high-volume waste producers in the area regarding waste diversion.				
#	Action	Responsible Parties	Support	Funding	Timeline
<b>2.2A</b>	Identify the largest waste generators in commercial, industrial and institutional sectors and their contacts	Winnebago County	Public institutions, community groups & partners	\$	5 Year
<b>2.2B</b>	Educate large food waste generators on food waste diversion and encourage innovative ways to reduce their waste.	Winnebago County	Educational non-profits, public institutions	\$\$	5 Year/ Ongoing
<b>Rec. 3</b>	Celebrate, recognize, and uplift significant area achievements in waste reduction and environmental improvements.				
#	Action	Responsible Parties	Support	Funding	Timeline
<b>2.3A</b>	Recognize communities within the County that champion waste reduction efforts.	Boone County, Winnebago County	Municipalities	\$	5 Year

**Table B-3. Circular Economy & GHG Emissions**

<b>Goal 1</b>	Gain a local understanding of GHG emissions related to waste processing.				
<b>Rec. 1</b>	Conduct a regional GHG inventory to understand emissions, impacts, and opportunities related to waste management.				
#	Action	Responsible Parties	Support	Funding	Timeline
<b>1.1A</b>	Work regionally to establish and standardize how existing waste reporting mechanisms operate.	Boone County, Winnebago County	Region 1 Planning Council	\$	1 year
<b>1.1B</b>	Work with municipalities throughout the Counties to understand area-specific information related to GHG emissions.	Region 1 Planning Council	Boone County, Winnebago County	\$	5 years
<b>1.1C</b>	Utilize EPA's WARM Model to track GHG emissions reductions in relation to waste management and diversion efforts.	Region 1 Planning Council	Local government	\$\$	Ongoing
<b>Rec. 2</b>	Conduct studies on the feasibility of waste-related GHG emissions reductions options.				
#	Action	Responsible Parties	Support	Funding	Timeline
<b>1.2A</b>	Examine existing related infrastructure and emissions produced/reduced.	Winnebago County	Boone County	\$\$\$	5 Years
<b>1.2B</b>	Identify and obtain funding sources for programs found necessary by the feasibility study.	Winnebago County	"Boone County, Region 1 Planning Council"	\$\$	1 year
<b>1.2C</b>	Support collaborative, mutually beneficial partnerships to reduce regional GHG emissions related to waste.	Region 1 Planning Council	Boone County, Winnebago County	\$	Ongoing
<b>Goal 2</b>	Achieve a regional circular economy to reduce waste and increase economic development by 2040.				
<b>Rec. 1</b>	Conduct economic impact and feasibility assessments to understand the local effects of a circular economy.				
#	Action	Responsible Parties	Support	Funding	Timeline
<b>2.1A</b>	Ensure access to current market rates and applications for common solid waste materials. Cross reference local waste streams with advantageous prices and materials.	Boone County, Winnebago County	Region 1 Planning Council	\$\$	Ongoing
<b>2.1B</b>	Create a regional circular economy action plan to outline specific areas of need and opportunity.	Boone County, Winnebago County	Region 1 Planning Council	\$\$\$	5 Years
<b>Rec. 2</b>	Connect stakeholders with eligible circular economy programs, opportunities, and incentives to reduce and/or divert waste.				
#	Action	Responsible Parties	Support	Funding	Timeline
<b>2.2A</b>	Establish a circular economy workshop and program that includes partner agencies to establish & achieve plan goals at a local level.	Winnebago County	Region 1 Planning Council	\$\$	5 years
<b>2.2B</b>	Encourage an "ecology of commerce" for promoting the sale of reusable items through various efforts such as community swap events.	Boone County, Winnebago County	Local community partners	\$	Ongoing
<b>2.2C</b>	Sponsor community repair workshops and educational programs for community members.	Winnebago County	Boone County	\$\$	5 years
<b>2.2D</b>	Develop (or use existing technology) and promote a waste diversion network of businesses and customers (repair/refurbishing businesses, used building material stores, non-profit organizations, deconstruction services, etc.).	Boone County, Winnebago County	Region 1 Planning Council	\$\$	Ongoing

**Table B-4. System Organization & Administration**

<b>Goal 1</b>	Bridge communication gaps between the public and waste haulers to address issues, needs, and opportunities.				
<b>Rec. 1</b>	Analyze and collaborate with private waste system components to standardize when possible.				
<b>#</b>	<b>Action</b>	<b>Responsible Parties</b>	<b>Support</b>	<b>Funding</b>	<b>Timeline</b>
<b>1.1A</b>	Work with private haulers to understand current waste management system issues and consumer feedback.	Boone County, Winnebago County	Local government	\$	Ongoing
<b>1.1B</b>	Identify sources that currently update customers regarding waste management information.	Boone County, Winnebago County	Local government	\$	5 years
<b>Rec. 2</b>	Offer waste, recycling, and composting options for all residents and resources for businesses.				
<b>#</b>	<b>Action</b>	<b>Responsible Parties</b>	<b>Support</b>	<b>Funding</b>	<b>Timeline</b>
<b>1.2A</b>	Connect with neighboring counties to understand source reduction and waste diversion opportunities.	Boone County, Winnebago County	Region 1 Planning Council	\$	1 year
<b>1.2B</b>	Review EPA toolkits on approaching different audiences with waste, recycling, and composting information.	Winnebago County, Boone County, Region 1 Planning Council	Local community partners	\$	1 year
<b>Goal 2</b>	Integrate zero-waste strategies throughout the community where applicable.				
<b>Rec. 1</b>	Partner with companies to develop innovative zero waste programs.				
<b>#</b>	<b>Action</b>	<b>Responsible Parties</b>	<b>Support</b>	<b>Funding</b>	<b>Timeline</b>
<b>2.1A</b>	Collaborate regionally to identify zero-waste program frameworks and standards.	Boone County, Winnebago County	Region 1 Planning Council	\$\$	5 Years
<b>2.1B</b>	Identify three pilot programs to implement to address targeted material reductions.	Winnebago County	Region 1 Planning Council	\$\$\$	5 years
<b>2.1C</b>	Identify mutually beneficial waste diversion activities and opportunities across county jurisdictions.	Boone County, Winnebago County	Region 1 Planning Council	\$	Ongoing
<b>Rec. 2</b>	Provide incentives for generators, waste haulers, recyclers, composters, and landfill operators to prioritize reducing and reusing materials, then recycling, digesting and composting the rest.				
<b>#</b>	<b>Action</b>	<b>Responsible Parties</b>	<b>Support</b>	<b>Funding</b>	<b>Timeline</b>
<b>2.2A</b>	Create a recognition program for communities that set and meet key milestones.	Boone County, Winnebago County	Region 1 Planning Council	\$\$	5 years
<b>2.2B</b>	Establish recognition milestones, incentives, and monitoring practices.	Boone County, Winnebago County	Region 1 Planning Council	\$	Ongoing
<b>2.3C</b>	Host a booth to offer educational resources for local businesses regarding source reduction/diversion at local events (e.g. City Market, Buchanan Street Strolls, County Fairs)	Boone County, Winnebago County	Local governments and community partners	\$\$-\$	Ongoing

**Table B-5. Partnerships**

<b>Goal 1</b>	<b>Develop community partnerships to grow and integrate waste diversion services and events.</b>				
<b>Rec. 1</b>	<b>Increase awareness and establish regional community drop-off locations for recycling.</b>				
<b>#</b>	<b>Action</b>	<b>Responsible Parties</b>	<b>Support</b>	<b>Funding</b>	<b>Timeline</b>
<b>1.1A</b>	Collaborate with local partners to host annual community collection events for difficult-to-recycle materials, such as e-waste and plastic bags.	Boone County, Winnebago County, Local community partners	Local government	\$\$	Ongoing
<b>1.1B</b>	Expand commercial recycling centers and increase awareness of their services through partner and community networks.	Winnebago County, Private commercial waste collection facilities	Local community partners	\$\$\$	5 years
<b>1.1C</b>	Partner with local agencies on educational programs related to recycling and waste reduction tactics.	Local community partners	Local government	\$	Ongoing
<b>Goal 2</b>	<b>Collaborate with neighboring counties to maximize resources and efforts through standardizing public messaging and educational materials.</b>				
<b>Rec. 1</b>	<b>Regularly meet with municipalities to explore and encourage multi-level government collaboration and share outreach materials.</b>				
<b>#</b>	<b>Action</b>	<b>Responsible Parties</b>	<b>Support</b>	<b>Funding</b>	<b>Timeline</b>
<b>2.1A</b>	Examine feasibility for waste exports and develop an agreement with surrounding counties for contingency plans.	Winnebago County	Boone County, Region 1 Planning Council	\$\$	1 year
<b>2.1B</b>	Explore and develop joint contracting/large scale agreements through cross-jurisdictional recycling at the county level.	Winnebago County	Boone County, Region 1 Planning Council	\$\$	1 year
<b>2.1C</b>	Partner with municipalities and housing advocates to provide educational information to property managers and renters.	Winnebago County	Boone County, Region 1 Planning Council	\$\$	Ongoing
<b>2.1D</b>	Create and uses Zero Waste Task Force to partner with local non-profits, private businesses, and residents when updating and implementing the Plan.	Winnebago County	Boone County, Region 1 Planning Council	\$\$	Ongoing
<b>Goal 3</b>	<b>Pursue Green Business Program partnerships to assist businesses with waste reduction and diversion.</b>				
<b>Rec. 1</b>	<b>Establish a local green business coalition to support waste reduction strategies.</b>				
<b>#</b>	<b>Action</b>	<b>Responsible Parties</b>	<b>Support</b>	<b>Funding</b>	<b>Timeline</b>
<b>3.1A</b>	Incentivize, educate, and encourage local businesses to participate in the Illinois Green Business Certification Program.	Boone County, Winnebago County	Region 1 Planning Council, Local chambers and economic development partners, Local government	\$	Ongoing
<b>3.2B</b>	Partner with local restaurants, grocery stores and community charities to create a system of food waste diversion efforts, such as diverting edible food via donation.	Winnebago County	Boone County, Local community partners	\$\$	Ongoing
<b>3.3C</b>	Connect organizations like Food Not Bombs with entities that have excess food waste to increase diversion.	Winnebago County	Region 1 Planning Council, Food Not Bombs	\$	Ongoing
<b>2.1D</b>	Create and uses Zero Waste Task Force to partner with local non-profits, private businesses, and residents when updating and implementing the Plan.	Winnebago County	Boone County, Region 1 Planning Council	\$\$	Ongoing
<b>Rec. 2</b>	<b>Utilize partnerships with licensed haulers, local governments, and other entities to maximize area capacity and create educational campaigns, programs, and events.</b>				
<b>#</b>	<b>Action</b>	<b>Responsible Parties</b>	<b>Support</b>	<b>Funding</b>	<b>Timeline</b>
<b>3.2A</b>	Require licensed haulers to post requirements on collection procedures and educate consumers on acceptable materials.	Winnebago County	Boone County	\$\$	Ongoing
<b>3.2B</b>	Educate community members on the negative impacts of single use items.	Boone County, Winnebago County	Region 1 Planning Council, Local community partners	\$	Ongoing
<b>3.2C</b>	Engage the community on potential gaps in the waste management system that limit diversion.	Boone County, Winnebago County	Region 1 Planning Council, Local community partners	\$	Ongoing

Table B-6. Policy

<b>Goal 1</b>	<b>Increase transparency of waste management legislation and efforts.</b>				
<b>Rec. 1</b>	<b>Establish local policies and processes to support consistent record keeping, data collection, monitoring, and reporting for solid waste generation and diversion.</b>				
<b>#</b>	<b>Action</b>	<b>Responsible Parties</b>	<b>Support</b>	<b>Funding</b>	<b>Timeline</b>
<b>1.1A</b>	Require and collect annual hauler reports detailing waste and recycling characterization and tonnages by county/sector to ensure proper collection and infrastructure management, and to assist with plan updates.	Boone County, Winnebago County	Local governments, Waste haulers	\$\$	5 years
<b>1.1B</b>	Require reports to be shared publicly via media advisories and accessible on websites to ensure transparency and increase awareness.	Winnebago County	Boone County, Local government	\$\$	5 years
<b>1.1C</b>	Assess local policy related to waste for system gaps and needs on a periodic basis.	Boone County, Winnebago County	Local government, Region 1 Planning Council	\$	Ongoing
<b>1.1D</b>	Analyze local ordinances and compile proposed revisions and additions that support overarching waste reduction goals.	Region 1 Planning Council	Boone County, Winnebago County	\$\$	5 Years
<b>Goal 2</b>	<b>Establish local policies that lower barriers and increase access to source reduction and waste diversion efforts.</b>				
<b>Rec. 1</b>	<b>Require licensed haulers to provide recycling collection data on all residential and commercial accounts.</b>				
<b>#</b>	<b>Action</b>	<b>Responsible Parties</b>	<b>Support</b>	<b>Funding</b>	<b>Timeline</b>
<b>2.1A</b>	Explore how local policy can specifically address and increase recycling options and participation.	Winnebago County	Boone County, Local government	\$\$	5 years
<b>2.1B</b>	Explore the feasibility of requiring licensed haulers to provide compost containers, collection/diversion procedures, and the costs said changes would incur.	Boone County, Winnebago County	Region 1 Planning Council, Waste haulers	\$\$	Ongoing
<b>Rec. 2</b>	<b>Require residential (rentals and owned) and commercial participation in source reduction and waste diversion efforts.</b>				
<b>#</b>	<b>Action</b>	<b>Responsible Parties</b>	<b>Support</b>	<b>Funding</b>	<b>Timeline</b>
<b>2.2A</b>	Require property owners to provide source separated, single-stream recycling options for renters.	Winnebago County	Boone County, Local government	\$	5 years
<b>2.2B</b>	Explore Pay-As-You-Throw (PAYT) requirements for source reduction/diversion practices.	Winnebago County	Boone County, Local government	\$	5 years
<b>2.2C</b>	Assess barriers for low/fixed income households regarding diversion methods (e.g. recycling, compost bins).	Winnebago County	Boone County, Local government	\$\$	5 years
<b>2.2D</b>	Facilitate open floor discussions or town halls with community members regarding source reduction and waste diversion requirements.	Boone County, Winnebago County	Region 1 Planning Council	\$	Ongoing
<b>Rec. 3</b>	<b>Support local government bans or fees to reduce the number of single use plastic bags within the next 10 years.</b>				
<b>#</b>	<b>Action</b>	<b>Responsible Parties</b>	<b>Support</b>	<b>Funding</b>	<b>Timeline</b>
<b>2.3A</b>	Explore the local impacts and feasibility of introducing a plastic bag fee or ban.	Winnebago County	Boone County, Region 1 Planning Council	\$\$	10 years
<b>2.3B</b>	Require in-store bag recycling programs and availability of reusable bags for purchase at groceries and pharmacies.	Winnebago County	Boone County, Local government	\$	5 years
<b>Goal 3</b>	<b>Incentivize waste-related GHG emissions reductions and the use of emerging technologies through local policy.</b>				
<b>Rec. 1</b>	<b>Evaluate and consider alternative technologies, taxes, and subsidies for materials management.</b>				
<b>#</b>	<b>Action</b>	<b>Responsible Parties</b>	<b>Support</b>	<b>Funding</b>	<b>Timeline</b>
<b>3.1A</b>	Advocate for appropriate State legislation to allow nonhome rule municipalities and counties in Northern Illinois to implement strategies to offset emissions by 2027.	Elected officials, NorthCOG	Local government	\$\$	5 years
<b>3.1B</b>	Conduct feasibility studies regarding new waste diversion technology and to analyze costs and benefits in a local context.	Boone County, Winnebago County	Region 1 Planning Council	\$	Ongoing
<b>3.1C</b>	Explore supporting policy for direct subsidies and/or tax credits for source reduction by 2032.	Winnebago County	Boone County, Region 1 Planning Council	\$\$	10 years
<b>3.1D</b>	Explore methods and strategies which may offset carbon emissions.	Elected officials, NorthCOG	Region 1 Planning Council	\$	Ongoing
<b>3.1E</b>	Advocate for large waste producers to reduce emissions and waste by 2027.	Elected officials, NorthCOG	Advocacy groups	\$\$	Ongoing



**Table B-7. Boone County Ordinance Suggestions**

Revision or Addition	Ordinance Name	Action/Suggestion
Revision	Data Collection Ordinance	Collect information regarding the characteristics of waste that is disposed and transported by haulers to include in a comprehensive annual report. Criteria shall include the nature of the waste, where it originated from, and tonnage per hauler. Currently reports are required on a monthly basis.
Revision	Data Collection Ordinance for Recyclables	Collect information regarding the disposal of recyclables and compile into a comprehensive annual report. Criteria shall include type of recyclables collected, price per unit, and revenue produced by it' sale. Currently reports are released on a quarterly basis.
Addition	Data Release Ordinance	Requires waste and recycling reports to be easily accessible to the public, such as through a municipality's website.
Revision	Prohibition on Leaf Burning Ordinance	Currently, on-site landscape waste may be burned on-site. This ordinance would ban this practice.
Addition	Mandatory Recycling Options Ordinance	Requires property owners to provide source separated recycling options to tenants.

**Table B-8. Winnebago County Ordinance Suggestions**

Revision or Addition	Ordinance Name	Action/Suggestion
Addition	Data Collection Ordinance	Collect information regarding the characteristics of waste that is disposed and transported by haulers to include in a comprehensive annual report. Criteria shall include the nature of the waste, where it originated from, and tonnage per hauler. Currently no such reports are required.
Addition	Data Collection Ordinance for Recyclables	Collect information regarding the disposal of recyclables and compile into a comprehensive annual report. Criteria shall include type of recyclables collected, price per unit, and revenue produced by its sale. Currently there is no ordinance requiring this.
Addition	Data Release Ordinance	Requires waste and recycling reports to be easily accessible to the public, such as through a municipality's website.
Addition	Mandatory Recycling Options Ordinance	Requires property owners to provide source separated recycling options to tenants.
Addition	Mandatory Recycling Options Ordinance	Requires property owners to provide source separated recycling options to tenants.

**Table B-9. Funding**

Goal 1	Collaborate regionally to maximize funding and programming while prioritizing source reduction efforts.				
Rec. 1	Research the costs and benefits of pursuing various solid waste management funding sources.				
#	Action	Responsible Parties	Support	Funding	Timeline
1.1A	Create a strategic plan for applying for relevant, recurring grant opportunities.	Winnebago County	Boone County, Region 1 Planning Council	\$\$	Ongoing
1.1B	Explore mutually beneficial, capacity-building opportunities related to waste management, such as internships or local higher education collaborations.	Winnebago County	Boone County	\$\$	Ongoing
1.1C	Compile a list of financial resources to be shared across all members of the Solid Waste Advisory Committee.	Region 1 Planning Council	Local government, Local community partners	\$\$	1 year
1.1D	Create a resource guide, tool kit, or informative report for local area partners on funding opportunities and mechanisms.	Region 1 Planning Council	Local government, Local community partners	\$\$	1 year
1.1E	Work with existing economic development groups when seeking funding or attracting waste haulers that meet local needs.	Boone County, Winnebago County	Region 1 Planning Council, Economic development groups	\$	Ongoing
1.1F	Explore methods to reduce overall waste system and resident costs, such as transitioning to every other week collection for recycling and garbage and weekly collection of compostable materials.	Winnebago County	Boone County, Region 1 Planning Council	\$\$	1 year
Goal 2	Receive sufficient public or private funding to implement the Regional Solid Waste Management Plan recommendations.				
Rec. 1	Explore public funding mechanisms that support sustainable waste planning and management efforts.				
#	Action	Responsible Parties	Support	Funding	Timeline
2.1A	Utilize host fees from the landfill to fund plan implementation efforts.	Winnebago County	Local government	\$\$	Ongoing
2.1B	Implement a voter-approved, short-term sales tax, or "trash tax", on haulers serving customers within Boone and Winnebago Counties' boundaries to help fund waste reduction efforts .	Boone County, Winnebago County	Local government	\$\$	Ongoing

Table B-10. Material Diversion Goals

Term	Goal
5 Year	Achieve an overall 35% Traditional Materials diversion rate by 2027
	Achieve a 53% non-traditional materials diversion rate by 2027
	Achieve a 60% organics diversion rate by 2027
10 Year	Achieve a 73% organics diversion rate by 2037
	Achieve a 62% non-traditional materials diversion rate by 2037
	Achieve an overall 60% Traditional Materials diversion rate by 2037
20 Year	Achieve a 95% non-traditional materials diversion rate by 2042
	Achieve an overall 85% Traditional Materials diversion rate by 2042
	Achieve an 85% organics diversion rate by 2042

Table B-11. Traditional Materials

5 Year	Achieve an overall 35% Traditional Materials diversion rate by 2027				
10 Year	Achieve an overall 60% Traditional Materials diversion rate by 2037				
20 Year	Achieve an overall 85% Traditional Materials diversion rate by 2042				
Rec. 1	Promote recycling amongst commercial, institutional, and industrial sectors.				
#	Action	Responsible Parties	Support	Funding	Timeline
1.1	Create a toolkit containing information on waste audits (generation and characterization studies), waste reduction analysis, and a materials marketplace.	Boone County, Winnebago County	Region 1 Planning Council	\$\$	1 year
1.2	Outline data reporting standards for haulers that support future analysis efforts.	Winnebago County	Boone County, Region 1 Planning Council	\$\$	Ongoing
Rec. 2	Promote education on waste minimization and proper recycling through public campaigns.				
#	Action	Responsible Parties	Support	Funding	Timeline
2.1	Create education campaigns on the “Dirty Dozen” contaminants using “Rethink, Reduce, Reuse, Recycle”	Winnebago County	Boone County, Local community partners	\$\$	1 year
2.2	Expand educational efforts to new audiences such as property owners, industrial commercial sector, etc.	Boone County, Winnebago County	Local government, Local community partners	\$	Ongoing
2.3	Promote Repair and Share programs for traditional waste materials.	Boone County, Winnebago County	Local government, Local community partners	\$	1 year
Rec. 3	Promote regional sustainable procurement practices.				
#	Action	Responsible Parties	Support	Funding	Timeline
3.1	Consider a minimum post-consumer recycled content requirement for procurement for local governments.	Boone County, Winnebago County	Region 1 Planning Council, Local government	\$	Ongoing
3.2	Sponsor green procurement workshops.	Boone County, Winnebago County	Local government	\$	5 years
3.3	Reward green buying practices in schools and businesses with financial incentives.	Winnebago County	Boone County, Local school districts	\$\$	Ongoing
3.4	Encourage selection of vendors with sustainability practices in supply chain management.	Boone County, Winnebago County	Region 1 Planning Council, Local government	\$	Ongoing
3.5	Promote clean product alternatives within local government contracts and publicly funded institutions.	Boone County, Winnebago County	Region 1 Planning Council, Local government	\$	Ongoing
Rec. 4	Promote product stewardship and responsibility in local industries (commercial and industrial).				
#	Action	Responsible Parties	Support	Funding	Timeline
4.1	Reduce consumer cost barriers for existing local take-back initiatives.	Boone County, Winnebago County	Local government	\$	Ongoing
4.2	Encourage environmental best practices amongst local industry and manufacturing businesses.	Boone County, Winnebago County	Local government, Economic development groups	\$	Ongoing
4.3	Review and encourage new national and state take-back initiatives for manufacturers and retailers.	Region 1 Planning Council	Local government	\$\$	Ongoing



<b>Rec. 5</b>	<b>Consider ordinances to increase commercial, industrial, and multifamily recycling.</b>				
#	Action	Responsible Parties	Support	Funding	Timeline
<b>5.1</b>	Amend or construct an ordinance requiring recycling infrastructure for dwellings that produce large amounts of waste.	Winnebago County	Boone County, Local government	\$\$	5 years
<b>5.2</b>	Amend or construct an ordinance requiring recycling infrastructure for high occupancy dwellings.	Boone County, Winnebago County	Local government	\$\$	5 years
<b>5.3</b>	Amend or construct an ordinance requiring recycling infrastructure for high waste generators in the commercial, industrial and institutional sectors.	Boone County, Winnebago County	Local government	\$\$	5 years
<b>Rec. 6</b>	<b>Promote pilot programs and demonstration projects.</b>				
#	Action	Responsible Parties	Support	Funding	Timeline
<b>6.1</b>	Consider possible reduction of number of accepted materials or simplification of guidelines.	Boone County, Winnebago County	Local government	\$	5 years
<b>6.2</b>	Investigate possible single-stream recycling for low-population communities.	Winnebago County	Boone County, Local government	\$\$	5 years
<b>6.3</b>	Connect haulers with manufacturers for material-specific diversion opportunities.	Boone County, Winnebago County	Local government	\$	Ongoing
<b>Rec. 7</b>	<b>Plan for seasonal and unexpected waste and recycling surges.</b>				
#	Action	Responsible Parties	Support	Funding	Timeline
<b>7.1</b>	Collaborate with Rockford University to plan for end of year student move-out waste surges.	Winnebago County	Higher Education	\$	Ongoing
<b>7.2</b>	Form a debris management plan for natural disasters in coordination with state/regional efforts.	Boone County, Winnebago County	FEMA, IEMA	\$\$	1 year
<b>7.3</b>	Collaborate with municipalities to require event planning/permitting to include diversion plan for public events (concerts, festivals).	Boone County, Winnebago County	Local government	\$	5 years

**Table B-12. Non-Traditional Materials**

<b>5 Year</b>	<b>Achieve a 53% non-traditional materials diversion rate by 2027</b>				
<b>10 Year</b>	<b>Achieve a 62% non-traditional materials diversion rate by 2037</b>				
<b>20 Year</b>	<b>Achieve a 95% non-traditional materials diversion rate by 2042</b>				
<b>Rec. 1</b>	<b>Sponsor one day events and or drop off locations for non-traditional materials.</b>				
#	Action	Responsible Parties	Support	Funding	Timeline
<b>1.1</b>	Host periodic collection events for non-traditional materials such as HHW, E-waste, polystyrene foam, and tires.	Boone County, Winnebago County	Local community partners	\$	Ongoing
<b>Rec. 2</b>	<b>Monitor legislative actions for opportunities targeting special recycling efforts.</b>				
#	Action	Responsible Parties	Support	Funding	Timeline
<b>2.1</b>	Review legislative actions each quarter that impact non-traditional materials collection.	Boone County, Winnebago County	Region 1 Planning Council	\$	Ongoing (Quarterly)
<b>Rec. 3</b>	<b>Promote the reduction and proper disposal of non-traditional materials.</b>				
#	Action	Responsible Parties	Support	Funding	Timeline
<b>3.1</b>	Develop outreach materials on sustainable alternative products, promote reuse and purchasing practices to find alternatives and/or reduce use of non-traditional materials.	Boone County, Winnebago County	Region 1 Planning Council, Local government and community partners	\$	1 year
<b>3.2</b>	Access Illinois EPA non-traditional materials event program information and apply for an event.	Boone County, Winnebago County	Local government	\$	1 year
<b>3.3</b>	Research feasibility for siting a partnership-based non-traditional materials recycling facility.	Boone County, Winnebago County, Region 1 Planning Council	Local government	\$\$	1 year
<b>3.4</b>	Secure permanent drop off locations.	Boone County, Winnebago County	Local government	\$	1 year
<b>3.5</b>	Evaluate options for home collection programs for non-traditional materials.	Boone County, Winnebago County, Region 1 Planning Council	Local government	\$\$	1 year
<b>3.6</b>	Invest in the necessary consumer infrastructure to properly recycle or salvage non-traditional waste.	Boone County, Winnebago County	Local government	\$\$\$	5 years

<b>Rec. 4</b>	<b>Prioritize and explore methods of diverting frequently landfilled or hard-to-recycle items.</b>				
#	Action	Responsible Parties	Support	Funding	Timeline
<b>4.1</b>	Explore integrating programs with large waste producers with infrastructure for drop-off items.	Boone County, Winnebago County	Local government	\$	1 year

**Table B-13. Organics**

<b>5 Year</b>	<b>Achieve a 60% organics diversion rate by 2027</b>				
<b>10 Year</b>	<b>Achieve a 73% organics diversion rate by 2037</b>				
<b>20 Year</b>	<b>Achieve an 85% organics diversion rate by 2042</b>				
<b>Goal 1</b>	<b>Increase the source reduction and diversion of non-food organic materials by 75 percent for residential and 45 percent commercial entities by 2026.</b>				
<b>Rec. 1</b>	<b>Promote greenscaping and home management of yard waste.</b>				
#	Action	Responsible Parties	Support	Funding	Timeline
<b>1.1</b>	Encourage municipalities to implement local policy encouraging and enabling greenscaping to reduce yard waste.	Boone County, Winnebago County	Region 1 Planning Council, Local government and community partners	\$	5 year
<b>1.2</b>	Provide or require reusable bins for yard waste collection.	Boone County, Winnebago County	Waste haulers	\$\$	5 year
<b>1.3</b>	Require yard waste collection for leaves, prohibiting open burning practices.	Boone County	Local government	\$	1 year
<b>Rec. 2</b>	<b>Coordinate with neighboring jurisdictions for seasonal composting events.</b>				
#	Action	Responsible Parties	Support	Funding	Timeline
<b>2.1</b>	Evaluate how to incorporate into existing community events.	Boone County, Winnebago County	Local government and community partners	\$	Ongoing
<b>2.2</b>	Host an annual leaf collection event.	Boone County, Winnebago County	Local government and community partners	\$\$	Ongoing
<b>2.3</b>	Host an annual pumpkin collection event.	Boone County, Winnebago County	Local government and community partners	\$\$	Ongoing
<b>2.4</b>	Host an annual Christmas tree collection event.	Boone County, Winnebago County	Local government and community partners	\$\$	Ongoing
<b>Goal 2</b>	<b>Increase the source reduction and diversion of food materials by 50 percent for residential and commercial entities by 2026.</b>				
<b>Rec. 1</b>	<b>Evaluate the feasibility of a local food scrap collection and compost program.</b>				
#	Action	Responsible Parties	Support	Funding	Timeline
<b>2.1A</b>	Create an inventory of organic waste infrastructure to determine feasibility of expansion. Evaluate existing organics collection infrastructure to accommodate additional materials.	Boone County, Winnebago County	Region 1 Planning Council, Waste haulers, Local community partners	\$\$	1 year
<b>2.1B</b>	Explore options that enable curbside organic waste (food and yard waste) collection to be transported to a large scale composting site in the area.	Boone County, Winnebago County	Region 1 Planning Council, Waste haulers, Local community partners	\$	1 year
<b>2.1C</b>	Partner with local community organizations such as KNIB to educate the public on the benefits of composting.	Winnebago County	Local community partners, Local school districts	\$\$	Ongoing
<b>Rec. 2</b>	<b>Evaluate the feasibility of voluntary or mandated food scrap composting programs.</b>				
#	Action	Responsible Parties	Support	Funding	Timeline
<b>2.2A</b>	Consider voluntary and mandatory composting for residential, commercial, and industrial properties.	Boone County, Winnebago County	Region 1 Planning Council, Local community partners	\$\$	5 year
<b>2.2B</b>	Periodically re-evaluate food scrap composting programming amid new information to increase diversion efforts.	Boone County, Winnebago County	Local community partners	\$	Ongoing
<b>Rec. 3</b>	<b>Develop opportunities for pre- and post- consumer food recovery.</b>				
#	Action	Responsible Parties	Support	Funding	Timeline
<b>2.3A</b>	Engage quarterly with communities, commercial entities, schools, etc., to identify food recovery opportunities.	Boone County, Winnebago County	Local government	\$\$	Ongoing
<b>2.3B</b>	Connect local food banks with large scale food waste generators to reduce food waste.	Boone County, Winnebago County	Local government, Local community partners	\$\$	Ongoing

# Appendix C: Existing & Model Ordinances

## Existing Codes Related to Waste: Boone County

### Chapter 26: FIRE PREVENTION AND PROTECTION

#### ARTICLE I. IN GENERAL

##### **Sec. 26-2. - Open burning—Prohibited (Applies to unincorporated areas only).**

The open burning of garbage, rubbish, and refuse is not allowed in any part of the county at any time pursuant to the Boone County Code of Ordinances, the International Fire Code, the Illinois Environmental Protection Act, and other regulations. Refuse includes, but is not limited to, materials such as discarded paper, cardboard, lumber, metal, plastic, cloth, glass, rubber, ceramics, synthetic materials, construction and demolition debris, discarded household items, commercial/trade waste, animal carcasses, manure, rubbish, garbage, off-site-generated flora and landscape waste, and any discarded matter which is burned for waste disposal purposes. On-site generated flora and landscape waste may be burned on-site. Burning in a metal drum or similar object is considered open burning.

### Chapter 34: Garbage, Trash and Refuse

#### **Article II. - Garbage Disposal Areas and Vehicles**

##### **Sec. 34-26: Definitions.**

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

**Garbage:** Garbage means any refuse, products, or materials, including, but not limited to, the following: Putrescible animal and vegetable wastes resulting from the handling, preparation, cooking, sale, or consumption of food; human and animal excretion; glass or metal containers, products, or objects discarded as no longer usable; paper, wood, and cardboard waste; uprooted weeds, grass clippings, leaves, and the like; ashes and cinders; discarded furniture or clothing; and dead animals.

**Garbage Disposal Area:** Garbage disposal area means any area within a county but outside any city, village, or incorporated town in such county to which garbage is hauled for disposal. The term “garbage disposal” does not include the area on any person’s land used for disposal of garbage from such person’s own household nor does it include areas maintained by any incorporated city, village, or town.

(Ord. of 12-12-1973, § 2; Code 1981, § 9-16)

Cross reference— Definitions generally, § 1-2.

##### **Sec. 34-27. Scope of Article.**

This article is not intended and shall not be construed to prohibit a resident of the county from hauling his own garbage in his personal vehicle, provided that the garbage is hauled to and deposited in a licensed garbage disposal area.

(Ord. of 12-12-1973, § 19; Code 1981, § 9-17)

##### **Sec. 34-28. Transportation of Garbage Restricted.**

The following restrictions shall apply to the transportation of garbage within the county:

It shall be unlawful for any person or any combination of persons to haul garbage a distance of greater than 25 miles from the garbage disposal area where the garbage will be disposed.

It shall be unlawful to transport garbage from outside the county except in totally enclosed trucks or units.

It shall be unlawful to transport garbage in the county that has not been deposited in a state-approved landfill within 24 hours of the time it is collected.

It shall be unlawful to transport garbage in the county except between the hours of 6:00 a.m. and 6:00 p.m.

It shall be unlawful to transport garbage into or out of the county by railroad car, pipeline or any other method except motor vehicle.

(Ord. of 12-12-1973, §§ 7—11; Code 1981, § 9-18)

Cross reference— Motor vehicles and traffic, Ch. 54.

##### **Sec. 34-29. Monthly reports of collectors.**

Each person operating a garbage collection, disposal, or transportation firm in the county shall file a monthly report with the county clerk specifying the number of vehicles used in that business, the nature and source of the refuse collected, transported, or disposed of and the total tonnage collected, transported, or disposed of. For the purpose of crosschecking these reports, the records of such persons shall be open to reasonable inspection by the county or an agent of the county.

(Ord. of 12-12-1973, § 13; Code 1981, § 9-19)

##### **Sec. 34-30. Inspections.**

The county or any authorized agent shall have authority to inspect at any time or place any vehicle used in hauling garbage or any garbage disposal area and shall have the authority to enter any licensed premises used as a garbage disposal area and make appropriate tests on monitoring wells or other facilities at reasonable times in order to ensure that all state and local standards regarding the operation of such vehicles and sites are met.

(Ord. of 12-12-1973, § 16; Code 1981, § 9-21)

### **Sec. 34-31. Violations; penalties.**

Any person who violates this article or any of the rules and regulations adopted pursuant to law shall be deemed to have committed a misdemeanor and shall be punished by a suspension or revocation of any license held or as provided in Section 1-10, or by both such suspension or revocation and penalty.

(Ord. of 12-12-1973, § 18; Code 1981, § 9-22)

## **ARTICLE III. CITY/COUNTY LANDFILL**

### **Sec. 34-56. Depositing grass Clippings, Etc., in City/County Landfill.**

Beginning May 1, 1989, no grass clippings, leaf, garden, and/or lawn waste shall be deposited in the city/county landfill, known as landfill No. 2.

(Code 1981, § 9-51; Ord. No. 89-12, § 19.1, 4-12-1989)

## **ARTICLE IV. RECYCLING**

### **Sec. 34-91: Containers-Generally.**

Any privately or publicly operated refuse collection service shall be required to provide each residential customer so served with a container to be used for collection and regular pickup of certain recyclable items as specified by the county.

(Code 1981, § 9-70; Ord. No. 90-6, 4-11-1990)

### **Sec. 34-82. Same—Areas provided.**

Providing customers with a container for recyclable items and the subsequent pickup of those items shall be done in areas where it is reasonable and compensatory to the refuse collection service.

(Code 1981, § 9-71; Ord. No. 90-6, 4-11-1990)

### **Sec. 34-83. Operation of Licensed Refuse Collection Services.**

The license holder shall operate under the following conditions:

1. The license holder will be required to either sell or provide to each residential customer a single, 12-gallon minimum, rectangular open top container for the purpose of collecting recyclable items. The containers shall be approved by the county prior to delivery to the homeowners.
2. The license holder agrees to pick up and have recycled the following recyclable materials, which are not to be placed in regular refuse containers:
  - a. Newsprint.
  - b. Clean glass food and beverage bottles/containers.
  - c. Aluminum food and beverage containers.
  - d. Steel/tin food and beverage containers.

Other items may be collected by the license holder for recycling at his discretion. The above categories of recyclable materials must be properly sorted and separated and placed at the curb in the open containers. Recyclable materials which include waste/ refuse will not be picked up.

1. At such a time that market conditions would prohibit the license holder from selling collected recyclables, the county board chairman may, at the request of the license holder, waive the requirement to collect the recyclable so affected. It is understood that if this condition arises, the license holder may, at his option, continue to collect the material but dispose of it with the regular refuse.
2. The recyclable materials will be picked up on the same day as the refuse/garbage.
3. The license holder shall furnish the county with quarterly statistical reports showing quantities, by type, of all recyclables collected, prices per unit, and revenues generated by their sale. Such reports shall have any information necessary to comply with state mandated requirements.
4. Collection and disposal of items designated as household refuse or household garbage shall be made not less than once a week. The frequency of collection of recyclable materials shall be at the discretion of the license holder. However, collection of recyclables shall be not less than once per month.
5. The license holder may continue to collect any refuse of any commercial, business, or industrial establishment, schools or other buildings occupied by a public body, subject to any and all of the regulations governing private scavengers.

(Code 1981, § 9-72; Ord. No. 90-6, 4-11-1990)

### **Sec. 34-84. Electric recycling fees.**

Electronic items shall be subject to the following fees:

1. First TV/monitor per resident per calendar year: no charge when received during operating hours.
  - a. TVs/monitors 20" or less .....\$20.00
  - b. TVs/monitors larger than 20" .....\$30.00
  - c. Non-Boone County Resident .....\$40.00
  - d. Fee when facility closed or unstaffed .....\$200.00

(Ord. No. 19-12, 1-16-2019)

## **Chapter 38: Health and Sanitation**

### **Article I. IN GENERAL**

#### **Sec. 38-2. Siting fees for new regional pollution control facility.**

There shall be paid to the county clerk for delivery to the county treasurer for deposit in the general fund at the time of the filing of an application for any new regional pollution control facility that is not a sanitary or hazardous waste landfill a fee of \$100,000.00. If costs incurred by the county for review of each applicant total amount below the \$100,000.00 fee, the difference between the fee and the actual expenses shall be refunded to the applicant. If costs incurred by the county for review of all applications total an amount in excess of \$100,000.00, the applicant shall reimburse the county for such expenses.

There shall be paid to the county clerk for delivery to the county treasurer for deposit in the general fund at the time of the filing of an application for a sanitary or hazardous landfill a fee of \$125,000.00. If costs incurred by the county for review of each applicant total amount below the \$125,000.00 fee, the difference between the fee and the actual expenses shall be refunded to the applicant. If costs incurred by the county for review of all applications total an amount in excess of \$125,000.00, the applicant shall reimburse the county for such expenses.

Previous regional pollution control facility siting fees set by the county board are hereby repealed from and after the effective date of the ordinance from which this section is derived.

(Ord. No. 05-30, 7-13-2005)

Cross reference— City/county landfill, § 34-56.

## **Article II. PUBLIC HEALTH ORDINANCE**

### **DIVISION 1. GENERALLY**

#### **Sec. 38-27. Definitions.**

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this article, except where the context clearly indicates a different meaning:

Blight means a dilapidated structure in need of repair and/or surrounding area exhibiting nuisance violations.

Dump means areas in which non putrefactive material is permitted to be deposited.

Dwelling means any structure, including, but not limited to, residential, commercial, industrial or agriculture.

Garbage shall mean any organic waste matter which is subject to putrification.

Health authority means the legally designated health administrator of the county or his duly authorized representative.

Rubbish shall mean organic or inorganic waste material which is not subject to putrification.

Sanitary landfill means a method of disposing of garbage or rubbish in accordance with United States Environmental Protection Agency regulations.

Sewage means the water-carried human wastes and other liquid wastes from residences, business buildings, industrial establishments, or other places.

Solid waste disposal area means a sanitary landfill or a dumping site.

(Ord. No. 05-30, 7-13-2005)

### **DIVISION 2. NUISANCES**

#### **Sec. 38-71. Garbage disposal.**

No person shall discharge, deposit, place, or permit the discharging, depositing, or placing on any premises, except the sanitary landfills in the county, of any garbage, filth, offal, or refuse accumulations of animal, fruit, or vegetable matter, other noxious matter or substance, or waste from sewage disposal facilities which by reason of its quantity or decomposition would become foul, odorous, subject to spontaneous combustion, or otherwise become detrimental to public health or conducive to the spread of disease. It is unlawful to place garbage or rubbish in the streets, alleys, or roadways.

Garbage and all empty food and beverage containers must be placed in a closed container. This container must be rodent- and fly-resistant. Garbage to be put out for pickup may be stored in plastic bags for a maximum of 24 hours. This section applies to all zone districts except A-1, as defined by the county zoning ordinance.

(Ord. No. 05-30, 7-13-2005)

Cross reference— Garbage disposal areas and vehicles, § 34-26 et seq.

#### **Sec. 38-72. Rubbish disposal.**

No person shall deposit or place or permit the depositing or placing of rubbish in any such manner as to become a nuisance or otherwise become detrimental to public health or conducive to the spread of disease.

(Ord. No. 05-30, 7-13-2005)

#### **Sec. 38-74. Hauling wastes.**

Any vehicle used for the purpose of carrying, carting, hauling, or transporting garbage, rubbish, or miscellaneous waste shall be so constructed as to prevent any part of the contents thereof from falling, leaking or spilling therefrom.

(Ord. No. 05-30, 7-13-2005)

Cross reference— Garbage, trash and refuse, Ch. 34.

### **DIVISION 4. RESPONSIBILITIES OF OWNERS AND OCCUPANTS**

#### **Sec. 38-144. Disposition of rubbish and garbage.**

Every occupant of a dwelling or dwelling unit shall store and dispose of all his rubbish in a clean, sanitary, and safe manner.

Every occupant of a dwelling or dwelling unit shall store and dispose of all his garbage and any other organic waste which might provide food for insects and/or rats in a clean, sanitary, and safe manner. Rodent resistant, insect resistant, watertight refuse containers shall be used for storage pending collection.

Every owner of a dwelling containing three or more dwelling units shall supply facilities or refuse containers for the sanitary and safe storage and/or disposal of rubbish and garbage. In the case of single-family or two-family dwellings, it shall be the responsibility of the occupant to furnish such facilities or refuse containers.

(Ord. No. 05-30, 7-13-2005)

## **Chapter 42: ENVIRONMENT**

### **Article II. REGIONAL POLLUTION CONTROL FACILITY SITING**

#### **Sec. 42-31. Title.**

This article shall be known, cited and referred to as the "Pollution Control Facility Siting Ordinance of Winnebago County, Illinois."

(Code 1964, § 13C-1; Ord. No. 2005-CO-35, § 1, 3-24-05)

#### **Sec. 42-32. Definitions.**

The terms used in this article shall have the same meanings as the same terms are defined in the state Environmental Protection Act, 415 ILCS 5/1 et seq. (referred to as the state Environmental Protection Act), in effect as of October 23, 1986, and as such statute may be amended or modified from time to time.

(Code 1964, § 13C-3)

Cross reference(s)— Definitions generally, § 1-2.



### **Sec. 42-33. Application.**

All applications for site location approval for pollution control facilities pursuant to the state Environmental Protection Act shall be made in writing and filed with the county clerk. The applications shall conform to the following:

1. Requirements. The application shall conform to the following:
  - a. Four copies of the application and all exhibits thereto shall be filed with the county clerk.
  - b. The application shall be typed on paper 8½ inches x 11 inches in size and shall be securely bound in the left hand margin.
  - c. The application shall contain the information specified in subsections (1) through (6) of this section.
  - d. The application shall be signed by the applicant, or if the application is filed by a corporation, it shall be signed by its principal executive officer.
  - e. The fact sheet of the application shall contain only the following information:
    1. A statement that it is an application for approval of a site for a new regional pollution control facility.
    2. A statement indicating whether it is an application for a waste storage site, sanitary landfill, waste disposal site, waste transfer station, waste incinerator, or any combination thereof, or any other type of regional pollution control facility governed by the state Environmental Protection Act.
    3. The name of the applicant.
    4. The principal business address and telephone number of the applicant.
    5. The name, address, telephone number and title of the person designated by the applicant as its agent for service of notices.
2. Background of applicant. The application shall contain the applicant's full name, address and telephone number. If a partnership, the names and addresses of all partners and the telephone number of the partnership shall be listed. If a corporation, the names and addresses of all shareholders owning ten percent or more of the capital stock of the corporation and the telephone number of the corporation shall be listed.
3. Site information. Information required for the site shall be as follows:
  - a. The application shall contain a legal description of the proposed site and a street address or some other reasonable description of where the proposed site is located.

- b. The application shall set forth the names, addresses and telephone numbers of the owners of the site, if other than the applicant. If the site is owned by a trust, the names, addresses and telephone numbers of all of the beneficiaries shall be set forth, and a copy of the trust agreement shall be attached to the application as an exhibit. If the site is owned by a corporation, all of the information required by subsection (2) of this section shall be furnished in the application as to the owning corporation. If the site is not owned by the applicant, the application shall describe all documents giving the applicant the right to use the site for the purposes listed in the application. The applicant shall attach copies of all the documents to the application as exhibits.
4. Proposed service area. The application shall define the geographic area that the proposed facility is intended to serve.
5. Floodplain. The application shall include a statement that the facility is within or outside of the boundary of the 100-year floodplain as determined by the state department of transportation.
6. Notices. Copies of the notices required to be served under the state Environmental Protection Act, as existing or hereafter amended, shall be filed with the application.

(Code 1964, § 13C-4; Ord. No. 2005-CO-35, § 1, 3-24-05; Ord. No. 2011-CO-69, 12-8-11)

### **Sec. 42-34. Effective date of filing.**

- a. No application for site approval shall be deemed to have been filed or accepted for filing unless all of the requirements of this article shall have been met. The county clerk shall not give a receipt or other indication of filing until such time as it has been determined that the application complies with the requirements of this article. Within a reasonable period of time after delivery of an application, the county clerk shall advise the applicant either:
  - That the application is complete and that it has been accepted for filing, designating the date of filing; or
  - That the application is not complete, specifying wherein it is deficient.
  - Reserved.

(Code 1964, § 13C-5; Ord. No. 2011-CO-69, 12-8-11)

### **Sec. 42-35. Filing fee.**

- a. Each application for a waste storage site, sanitary landfill, waste disposal site, waste transfer station, waste incinerator, or any combination thereof, shall be accompanied by a \$100,000.00 filing fee, and all other applications shall be accompanied by a \$10,000.00 filing fee, which shall be used to defray the actual costs incurred by the county in the siting review process, including, but not limited to, the costs involved in conducting the required hearings and court reporting and transcription fees.

- b. Within a reasonable time after all proceedings have been completed as to any application, the county board shall make a determination as to the total costs incurred by the county in the siting review process and shall order any excess of the fee paid with the application to be refunded promptly to the applicant. However, in no case will any amount of interest on the refunded amount be refunded to the applicant. If the actual costs incurred exceed the filing fee, the applicant will be notified and will promptly remit the amount needed to cover the actual costs incurred by the county.

(Code 1964, § 13C-6; Ord. No. 2005-CO-05, §§ 2, 3, 3-24-05)

#### **Sec. 42-36. County clerk's duties.**

Upon receipt of an application for site location approval, the county clerk shall transmit a copy of that application to the chairman of the county board and to the county state's attorney. Furthermore, upon receipt of any written comment from any person concerning the appropriateness of the proposed site, the county clerk shall transmit a copy of that written comment to the chairman of the county board and to the county state's attorney.

(Code 1964, § 13C-7)

#### **Sec. 42-37. Public inspection duties.**

A copy of the application shall be made available for public inspection in the office of the county clerk. Members of the public shall be allowed to obtain a copy of the application or any part thereof upon payment of the actual cost of reproduction.

(Code 1964, § 13C-8)

#### **Sec. 42-38. Public comment.**

- a. The county clerk shall receive and file written comments from any person concerning the appropriateness of the proposed site. Upon receipt of any such written comment, the county clerk shall date stamp the written comment and immediately deliver a copy to the chairman of the county board and to the county state's attorney.
- b. Copies of such written comments shall be made available for public inspection in the office of the county clerk. Members of the public shall be allowed to obtain a copy of any written comment upon payment of the actual cost of reproduction.

## **Chapter 58: PARKS AND RECREATION**

### **ARTICLE II. MOTORBOAT SAFETY**

#### **Sec. 58-37. Waterway litter.**

It is unlawful to leave, deposit, place, or throw on the waters, ice, shores or water or upon public or private property any cans, bottles, debris, refuse or solid waste material.

(Ord. No. 89-CO-52, § XI, 9-7-89)

## **Chapter 70: SOLID WASTE**

### **ARTICLE I. IN GENERAL**

#### **Sec. 70-1. Definitions.**

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Commercial purpose means the carriage of persons or property for any fare, fee, rate, charge or other consideration, or directly or indirectly in connection with any business or other undertaking intended for profit.

Garbage means any refuse products or material including, but not limited to, the following: putrescible animal and vegetable wastes resulting from the handling, preparation, cooking, sale or consumption of food; animal excretion; glass or metal containers, products or objects discarded as no longer useable; paper, wood, and cardboard waste; yard waste such as uprooted weeds, grass clippings, leaves and the like; ashes and cinders; discarded furniture or clothing; and dead animals. The term "garbage" does not include human excretion in the form of body waste.

Health officer means the Public Health Administrator of the Winnebago County Health Department.

Garbage hauling vehicle means any vehicle used for the commercial purpose of carrying, charting, hauling, or transporting garbage to a garbage disposal area, including, but not limited to, front loader garbage trucks, rear loader (packer) garbage trucks, side loader garbage trucks, roll-off garbage trucks (dumpers), grapple trucks, flatbed trucks, and all other vehicles displaying an H plate or more.

(Code 1964, § 9-1; Ord. No. 88-CO-5, § A, 2-11-88; Ord. No. 97-CO-24, 4-10-97; Ord. No. 2019-CO-111, § A, 11-26-19, eff. 1-1-20)

Cross reference— Definitions generally, § 1-2.

#### **Sec. 70-3. Depositing; discharging; placing of garbage and other filthy substances on premises or streets.**

It shall be unlawful for any person to discharge, deposit, place or permit the discharging, depositing or placing on any premises in the county, of any garbage, filth, offal or refuse accumulations of animal, fruit or vegetable matter, other nauseous matter or substance, or waste from sewage disposal facilities, which by reason of its quality or decomposition would become foul, odorous, subject to spontaneous combustion or otherwise become detrimental to public health or conducive to the spread of disease. It is unlawful to place garbage or rubbish in the streets, alleys or roadways.

(Code 1964, § 9-8)

#### **Sec. 70-4. Garbage disposal.**

- a. All persons within the county who accumulate garbage shall dispose of it in an approved manner and in a suitable container of metal or plastic with fitted covers.
- b. All garbage shall be placed in a container, as set forth above, and removed at least once per week. All persons generating garbage shall keep a record of who is removing such garbage.
- c. All garbage hauling vehicles transporting garbage to a garbage disposal area in Winnebago County must be properly permitted as set forth in section 70-6.

(Code 1964, § 9-9; Ord. No. 88-CO-5, §§ C, D, 2-11-88; Ord. No. 2019-CO-111, § C, 11-26-19, eff. 1-1-20)

### Sec. 70-5. Depositing rubbish on premises.

It shall be unlawful for any person to deposit or place, or permit the depositing or placing, on any premises in the county, rubbish in such manner as to become a nuisance or otherwise become detrimental to public health or conducive to the spread of disease.

(Code 1964, § 9-10)

### Sec. 70-6. Hauling garbage and rubbish.

- a. Owners duty to prevent spills. No person owning or controlling any garbage hauling vehicle, or any other vehicle used to haul garbage, shall cause or permit any vehicle to be so loaded, to be in such defective condition, so out of repair, faultily constructed, or so improperly driven or managed that any garbage with which such vehicle is loaded, or is being loaded, shall drop or fall on any public way or other place. Such vehicle shall be so constructed and covered as to prevent any part of the contents thereof from falling, leaking or spilling therefrom. Vehicles that transport garbage in a manner that is not fully enclosed shall ensure that the transport container is covered, by a tarp or other effective means, at all times when the vehicle is operating in the county, including after depositing any garbage being transported.
- b. Permit required; procedures. Any person owning or controlling any garbage hauling vehicles transporting garbage to a garbage disposal area in Winnebago County shall obtain permits for the vehicles from the Winnebago County Health Department and comply with the following terms and conditions:
  3. Application. Permit forms shall be furnished by the health department for the applicant to provide the following information: name and address of hauler, a description of each vehicle to be permitted, vehicle license plate, and vehicle identification number. Permit applications shall be submitted at least 30 days prior to the first day of the quarter in which the annual permit is to be issued, as set forth below.
  4. Inspection. All vehicles to be permitted will be inspected. Inspections shall be completed prior to permits being issued. Inspections shall consist of checking whether the vehicle can contain the type of garbage it will be used to haul without leaking, the wind blowing, or otherwise discharging any garbage prior to or after its disposal destination. The health officer or his or her designee shall inspect any three or more refuse hauling vehicles at a reasonable time, quartered at the same site in the county. Persons owning or operating fewer than three garbage hauling vehicles shall arrange with the health officer a reasonable time and place for inspection. Regardless of permit status, the health officer may inspect any garbage hauling vehicle at any time or place to ensure that its condition and operation are in compliance with this chapter and in the interest of public health and safety.

5. Term. The term of annual permits shall be staggered by county fiscal year quarters depending on the number of garbage hauling vehicles to be permitted:

Date Range	No. of Vehicles
October 1-September 30	76 or more vehicles
January 1-December 31	51-75 vehicles
April 1-March 31	11-50 vehicles
July 1-June 30	1-10 vehicles

6. Insurance. All permit applicants must provide a policy or certificate of insurance demonstrating both vehicle liability insurance and comprehensive general liability insurance with limits each of not less than \$1,000,000.00 each person, \$3,000,000.00 each accident bodily injury liability, and \$1,000,000.00 each accident property damage liability. Said insurance may not be changed or canceled without at least 30 days prior written notice to the health department.
7. Identification. At the time of permit issuance, the health officer shall provide two decals for each vehicle, one of which is to be affixed to the driver's side windshield and the other to be placed on the rear of the garbage hauling vehicle. Both decals must be visible at all times. No vehicle may be used without displaying said decals.
8. Violations. Failure to comply with any of the provisions in this section may be punished by suspension of the permit and a fine of up to \$1,000.00. Each day that a violation exists shall be considered a separate offense. In addition to other penalties and procedures authorized by law or this Code, a violation of this section is also subject to the code enforcement procedures set forth in chapter 4 of this Code.
9. Fees. The permit fees for garbage hauling vehicles shall be \$50.00 per vehicle per annum. An inspection fee of \$100.00 per vehicle per annum shall be assessed to cover the cost of the vehicle inspection.
10. A late fee of \$100.00 will be assessed for each permit application received on or after the first day of the quarter in which it was due.

(Code 1964, § 9-11; Ord. No. 88-CO-5, § E, 2-11-88; Ord. No. 2001-CO-63, 10-25-01; Ord. No. 2003-CO-147, 10-23-03; Ord. No. 2008-CO-48, 8-14-08; Ord. No. 2010-CO-73, 9-2-10; Ord. No. 2019-CO-111, § D, 11-26-19, eff. 1-1-20)



### **Sec. 70-7. Garbage debris and removal.**

If the owner of the property refuses or neglects to remove garbage and debris from the property, such garbage and debris may be removed by the county and the cost of such removal may be collected from the property owner in the following manner:

Notice of the county's intention to remove garbage and debris from the property shall be given to the property owner or owners by mailing a written copy of the notice to the last known address of each owner at least 15 days prior to such removal by the county;

Within 60 days of the county incurring such costs, the county or person performing the removal by the authority of the county in his own name, files notice of lien in the county recorder's office which notice shall consist of a sworn statement setting out:

A description of the real estate sufficient for identification;

The amount of money representing the cost and expense incurred or payable for the service; and

The date or dates when the costs were incurred by the county.

(Ord. No. 97-CO-24, 4-10-97)

### **Sec. 70-8. Violation subject to code enforcement procedure.**

In addition to other penalties and procedures authorized by law or this Code, a violation of sections 70-3 through 70-6 is also subject to the code enforcement procedures set forth in chapter 4 of this Code.

(Ord. No. 97-CO-67, § III, 12-11-97)

## **ARTICLE II. SANITARY LANDFILLS**

### **Sec. 70-31. Penalty for violation of article.**

Any operator who shall violate any provision of this article shall be subject to a fine of not less than \$100.00 or more than \$1,000.00. Each day's failure to comply with any such provision shall constitute a separate violation.

(Code 1964, § 9-166; Ord. No. 2019-CO-111, § E, 11-26-19, eff. 1-1-20)

### **Sec. 70-32. Permit required.**

An operator of a sanitary landfill in the county shall first obtain a permit from the county. The annual fee for a permit required by this section shall be \$500.00.

(Code 1964, § 9-158; Ord. No. 2019-CO-111, § E, 11-26-19, eff. 1-1-20)

### **Sec. 70-33. Bond required.**

The operator of a sanitary landfill shall deliver to the health department a cash or corporate bond in the sum of \$5,000.00. Such cash or corporate bond shall run to the county and shall be conditioned as follows:

The operator, their agents and employees will comply with all of the terms, conditions, provisions, requirements and specifications contained in this article and with all federal, state and local laws and regulations.

The operator will save harmless the county from any expense incurred through the failure of the operator, his agents or employees to operate and maintain the sanitary landfill in accordance with this article and all federal, state and local laws and regulations, including any expense the county may incur for correcting any violation or from any damages growing out of the negligence of the operator, his agents or employees.

Such bond shall run for a period of two years after the landfill site has been finished and brought to final grade.

(Code 1964, § 9-159; Ord. No. 2019-CO-111, § E, 11-26-19, eff. 1-1-20)

### **Sec. 70-34. Inspections; right of entry of health officer.**

The health officer or his or her designee shall make inspections of each sanitary landfill as often as he/she deems necessary and will report any major discrepancies to the county board. An operator shall allow the health officer or his or her designee upon the premises at all reasonable times for the purpose of inspecting the landfill.

(Code 1964, § 9-160; Ord. No. 2019-CO-111, § E, 11-26-19, eff. 1-1-20)

### **Sec. 70-35. Hearings before health officer.**

Any person affected by any notice in connection with the enforcement of the provisions of this article, or any rule or regulation adopted pursuant thereto, as provided by this article, may request and shall be granted a hearing on the matter before the health officer, provided that such person shall file in the office of the health officer a written petition requesting such hearing and setting forth a brief statement of the grounds therefor within ten days after such notice has been served.

Upon receipt of such petition, the health officer shall set a time and place for such hearing and shall give the petitioner written notice thereof. At such hearing, the petitioner shall be given an opportunity to be heard and to show why such notice should be modified or withdrawn, provided that, upon application of the petitioner, the health officer may postpone the date of the hearing for a reasonable time beyond such ten-day period if, in his judgment, the petitioner has submitted a good and sufficient reason for such postponement. (Code 1964, § 9-161)

### **Sec. 70-36. Action on notice following hearing.**

After such hearing, the health officer shall sustain, modify or withdraw such notice, depending upon his findings as to whether the provisions of this article and of the rules and regulations adopted pursuant thereto have been obeyed. If the health officer sustains or modifies such notice, it shall be deemed an order.

(Code 1964, § 9-162)

### **Sec. 70-37. Permit revoked if notice suspending permit sustained.**

If a notice suspending any permit has been sustained by the health officer, the permit shall be revoked. Any such permit which has been suspended by a notice shall be automatically revoked if a petition for hearing is not filed in the office of the health officer within ten days after such notice is served.

(Code 1964, § 9-163)

### **Sec. 70-38. Summary of record of hearing.**

The proceedings of such hearing, including the findings and decision of the health officer, shall be summarized, reduced to writing and entered as a matter of public record in the office of the health officer. Such record shall also include a copy of every notice or order issued in connection with the matter.

(Code 1964, § 9-164)

### **Sec. 70-39. Emergency orders by health officer.**

Whenever the health officer finds that an emergency exists which requires immediate action to protect the public health, he may, without notice or hearing, issue an order reciting the existence of such an emergency and requiring such action to be taken as he deems necessary to meet the emergency. Notwithstanding the other provisions of this article, such order shall be effective immediately. Any operator to whom such order is directed shall comply therewith immediately, but upon written petition to the health officer shall be afforded a hearing within ten days. After such hearing, the health officer shall continue such order in effect, modify it or revoke it.

(Code 1964, § 9-165)

## **Chapter 86: UTILITIES**

### **Article II SEWERS AND SEWAGE DISPOSAL**

#### **Sec. 86-30. Type of waste.**

A private sewage disposal system shall be designed to receive all domestic sewage from the buildings served. No cooling water, groundwater, discharge from roof drains, discharge from footing tile drains, swimming pool wastewater, or other clear water discharges shall be directed to the private sewage disposal system. No automotive grease or oil or toxic wastes, or any other waste other than domestic waste shall be discharged to a domestic private sewage system. Commercial private sewage systems must meet state requirements for grease and oil.

*Note: Water softener backwash should bypass the septic tank directly to the septic field or to a separate field line.*

(Ord. No. 2008-CO-26, 3-28-08)

# Model Ordinances

## Source Reduction Ordinance Template

This template was modeled after the following existing ordinances:

- Universal Zero Waste Ordinance – City of Boulder, Colorado
  - Ordinance No. 8045
  - Adopted 6/17/2015
- Refuse Separation Compliance Ordinance 2018 – San Francisco, California
  - Ordinance No. 300-18
  - Amended in Board 12/4/2018

### DEFINITIONS

The following words, terms, and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning.

*NOTE: For context purposes, definitions reflect the meanings established by the original ordinance that were referenced to create the following model ordinance.*

Special Events means temporary events held on special occasions in a public space, such as fairs, festivals, and similar events.

Waste Collection Services means services that collect waste from designated pick-up points.

Source Reduction means reducing waste by eliminating it before it is generated.

Business Owner means the owner/operator of a business who is responsible for functions and services for said business, including trash/recyclable collection.

Compostables means organic materials that have the capability to break down naturally in the environment to produce compost.

Landfill means a site in which waste is taken to be disposed of.

Large Waste Generator means a property that generates large quantities of waste (greater than 40 cubic yards per week of un-compacted waste).

Owner means the individual/individuals who claim ownership or responsibility of any property, including personal and commercial properties.

Property Owner means the owner/operator of a property who is responsible for functions and services for said property, including trash/recyclable collection.

Recyclables means materials that can be repurposed into other materials.

Source Separation refers to the process in which recyclables and compostables are separated from waste at the point of

generation to reduce the amount of waste disposed of in landfills.

Trash Container means a container that is approved to carry and transport waste until it can be taken to a landfill, or recycling/composting facility.

Waste means materials and substances from human/commercial/industrial/agricultural activities that no longer have a use.

Waste Pathways refers to where unwanted materials go once disposed of (landfill, recycling/compost facility).

Zero waste refers to the initiative to significantly reduce the amount of waste in the waste system by separating recyclables and compostables at the point of generation to divert them from landfills.

### ARTICLE 1. PURPOSE

#### PURPOSE

The purpose of this ordinance is to achieve “zero waste” by significantly reducing the amount of waste that is disposed of in landfills. This is to be done by requiring recyclable and compostable waste be separated at the source of generation for it to be handled properly and thus diverted from landfills.

#### APPLICABLE REGULATION

The following Regulatory instruments are applicable to the subject of zero waste:

- 40 CFR Part 246
- Resource Conservation and Recovery Act (RCRA)

#### SCOPE

The ordinance applies to the reduction and source separation of waste by enforcing the appropriate disposal of recyclable and compostable materials from property owners, businesses, and waste collectors.

#### MONITORING AND ENFORCEMENT

Waste in visible areas (such as alleyways or curb sides) is subject to inspection and reporting by local law enforcement if there are visible issues present with the waste containers. This includes visible and excessive amounts of waste that are improperly sorted or disposed of. Citizens who observe improper waste disposal practices are encouraged to inform the proper authorities to enforce this ordinance. Waste collection services have the responsibility to inform the waste generator if issues in disposal practices are observed. If the improper sorting and disposal continues after written warning, the generator may be subject to violation fines.

### ARTICLE 2. REQUIREMENTS BY GENERATOR TYPE

#### PROPERTY OWNER/MANAGER REQUIREMENTS

1. It is the responsibility of property owners and property managers to ensure that on-site collection areas for recyclables and compostables are present. These collection areas shall be in close proximity to the building and be reasonably accessible to all tenants inhabiting the property.

2. Janitorial services for residential properties shall accommodate waste source separation practices for separate recycling and composting containers when disposing of waste.
3. Property owners and managers should conduct annual training to tenants regarding the collection and location of recyclable and compostable collection areas. New tenants to the property shall be told this information within 30 days of their move-in date. Any alterations regarding the location or method of recyclable or compostable waste collection must be conveyed to all tenants within 14 days of the alteration.
4. Records of waste management practices shall be kept for a minimum of three years and are subject to inspection from county authorities.

## **BUSINESS REQUIREMENTS**

1. It is the responsibility of business owners and managers to ensure that on-site collection areas for recyclables and compostables are present. These collection areas shall be in close proximity to the building and be reasonably accessible to employees and customers.
2. Janitorial services for businesses shall accommodate waste source separation practices for separate recycling and composting containers when disposing of waste.
3. Business owners and managers should conduct annual training to employees regarding the collection and location of recyclable and compostable collection areas. New employees to the business must be told this information within the first 30 days of employment. Any alterations regarding the location or method of recyclable or compostable waste collection must be conveyed to all employees within 14 days of the alteration.
4. Records of waste management practices shall be kept for a minimum of three years and are subject to inspection from city authorities.
5. Businesses shall display instructions for the proper disposal of recyclable or compostable waste near each collection container. These instructions shall be written in both English and Spanish languages or only be composed of descriptive illustrations.

## **LARGE WASTE GENERATOR REQUIREMENTS**

It is more difficult for large waste generators to enforce proper separation and disposal of waste, so they may be more likely to have cross contamination of waste pathways. For this reason, facilities that generate greater than 40 cubic yards per week of un-compacted waste will be subjected to a waste audit at least once every three years.

## **SPECIAL EVENT REQUIREMENTS**

1. Special events hosted by municipalities shall provide appropriate waste containers, including containers for recyclable and compostable waste. These containers shall be in an accessible area and have the capacity to handle the waste produced by the event.
2. These containers shall display instructions or imagery near waste containers to demonstrate how to appropriately dispose of waste.

## **WASTE COLLECTION SERVICES REQUIREMENTS**

1. Waste collection services shall provide separate containers to customers to separate waste. These shall be a designated container for recyclables, compostables, and other waste.
2. These collection containers shall display the name of the collection company in which they belong and they shall either be labeled or color coded to indicate their purpose.
3. It is the responsibility of the customer to separate the waste which they generate, and it is the responsibility of the collection service to oversee the collection. If errors in separation are noticed, collectors shall inform the customer of the sorting error. If the errors persist, the collection service shall provide a written notice to the customer.

## **COMPLIANCE**

Failure to comply with this ordinance will result in a notice of violation. If the issues are not addressed, increasing penalties will be applied to the property/business owner or manager.

- First violation- \$500 fine.
- Second violation- \$1,000 fine.
- Third plus violation- \$2,000 fine for each subsequent violation.

## **EXEMPTIONS**

Exemptions from violation for this ordinance may be provided when certain criteria are reached. The criteria are as follows:

1. Significant economic hardship.
2. For commercial businesses that inhabit less than half of a building.
3. Instances in which the recycling and compost of certain types of waste would violate state or federal law.
4. Waste generated is deemed significantly low in quantity/volume.
5. A business follows best practices for disposal of waste by including recycling and compost containers, but still experiences minimal waste cross contamination as a result of customers improperly disposing of waste.

# Pay-As-You-Throw (PAYT) Ordinance Template

This template was modeled after the following existing ordinances:

- Fort Collins' "Pay-As-You-Throw" (PAYT) Ordinance, 1996

## DEFINITIONS

The following words, terms, and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning.

NOTE: For context purposes, definitions reflect the meanings established by the original ordinance that were referenced to create the following model ordinance.

Pay-As-You-Throw (PAYT) means a disposal system in which the price of disposal is determined by the amount of waste that is generated.

PAYT bags means special distinct looking garbage bags that are a part of the PAYT program that must be purchased from approved sellers and must be used to dispose of all non-recyclable or non-compostable waste.

Donate means the act of giving away unneeded items free of charge to those who will use them.

Reuse means utilizing products for another purpose, instead of disposing of them.

Recycle means the disposal of materials in such a way that they can be repurposed into other materials.

Reduce means the process of generating less waste, such as reducing the amount of single-use non-recyclable products purchased.

Waste means materials and substances from human/commercial/industrial/agricultural activities that no longer have a use.

Compost means the disposal of organic materials that have the capability to break down naturally in the environment to produce compost.

Landfill means a site in which waste is taken to be disposed of.

Waste Collection Services means services that collect waste from designated pick-up points.

Source Separation means the process in which recyclables and compostables are separated from waste at the point of generation to reduce the amount of waste disposed in landfills.

## ARTICLE 1. PURPOSE

### 1.1 PURPOSE

The purpose of the PAYT program is to encourage waste generators to reduce the amount of waste produced by charging for the amount of waste disposed of. This method of waste disposal is intended to promote positive environmental and economic change in the community.

## APPLICABLE REGULATIONS

- 40 CFR Part 246
- Resource Conservation and Recovery Act

## SCOPE

This ordinance applies to the reduction of solid waste by encouraging composting, donating, reducing, reusing, and recycling the appropriate materials.

## MONITORING AND ENFORCEMENT

This ordinance does not necessarily enforce recycling, composting, and donation practices. However, it does financially incentivize the utilization of these sustainable alternatives. Waste that is disposed of in unapproved garbage bags or containers will not be collected by waste collection services.

## ARTICLE 2. SPECIFICATIONS

### APPROVED PAYT BAGS

- All waste shall be disposed of in approved PAYT garbage bags. These bags must be easily distinguishable to waste collection service workers from traditional garbage bags. Such differences could be a district color or pattern on the PAYT bags.
- PAYT bags shall be easily accessible to purchase at various local locations. Retailers are permitted to sell these bags, so long as they do not increase the sale price.
- The price of these bags is dependent on size and quantity. Single small (15 gallon) bags are sold for \$.85 and single large (30 gallon) bags are sold for \$1.50 can also be sold in packs of five for \$4.25 for small bags and \$7.50 for large bags.
- Bags shall not be overstuffed to the point of ripping and must be able to be tied. Overflowing or excessively ripped bags will not be collected.
- If purchased PAYT bags are found to contain defects that inhibit their ability to properly carry waste, they can be exchanged at an approved bag sale location. Bags that were ripped as a clear result of over-stuffing will not be accepted for exchange.
- The cost of waste disposal under this program is heavily influenced by the amount of waste generated. The less waste that is disposed of, the less PAYT bags are required to be purchased.

### SOURCE SEPARATION

Source separation is highly encouraged and incentivized under PAYT. The more materials that are reduced, reused, recycled, donated or composted, the less bag fees will have to be paid. Waste collection services shall provide separate containers for materials that are compostable and recyclable.

### COMPLIANCE

Waste shall be disposed of in the appropriate PAYT garbage bags, or the waste will not be collected. If the uncollected waste remains, it is in violation of Existing County Ordinance X and is subject to penalties associated with noncompliance of said ordinance.



# Recycling Infrastructure and Building Design Ordinance Template

This template was modeled after the following existing ordinance:

- North Central Texas Council of Governments, 2009

## DEFINITIONS

The following words, terms, and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning.

NOTE: For context purposes, definitions reflect the meanings established by the original ordinance that were referenced to create the following model ordinance.

Recycle means the disposal of materials in such a way that they can be repurposed into other materials.

Recycling Infrastructure means infrastructure that supports recycling practices.

Building means an indoor structure that is utilized for residential, commercial, or industrial use.

Compost means the disposal of organic materials that have the capability to break down naturally in the environment to produce compost.

Multi-Family Dwelling means a single building in which multiple separate living units are present. This included duplexes, apartments, and similar buildings.

Single-Family Dwelling means a single building which contains only one living unit.

New Building means a building that must undergo construction and applicable building permits following the adoption of this ordinance.

Existing Building means a building that was already constructed prior to the adoption of this ordinance.

Residential Building means a building which is intended for continuous human occupancy where individuals or families live.

Living Unit means an area in which contains all of the necessities to be considered a living space, including but not limited to a kitchen, bathroom, and area to sleep.

POS System means the point of sale system in which a monetary transaction for goods is completed.

## ARTICLE 1. PURPOSE

### PURPOSE

The purpose of this ordinance is to encourage an increase in recycling efforts by developing more accessible recycling infrastructure through new building design.

### APPLICABLE REGULATIONS

- 2021 International Building Code
- 2021 International Residential Code
- Resource Conservation and Recovery Act

## SCOPE

This ordinance provides recycling infrastructure guidelines that are required for the design of new buildings and recommended for existing buildings.

## MONITORING AND ENFORCEMENT

This ordinance will be enforced for new building developments as a necessary step in the building permit process. For already existing buildings, adoption of recycling infrastructure is highly recommended, but not required.

## ARTICLE 2. REQUIREMENTS BY BUILDING TYPE

### RESPONSIBILITY OF NEW BUILDING DEVELOPERS

#### *Residential Single-Family Buildings*

1. Recycling infrastructure is highly recommended for new single-family residential buildings but is not required for residential buildings containing less than four living units.
2. Recommended recycling infrastructure for new structures includes at least 2.5 cubic feet of space for waste and 2.5 cubic feet for recyclables in every residential unit.
3. It is recommended that there are waste and recycling containers located in accessible areas of the building.

#### *Residential Multi-Family Buildings*

1. Recycling infrastructure is required for new multi-family residential buildings that contain four or more living units.
2. A location to dispose of waste and recycling shall be present and clearly marked on every floor for residential buildings that contain four or more living units.
3. Required recycling infrastructure for new structures includes at least 2.5 cubic feet of space for waste and 2.5 cubic feet for recyclables in every residential unit.
4. The building shall provide an area designated for the separate storage of recyclables and waste while it is awaiting disposal from a waste collection service. This area shall not be in an area of prolonged human habitation.
5. Recommended recycling infrastructure for multi-level buildings is the installation of a chute for the easy transport of recyclables to a designated recyclable space.

#### *Commercial Buildings*

1. A location to dispose of waste and recycling shall be present and clearly marked on every floor for commercial buildings that have ten or more employees.
2. The building shall provide an area designated for the separate storage of recyclables and waste while it is awaiting disposal from a waste collection service. This area shall not be in an area of prolonged human habitation.

3. Recommended recycling infrastructure for multi-level buildings is the installation of a chute for the easy transport of recyclables to a designated recyclable space.

### **Industrial Buildings**

1. A location to dispose of waste and recycling shall be present and clearly marked on every floor for industrial buildings that have ten or more employees.
2. The building shall provide an area designated for the separate storage of recyclables and waste while it is awaiting disposal from a waste collection service. This area shall not be in an area of prolonged human habitation.
3. Recommended recycling infrastructure for multi-level buildings is the installation of a chute for the easy transport of recyclables to a designated recyclable space.

### **RESPONSIBILITY OF EXISTING BUILDING OPERATORS**

#### **Residential Single-Family Buildings**

1. Recycling infrastructure is highly recommended for existing single-family residential buildings but is not required.
2. Recommended recycling infrastructure for new structures includes at least 2.5 cubic feet of space for waste and 2.5 cubic feet for recyclables in every residential unit.
3. It is recommended that there are waste and recycling containers located in accessible areas of the building.

#### **Residential Multi-Family Buildings**

1. Recycling infrastructure is highly recommended for existing multi-family residential buildings.
2. It is recommended that a location to dispose of waste and recycling be present and clearly marked on every floor for residential buildings that contain four or more living units.
3. The building is encouraged to provide an area designated for the separate storage of recyclables and waste while it is awaiting disposal from a waste collection service. This area must not be in an area of prolonged human habitation.
4. Recommended recycling infrastructure for multi-level buildings is the installation of a chute for the easy transport of recyclables to a designated recyclable space.

#### **Commercial Buildings**

1. Existing commercial buildings that undergo renovations that equate to a 30 percent addition to square foot value are required to install recycling infrastructure.
2. The building shall provide an area designated for storage of waste while it is awaiting disposal from a waste collection service. This area shall not be in an area of prolonged

human habitation. It is encouraged that a separate area for the storage of recyclables is also implemented.

3. Recommended recycling infrastructure for multi-level buildings is the installation of a chute for the easy transport of recyclables to a designated recyclable space.

### **Industrial Buildings**

1. Existing industrial buildings that undergo renovations that equate to a 30 percent addition to square foot value are required to install recycling infrastructure.
2. The building shall provide an area designated for storage of waste while it is awaiting disposal from a waste collection service. This area shall not be in an area of prolonged human habitation.
3. It is encouraged that a separate area for the storage of recyclables is also implemented.
4. Recommended recycling infrastructure for multi-level buildings is the installation of a chute for the easy transport of recyclables to a designated recyclable space.

### **COMPLIANCE**

New building developers shall meet the recycling infrastructure requirements to be eligible for a building permit and certificate of occupancy. Existing buildings will not be penalized for failure to comply.

### **EXEMPTIONS**

- Already existing buildings are not subject to this ordinance.
- Buildings that are greater than 50 percent complete by the time this ordinance is adopted are not subjected to these regulations.
- Residential buildings that contain less than 4 six units.
- Commercial businesses that inhabit less than half of a building.

## **Single-Use Plastic Bag Tax/Fee Ordinance Template**

This model ordinance focuses specifically on the tax/fee of single-use plastic bags. This format can be modified to apply taxes and fees associated with the use of other materials, as well as a way to provide a more seamless transition for other material bans.

This template was modeled after the following existing ordinance:

- Marin County Ordinance Regulating Retail Establishments Provision of Single-Use Carry-Out Bags
- Ordinance No. 3553

## DEFINITIONS

The following words, terms, and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning.

NOTE: For context purposes, definitions reflect the meanings established by the original ordinance that were referenced to create the following model ordinance.

**Material Definitions** – It should be noted that the material being taxed should be clearly defined in this section. For the purpose of this ordinance, terms relating to the use of single use plastic bags will be defined.

**Single-Use Plastic Bag** means any disposable plastic bag that is provided by retailers or businesses to a customer for the purpose of carrying items.

**Single-Use Paper Bag** means any disposable paper bag that is provided by retailers or businesses to a customer for the purpose of carrying items.

**Customer** means anyone who purchases goods at a business.

**Restaurant/Takeout Location** means any location that sells ready-to-eat food that is prepared on site.

**Retail Establishment** means a location that sells goods to consumers, including but not limited to groceries, apparel, and household items.

**Reusable Bag** means a bag that is of good enough quality to be used indefinitely. Can be made of fabric or durable plastic that is at least 2.25 millimeters thick.

**POS System** means the point of sale system in which a monetary transaction for goods is completed.

## FINDINGS

- There are significant environmental impacts associated with the production, distribution, and use of single-use bags.
- Single-use plastic bags are a large contributor to pollution.
- Reusable bags are widely accessible and affordable.

## ARTICLE 1. PURPOSE

### PURPOSE

The purpose of this ordinance is to discourage the distribution and use of single-use plastic bags provided by retail establishments by applying a mandatory tax/fee per bag used, in appropriate situations.

### APPLICABLE REGULATIONS

- Resource Conservation and Recovery Act
- 35 ILCS 120/1

### SCOPE

This ordinance applies to the distribution and use of single-use plastic bags provided by retailers and other businesses.

### MONITORING AND ENFORCEMENT

1. Adequate financial records shall be kept of all transactions including single-use plastic fees.
2. These records shall detail the number of bags used in total, how much money was paid in

fees, and the amount of the bag fee that is kept by the retail establishment.

3. Bag charges shall be present on the customers' receipt, and present in the point of sale (POS) system. If no such system is utilized, manual records shall be kept.
4. This ordinance is enforced by the City Manager.
5. Retailer establishments shall report their records on a quarterly basis.
6. In cases where bag fee exemptions apply, while no fee is paid, the amount of bags used and the applicable exemption shall still be recorded.

## ARTICLE 2. REQUIREMENTS

### MANDATORY BAG FEE

Retail establishments are required to charge a fee of \$0.10 per plastic bag that is given to customers.

### FEES ASSOCIATED WITH ALTERNATE BAGS

Other single-use bags such as paper bags are also subject to bag fees of \$0.10 per bag. This is done in an attempt to reduce the amount of unsustainable plastic alternatives that are used, and encourage the use of reusable bags.

### UTILIZATION OF FEES

1. Dispersion of bag fee revenue of \$0.02 of every \$0.10 is allocated to the retailer or business that is distributing the bags.
2. These funds are intended to offset the price of the necessary changes the retailer must make, such as changes to POS systems to include the option of bag fees, the training of employees, and necessary bag fee signage.
3. The remaining \$0.08 cents is allocated to [insert municipality] and is considered a tax. The revenue from this tax is used exclusively to fund local sustainability and resiliency improvement projects.

### APPROVED BAGS

1. Customers are encouraged to bring their own reusable bags when buying merchandise.
2. Customers are permitted to bring whatever bags they wish, even if they are single-use plastic bags or paper bags.

### RETAIL ESTABLISHMENT REQUIREMENTS

1. Retail establishments shall give warning of changes to bag use policy at least 60 days prior to the enactment of the bag fees.
2. Signage clearly stating the bag fee policy shall be located at every POS station and in clear sight to customers.
3. Retail establishments are required to provide reusable bags, either for sale or free of charge to the customer.
4. Retail establishments shall also permit the use of reusable bags, and are prohibited from banning them from their establishments. See exemptions.



## COMPLIANCE

Retailers and businesses are subject to fines for instances of noncompliance.

- First violation – Written notice of violation.
- Second violation – \$100.00 fine.
- Third violation- \$200.00 fine.
- Fourth and subsequent violations - \$500.00 fine per violation.

Failure of a retail establishment to keep adequate records of single-use bag distribution will result in a violation and a fine based on their past records will be estimated and must be paid.

## EXEMPTIONS

1. Restaurants and takeout establishments are not required to charge a bag fee as reusable bags may not be suitable for the transport of cooked food.
2. Plastic bags with the purpose of carrying produce, meat, and pharmaceuticals, and are exempt as they could contaminate other items and reusable bags.
3. Dry cleaning and newspaper paper bags are permitted as they protect these objects.
4. During a major health crisis, some retail establishments may choose to ban the use of reusable bags for employee safety, unless a self-checkout is utilized.
5. Customers who receive government assistance to purchase food products are not required to pay bag fees.

# Single-Use Plastic Bag Ban Ordinance Template

This model ordinance focuses specifically on the ban of single-use disposable plastic bags. This format can be modified to apply taxes and fees associated with the use of other materials, as well as a way to provide a more seamless transition for other material bans.

This template was modeled after the following existing ordinance:

- Marin County Ordinance Regulating Retail Establishments Provision of Single-Use Carry-Out Bags
- Ordinance No. 3553

## DEFINITIONS

The following words, terms, and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning.

NOTE: For context purposes, definitions reflect the meanings established by the original ordinance that were referenced to create the following model ordinance.

Material Definitions – It should be noted that the material being taxed should be clearly defined in this section. For the purpose of this ordinance, terms relating to the use of single use plastic bags will be defined.

Single-Use Plastic Bag means any disposable plastic bag that is provided by retailers or businesses to a customer for the purpose of carrying items.

Single-Use Paper Bag means any disposable paper bag that is provided by retailers or businesses to a customer for the purpose of carrying items.

Customer means anyone who purchases goods at a business.

Restaurant/Takeout Location means any location that sells ready-to-eat food that is prepared on site.

Retail Establishment means a location that sells goods to consumers, including but not limited to groceries, apparel, and household items.

Reusable Bag means a bag that is of good enough quality to be used multiple times. Can be made of fabric or durable plastic that is at least 2.25 millimeters thick.

POS System means the point of sale system in which a monetary transaction for goods is completed.

## FINDINGS

- There are significant environmental impacts associated with the production, distribution, and use of single-use bags.
- Single-use plastic bags are a large contributor to pollution.
- Reusable bags are widely accessible and affordable.

## ARTICLE 1. PURPOSE

### PURPOSE

The purpose of this ordinance is to discourage the distribution and use of single-use plastic bags by enacting a ban on them, except for certain appropriate circumstances.

### APPLICABLE REGULATIONS

- Resource Conservation and Recovery Act
- 35 ILCS 120/1

### SCOPE

This ordinance applies to the distribution and use of single-use plastic bags provided by retail establishments.

### MONITORING AND ENFORCEMENT

1. This ordinance is enforced by the City Manager.
2. Retailer establishments must report their records on a quarterly basis for alternate bags distributed.

## ARTICLE 2. REQUIREMENTS

### MANDATORY SINGLE-USE PLASTIC BAG BAN

Retail establishments are prohibited from distributing single-use plastic bags to customers at checkout.

### FEES ASSOCIATED WITH ALTERNATE BAGS

Other single-use bags such as paper bags are subject to bag fees of \$0.10 per bag. This is done in an attempt to reduce the amount of unsustainable plastic alternatives such as paper bags that are used and encourage the use of reusable bags.

## UTILIZATION OF ALTERNATE BAG FEES

Dispersion of alternate bag fee revenue of \$0.02 of every \$0.10 is allocated to the retailer or business that is distributing the bags. These funds are intended to offset the price of the necessary changes the retailer must make, such as changes to POS systems to include the option of alternate bag fees, the training of employees, and necessary bag fee signage.

The remaining \$0.08 cents is allocated to the [insert municipality] and is considered a tax. The revenue from this tax is used exclusively to fund local sustainability and resiliency improvement projects.

## APPROVED BAGS

1. Customers are encouraged to bring their own reusable bags when buying merchandise.
2. Customers are permitted to bring whatever bags they wish, even if they are single-use plastic bags or paper bags.

## RETAIL ESTABLISHMENT REQUIREMENTS

1. Retail establishments must give ample warning of changes to bag use policy prior to the enactment of the bag fees.
2. Signage clearly stating the bag fee policy must be located at every POS station and in clear sight to customers.
3. Retail establishments are required to provide reusable bags, either for sale or free of charge to the customer.
4. Retail establishments must also permit the use of reusable bags and are prohibited from banning them from their establishments. See exemptions.

## COMPLIANCE

Retailers and businesses are subject to fines for instances of noncompliance.

- First violation – Written notice of violation.
- Second violation – \$100.00 fine.
- Third violation- \$200.00 fine.
- Fourth and subsequent violations - \$500.00 fine per violation.

## EXEMPTIONS

1. Restaurants and takeout establishments are not impacted by this ban, as reusable bags may not be suitable for the transport of cooked food.
2. Plastic bags with the purpose of carrying produce, meat, and pharmaceuticals, and are exempt as they could contaminate other items and reusable bags.
3. Dry cleaning and newspaper paper bags are permitted as they protect these objects.
4. During a major health crisis, some retail establishments may choose to ban the use of reusable bags for employee safety, unless a self-checkout is utilized.

# Appendix D: Acronyms & Glossary

## Acronyms

### A

**AD:** Anaerobic Digestion

### B

**BCCD:** Boone County Conservation District

**BTU:** British Thermal Unit

### C

**C&D:** Construction & demolition

**CDBG:** Community Development Block Grant

**CED:** Covered Electronic Device

**CERA:** Consumer Electronic Recycling Act

**CERCLA:** Comprehensive Environmental Response Liability and Compensation Act

**CFL:** Compact Fluorescent Light

**CFR:** Code of Federal Regulations

**CH 4:** Methane

**CHP:** Combined Heat and Power

**CII:** Commercial, Industrial, and Institutional

**CNG:** Compressed Natural Gas

**CO<sub>2</sub>:** Carbon Dioxide

**CPS:** Collaborative Problem-Solving

### E

**EE:** Environmental Education

**EJ:** Environmental Justice

**EPA:** Environmental Protection Agency

**EPRA:** Electronic Products Recycling and Reuse Act

**EREF:** Environmental Research & Education Foundation

**EV:** Electric Vehicle

### F

**FRSA:** Four Rivers Sanitation Authority

**FTE:** Full-time equivalent job

### G

**GCS:** Gas Collection System

**GHG:** Greenhouse Gases

**GSA:** U.S. General Services Administration

### H

**HHW:** Household Hazardous Waste

### I

**IEPA:** Illinois Environmental Protection Agency

**IFSC:** Illinois Food Scrap Coalition

**IGA:** Illinois General Assembly

**IHE:** Institutions of Higher Education

**ILCSWMA:** Illinois Counties Solid Waste Management Association

**ILPSC:** Illinois Product Stewardship Council

**IPCB:** Illinois Pollution Control Board

**IRF:** Illinois Recycling Foundation

### K

**KNIB:** Keep Northern Illinois Beautiful

### L

**LCFS:** Low Carbon Fuel Standards

**LFG:** Landfill Gases

### M

**MMAC:** Materials Management Advisory Committee

**MMBTU:** Millions of BTUs

**MMU:** Materials Management Unit

**MPG:** Multipurpose Grants

**MRF:** Material Recovery Facility

**MSW:** Municipal Solid Waste

### N

**NEETP:** National Environmental Education and Training Program

**NLI:** Natural Land Institute

**NSCEP:** National Service Center for Environmental Publications

**NW:** Northwestern

### O

**ORCR:** Office of Resource Conservation and Recovery

### P

**P2:** Pollution Prevention

**PAYT:** Pay-As-You-Throw

**PCF:** Pollution Control Facility

**PFAS:** Per- and Polyfluoroalkyl Substances

**PFOA:** Perfluorooctanoic Acid

**PFOS:** Perfluorooctane Sulfonate

**PRSC:** Paper Recovery Service Corp

## R

**RCRA:** Resource Conservation and Recovery Act

**REMI:** Regional Economic Models Inc.

**RFS:** Renewable Fuel Standards

**RIN:** Renewable Identification Numbers

**RNG:** Renewable Natural Gas

## S

**SCARCE:** School & Community Assistance for Recycling and Composting Education

**SGA:** Seven Generations Ahead

**SMM:** Sustainable Materials Management

**SWALCO:** Solid Waste Agency of Lake County, IL

**SWANA-IL:** Illinois Chapter of the Solid Waste Association of North America

**SWCD:** Soil & Water Conservation Districts

**SWDA:** Solid Waste Disposal Act

**SWMA:** Solid Waste Management Act

**SWMRA:** Solid Waste Management and Recycling Act

**SWPRA:** Solid Waste Planning and Recycling Act

## T

**TSD:** Treatment, Storage and Disposal Facility

## U

**UIC:** University of Illinois Chicago

## V

**VOCs:** Volatile Organic Compounds

## W

**WARM:** Waste Reduction Model

**WFAA:** Wasted Food Action Alliance

**WTE:** Waste-to-Energy

## Y

**YMCA:** Young Men's Christian Association

# Glossary of Terms

## A

### Aerobic Oxidation

Aerobic oxidation is a type of cellular respiration. Aerobic respiration undergoes by utilizing oxygen in many cells. In this type of oxidation, carbon dioxide and adenosine triphosphate (ATP) are released as by-products.

Source: Walsh Medical Media

### Anaerobic Digester

The closed anaerobic environment in which anaerobic digestion takes place.

Source: U.S. Environmental Protection Agency

### Anaerobic Digestion

Anaerobic digestion is a process through which bacteria break down organic matter—such as animal manure, wastewater biosolids, and food wastes—in the absence of oxygen.

Source: U.S. Environmental Protection Agency

### Anthropogenic

Environmental change caused or influenced by people, either directly or indirectly.

Source: United States Geological Survey

## B

### Bioaccumulation

The accumulation over time of a substance and especially a contaminant (such as a pesticide or heavy metal) in a living organism.

Source: U.S. Environmental Protection Agency

### Biogas

Anaerobic digestion produces two valuable outputs: biogas and digestate. Biogas is composed of methane (CH<sub>4</sub>), which is the primary component of natural gas, at a relatively high percentage (50 to 75 percent), carbon dioxide (CO<sub>2</sub>), hydrogen sulfide (H<sub>2</sub>S), water vapor, and trace amounts of other gases. The energy in biogas can be used like natural gas to provide heat, generate electricity, and power cooling systems, among other uses. Biogas can also be purified by removing the inert or low-value constituents (CO<sub>2</sub>, water, H<sub>2</sub>S, etc.) to generate renewable natural gas (RNG).

Source: U.S. Environmental Protection Agency

### Biomass

Biomass is renewable organic material that comes from plants and animals.

Source: U.S. Environmental Protection Agency

### Bioplastics

The term “bioplastics” is used to describe both fossil fuel-derived plastics that are biodegradable (they break down to some level at some point in time- up to thousands of years), and biomass or renewable resource-derived plastics (termed bio-based plastics).

Source: U.S. Environmental Protection Agency

## **Biosolid Fertilizer**

Biosolids are a product of the wastewater treatment process. During wastewater treatment, the liquids are separated from the solids. Those solids are then treated physically and chemically to produce a semisolid, nutrient-rich product known as biosolids. The terms ‘biosolids’ and ‘sewage sludge’ are often used interchangeably. Land application of biosolids also can have economic and waste management benefits such as a reduced demand for synthetic fertilizers.

Source: U.S. Environmental Protection Agency

## **Bottle Bill**

The term “bottle bill” is actually another way of saying “container deposit law.” A container deposit law requires a minimum refundable deposit on beer, soft drink, and other beverage containers in order to ensure a high rate of recycling or reuse.

Source: National Conference of State Legislatures

## **C**

### **Capital Costs**

The costs associated with the initial landfill construction, including land, engineering and infrastructure and excluding the cost of WTE additions.

Source: National Renewable Energy Laboratory

### **Catalytic Converters**

Catalytic converters, installed on vehicles with internal combustion and diesel engines, convert the toxic byproducts of combustion to less toxic compounds.

Source: Merriam-Webster Dictionary

### **Circular Economy**

An economy that uses a systems-focused approach and involves industrial processes and economic activities that are restorative or regenerative by design, enable resources used in such processes and activities to maintain their highest value for as long as possible, and aim for the elimination of waste through the superior design of materials, products, and systems (including business models).

Source: U.S. Environmental Protection Agency

### **Combustion**

Combustion, also known as mass burning, is the process of burning MSW in a combustion chamber with the presence of excess air. This process is the most common waste-to-energy method used partly due to its low maintenance requirements. Incinerators are often used to combust waste, but this technology can produce toxic chemicals, such as carbon monoxide, that pollute the air.

Source: U.S. Environmental Protection Agency

### **Compost Product**

The final product that is produced from a composting facility or the composted digestate from an AD facility.

Source: U.S. Environmental Protection Agency

### **Corrosive**

Causes damage by chemical action.

Source: U.S. Environmental Protection Agency

## **D**

### **Digestate**

Anaerobic digestion produces two valuable outputs: biogas and digestate. Digestate is the residual material left after the digestion process. It is composed of liquid and solid portions.

Source: U.S. Environmental Protection Agency

### **Dual-Stream Recycling**

Dual-stream recycling separates the waste into two streams — fibers and containers — by using both manual sorting and automated equipment.

Source: U.S. Environmental Protection Agency

## **E**

### **End-of-Pipe**

Practices that promote waste pre-processing prior to disposal through chemical treatment, recycling, and burning.

Source: IGI Global

### **Environmental Justice**

Environmental justice (EJ) is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.

Source: U.S. Environmental Protection Agency

## **F**

### **Feedstock**

Raw material used in the production of goods.

Source: U.S. Environmental Protection Agency

### **Ferrous**

Containing or relating to iron.

Source: Cambridge Dictionary

## **G**

### **Gasification**

Gasification is the complex process of converting household waste into substances rich in carbon, like char and synthetic gas. This process requires a high level of maintenance to be performed correctly and efficiently. On the other hand, it requires little to no fuel demand and emits little air pollution, making it an attractive option.

Source: Office of Energy Efficiency & Renewable Energy

### **Goodness-of-Fit**

The conformity between an experimental result and theoretical expectation or between data and an approximating curve.

Source: Merriam-Webster Dictionary

## **H**

### **Holistic**

Dealing with or treating the whole of something or someone and not just a part.

Source: Cambridge Dictionary

## **I**

### **Impervious**

Incapable of being penetrated: a material impervious to water.

Source: U.S. Environmental Protection Agency

## **L**

### **LCFS Profits**

The Low Carbon Fuel Standard is a program by the State of California that awards credits to facilities that have waste-to-energy pathways that produce vehicle fuel that has a lower carbon intensity than standard fuel. Facilities outside of California can still be awarded these credits if the fuel that they produced is used in California.

Source: U.S. Environmental Protection Agency

### **Leachate**

Leachate is formed when rain water filters through wastes placed in a landfill. When this liquid comes in contact with buried wastes, it leaches, or draws out, chemicals or constituents from those wastes.

Source: U.S. Environmental Protection Agency

### **Linear Economy**

An economic model based on the sequence take (raw material), make (products), use (consume), dispose (of non-recyclable waste), which has demonstrated to be unsustainable for both its resources consumption and its environmental impact.

Source: IGI Global

## **M**

### **Mitigate**

To make something less harmful, unpleasant, or bad.

Source: Cambridge Dictionary

### **Mixed Waste Recycling**

Mixed waste recycling separates recyclable materials from waste and then continues separating the recyclables, making it the most tech-oriented method of these options.

Source: Cleanup News

### **Multicollinearity**

The existence of such a high degree of correlation between supposedly independent variables being used to estimate a dependent variable that the contribution of each independent variable to variation in the dependent variable cannot be determined.

Source: Merriam-Webster Dictionary

### **Municipal Solid Waste**

Municipal solid waste is a mixture of energy-rich materials such as paper, plastics, yard waste, and products made from wood. The definition excludes waste from municipal sewage networks and treatment, as well as waste from construction and demolition activities.

Source: U.S. Energy Information Administration

## **N**

### **Net Present Value**

The sum of the costs and revenue in which cost is negative and profit is positive. This is expressed in dollars per ton of waste in this document.

Source: National Renewable Energy Laboratory

## **O**

### **Operation and Maintenance Costs**

The costs associated with operating a facility excluding the cost of waste-to-energy systems. This includes factors such as labor, fuel and repair costs.

Source: National Renewable Energy Laboratory

### **Organic Waste**

Biodegradable waste originating from plants or animals (food waste, paper, yard trimmings, etc.).

Source: U.S. Environmental Protection Agency

## **P**

### **Product Capital Costs**

The cost of any additional investments needed for waste-to-energy projects. This value will vary depending on the waste-to-energy system utilized.

Source: National Renewable Energy Laboratory

### **Product Operation and Maintenance Costs**

The costs associated with operating the waste-to-energy systems only. This includes factors such as labor, fuel, and repair specifically to the waste-to-energy systems.

Source: National Renewable Energy Laboratory

### **Product Profits**

Refers to the profit that is earned from the various waste-to-energy pathways. This can include but is not limited to profits from the sale of electricity to the grid and the sale of CNG.

Source: National Renewable Energy Laboratory

### **Pyrolysis**

Pyrolysis is the process of exposing waste to extremely high temperatures in order to create biofuel. While this process may sound similar to incineration, pyrolysis is performed in the absence of air and generates less dioxins, making it a cleaner method.

Source: U.S. Environmental Protection Agency

## **R**

### **Reactive**

Likelihood of a substance to undergo chemical change.

Source: U.S. Environmental Protection Agency

### **REC Profits**

Renewable Energy Credits are earned by waste-to-energy pathways that produce electricity and are awarded per kWh of energy generated.

Source: U.S. Environmental Protection Agency



## Remediation

The process of improving or correcting a situation.

Source: Cambridge Dictionary

## RIN Profits

Renewable Identification Numbers are profits specific to waste-to-energy pathways that produce fuel for vehicles.

Source: U.S. Environmental Protection Agency

## S

### Scalability

The ability of a business or system to grow larger.

Source: Cambridge Dictionary

### Sewage Sludge

The solid, semisolid, or liquid untreated residue generated during the treatment of domestic sewage.

Source: U.S. Environmental Protection Agency

### Single-Stream Recycling

Single stream recycling is similar to dual-stream except the recyclables are not separated, so higher technology is required to separate them at the beginning of the process.

Source: U.S. Environmental Protection Agency

### Social Vulnerability

Social vulnerability refers to the potential negative effects on communities caused by external stresses on human health.

Source: Centers for Disease Control and Prevention

### Soil Amendment

Materials added to soil to improve its physical properties.

Source: U.S. Environmental Protection Agency

### Solar Radiation

Solar radiation, often called the solar resource or just sunlight, is a general term for the electromagnetic radiation emitted by the sun. Solar radiation can be captured and turned into useful forms of energy, such as heat and electricity, using a variety of technologies. However, the technical feasibility and economical operation of these technologies at a specific location depends on the available solar resource.

Source: Office of Energy Efficiency & Renewable Energy

### Source Reduction

Source reduction, also known as waste prevention, means reducing waste at the source, and is the most environmentally preferred strategy. It can take many different forms, including reusing or donating items, buying in bulk, reducing packaging, redesigning products, and reducing toxicity. Source reduction also is important in manufacturing. Lightweighting of packaging, reuse, and remanufacturing are all becoming more popular business trends.

Source: U.S. Environmental Protection Agency

### Source Separation

Manual sorting at curbs of recycled materials that require less attention, such as glass, paper, and plastic.

Source: U.S. Environmental Protection Agency

## Stewardship

Care or management.

Source: Cambridge Dictionary

## Stratified

Arranged in separate layers.

Source: Cambridge Dictionary

## Superfund Sites

Thousands of contaminated sites exist nationally due to hazardous waste being dumped, left out in the open, or otherwise improperly managed. These sites include manufacturing facilities, processing plants, landfills and mining sites.

Source: U.S. Environmental Protection Agency

## T

### Tipping Fee

A dollar per ton fee that a waste facility charges users to dispose of waste. These have conventionally been the main way landfills and other waste management facilities offset their capital and operating costs.

Source: National Renewable Energy Laboratory

### Total Solid Waste

Residential, commercial, industrial, and landscape wastes and sewage sludge.

Source: Boone and Winnebago County Waste Plans

### Toxic

Poisonous, or relating to poisonous substances.

Source: Cambridge Dictionary

## W

### Waste Diversion

For waste measurement purposes, diversion is any combination of waste prevention (source reduction), recycling, reuse and composting activities that reduces waste.

Source: CalRecycle

### Waste Infrastructure

The basic structure of waste disposal, recycling, or composting, such as “waste sorting and treatment facilities, landfills, bins, dumpsters, trucks, and transfer stations”.

Source: Cambridge Dictionary

### Waste Stream Audits

An analysis of the types, quantities, and location of waste generated, usually performed by sorting through trash.

Source: The Solid Waste Authority of Central Ohio

### Waste-to-Energy

Waste-to-Energy plants burn municipal solid waste (MSW), often called garbage or trash, to produce steam in a boiler that is used to generate electricity.

Source: Energy Information Administration



# Appendix E: Public Survey, Comments & Data Methodology

## Public Survey

As a key component of the Regional Solid Waste Management Plan, a public outreach survey was conducted for residents of Boone and Winnebago Counties. The goal of the survey was to collect further insight about current waste management practices, disposal accessibility, and local public opinion regarding solid waste and the regional solid waste management system. These results helped identify pressure points and areas of improvement in the regional solid waste system. The survey was open to the public for approximately 30 days. In this time, 106 individuals took the survey, answering a total of 27 questions.

**NOTE:** *The opinions expressed in this survey are not representative of both counties as a whole, but merely a small percentage of those who chose to complete the survey. This data is also subject to rounding errors as a result of multiple-choice formatting. Thus, some questions will have a total percentage above 100 percent.*

## Key Findings

- A majority of respondents (70%) recycle most of the time.
- The three most common recycling methods are curbside recycling, yard waste collection, and private facility drop-off.
- Barriers to recycling include cost, convenience, and lack of education or access. The following results support this finding.
- Survey data indicated 29% of respondents were not familiar with drop-off recycling centers near them.
- Results showed 34% of respondents claim to receive no resources related to waste management program information.
- Misconceptions about recycling can impact an individual's motivation to recycle. Moreover, 13% of respondents claim they do not recycle and are not interested in recycling.

## Summary

The survey results indicate a lack of knowledge regarding recycling methods. Curbside recycling was the method people were most familiar with, while less than a third of respondents claimed they had no experience with drop-off centers. Additionally, there is unfamiliarity with used tire and household battery recycling, bulky item disposal, and composting in the area. Over a third of those also reported inexperience with household hazardous waste disposal services.

Overall, there is confusion regarding the disposal of traditional and non-traditional materials, recycling locations, and the success rate of recycling. This contributes to incorrect source separation and a lack of recycling altogether. This confusion may be attributed to a lack of accessible waste management programs and resources for residents. Over a third of respondents claimed their households do not receive any educational resources, and those that did most frequently received it from the county website, print media, and/or utility bills.

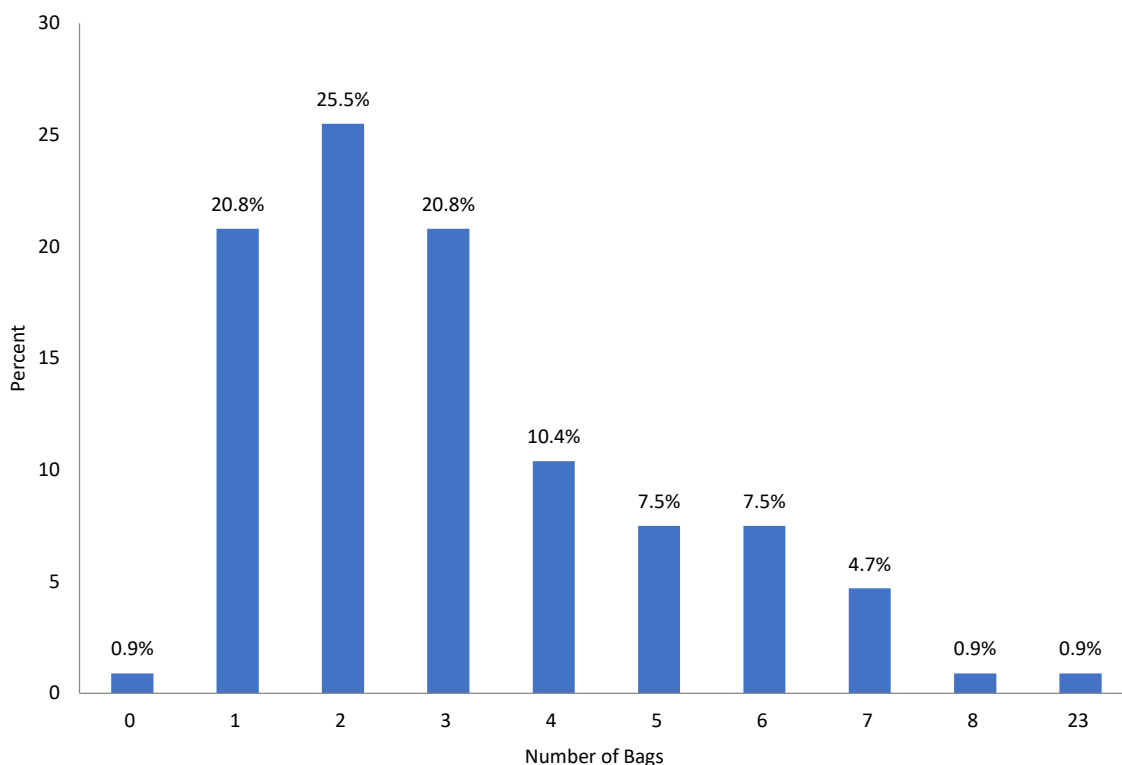
Many respondents stated they would like to see recycling programs expanded for composting, household hazardous waste, and electronics. Another highly recommended request was the inclusion of more curbside recycling for less conventional recyclables in place of drop-off centers.

Concerns related to the local waste system's infrastructure included noxious odors purported to originate from the Winnebago Landfill, landfill expansions, environment-specific health issues, property values, drinking water contamination, hauler truck traffic, and waste falling off of waste transporter trucks and into the street.

# Public Survey Responses

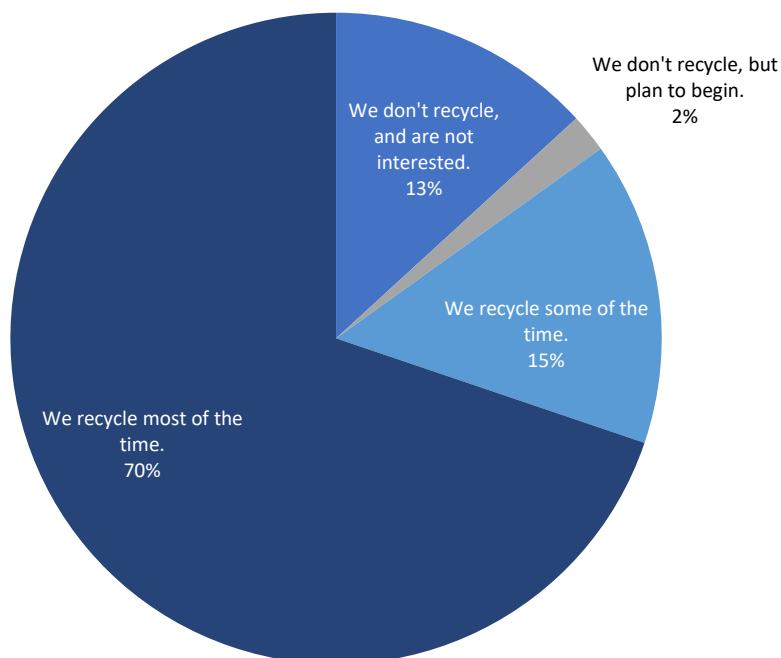
## 1. On average, your household produces how many medium-sized garbage bags for collection each week?

Figure E-1. Number of Garbage Bags Produced Each Week



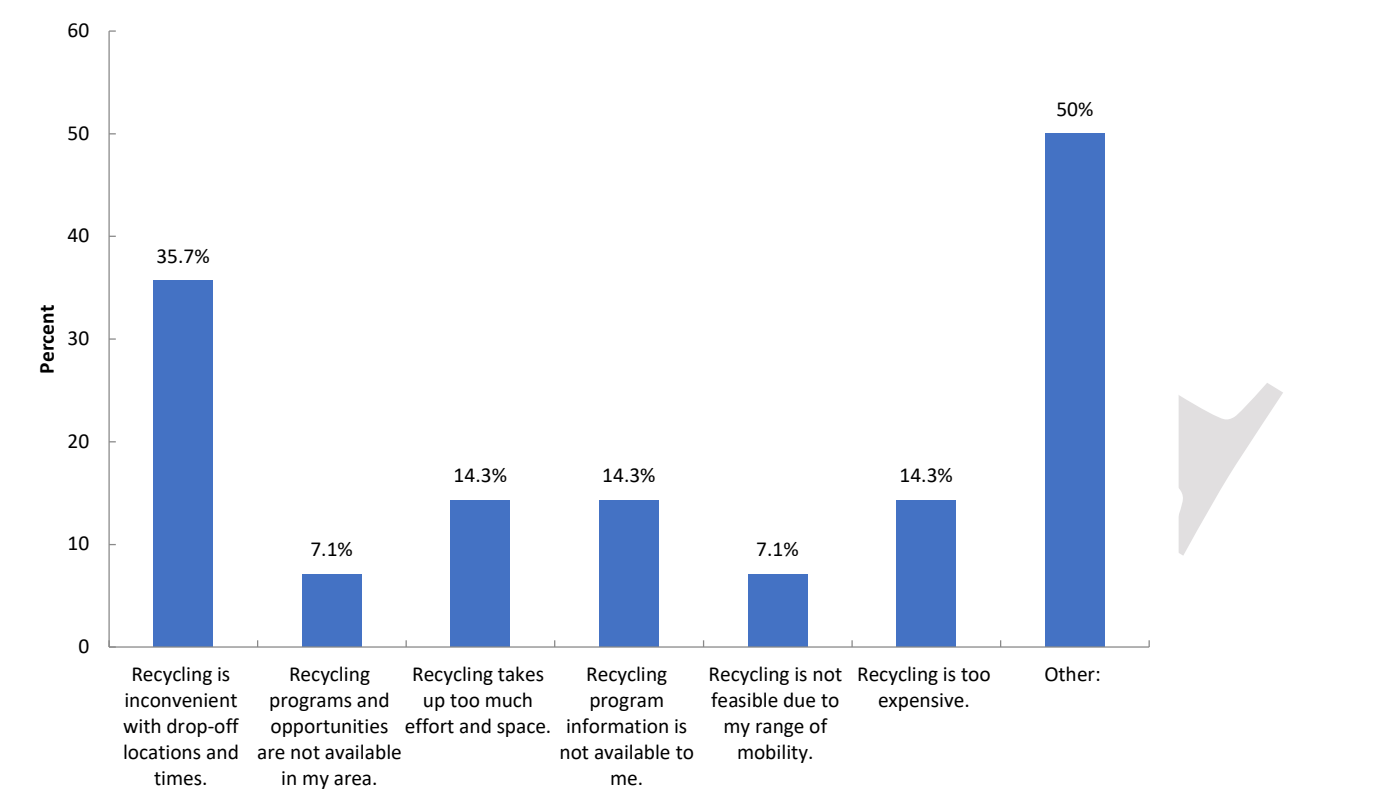
## 2. How much emphasis does your household place on recycling?

Figure E-2. Emphasis on Recycling



3. What barriers do you have to recycling? (Check all that apply)

Figure E-3. Barriers to Recycling



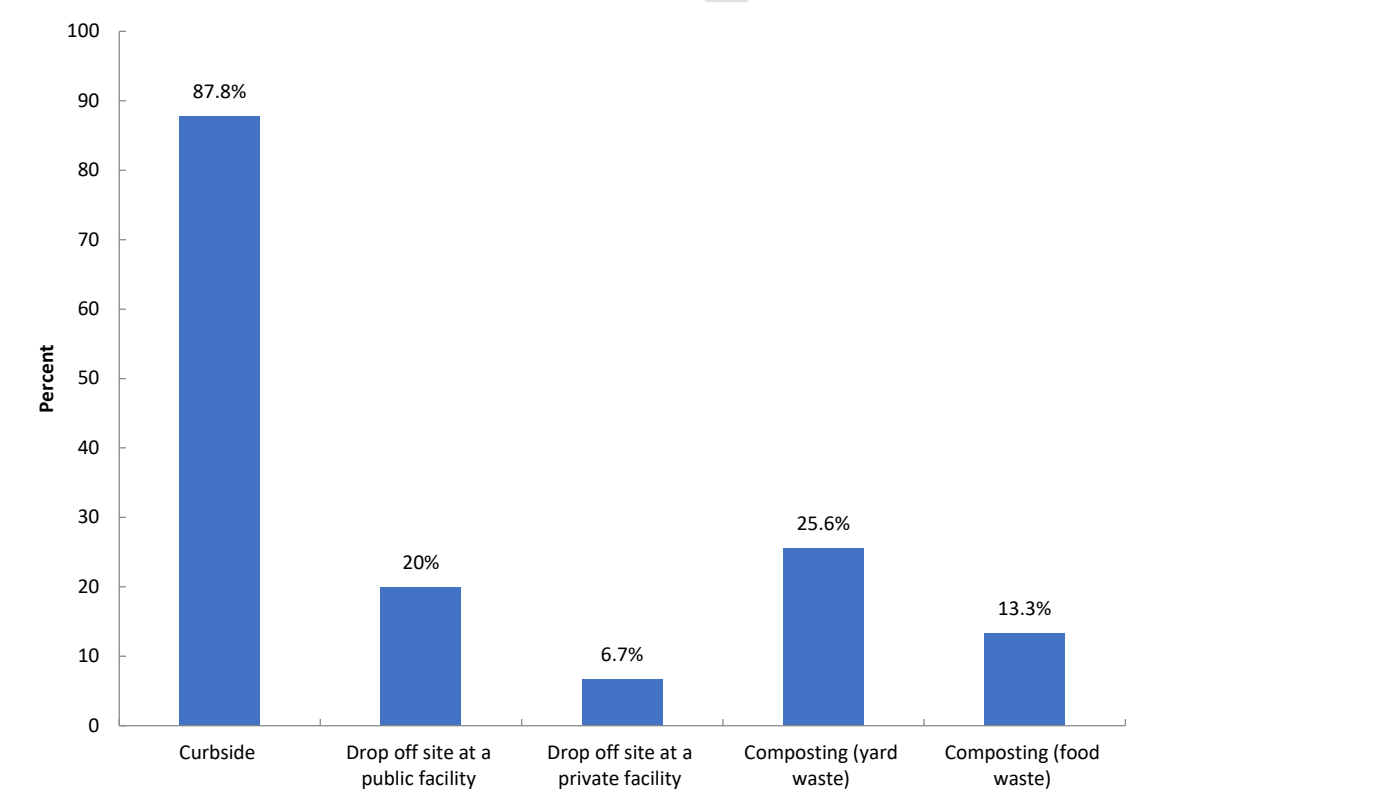
4. What made you decide to start recycling? (Check all that apply)

Table E-1. Recycling Reasons Explained

Winnebago County does not provide recycling pickup.
Other; (blank)

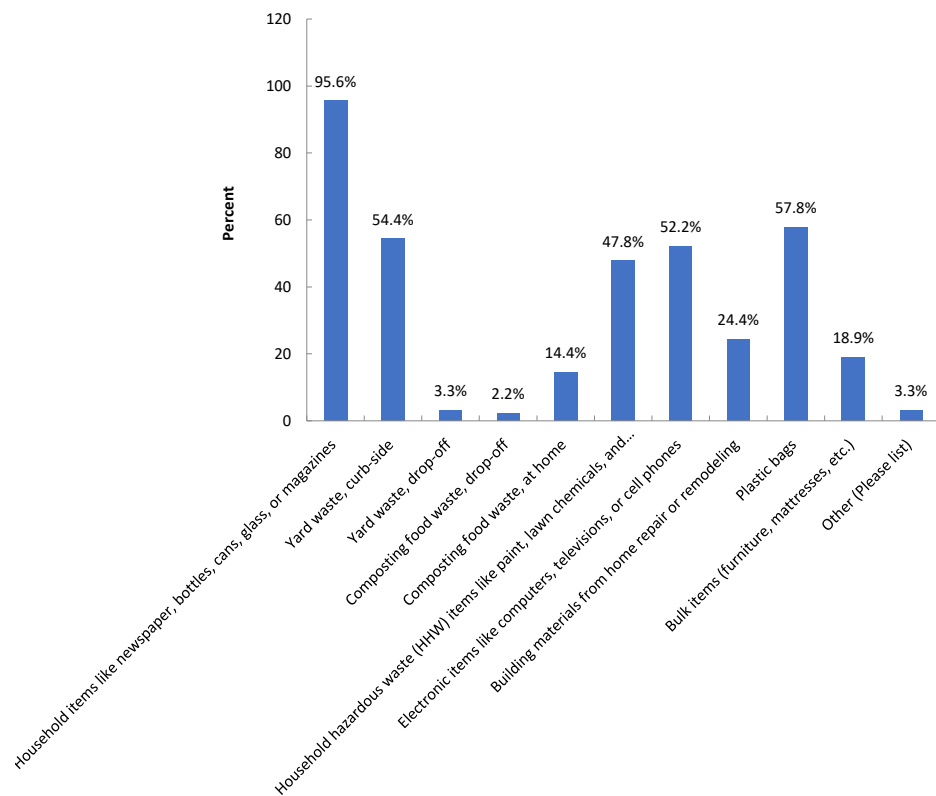
5. How do you currently recycle? (Check all that apply)

Figure E-4. Recycling Methods Utilized



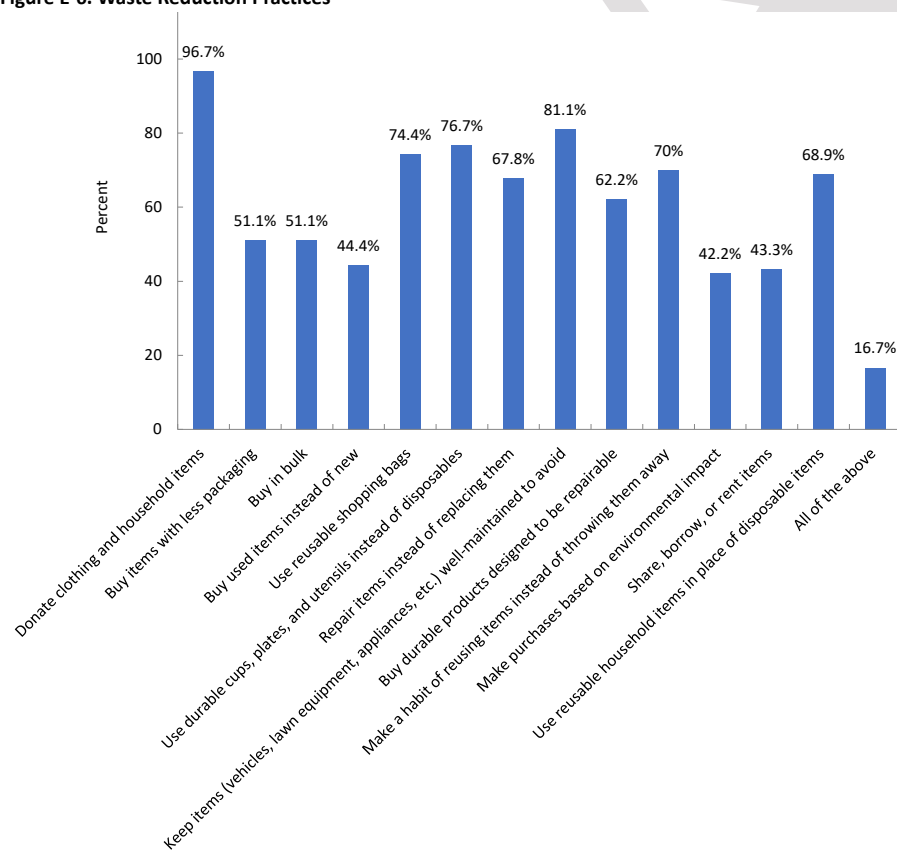
**6. Which of the following materials does your household recycle (either curb-side or at a drop-off facility)? (Check all that apply)**

**Figure E-5. Materials Frequently Recycled**



**7. Which of the following materials does your household recycle (either curb-side or at dropoff facility)?**

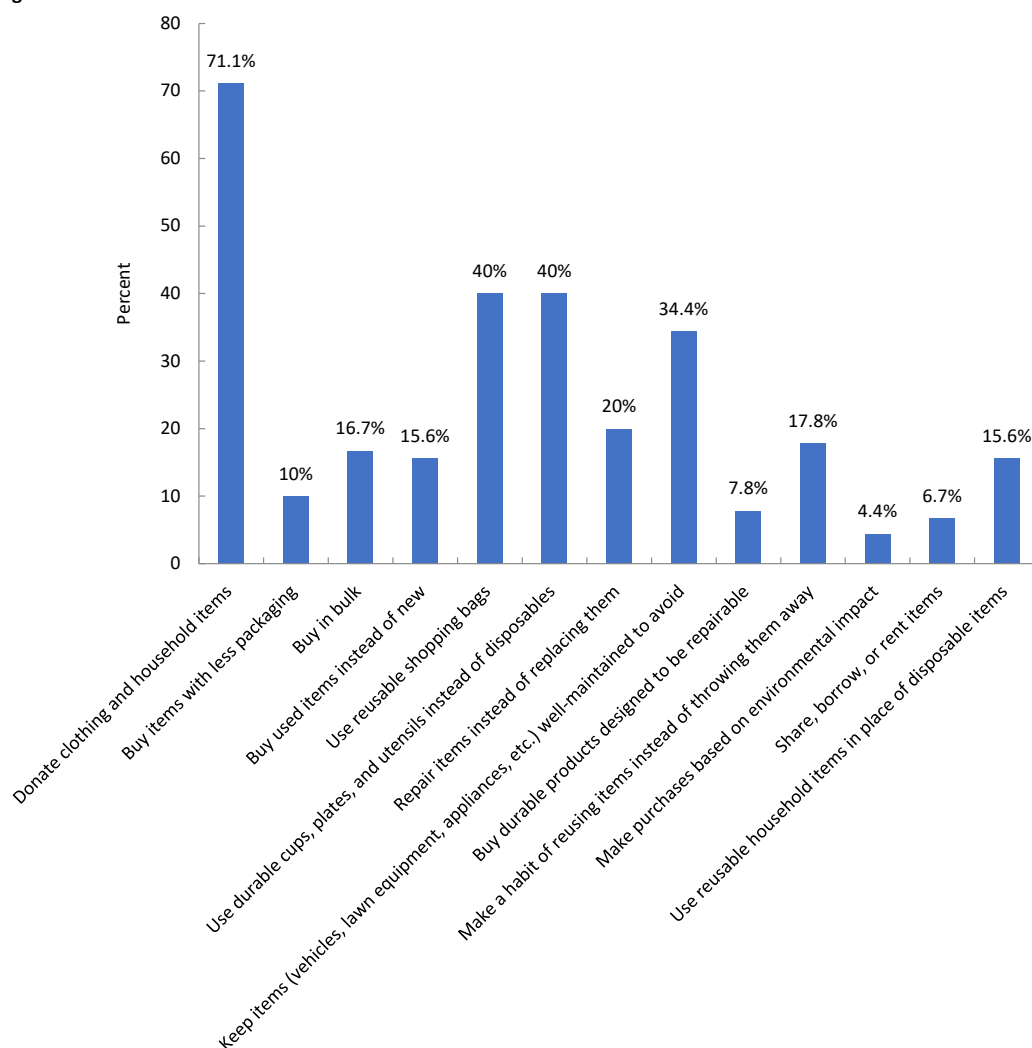
**Figure E-6. Waste Reduction Practices**



8. Do you or other members of your household currently do any of the following to reduce the amount of trash you throw away?

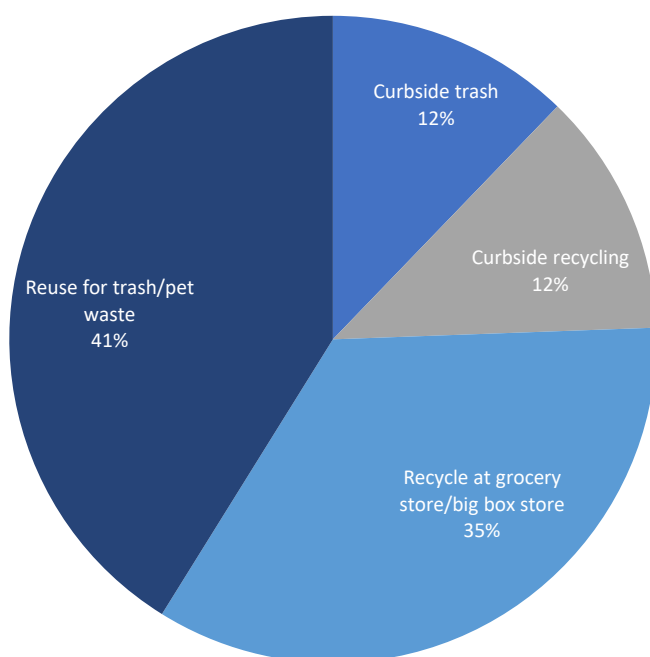
9. What top three activities from the previous question do you do most frequently?

Figure E-7. Most Utilized Waste Reduction Practices



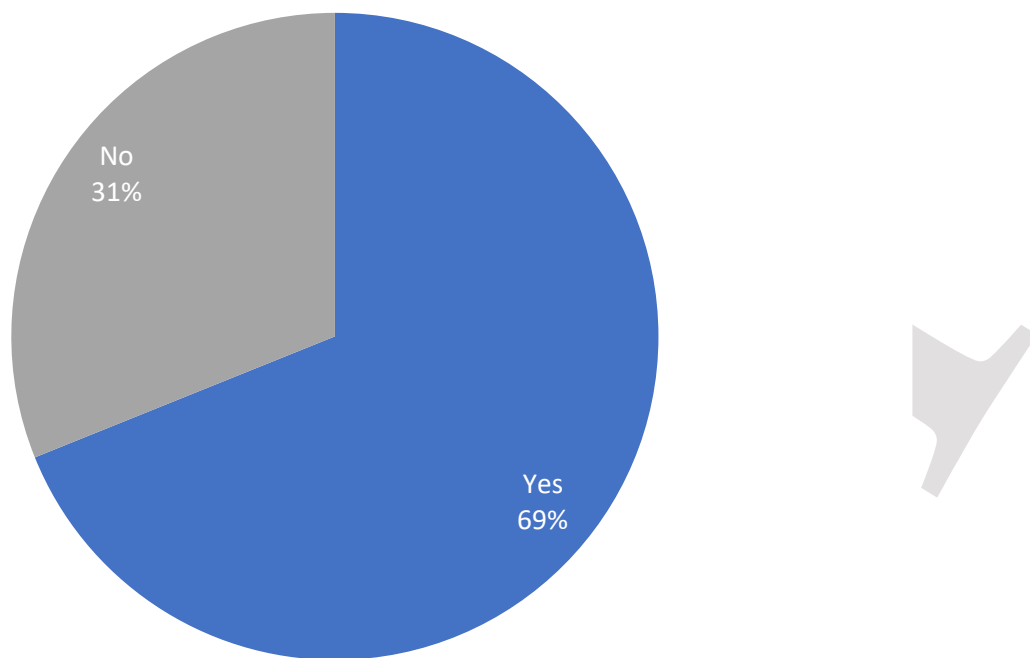
10. How do you manage plastic shopping bags at your home?

Figure E-8. Plastic Bag Disposal



## 11. Are you recycling more than you did 5 years ago?

Figure E-9. Recycling Now versus 5 Years Ago



## 12. Please Explain.

Table E-2. Explanation for Responses of Additional Services Offered

I believe plastic recycling is actually harming our environment by using Cargo Barges to transfer plastics over oceans only to be sent back. It seems we uselessly use fossil fuels to move recyclables across the globe with actually no recycling done.
We recycle more items than we used to.
Actually I have found that some of the items that I used to think we're recyclable are not. So maybe I'm recycling less but I still recycle everything that can be recycled.
Recycling same as we did 5 years ago. There's only 2 of us in the house and we don't buy or use more than we did
Electronic items. I used to just throw them in the trash. Now I put broken items in a bin and take them to public recycling events. I also buy more items from thrift stores and garage sales rather than buying new
We donate a lot to good will and save all our cans.
Less acceptable
Wish my recycle container was bigger. Have more recycle than garbage.
We make an effort to recycle all we can
I have more people living with me.
I recycle my cans for years and been recycling plastic, glass, cardboard for years with curbside and once in a while broken furniture.
There are more items purchased that are packaged in recyclable materials. Also, glad to be aware of more recycling sites for electronic devices and household chemicals.
Much less just recently. Realized much or most of my plastics weren't actually getting recycled. Witnessed my recycle truck guy taking my garbage also (clearly garbage in garbage bags). If he's throwing used cat litter in with the recyclables, none of it is going to be recycled since it will be contaminated and filthy. I was spending way too much time cleaning everything and sorting, just to find him doing that.
More aware of the impact- so making more of an effort to recycle. But our recycle can is much smaller than our 2 garbage cans. And recycle pick up is only every other week.
Space constraints
More conscious
More aware but upset when we recycle only to see it dumped in with the normal trash at pickup
We've always been recycling advocates way beyond the 5 years you've mentioned.
More Amazon purchases with more cardboard boxes to recycle.
I recycle the most items of anyone in my neighborhood. I also take items to KNIB and to the place off Kishwaukee for oil paints and tires. I think people should be fined for not recycling.
With exception to items collected curbside, we have used other resources for recycling like plastic bag drop-off bins.

I've always brought recycling home from school or work if it wasn't available there. Now just from my household, we fill a bin per day most days and then I have to drive it somewhere. Very grateful for organizations such as Keep IL Clean and Beautiful and I give the rest to my parents to put out with theirs because they have curbside pickup and I do not.

Recycling habits haven't changed in 5 years.

We have always been big on recycling as much as we can.

I question each item that goes in the regular trash and try to recycle it.

Seems self explanatory

Same

We donate, reuse, and recycle as much as we can as our kids get older and want to do the same.

limited in previous location

City switched to larger recycling container

We recycle plastic bags more often.

My recycling rate has been higher for more than 5 years

Being more cognizant of the waste produced.

We have always recycled.

I have been recycling as much as I can for at least 10 years.

Harder to recycle here than where I came from

We make sure to recycle anything we can.

We have fewer household members so the volume is somewhat less; otherwise, we have recycled to the maximum extent possible for more than 20 years

We started recycling a few years ago due to a recycling initiative at my son's school. We placed recycling bins in a more accessible area of our garage.

Household has always made recycling a top priority.

We moved to new home; before the garage was not attached but now it is. We have placed recycle container inside the garage right at the door that opens to kitchen and toss recyclables like bottles, boxes, glass etc... Kids also help to remind; they are better at it.

We recycle everything that we can

No change

More conscious of items that can be recycled rather than throw away. I also donate a lot of items.

I recycle a little more than 5 years ago.

electronic waste now has an outlet at KNIB. Egg cartons are now reused at KNIB. Canvas bags are again accepted at a few places, but not overall. Very disappointed in that.

I become more aware of its importance

We simple more aware. . .

More materials have become recyclable and so our recycling has increased. We are very diligent about doing so.

More cognizant

Same

Volume of items is more

WE are trying to buy things that don't come in plastic. We are buying refillable containers. We try to keep things in good repair. We reuse things we used to toss.

I did know exactly what could be recycled

In Rockton it has become more convenient to recycle with curbside recycling.

We have been recycling to this extent for the last 17 years (when we moved out on our own).

We have more items to recycle than 5 years ago. We have been recycling for 40 years. Our son was in the first recycling TV commercial 35 years ago promoting Recycling in Rockford.

reuse plastic bags

We recycle as much as possible because we have watched the countryside, just south of us, become a mountain of trash in just a few years. Very sad.

Have always recycled

Very mindful of what we put into a landfill to help protect our environment and wildlife

Used to burn paper. Now recycle the paper.

by reducing our garbage hoping we can stop/slow expansion of the 2 landfills that are kitty corner from each other.

Maybe not. A lot of the items I thought were recyclable are not.

They are making less and less items eligible for recycle

Ever since curbside became a thing I have been recycling paper, plastic and aluminum. Before that it had been just cans, but that was already 10 years ago.

Using reusable shopping bags, composting food scraps, repairing items instead of scrapping then

Moved into an area with recycling opportunities

I am more aware than years past.

Take to store more often



We recycle about the same and in the same ways.

I have always recycled everything.

I've always saved cans and done the above things.

Aware of environment more.

I did not have access to curbside recycling five years ago, so I didn't recycle.

I have recycled for over 5 years.

We have curb side pickup for recyclables

I have just been paying more attention to it

Far more conscious of the waste, so tend to recycle more items,

No

More things get recycled than trash we produce. Older & more aware of environmental toxins & damage!

Family has grown and so has the number of items we recycle.

Recycling partially increased due to increase in online shopping

The volume of single-use plastics has increased in the last five years.

Where I lived five years ago did not have opportunities for as much recycling. (Glass and several plastics were not recyclable in my state)

I have always prioritized recycling, my rate remains steady

### 13. Please rate your familiarity with the following services in the community where you live.

Figure E-10. Familiarity with Curb Side Recycling

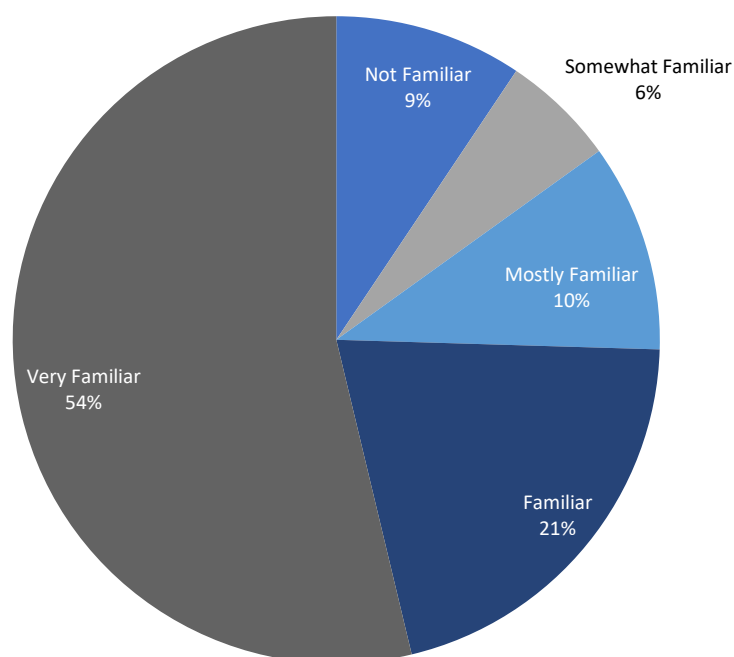


Figure E-11. Familiarity with Recycling Drop-off Centers

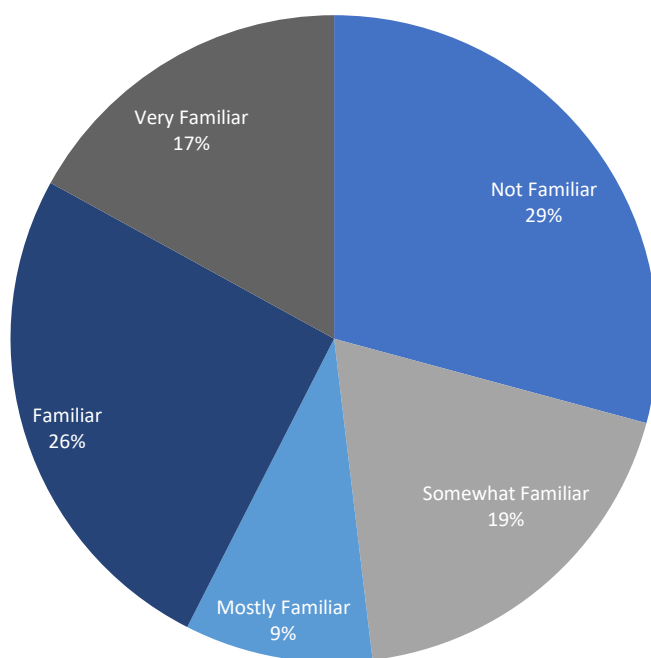


Figure E-12. Familiarity with Yard Waste Collection

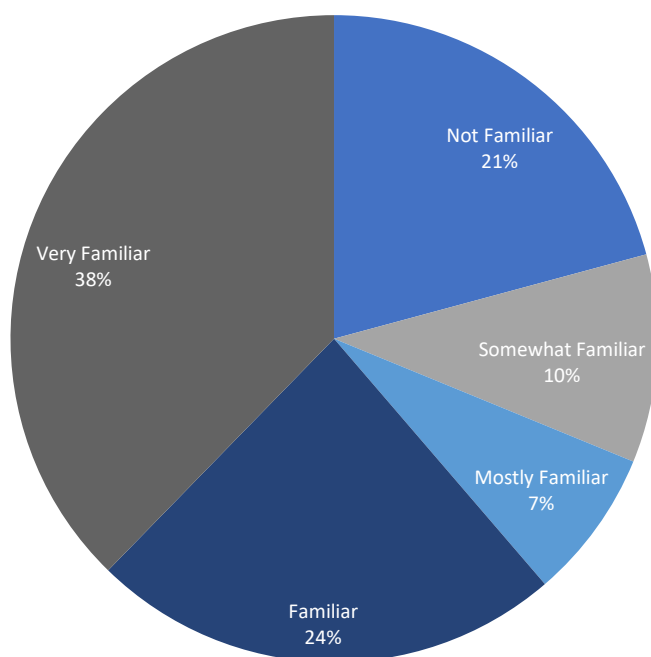


Figure E-13. Familiarity with Household Hazardous Waste Collection Services

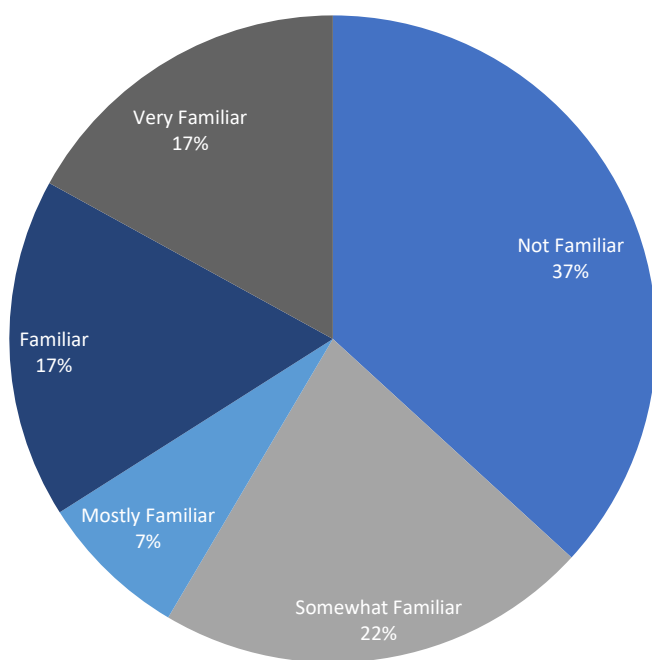


Figure E-14. Familiarity with Used Tire Disposal

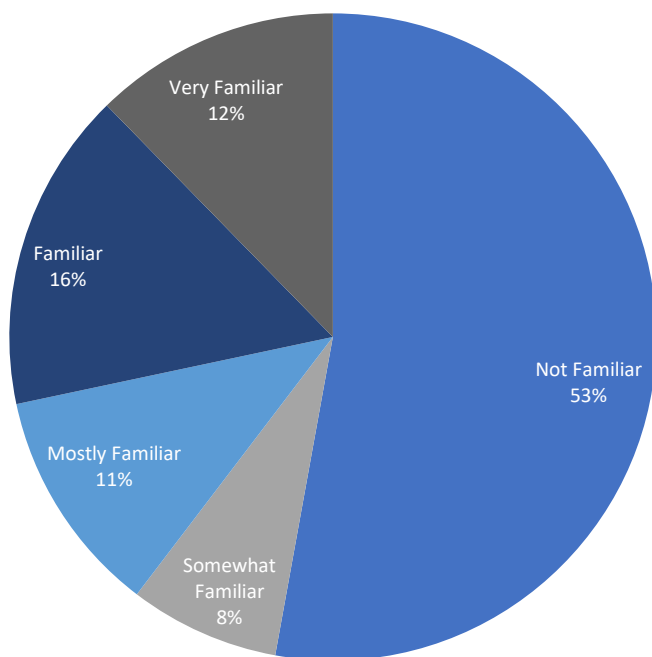


Figure E-15. Familiarity with Bulky Item Pick-up

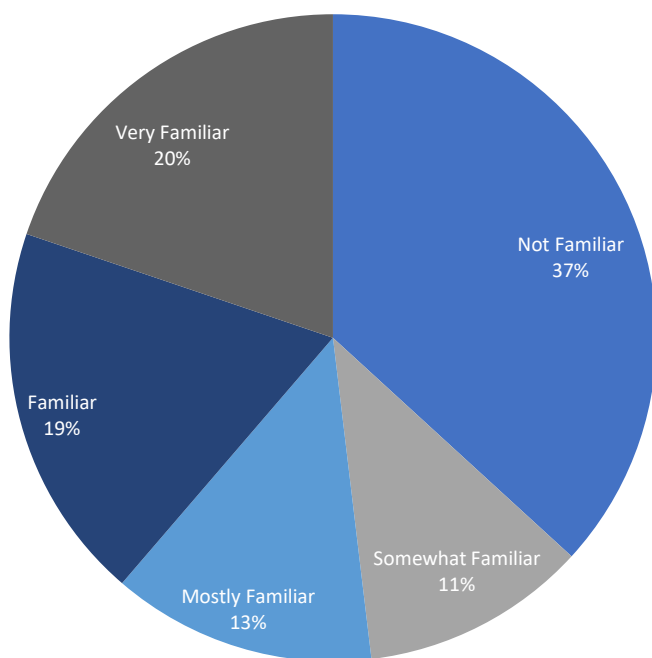
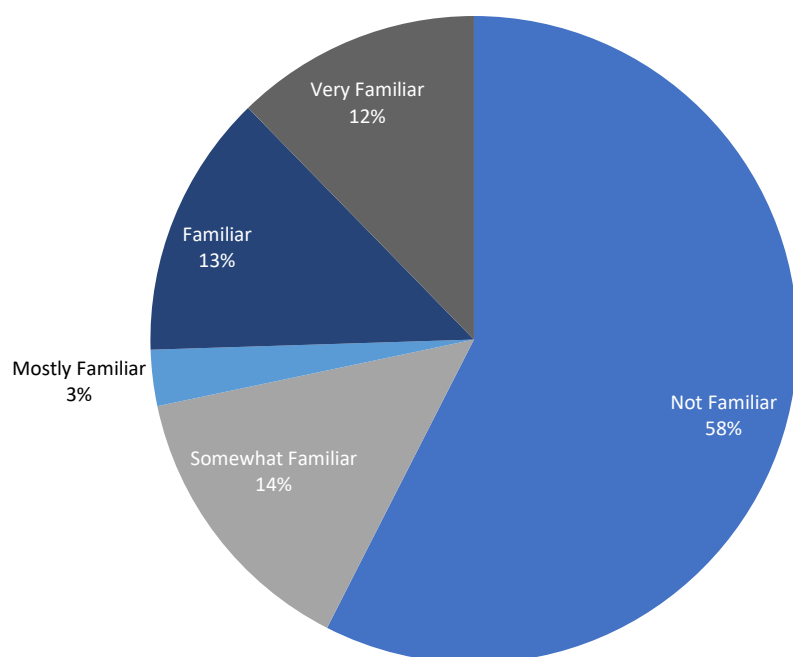
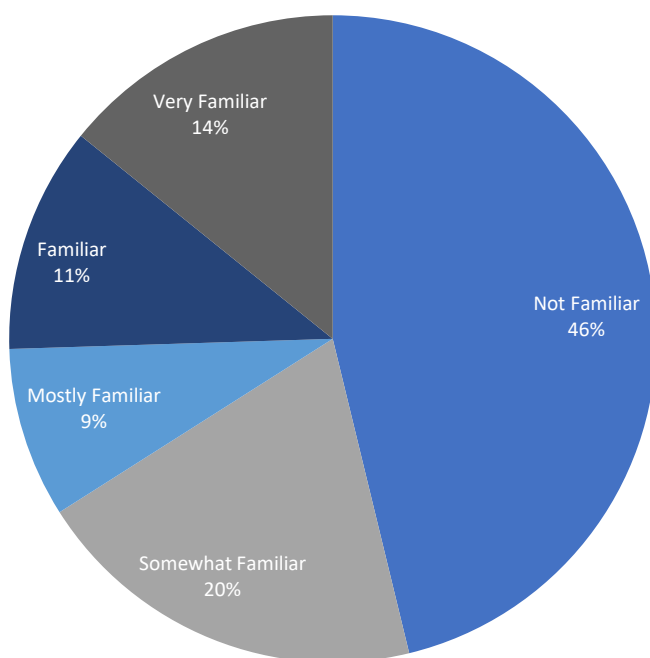


Figure E-16. Familiarity with Household Battery Recycling



**Figure E-17. Familiarity with Composting Services (at home or drop-off)**



#### 14. What additional waste or recycling services would you like to see offered or expanded in your community?

**Table E-3. Responses of Additional Services**

Battery recycling from home
Community recycling Byron lost their station
Curbside or drop off composting
Drop off sites for tires, batteries, and plastics
E Waste Drop Off
Easier access to recycling of non household items
Electronic waste collection
Electronics
Electronics recycling
For Winnebago County to have recycle bins and the Garbage trucks to pick them up. Currently not offered in County.
Free Electronic Recycling
Household batteries recycling, composting
Household Hazardous Waste
Household battery recycling.
I want puck up for recycling at my location
I would like to see my apartment be required to provide recycling services
Larger recycle cans or pick up weekly for recycling
Magazines
More options to recycle tires
More places to buy reasonably priced previously owned items
Municipal composting, County passing a plastic bag ban.
We pay for our trash pick up and don't have access to much recycling.
When I tried to recycle batteries locally, I was told that I should just throw them out.
battery and hazardous waste pick up
composting
composting; textile recycling

cost efficient recycling

education on recycling (many people I talk to don't think it is worth it or that it is actually recycled, also I see many people put their recycled goods in plastic bags for roadside pick up)

electronic collection, tv, computer

electronic recycling

electronics

electronics recycling

electronics recycling and battery recycling

fdgh

food disposal/composting

household batteries AAA etc

pick up of appliances

plastic bag recycling

recycle large appliances

recycling opportunities for apartments

**Table E-4. Responses of Additional Services Explained Further**

Actually make the garbage companies recycle the recyclable material.

Battery and plastic bag collection

Bulk item pick up (designated dates). Hazardous waste recycle.

Construction materials disposal

Electronic waste collection

Electronics recycling

Household Hazardous Waste (improved advertising/communication)

Information as to locations & hrs to be readily available

Information on what my disposal company recycles. It is difficult to find on their website. Hazardous waste site in Boone. We currently go to Rockford.

Larger recycling bins provided for curbside

Make it simple

Paint disposal

Tires/Bulk disposal awareness

Tv battery pick up

Would like to see more than just basic recycling offered. Things people dont know what to do with

Would like to try the composting service

acceptable curbside items expanded

curbside

curbside recycling (items actually get processed and recycled at waste facility), and improved plastic bag recycling options. More frequent and accessible tire and battery and hazardous waste disposal opportunities. Incentivizing biodegradable bag use, fully recyclable waste containers when they reach end of useful life.

hazardous waste and electronic waste collection/recycling.

larger curbside recycling bins

on-street leaf pickup in the fall

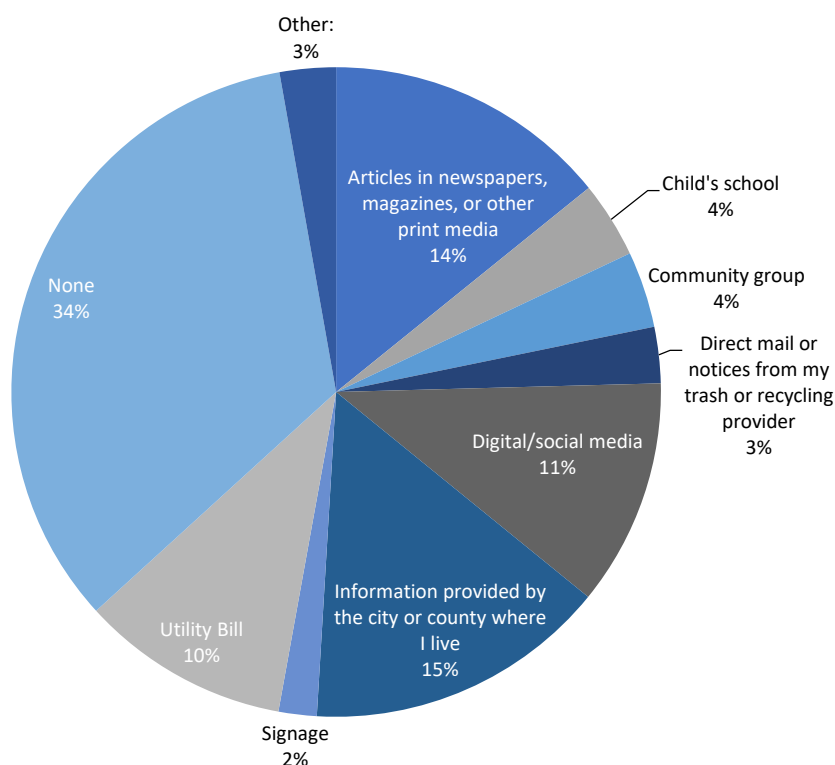
road side pick up to more areas and recycling for businesses

toxic waste disposal

yard waste

## 15. What types of resources does your household currently receive related to waste management programs?

Figure E-18. Current Waste Management Resources Received



## 16. What are your thoughts on your area's current waste management practices or haulers?

Table E-5. Respondents Thoughts on Current Waste Management Practices and Haulers

I don't recycle because I think it's all going into the landfill anyway

My Driver is outstanding. The Haulers brining in trash from outside my area tend to lose garbage from their trucks. The landfill is filling our area with outside garbage creating extensive truck traffic in addition to failing to control toxic gas release into our community from excessive mountains of decaying garbage.

Open top haulers need to ensure their net/cover is being utilized to prevent trash being blown out of their truck and we need to stop trucking in trash from Chicago.

I don't really have any complaints. I just wish more things were recyclable. And be picked them up from the house or have a drop-off not just on certain days and time. Anytime drop off

Not good. We are still frequently smelling landfill gases at and inside our home, though not quite as intense as previously. I have told friends looking to but a house to look outside our area because of the landfills. Haulers are still an issue as well, have to be extra careful near the landfills so we don't get creamed by one leaving the site.

THE DUMP SMELLS HORRIBLY! I live by it and some days I literally gag. Too many out of area trucks come here to dump stuff. Why? These trucks drip liquids and stuff blows off of them. Why?

To expensive

The garbage trucks leave a mess because they are over filled. Trash flies out everywhere.

Not aware that our hauler offers any type of recycling program.

Management of the landfill is horrible. Smells are often present over 5 miles away from the dump to the point our children are unable to play outside and we are unable to enjoy being outside.

You don't want to know

Like rock river but need bigger recycle containers.

Not sure. Waste haulers drive too fast on roads

Haulers won't pick up recycling and sometimes don't take all of the trash.

Stop talking garbage from outside Boone and Winnebago county. Stop trying to make a profit off of trash! Make the landfills follow the laws and stop polluting our air and waterways. Stop putting dollars over your residents.

None

none

I'm not happy with the constant barrage of trucks through our neighborhood and roads spewing trash from their over filled trucks. The drivers also drive over the speed limit and aren't courteous to others driving on the road. My biggest concern however, is the stench that has invaded our lovely countryside from the mountains of trash filling our landfill all for a few million dollars. Such a tragedy to lose our pristine land for tons of garbage and a scarce amount of money, especially when you consider the cost for cleaning the air and rising respiratory health concerns. The logic of that deal never made sense to me!

Not sure I trust them anymore. Have not been able to come up with a reasonable explanation of why the recycle guy would take a black plastic garbage bag filled with garbage. And sometimes they miss a pick-up and I have to call them. Then they may or may not come back out. I called them two days in a row earlier this summer, but they still never showed up.



Need weekly pick up for recycling

A more transparent and competitive structure of hauler contract services would help.

A lot of debris flies off both the trucks for Winnebago LF & DJ Orchard View. The cost to pick up the litter by the County is a wash for what revenues it takes in. Then there is the clear EPA violation of 2 of IL. Larger Landfills kitty corner from each other polluting not only the Air Quality on a regular basis. This affects the Respiratory health of the towns & subdivisions that are under 5 miles away. The Davis Junction Orchard View LF trenched a ditch for drainage run off from the landfill that empties into Kilbuck Creek direct! And yet somehow Winnebago City Health & Ogle County Health Depts., EPA look the other way & continue the expansion of both Landfills! How is making these Landfills bigger making it any safer for the surrounding residents?!

N/s

Does not comply well

Do a better job of letting the customer know exactly what plastics are/are not recyclable. The recycle containers may say plastics 1 thru 7 but some brochures may mention certain items within that group that are not recyclable.

Competitive market in my location so I can choose hauler. MDC collects my house currently and does a good job.

There is still too much trash along the highways of all of our counties. People toss TVs, mattresses and other large items in fields and waterways. There should be higher fines for littering!

recycling efficiency needs to improve. More education as it relates to acceptable items. A local materials recovery facility would also help reduce carbon footprint by reducing transportation of items.

Good service do not like the odors from the landfill nor the littering off of some of the trucks I

Pick up yard waste

Recycling should be mandatory. Winnebago county should do more Recycling with all of the garbage coming in from Chicago.

It is terrible. It doesn't exist at my address.

The City of Rockford does a great job. No limits on yard waste, trash, etc. I do believe that there needs to be better information about the household hazardous waste center on Kishwaukee St. I found old and conflicting information online. KNIB does a wonderful job of getting the word out about their electronics recycling.

I think overall it is done well, there are some places where waste gets left behind defeating the purpose.

I have MDC. They are very good. However, the redundancy in having so many companies is not good environmentally. Same routes. At least five different trucks each week, if you include recycling pick ups, doing the same job.

Pretty good

Need to be more aggressive in preventing litter from escaping trucks

Our trash and recycling pickup service is efficient.

they are selective with bulk items

We have good waste services, curbside recycling, and HHW drop-off. We do not have adequate electronic recycling or battery recycling

I can't think of anything specific.

could be improved

Not much information provided on what places collect or dispose of certain material

pleased

No opinion

There is a monopoly with only a few large waste haulers. I signed up for curbside pickup when I moved to Rockford and then found out they do not recycle so now I have to deliver my recyclables myself.

It's hard to recycle in multi-family housing, especially when public recycling services are very limited outside the 9-5 timeframe. It's almost impossible to compost.

I haven't had any problems with our current waste management provider.

The amount of waste brought in from Chicago and surrounding areas appears to be tremendous and that is a concern

Efficient and timely

.

Need to have Recycle bins and pick up in the County. We are Euclid Ave in Rockford, considered county but no library services or recycling.

Our haulers are great, they come early/on time and grab quickly and efficiently. As for local practices, I would like to see what can be recycled expanded- or maybe there is a lot that can be recycled but homeowners don't know exactly what/how. I would like more information shared about local composting options, as well.

It seems monopolized.

they do great work

The garbage trucks and semis coming in from Chicago leave garbage all over the place on Baxter Rd, I-39, and Hwy 251. It's really sad that our the Mountain of garbage at the dump site was allowed to build up higher than the lay of the land surrounding it, it is a huge eyesore.

There is always trash left from the haulers on the streets that we have to pick up after.

None

no issues.

None

Overall, good. .

I have nothing negative to say. I believe our haulers do a fine job.

We have a positive attitude

Very satisfied.

They need improvement. I don't even think what I recycle actually gets recycled. We should be more like Portland or Seattle.

We have curbside recycling but I would like to see a report on what actually gets recycled when I gets hauled away.

Pretty good

WE need county-wide recycling services.

NO thoughts

I think that they are doing a great job

Rockton's service provider has been very good

I love it!

I think they do a great job but I wonder how much goes into the landfill that should not.

Burying our trash is archaic. Sweden has a far more advanced system that we should be emulating. I've seen it first hand. They burn it with no emissions and produce heating and power for their communities. They have been doing it for over 40 years.

messy inconsistent pick up damage to our cans that they will not replace

Why does Winnebago County take so much waste from other counties?

There is too much brought in from outside our community. Haulers are very dangerous they are in a hurry. They lose trash on the road. They abuse our roadways with heavy loads. The stink from the dump is very offensive. Killbuck creek will run brown and foamy from their discharge. The bird attraction to the dump could be a grave danger to the flights from the airport that is near by.

It's disgusting! The stench, the massive number of trucks. No regard for the people that live in this area. Winnebago County should be ashamed of what is happening here! Nothing is done to clean up this mess and protect tax paying home owners.

Nearby landfills are growing too big and taking on too much waste from outside our community resulting in bad smelling air and potential health risks and environmental damage.

The landfill should not be expanded again.

I have no complaints with service pick up in my area. I have a problem with all the other countries hauling there trucks to the dumps in my area. We have no idea what toxic things they may be dumping. They leave the roads covered in muck and litter. The bigger the dump, the more smell and toxic air we have to breathe.

sloppy

I think Rock river disposal needs to provide larger recycling containers.

Waste management practices are not up to par. If you lived by the landfills you would know that! Very toxic smells with certain weather conditions. Yeah haulers are not respectful of other traffic on the road.

I do not trust the management to run the system properly.

We have had to call, our alley was forgotten twice last month.

It's terrible on 11th street near dump. Trucks pull right out in front of you.

I am happy with the services provided however the cost for the services is a concern as they continue to increase.

Not enough promotion or education on what's available and when.

we need them

I feel they are profession workers and always seem to pick up at the same time, which I really like.

Needs to be expanded for county residents

I have heard from several people that have been at the landfill dumping yard waste, that recycled items are being dumped in the landfill by the contractors that pick up recycling from our homes. I have never witnessed this myself because I have never went to the landfill.

Subpar. Not very good. I don't believe our waste is being recycled. Garbage trucks contribute most of the trash along our roadways. Very disappointed in our waste removal

I live in the County, I can Smell the Land Fill quite a lot, and when you drive down 251 south and Baxter Rd it is a mess, lots of GARBAGE flying out of garbage trucks

Not enough publicity leads to misinformation

Okay

Don't like the fact that "garbage" trucks are picking up recycling. I have also seen garbage trucks dump garbage & recycling in the same truck!

Unsure

Generally fairly positive

Not very good garbage all over and am Bering gassed to death with landfill odors

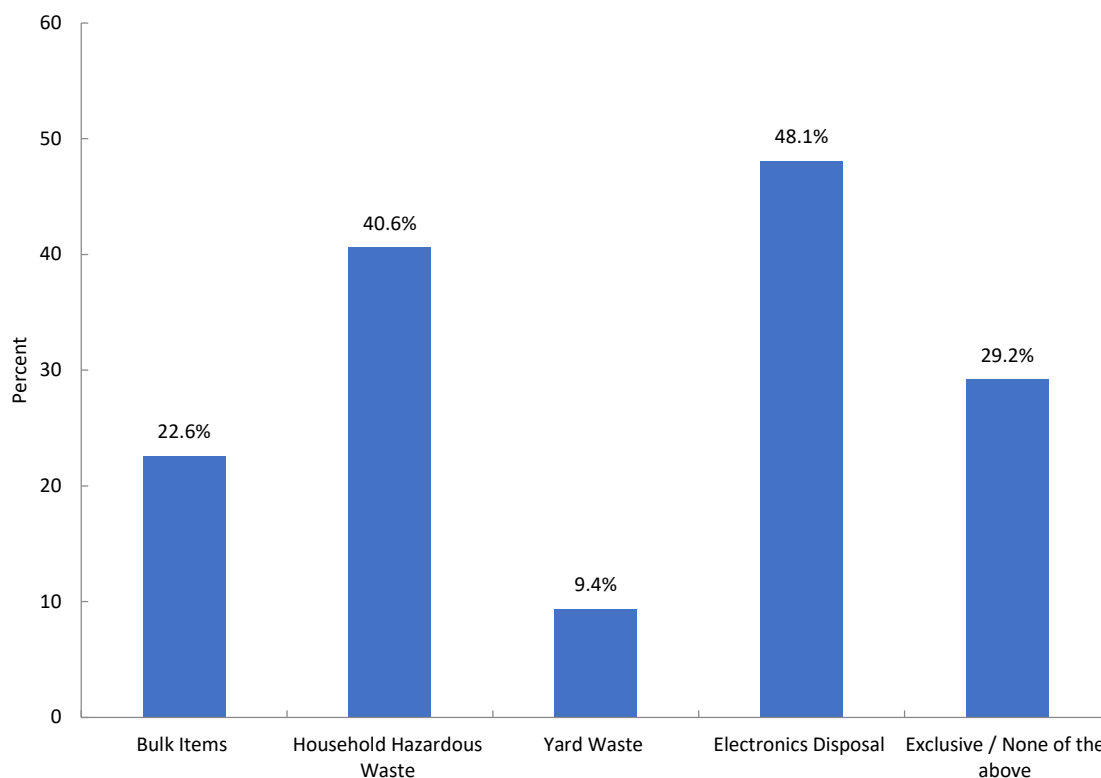
n/a

It's odd that my neighborhood has so many different hauler options, I hear trash pick up nearly every day of the week-all different companies

Information difficult to find. REPEATED OFFGASSING ISSUES, RESULTING IN ODOR PERMEATING CITY FROM LANDFILLS. Lack of transparency regarding actual recycling completed once it leaves our home. Poor billing practices (for example, if I put out an extra bin and they count it once, they keep counting and charging for the extra bin disposal even though it is not used other weeks or months, resulting in overcharging. Difficult to reach and address overcharge, and refusal to correct billing for prior overcharging).

## 17. Please check the boxes for any items that you have issues with disposing.

Figure E-19. Reported Difficult to Dispose of Items



## 18. Please explain the issues with disposing of certain waste types.

Table E-6. Respondents Explanation of Difficult to Dispose of Items

I've been meaning to take old paint and varnish to the Saturday drop off for 15 years. Now I have so much it's a daunting task.

I do not know where to dispose of them.

It's not well known where to dispose these things

It's hard when there's only specific dates and times to drop off. It'd be nice if there was a location and a drop box that you can just put it at any time of the day or night oh, any day of the week.

It's very hard to know where or when collecting of electronic items is. We have so many big screen TVs, laptops and other electronic items that can't be fixed. We need a place to drop them off that is available several days a week year around

The company we are with does not offer any type of yard waste or recycling pickup.

Trash has no pick up of large items.

Not known

Not conveniently located

They are too picky about the way you dispose of it.

the cost we already pay a bill. we can't afford added programs that will cost us to pay more. the money not there.

Times! Frequency and locations change without notice. Permanent sites and times would certainly help.

Unfamiliar with how to dispose of them properly

I called all around to find out where to take old paint or solvents too. Never got a answer that panned out to be real.

Bed items

Not enough drop off areas

Unclear where to dispose of these items now that the E-Waste bins at the gas stations have been removed.

There should be a place to dispose of refrigerators and freezers. KNIB only takes TV and computer monitors for a fee.

M

Where can they be disposed at? Why doesn't a city as big as Rockford have a place for disposing of needles / medical waste?????

oil, paint, etc. Where can I take it??

See above.

There is usually a charge involved, finding the location on the City Website is more challenging as well.

Getting to a place that takes these items in time frame they are open

Limited hours for drop off

It would be convenient to have battery disposal each month.

what happens to it?

Lack of available resources

I'm not sure what to do with old paint.

limited options

Not sure where to dispose of certain hazardous waste

not sure where to take

Knowing when and where I can drop them off at or what my municipality has for programming.

Paid large sum of money to have sofa picked up. Sofa ready on curb for 2 weeks before scheduled pick up. Day of pick up Called right away as someone had adopted the sofa. I was STILL charged for a pick up that never happened and no re-imbursement. I had to pre pay to have the pick up. Glorious waste of my money and great for your pockets. No service done yet you got paid. Home owner is a Veteran, no discounts.

I don't know where or how to dispose of certain types of waste.

having to load in car and drop of. Also, I head there is now a charge for large electronics (computers, tv, stereos, microwaves etc..)

Hours are not convenient and there are fees

Where is the location

Not sure where to bring large electronics anymore. Used to bring to Mobil on south main because there was a truck

items like motor oil, paint, stains are difficult to drop off at the limited hours they have

The hours they are open are not convenient.

We have no idea where to dispose of them, we receive no information from our waste management company.

They don't all go to the same place

I live in rural Winnebago county in Durand so the household hazardous waste is all the way in the South Rockford.

Would rather recycle than throw away batteries. Having an option to recycle TVs, etc. curbside would be helpful as it's hard to coordinate otherwise.

We need to know how to get large items, hazardous items, etc. picked up.

not sure where to take them

Not sure exactly where to dispose of hazardous waste

I don't know how to recycle bulk items that are not suitable for donation.

Oil. Not sure how to dispose of it.

Finding locations

paint they leave grass 1/2 time leave may get next week tv wont pick up

Electronics- Finding a location to take them.

No idea after calls to the village of where to take such items too.

Not as simple as other states offer

The dates and times are have to remember or the location is hard to get to.

Not available

I haven't educated myself of the subjects enough. Some material on those issues would be great.

Don't know how to get rid of them. Not enough recycling dates

Electronic devices are not picked up and cost us to drop off.

Don't have any info

Bulk Items are difficult to get rid of due to inability to drop off at a localized transfer station. Electronic Disposal costs too much for televisions.

Confusion on what items are accepted and not a convenient drop off site.

not many places take them and it's expensive to have done.

Have to pay extra for bulk items. Limit on yard waste bags. Electronics disposal not offered and limited hours to drop off.

I have to pay to get rid of electronics. Not sure how to get rid of household chemicals and paint.

Lack of drop off locations

Used car oil, paints etc. seem to have very few drop-off points

Cant find places that take them!

You have to seek out a private firm for recycling motor oil, etc.

Lack of either multiple or a geographically centrally located facility in my community

Hardly any where to dispose electronics

Bulk items options unclear. Yard waste unclear about quantity allowed to put out. dates for yard waste pickup, and when a sticker is or is not needed. To find this information, I had to search County codes. Electronics: Few options due to site closure off of riverside.

## 19. What concerns do you have regarding waste collection and storage?

**Table E-7. Concerns Regarding Waste Collection and Storage**

The rotten smell from the landfill
My weekly waste collection and bin is sufficient for 3 people in my household and holds up to scavenger attempts well. The long term storage is an issue. Landfill laws are outdated and written for considerably smaller local landfills. The new larger capacity landfills decimate neighborhoods with toxic odors, excessive truck traffic and long term environmental concerns.
Our landfills in Winnebago and Ogle county are full of trash from Chicago and surround area. My street has 3 collection days. Garbage is all along IL-251 and I-39 from trash haulers coming in from Chicago.
I have a great deal of concern! We live very close to two landfills and they are getting larger by the second. My concerns are air quality, run off into the streams and lakes and anything else in the area that might get contaminated by it, the smells that we smell some of us on a daily basis send some of us on a weekly basis. The gases and chemicals that emit from the landfills are a huge concern for myself, my children and grandchildren's health. I feel that they have reached their limits and it's time to find a different location away from here. Davis Junction, Illinois
I've seen recent pictures of kilbuck creek, it's not looking very healthy. Is our groundwater actually safe? Why are the landfills not buttoning up their gaseous emissions better? Haulers need to be safer on the roads and ensure Their loads are actually secured.
The mountains of waste in my neighborhood are disgusting! Many days of horrible odors. Too many trucks hauling waste filling the streets. Too much garbage leaking out of and blowing off of trucks. AND, the building holding thousands of plastic bottles for recycling caught fire a few months back. My whole house smelled from the thick gray smoke that filled the neighborhood. Is that how you recycle???
None
The odor and health hazards caused by living near this dump.
We are not offered any type of program for pickup.
.
HIHK
Quit picking up Chicago garbage.
Landfill odors
0
Again, stop taking trash from the Chicagoland area. You are running out of storage space because of the volume you allow.
None
not sure what you mean buy storage but the landfill stinks, their must be other ways than to pollute the rivers and creeks around south Rockford.
I would love recycling collected every week not twice a month.
Not convinced it's worth all my efforts. Not sure what or how much is really being recycled. Someone needs to investigate.
We can smell the dump at our house depending on weather- I realize we live fairly close. Also, recycling g needs to be picked up weekly, or we need a larger can for it.
Some overflows. Unclear about recyclable items.
none on my end at my house but a lot of concerns over the hauling and air pollution the landfills keep occurring.
The dump stinks for miles
Garbage all over the roads
I am generally very satisfied with my garbage pick-up. My ability to vacation stop and restart as I'm on vacation a lot.
NA
It should be weekly instead of biweekly and people should get a lower trash haul away rate for recycling.
I don't like that some municipalities allow residents to place garbage out in bags only or trash cans with no lids. This causes unnecessary litter.
No more landfills in our neighborhood .
N
Our City is full of trash and litter which flies out of the garbage trucks. More enforcement needs to be done. They will get tired of paying fines sooner or later.
It comes out of the truck and litters the roadway as well as the smell from the dump travels significantly.
Smell from Winnebago Landfill and/or Orchard Hills Landfill (Ogle County). On some days we can smell it in Rockford, when the wind is out of the south. This needs to be addressed and is impacting property values in New Milford, south Rockford, etc.
I am concerned that not enough recycling and proper processing is being done
I would like to know if my recyclables are really being processed or simply landfilled.
The smell from garbage dump
Affect on neighboring properties
We hope that storage and recycling is able to expand when necessary, plastics reused, and battery collection expanded.
none
None
We should reduce and/or reuse waste as a community.
na
Proper storage and drop off of waste
none

None
I am concerned that we will run out of storage space in our landfill and that the landfill is leaching runoff into our environment and then ultimately contaminating our underground water.
Lack of services, illegal dumping next to roads
None
The amount of waste brought in from Chicago and surrounding areas appears to be tremendous and that is a concern
None
.
Why are we accepting Chicago waste when there is a limited amount of space for disposal? What are your plans for when space runs out????
I think 2 recycling bins/house would be a good idea. Sometimes we have overflow and picking up side items is likely a hassle for the haulers. A second, standard sized bin would help.
That we will run out of room.
pick up of large electronics
Rock River Disposal's recycling bins do not have covers so when it's windy the recyclables blow out of the bins into the neighborhoods
None.
None
Long-term issues for the environment.
I think we could do better
I hear that more waste is going to the landfill than in previous years. I am concerned that the U.S. does not maintain recycling facilities that we can well afford, but prefer to dump our garbage on other countries and in the ocean.
running out of room for waste is a concern
Not enough disposal centers and hours open for electronic equipment drop off.
Environmental issues in Rockford and surrounding areas.
More education. A lot of people don't know what is and isn't recyclable. Things soiled with grease or food cannot be recycled even if they have a recycling label.
None
None
WE shouldn't be the dumping ground for larger cities outside of Winnebago County.
none
No concerns
None
None
No concerns unless I am right about too much garbage going into the landfills that shouldn't
Pick up should be more automated. Containers should be picked up by trucks equipped with armatures, not manual labor. Containers should be standardized.
need to pick up anything that is left curbside at the price we are paying
The smell, which has improved this summer, had been sickening. Even now, to drive along Rt 251 south of Rockford, or Baxter Rd east of 251, the smell is still bad.
Dump is too large
I have issues with the land fill stench, trucks, trash blowing into our property. Our families health living near this disgusting mess.
Pickup schedule varies widely. Wind days result in several tipped over trash cans that sit outside awaiting pickup.
Air Quality, Methane Gas, Water run off direct from Orchard View into Kilbuck Creek. The continued expansion of both Winnebago City LF & Orchard View when they can't control the terrible smell that affects area residents that literally gets people sick & causes respiratory issues. If they're going to continue to expand why not buy out local area residents? you can't expect to have 2 of the largest LF's in the state to continue to expand w/o compensating those who are directly impacted daily. The lack of regulation is simply astounding & so wrong!
The landfill should not be expanded and New Milford residents should not have to BEG for a solution to the smell.
In a nutshell, the runoff contamination to the land and water, contamination to streams or lakes, toxic air we are breathing which is leading to real health problems. The foul smell coming from the dump that keeps us from enjoying being outside of our homes. Can't enjoy just sitting on the deck depending which way the wind is blowing.
Recycling is pretty well non-existent in rural areas
None.
Storage?
The management of the waste facilities.
Detailed plans are the company's job. More needs to be done related to storage. A search of other communities do who have improved their storage problems
Landfill expanding!
None
Not sure that it's promoted enough
that we won't have enough storage

None

I am concerned with the amount of waste actually getting recycled.

This is a repeat of what I stated in question 20. I have heard from several people that have been at the landfill dumping their yard waste, that recycled items are being dumped in the landfill by the contractors that pick up recycling from homes.

garbage trucks litter to much

how the land fill brings in garbage from other counties

Wonder if we are using too much water to rinse recyclables. Would that be better done at a facility in bulk?

??

Is the recycling getting dumped in the same place garbage is going?? Rumor has it, it does & we are paying extra for that?

making it easier and more common for people to do this so that it doesn't require a lot of thinking or taking time out of a day to do so.

What is the lifecycle of current landfill

Garbage on the road side to the dump on 39

I'm concerned that our recycling isn't actually being recycled, largely due to there not being a market for items such as plastic. There needs to be greater transparency and accountability with our recycling process; municipal coproduction requires such to be effective.

making sure that the companies follow regulations and handle waste properly. Having more education on proper recycling to the community so that more items recycled can be properly recycled. And the amount of debris/litter created by pick up services is alarming.

Accurate fees. Management of fumes and unsafe practices affecting our quality of life. Giving needed space in landfills to outside counties. Poor recycling management and no advocacy to improve recycling, no transparency when recycling abilities change or when issues arise.

## 20. What needs do you have regarding waste collection in your community that are not currently being met?

**Table E-8. Community Waste Collection Needs**

we need waste disposal that does not smell

Electronics and Bulk items

The odor pollution from both landfills in the area is horrendous. Our roads are full of trash.

None

Curbside is currently fine. Better management of emissions is a serious concern at this time.

Just easier recycling of items that cannot/should not go to the landfill

None

Garbage haulers needs to be held responsible

Pickup at our home.

Landfill management

Picking up large items if needed

Not known

No comment

Need to take everything you put out

Na

None

some times a lot of times they loose the garage on the ground and street and we have to pick it up for the second time . it does get old.

None for us except weekly recycling pick up.

n/a

Education about recycling and our impact on earth

Food waste

Already explained previously regarding paint.

The dumps stink. The dumps are close to water ways, farm land and homes.

Clean up the odor in our area

None

E-Waste and Household Hazardous Wastes

There needs to be a new community place for the Byron area. All small towns should have a community waste area with cameras to catch the bad people that dump TVs and other items.

A more localized household hazardous waste collection facility. More focus on building materials recycling and deconstruction is also needed.

Stop the smell.

Yard waste pickup

Medical waste.

Recycling pick up is not offered at my location and it is upsetting.



n/a
Making sure we are all doing as much as we can.
A closer hazardous waste facility or collection.
Smell from the garbage dump
Ease of recycling receptacle replacement
Possibly easier battery/electronic pickup for recycling
more curbside available or one location to drop off.
See item 20
Not sure what to do with old paint.
na
General information provided by government on waste management and collection
electronic recycling
I do not know
There should be increased education for the public on where the closest hazardous waste, electronic waste, and recycling centers are so they can safely dispose or recycle.
composting
None
none
Apartment complexes, who, arguably, create the most waste, are not given convenient opportunities to recycle
.
Need Recycling curbside pick up in the County.
More info and local encouragement to get more people on board. Also, more transparency and information about what actually happens to blue bin items once they are hauled from the home.
Information on disposing of large items or hazardous items
pick up of large electronics
None
n/a
None
No issues.
Easier way of recycling electronics
Household batteries Styrofoam containers. Even if triangled, I am not sure they are recycled.
disposing of paints and stains, motor oil
Electronic Disposal Services
Environmental concerns including air quality, runoff and pond/lake quality.
People shouldn't have to pay extra for recycling or composting. Residents should pay for collection services based on the size of the trash can needed, with recycling and compost included at no additional cost.
I would like curbside yard waste pickup as opposed to driving it to the community compost file.
Would rather recycle than throw away batteries. Having an option to recycle TVs, etc. curbside would be helpful as it's hard to coordinate otherwise.
Future planning for our own waste should come first before out of county needs/revenue.
none
No needs
None
Bulk items??
Everything I need is being met
Just make it more automated.
they should provide the cans since they damage ours, outlying communities are provided roller cans
Old televisions; not knowing where to recycle them.
None
My needs are met with no help from the landfill.
More consistent pickup schedule.
The amount the County spends to clean up the litter from the haulers is close to equalizing what revenue they get. Air Quality is terrible and yet yr. after yr. it continues to get worse not better as the 2 LF's grow at a brisk pace!
Need to be able to dispose of paint, electronics, etc. at the curb.
Recycling drop off for electronic items and household cleaning products and paint.

metal disposal
None
Needs are met
Lawn waste, garbage and recycling haulers do their jobs well.
Respect and responsibility.
Landfill expanding & the smell!
Bulk Item and Electronic Disposal.
None
none
None
Expanded recycling.
Having to pay to get rid of large appliances and TVs
to much plastic waste. Need more recycling
the land fill maintaining its property
What to do with freon and other such items
Huh
Batteries, electronics, used old paint/chemicals
Unsure
none come to mind
None
Municipal composting.
Community compost (I compost myself, but I'm sure the community would benefit from an option for pick up-for those who don't want or know how to compost on their own.)
Bulk pickup dates. Increased capacity for lawn waste so I don't have to fill my garage and parcel them out across the month (to avoid overcharging). Curbside hazardous waste drives (similar to bulk pickup dates). Real recycling services.

## 21. Are there any opportunities or ideas you would like to highlight?

**Table E-9. Community Ideas and Opportunities**

recycling, composting, waste to fuel
I would like to find an electronics (E-waste) recycler and offer periodic services to the community.
Stop hauling in trash from Chicago and suburbs. Streamline collection days. Fix the air quality smell suppressant systems at the landfills.
,
Noted prior, thanks
Just recycling tires, furniture, mattresses.
No
We need clean air.
Separate bin for curb side pick up of recycling items
Landfill management/smell containment
No
Need a electronics drop off or more like the one that used to be at South Main mobile.
No
No
Na
No
yeah you spill it you pick it up.
I would love to see/ smell a better use of the ethanol gas expelled from the landfills. Other countries use this energy for powering cooking stoves, lights and heat.
n/a
I would love to see some composting opportunities/education
Regular reminders/educational campaigns for recycling would be appreciated.
More measuring of air quality in random unannounced checks
Already stated
Yes
None
No

Get money off your trash bill for recycling.

none

No

No

No

Community education on how to recycle and increase support to encourage recycling

n/a

A full resource available to everyone on line or website, new bins that label what they recycling materials are, so that eliminates confusion and we can be sure we are recycling the right materials.

No

Move the dump

Nope

N/A

none

Electronics and Battery Recycling. More emphasis on Extended Producer Responsibility and waste reduction

No.

na

More information/material provided electronically (reduce more waste) on what is disposable, who can collect it, and where to drop it off

no

none

It would be helpful if the City or County had an interactive map where the locations and times of recycling centers, bulk item drop off etc. where located so you could type in your address and see what is closest for electronic waste drop off for example.

Public composting would be incredible

None

No

I would like recycling to be more convenient and cost effective

.

At all fairs and craft shows you need to have information table.

N/A

No

n/a

Stop bringing garbage in from Chicago until a way can be found to actually keep it in the trucks on the way to the facility and hold the drivers responsible.

n/a

No

None at this time.

None

find more outlets for recycling and quit taking Chicago garbage for money.

n/a

Same as above

Winnebago County must take more responsibility for the environmental protection of its citizens and natural resources including but not limited to spraying for insects and unmonitored runoff.

We should be more like Portland or Seattle. Make it so trash only comes every 2 weeks so that people are more cognizant of the waste they produce and are forced to reduce consumption.

Na

Would rather recycle than throw away batteries. Having an option to recycle TVs, etc. curbside would be helpful as it's hard to coordinate otherwise.

Keep trash disposal local.

none

None

No

Bulk item recycling

Education for recycling and ways to go green for those who don't know what to do

Incineration needs to be fully explored. Technologies have advanced to make this a no brainer. There are plenty of best practices to check out and reveal their benefits.

I am concerned on the land being taken up in our county for Chicago garbage

None that I can think of right now.

Stop taking waste from other communities. The fees that are collected by the county should be returned to the area most affected by the physical presence of the dump. The more influential northern part of the country was able to block blacktop production but the south part of the country has to endure a never ending expansion of a dump. What will be the long term problems from all the expansions.

Yes, this needs to be cleaned up and reduced

Stop expanding landfills in my area and do something about the ever worsening air quality.

Find a new more uninhabited, less dense area to use for Landfills far from creeks or water supplies & rivers. And do not locate them right off I39 & 251 or close to a Airport.

No

Stop expanding the two dumps. At the very least, just except garbage from our surrounding countries only.

no

No

Yes, the toxic smells and ground water needs to be taken care of so as not to room our health and our neighborhood

No

No

Get rid of the smell & NO to expansion.

I believe our community would benefit greatly from a localized transfer station within Winnebago County where large items and electronics could easily be disposed of.

None

none

No

More education on composting.

We pay a lot of money for garbage and recycling pickup, we shouldn't have to pay extra to get rid of TV's and large appliances

People need a place to get rid of waste without dumping along roads

Garbage truck over flowing on the way to the land fill, so much waste on the side of the roads on the way to the land fill

Sell stickers for garbage bags in excess of 2-3 medium bags a week.

No

I think I've voiced my concerns

N/A

None come to mind

Yes do something for the people in the area of the landfill about the smell

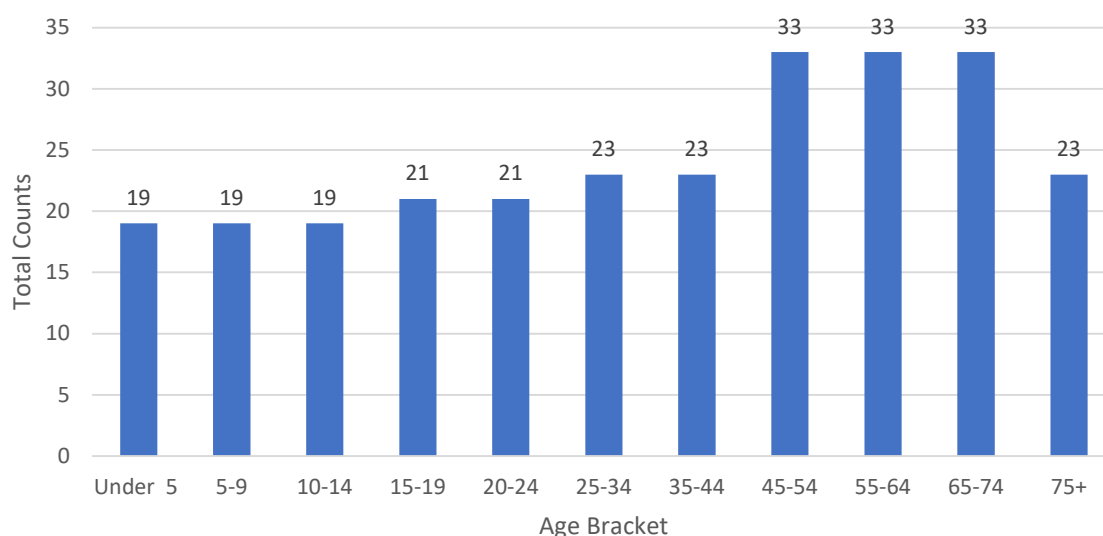
n/a

n/a

Curbside composting and hazardous waste options (ex Elgin)

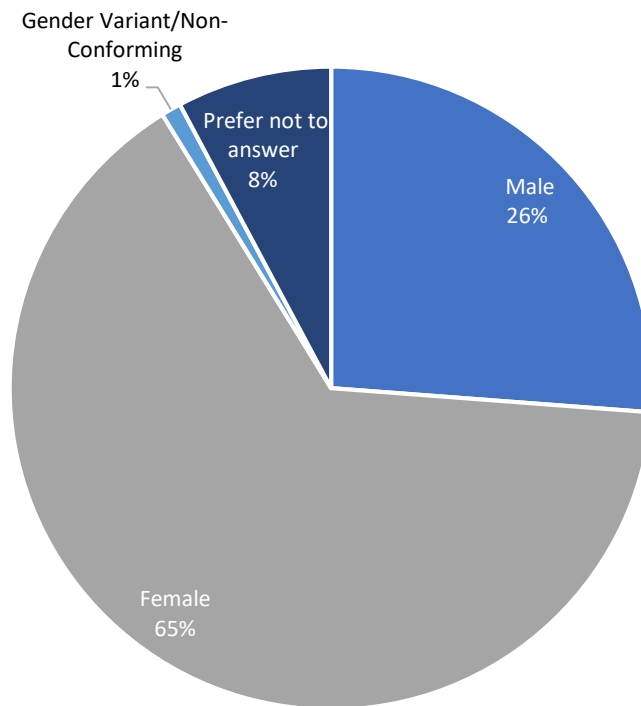
## 22. Including yourself, how many people in your household are...

Figure E-20. Number and Age of Household Members



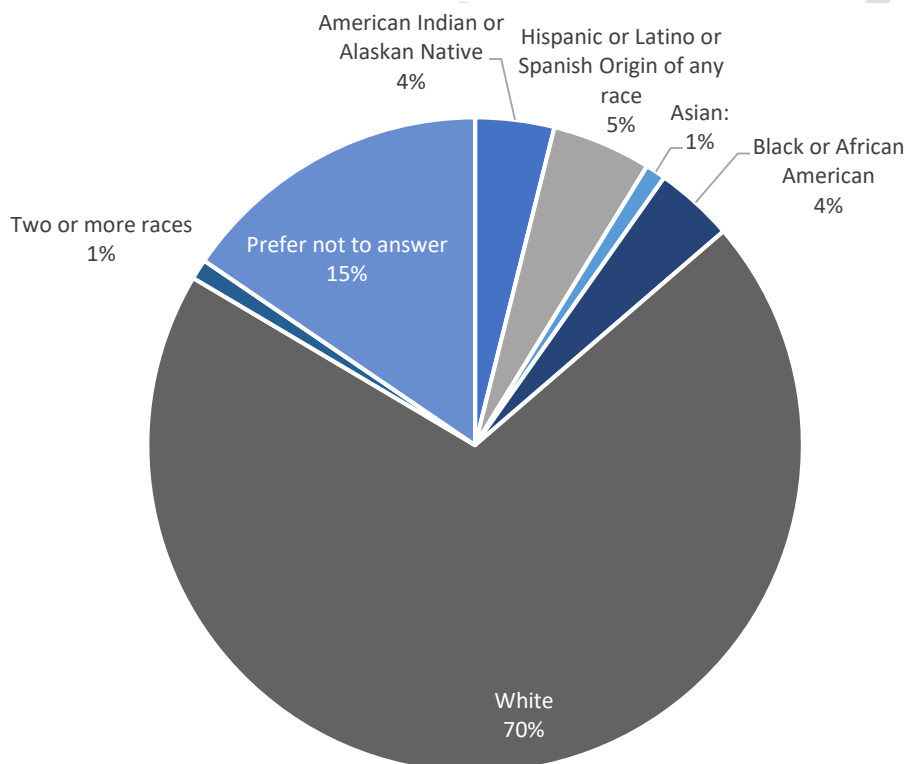
### 23. What is your gender identity?

Figure E-21. Gender Identity



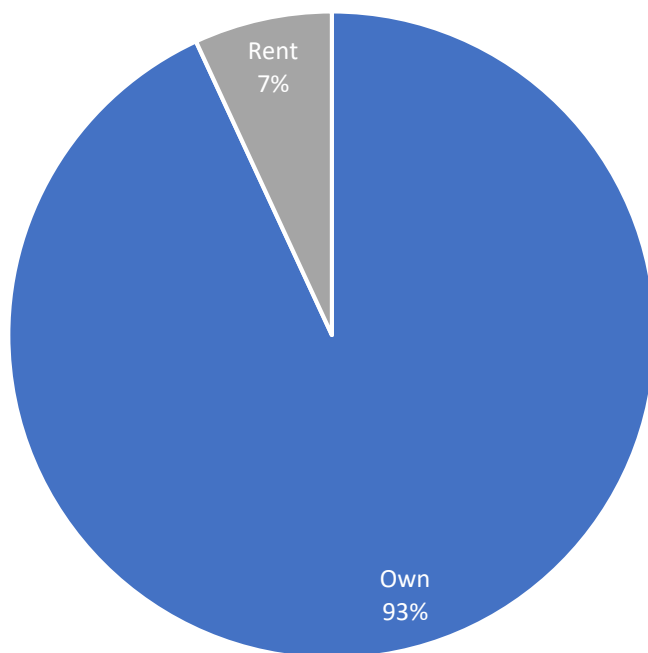
### 24. How do you best describe yourself?

Figure E-22. Racial Identity



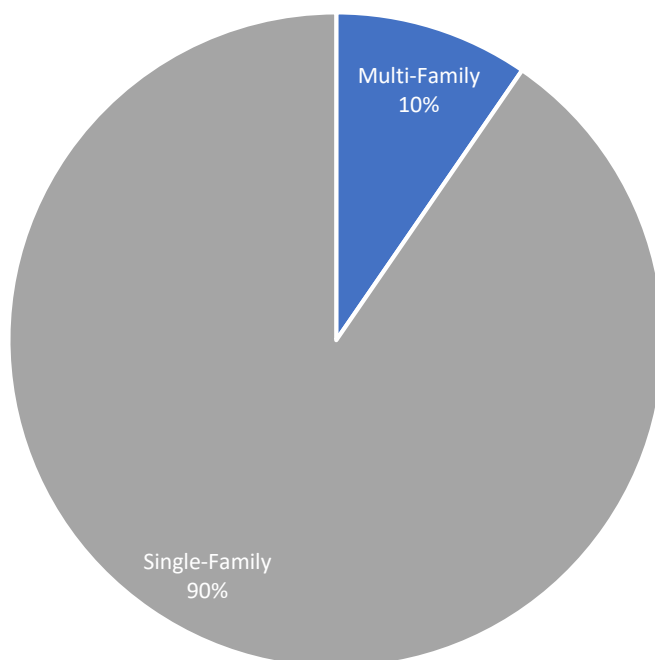
## 25. Do you own or rent your current residence?

Figure E-23. Residence Ownership



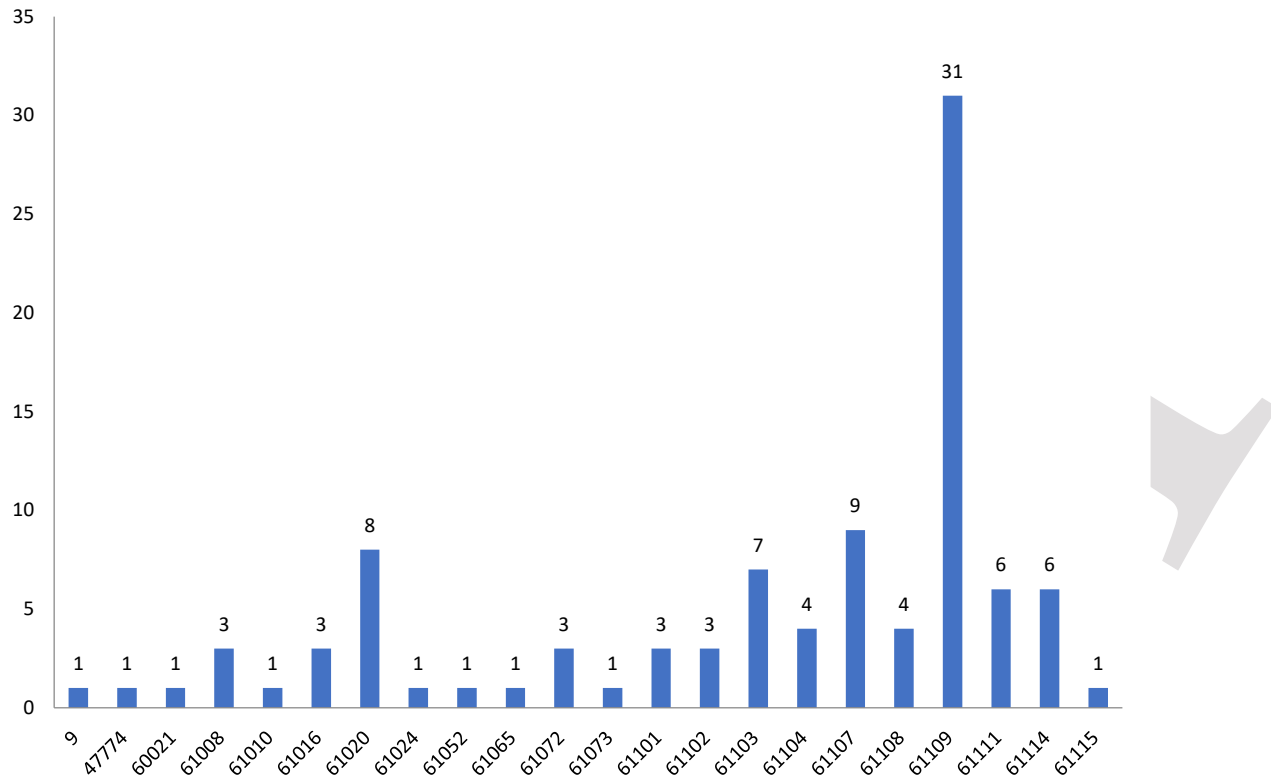
## 26. What type of residence do you live in?

Figure E-24. Residence Type



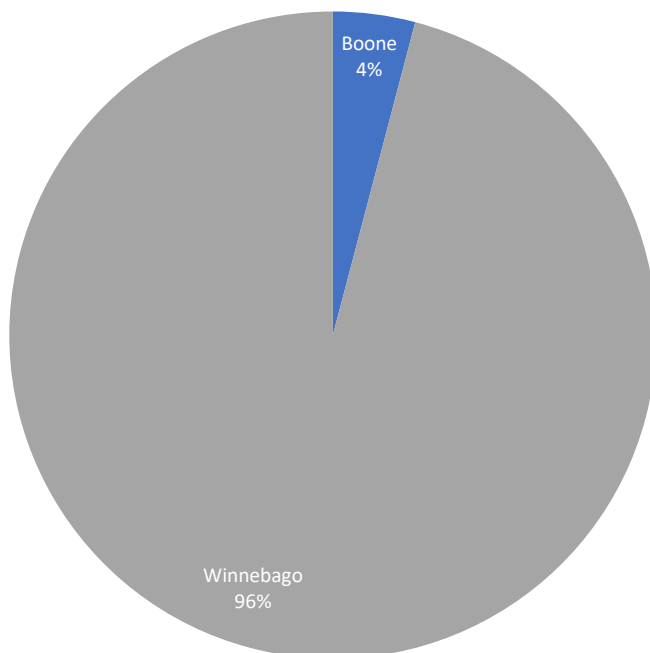
## 27. What is your home zip code?

Figure E-25. Respondent Zip Code



## 28. What County do you live in?

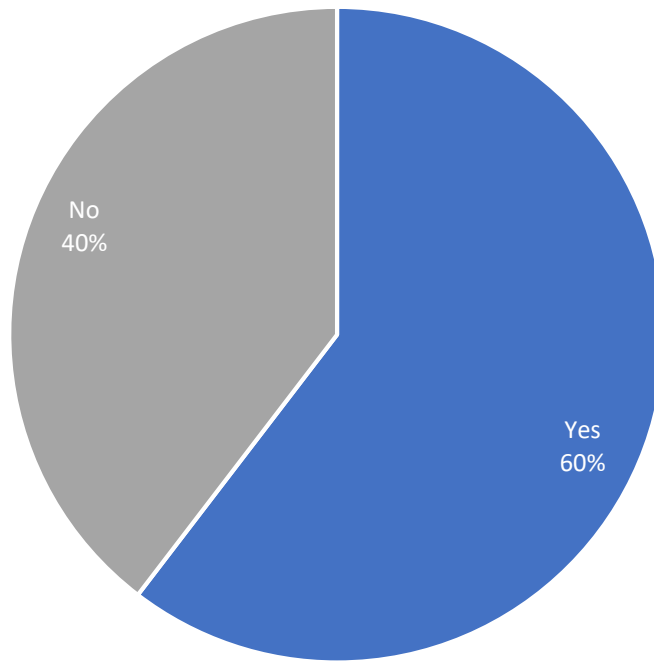
Figure E-26. Respondent County





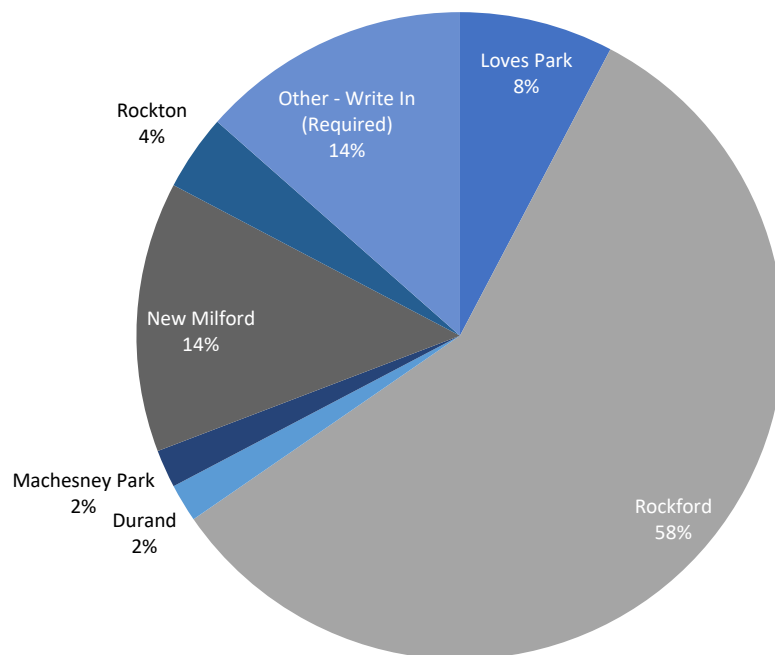
## 29. Do you live in a municipality?

Figure E-27. Respondents Living in Municipalities



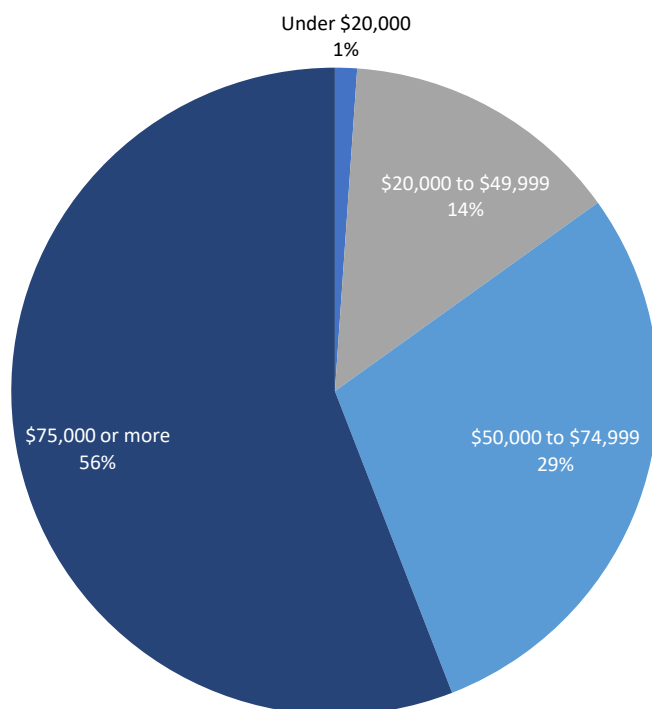
## 30. Which municipality?

Figure E-28. Respondents Municipality



### 31. Your total annual household income is:

Figure E-29. Respondent Total Annual Household Income



## Record of Public Comment

Name	Organization	Topic	Comment	Comment Response
Thomas Hilbert	Waste Management	Implementation/ waste management options	You know, with respect to 'what did the plan miss', the one thing I am used to seeing in solid waste management plans is a recommendation for waste management practices moving forward and I just didn't see where this document provided some clear recommendations for what to, you know, what the county would rely on for their waste management options moving forward so, you know typically it would be something as simple as continue to rely on landfill for solid waste disposal needs, look at other options, and as they become available or reasonable, from an economic perspective we would work to bring those into our waste management options. you did a really good job of describing various different options that are out there but you didn't really provide a direction for which way the county would be going moving forward...There was a lot of emphasis on waste to energy, which is understood, including using landfill gas as a you know describing it as a waste to energy technology, but really in this day and age, you know the two primary mechanisms that are used throughout the us, are landfilling and waste combustion, you know waste to energy through combustion and then to a much, much lesser extent some of the other things you guys looked at so I just, it would be nice to see something in there about how the county intends to rely on existing technologies until others become available.	Appendix B details the implementation plan. More factors must be studied for additional detailed recommendations. R1 has added information in Appendix B to clarify current and proposed efforts to manage waste. The Plan will allow for the organizing and prioritizing of further implementation planning.

# Record of Public Comment (Cont.)

Name	Organization	Topic	Comment	Comment Response
Lori Gummow	Winnebago County	Implementation	Good evening, great plan. A couple of my questions are can you elaborate what other counties did you use as models for their solid waste management plans? What other resources did you use in the state of Illinois? I know it's been awhile since Illinois has done a waste characterization study, do you know what's the most recent one that's been done?	R1 reviewed many resources to inform this plan, including the IEPA's most recent landfill capacity report (2020), historic plans from Boone and Winnebago Counties, a best practices Planning Advisory Service report authored by Dr. Ai and the American Planning Association, the Solid Waste Agency of Lake County's most recent plan, and plans from surrounding counties. The most recent waste characterization study for Illinois was completed in 2015. Reports that covered waste characterization in Boone and Winnebago Counties specifically were released in 2005 and 2010, respectively.
Lori Gummow	Winnebago County	Public Survey	You had over 100 people that participated in the survey. How did you gather that--those 100 people? How was it that they were targeted for this survey?	The survey was distributed through existing partnerships, press releases and social media posts.
Thomas Hilbert	Waste Management	Public Survey/ Diversion Rates	Do you guys have an idea of the geography of where the responses came from? Southern Winnebago? Rockford? It is an interesting question because the services to residents in the City of Rockford are going to be different than the services offered in Machesney Park, and Rockton, and Roscoe and New Milford and all the different various communities. They all support different or offer different levels of services depending on what they chose as a plan with their solid waste hauler, you know if they have a hauling agreement. Some of them don't if it's by subscription like the county. That would be of interest, I'd think. You know, as you're trying to address the Counties' needs and trying to give them, people some direction to achieve the goals, which you know, in my mind the primary ones that are really good goals to have are, you know trending towards minimizing the amount of waste that we generate that has to be disposed of either through a landfill or waste to energy type process or digesting, however it gets managed at the end of life cycle, I'm rambling a little bit but I did like the goal of going from you know our current estimated 18 percent diversion rate to 30 to 40 percent which is more online with the national diversion rate, It seems to me I remember the national diversion rate being somewhere around 35 percent. That in and of itself is a pretty big first step. Winnebago's worked pretty hard in various steps to up its diversion rate. The City of Rockford went to bigger recycling containers and it would be interesting to know why we are below the national average.	Most of the responses of the survey came from Winnebago County (96 percent), with approximately 28 percent of respondents from the southern area of the county. From secondary sources, it appears the organic diversion rate in the two counties are particularly lower than the state and national averages. Given that organic waste tends to be bulky and heavy, focusing on that category could boost the diversion rate considerably.
Thomas Hilbert	Waste Management	Diversion Rates	I do have just one additional comment on the jump from 18 to 35 percent [referring to the diversion rate]. Have you identified something that is an obvious thing within the Winnebago waste, Winnebago and Boone County waste generation that you know, is why we fall to 50 percent of what would be a normal diversion rate? You know, is it the amount of composting that occurs, or because those types of things derive big percentages.	While the modeling conducted for this project is very robust, material-specific information is harder to define because jurisdictions have defined waste categories differently over the years and from one another. This can make it more challenging to understand why the area is behind, as waste categories are defined differently in different locations, and sometimes differently through the years within a jurisdiction.

# Supporting Data & Methodology

## Region 1 Planning Council Analysis

Region 1 Planning Council (RPC) staff performed the initial feasibility of the detailed WTE methods with the use of UIC's data waste stream composition and diversion projections and NREL's local WTE technology analysis. The analysis included reviewing the largest shares of the waste stream. This evaluation also used feedback from the public through the Solid Waste Management Survey data, in addition to comments from the first solid waste public meeting. Other components used to evaluate WTE feasibility were the physical space necessary for operation, the measure of net GHGs produced, the level of complexity, and overall economic benefits (e.g. job creation).

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The following explanation was authored by Dr. Ning Ai.

### Introduction

To support the waste management plan update in Boone and Winnebago Counties by the Region 1 Planning Council (RPC), the research team at the University of Illinois at Chicago (UIC) has been tasked with (1) estimating annual waste volume, (2) developing waste projections into 2040, and, subsequently, (3) developing waste management scenarios, and (4) analyzing environmental and economic impacts associated with various scenarios in Task 3.

Given the limitations of historical data and time constraints to conduct waste audits, the UIC team has developed models for waste volume estimates and waste management scenario analysis. The methodology of numerical analysis is designed with the intention of replicability, especially for regions where material and waste management data have not been regularly collected or reported.

This document summarizes data availability in Boone and Winnebago Counties, the method of waste volume estimates and key data parameters adopted, and the method for waste scenario planning and analysis. The document aims to facilitate a transparent planning process, and importantly, highlight the critical need for consistent and quality data that reflect local characteristics.

It is important to note that the definition of municipal solid waste (MSW), as the general scope for the waste management plan update in Boone and Winnebago Counties, varies considerably by region. This project focuses on MSW generated from residential, commercial, institutional, and industrial (non-hazardous) locations. Construction and demolition (C&D) waste and sludge are examined separately and excluded from the total MSW volume, unless noted otherwise.

## Data Availability in Boone and Winnebago Counties

For this study, both waste quantity and material composition data in Boone and Winnebago Counties are needed. The UIC team has screened all relevant documents provided by RPC, regional stakeholders, as well as other publicly accessible datasets of Boone and Winnebago counties, including:

- Winnebago County (1991 SWMP, 1996-2001, 2007, 2011, 2016 plan updates)
- Boone County (1992 Waste Characterization Study, 1995 SWMP, 2006 plan updates, IEPA MW recycling survey 2000, 2004, 2005)
- City of Rockford 2014-2021 residential waste summary data
- Public Solid Waste Management Survey Results from RPC in Fall 2021
- Illinois Waste Characterization Study (2009)
- Illinois Waste Characterization Study (2015)

Significant data constraints were identified in the study region. The most recent waste reports are from 2010 in Winnebago County and 2005 for Boone County, which do not cover economic fluctuations in the last decade or recent impacts of pandemic conditions. Another major limitation is that historical reports have employed inconsistent definitions (e.g., waste disposal volume vs. generation volume) and categories (e.g., whether industry waste, sludge, or C&D are included). To ensure a consistent scope of waste volume estimates over time, and at the same time, to reflect on local conditions and waste compositions, this study has primarily referenced the Illinois Waste Characterization Study (2009 and 2015) and Boone County Waste Characterization Study (1992) for numerical analysis. Other datasets are used for data verification and model calibration.

### Methodology Overview

Constraints about historical data and uncertainties about the baseline conditions in Boone and Winnebago Counties do not allow waste inventory analysis or volume projections solely based on historical data in these two counties. Therefore, this study has designed a method that couples county-specific characteristics (e.g., population, housing units, and employment by sector) with waste generation rates in Illinois, refers to practices in comparable regions and the national average, and verifies modeling results with local facility managers and planners.

This section explains the general approach for the four specific tasks for Boone and Winnebago Counties: (1) estimate waste generation and composition; (2) project waste volume into 2040; (3) develop waste management scenarios, and (4) analyze the impact of waste management scenarios. Tasks 1 and 2 both rely on regression models and adopt a similar structure, and thus are summarized together below. Further details are provided in 2.1.4 "Regression Models for Waste Volume Estimates."

## Waste Generation and Composition Modeling

This project has developed regression models that predict waste generation and composition in Boone and Winnebago Counties based on local conditions. Regression models connect dependent variables (e.g., waste generation) with independent variables (population, housing, employment, etc.). Adjustments are also made to allow the models to analyze for both residential and commercial sectors separately. Additional analysis has been conducted to identify distinct characteristics in urban vs. rural areas (discussed in Urban vs. Rural Delineation under E.2.2.4).

This project tested over 20 combinations of independent variables (with varying data transformations). The deployment of the final model considered the goodness-of-fit ( $R^2$  and Adj  $R$ ), validity (e.g., low multicollinearity), and differences of predicted waste generation rates compared to observed values.

## Scenario Development for Waste Diversions

This project has developed three scenarios for Boone and Winnebago Counties' waste management practices: baseline, short-term, and zero waste.

- The Baseline Scenario was developed in reference to the reported data in Boone County and Winnebago County, regional stakeholder interviews, and peer region performances. Given uncertain impacts of pandemic conditions, the year of 2019 was chosen as the baseline year.
- The Short-Term Scenario is designed to be a feasible goal in the next 3-5 years in the study region. It aims to keep pace with national average rates of waste diversion and present best practices in Illinois.
- The Zero Waste Scenario adopts a 90% diversion rate or higher for each material type. It is an aspirational goal that would require the engagement of all citizens and sectors in Boone and Winnebago Counties and beyond.

For each scenario, overall diversion rates include all types of MSW materials and reflect a weighted average using 2019 waste tonnage estimates. Diversion rates also factor in service coverage (specific materials accepted/recycled/recovered), participation rates (percentage of businesses and residents participating in recycling), and material contamination (percentage of unaccepted items dropped off in recycling carts). Specific material recovery rates were determined in reference to Tables 4-1 and 4-2 in the 2015 Illinois Commodity/Waste Generation and Characterization Study Update. Contamination in curbside recycling tends to be around 20-25% in many communities in northern Illinois. This study used 15% in the baseline scenario, as a conservative estimate for Boone and Winnebago counties. Numerically, the overall diversion rate has been calculated as Equation (1).

Equation 1

$$\text{Overall Diversion Rate} = \frac{\sum (G_{ij} \times M_{ij} \times P_i \times C_i)}{\sum G_{ij}}$$

Where:

$G_{ij}$ : Waste generation of material  $j$  in sector  $i$

$i$ : Sector  $i$

$j$ : Material  $j$

$M_{ij}$ : Service/material capture rates of material  $j$  in sector  $i$

$P_i$ : Participation rates of sector  $i$

$C_i$ : Contamination rates of sector  $i$ .

## Environmental and Economic Impact Analysis of Waste Management Scenarios

The U.S. EPA Waste Reduction Model (WARM) has been used to calculate environmental and economic impacts. The WARM model is used to help solid waste planners and organizations track and voluntarily report greenhouse gas (GHG) emissions reductions, energy savings, and economic impacts from different waste diversion efforts.

Essentially, the WARM model assesses the difference of impacts from two waste management scenarios (i.e., baseline vs. comparison) based on waste volume and management method. Users specify how much waste is managed by each of the applicable methods (i.e., recycled, composted, landfilled, anaerobically digested, combusted, or source reduced) in both scenarios. Users can customize model parameters or directly adopt the default parameters embedded in the model. Then the WARM model returns outputs for the difference of impacts between the two scenarios.

Plugging in the data parameters discussed above, the WARM model was run twice in this study: first, comparing the Short-Term Scenario to the Baseline Scenario; second, comparing the Zero Waste Scenario to the Baseline Scenario. In the model result, this study focuses on three types of impacts: (1) carbon emissions measured by metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>E); (2) energy consumption in millions of BTUs (MMBTU); and (3) job impacts or labor hours. Instead of focusing on the end-of-pipe pollution impacts, the WARM model assumes life-cycle boundaries start at the point of waste generation (i.e., the moment a product such as paper or dimensional lumber reaches its end-of-life stage). In terms of job impacts, the WARM model only accounts for direct jobs associated with different waste treatment methods. In other words, the inter-sectoral impacts, or multiplier effects, of waste diversion programs are not measured in the WARM model. To ease data interpretation, this study has converted the estimated labor hours to full-time equivalent jobs (FTEs) by a factor of 2080 hours/year (40 hours/week\*52 weeks).

## Regression Models for Waste Volume Estimates

As explained earlier, this study has developed regression models to address data gaps and predict waste generation and composition in Boone and Winnebago Counties based on local conditions. This section explains the data inputs that characterize local conditions, regression model specification, and final model selection and validation.

## Data Inputs for Independent Variables

Due to data constraints, this study has focused on three sets of socio-demographic variables to predict waste volume and composition: population, housing, and employment.

Population size directly affects the total waste generation. The historical population data are collected from the US Census; the population projection for Boone and Winnebago Counties is provided by RPC.

Besides population, variables of interest relevant to waste generation include the number and type of housing units. Notably, waste generation rates and composition (as well as challenges of waste diversion) vary by housing type.

This report collects and analyzes data on the numbers of both single-family units (i.e., housing structures with four or fewer units) and multifamily units (i.e., housing structures with more than four units) separately for residential waste analysis.

Commercial, institutional, and industrial waste generation are associated with local employment, both in terms of the size of institutions and the mix of industrial sectors. Historical employment data (1990-2020) were retrieved from the County Business Pattern (CBP), which surveys business establishments for the number of individuals employed (in March of each year) and the first quarter payroll for each detailed industry (at the 6-digit NAICS code level). All industries have been categorized into six major industries based on the 2-digit NAICS code. The annual employment projection (2020-2040) is provided by RPC and classifies employment differently from CBP. In addition, the CBP dataset excludes non-wage employment and governmental jobs. Therefore, the UIC team developed crosswalks and adjustments to connect historical and projected data.

### Urban vs. Rural Delineation

The UIC team was also tasked with providing separate estimates of waste generation for urban and rural areas for the two-county area. A confounding factor is that the US Census Bureau has continuously revised the urban area criteria over time. The most relevant definition from the US Census Bureau states that urban areas are “core census block groups or blocks that have a population density of at least 1,000 people per square mile and surrounding census blocks that have an overall density of at least 500 people per square mile.”

The UIC team collected the population and housing units in the urban and rural areas within the two counties for 2000 and 2010. These are the only data points where urban and rural definitions are consistent and available. Employment datasets, however, do not differentiate urban from rural areas. To address the mismatch of geographic boundaries in employment statistics, the UIC team extracted data from ZIP Codes Business Patterns. Then the ZIP code boundaries were overlaid with urban/rural boundaries in ArcGIS in order to re-classify all ZIP codes in the study area into urban versus rural. Eventually, aggregations of ZIP code employment were created for urban and rural areas. Similarly, the UIC team calculated the urban-rural ratio for each independent variable and applied linear projection for these ratios into the next 20 years.

Equation 2

$$\ln(W_{m,pc}) = \beta_0 + \beta_1 \ln(POP) + \beta_2 \ln(HOS_{pc}) + \beta_3 \ln(EMP_{pc}) + \beta_4 YEAR + \epsilon$$

Equation 3

$$\ln(W_{m,pc}) = \beta_0 + \beta_1 \ln(POP) + \beta_2 \ln(SFH_{pc}) + \beta_3 \ln(MFH_{pc}) + \beta_4 \ln(AMUC_{pc}) + \beta_5 \ln(MFG_{pc}) + \beta_6 \ln(WHSLE_{pc}) + \beta_7 \ln(RTL_{pc}) + \beta_8 \ln(SVC_{pc}) + \beta_9 \ln(INST_{pc}) + \beta_{10} YEAR + \epsilon$$

Equation 4

$$\ln(W_{m,pc}) = \beta_0 + \beta_1 \ln(POP) + \beta_2 \ln(HOS_{pc}) + \beta_3 MFH_{pct} + \beta_4 \ln(EMP_{pc}) + \beta_5 AMUC_{pct} + \beta_6 MFG_{pc} + \beta_7 WHSLE_{pct} + \beta_8 RTL_{pct} + \beta_9 SVC_{pct} + \beta_{10} INST_{pct} + \beta_{11} YEAR + \epsilon$$

Where:

$W_{m,pc}$ : Per capita waste generation of material m.

$POP$ : Population

$HOS_{pc}$ : Per capita housing units.

$EMP_{pc}$ : Per capita employment.

$YEAR$ : Year indicator

$SFH_{pc}$ : Per capita single family (equal or less than 4 units) housing units

$MFH_{pc}$ : Per capita multifamily (more than 4 units) housing units.

$MFH_{pct}$ : Percentage multifamily (more than 4 units) housing units.

$AMUC_{pc}$ : Per capita Agriculture, Mining, Utility, and Constructure employment.

$AMUC_{pct}$ : Percentage Agriculture, Mining, Utility, and Constructure employment.

$MFG_{pc}$ : Per capita Manufacturing employment.

$MFG_{pct}$ : Percentage of Manufacturing employment.

$WHSLE_{pc}$ : Per capita Wholesale employment.

$WHSLE_{pct}$ : Percentage of Wholesale employment.

$RTL_{pc}$ : Per Capita Retail Trade employment.

$RTL_{pct}$ : Percentage of Retail Trade employment.

$SVC_{pc}$ : Per Capita of Service employment.

$SVC_{pct}$ : Percentage of Service employment.

$INST_{pc}$ : Per capita Institutional employment.

$INST_{pct}$ : Percentage of Institutional employment.

Figure E-30. Average Difference Between the Predicted and Observed Values for Each Modeled Material

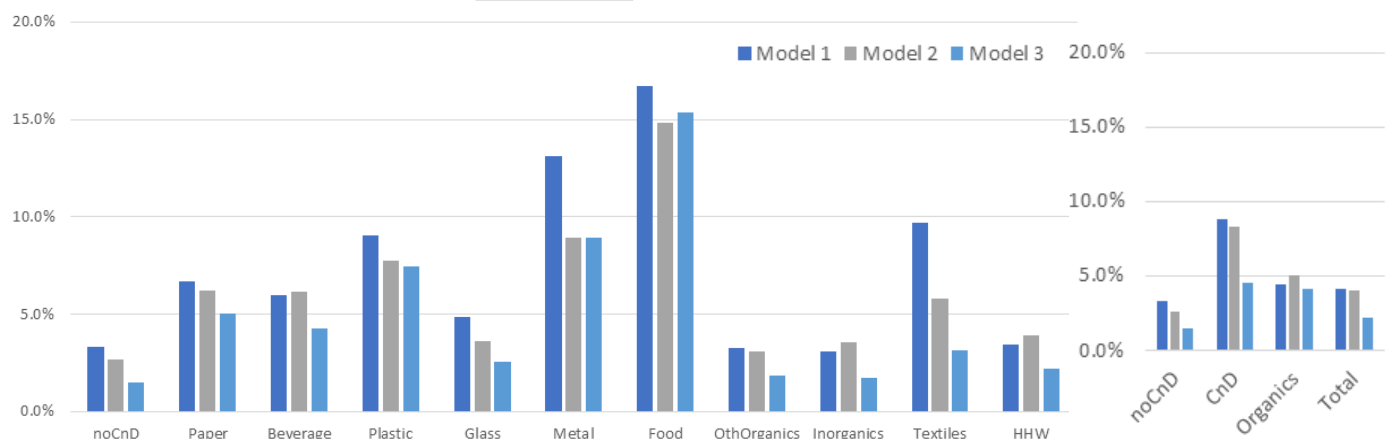




Figure E-31. Difference Between the Predicted & Observed Values for Each Modeled Material in Winnebago & Boone Counties

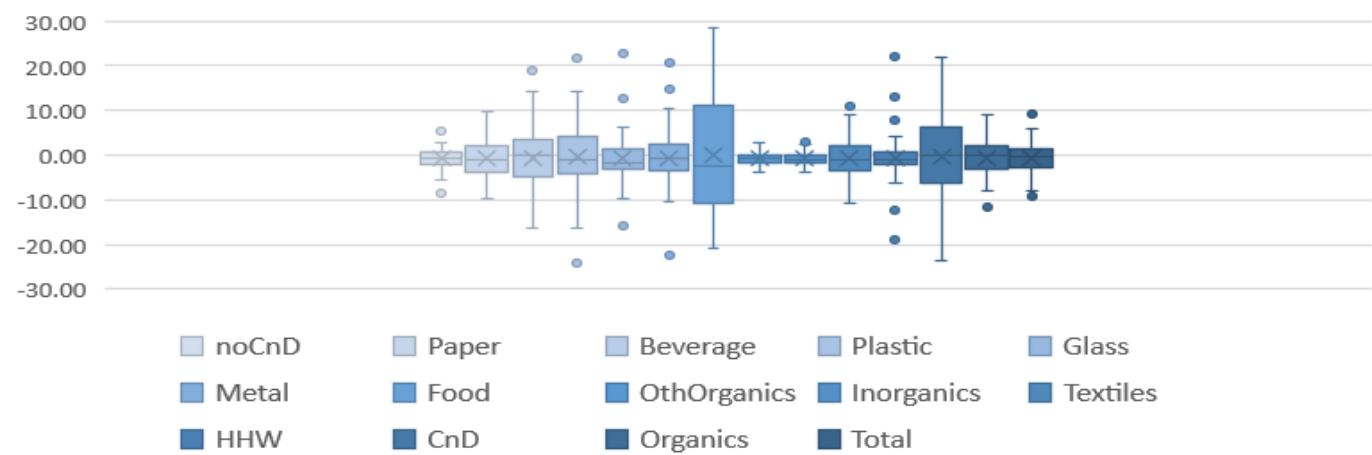


Figure E-32. Waste Generation (Excluding C&D) in Boone County: Estimates vs. Reported Data

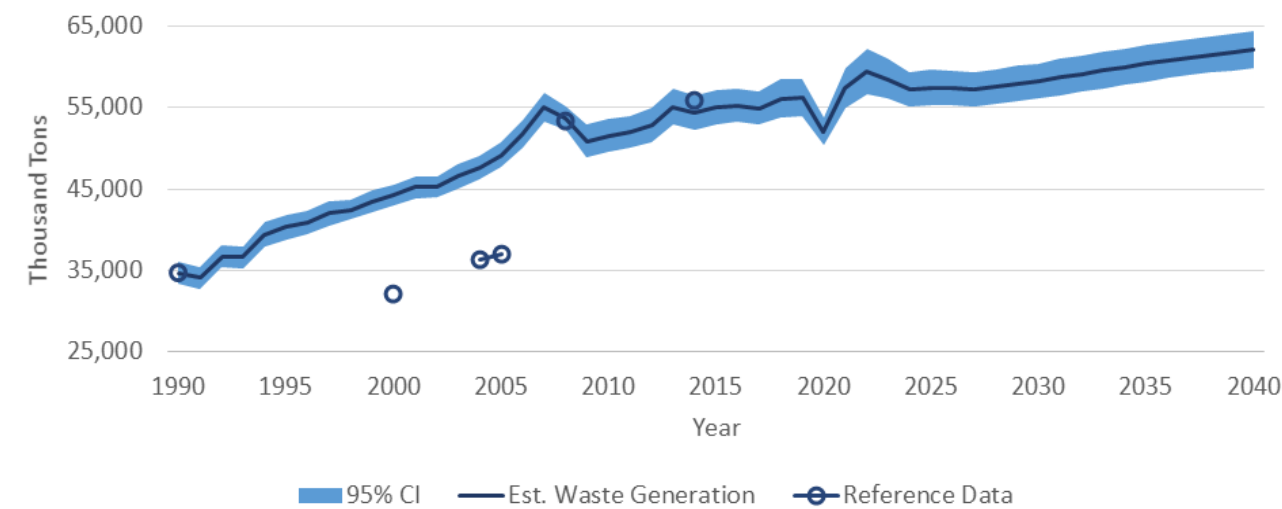
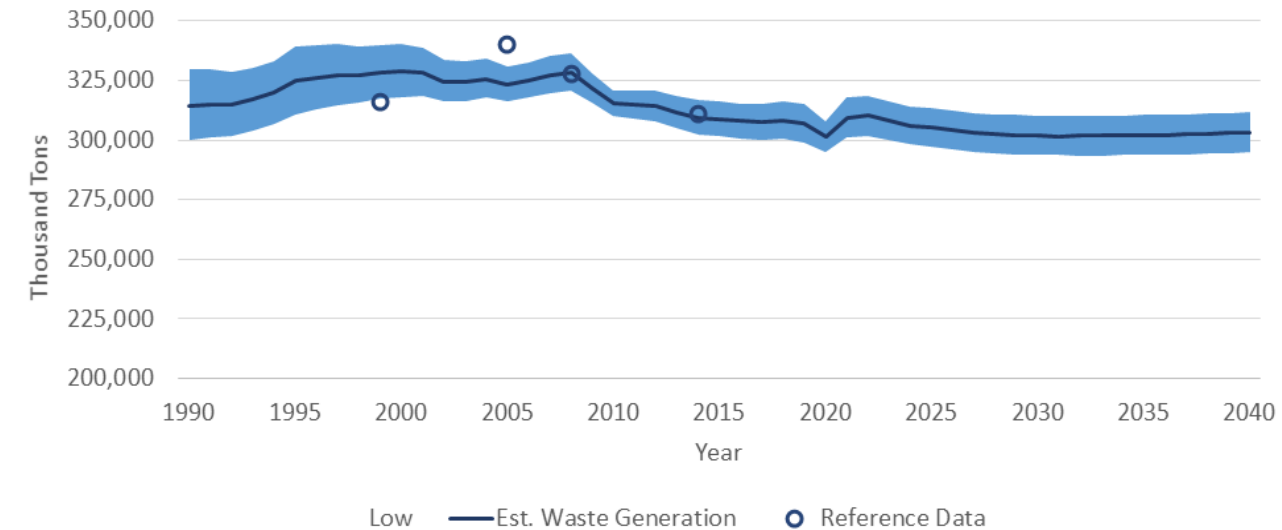


Figure E-33. Waste Generation (Excluding C&D) in Winnebago County: Estimates vs. Reported Data





## Regression Model Specification

Equations 2-4 provide some specific examples of how regression models connect the dependent variables (e.g., waste generation) with independent variables (population, housing, employment, etc.).

## Regression Model Selection and Validation

This project tested over 20 combinations of independent variables. The goal was to identify a model with a high value of goodness-of-fit, low multicollinearity, and minimal differences between observed and predicted values. Figure E-30 compares results (i.e., waste quantity) from three models developed in this study (corresponding to Equations 2-4) to observed values in Illinois statewide studies in 2009 and 2015. It shows most of the model results were estimated within 5% of variance. In other words, the modeled values are consistently close to observed values. In most cases, Model 3 (or Equation 4) has better predictive power, compared to the other two models. Model 3 was also validated using data samples of specific material types in Boone and Winnebago counties (Figure E-30). Although some materials (e.g., food and C&D) show larger variances than material types, the models generally show good prediction results. The model for total waste shows a good fit overall.

Lastly, Figures E-32 and 33 show the predicted waste generation (excluding C&D) in Boone and Winnebago counties. The solid black lines show the modeling results in this study. The grey zone shows a 95% confidence interval. The red circles show the identifiable data points (reported values); some of which align with the modeling results very well. The outliers possibly involve inconsistent categories of waste definitions, as revealed in the text review of periodical reports in two counties. These differences also demonstrate the need of adopting and documenting consistent categories/definitions of waste inventory over time.

## National Renewable Energy Laboratory (NREL)

### Contributors

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### Metrics

The Cost Benefit Analysis (CBA) performed by the NREL studied the feasibility of three WTE pathways, landfill gas capture, anaerobic digestion, and composting. For the purpose of determining the relationship between scale and feasibility the analysis was performed by taking three different sized systems into account. Waste disposal rates for the scenario originated from national EPA high, low, and average rates.

A majority of the analysis was conducted using national data. Data for Landfill Gases (LFG) costs and revenues were determined using the Landfill Methane Outreach Program (LMOP) Landfill Gas Energy Cost Model. For anaerobic digestion and composting, cost and revenue estimates were sourced from results on a national scale. Tipping fees, fuel and composting costs were sourced from 2021 pricing in Northern Illinois. Government incentives such as Renewable Identification Numbers (RIN) and California Low Carbon Fuel Standards (LCFS) were calculated using the Database of State Incentives for Renewables & Efficiency (DSIRE).

The Net Present Value (NPV) is calculated by taking the sum of both revenue and expenses. A positive NPV indicates profitability, while a negative value indicates debt. The sensitivity analysis for all pathways was performed by weighing the most impactful drivers of revenue and cost and taking the volatility of price into consideration.

It is important to note that while exact numbers were used in this analysis, there may be uncertainties that are unaccounted for in the results, such as the cost of transporting waste and dependent on the end use for Compressed Natural Gas (CNG), LCFS credits may not be an applicable revenue source. Additional context specific research should be conducted for sites in the region prior to any waste-to-energy developments to determine social, economic, and environmental feasibility for the site.

# Appendix F: References

## Chapter 2: Current Plan Implementation Status

- i. Winnebago County. 1991. "Winnebago County Comprehensive Solid Waste Management Plan." Solid Waste Management Plan, Rockford, IL.
- ii. Patrick Engineering Inc. 1995. "Boone County/City of Belvidere Solid Waste Management Alternatives." Solid Waste Management Plan, Belvidere, IL.
- iii. Patrick Engineering Inc. 1992. "Boone County/City of Belvidere Solid Waste Needs Assessment." Solid Waste Needs Assessment, Belvidere, IL.
- iv. Ibid.
- v. Ai Ning. "UIC Summary Data." Internal Research, University of Illinois Chicago, 2021.
- vi. Winnebago County. 2016. "Winnebago County Twenty-Five Year Municipal Waste Management Plan Update." Solid Waste Management Plan Update, Rockford, IL.
- vii. Hadero, Haleluya. 2021. "Goodwill stores have a message: Please stop donating trash" . Accessed December 20, 2021. <https://apnews.com/article/sc-state-wire-health-coronavirus-pandemic-philanthropy-lifestyle-f2d83c7d78fadb074a016bbdec618a23>.
- viii. Ibid.
- ix. Four Rivers Sanitation Authority. 2021. "Partnerships." Accessed December 9, 2021. <https://fourrivers.illinois.gov/doing-business/partnerships/>.
- x. Ibid.
- xi. Ibid.
- xii. United States Census Bureau. 2019. Table S0101. Accessed October 3, 2021. <https://data.census.gov/cedsci/table?q=Ogle%20County,%20Illinois%20Populations%20and%20People&tid=ACST5Y2019.S0101&hidePreview=true>
- xiii. Ogle County. 2019. "Solid Waste Department." Accessed October 2, 2021. [https://www.oglecounty.org/departments/solid\\_waste/overview.php](https://www.oglecounty.org/departments/solid_waste/overview.php)
- xiv. Illinois Environmental Protection Agency. 2021. "Materials Management." Springfield. Accessed October 3, 2021. <https://www2.illinois.gov/epa/topics/waste-management/materials-management/Pages/default.aspx>
- xv. Illinois Environmental Protection Agency. 2021. "State Response Action." Springfield. Accessed October 3, 2021. <https://www2.illinois.gov/epa/topics/cleanup-programs/state-responseaction/Pages/default.aspx>
- xvi. Environmental Protection Agency. 2021. "Universal Waste." Washington D.C. July 23. Accessed October 3, 2021. <https://www.epa.gov/hw/universal-waste#state>
- xvii. U.S. General Services Administration. 2018. "Solid Waste Management". Washington DC. December 31. Accessed October 4, 2021. <https://www.gsa.gov/real-estate/environmental-programs/waste-minimization/solid-waste-management>.
- xviii. Illinois Environmental Protection Agency. 2021. "Illinois Materials Management Advisory Committee Report to the General Assembly."
- xix. Illinois Environmental Protection Agency. 2021. "Illinois Landfill Disposal Capacity Report."
- xx. Illinois Environmental Protection Agency. "Illegal Dumping." Accessed October 2021. <https://www2.illinois.gov/epa/topics/waste-management/illegal-dumping/Pages/default.aspx>
- xxi. 40 CFR 258.61 "Post-closure care requirements." Accessed October 2021. <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-I/part-258/subpart-F/section-258.61>
- xxii. G. Fred Lee & Associates, E. M. 2004. "Flawed Technology of Subtitle D Landfilling of Municipal Solid Waste."
- xxiii. Environmental Protection Agency. 2014. "Closed Waste Sites as Community Assets: Guide for Municipalities, Landfill Owners, and Regulators."
- xxiv. Katz, Cheryl. 2019. "Piling Up: How China's Ban on Importing Waste Has Stalled Global Recycling" Accessed December 2021. <https://e360.yale.edu/features/piling-up-how-chinas-ban-on-importing-waste-has-stalled-global-recycling>.
- xxv. Centers for Disease Control and Prevention 2022. "CDC Social Vulnerability Index 2018 Documentation."
- xxvi. Dutko, Paula, Michele Ver Ploeg, and Tracey Farrigan. "Characteristics and Influential Factors of Food Deserts." ERR-140, U.S. Department of Agriculture, Economic Research Service, August 2012.
- xxvii. Municipal, County & Hauler Websites:  
City of Belvidere. 2021. Belvidere Refuse & Recycling. Accessed November 2021. <https://www.ci.belvidere.il.us/resident-information/garbage-collection-info.html>.  
City of Loves Park. 2021. Garbage Pickup. Accessed October 2021. <https://cityoflovespark.com/garbage-pickup/>.  
City of Rockford. 2021. Sanitation, Solid Waste, and Recycling Services. Accessed October 2021. <https://rockfordil.gov/city-departments/community-and-economic-development/sanitation/>.  
Lake Summerset. 2021. "Rules & Regulations for the Lake Summerset Association." lake-summerset. November. Accessed November 2021. <http://www.cherryvalley.org/index.php/2013-06-18-18-19-44/new-resident-information>.  
Village of Machesney Park. 2014. Refuse and Recycling Collection Information. Accessed October 2021. <https://machesneypark.org/departments/public-works/refuse-and-recycling-collection-information/>.  
South Beloit. 2015. South Beloit Residents Now Served by Rock River Disposal for Refuse Collection. Accessed October 2021. <https://southbeloit.org/south-beloit-residents-now-served-by-rock-river-disposal-for-refuse-collection/#::~text=The%20City%20of%20South%20Beloit,call%20815%2D965%2D2489>.  
Village of Rockton. 2015. Village - Refuse Collection. Accessed October 2021. [https://www.rocktonvillage.com/index.asp?SEC=E5E2ED99-8268-4D5F-A2C3-4B98392DE3A4&Type=B\\_BASIC#:~:text=The%20Village%20of%20Rockton%20contracts,at%20815%2D624%2D7600](https://www.rocktonvillage.com/index.asp?SEC=E5E2ED99-8268-4D5F-A2C3-4B98392DE3A4&Type=B_BASIC#:~:text=The%20Village%20of%20Rockton%20contracts,at%20815%2D624%2D7600).  
Village of Caledonia. 2021. Village Ordinances. Accessed November 2021. <https://villageofcaledonia.com/ordinances>.  
Village of Cherry Valley. 2013. New Resident Information. Accessed October 2021. <http://www.cherryvalley.org/index.php/2013-06-18-18-19-44/new-resident-information>.  
Village of Durand. 2020. Waste Collection & Recycling Guidelines for Durand, IL. March. Accessed October 2021. <https://villageofdurand.com/garbage-recycling/>.

## Chapter 3: Existing Infrastructure Report

- i. Illinois Environmental Protection Agency. 2020. "Illinois Landfill Disposal Capacity Report." <https://www2.illinois.gov/epa/topics/waste-management/landfills/landfill-capacity/Documents/landfill-capacity-report-2020.pdf>.
- ii. Ibid.
- iii. Winnebago Landfill. 2020. Landfills. March. Accessed October 2021. <https://www.winnebagoandfill.com/landfills/>.
- iv. Wastebits. 2021. "Roscoe Transfer Station." Accessed October 2021. <https://wastebits.com/locator/location/advanced-disposal-roscoe-transfer-station>.
- v. WTVO. 2021. "Rock River Water Reclamation District Changes Its Name." June 29. Accessed October 2021. <https://www.mystateline.com/news/rock-river-water-reclamation-district-changes-its-name/>.
- vi. City of Rockford. 2016. "Yard Waste: Proper Disposal of Your Leaves and Grass Clippings." Accessed November 2021. <https://rockfordil.gov/wp-content/uploads/2017/06/Yard-Waste-Brochure-8.5-x-11.pdf>
- vii. U.S. Census. 2021. "Boone County, Illinois." <https://data.census.gov/cedsci/profile?g=0500000US17007/>. Census.gov.
- viii. U.S. Census. 2021. "Winnebago County, Illinois." <https://data.census.gov/cedsci/profile?g=0500000US17007>. Census.gov.

- ix. Regional Economic Models Inc. 2021
  - x. Ai Ning. "UIC Summary Data." Internal Research, University of Illinois Chicago, 2021.
  - xi. Illinois Environmental Protection Agency. October 2021. "Illinois Landfill Disposal Capacity Report."
  - xii. Illinois Environmental Protection Agency. October 2021. "Illinois Materials Management Advisory Committee Report to the General Assembly."
- ## Chapter 4: Waste Generation Assessment
- i. Illinois Environmental Protection Agency. 2021. "Illinois Materials Management Advisory Committee Report to the General Assembly."
  - ii. Waste Connections. n.d. "Winnebago Landfill". Accessed October 2021. <https://www.winnebagolandfill.com/>.
  - iii. Ai Ning. "UIC Summary Data." Internal Research, University of Illinois Chicago, 2021.
  - iv. U.S. Environmental Protection Agency. 2021. "Manufacturing Waste Management Trend." Accessed October 2021. <https://www.epa.gov/trinationalanalysis/manufacturing-waste-management-trend>.
  - v. Boone County, Region 1 Planning Council. 2019. "Boone County Comprehensive Plan." Accessed December 2021. <https://cms8.revize.com/revize/booneil/Comprehensive%20Plan%202020.pdf>.
  - vi. R. Ramirez-Garcia, N. Gohil, V. Singh. 2021. "Agricultural Waste." Accessed December 2021. <https://www.sciencedirect.com/topics/earth-and-planetary-sciences/agricultural-waste>.
  - vii. Carpello, Alexis. 2021. "Belvidere Officials Seek State Support for Stellantis Plant." Accessed September 30, 2021. <https://www.mystateline.com/news/local-news/belvidere-officials-seek-state-support-for-stellantis-plant/>.
  - viii. Ai Ning. "UIC Summary Data." Internal Research, University of Illinois Chicago, 2021.
  - ix. U.S. Environmental Protection Agency. 2021. "National Overview: Facts and Figures on Materials, Wastes and Recycling." Accessed October 2021. <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/national-overview-facts-and-figures-materials>.
  - x. The Science History Institute. 2019. "History and Future of Plastics." November 20. Accessed November 15, 2021. <https://www.sciencehistory.org/the-history-and-future-of-plastics>.
  - xi. United States Environmental Protection Agency. 2021. "Municipal Wastewater." Accessed November 15, 2021. <https://www.epa.gov/npdes/municipal-wastewater>.
  - xii. Code of Federal Regulations. "Protection of Environment, 40 C.F.R. § 503.9 (2018)." <https://www.govinfo.gov/content/pkg/CFR-2018-title40-vol32/xml/CFR-2018-title40-vol32-part503.xml#seqnum503.9>.
  - xiii. Four Rivers Sanitation Authority. 2021. "Who We Serve." November 11. Accessed 11 15, 2021. <https://fourrivers.illinois.gov/about-us/>.
  - xiv. Rockford Register Star. October 2014. "Upgrades at the Belvidere Wastewater Treatment Plant." Accessed September 30, 2021. <https://www.rrstar.com/article/20141022/NEWS/141029765>.
  - xv. Winnebago Landfill: A Waste Connections Company. n.d. "FAQs." Accessed December 2021. [https://www.winnebagolandfill.com/faqs/#link\\_acc-1-4-d](https://www.winnebagolandfill.com/faqs/#link_acc-1-4-d).
  - xvi. Winnebago Landfill: A Waste Connections Company. n.d. "Responsible and Safe Waste Disposal and Recycling Services." Accessed December 2021. <https://www.winnebagolandfill.com/>.
  - xvii. Winnebago County. n.d. "Economic Development Division." Accessed January 3. <https://wincoil.us/departments/regional-planning-economic-development/economic-development-division/>.
  - xviii. Government of the Netherlands. January 2017. "National Agreement of the Circular Economy." Accessed December 2021. <https://www.government.nl/topics/circular-economy/from-a-linear-to-a-circular-economy>.
  - xix. Ibid.
  - xx. OECD (2020). "The Circular Economy in Cities and Regions: Synthesis Report." OECD Urban Studies, OECD Publishing, Paris, <https://doi.org/10.1787/10ac6ae4-en>.
  - xxi. U.S. Environmental Protection Agency. n.d. "Basic Information about Landfill Gas." Accessed October 2021. <https://www.epa.gov/lmop/basic-information-about-landfill-gas>.
  - xxii. U.S. Environmental Protection Agency. n.d. "What are Volatile Organic Compounds (VOCs)." Accessed October 2021. <https://www.epa.gov/indoor-air-quality-iaq/what-are-volatile-organic-compounds-vocs>.
  - xxiii. Ibid.
  - xxiv. Illinois Environmental Protection Agency. 2020. "Odor Issues with Veolia ES Orchard Hills Landfill and Winnebago Landfill Fact Sheet #1." January. Accessed October 2021. <https://www2.illinois.gov/epa/topics/community-relations/sites/veolia-winnebago-landfills/Pages/fact-sheet-1.aspx>.
  - xxv. U.S. Environmental Protection Agency. 2006. "Solid Waste Management and Greenhouse Gases. National Service Center for Environmental Publications (NSCEP)." Accessed October 2021. <https://nepis.epa.gov/Exe/ZyNET.exe/60000AVO.TXT?Z>.
  - xxvi. IPCC, 2014: Climate Change 2014: Synthesis Report. "Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change." [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, 151 pp.
  - xxvii. Ibid.
  - xxviii. U.S. Environmental Protection Agency. n.d. "Criteria for the Definition of Solid Waste and Solid and Hazardous Waste Exclusions." Accessed October 2021. <https://www.epa.gov/hw/criteria-definition-solid-waste-and-solid-and-hazardous-waste-exclusions>.
  - xxix. U.S. Environmental Protection Agency. n.d. "Household Hazardous Waste (HHW)." Accessed October 2021. <https://www.epa.gov/hw/household-hazardous-waste-hhw>.
  - xxx. U.S. Environmental Protection Agency n.d. "What is Superfund?" Accessed October 2021. <https://www.epa.gov/superfund/what-superfund>.
  - xxxi. U.S. Environmental Protection Agency, n.d. "Search for Superfund Sites Where You Live." Accessed October 2021. <https://www.epa.gov/superfund/search-superfund-sites-where-you-live-ActionD=ZyDocuments&Client=EPA&Index=2006+Thru+2010&Docs=&Query=&Time=&End-Time=&SearchMethod=1&TocRestrict=n&-Toc=&TocEntry=&QField=&QFieldYear=&QField-Month=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=>.
  - xxxii. Illinois Environmental Protection Agency. "Illegal Dumping." Accessed October 2021. <https://www2.illinois.gov/epa/topics/waste-management/illegal-dumping/Pages/default.aspx>.
  - xxxiii. U.S. Environmental Protection Agency. 2021. "PFAS Strategic Roadmap: EPA's Commitments to Action 2021–2024". Accessed October 2021. <https://www.epa.gov/pfas/pfas-strategic-roadmap-epas-commitments-action-2021-2024>.
  - xxxiv. U.S. Environmental Protection Agency. 2017. "Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS). Technical Fact Sheet." <https://www.epa.gov/fedfac/technical-fact-sheet-perfluorooctane-sulfonate-pfos-and-perfluorooctanoic-acid-pfoa-0>.
  - xxxv. U.S. Environmental Protection Agency. n.d. "Basic Information on PFAS." Accessed October 2021. <https://www.epa.gov/pfas/basic-information-pfas>.
  - xxxvi. Masoner et., al. 2020. "Landfill Leachate Contributes Per-/poly-fluoroalkyl Substances (PFAS) and Pharmaceuticals to Municipal Wastewater." Environ. Sci.: Water Res. Technol 1300-1311.
  - xxxvii. Winnebago County Health Department. n.d. "Groundwater Protection Program." Accessed October 2021. <https://www.wchd.org/environmental-health/wells-and-septic-program/ground-water-protection-program>.
  - xxxviii. Xiang, R., Xu, Y., Liu, YQ. et al. "Isolation distance between municipal solid waste landfills and drinking water wells for bacteria attenuation and safe drinking." Sci Rep 9, 17881 (2019). <https://doi.org/10.1038/s41598-019-54506-2>.
  - xxxix. Vrijheid, Martine. 2000. "Health Effects of Residence Near Hazardous Waste Landfill Sites: A Review of Epidemiologic Literature." Environ Health Perspect 108 suppl1 101-112.
  - xl. Ibid.
  - xli. Ibid.
  - xlii. Martuzzi, Marco, Francesco Mitis, and Francesco Forastì. n.d. "Inequalities, Inequities, Environmental Justice in Waste Management and Health." European Journal of Public Health 21-26.
  - xliii. Ready, Richard C. 2005. "Do Landfills Always Depress Nearby Property Values?" Rural Development Paper No. 27.
  - xliv. Guerrero, Isaac. 2019. "Winnebago County Board urged to clean up problems at landfill." November. Accessed October 2021. <https://www.rrstar.com/news/20191114/winnebago-county-board-urged-to-clean-up-problems-at-landfill>.
  - xl. City of Rockford. n.d. "Fee Schedule." Accessed October 2021. <https://rockfordil.gov/city-departments/finance/customer-service/fee-schedule/>.
  - xlv. Guerrero, Isaac. 2019. "Noxious odors prompt Illinois EPA to slap Winnebago Landfill with more environmental violations." June. Accessed October 2021. <https://www.journalstandard.com/news/20190612/>

noxious-odors-prompt-illinois-epa-to-slap-winnebago-landfill-with-more-environmental-violations.

- xlvi. Guerrero, Isaac. 2020. "Illinois AG accuses Winnebago Landfill of air pollution." Accessed December 2021. <https://amp.rstar.com/amp/2006599007>

## Chapter 5: Proposed Material Management Plans

### i. Hauler Websites:

Green for Life. 2021. My Branch. Accessed December 2021. <https://gflenv.com/find-my-branch/>.

Republic Services. 2021. Welcome to Republic Services of Illinois. Accessed November 2021. <https://www.republicservices.com/locations/illinois>.

Waste Management. 2021. Service Locations. Accessed November 2021. <https://www.wm.com/us/en/location/il>.

- ii. Environmental Protection Agency. 2021. "Composting at Home." April 1. Accessed October 2021. <https://www.epa.gov/recycle/composting-home>.
- iii. Palacios-Mateo, C., van der Meer, Y. & Seide, G. 2021. "Analysis of the polyester clothing value chain to identify key intervention points for sustainability". *Environ Sci Eur* 33, 2. <https://doi.org/10.1186/s12302-020-00447-x>.
- iv. Massachusetts Department of Environmental Protection. October 2021. MassDEP Textile Recovery. Accessed December 8, 2021. <https://www.mass.gov/guides/massdep-textile-recovery#-textiles-by-the-numbers->.

## Chapter 6: Public Education and Outreach

- i. Environmental Protection Agency. n.d. "What Is Environmental Education?" Accessed January 4, 2022. <https://www.epa.gov/education/what-environmental-education>.
- ii. Office of Environmental Education, Environmental Education Services to EPA Offices § (1998).
- iii. Environmental Protection Agency. n.d. "National Environmental Education Training Program." Accessed January 4, 2022. <https://www.epa.gov/education/national-environmental-education-training-program>.
- iv. Environmental Protection Agency. n.d. "Environmental Education (EE) Grants." Accessed January 4, 2022. <https://www.epa.gov/education/grants>.
- v. Environmental Protection Agency. n.d. "Environmental Education Grants: National." Accessed January 4, 2022. <https://www.epa.gov/education/environmental-education-grants-national-statistics>.
- vi. Environmental Protection Agency. n.d. "Opportunities for Students and Recent Graduates." Accessed January 4, 2022. <https://www.epa.gov/careers/opportunities-students-and-recent-graduates-0>.
- vii. Environmental Protection Agency. 2021. "WasteWise." Washington DC, October 17. Accessed October 5, 2021. <https://www.epa.gov/smm/wastewise>.
- viii. United States Department of Agriculture (USDA). n.d. "Home Page." Conservation Education – Home Accessed January 4, 2022. <https://www.fs.usda.gov/conservationeducation>.
- ix. United States Department of Agriculture (USDA). n.d. "PLT GreenSchools! Program Components. Conservation Education." Accessed January 4, 2022. <https://www.fs.usda.gov/detail/conservationeducation/home/?cid=stelprdb5246840>.
- x. US Department of Education. April 22, 2021. U.S. "Department of Education Green Ribbon Schools." <https://www2.ed.gov/programs/green-ribbon-schools/index.html>.
- xi. US Department of Education. n.d. "Home Page." Accessed January 4, 2022. <https://www.greenstrides.org/>.
- xii. Government of Illinois. n.d. "Bureau of Land." Accessed December 10, 2021. <https://www2.illinois.gov/epa/topics/waste-management/Pages/default.aspx>.
- xiii. Illinois Environmental Protection Agency. n.d. "Environmental Pathways." Accessed January 4, 2022. <https://www2.illinois.gov/epa/topics/education/Pages/pathways.aspx>.
- xiv. University of Illinois Board of Trustees. n.d. About ISTE. Accessed January 20, 2022. <https://www.iste.illinois.edu/cms/One.aspx?portalId=427487&pageId=427497>.
- xv. Lake County SWALCO, IL. n.d. "Education Lake County SWALCO, IL." Accessed December 10, 2021. <https://swalco.org/9/EDUCATION>.
- xvi. Illinois General Assembly. n.d. "Soil and Water Conservation Districts Act, (70 ILCS 405/)." Accessed December 10, 2021. <https://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=857>.
- xvii. Winnebago County SWCD. May 15, 2014. "Conservation." Accessed January 2022. [https://www.winnebagoswcd.org/swcd/?page\\_id=98](https://www.winnebagoswcd.org/swcd/?page_id=98).
- xviii.

- xix. Boone County Conservation District. n.d. "Preserving Our Natural Resources in Boone County Illinois, Help US Create Habitat with Your Giving Tuesday Donation!" Accessed December 10, 2021. <https://www.bccdil.org/#>.
- xx. Keep Northern Illinois Beautiful. n.d. "Programs: Rockford, IL." Accessed January 4, 2022. <https://www.knib.org/programs>.
- xxi. Environmental Protection Agency. n.d. "Food Waste Activity Packet." <https://www2.illinois.gov/epa/topics/education/Documents/Food%20Waste%20Packet.pdf>
- xxii. Environmental Protection Agency. n.d. "Recycling Guidelines." [https://www2.illinois.gov/epa/topics/waste-management/Documents/RecyclingGuidelinesHR\\_Illinois.pdf](https://www2.illinois.gov/epa/topics/waste-management/Documents/RecyclingGuidelinesHR_Illinois.pdf)

## Chapter 7: Partnerships, Policy, & Funding

- i. Illinois Environmental Protection Agency. July 1, 2021. "Materials Management Advisory Committee." Accessed October 2021. <https://www2.illinois.gov/epa/topics/waste-management/materials-management/Pages/Materials-Management-Advisory-Committee.aspx>.
- ii. Hamilton County, Ohio Recycling and Solid Waste District. 2015. "Solid Waste & Recycling/Joint Contract Proposal." Public Hearing Presentation, Hamilton County, Ohio. Accessed October 2021. <https://www.springfieldtpw.org/DocumentCenter/View/487/Waste-District-RFP-Presentation---July-15th-Hearing?bidId=>.
- iii. Rock River Valley YMCA. 2021. "About Us." Accessed December 2021. <https://rockriverymca.org/AboutUs/>.
- iv. Keep Northern Illinois Beautiful. 2021. "About." Accessed December 2021. <https://www.knib.org/about>
- v. Natural Land Institute. 2021. "About." Accessed December 2021. <https://www.naturalland.org/about/>
- vi. Bethesda. "Mercy House." 2022, accessed January 4, 2022, [https://www.bethesdacovenant.Winnebago Landfill a Waste Connections Company. 2020. "Home." Accessed October 2021. https://www.winnebagolandfill.com/](https://www.bethesdacovenant.Winnebago Landfill a Waste Connections Company. 2020. )
- vii. Illinois Department of Commerce & Economic Opportunity. 2021. "CDBG Programs." Accessed October 2021. [https://www2.illinois.gov/dceo/CommunityDevelopment/Pages/CDBG\\_Programs.aspx](https://www2.illinois.gov/dceo/CommunityDevelopment/Pages/CDBG_Programs.aspx)
- viii. Ibid.
- ix. Illinois Department of Commerce & Economic Opportunity. 2021. "Public Infrastructure." Accessed October 2021. <https://www2.illinois.gov/dceo/CommunityDevelopment/Pages/CSBGPublicInfrastructure.aspx>
- x. Environmental Protection Agency. 2021. "EPA Grants." October 19. Accessed October 2021. <https://www.epa.gov/grants>.
- xi. Environmental Protection Agency. May 26, 2021. "Multipurpose Grant, Environmental Protection Agency." Accessed October 2021. [https://www.epa.gov/sites/default/files/2021-05/documents/final\\_fy21\\_mpg\\_guidance\\_for\\_states.pdf](https://www.epa.gov/sites/default/files/2021-05/documents/final_fy21_mpg_guidance_for_states.pdf).
- xii. Ibid.
- xiii. Ibid.
- xiv. Ibid.
- xv. Environmental Protection Agency. n.d. "United States Environmental Protection Agency Grant Guidance for Multipurpose Grants to States and Tribes." Accessed January 25, 2022. <https://www.epa.gov/grants/united-states-environmental-protection-agency-grant-guidance-multipurpose-grants-states-and>.
- xvi. Environmental Protection Agency. "Air Grants and Funding." 2021. <https://www.epa.gov/grants/air-grants-and-funding>. Accessed November 2021. <https://www.epa.gov/grants/air-grants-and-fundingom/?sapurl=LytrZjQ3L2FwcD9lbWJlZD10cnVlJnJlY2VudFJvdXRlPWFWfcC53ZWItYXBwLnJlZGlyZW50b3lmcjZlZW50Um91dGVtbHVnPWFW>
- xvii. Empower Boone Food Pantry. 2022. "Ways to Give." Accessed January 19th, 2022. <https://empowerboone.org/ways-to-give/give-clothing/>.
- xviii. Illinois Recycling Association and Illinois Recycling Foundation. 2018. "Summary of Illinois' Solid Waste Legislation." Geneva, June. Accessed October 5, 2021. <https://illinoisrecycles.org/documents/summary-of-illinois-solid-waste-legislation/>
- xix. Ibid.
- xx. State of Illinois. 2021. "Illinois Administrative Code." March 18. Accessed October 12, 2021. [https://library.municode.com/il/boone\\_county/codes/code\\_of\\_ordinances](https://library.municode.com/il/boone_county/codes/code_of_ordinances)
- xxi. Florida Gulf Coast University. n.d. "Environmental Policy and Law." Fort Myers. Accessed October 4, 2021. <http://ruby.fgcu.edu/courses/twimberley/EnviroPol/EnviroPolSess7a.htm>
- xxii. Ibid.



xxiii. National Center for Environmental Economics. (2001). "The United States Experience with Economic Incentives for Protecting the Environment".

xxiv. Marie Lynn Miranda et al. "Market-Based Incentives and Residential Municipal Solid Waste." *Journal of Policy Analysis and Management* 13, no. 4 (1994): 681–98. <https://doi.org/10.2307/3325493>.

xxv. Portney, Paul R. 2020. "Market-Based Approaches to Environmental Policy: A "Refresher" Course." Washington DC, June 15. Accessed October 4, 2021. <https://www.resources.org/archives/market-based-approaches-to-environmental-policy-a-refresher-course/>

xxvi. Illinois General Assembly. "Environmental Safety (415 Ilcs 5/) Environmental Protection Act." Accessed November 2021. <https://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=1585&ChapterID=36>

xxvii. Fullerton, Don, and Sarah Miller. 2010. "Waste and Recycling in Illinois." University of Illinois Institute of Government & Public Affairs. Accessed October 5, 2021.

xxviii. Ibid.

xxix. U.S. Environmental Protection Agency. "Siting a Pollution Control Facility in Illinois." Accessed December 20, 2021. <http://www.epa.state.il.us/community-relations/pollution-control-facility-siting.pdf>.

xxx. Ibid.

xxxi. Boone County, ILL. Siting Fees for New Regional Pollution Control Facility Ch. 38, § 2 (2005).

xxxii. Winnebago County, Ill., Regional Pollution Control Facility Siting Ch. 42, § 31-38 (2005).

xxxiii. Boone County. 2021. Code of Ordinances. March 18. Accessed October 12, 2021. [https://library.municode.com/il/boone\\_county/codes/code\\_of\\_ordinances](https://library.municode.com/il/boone_county/codes/code_of_ordinances)

xxxiv. Winnebago County. 2017. Code of Ordinances. February 23. Accessed October 12, 2021. [https://library.municode.com/il/winnebago\\_county/codes/code\\_of\\_ordinances?nodeid=12529](https://library.municode.com/il/winnebago_county/codes/code_of_ordinances?nodeid=12529).

xxxv. Winnebago County. 2017. Code of Ordinances. 12-12-1973, § 13; Code 1981, § 9-19 Sec. 34-29 February 23. Accessed October 12, 2021. [https://library.municode.com/il/winnebago\\_county/codes/code\\_of\\_ordinances?nodeid=12529](https://library.municode.com/il/winnebago_county/codes/code_of_ordinances?nodeid=12529)Environmental Protection Agency. 2021 "The Environmental Justice Collaborative Problem-Solving Cooperative Agreement Program." Accessed November 2021. <https://www.epa.gov/environmentaljustice/environmental-justice-collaborative-problem-solving-cooperative-agreement-5>

xxxvi. Ibid.

xxxvii. Ibid.

xxxviii. Environmental Protection Agency. 2021. "Grant Programs for Pollution Prevention." July 12. Accessed October 2021. <https://www.epa.gov/p2/grant-programs-pollution-prevention#p2grant>.

xxxix. Ibid.

xl. Ibid.

xli. Environmental Protection Agency. Office of Land and Emergency Management Grants and Funding. 2021. <https://www.epa.gov/grants/office-land-and-emergency-management-grants-and-funding>

xl. Ibid.

xl. Environmental Protection Agency. Office of Resource Conservation and Recovery (ORCR). 2021. <https://www.epa.gov/rcra/epas-office-resource-conservation-and-recovery-orcr>.

xliv. Ibid.

xliv. Closed Loop Partners. 2021. "Closed Loop Infrastructure Fund." Accessed January 2022. <https://www.closedlooppartners.com/funds/apply-for-funding/closed-loop-infrastructure-fund/>.

xlvi. Ibid.

xlvi. The Recycling Partnership. 2021. "Residential Curbside Recycling Cart Grant." Accessed October 2021. <https://recyclingpartnership.org/recycling-cart-grant/>.

xlvi. Ibid.

xlvi. Environmental Research & Education Foundation. 2021. "Who We Are." Accessed November 2021. <https://erefdn.org/about/>.

li. Ibid.

li. Patagonia. 2021. "How We Fund." Accessed November 2021. <https://www.patagonia.com/how-we-fund/>

## Appendix A: Waste-to-Energy Report

i. U.S. Environmental Protection Agency. 2021. "Sustainable Materials Management: Non-Hazardous Materials and Waste Management Hierarchy." EPA Website. Accessed December 13, 2021. <https://www.epa.gov/smm/sustainable-materials-management-non-hazardous-materials-and-waste-management-hierarchy>.

ii. Michaels, Ted, and Karunya Krishnan. 2018. "2018 Directory of Waste-to-Energy Facilities." Directory, Washington, D.C.: Energy Recovery Council.

iii. Hoosier Energy. 2016. "Orchard Hills adds renewable energy resource to cooperative power supply." October 1. Accessed October 11, 2021. <https://www.hoosierenergy.com/press-releases/orchard-hills-adds-renewable-energy-resource-to-cooperative-power-supply/>.

iv. Office of Resource Conservation and Recovery. n.d. "RCRA Orientation Manual §."

v. Illinois General Assembly. n.d. "Public Act 099-0906" Accessed December 14, 2021. <https://www.ilga.gov/legislation/publicacts/99/PDF/099-0906.pdf#page=31>.

vi. Illinois General Assembly - Full Text of Public Act 100-0951. Accessed December 14, 2021. <https://www.ilga.gov/legislation/publicacts/fulltext.asp?Name=100-0951>.

vii. Carbon Offset Guide, December 29, 2020. "Allowances." Accessed December 2021. <https://www.offsetguide.org/understanding-carbon-offsets/other-instruments-for-claiming-emission-reductions/allowances/>.

viii. Illinois Power Agency. June 7, 2021. "Renewable Resources Procurement Plan."

ix. U.S. Environmental Protection Agency. n.d. "Basic Information about Landfill Gas." Accessed December 2021. <https://www.epa.gov/lmop/basic-information-about-landfill-gas>.

x. U.S. Environmental Protection Agency. n.d. "Project and Landfill Data by State" Accessed December 2021. <https://www.epa.gov/lmop/project-and-landfill-data-state>

xi. Milbrandt, Anelia. 2021. "Comparison of Select Food Waste Utilization Options". Golden, CO: National Renewable Energy Laboratory. NREL/BR-6A20-81024. <https://www.nrel.gov/docs/fy21osti/81024.pdf>.

xii. U.S. Environmental Protection Agency. 2020. "Assessment of MSW Energy Recovery Technologies."

xiii. Badgett, Alex, Jacqueline Streur, and Anelia Milbrandt. 2021. Waste-to-Energy Technical Assistance Results: Region 1 Planning Council. Analytical, Golden: National Renewable Energy Laboratory.

xiv. U.S. Environmental Protection Agency. 2021. "LFG Energy Project Development Handbook."

xv. Ibid.

xvi. U.S. Environmental protection Agency n.d. "Renewable Identification Numbers (RINs) under the Renewable Fuel Standard Program" Accessed December 2021. <https://www.epa.gov/renewable-fuel-standard-program/renewable-identification-numbers-rins-under-renewable-fuel-standard>

xvii. Ibid

xviii. U.S. Environmental Protection Agency. 2020. "Assessment of MSW Energy Recovery Technologies."

xix. Ibid.

xx. Sierra Club. 2010. Report on Landfill-Gas-To-Energy.

xxi. U.S. Environmental Protection Agency. 2021. "Basic Information about Anaerobic Digestion (AD). September." Accessed October 2021. <https://www.epa.gov/anaerobic-digestion/basic-information-about-anaerobic-digestion-ad>.

xxii. U.S. Environmental Protection Agency. 2021. "Types of Anaerobic Digesters." June. Accessed October 2021. <https://www.epa.gov/anaerobic-digestion/types-anaerobic-digesters>.

xxiii. Environmental and Energy Study Institute. 2017. "Fact Sheet Biogas: Converting Waste to Energy." Accessed October 2021. <https://www.eesi.org/papers/view/fact-sheet-biogasconverting-waste-to-energy>.

xxiv. U.S. Environmental Protection Agency. 2020. "Assessment of Municipal Solid Waste Energy Recovery Technologies." Final Report.

xxv. U.S. Environmental Protection Agency. 2020. "Documentation for Greenhouse Gas Emission and Energy Factors Used in the Waste Reduction Model (WARM)." Final Report.

xxvi. Munro, Eaun A. 2019. "Environmental Protection in Anaerobic Digestion: How implementation of a renewable technology can lead to greater risk of environmental harm." SYMPOSIUM SERIES NO 166.

- xxvii. United States Environmental Protection Agency. April 1, 2021. "Composting at Home." Accessed October 12, 2021. <https://www.epa.gov/recycle/composting-home>.
- xxviii. Hu, Shelia. July 2020. "Composting 101." Accessed November 12, 2021. <https://www.nrdc.org/stories/composting-101>.
- xxix. United States Environmental Protection Agency. March 12, 2021. "Types of Composting and Understanding the Process." Accessed October 11, 2021. <https://www.epa.gov/sustainable-management-food/types-composting-and-understanding-process>.
- xxx. Climate Policy Watcher. August 2021. "Advantages and Disadvantages of Composting." Accessed October 11, 2021. <https://www.climate-policy-watcher.org/wastewater-sludge/advantages-and-disadvantages-of-composting.html>.
- xxxi. United States Environmental Protection Agency. December 2020. "Assessment of Municipal Solid Waste Energy Recovery Technologies." Accessed October 11, 2021. [https://cfpub.epa.gov/si/si\\_public\\_file\\_download.cfm?p\\_download\\_id=542242&Lab=CESER](https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=542242&Lab=CESER).
- xxxii. Miandad, Rashid, Mohammad Rehan, Mohammad Barakat, Asad Aburiazaiza, Hizbullah Khan, Iqbal Ismail, Jeya Dhvamani, Jabbar Gardy, Ali Hassanpour, and Abdul-Sattar Nizami. March 19, 2019. "Catalytic Pyrolysis of Plastic Waste: Moving Toward Pyrolysis Based Biorefineries." <https://www.frontiersin.org/articles/10.3389/fenrg.2019.00027/full>
- xxxiii. Wolff, Roman. December 2, 2010. "Pyrolysis Oil Challenges and Solutions." Accessed October 11, 2021. <http://biomassmagazine.com/articles/6642/pyrolysis-oil-challenges-and-solutions#:~:text=There%20is%20a%20catch%2C%20however,challenge%20that%20must%20be%20overcome>.
- xxxiv. Tangi, Neil, and Monica Wilson. 2017. "Waste Gasification and Pyrolysis: High Risk, Low Yield Processes for Waste Management." Risk Analysis, Global Alliance for Incinerator Alternatives.
- xxxv. Lee County. 2021. Community Performance. October. Accessed February 9, 2022. <https://www.wastetodaymagazine.com/article/lee-county-10-million-tons-waste-energy/#:~:text=Lee%20County%2C%20Florida%2C%20is%20celebrating,community's%20waste%20from%20landfill%20disposal>.
- xxxvi. Chim, Man Mei. 2019. "Waste-to-Energy: Considerations for Informed Decision-Making." Guide, Nairobi: United Nations Environment Programme.
- xxxvii. Covanta. 2020. Covanta Palm Beach 2020 Facility Performance. Performance, Palm Beach: Covanta.
- xxxviii. Advanced Disposal Landfill Insert 11.2013." Advanced Disposal Accessed December 20, 2021. <https://www.advanceddisposal.com/UploadedFiles/pdf/FacilityPDF/118/579/Advanced%20Disposal%20Landfill%20Insert%2011.2013.pdf>.
- xxxix. Eco-Cycle. 2021. Eco-Cycle's Green Star Schools® Program. Accessed January 2022. <https://www.ecocycle.org/schools/greenstarschools>.
- xl. City of Richmond. n.d. Residents: Free Recycling and Composting. Accessed January 28, 2022. <https://www.ci.richmond.ca.us/1718/Residents>.
- xli. (Ordinance No. 15-87 N.S.; Ord. No. 20-10 N.S., § 2, 6-15-2010)
- xlii. City of Austin. 2020. Zero Waste Event Rebate. February. Accessed January 2022. <https://www.austintexas.gov/zweventrebate>.
- vi. Fort Collins' "Pay-As-You-Throw" (PAYT) Ordinance. 1996. Accessed October 20, 2021. <https://www.fcgov.com/recycling/ordinances>
- vii. North Central Texas Council of Governments. 2009. "Recycling Ordinances and Building Design Guidelines". Accessed October 20, 2021. [https://www.nctcog.org/nctcg/media/Environment-and-Development/Documents/Materials%20Management/Final-Report-Ordinances\\_Guidelines\\_August\\_2009.pdf](https://www.nctcog.org/nctcg/media/Environment-and-Development/Documents/Materials%20Management/Final-Report-Ordinances_Guidelines_August_2009.pdf)
- viii. Marin County. "Ordinance Regulating Retail Establishments Provision of Single-Use Carry-Out Bags." Ordinance No. 3553. Accessed October 20, 2021. [https://library.municode.com/ca/marin\\_county/codes/municipal\\_code?nodeId=TIT5BURELI\\_CH5.46DIBAREOR](https://library.municode.com/ca/marin_county/codes/municipal_code?nodeId=TIT5BURELI_CH5.46DIBAREOR)
- ix. Illinois General Assembly. "35 Illinois Compiled Statutes 120/1." Accessed October 20, 2021. <https://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=582&ChapterID=8>
- x. *ibid*.

## Appendix B: Proposed Implementation Tactics & Timelines

- i. Pierce, Lisa. 2014. Confused consumers toss out plastic packaging instead of recycling: poll. August 7. Accessed May 16, 2022. <https://www.packagingdigest.com/sustainability/confused-consumers-toss-out-plastic-packaging-instead-recycling-poll>

## Appendix C: Existing & Model Ordinances

- i. Municode. 2021. Code of Ordinances. March 18. Accessed October 20, 2021. [https://library.municode.com/il/boone\\_county/codes/code\\_of\\_ordinances](https://library.municode.com/il/boone_county/codes/code_of_ordinances).
- ii. Municode. 2017. Code of Ordinances. February 23. Accessed October 20, 2021. [https://library.municode.com/il/boone\\_county/codes/code\\_of\\_ordinances](https://library.municode.com/il/boone_county/codes/code_of_ordinances).
- iii. Municode. 2015. Ordinances for Boulder, CO Municipal Code. March 18. Accessed October 20, 2021. [https://library.municode.com/co/boulder/ordinances/municipal\\_code?nodeId=718211](https://library.municode.com/co/boulder/ordinances/municipal_code?nodeId=718211)
- iv. Refuse Separation Compliance Ordinance 2018 – San Francisco. Ordinance No. 300-18. Amended in Board 12/4/2018. [https://sfenvironment.org/sites/default/files/fliers/files/sfe\\_zw\\_refuse\\_separation\\_ordinance.pdf](https://sfenvironment.org/sites/default/files/fliers/files/sfe_zw_refuse_separation_ordinance.pdf)
- v. Code of Federal Regulations. "40 CFR Part 246." Accessed December 2021. <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-I/part-246>





# Regional Solid Waste Management

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A Plan for  
Boone & Winnebago Counties  
2022 - 2042

*Final Draft September 2022*



# Regional Solid Waste Management

## A Plan for Boone & Winnebago Counties 2022 - 2042

Final Draft September 2022

This document has been prepared by the Region 1 Planning Council in collaboration with its member agencies, partnership organizations, and local stakeholders.

This report was prepared in cooperation with the following:

University of Illinois-Chicago  
Boone County  
Winnebago County  
The Solid Waste Advisory Committee

The contents, views, policies, and conclusions expressed in this report are not necessarily those of the above agencies.



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# Frontmatter

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# Executive Summary

## About

The State of Illinois Solid Waste Planning and Recycling Act (SWPRA) requires all Illinois counties to update their 20 year comprehensive solid waste management plan every five years. This allows counties to conduct a holistic assessment of area waste management practices and continually assess both short and long-term goals. The State of Illinois' Materials Management Advisory Committee (MMAC) provided guidance in a July 2021 Report to the General Assembly. Regional Solid Waste Management: a Plan for Boone & Winnebago Counties, hereinafter referred to throughout this document as "the Plan", was formed using this guidance in addition to supporting technical data, and local context.

### Solid Waste Plan Elements

- Executive summary;
- Current plan implementation;
- Waste generation and volume data for currently managed materials;
- Existing infrastructure;
- Waste generation assessment;
- Existing diversion programs and recommendations for expanding recycling programs;
- Public education campaigns; and
- A summary of recommendations.

## Waste Capacity & Infrastructure

Local waste infrastructure is limited mostly to traditional landfills, which are expected to reach full capacity by 2042, in the Illinois Environmental Protection Agency (IEPA) designated Northwestern Region. Landfill capacity estimates are approximate, as compounding and external factors present additional unknowns. The need for future waste reduction and diversion infrastructure is vital, as the concentration of waste in remaining landfills, along with the lack of existing recycling and diversion infrastructure present an increasing need for alternative disposal methods. Municipalities within the two Counties have various structures of waste collection. Larger jurisdictions have various direct agreements with private haulers funded through user fees. Residents outside of the larger municipalities self-select haulers and services, directly paying the hauler. In addition to private sector services, the public and non-profit sector provides diversion and recycling opportunities. Refer to Chapter 2: Current Plan Implementation Status for more detailed information.

## High Level

### Diversion Goals (2042)

The following are high level, regional-scale goals that Boone and Winnebago Counties aim to achieve in the next 20 years.



Achieve a 95% traditional materials diversion rate.



Achieve a 85% non-traditional materials diversion rate.



Achieve a 85% organics diversion rate.

### Overall Goal Structure

The 2022 Regional Solid Waste Management Plan for Boone and Winnebago Counties also contains short-term goals to incrementally support waste reduction efforts. Implementation goals, recommendations and actions are included within the following categories:

- Public Education & Outreach
- Circular Economy & Greenhouse Gas (GHG) Emissions
- System Organization & Administration
- Partnerships
- Policy
- Funding
- Traditional Materials Recycling
- Non-Traditional Materials
- Organics

### Requirement List

Required Elements provides a full list of the MMAC's requirements, as the Plan is organized in an alternative format.

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## Organization of Document

### Chapter 1: Introduction

The first chapter of the Solid Waste Management Plan describes the background and purpose of the document. Additionally, it describes the importance of data collection, updates, and details the development process. It concludes with describing the public engagement process, in addition to Solid Waste Advisory Committee efforts.

### Chapter 2: Current Plan Implementation Status

Chapter 2 discusses Boone and Winnebago Counties previous Solid Waste Management Plans. The chapter includes a review of current programs, progress towards recommendations from recent plans, and a discussion of barriers to achieving the recommendations and how to overcome them. The chapter concludes with a discussion of issues, needs, and opportunities as a result from the public input survey.

### Chapter 3: Existing Infrastructure Report

This chapter identifies existing solid waste management facilities such as landfills, transfer stations, and other waste collection facilities that are utilized by both Boone and Winnebago Counties, and how long these facilities will support current and future solid waste needs. The chapter concludes by discussing what vulnerable elements exist in the waste management system within Boone and Winnebago Counties.

### Chapter 4: Waste Generation Assessment

Chapter 4 identifies both counties current waste generation rates and current diversion rates for local waste streams and waste water. The chapter concludes by discussing the environmental, economic, and social impacts of waste in Boone and Winnebago Counties.

### Chapter 5: Proposed Material Management Programs

This chapter describes the facilities and programs currently existing, along with additional facilities and programs that are needed to support waste diversion efforts in Boone and Winnebago Counties. The waste types reviewed include traditional materials, organic materials, and non-traditional materials. The chapter concludes by discussing various programs that help address waste management outside of diversion efforts, disposal efforts, and waste projections for the area.

### Chapter 6: Public Education & Outreach

Chapter 6 describes the efforts currently used to promote recycling measures and future recommendations through public education and outreach. The chapter concludes with goals and recommendations on recycling promotion strategies for Boone and Winnebago Counties.

### Chapter 7: Partnerships, Policy & Funding

Chapter 7 is broken into three subsections: partnerships, policy, and funding opportunities. These subsections review new methods to increase and improve materials diversion and recycling efforts for the area. The partnership subsection focuses on community, private, and public partnerships that could be formed to improve recycling efforts in the community. The policy subsection reviews potential incentives to encourage recycling and waste diversion. The funding subsection identifies current funding sources and potential funding sources at the local, state, and federal level.

### Appendix A: A Report on Waste-to-Energy and Waste Utilization Options in the Rockford Region

Appendix A: This report discusses initial waste utilization options to explore further with the supporting data from UIC and NREL.

### Appendix B: Proposed Implementation Tactics & Timelines

Appendix B is a compilation of implementation efforts, who is responsible and what that timeline looks like.

### Appendix C: Existing & Model Ordinances

Appendix C details relevant existing ordinances and sample ordinances other communities have implemented regarding waste management.

### Appendix D: Glossary & Acronyms

Appendix D: Glossary of Terms is included to aid in the understanding and becoming familiar with solid waste management terms and acronyms.

### Appendix E: Public Survey, Comments, & Data Methodology

This appendix details the results of the Solid Waste Management Survey, public comments on the specific plan, and data explanations for analysis, NREL and UIC data.

### Appendix F: References

This appendix stores all sources referenced by roman number in the text.

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# Chapter 1: Introduction

## Background & Purpose

The purpose of the Boone and Winnebago County Regional Solid Waste Management Plan (hereafter referred to as the “Plan”) is to provide a comprehensive assessment of the solid waste system in both Counties, and covers waste infrastructure, generation, programs, stakeholders, issues, needs, opportunities, policy, and funding. These elements inform future programs, goals, recommendations, and actions. All Illinois counties are required by the Illinois Solid Waste Management and Recycling Act (SWMRA) to have a 20-year solid waste management plan, in addition to providing five-year plan updates. Boone and Winnebago Counties agreed to collaborate on their new 20-year plan update, submitting one regional plan for both counties to implement collectively. This collaboration is most appropriate for several reasons including: Local waste disposal efforts often operate on a regional scale; waste collection is privately contracted in both counties; and waste from Boone County is regularly transported to facilities in Winnebago County.

## Dates & Plan Updates

County Solid Waste Management Plans must be adopted 60 days after the public comment period has ended. The public comment period for this plan was from April 18, 2022 to May 18, 2022; therefore this Plan should be adopted by July 17, 2022.

## Plan Development & Process

The Boone and Winnebago County Regional Solid Waste Management Plan 2022-2042 began with reviewing the recent “Illinois Materials Management Advisory Committee (MMAC) July 2021 Report to the General Assembly.” This comprehensive report contains the following components:

- Committee recommendations on various statewide waste metrics and strategies;
- Background information regarding applicable laws, regulations, and terms;
- Materials management and generation in Illinois;
- Relevant materials management data and associated methodology; and
- New plan requirements for County Solid Waste Management Plans.

Following the review of this report, the MMAC Solid Waste Management Plan outline was modified to include the two counties as well as area-specific plan elements, such as Appendix A: A Report on Waste-to-Energy and Waste Utilization Options in the Rockford Region. Once the modified outline was approved by the counties, further research and data gathering occurred and a Solid Waste Advisory Committee (SWAC) was formed. This committee met regularly throughout the planning process to provide informed perspectives and feedback as the Plan developed. A public survey was then published to further understand area issues and general public opinion. The first public meeting was complementary to this effort, and informed the public of current plan progress. An additional public meeting was conducted to present the plan and provide an opportunity for area residents to discuss their thoughts, concerns, and questions. These meetings were held virtually due to the ongoing COVID-19 pandemic.

## The Role of Data

Data for this Plan was sourced from many areas to provide insights on waste projections and area trends over time. The nature of locally privatized waste means that historic data may not be available or consistent across years due to varying definitions and other factors, so regression models were utilized to inform historic trends. Demographic and labor data sourced from the U.S. Census Bureau and regional economic modeling software was used to inform these projections.

## Data Methodology Summary

Data availability for the Plan was significantly limited, as the most recent waste reports for both Boone and Winnebago Counties were from 2005 and 2010. Data collection for the Plan came from projection software, previous plans, key stakeholders, historic population, and employment data, performed in collaboration with the University of Illinois Chicago (UIC). Refer to Appendix E: Public Survey, Comments, & Data Methodology for more detail regarding UIC’s methodology.

## Waste Generation and Composition

This project developed regression models to predict waste generation and composition in Boone and Winnebago Counties based on local conditions. Regression models connect dependent variables (such as waste generation) with independent variables (such as population, housing, or employment). Adjustments were also made to allow the models to analyze for both residential and commercial sectors separately. Additional analysis was conducted to identify distinct characteristics in urban versus rural areas (discussed further in Chapter 4: Waste Generation Assessment (Local Waste Stream Impacts)). This project tested over 20 combinations of independent variables with varying data transformations. The deployment of the final model considered the goodness-of-fit (R<sup>2</sup> and Adjusted R<sup>2</sup>),

validity (low multicollinearity), and differences of predicted waste generation rates compared to observed values.

## Waste Diversion Scenario Development

For each scenario, overall diversion rates include all types of MSW materials (excluding construction and demolition waste) and reflect a weighted average using 2019 waste tonnage estimates. The diversion rates also factored in service coverage (specific materials accepted, recycled, or recovered), participation rates (percentage of businesses and residents participating in recycling), and material contamination (percentage of unaccepted items dropped off in recycling carts). Specific material recovery rates were determined in reference to Tables 4-1 and 4-2 in the 2015 Illinois Commodity/Waste Generation and Characterization Study Update. Contamination in curbside recycling is on average around 20 to 25 percent in many communities in northern Illinois. This study used 15 percent in the baseline scenario as a conservative estimate for Boone and Winnebago Counties.

### Baseline Scenario (2019)

The Baseline Scenario was developed in reference to the reported data in Boone and Winnebago Counties, regional stakeholder interviews, and peer region performances. Due to the uncertain impacts of pandemic conditions, 2019 was chosen as the baseline year. The overall diversion rate was 18.2 percent.

### Short-Term Scenario (2026)

The Short-Term Scenario with a 38.6 percent overall diversion rate was designed to be a feasible goal in the next three to five years in the study region. It aims to keep pace with national average rates of waste diversion and present best practices in Illinois.

### Zero Waste Scenario (2050)

The Zero Waste Scenario adopts a 90.7 percent diversion rate or higher for each material type. It is an aspirational goal that would require the engagement of all citizens and sectors in Boone and Winnebago Counties and beyond.

## Environmental & Economic Scenario Impacts

The U.S. Environmental Protection Agency (EPA) Waste Reduction Model (WARM) has been used to calculate environmental and economic impacts. The WARM model is used to help solid waste planners and organizations track and voluntarily report greenhouse gas (GHG) emissions reductions, energy savings, and economic impacts from different waste diversion efforts. Essentially, the WARM model assesses the difference of impacts from two waste management scenarios (baseline versus a comparison) based on waste volume and management method. Users specify how much waste is managed through each of the applicable methods (recycled, composted, landfilled, anaerobically digested, combusted, or source reduced) in both scenarios. Users can customize model parameters or directly adopt the default parameters embedded in the model. Then the WARM model returns outputs for the difference of impacts between the two scenarios.

Plugging in the data parameters discussed above, the WARM model was run twice in this study: first, comparing the Short-Term Scenario to the Baseline Scenario; and second, comparing the Zero Waste Scenario to the Baseline Scenario. In the model result, this study focused on three types of impacts: (1) carbon emissions measured by metric tons of carbon dioxide equivalent

(MTCO<sub>2</sub>E); (2) energy consumption in metric millions of British thermal units (MMBTU); and (3) job impacts or labor hours. Instead of focusing on the end-of-pipe pollution impacts, the WARM model assumes life-cycle boundaries start at the point of waste generation (the moment a product such as paper or dimensional lumber reaches its end-of-life stage). In terms of job impacts, the WARM model only accounts for direct jobs associated with different waste treatment methods. In other words, the inter-sectoral impacts, or multiplier effects, of waste diversion programs are not measured in the WARM model. To ease data interpretation, this study converted the estimated labor hours to full-time equivalent jobs (FTEs) by a factor of 2080 hours/year (40 hours per week times 52 weeks).

## Public Participation

### Public Meetings

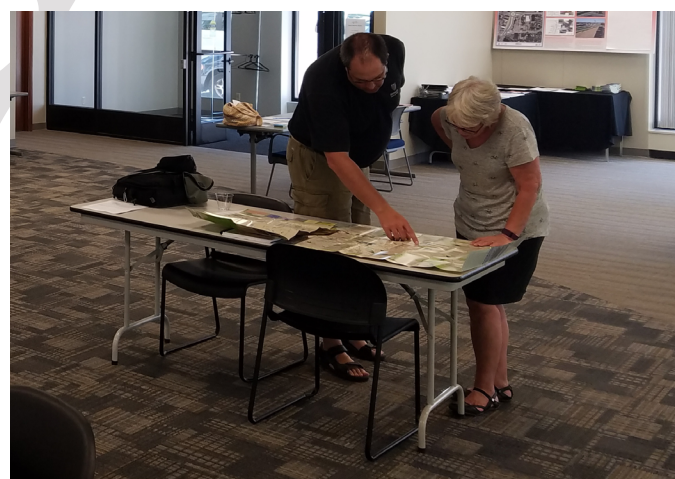
Throughout the Plan's development, R1 hosted two public meetings. The first public meeting took place on September 23, 2021, with a virtual open house where attending members of the public were informed about the Plan's purpose, current progress, and next steps. After an informative presentation, community members were asked to discuss their thoughts about waste in the two counties. The second public meeting took place on May 2, 2022, halfway through the public engagement period. This meeting included a presentation on the Plan draft and allowed for the public to ask specific questions.

### Solid Waste Management Survey

In an effort to understand public perspective regarding waste collection, education, and impacts, a 27-question Solid Waste Management Survey was created and published for approximately 21 days. The digital survey yielded 106 individual responses from Northern Illinois residents in Boone and Winnebago Counties (see Appendix E for more information).

### Public Comment Period

The public comment period took place from April 18, 2022 to May 18, 2022. A press release and social media posts were published to promote public engagement and feedback. During this time, five public comments were received. The list of public comments received can be found in Appendix E.



Community members at an open house in Northern Illinois.

# Chapter 2: Current Plan Implementation Status

## Previous Plans

Solid waste management implementation of the original plans began in Boone and Winnebago Counties in the early-to-mid 1990's. Previous data shows Boone and Winnebago Counties generated 33,213 and 188,500 tons of municipal solid waste (MSW) in 1990, respectively.<sup>i,ii</sup> Winnebago County's most recent 2016 update reported that an average of 453,926 tons of waste was generated in 2010. Recent data was not available for Boone County. Collection and accuracy of MSW estimates are impacted by several variables, including waste origins, lack of access to "proprietary" data, and a lack of local, historic waste data.

Additionally, the 1991 Winnebago County Solid Waste Management Plan and the 1992 Boone County Solid Waste Needs Assessment reports on both MSW and total solid waste (TSW) in order to ensure a complete analysis of waste composition in the region.<sup>iii</sup> TSW accounts for MSW along with landscape waste and sewage sludge.<sup>iv</sup> Data used by both plans included residential, commercial, and industrial wastes (with the exception of Boone County, which also included construction and demolition wastes).

Model projections based on historic data used in this Plan (due to a data gap between plan updates) estimate that in 2019, Boone and Winnebago Counties respectively generated 56,202 tons and 307,023 tons of MSW, excluding construction and demolition waste.<sup>v</sup> Due to the significant impacts solid waste management has on residents and their overall quality of life, several programs have been created by both municipalities and counties. The programs will be further outlined in this chapter, along with the state and federal policies that inform the programs.

## Summary of Current Programs & Diversion Activities

Tables 2-1, 2-2, and 2-3 review the solid waste collection practices of Boone County's five municipalities and Winnebago County's 12 municipalities. While some smaller towns and cities do not provide online information, this visualization identifies what policies have been adopted. While all of the municipalities offer curbside garbage collection, not all provide more specialized services like electronic, pharmaceutical, or hazardous waste pickup. For the municipalities that coordinate these services, they are not usually available curbside. Many of the municipalities, in addition to Boone and Winnebago Counties, have collection centers for various recycling, e-waste, pharmaceuticals, and hazardous waste, or have other specific programs such as used medication drives.

## Recycling Collection & Activities

Curbside recycling collection depends on location and service provider, but often occurs once per week. Cleaned and emptied recyclables (with lids removed) are to be placed loosely in designated containers, not in plastic bags or can liners. Certain municipalities (Village of Roscoe, Village of Winnebago, City of Rockford) allow excess recyclables to be put in paper bags on the curb next to the dedicated bin.

## Progress of Current Plan Recommendations & Strategies

The following content describes the current achievements by both Boone and Winnebago Counties as outlined in the most recent plan updates. While there has been progress in some areas such as recycling efforts and source reduction. There has been less progress in combustion for energy recovery or combustion for volume reduction.<sup>vi</sup>

### Boone County Source Reduction

During a 2006 solid waste management plan update, Boone County chose not to set a specific municipal waste reduction goal due to a lack of data collection to measure source reduction impacts. Instead, the County decided to establish quantitative goals for future source reduction programming.

### Recycling & Reuse

The private sector is mandated to provide the collection, marketing, and processing of residential recyclables from curbside recycling programs. The County, in coordination with Belvidere Township, supports the local recycling center.

Table 2-1. Recycling Pickup days by Jurisdiction

	MON	TUE	WED	THU	FRI
<b>Durand</b>					X
<b>Lake Summerset</b>	X*				
<b>Poplar Grove</b>	X				
<b>Rockford**</b>	X	X	X	X	
<b>Village of Pecatonica</b>			X		
<b>Village of Winnebago</b>		X			

\*Lake Summerset offers residential recycling pickup on the first and third Monday of each month.

\*\*Rockford residents typically receive collection services once a week.

Source: County, Municipality, and Hauler Sites

**Table 2-2. Waste Collection Opportunities by Jurisdiction & Material**

	Yard	Electronics (E-waste)	Medication Disposal	Curbside Collection	Bulk Pick Up	Hazardous Waste	Hauler
<b>Boone County</b>		X	X				Hauler of choice*
<b>Belvidere</b>	X		X	X	X	X	Hauler of choice*
<b>Caledonia</b>			X	X	X	X	Advanced Disposal; Republic Services
<b>Poplar Grove</b>	X			X	X	X	Advanced Disposal
<b>Winnebago County</b>		X	X				Hauler of choice*
<b>Rockford</b>	X	X	X	X		X	Advanced Disposal; Rock River Disposal; Republic Services
<b>Machesney Park</b>	X		X	X	X	X	Rock River Disposal
<b>Durand</b>				X		X	Advanced Disposal
<b>Pecatonica</b>	X	X		X	X		Advanced Disposal; Republic Services
<b>Cherry Valley</b>	X	X		X	X	X	Advanced Disposal
<b>Lake Summerset</b>	X			X	X		Gill's Freeport Disposal
<b>Loves Park</b>	X	X		X	X	X	Advanced Disposal; Rock River Disposal; Republic Services
<b>Rockton</b>	X		X	X	X	X	Advanced Disposal; Rock River Disposal
<b>Roscoe</b>	X		X	X	X	X	Advanced Disposal
<b>South Beloit</b>	X	X	X	X		X	Advanced Disposal; Rock River Disposal; Republic Services
<b>Village of Winnebago</b>	X		X	X	X		Gill's Freeport Disposal; Advanced Disposal

\*Advanced Disposal; DC Trash; GFL Environmental; MDC Environmental Services; Prairie Land Disposal; Rock River Disposal (Commercial Only); Waste Management.

Source: County, Municipality & Hauler Websites

**Table 2-3. Curbside Recycling Conditions by Jurisdiction  
Recycling Hours, Limits, & Guidelines**

<b>Cherry Valley</b>	<ul style="list-style-type: none"> <li>Recyclables must be placed curbside the night before, or prior to 6 a.m. on the scheduled day of collection.</li> </ul>
<b>Durand</b>	<ul style="list-style-type: none"> <li>Recyclables must be placed curbside the night before, or prior to 6 a.m. on the scheduled day of collection.</li> </ul>
<b>Poplar Grove</b>	<ul style="list-style-type: none"> <li>All recycling may be placed at the curb no earlier than 5:00 a.m. and no later than 6:45a.m. The morning of your scheduled collection day. Carts and containers must be removed from the curb by 9:00 p.m. the day of collection.</li> <li>In addition to the cart, a resident may place out for collection each week an unlimited amount of containerized recycling. Additional recycling must be placed in either a resident supplied reusable container (clearly marked recycling) or plastic recycling bins in order to be collected. Resident supplied containers must be no larger than 33-gallons nor weigh more than 50 lbs. Oversized or overweight containers or recycling in plastic bags will not be collected.</li> <li>There is a weight limit of 250 lbs for the Advance Disposal recycling carts.</li> </ul>
<b>Rockford</b>	<ul style="list-style-type: none"> <li>Large cardboard and paperboard must be flattened and bundled with string or twine (not wire). Bundles should be no larger than two-feet by two-feet.</li> <li>Residents may dispose of small electronics that are less than two-feet by two-feet in size in their City-issued blue recycling bins, with exception to televisions and computer monitors.</li> <li>Excess recyclables may be put in paper bags on the curb next to the dedicated bin.</li> </ul>
<b>Roscoe</b>	<ul style="list-style-type: none"> <li>Recycling should not be put at the curb until after 6:00 PM the night before pick-up. All recycling should be placed at the curb no later than 6:00 AM the day of pickup.</li> <li>In addition to the cart, a resident may place out for collection each week an unlimited amount of containerized recycling. Additional recycling must be placed in either a resident supplied reusable container (clearly marked recycling) or plastic recycling bins in order to be collected. Resident supplied containers must be no larger than 33-gallons nor weigh more than 50 lbs. Oversized or overweight containers or recycling in plastic bags will not be collected.</li> <li>Excess recyclables may be put in paper bags on the curb next to the dedicated bin.</li> </ul>
<b>Village of Winnebago</b>	<ul style="list-style-type: none"> <li>Cardboard must be broken down in two-foot x two-foot sections and must be bundled or placed in a two-foot square cardboard box.</li> <li>Newspapers, magazines, and other paper items must be bundled separately with string or placed in a paper bag.</li> <li>Any items left in your bin after pickup will be classified as non-recyclable and will need to be placed in your garbage the following week.</li> <li>Excess recyclables may be put in paper bags on the curb next to the dedicated bin.</li> </ul>

Source: County & Municipality Websites



## Combustion for Energy Recovery & Volume Reduction

Due to Boone County's small amount of waste generation, the high capital and operating costs associated with incineration, and the unclear regulatory atmosphere, incineration for energy recovery or volume reduction were not considered as viable alternatives and therefore have not been pursued.

## Disposal in Landfills

Boone County relies on out-of-county landfill capacity for long term waste disposal. The County encourages private hauling companies to pursue private contracts for waste disposal services. Homeowners and businesses are responsible for subscribing to service from a private hauler.

## Status of Current Implementation Efforts

The following activities were a result of recommendations. In 2005, Boone County entered into an agreement with One Source Recycling, located in Loves Park, IL to purchase and haul away all recycled materials. The County's waste assessment and needs were last explored in a 1992 Solid Waste Plan Survey.

## Recommendations not Implemented

Recommendations such as source reduction programs, combustion for energy recovery, and combustion for volume reduction were not implemented due to budgetary reasons and lack of feasibility.

## Winnebago County Source Reduction

In the original Winnebago Solid Waste Management Plan, source reduction efforts were reportedly handled through private and non-profit organizations (Goodwill, Salvation Army, and Keep Northern Illinois Beautiful). Donation efforts do contribute to source reduction, as some products will be purchased and subsequently given an extended life. It should be noted that donation with limited criteria, results in a portion of donations being immediately landfilled due to quality issues.<sup>vii</sup>

## Recycling & Reuse

The City of Rockford provides curbside recycling for 32 items and a curbside composting program for yard waste. However, private businesses and apartment buildings are responsible for contracting a waste hauler.<sup>viii</sup> County residents can dispose of household hazardous waste (HHW) items at a HHW Disposal Center located at the Four Rivers Sanitation Authority.<sup>ix</sup> KNIB also sponsors county-wide recycling events and has household recycling drop off sites in Machesney Park and Rockford.<sup>x</sup> Some programs have changed since the 1996 plan.

## Combustion for Energy Recovery & Volume Reduction

The County conducted a feasibility study for a direct Waste-to-Energy (WTE) plant in 1992-1994.<sup>xi</sup> The plant was scheduled to begin operations in 1994-1996, but was never pursued. To date, no current WTE facilities exist. The original plan also did not consider any programs to address waste volume reduction only.

## Disposal in Landfills

In the original plan, expansion of the Winnebago Landfill or siting a new facility were the primary waste disposal options presented. The Winnebago Landfill expanded in 1999 and 2009, and in 2012 Winnebago County approved the application of Local Siting Approval for an additional expansion. As of 2020, the capacity of the current operating units allow for 16 more years of operations.

## Status of Current Implementation Efforts Implemented Recommendations

- All recycling and reuse activities have been implemented. These activities include having the City of Rockford provide curbside recycling for residents, establishing a county HHW collection, and creating recycling drop off sites.
- Winnebago County reported that source reduction activities are being addressed in the private sector at this time.
- The last plan update stated the landfill capacity was expanded to meet current and future demand.

## Recommendations not Implemented

- Combustion for energy recovery was determined to not be financially feasible.
- Winnebago County was unable to adopt a county-wide waste hauling agreement as identified in the original plan due to a change in Illinois state law in 2003 and 2004. The county did not proceed, as there was no mechanism to require participation without providing service at no charge.

## Plans, Studies, & Programs Outside of the Service Area

While it is important to examine the solid waste management activity within Boone and Winnebago Counties, it is also helpful to review key plans and programs on a regional, state, and national level. The state and national guidelines will serve to inform local efforts and to inspire new plans, studies, or programs. Since all Illinois counties are mandated by the same guidelines for waste management planning, the standardization allows for accountability in the reporting of these methods, goals, and metrics.

## Local & Regional Efforts

Located south of Boone and Winnebago Counties, Ogle County has a smaller population than both and works to promote a healthy environment through the safe collection and disposal of waste.<sup>xii</sup> Similar to Boone and Winnebago Counties, Ogle County developed a Solid Waste Management Plan in 1990, which included a needs assessment, study of current management options, and a 20-year plan. Since then, both five-year and 20-year updates have been completed, as well as a draft 2021 plan update. Both the original plan and 20-year update provided recommendations on developing several initiatives such as education and recycling programs, record keeping and reporting, landfill permits, and various grants to fund the implementation of waste reduction activities. Other funding is available to Ogle County through landfill surcharges and fees and general revenue funds. Nine of the 11 municipalities in Ogle County offer residential and curbside garbage and recycling collection through contract. The Orchard Hills Landfill, located in Davis Junction, also has a drop-off recycling station open to the public. Four annual landfill capacity reports and various municipal laws and regulations are publicly available online, similar to Boone and Winnebago Counties. Ogle County's Solid Waste Management Department is a comprehensive, successful division that provides its citizens with information on disposal options for both every day and specialty items, updates on recycling efforts, policies, and other resources.<sup>xiii</sup>

## State Efforts Reports

The IEPA publishes an annual Landfill Capacity Report on disposal capacity for active Illinois landfills. The most recent report from August 2021 provides data for a total of 36 landfills, including those in Region 1 in Northwestern Illinois. Details on these sites include maps of the region, the volumes of waste accepted, and the remaining waste capacities of the landfills from that calendar year. For Region 1, the Winnebago Landfill reported to have a life expectancy of 16 years and the Orchard Hills Landfill reported a six-year life expectancy.

Additionally, the IEPA identifies hazardous waste sites in the Illinois Hazardous Waste Annual Report. These include generation, treatment, storage, and disposal sites, as well as the types and total quantities of hazardous waste. The last publication from 2015 reported one of these storage sites in Winnebago County: Clean Harbors Pecatonica, LLC in Pecatonica. The Illinois legislation that initiated the creation of these two respective reports, the Illinois Solid Waste Management Act and the Resource Conservation and Recovery Act, will be reviewed thoroughly in Chapter 7: Partnerships, Policy, & Funding.

The 2021 Illinois Materials Management Advisory Committee (MMAC) Report to the General Assembly is another important document for the state, serving as a comprehensive framework for current and future waste management opportunities, along with achievable landfill diversion goals. The MMAC Report was heavily referenced throughout the development of the Plan for Boone and Winnebago Counties, including within the analysis of education, infrastructure, material markets, and recommendations components. The other work that the Illinois MMAC is dedicated to will be covered later in this chapter.

## Programs

The IEPA has several programs to address waste management, reduction, and diversion strategies. Among these programs, the IEPA's Materials Management Unit (MMU) supports diversion programs and general education on recycling and waste collection. The MMU oversees specific material recycling including E-waste and composting programs, and facilitates disposal of other items once they are no longer recyclable. The Illinois state government partners with local entities (government, non-profit, and others) throughout Illinois to hold four HHW collections each year in rotating locations. The IEPA works with the organization to package, transport, and dispose of the waste collected at these events, and also runs and operates four long-term collection facilities in Illinois. The IEPA partners with collection sites to hold medication take back programs with select hours or 24/7 disposal boxes, reducing medication from local water streams.<sup>xiv</sup> Similarly, the State Response Action Program hosts cleanup programs at various sites (such as former landfills, manufacturing plants, or agrochemical facilities) where the natural environment has been contaminated by hazardous material and threatens community and environmental health.<sup>xv</sup>

As a result of Governor Pritzker's amendment to the Illinois Solid Waste Management Act, a Materials Management Advisory Committee (MMAC) was formed in 2019 (see Chapter 7 for more information). The MMAC advises the Illinois General Assembly on materials, policy, processes, and planning efforts related to waste management. There are five subcommittees within the MMAC:

- Education and Outreach;
- Infrastructure Development;
- Local Government Support;
- Markets Development; and
- Measurement.

## MMAC Report to the General Assembly

As mentioned above, the State of Illinois formed a Materials Management Advisory Committee made up of a variety of stakeholders to advise policy, process, and planning efforts related to waste management. During the MMAC's collaboration, numerous formal recommendations were presented to the Illinois General Assembly for adoption. Copies of these formal recommendations are included in Attachment C of the MMAC report. The recommendations are intended to meaningfully enhance the volume of material diverted from Illinois landfills. A few of these recommendations include:

- Establishing statewide landfill diversion targets of 40 percent by 2025, 45 percent by 2030, and 50 percent by 2035 (current rate is 37 percent);
- Employing a stratified approach to strategically target materials for diversion from Illinois landfills;
- Increasing statewide support from existing funding and without additional revenue for materials management programs by as much as \$3.375 million per State Fiscal Year by State Fiscal Year 2027-2028;



- Creating a Statewide Market Development Advisory Board to review and approve viable public and private sector diversion projects to receive state support;
- Appropriating funding to support the statewide recycling and composting infrastructure grant programs;
- Enhancing the level of state support for household hazardous waste collections;
- Developing and continuing to support a statewide materials management education campaign;
- Developing sophisticated data management systems within state government to track and map landfill diversion opportunities available to the public; and
- Adopting a consistent and simplified statewide approach to local government solid waste and materials management planning and reporting.

## National Efforts

The Environmental Protection Agency (EPA) has also federally implemented a variety of policy and programming efforts concerning safety and sanitation regulations for waste disposal, collection, and recycling within the United States. The Universal Waste Program details management standards for five types of commonly generated hazardous waste: batteries, pesticides, mercury-containing equipment, lamps, and aerosol cans. While not included in the 1995 Universal Waste Rule, some states include additional materials in their universal waste programs such as antifreeze and paints. Participants regulated by this system include small and large quantity handlers of universal waste, universal waste transporters, and universal waste destination facilities. Illinois adopted the 1995 federal program and was also authorized by the EPA to implement it. The regulations within this program involve storage, disposal, and management of the universal wastes listed above.

Similarly, the U.S. General Services Administration (GSA) manages and disposes of the solid waste produced in its federal buildings, and publishes its performance results in an annual Sustainability Performance Plan. Each regional office has its own reuse, recycling, and composting programs and requirements, but each GSA building has a diversion goal of 50 percent of all solid waste. GSA also has an interactive Sustainable Facilities tool for the public to learn more about the GSA's use of materials and resources.<sup>xvii</sup>

## Issues, Needs & Opportunities

Solid waste management serves a vital role in the health and safety of every community. To better serve the community, it is important to address factors that may be inhibiting solid waste management. A majority of the issues, needs, and opportunities presented in this subsection were identified through a public meeting and survey, in addition to stakeholder feedback.

## Key Issues & Needs Boone County

Boone County has limited recycling and non-traditional waste disposal programs beyond self-selected curbside recycling services. Boone County residents must travel outside the County to access a recyclable drop off site or pay the added cost of a recycling service. This presents an issue for dealing with hard-to-recycle materials that are not accepted for curbside pickup. Individuals who have constraints such as insufficient finances or lack of transportation may not be willing or able to travel long distances to properly recycle select materials.

In order to encourage more waste diversion practices in Boone County, accessible waste diversion infrastructure is crucial. Drop-off sites to dispose of recyclable materials for those who cannot or do not have curbside recycling are needed. Boone County also does not have any compost facilities that accept food waste, with only landscape waste and wastewater treated by the sanitation district in Belvidere.<sup>xviii</sup> The establishment of drop-off or curb-side compost programs in the area could be beneficial in reducing the quantity of organics landfilled.

Currently, there are no permanent or long-term HHW drop off locations in Boone County. This demonstrates a need for increased availability of drop-off locations. However, for rural or lower population areas, it may not be feasible to have a permanent drop-off location. If such is the case, temporary waste collection sites can be established in the area.

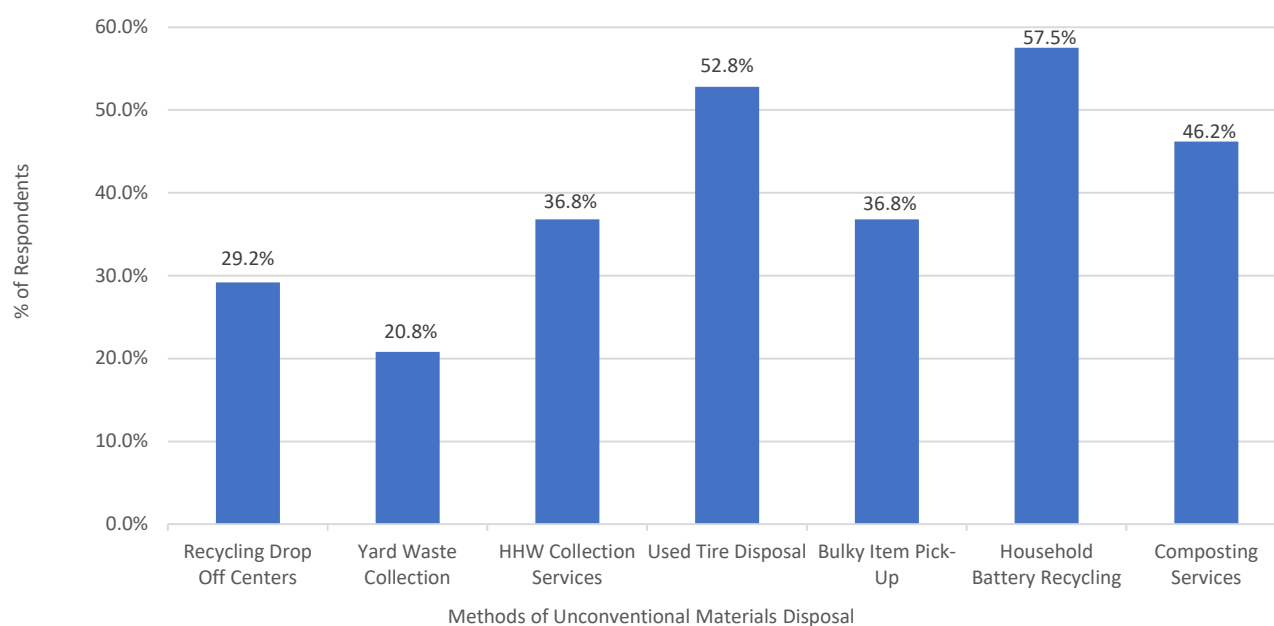
## Winnebago County

There are only two drop-off recycling sites in Winnebago County, both of which are run by the not-for-profit Keep Northern Illinois Beautiful (KNIB). These sites accept household recyclables, and for a small fee will dispose of unwanted electronics. Accessibility to these two sites could pose an issue for those who do not have reliable sources of transportation or funds to dispose of electronics. Expansion of the current recycling systems could help combat this issue.

Residents of Boone and Winnebago Counties were given the opportunity to voice their concerns by completing the Solid Waste Management Survey (see Appendix E). The purpose of this survey was to provide further insight on public engagement and impacts pertaining to the regional solid waste management system. The results demonstrated that residents living near the landfill are impacted by high volume of hauler traffic and an unpleasant odor originating from the landfill. Citizens report that trash haulers bound for the landfill unintentionally drop trash onto the streets and present an odor nuisance.

Winnebago County also experiences other important issues, largely as a result of the Winnebago Landfill located within the County. One concern raised in SWAC meetings and in the public survey was the life expectancy of the Winnebago Landfill. It is calculated that this landfill only has 16 years left until it reaches its capacity.<sup>xix</sup> Limited landfill capacity, quality of life impacts, and best practices indicate a need for increased waste diversion and source reduction programming.

**Figure 2-1. Unfamiliarity with Recycling & Disposal of Unconventional Materials**



Source: Solid Waste Management Survey 2021

## Illegal Dumping

Illegal dumping remains a concern for both Boone and Winnebago Counties. The issue of illegal dumping refers to the disposal of waste in an unapproved or dangerous manner. It is often characterized by piles of waste and bulky items left beside streets, vacant areas, and even neighborhoods. Common illegally dumped items such as large furniture, appliances, and tires may be an eyesore, and in severe cases can cause local property values to drop.<sup>xx</sup> Illegally dumped hazardous materials that have toxic, corrosive, flammable, or reactive properties threaten the health and safety of humans and the environment.

The solid waste management system must adapt to reduce the amount of illegal dumping that occurs. Local policy and programming may address this by reducing barriers to proper waste disposal. This can be accomplished by targeting frequently illegally dumped materials such as tires and electronics.

## Lack of Education

A key barrier observed in both counties was lack of education concerning proper waste management practices. This is indicated in the results of the Solid Waste Management Survey, in which a lack of education for how to recycle materials and where to do so was identified. Twelve percent of survey respondents reported that they recycled plastic shopping bags through their curbside recycling program. This presents an issue, because curbside recycling programs do not accept plastic bags and they must instead be brought to an appropriate location.

Increased public education efforts could result in improvements of the overall solid waste management system, and there is a need for educational outlets residents can utilize to ensure proper disposal of materials.

## Landfill Environmental Risks & Closure

Inactive landfills are monitored for 30 years post closure, as they still pose a threat to human health and the environment. Federal regulation (40 CFR § 258.61) outlines certain criteria landfills pending closure must follow.

Landfill closure care must be conducted for 30 years after the site has closed, unless the Director of an approved State deems that another time frame is more appropriate for the site. Post-closure care of a landfill must fulfill the following requirements:<sup>xxi</sup>

- A final cover must be installed on top of the landfill. This cover must be repaired and maintained regularly to ensure that it remains effective.
- So long as leachate from a particular site is deemed to be a threat to human health or the environment, a leachate collection system must be implemented and maintained. The Director of an approved State may provide approval to cease leachate collection, if it is determined it no longer poses a threat.
- Ground water monitoring must be conducted if it is determined there is a chance of possible contaminant migration into groundwater.
- Operation and maintenance of gas collection systems.

The requirements set forth for landfills closures are not impenetrable safeguards for contamination. The final cover may eventually begin to fail over time. This could result in escape of gases that should be captured by the on-site gas collection system. It is also possible for water to permeate through the cover, generating leachate, and for the landfill liner to eventually begin to fail, allowing for the leachate to contaminate groundwater.<sup>xxii</sup> It is for this reason that landfills, even those that are no longer operational, are continually monitored.

Landfills that appropriately conduct post-closure procedures and are deemed to no longer pose a significant threat to the environment may be repurposed. The large open land areas that result from landfills can be used to develop recreational areas, parking lots, or other developments to benefit the community, so long as these activities do not interfere with the integrity of the landfill closure systems.<sup>xxiii</sup>

## Legislation & Price Changes

The regional solid waste management system is vulnerable to legislative changes that are above the scope of the region. Changes to state, national, or even international legislation have the ability to impact the economic feasibility and accessibility of the region's waste disposal and recycling system.

Perhaps one of the most notable legislation changes occurred when the People's Republic of China's 2018 "National Sword" Policy was enacted. Prior to its enactment, 70 percent of the recyclable plastic that was collected in the U.S. was exported to China.<sup>xxiv</sup> The policy does not explicitly prohibit the importation of recyclable solid waste, but rather increases restrictions on the quality of the waste accepted. This policy limited the amount of plastics the U.S. could divert previously. This resulted in recyclables accumulating, and national recycling cost increases due to local labor, infrastructure, and transportation costs differing.

## Addressing Equity

The Center for Disease Control's 2018 social vulnerability data for Boone and Winnebago Counties showed those with higher social vulnerability percentiles tend to live within the more urbanized areas of Rockford and Belvidere. In Rockford, the census tracts with a higher social vulnerability score are located predominantly to the West and South of Rockford's downtown center. The Winnebago Landfill is not near these socially vulnerable tracts, nor are any waste diversion sites. Sites for solid waste disposal are primarily located in census tracts with a low social vulnerability score and low minority population.

A key consideration when addressing equity is that the ability for an individual to choose more sustainable waste diversion options is often a privilege. For instance, low/fixed income, black, and ethnic communities are disproportionately located in food deserts: areas that lack close access to fresh food. Stores

that sell food in these areas are often limited in variety and may not provide healthy or environmentally sustainable options.<sup>xxviii</sup> Locations with sustainably packaged/produced goods are often more expensive than traditional products. Individuals with a low or fixed income may be effectively priced out of some source reduction practices. Furthermore, individuals face the combination of cost barriers to source reduction and diversion such as: transportation (access and cost), access to a store that sells affordably priced products with low/zero waste infrastructure, large up-front costs for reusable goods and (membership based) bulk purchasing. Furthermore, limited income makes curbside or drop-off efforts impractical or impossible due to cost and transportation barriers.

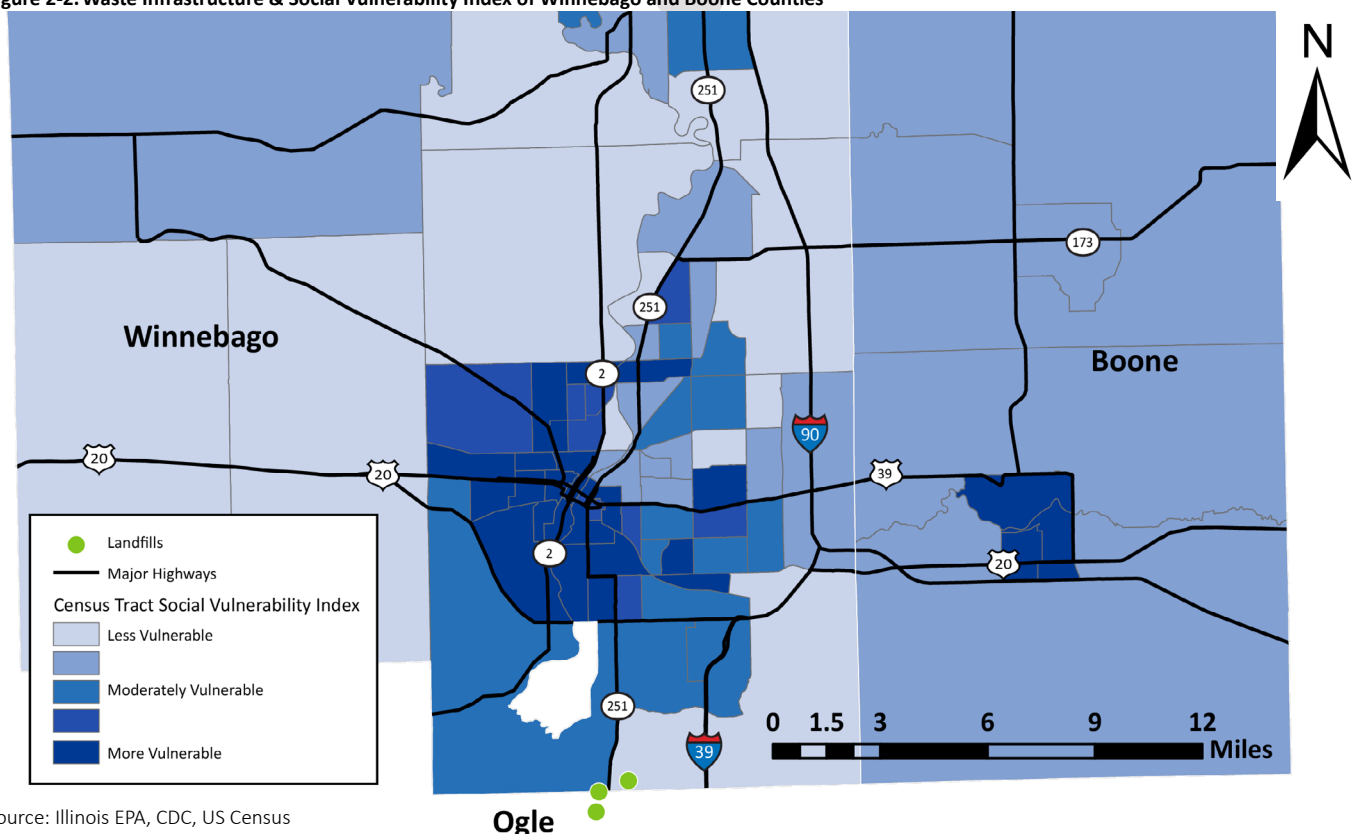
## Uncertain Future Waste Capacity

Currently, Boone and Winnebago Counties have few diversion opportunities in the form of facilities and services. Although both counties are in an IEPA designated region tied with the highest quantity of landfills, remaining capacity is relatively low. There are no public plans for an expansion for any landfills within Winnebago County or the surrounding counties.

## Emerging Opportunities

The regional solid waste management system has the potential to be a driver of economic development for the local community. Currently, opportunities exist that can help the solid waste system become a more profitable and environmentally-sustainable entity. Food and organic waste are excellent candidates for WTE facilities, which could add to the region's already diverse energy portfolio. Collaborative opportunities with ongoing sustainability-driven initiatives are also possible. As the prevalence of electric vehicles (EVs) in the region increases, so does the need for sustainable energy sources to power them.

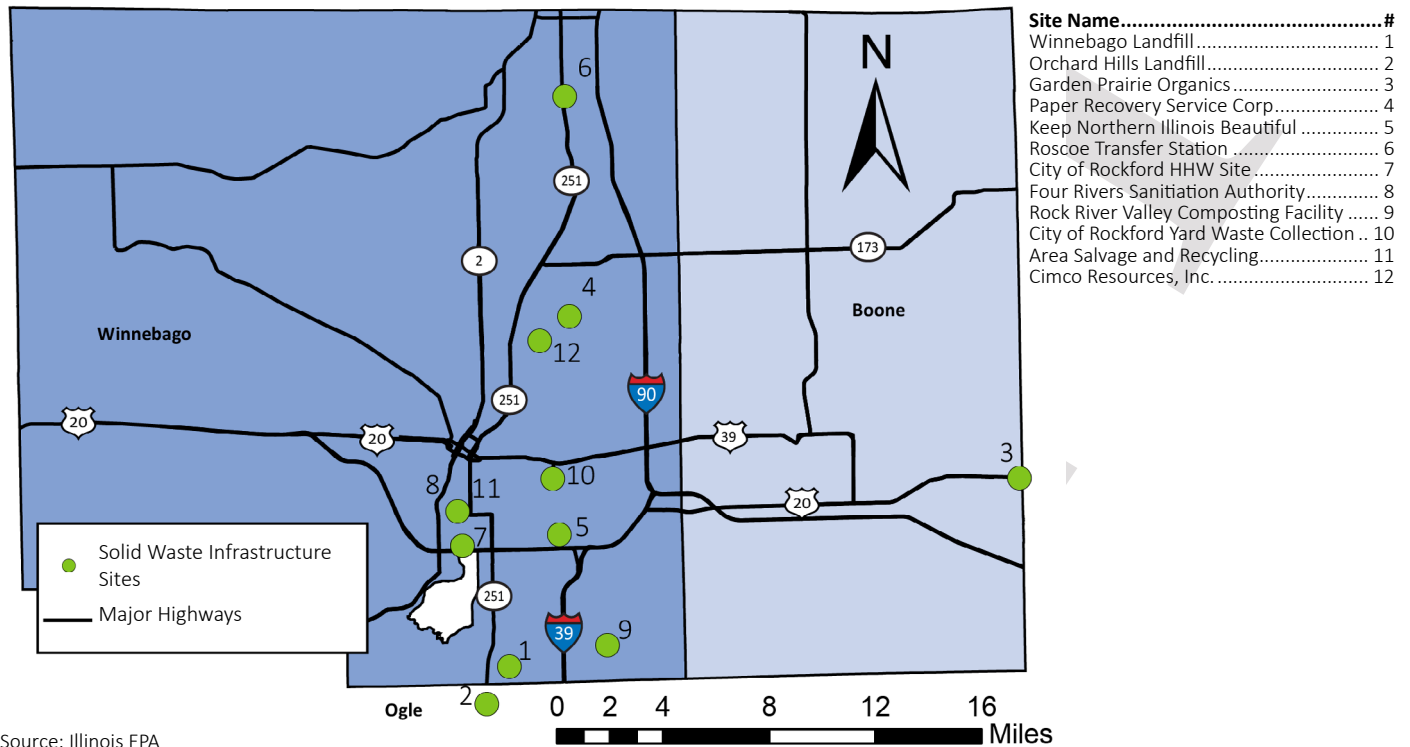
Figure 2-2. Waste Infrastructure & Social Vulnerability Index of Winnebago and Boone Counties



Source: Illinois EPA, CDC, US Census

# Chapter 3: Existing Infrastructure Report

Figure 3-1. Existing Infrastructure Map



Source: Illinois EPA

## Existing Landfills Utilized by Counties

The Illinois Environmental Protection Agency (IEPA) has seven administrative regions within the state, covering 36 landfills. Boone and Winnebago Counties are located within the Northwest (NW) IEPA administrative region. This region is tied with the Peoria IEPA administrative region for the highest number of landfills at seven each.<sup>i</sup> However, the NW Illinois region has nearly triple the remaining landfill capacity post-compaction in comparison to the Peoria region (145.3 million yd<sup>3</sup>), a higher disposal volume than the other six administrative regions (6.8 million yd<sup>3</sup>), and the highest current five-year average of waste disposal (6.6 million yd<sup>3</sup>).<sup>ii</sup> Although this region has the highest reported remaining capacity among the seven administrative regions in Illinois, it also has the lowest landfill life expectancy (22 years), alongside East St. Louis (22 years), and the Chicago Metropolitan area (nine years).

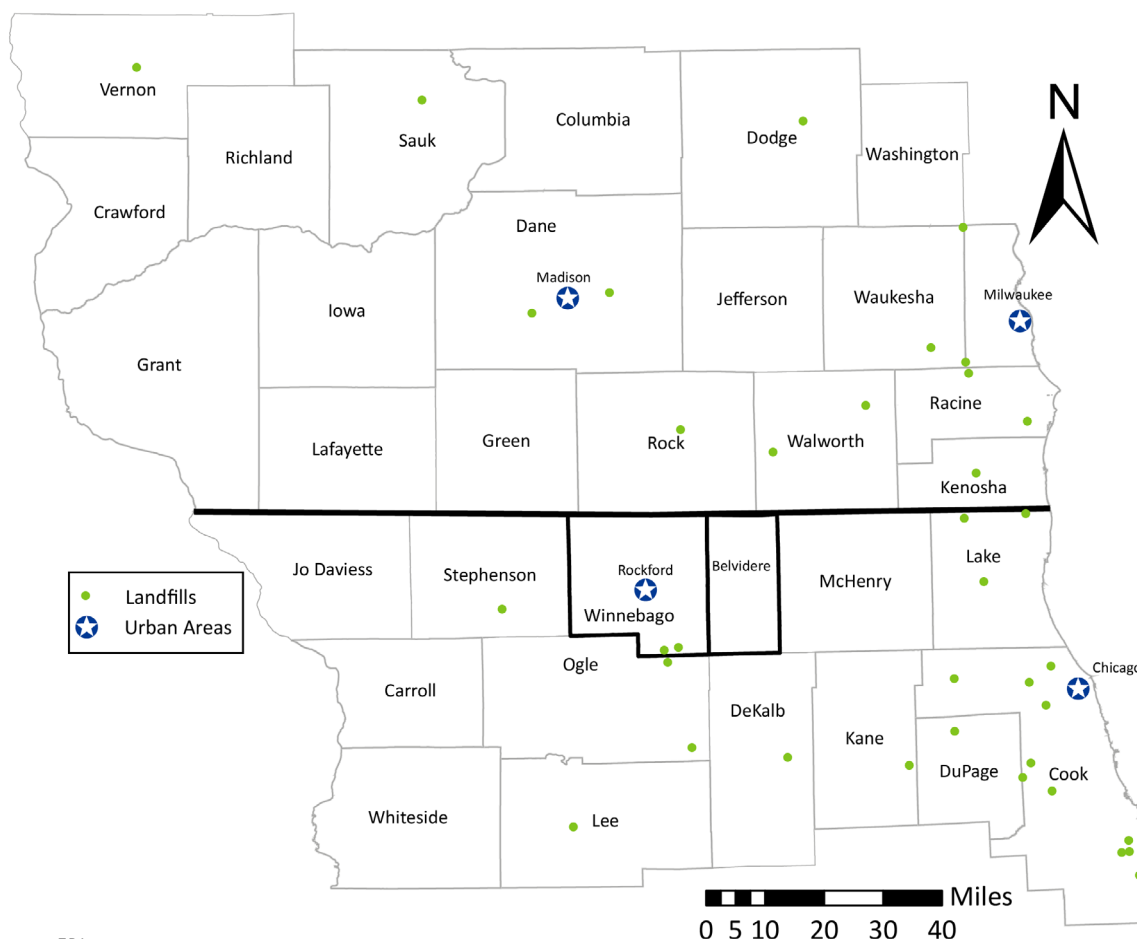
Winnebago Landfill, owned and operated by Waste Connections, has the largest reported remaining capacity (47 million yd<sup>3</sup>), the largest disposal volume (2.8 million yd<sup>3</sup>), and the largest current five-year average disposal volume (2.4 million yd<sup>3</sup>) in the region. Winnebago Landfill also has the second lowest life expectancy in the region (16 years).<sup>iii</sup>

This landfill is located in the southern portion of Winnebago County, and is close to Orchard Hills Landfill in bordering Ogle County. Winnebago Landfill's last reported expansion approval was in 2012 for a 222-acre addition within its 855-acre facility boundary.<sup>vi</sup>

Waste Management (formerly known as Advanced Disposal Services Inc.) operates the sole transfer station in Winnebago County, located in the Village of Roscoe. The facility accepts the following items: municipal solid waste, shingles, roofing materials, yard waste, and construction/demolition materials.<sup>v</sup>

Though there are separate centers, neither of these sites contain a recycling drop off center. This indicates a lack of connected systems within the area's existing traditional pollution control facilities.

Figure 3-2. Landfills in Northern Illinois & Southern Wisconsin



Source: EPA

## Summary of Other Facilities Utilized by Boone County

Currently, Boone County residents must travel to neighboring counties to recycle or divert solid waste from the landfill for items that cannot be collected through curbside recycling, unless the specific diversion site offers hauling services to collect the waste. However, this is still a significant distance for haulers to routinely travel from homes in Boone County to non-landfill solid waste management sites in Winnebago County or other neighboring counties. Like the vast majority of other Illinois counties, Boone County is expected to experience population growth in the coming years, making infrastructure for solid waste management diversion systems essential. Extended distances between residents and reliable diversion sites is a barrier to waste diversion and further constrains the shrinking capacity of regional landfill infrastructure.

### Composting Facilities Garden Prairie Organics, LLC

Garden Prairie Organics accepts compost from several local municipalities, landscape architects and commercial landscapers, garden centers, golf courses, road construction contractors, local farmers, and the general public. The company produces general compost for agriculture and golf turf, and arranges for trucking and delivery of their products.

### Winnebago Landfill

Winnebago Landfill accepts municipal and commercial yard waste (through individual drop-off and curbside collection).

## Summary of Other Facilities Utilized by Winnebago County

### Materials Recovery Facilities Paper Recovery Service Corp (PRSC)

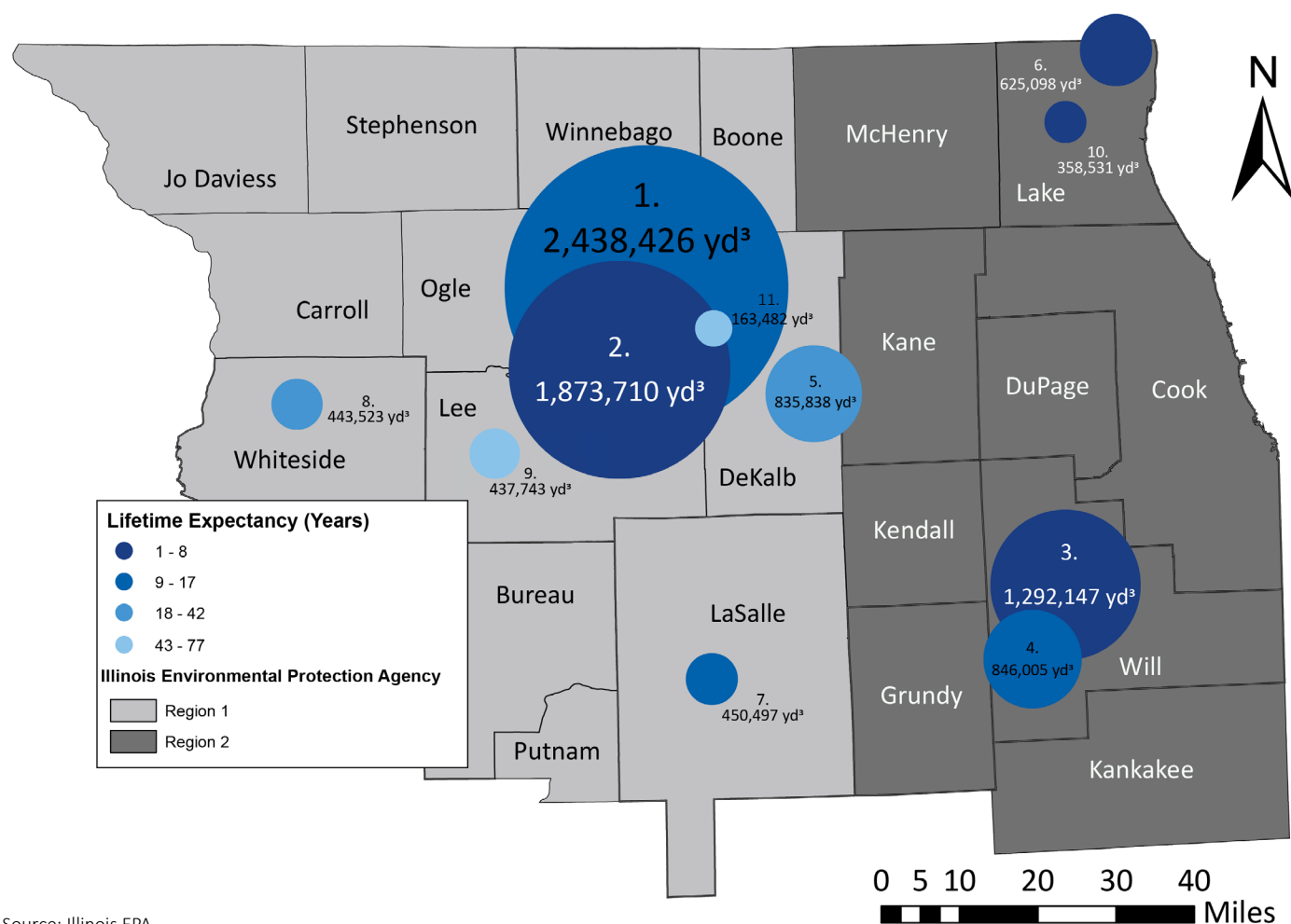
PRSC offers document and hard drive shredding, on-site paper shredding, cardboard, scrap metal, and aluminum recycling, and paper breakdown services. This 75,000 square foot facility purchases large amounts of cardboard from local and large businesses as well as aluminum cans and scrap metal. Their drop-off center is open to the public.

### Recycling Centers Keep Northern Illinois Beautiful (KNIB)

There are two KNIB locations in Winnebago County open to the public. Both locations take a wide variety of waste items including flags, clothes, paper, cardboard, appliances without refrigerant, and small electronics. These facilities also take larger electronics and other E-waste with a fee.



Figure 3-3. Landfill Capacity & Disposal Volume in Northern Illinois & Southern Wisconsin



Source: Illinois EPA

Table 3-1. Landfill Capacities in IEPA Regions 1 & 2

Rank	Region	Name	Address	Disposal Voume (Y <sup>3</sup> ) (5-Year Averages)	Lifetime Expectancy (Years)
1	1	Winnebago Landfill	8403 Lindenwood Rd, Rockford, IL 61109	2,438,426	16
2	1	Orchard Hills Landfill	8290 IL-251, Davis Junction, IL 61020	1,873,710	6
3	2	Laraway Recycling and Disposal Facility	21101 W Laraway Rd, Elwood, IL 60421	1,292,147	5
4	2	Prairie View Recycling and Disposal Facility	29755 S Prairieview Dr, Wilmington, IL 60481	846,005	17
5	1	Dekalb County Landfill	18370 Somonauk Rd, DeKalb, IL 60115	835,838	29
6	2	Zion Landfill	701 N Green Bay Rd, Zion, IL 60099	625,098	8
7	1	LandComp Landfill	2840 E 13th Rd, Ottawa, IL 61350	450,497	17
8	1	Prairie Hill Recycling and Disposal Facility	18762 Lincoln Rd, Morrison, IL 61270	443,523	42
9	1	Lee County Landfill Inc.	1214 S Bataan Rd, Dixon, IL 61021	437,743	77
10	2	Countryside Landfill Inc.	31725 IL-83, Grayslake, IL 60030	358,531	5
11	1	Rochelle Municipal Landfill No. 2	6513 S Mulford Rd, Rochelle, IL 61068	163,482	63

Source: Illinois EPA

## Transfer Stations

### Roscoe Transfer Station

Roscoe Transfer Station is owned by Advanced Disposal, which is a subsidiary of Waste Management. Roscoe Transfer Station is located northeast of Roscoe between Highway 251 and I-90. The drop off center is open to the public and accepts number one and number two plastics, glass bottles, aluminum, metals, and paper. As a subsidiary of Advanced Disposal, they also offer pickup services, which can be arranged through Advanced Disposal's website.

## Household Hazardous Waste

### Collection Facilities

#### City of Rockford Household Hazardous Waste Site

Located just north of the Four Rivers Sanitation Authority's office, the City of Rockford Household Hazardous Waste site accepts a variety of hazardous residential waste items on weekends, including aerosols, corrosives, oxidizers, solvents, oil-based paints, waste oil, pesticides, fertilizers, non-alkaline batteries, and fluorescent lamps. Waste generated from a commercial source, or volumes larger than five gallons, are not accepted. This site is open to the public.

#### Four Rivers Sanitation Authority (FRSA)

Formerly the Rock River Water Reclamation District, FRSA provides waste water treatment services for the Rock River Watershed, which includes most of Winnebago County and part of Boone County. Currently serving 77,000 residential, commercial, and industrial customers, FRSA treats 40 million gallons of contaminated waste water daily, converts 11,000 tons of solid waste into a locally-available bio-solid fertilizer each year, and generates 70 percent of the electricity needed to operate the facility with naturally produced methane gas.<sup>vi</sup>

## Composting Facilities & Services

### Rock River Valley Composting Facility

The Rock River Valley Composting Facility, a part of the Winnebago Landfill, accepts only landscape waste (such as grass clippings). It is only open between April and November. The facility makes no distinction between residential and commercial landscape waste, but given a \$50 per ton of waste disposal fee, with a two-ton minimum charge, residents are unlikely to utilize the facility. However, it is open to the public.

#### City of Rockford Yard Waste Collection

City of Rockford yard waste collection occurs only during Spring, Summer, and Fall. Collected yard waste is taken to the Rock River Valley Composting Facility, near the Winnebago Landfill.

## Scrap Metal Facilities

### Area Salvage & Recycling

Area Salvage and Recycling offers compensation for scrap metal, machinery, and vehicles. Metals accepted include copper, aluminum, batteries, cast and lead, brass (all types), catalytic converters, computer equipment, and appliances. The site is open to the public.

## Cimco Recycling Loves Park, Inc.

Cimco Recycling Loves Park purchases all grades of ferrous and non-ferrous metals. This facility, which is open to the public, also provides trailer, lugger, and roll-off services for manufacturing facilities throughout the Rockford and southern Wisconsin areas, while also receiving and shipping bulk scrap and recyclables via the Union Pacific Railroad. Cimco is headquartered in Rockford with seven facilities spread throughout Illinois and Wisconsin.

## Future Outlook with Current Infrastructure

As of 2020, the population of Boone and Winnebago Counties was 338,789 residents.<sup>viii,ix</sup> Migration to the region and population growth within both counties are not expected to increase dramatically between 2020-2040.<sup>x</sup> The combined Winnebago and Boone Counties population projections display a 2.67 percent population increase between 2020 and 2040. It should be noted that Winnebago has a much larger population, though the County's population is projected to decline. Boone County is projected to increase in population during this time, with a subsequent increase in waste generation.

Including both counties, less than 10 percent (9.7 percent) of the population lives in rural areas, with the vast majority of residents in urban areas.<sup>xi</sup> The top two urban areas are Rockford (43.8 percent) and Belvidere (7.3 percent). Urban areas generate about 93 percent of waste in both counties and urban waste is projected to increase in urban areas from 2020-2040. Per capita waste generation in 2019 was 0.5 tons per person per year for urban residents, 0.6 tons per person per year for urban commercial entities, 0.4 tons per person per year for rural residential residents, and 0.35 tons per person per year for rural commercial entities.

Between 2020 and 2040, waste composition is not projected to change significantly in the region's rural and urban areas. Paper is the largest percentage of overall waste products for both urban (751.1 pounds per person per year) and rural (386.6 pounds per person per year) individuals. Within Boone and Winnebago Counties, three facilities accept paper, with one of them specifically for shredding and recycling documents. The current capacity of these facilities is unknown. Solid waste diversion infrastructure is limited for both counties. While there are two composting facilities, only one accepts food and other organics aside from grass and lawn clippings. Like many commercial and industrial facilities, exposure to COVID-19 has prompted changes that have created logistical bottlenecks, further reducing the capacity and rate at which solid waste can be diverted.

Even without a projected increase in population, with current solid waste habits and trends, the existing landfill infrastructure will not be adequate for the region's needs. It can take up to five years to plan a landfill facility and 10 years to go through the permitting process. Due to the lack of requirements for private solid waste management firms and diversion facilities to provide public capacity and disposal volume reports, the future capacity of non-landfill solid waste infrastructure in Winnebago and Boone Counties remains somewhat unclear and in need of further investigation.



The average landfill life expectancy of the Northwest administrative region is 22 years. For Boone and Winnebago Counties specifically, the two nearest landfills, Orchard Hills Landfill and Winnebago Landfill, have life expectancies of six and 16 years (both as of 2020), respectively. As of Fall 2021, there are no public plans for expansion of either facility. The current solid waste system primarily utilizes landfills near the end of their capacity. Although the region will most likely not encounter a population increase in line with the U.S. average over the next 20 years, the issue of limited landfill capacity still exists. Solutions such as source reduction, routing to higher capacity landfills, or the construction of new infrastructure can help to mitigate this problem.

## Key Solid Waste Management System Vulnerabilities

The current solid waste management system in Boone and Winnebago Counties consists of many entities working towards the legal and efficient disposal of waste. A system of this level of scale and complexity is likely to face challenges and vulnerabilities, some of which are outlined further in the subsections below.

### Infrastructure Life Expectancy

The limited life expectancy of the region's landfills poses a significant vulnerability to the solid waste management system. The life expectancy of a landfill is determined by how much available capacity the site has left. As landfills reach capacity, the solid waste management system may become strained. When a landfill closes, other surrounding landfills frequently absorb the waste materials the closed landfill would have previously accepted. This then impacts the life expectancy of the surrounding landfills, as they must take in more waste and will reach capacity more quickly. Of the seven landfills located in Northern Illinois, the Winnebago landfill site has the largest remaining capacity but the second shortest lifetime expectancy (16 years). This is attributed to the high disposal volume of the landfill site, which is the highest of the seven landfills. It is estimated that the five-year average disposal volume is 2.4 million cubic yards post-compaction for this site.<sup>xii</sup> Permitting and construction of a new landfill is a lengthy process that can take anywhere from 10-20 years. The high disposal rates of this landfill site and its remaining limited capacity makes the region's solid waste management system vulnerable to future issues. When this site reaches capacity, zero waste infrastructure will be vital to avoid longer disposal trips.

### Lack of Waste Diversion

Another potential vulnerability in the current solid waste management system of Boone and Winnebago Counties is the quantity of recyclable materials landfilled instead of recycled. In Illinois, statewide data estimated that 42.4 percent of the solid waste stream is composed of materials that have established waste diversion programs. Established programs are categorized as being prominent and having easy accessibility to recycling sites. Some materials that have such programs are mixed paper, Uncoated OCC/Kraft (cardboard), yard waste, and more.<sup>xiii</sup>

Landfilling recyclable materials unnecessarily contributes to the reduced life expectancy of the facilities and increases system infrastructure vulnerabilities. Diverting these materials can increase the life expectancy of landfills, reducing the need to site for additional facilities.

### Accessibility

Across Illinois, areas with lower populations often have less access to waste diversion infrastructure compared to higher populated areas. This can be observed in Boone and Winnebago Counties as well. The lower populated areas, especially in Boone County, lack accessibility to recycling and material recovery drop-off facilities.<sup>xiv</sup> This lack of accessibility can result in less waste diversion and increased landfill disposal rates.

### Data Reporting

Privatized waste facilities each have different policies and procedures, limiting access to data and posing a potential vulnerability in system knowledge. It is difficult to directly compare the different features of the solid waste management system, as many of them are privately contracted and may not share information with each other.<sup>xv</sup> While landfills and other waste and recycling facilities adhere to the regulations set forth by the state and federal government, they do not have a standardized method of data collection to make regional data analysis more cohesive. Further efforts to expand and standardize solid waste management data collection and transparency should be explored on a coordinated, regional scale.

# Chapter 4: Waste Generation Assessment

## Introduction

The Waste Generation Assessment chapter discusses overall waste generation and diversion rates, local waste stream impacts, and wastewater treatment within both Boone and Winnebago Counties. Waste generation refers to the amount of waste that has been produced by people or entities within a specific area. Waste generation metrics are shown by weight (tons), per capita, and by material type.<sup>i</sup> Waste diversion refers to the diversion of waste typically disposed of through traditional means such as landfilling. Waste diversion strategies include source reduction, recycling, reuse, or composting. Waste generation is important to monitor, as it speaks to the capacity of waste management assets with physical capacity limits, such as landfills. Waste diversion rates speak to how effective existing diversion programs are over time. There are various ways waste has been defined over time, and communities also define waste differently. This affects what data is collected and analyzed. Data collection and analysis has been constructed to accommodate these differences to the best ability possible. Each region defines Municipal Solid Waste differently. In this context, construction and demolition waste, and sludge are excluded from total MSW. This affects waste data when examined by weight.

## Base Data for Projections

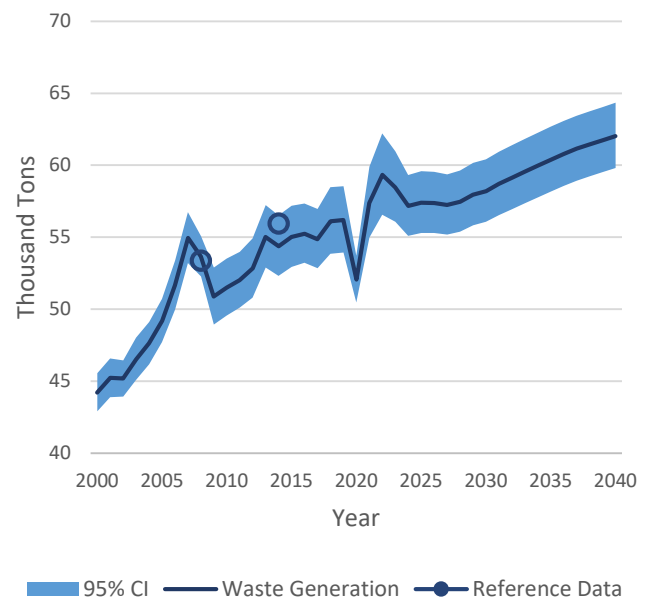
Waste generation estimates and diversion models were constructed by project consultant UIC and were based on 2019 five-year U.S. Census data, Regional Economic Models Inc. (REMII) employment, and population data projections within Boone and Winnebago Counties.<sup>ii</sup> Practitioner verification also supported data validation efforts. More information on UIC's methodology can be found in Appendix E. This data was vital to inform goals, recommendations, and implementation steps for the Plan.

## Waste Generation in Boone County

Waste generation rates in Boone County have increased overall from 1990 to 2020. Waste generation rates decreased during the Great Recession of 2007-2009, but rose again after 2010. During the Great Recession, many Americans had less disposable income and manufacturers were also reducing production.<sup>iii</sup> Research compiled from the U.S. EPA suggests that waste generation rates decreased partly due to less production and consumption of goods. Given the amount of current facilities and practices, waste generation rates are expected to increase over time, as noted in Figure 4-1.

Boone County's fluctuations in waste generation rates for paper, metal, glass, plastic, and food are overall comparable to Winnebago County's rates, though waste generation rates in Boone County changed slightly more each 10-year period compared to Winnebago County. Those differences related to Boone County are largely a result of population and employment increases. Paper waste generation rates per capita decreased in a significantly shorter period compared to Winnebago County. The rural nature of Boone County suggests that fewer variables impact waste generation compared to Winnebago County, which could explain the rapid decrease of paper generation, and overall less stable generation rates. Plastic and metal waste generation rates per capita are comparable between the two counties, but waste generation rates per capita for organics in Boone County fluctuated more between 2005 and 2010 in comparison to Winnebago County.

**Figure 4-1. Boone County Waste Generation Volumes**

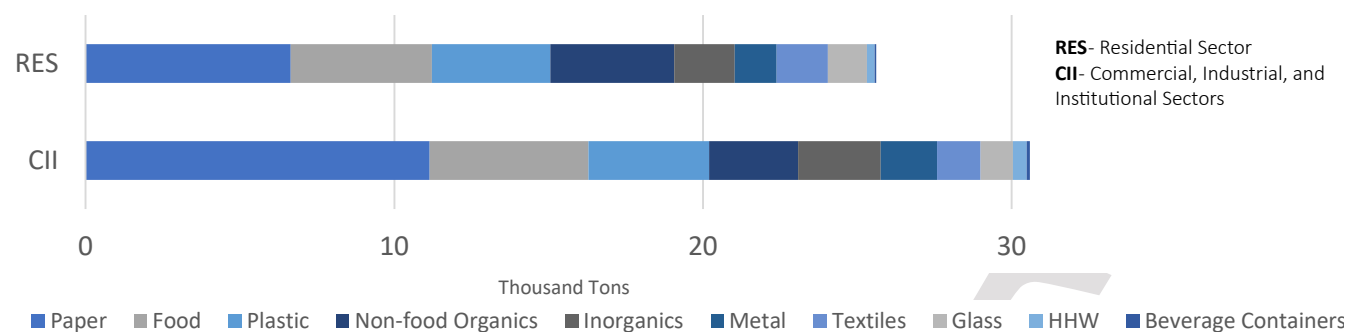


Source: Ning Ai, PhD- UIC 2021

## Local Waste Stream Impacts

The majority of waste generated in Boone County is from Commercial, Industrial, and Institutional (CII) sectors. Though not a part of MSW, waste from agricultural farming practices and leading employers (such as area manufacturers and the local public-school district) impact waste streams in Boone County. Since 83 percent of land is used for agricultural production within the County, this may contribute to the slightly larger share of non-food organics in comparison to Winnebago County's waste stream (which has more yard waste).<sup>iv</sup> Other waste stream impacts associated with agricultural land use and farming are animal waste and crop residues.<sup>v</sup>

**Figure 4-2. Boone County Waste Generation Volumes by Material (2019)**



Source: Ning Ai, PhD- UIC 2021

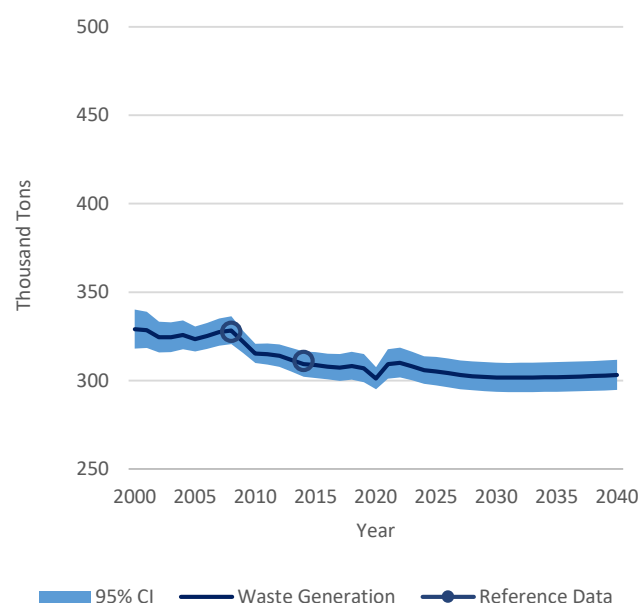
Large area employers in the manufacturing sector also influence waste composition. Employers are directly affected by economic shifts like the global microchip supply shortage.<sup>vi</sup> As a result, some employers had to reduce or shut down operations, which changed the overall composition and volume associated with CII waste streams.

## Waste Generation in Winnebago County

Overall, per capita waste generation in Winnebago County has declined since the 1990s with minimal fluctuations.<sup>vii</sup> The highest waste generation volumes occurred between 2005 and 2010. The volume of waste has steadily declined from 2010 to 2020, but is projected to stabilize for the next 20 years with current management practices and infrastructure. UIC's projected data by material type show that paper, metal, and glass waste generation rates are declining. However, food and plastic waste quantities are increasing. The rise of personal computers and other technology has contributed to the significant decrease in paper's waste generation rate since the 2000s.<sup>viii</sup>

Plastic waste generation has increased over time because the material is a cheaper, versatile alternative to traditional material choices such as glass or wood. Cost and flexibility make the material an attractive choice for manufacturers, thus increasing the amount of plastic used in material production.<sup>ix</sup>

**Figure 4-3. Winnebago County Waste Generation Volumes**



Source: Ning Ai, PhD- UIC 2021

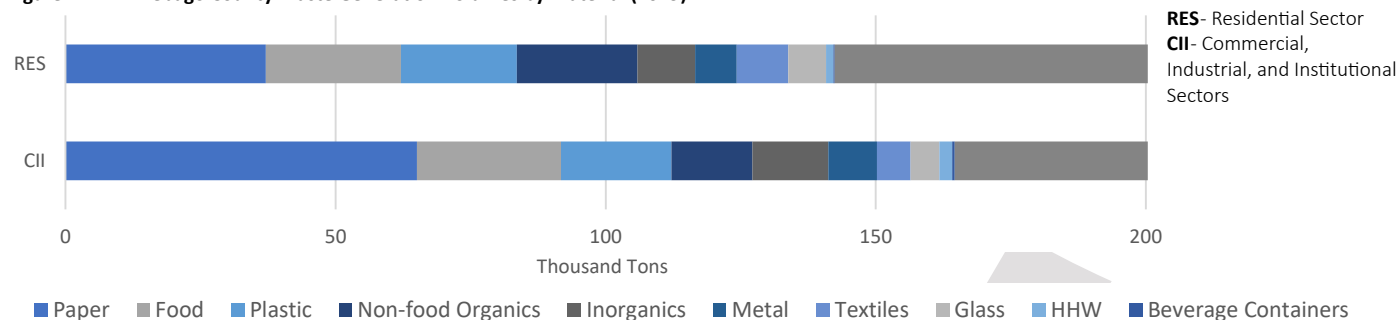
## Local Waste Stream Impacts

Local employers, global supply-chain shortages, and the COVID-19 pandemic are just a few elements that impact the composition of Winnebago County's local waste streams. The County has significant industrial roots, which are still evident today. The area has a mix of industrial employers, while also indicating trends of de-industrialization. De-industrialization can result from market changes, technological developments, and economic shocks, affecting which industries operate within the County and subsequently the composition of local waste streams. The largest employment sectors are education, healthcare, and the automotive industries. Food waste from large educational institutions significantly contribute to local waste streams, as these places accommodate thousands of students and employees. Additionally, the healthcare industry affects the composition of waste, as medical waste has higher regulatory disposal requirements and surges are subject to health emergencies. Similar to Boone County, local manufacturing plants also affect the waste stream when economic shifts occur.

## Overall Diversion Rate Estimates

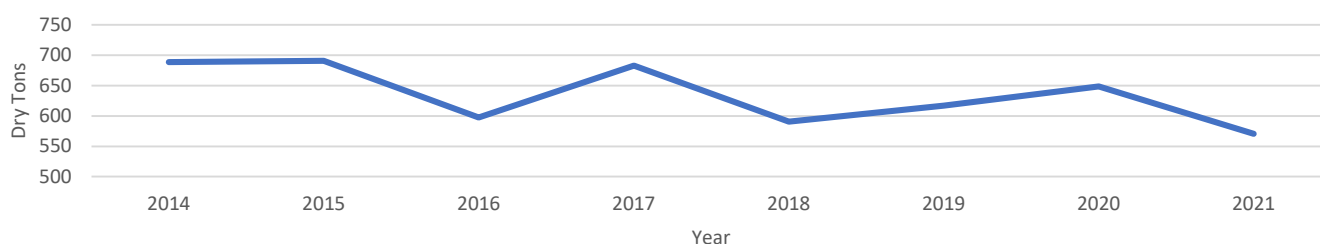
The 2019 baseline model estimates an overall waste diversion rate of 18.2 percent across both counties. Currently, household hazardous waste (HHW) is the most diverted material type for the CII sector, as entities must adhere to legislative and workplace safety standards. Inorganic materials and paper respectively rank second and third for diversion rates. Non-food organics (such as yard waste, dirt, or leaves) were the most commonly diverted materials for households, followed by HHW and inorganics (such as E-waste or tires). These findings are supported by existing collection programs that target materials within these categories, in addition to curbside recycling services.

**Figure 4-4. Winnebago County Waste Generation Volumes by Material (2019)**



Source: Ning Ai, PhD- UIC 2021

**Figure 4-5. Belvidere Sewer Treatment Plant Annual Dry Tonnage 2014-2021**



Source: City of Belvidere

## Wastewater

Wastewater is an important waste stream to consider, as similar items can be found in comparison to the dry municipal waste stream such as food, paper, or flushable wipes. Moreover, it is important to account for this waste stream, as communities and the environment continually interact with wastewater, whether as inputs or outputs. The same factors (such as local employers, public health, or supply chains) can also influence the composition of local wastewater.

Wastewater, or used water, is routed from the built environment through utility pipes to be treated and released back into natural water systems. The used water is typically split into two categories: sanitary and stormwater. Due to water running over impervious surfaces, runoff from natural precipitation captures and carries a variety of pollutants. Stormwater is directed to street drains via elevation, routing the stormwater to be treated.<sup>x</sup> Sanitary wastewater is water used from common household sources (sinks, toilets, bathtubs, washing machines, dishwashers, etc.). This water is often treated for contaminants such as food particles, urine, and feces. Depending on the coverage area, wastewater treatment plants treat water from both categories, preventing many contaminants from re-entering local drinking water systems. Dry tonnage rates calculate the dry weight of sewage sludge (the residue generated during the treatment of domestic sewage), illustrating how much waste is handled throughout a given time period.<sup>xi</sup> A range of elements influence sludge production rates, including public health emergencies,

weather, human habits, and cultural behavior. Significant, long term shifts in usage patterns affect which infrastructure is used and how often, consequently affecting maintenance and capacity. In addition to dry tonnage, water quality may provide insights concerning the effectiveness of an area's disposal process and waste diversion programs.

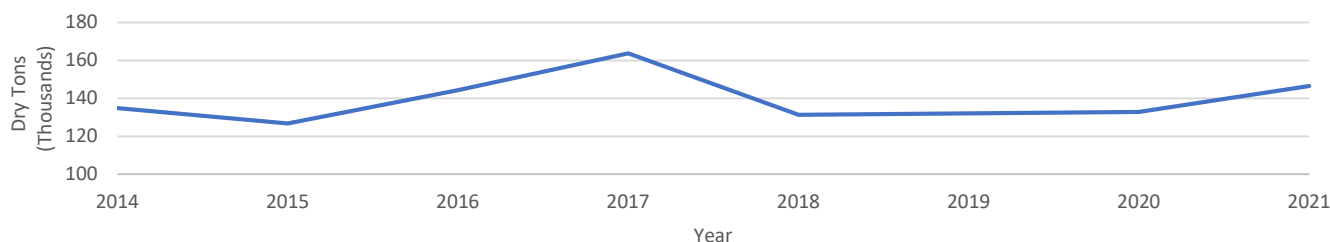
## Boone County

The Belvidere Sewer Treatment Plant within Boone County routes treated water to the Kishwaukee River and Upper Rock River watersheds. The facility uses a secondary digester to heat up and break down waste separated from the water. The fertilizer produced from the separated waste is then donated to local farmers. Annual dry tonnage rates have remained somewhat consistent the past eight years, with an overall declining trend in volume with a fluctuation of approximately 120 dry tons. Approximately one third of the produced sludge is landfilled.

## Winnebago County

The largest water treatment facility in Winnebago County, Four Rivers Sanitation Authority (FRSA) serves 240,000 community members across almost 100 square miles.<sup>xii</sup> Over 1.5 billion gallons of treated wastewater flows back into the Rock, Kishwaukee, Pecatonica, and Sugar Rivers each year.<sup>xiii</sup>

**Figure 4-6. Four Rivers Sanitation Authority Annual Dry Tonnage 2014-2021**



Source: Four Rivers Sanitation Authority

This facility captures the methane gas produced from the water purification process to fuel 70 percent of its daily processes. The solid waste byproduct from this same process is transformed into a biosolid fertilizer used by local farmers. Dry tonnage rates from 2014 to 2021 have increased slightly overall, with the most dramatic increase occurring from 2015 to 2017.

## Economic, Environmental, & Social Impacts

This subsection explores the environmental, economic, and social impacts the regional solid waste management system has on the Rockford Region. Identification of possible and measured impacts is the first step towards mitigation, and in turn will support a system that provides equitable and sustainable waste management.

### Economic Impacts

Regional solid waste management systems and infrastructure impact the local economy in many ways. Solid waste management systems can create a significant number of reliable, diverse employment opportunities. Landfills, recycling facilities, transfer stations, and waste collection are sources of employment for individuals of varying skill sets and education levels. Implementation of Waste-to-Energy (WTE) energy technologies at new or existing facilities also can create local jobs and increase revenue sources.

Proper waste management is essential for an area's economic and environmental resilience. While traditional disposal methods are initially cheaper, many are not sustainable. Once traditional methods are not viable due to limited capacity and environmental concerns, funds must be used to consider other methods. Financing options are context specific and its associated fees (collection fees, host fees, tipping fees, etc.) affect waste management feasibility. For example, the Winnebago Landfill charges tipping fees (paid by those who bring waste to the landfill) to support their business. The Winnebago Landfill charges a tipping fee of \$60 per ton of waste for general refuse that is disposed of on-site. The tipping fee for cement disposal is dependent on the size of the vehicle between the range of \$20 to \$60 per vehicle.<sup>xiv</sup> While the landfill does make profit from tipping fees, there are also fees and taxes the landfill must pay. One example is the host fee, which the landfill pays to Winnebago County per ton of waste that is disposed of at the landfill. These fees are then deposited into a specific host fee fund maintained by the County, where a large proportion is put toward debt service regarding economic development projects in addition to subsidizing some local non-profit organizations.<sup>xv</sup> Some of the major economic developments supported by Host Fee funded grants include the construction of Nicholas Conservatory and Gardens, renovating the BMO Harris Centre, and Rock Valley College's Aviation Maintenance Technology Program.

However, compounding waste management issues can also lead to adverse economic outcomes. Environmental impacts due to improper waste management can require remediation, the efforts of which are often costly. In extreme cases, improper waste management can lead to negative public health outcomes, straining the local workforce and public services.

Areas with visibly poor solid waste management systems may hinder economic development, as the visual nuisance is off-putting to potential investors, developers, and community members.

### The Need for a Circular Economy

Winnebago and Boone Counties currently resemble what is referred to as a linear economy. This is an economic system in which raw materials are used to make products that are subsequently disposed of in landfills.<sup>xvii</sup> This economic system is not sustainable nor economically feasible, especially in the context of projected waste generation rates and landfill capacity. One approach to solve unsustainable waste practices is the development of a circular economy. A circular economy places great value on recycling and reusing materials that have already been manufactured instead of relying solely on raw materials. Strategies for the adoption of a circular economy include reducing dependence on materials that cannot be recycled or reused and encouraging design of products that are reusable, long-lasting, and easy to repair.<sup>xviii</sup> The establishment of a circular economy has the potential to reduce disposal rates, thus increasing the life expectancy of landfills. However, the scalability of a circular economy is limited to area density and resources.<sup>xix</sup> For this reason, a larger, coordinated approach is needed to sustain this effort.

Figure 4-7. Linear Economy

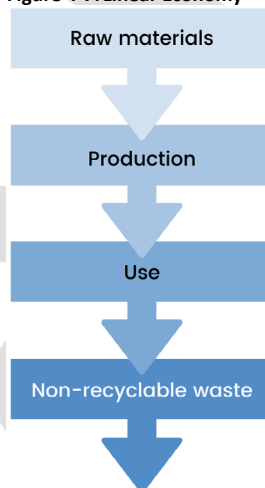
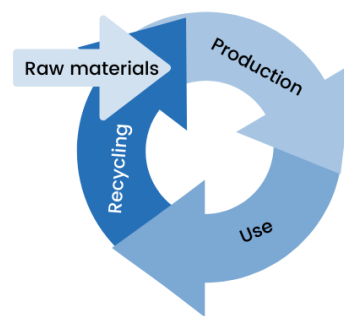


Figure 4-8. Circular Economy



### Environmental Impacts

Having a safe and efficient solid waste management system is imperative for community health and a clean environment. However, even with an organized system, waste can still pose a threat to the environment, the economy, and the community. Identifying the environmental impacts of the solid waste management system can aid in mitigation efforts.

#### Air Quality

Emissions produced by landfills are of great environmental concern because the breakdown of waste releases landfill gases (LFG) into the atmosphere. The chemical makeup of LFG is estimated to be approximately 50 percent methane ( $\text{CH}_4$ ), 50 percent carbon dioxide ( $\text{CO}_2$ ), and a small percentage of other gases.<sup>xx</sup> These other gases can include volatile organic compounds (VOCs), which are known to cause health problems. VOCs are substances characterized by their ability to easily undergo a phase change to a gaseous state due to their high vapor pressure.<sup>xxi</sup> Once in a gaseous state, humans are susceptible to contaminant exposure through inhalation.



VOC exposure can cause irritation of the eyes, nose, and throat, and in extreme cases, even more severe health complications.<sup>xxii</sup> Common objects that contain VOCs are paint, adhesives, and dry-cleaning chemicals, therefore proper disposal of these products is important. Another gas emitted from landfill activities is hydrogen sulfide. This gas is known for its extremely strong and unpleasant odor that resembles the smell of rotten eggs. It has been known to cause irritation of eyes, nose, and throat, and nausea.<sup>xxiii</sup> Methane and carbon dioxide are categorized as greenhouse gases (GHGs), which are major contributing factors in climate change. Methane and carbon dioxide act as an insulator of solar radiation. While some insulation is necessary to keep the earth at a habitable temperature, anthropogenic activity has created an overabundance of GHGs in the atmosphere.<sup>xxiv</sup> Methane in particular is of great concern due to its effectiveness as a GHG. Compared to carbon dioxide, methane is 28 to 36 times more effective at trapping in atmospheric heat over a 100-year period.<sup>xxv</sup> Municipal landfills are the third greatest anthropogenic contributors to methane in the atmosphere.<sup>xxvi</sup> In addition to emissions from landfills, air quality is also impacted by the waste transportation network. The large vehicles used routinely to transport waste and recyclables are mobile sources of air pollution.

## Hazardous Waste

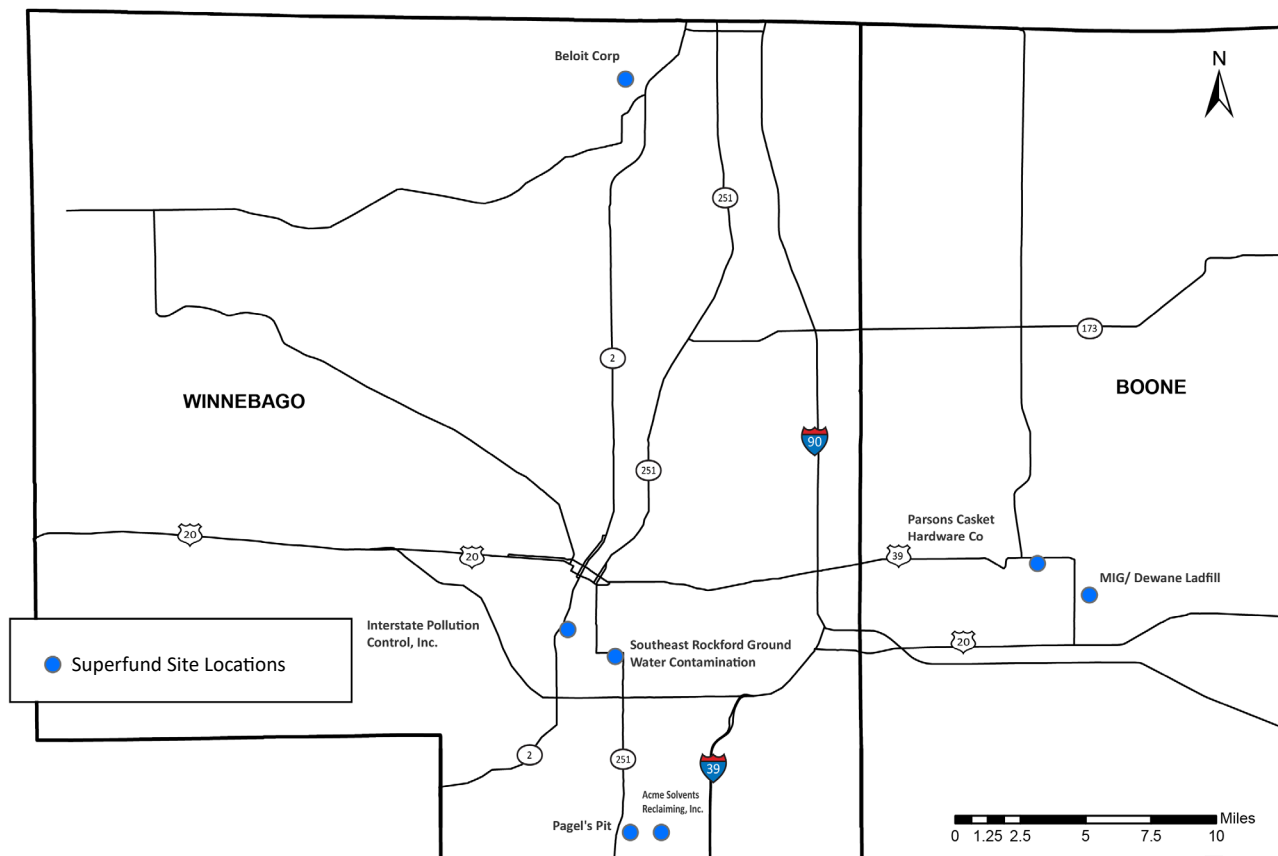
Hazardous waste must be disposed of in the appropriate manner for the safety of the sanitation workers, the community, and the environment. This is applicable for commercial, manufacturing, and even municipal waste. A substance is considered hazardous waste when it is no longer being used and poses a risk to human health and the environment.

Hazardous waste can be categorized as corrosive, toxic, reactive, or flammable.<sup>xxvii</sup> Proper handling and disposal of hazardous waste is of great importance. Even everyday household items can pose a risk. HHW includes substances such as paint, batteries, motor oil, and cleaning chemicals. Such substances should be disposed of at designated HHW drop off centers. Even so, disposal of HHW may be difficult to monitor and enforce, and individuals may be unaware of the proper way to get rid of household waste. As a result, this waste may end up in municipal trash, washed down the drain, or left outside.<sup>xxviii</sup> This can be dangerous in the short term for sanitation workers, plants, and animals that may be exposed, and long term for the local community and environment. It also has the potential to damage multiple aspects of the solid waste management system, such as waste water treatment plants and septic systems.

## Superfund Sites

Landfills and other waste sites impact the environment long after operations close. Routine monitoring is conducted at inactive landfill sites for at least 30 years after closing, as they still pose a risk to air and water quality. The Comprehensive Environmental Response Liability and Compensation Act (CERCLA) established regulatory guidelines for abandoned hazardous waste sites, referred to as Superfund sites.<sup>xxix</sup> These sites are located all across the country, including in the Rockford Region. Boone County has three Superfund sites, and Winnebago County has six.<sup>xxx</sup> It is important to continue the monitoring and remediation of these sites for environmental and public health purposes. Additionally, consistent monitoring and record keeping ensure these areas can have a second life as a community asset when safe to do so.

Figure 4-9. Superfund Sites in Boone & Winnebago Counties



Source: EPA Superfund Database





An example of illegal dumping (used tire).

## Illegal Dumping

Illegal dumping occurs when waste is disposed of inappropriately without regard to policy or law. This issue can take many forms, and the unauthorized disposal of waste can pose a threat to the environment and the community. Some illegally dumped waste might have hazardous properties such as high flammability or corrosivity, and people or wildlife may be harmed if they accidentally came into contact with it. Other items such as large furniture, appliances, and tires may be an eyesore when dumped illegally, and in severe cases can also result in a drop in local property value.<sup>xxxix</sup>

## Per- and Polyfluoroalkyl Substances (PFAS)

Per- and polyfluoroalkyl substances (PFAS), referred to as “forever chemicals,” are a group of man-made chemicals, some of which have been determined to cause adverse health effects. These substances have been utilized in commercial, industrial, and home settings. The production and disposal of PFAS is regulated by the government, however they are still under-regulated in regards to the contamination that is already present in the environment. The detrimental nature of PFAS has been known for decades, yet as of 2021, they are still not listed as federal drinking water contaminants. Fortunately, the EPA has shifted its focus towards regulation and remediation of PFAS with their recently developed “PFAS Strategic Roadmap.” Implementation will result in increased polluter responsibility, additional scientific research, and the inclusion of drinking water regulations for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS).<sup>xxxix</sup>

PFOA and PFOS are especially hazardous PFAS and are no longer produced in the United States. PFOA and PFOS are man-made industrial compounds; their ability to repel water was utilized for water and stain proofing of multiple materials, nonstick cookware, and fireproofing.

Although these two substances are no longer manufactured in the United States, products containing PFOAs and PFOS can still be imported into the U.S. from other countries in addition to impacting the environment through their persistence.<sup>xxxiii</sup>

PFAS may be present in many common products, including household cleaning, personal care, and food preparation products. The disposal of such products into landfills can contribute to groundwater contamination through mixing with untreated landfill leachate. Due to its tendency to persist not only in water and soils but also in living organisms, PFAS remains a grave concern for waste management systems. Consumption of an animal or plant that has been exposed to PFAS is another route of exposure for humans, and these substances bioaccumulate all of the aforementioned.<sup>xxxiv</sup>

## Water Quality

A chief environmental concern in solid waste management is the health of nearby water sources. Both groundwater and surface water are at higher risk of being contaminated by nearby solid waste sites. A combination of waste breakdown and environmental conditions can produce a liquid called landfill leachate. This leachate contains the same contaminants present at the waste site, and it can also leach into nearby groundwater if not handled properly. As groundwater travels downstream, the contaminants do as well.<sup>xxxv</sup> This can threaten the quality of groundwater for both humans and wildlife. Groundwater irrigates crops in rural areas and is also the source of drinking water for Boone and Winnebago Counties.<sup>xxxvi</sup> Groundwater contaminants of concern that originate from landfills include a range of dangerous substances such as heavy metals, bacteria, and PFAS.<sup>xxxvii</sup>

## Social Impacts

The solid waste management systems in Boone and Winnebago Counties provide important services to local communities, but these communities can also be impacted by their operation.

## Human Health

Living in close proximity to a landfill can have adverse impacts on the health and overall wellbeing of a community. Reported health problems associated with landfills are dependent on a variety of factors. Some landfills appear to cause more health problems than others, and even then it may be challenging to identify the landfill as the main cause. Many individuals who live near landfills have self-reported symptoms such as headaches, nausea, fatigue, breathing and stomach problems, and changes in mental state.<sup>xxxviii</sup> Some reported health impacts of landfills and hazardous waste sites are more severe. Low birthrate or birth defects in infants, cancer, and liver problems have been observed in areas with operating landfills.<sup>xxxix</sup> Based on research performed, these occurrences appear to be rare, and it is challenging to prove that a waste site is responsible for these health impacts. The studies may not have taken other variables into account, such as the socio-economic status and healthcare access of those afflicted, showing that more research is needed to better determine the health impacts and outcomes.<sup>xl</sup>

## Equity & Environmental Justice

In addition to lacking access to purchasing sustainable food options, the same groups may be disproportionately affected by the location of solid waste management infrastructure. Individuals and families who are in one or more socially vulnerable groups (low-income, lack of education, marginalized minority groups) are more likely to live near a landfill than less vulnerable populations.<sup>xli</sup> This presents potential issues of equity and environmental justice, as these populations are often the most impacted by the placement of waste management facilities. Landfills can also impact the value of nearby homes. Small landfills can cause the value of nearby houses to drop by approximately 2.5 percent, while larger landfills can drop home value by approximately 12.9 percent on average.<sup>xlii</sup> Those living near landfills may also experience a lower quality of life from related nuisances, such as sight or odor and possible health concerns. Locally, residents also claim that the transport of waste to this site has caused an issue with litter, as some waste occasionally falls from collection trucks and into the surrounding community.<sup>xliii</sup> Additionally, there may be increased traffic and noise attributed to waste hauling, causing further adverse impacts.

### On Landfill Gas Emissions

Landfill gas emissions can affect local air quality by compromising respiratory health and aesthetics.

*Source: Vrijheid, Martine*

Other environmental justice issues related to solid waste management is the affordability of waste disposal, curbside service and drop off center access. Within the City of Rockford, the monthly fee for municipal waste pickup and disposal in 2021 is \$22.06.<sup>xliv</sup>

While this amount does not seem excessively high, it could put stress on households that already have significant financial struggles. Lack of access to affordable and local nontraditional waste disposal can exacerbate the region's ongoing illegal dumping problem. Commonly dumped items such as bulky items, electronics, and appliances have fees associated with disposal. Those who are unable or unwilling to pay these fees may keep materials with additional disposal costs, or dispose of them improperly.

## Local Concerns

The Village of New Milford residents, who are in close proximity to the Winnebago Landfill, have raised concerns regarding the unpleasant odors and loose debris from waste hauling vehicles. In 2010, the site received violations from the EPA for failure to properly maintain the generated landfill gases, including hydrogen sulfide, causing unpleasant odors in nearby areas.<sup>xlv</sup> However, the odor issues still persisted, so in December 2020 a lawsuit was filed by the State of Illinois against Winnebago Landfill Company and Winnebago Reclamation Services Inc.<sup>xlvi</sup>

Some of these concerns were collected from a public survey taken by residents of Boone and Winnebago Counties regarding the regional solid waste management system. This survey allowed residents to state their concerns and impacts of the current solid waste management system. A frequently referenced concern was the air quality near the landfill. Many survey respondents expressed concern about their health as a result of the odors, and one respondent was concerned about groundwater quality.

# Chapter 5: Proposed Material Management Plans

## Introduction Methodology

Methodology for waste diversion modeling is available in Chapter 4: Waste Generation Assessment. The Plan prioritizes materials categories with the largest diversion potential between the 2019 (baseline) and 2027 scenarios. Specific materials within the categories were chosen based on previous and projected generation volumes, diversion method options, and environmental impacts.

### Traditional Materials

These are materials that are collected from generators by waste and recycling haulers typically as part of a regularly-scheduled service. These materials include:

- Residential curbside single-stream recycling, organic waste, and solid waste; and
- Commercial recycling, organic waste, and solid waste.

*Source: Illinois Materials Management Advisory Committee, 2021*

## Traditional Material Diversion Efforts Current Items Recycled

Currently, metal, paper, glass, plastic, and milk/juice cartons may be diverted through unlimited single stream recycling in the following jurisdictions: Belvidere, Caledonia, Poplar Grove, Rockford, Durand, Pecatonica, Cherry Valley, Lake Summerset, Loves Park, Rockton, Roscoe, South Beloit, and the Village of Winnebago.<sup>1</sup> Advanced Disposal, Rock River Disposal, and Gill's Freeport Disposal are the three main haulers that serve the area, (all managed under Waste Management) but additional haulers available include Republic Services, Green for Life, and Veolia. Specific materials accepted by the three main haulers in the Northern Illinois region are:

- Aluminum/tin containers
- Paper and paperboard
- Glass containers
- Plastics #1-5, #7
- Milk and juice cartons

Advanced Disposal offers residential, commercial, and government recycling services. Some of their facilities, including the Rockford location, offer special waste recycling such as industrial foundry sands. Rock River Disposal and Gill's Freeport Disposal offer commercial and residential recycling to customers in the area.

Table 5-1. Bi-County Materials Targeted for Diversion Matrix

Material Group	Current Diversion Rate (2019)		Short Term Goal (2024-2026)		Long Term Goal (2050)	
	Residential Sector	CII Sector	Residential Sector	CII Sector	Residential Sector	CII Sector
<b>Fiber</b>						
Paper	32.20%	39.80%	48.50%	71.10%	90.00%	90.00%
<b>Organics</b>						
Non-food Organics	75.00%	21.60%	75.00%	45.00%	90.00%	90.00%
Food	1.10%	1.10%	50.00%	50.00%	90.00%	90.00%
<b>Plastic</b>	7.00%	6.80%	11.40%	10.30%	90.00%	90.00%
<b>Metal</b>	39.70%	38.30%	57.90%	54.60%	90.00%	90.00%
<b>Glass</b>	22.70%	20.30%	31.30%	27.30%	90.00%	90.00%
<b>Inorganics</b>	42.40%	52.90%	50.30%	65.90%	95.00%	95.00%
<b>Other Inorganics</b>						
HHW	53.10%	53.10%	62.40%	62.40%	95.00%	95.00%
Textiles	16.10%	16.30%	19.10%	19.40%	95.00%	95.00%
Beverage Containers	5.50%	5.50%	6.50%	6.50%	90.00%	90.00%
Participation Rate	85.00%	45.00%	90.00%	70.00%	100.00%	100.00%
<b>Overall Diversion Rates</b>	<b>18.20%</b>		<b>38.60%</b>		<b>90.70%</b>	

Source: Ning Ai, PhD- UIC 2021

Hauler availability by jurisdiction is also available in Table 2-2. Some of the smaller municipalities within Boone and Winnebago Counties such as Capron, Timberlane, and New Milford do not have waste collection information available online.

## Traditional Recycling Efforts

All haulers for Boone and Winnebago County municipalities provide residents with recycling containers. Additional bins are available for an added cost. Rock River Disposal works with Keep Northern Illinois Beautiful to divert a range of traditional materials (excluding cartons) and select non-traditional materials at two collection centers.

### KNIB Recycling Centers

- Rockford Recycle Center: 4665 Hydraulic Road, Rockford, IL 61109: Tuesday 2-5P; Saturday 9A-12P
- Machesney Park Recycle Center: 8409 N. 2nd St. Machesney Park, IL 61115: Wednesday 2-5P; Saturday 9A-12P

*Source: Keep Northern Illinois Beautiful*

## Additional Items to be Diverted

Though all local waste haulers offer recycling services for traditional materials, there is potential within Boone and Winnebago Counties to increase collection and diversion rates. In the commercial, industrial, and institutional (CII) sector, paper, metal, and glass materials have the largest gaps between diversion potential and current estimated rates. Metal is the least diverted material in the residential sector, followed by paper and glass. Waste education and outreach, policy changes, and community partnerships can collectively increase diversion efforts.

## Recommendations

The following recommendations support increased diversion rates for paper, metal, and glass in order to achieve a traditional materials diversion rate of 85 percent by 2042. Incremental goals at five and 10 years are also established for evaluative purposes.

**Rec. 1.** Promote recycling amongst commercial, institutional, and industrial sectors.

**Rec. 2.** Promote education on waste minimization and proper recycling through public campaigns

**Rec. 3.** Consider ordinances to increase commercial, industrial, and multifamily recycling.

# Non-Traditional Material Diversion Efforts

## Non-Traditional Materials

Non-Traditional Materials include materials managed through programs provided by local governments or by private sector collectors. These materials include batteries, bikes, books, construction & demolition (C&D) recycling and solid waste, confidential documents, electronics, fluorescent tubes and bulbs, household hazardous wastes (HHW), paint, polystyrene, scrap metal, scrap wood, shoes, textiles, tires, tools, and other hard-to-recycle materials.

*Source: Materials Management Advisory Committee*

## Current Items Recycled

Non-traditional recycling materials include but are not limited to electronics, hazardous waste, and construction and demolition debris. HHW addresses many of the non-traditional recycling materials and therefore is the main focus of this subsection. There are several options for the collection of HHW in the region, such as Boone County's Administrative Campus, Rockford Disposal Center Hazardous Waste Site, Rock River Valley Compost, Paper Recovery Service Corp., Cimco Resources Inc., KNIB Rockford and Machesney Park Recycle Centers, and private haulers such as Rock River Disposal and Advanced Disposal. Some local big box stores also have programs that accept electronic waste such as Best Buy, Costco, Target, Staples, and Walmart.

Boone County has a HHW collection location at their administrative campus in Belvidere, and Winnebago County collects HHW at the City of Rockford's Household Hazardous Waste Disposal Center. These locations accept the following items listed below:

## HHW Locations and items accepted

### Boone County Administrative Campus

- Oil-Based Paints
- Household Batteries
- Used Motor Oil
- Paint Thinners
- Herbicides
- Lawn Chemicals
- Insecticides
- Solvents
- Pesticides
- Antifreeze
- Old Gasoline
- Hobby Chemicals
- Pool Chemicals
- Aerosol Paints and Pesticides
- Cleaning Products
- Fluorescent Lamp Bulbs
- Mercury
- Drain Cleaners
- Acids
- Corrosives
- Unwanted Medications (excludes Controlled Substances)



## Rockford: Household Hazardous Waste

- Adhesives
- Aerosol Cans
- Antifreeze
- Arts & Crafts Paints
- Asbestos (caulk/roofing tar/paint)
- Asbestos tiles or shingles
- Auto Body Filler
- Auto parts
- Automotive fluids & fuels
- Batteries (Nickel-Cadmium, Lithium-Ion, Lead-acid)
- Body putty
- Brake Fluid
- Car & chrome polish
- Car cleaners
- Carburetor cleaner
- Caulks
- CFL (compact fluorescent light) bulbs & tubes
- Charcoal
- Cleaners/Cleaning products, solvents, wipes
- Coolant
- Concrete sealant
- Craft & hobby chemicals
- Diesel fuel
- Dish soap
- Drain cleaners
- Driveway sealant
- Engine Degreaser
- Epoxies
- Fertilizers
- Flammable liquids – in properly marked containers
- Florescent Tubes/Bulbs
- Freon in aerosol cans (R-11, R-34a)
- Fuel and oil additives
- Fuel injector cleaner
- Fungicides
- Garden chemicals
- Gasoline
- Glues
- Grease and rust solvents
- Herbicides lawn chemicals
- Household batteries (nickel-cadmium, nickel-metal hydride, lithium-ion, lead-acid)
- Household cleaners
- Insecticides
- Kerosene
- Lacquers and stains
- Lamp oil
- Laundry detergent
- Lawn and garden products
- Light bulbs
- Mercury – thermometers, thermostats
- Mercury – metallic liquid, solids
- Mineral Spirits
- Naval jelly
- Ni-Cad Batteries (Nickel-Cadmium, rechargeable)
- Oil, automotive
- Oil, based paints (alkyd)
- Paint- oil-based only (no Latex paint)
- Paint Strippers/Paint Thinner
- Peanut Oil
- Pesticides (residential size)
- Photo Processing Chemicals
- Pool Chemicals/Additives/Chlorine
- Radiator fluids
- Rechargeable batteries
- Resins, fiberglass & epoxy
- Roach and Ant killer
- Rodent Poisons
- Roofing tar
- Rubber cement & thinner
- Shampoo
- Skin lotions
- Soil fumigants
- Starter fluids
- Thermometers (mercury)
- Thermostats (mercury)

## Keep Northern Illinois Beautiful

- Appliances with refrigerant
- Auto or Marine Batteries

## Rock River Disposal

- Asbestos
- Non-toxic fry ash
- Non-toxic foundry sand

## Advanced Disposal

- Paints
- Motor oil
- Fertilizers
- Fluorescent light bulbs
- Aerosol cans
- Batteries
- Cleansers
- Insecticides

## Additional Items to be Diverted

It is important for households and businesses to be able to safely dispose of waste generated. There is a need for better waste collection of hard-to-recycle materials such as fire safety materials, automotive materials, and commercial debris. In the September 2021 public meeting and Solid Waste Management Survey, community members expressed that televisions, paint, and general electronics were among the most difficult items to divert from the landfill. Additional items identified to increase diversion rates are E-waste (such as televisions, mobile phones, and computers), polystyrene foam, tires, and paint. These items should be the main focus in diversion efforts due to the current lack of waste management infrastructure, environmental impacts, economic value, and system gaps.

## Recommendations

Non-traditional material diversion recommendations range from policy changes, public collection events, and programming to achieve high level diversion goals.

- Rec. 1.** Sponsor one day events and or drop off locations for non-traditional materials.
- Rec. 2.** Monitor legislative actions for opportunities targeting special recycling efforts.
- Rec. 3.** Promote the reduction and proper disposal of non-traditional materials.
- Rec. 4.** Prioritize and explore methods of diverting frequently landfilled or hard-to-recycle items.

# Organics Material Diversion Efforts

## Organic Materials

Organic material is any material that is biodegradable (can be broken down into carbon dioxide, water, methane, or simple organic molecules by microorganisms and other living things) and comes from either a plant or animal.

Source: Illinois Materials Management Advisory Committee

## Current Items Recycled

Currently, residential organic waste disposal is limited to yard waste collection through Rock River Valley Compost, Garden Prairie Organics, and several municipalities. There are no opportunities for residents to drop off food waste within Boone and Winnebago Counties.

## Additional Items to be Diverted

There are many additional organic materials that can be diverted from the landfill. Food scraps and yard waste make up roughly 30 percent of the waste stream, and the most common way to divert organic waste from landfills is by composting.<sup>ii</sup> Creating a curbside organic waste collection for compost could decrease the amount of food waste and other organic materials that end up in the landfill. Compost is a nutrient rich soil that can be used for gardening or agriculture.

## Recommendations

Organics material recommendations largely center around increased diversion rates for food waste, as infrastructure for non-food organics (yard waste collection) is relatively established. Though diversion efforts are important, some strategies involve source reduction efforts, such as reducing initial food excess and providing cost savings for businesses, consumers, and waste industry leaders through infrastructure.

- Rec. 1.** Promote greenscaping and home management of yard waste.
- Rec. 2.** Coordinate with neighboring jurisdictions for seasonal composting events.
- Rec. 3.** Evaluate the feasibility of a local food scrap collection and compost program.
- Rec. 4.** Evaluate the feasibility of voluntary or mandated food scrap composting programs.
- Rec. 5.** Develop opportunities for pre- and post- consumer food recovery.

## Materials to Target for Diversion (2027)

Existing waste management infrastructure shows limited options to divert plastics, organics and metals within collection infrastructure, yet these materials make up a large portion of local waste streams. While some drop off locations are available, transportation, fees (i.e. televisions/monitors) and limited hours are barriers to participation.

Targeting these materials can amplify local diversion efforts while exploring the larger waste composition from origins outside the two counties. Further analysis must be conducted to account for additional factors such as outside waste entering the community, metrics to assess material amounts by mass (as weight is the current metric), the cost effectiveness and net benefit of specific material diversion in addition to current market conditions.

Table 5-1 displays current diversion rates by material in addition to five, 10-, and 15-year goals. These were formed from UIC's data projections based on population, employment, and historic area data. Refer to Chapter 4 for a more detailed explanation on how diversion potential estimates were calculated and conceptualized. Plastics, food waste, and textiles are specifically targeted categories due to the disparity between the waste stream and diversion rates (refer to table 5-2 for current collection opportunities). These determinations are also supported by lack of generator participation and or programming gaps.

**Table 5-2. Collection Opportunities for Targeted Materials**

Material	Opportunity
Plastic Bags	Meijer, Wal-Mart, Lowes, Target, Schnucks
Beverage Containers	Private haulers, KNIB
Paper	Private haulers, KNIB, Cimco Inc., Boone County Highway Dept.,
TVs, Monitors, E-Waste	Boone County Highway Dept., KNIB
Cleaning Supplies	Boone County Administrative Campus
Medication	KNIB medication drives, Boone County Administrative Campus
Food Scraps	None
Clothing, Household goods	KNIB, Good Will, Mercy House, Salvation Army

## Traditional Materials

Recycling efforts for traditional materials are available through publicly-coordinated curbside recycling for 14 of the 17 municipalities in Boone and Winnebago Counties. Two drop-off centers are available for residents who do not have curbside recycling: Keep Northern Illinois Beautiful (KNIB) Rockford and Machesney Park Recycle Centers.

## Non-Traditional Materials

Disposal options for non-traditional items include:

- Boone County Administrative Campus
- Rockford Disposal Center
- Hazardous Waste Site
- Rock River Valley Compost
- Paper Recovery Service Corp.
- Cimco Resources Inc.
- KNIB Rockford and Machesney Park Recycle Centers
- Private haulers such as Rock River Disposal and Advanced Disposal



## Organics

Rock River Valley Compost, Garden Prairie Organics, and haulers through several municipalities accept yard waste. There are currently no locations in Boone and Winnebago Counties to drop off food waste.

## Plastics

Plastics have many applications and can be found in a variety of common consumer products (both single-use and reusable). Plastic subsequently accounts for a significant portion of waste streams for both sectors and counties (refer to Table 5-1). However, only seven percent of residential plastic and 6.8 percent of CII plastic is diverted from landfills. Local Northern Illinois haulers already accept a majority of these products for recycling, so other barriers and perspectives must be addressed. Plastic products targeted for diversion fall within recycling categories #1-5 and #7. Figure 5-1 shows examples of material within each category.

## Food Waste

Organic waste is the second largest category within each County's waste stream projection, yet there are only yard waste collection programs to account for a portion of this share. This gap indicates an opportunity to divert a large volume of material across many areas.

Additionally, organic waste (including most food and byproducts) is compostable and combustible, which means there is also potential for energy generation.

### Food Waste

Food waste is defined as:







- Leftover Food
- Spoiled Food
- Food Scraps (e.g. peels, rinds, eggshells, nut shells)

*Source: EPA (Sustainable Management of Food Basics)*

## Textiles

Textiles such as used clothing, footwear, sheets, towels, curtains, or carpet can be made from synthetic or natural fibers and have a variety of uses. Synthetic materials such as polyester contain microplastics, which break down during the decomposition process and affect the surrounding environment.<sup>iii</sup> This material category had one of the lowest diversion rates in 2019, yet about 95 percent of reusable household textile products can be reused or recycled.<sup>iv</sup> Additionally, many landfill diversion/reuse opportunities exist for textiles within Northern Illinois, therefore strengthening these existing resources can offer a larger impact at a lower cost (as opposed to creating new infrastructure or programming).

**Figure 5-1. Material Types and Examples**

1	2	3	4	5	7
<b>PETE</b>	<b>HDPE</b>	<b>PVC</b>	<b>LDPE</b>	<b>PP</b>	<b>OTHER</b>
Polyethylene terephthalate	High-density polyethylene	Polyvinyl chloride	Low-density polyethylene	Polypropylene	Other plastics including
Soft drink bottles mineral water fruit juice containers and cooking oil	Milk jugs, cleaning agents, laundry detergents, bleaching agents, shampoo bottles, washing and shower soaps	Trays for sweets, fruit, plastic packaging (bubble foil) and food foils to wrap the foodstuff	Crushed bottles, shopping bags, highly-resistant sacks and most of the wrappings	Furniture Luggage Toys Bumpers, Lining, and External borders of cars	acrylic, poly-carbonate, polyactic fibers, nylon, fiberglass
					

Source: World Economic Forum 2016

## High Level Diversion Goals

After a detailed analysis, plastics, textiles, and food waste have been identified as targeted materials. Prioritizing material-specific recommendations for the next reporting cycle is essential to achieve the following high-level diversion milestones. These recommendations were formed with local context in mind and also by observing potential opportunities and suggestions from Illinois' Materials Management Advisory Committee (MMAC).

**Goal 1.** Achieve a 95% non-traditional materials diversion rate by 2042

**Goal 2.** Achieve an overall 85% Traditional Materials diversion rate by 2042

**Goal 3.** Achieve an 85% organics diversion rate by 2042

**Figure 5-2. Specific Items to Target for Diversion**



## Disposal Efforts Facilities for Disposal

Solid waste in Boone and Winnebago Counties that is not diverted ends up in one of the seven landfills in Region 1 in addition to neighboring landfills.

The region's proximity to two densely populated locations make solid waste infrastructure all the more critical, as more than just Northern Illinois residents depend on it for disposal. Though impact data for waste origins is not available, the IEPA's 2021 Landfill Disposal Capacity Report shows that the region's average landfill life expectancy is the second lowest, despite having the most remaining capacity by far.

# Chapter 6: Public Education & Outreach

## National Efforts

At a national level, many federal programs and opportunities for public solid waste education are primarily for school boards, educators, and higher education students and graduates. The end result tends to be a wide selection of strategies and findings that can generally be utilized equally among institutions.

## U.S. Environmental Protection Agency

The 1990 National Environmental Education Act requires the U.S. Environmental Protection Agency (EPA) to provide national leadership to increase environmental literacy. This act establishes the Office of Environmental Education, an Environmental Education and Training Program, Environmental Education Grants, and Environmental Internships and Fellowships.

### Office of Environmental Education

The EPA website defines environmental education as a process that allows individuals to explore environmental issues, engage in problem solving, and act to improve the environment.<sup>i</sup> Rather than advocating a particular course of action, environmental education shows individuals how to weigh perspectives on environmental issues through critical thinking. The Office has an environmental education coordinator and initiatives for each of the 10 EPA regions. Each regional office develops and supports environmental education efforts for their region, with coordinators who award grants, train environmental professionals to develop and deliver environmental education programs, as well as work in partnership with nonprofit organizations and educational institutions.<sup>ii</sup>

### Environmental Education & Training Program

Through the National Environmental Education and Training Program (NEETP), the EPA supports environmental education and training for teachers and other educational professionals. Each iteration of NEETP varies in specific activities and methodologies, but includes mandated functions and activities as part of their overall program. Some of those mandated activities include:<sup>iii</sup>

1. Delivering in-service educator training that builds on existing quality Environmental Education (EE) programs.
2. Delivering pre-service educator training that enables student teachers and faculty in education departments at colleges and universities to effectively include EE in their teaching.

3. Developing, promoting, and/or providing training on the national EE Guidelines for Excellence, which seek to improve the quality of EE. Supporting state “infrastructure” that enables educators to effectively teach about environmental issues (referred to as “state capacity building”).
4. Developing and institutionalizing a materials review process that identifies, evaluates, and promotes quality EE materials.
5. Supporting accreditation efforts to include EE in college and university teacher preparation programs.
6. Supporting states in developing their own environmental educator certification programs.
7. Facilitating access to EE information and materials online by expanding and enhancing existing resource centers.

### Environmental Education Grants

Each EPA Region provides local grants annually to applicants that represent a local or state education agency, university, non-profit organization, noncommercial educational broadcasting entity, or tribal education agency. Since 1992, the EPA has distributed between \$2 and \$3.5 million in grant funding per year for a total of more than \$85 million.<sup>iv</sup> A majority of grant funds have been awarded to non-profit organizations, universities, schools, school districts, and school boards.<sup>v</sup> Most environmental grants are geared towards addressing issues with general educational literacy, water, and biodiversity.

### EPA Region Five 2020 Grantee Projects Illinois

#### *Environmental Education Association of Illinois*

Earth Force Illinois is a two-year train-the-trainer effort where the Environmental Education Association of Illinois (EEAI) will develop the capacity to train and support urban and rural educators throughout Illinois in the use of the Earth Force Process. Participants will learn, model, and practice Earth Force’s six-step process with an emphasis on building youth-adult partnerships, encouraging critical thinking, accessing community resources, approaching stakeholders, and planning and celebrating action. After attending a train-the-trainer workshop, participants will host their own educator workshops, further amplifying the reach of this project. Trained educators will facilitate student-led investigations of environmental issues and the development of action plans to address those issues, with an estimated 250 students. This project will provide 85 K-12 educators with training in what is now known to be some of the most critical steps in the environmental education process when trying to develop an environmentally responsible public.

## Michigan

### *Central Michigan University*

H2O Q: Science Based Environmental Education engages teachers, community organizations, and corporate and public partners in experiential field science to help students measure water quality parameters and scientifically analyze and critically apply this data to a local issue affecting the Great Lakes. One teacher leader and one community/environmental leader from five subaward partners throughout Michigan will come to the Central Michigan University (CMU) Biological Station and engage in hands-on learning using the H2O Q kit. Leaders, along with CMU experts will train an additional 40 to 60 middle school teachers with a reach of over 4,000 students in research around water quality issues within their communities. By using the kit to measure the chemistries of water quality, students will gain scientific literacy in issues affecting the Great Lakes region. The overall goal of this project is to educate middle school science teachers and equip them with the critical skills and resources to become effective environmental stewards.

### *Trout Unlimited*

Connecting communities to their local water resources is important to the Great Lakes Region to help protect the largest surface freshwater system on Earth. The goal of expanding Trout Unlimited's (TU) STREAM Girls Program is to educate more than 275 girls, 35 partners and volunteers, and 1,000 community members across Michigan in water quality issues. Project participants will learn to investigate streams, document their findings, and become environmental stewards by designing and implementing projects to protect water quality. TU will work with partner organizations to deliver STREAM Girls at outdoor locations in the Lower Grand River, Detroit River, and Rouge River Watersheds. By reaching audiences from three of Michigan's top five most diverse counties, this project will provide outdoor and informal education opportunities to girls who have not typically participated in these types of activities, giving them a new perspective on science.

## Wisconsin

### *Neighborhood House of Milwaukee*

The goal of the Renew-Recycle- Reclaim (3R) project is to increase access to environmental science education and meaningful conservation activities for more than 1,000 low-income, urban youth of color, ages six to 19 who live in and around Milwaukee, Wisconsin. After receiving training on invasive species identification, integrated pest management, wetland and forest monitoring and surveying, and lesson plan writing, paid interns will implement environmental education activities at local schools and lead field trips to nature centers and local and state parks. Program's interns will lead students in interactive educational sessions using established curricula paired with corresponding stewardship activities, such as building pollinator gardens, wetland species monitoring and bio-blitzes. This combination of lessons and activities will give students multiple opportunities to put what they have learned into practice. The 3R program will strive to create diversity for the natural resources field, starting with elementary school students and impacting youth into postsecondary school.

### *University of Wisconsin-Madison*

The University of Wisconsin-Madison Arboretum and its project partners will work with leaders and residents in the Lake Wingra Watershed to minimize the harmful effects of stormwater that flows from urban land into lakes and rivers. The Water Action to Encourage Responsibility project will engage 15-20 leaders – “social trailblazers” – composed of individuals and policymakers. Outreach will be conducted using custom toolkits, online training, a website and community events. This project will provide a model for community engagement in pressing environmental issues and document how neighborhood-focused efforts can make a difference. By empowering leaders within targeted neighborhoods, this project aims to prepare local communities to address challenges related to the harmful effects of stormwater runoff. The lessons learned and the materials developed during the project cycle will be transferable to watersheds throughout the country. In total, this project aims to reach more than 6,500 local residents.

## Environmental Internships & Fellowships

The EPA offers paid and unpaid internships for post-secondary or graduate students. The EPA utilizes a pathways program which consists of an internship program, recent graduates program, and a Presidential Management Fellows Program.<sup>vi</sup> All pathway programs are paid and are available to those lawfully permitted to the U.S. as a permanent resident or otherwise authorized to be employed. The EPA also offers an unpaid volunteer position for students interested in learning more about the EPA. These internships allow for opportunities to explore waste and waste reduction strategies.

## WasteWise Tool

Information on topics such as sustainable procurement, composting, and recycling can be found using EPA resources like the WasteWise tool. This tool helps businesses, local governments, and nonprofit organizations track recycling and waste reduction practices at various levels of involvement. Once the annual data is submitted, some organizations are recognized as award winners for their leadership in waste management and environmental stewardship.<sup>vii</sup> This program also provides technical assistance and reduces waste related purchasing and disposal costs for organizations and businesses, allowing for networking and information sharing at the same time.

## U.S. Department of Agriculture

The U.S. Department of Agriculture offers several programs, such as GreenSchools and The Children and Nature Initiative, that include providing education on the benefits of waste reduction and solid waste management. The department hosts a Conservation Education website, which provides the details of each program as well as additional educational material for educators and students.<sup>viii</sup>

## GreenSchools

GreenSchools teaches educators how to integrate environmental education into their curriculum, conducting a “GreenSchools! Investigation” of a site's use, waste and recycling, water assessment, energy, and environmental quality, and complete “GreenWorks!” service learning projects based on their results.<sup>ix</sup> Grants will be awarded to schools to implement the action plans they developed during investigations.



## U.S. Department of Education Green Ribbon Schools

Awarded by the U.S. Department of Education, Green Ribbon Schools are recognized for their efforts to reduce environmental impact and costs, improve the health and wellness of students and staff, and provide effective environmental and sustainability education.<sup>x</sup> The award allows a small number of honorees each year to show how all schools can employ similar practices and utilize resources. Selected schools, school districts and institutions of higher education (IHE), are announced each spring. Awardees receive a plaque, media attention, and state recognition, as well as private sector cash prizes that are encouraged by the Department of Education.

### Green Strides

Launched by Green Ribbon Schools, Green Strides is an effort to connect all schools with the resources used by honorees.<sup>xi</sup> Annual reports show replicable practices, newsletters and social media posts share additional resources and practices, and an annual Green Strides tour brings further attention to the honorees and their best practices, some of which can pertain to waste reduction and diversion.

## State & Regional Efforts

Guides and educational reference material are common resources at the state and regional level. There are less avenues for funding at this level compared to the national level, and resources and recommendations are less generalized and more specific to the needs and context experienced within the region.

## Illinois Environmental Protection Agency

The Illinois Environmental Protection Agency (IEPA) has some of the best regional resources for solid waste management public education for Northern Illinois residents. Other county agencies, whose materials are available online, are good sources of waste guidance outside of Boone and Winnebago Counties' jurisdictional boundaries.

The IEPA, a subsidiary of the federal EPA, offers public education on beneficial sustainability practices, land pollution, and waste disposal, as well as maps to the nearest sites for household hazardous waste. Although the majority of research and data is collected at a state level, items such as the Waste Management Fact Sheet are still relevant at a regional and local level. The IEPA website also publishes region-based landfill reports, providing additional transparency for residents interested in the capacity and disposal volume of their respective landfills.

### Environmental Pathways

The IEPA has partnered with the University of Illinois Urbana-Champaign to create new science curricula for fifth and sixth grade educators.<sup>xiii</sup> This includes sections on food waste reduction and landfill diversion. The IEPA also offers a teacher's guide to the environment designed to develop critical thinking skills and make informed decisions about natural resources. Though dated, this guide meets the criteria of the North American Association for Environmental Education's Environmental Education Materials: Guidelines for Excellence.

## Illinois Sustainable Technology Center

The Illinois Sustainable Technology Center (ISTC) is a state legislated technical assistance program that works with all sectors (e.g. citizens, business, government) to prevent pollution, conserve natural resources, and reduce waste to protect human health and the environment of Illinois and surrounding areas.<sup>xiv</sup>

## Solid Waste Agency of Lake County, IL

The Solid Waste Agency of Lake County, IL (SWALCO) produced a circular economy guide along with recycling guidelines, video library, and healthy home and yard practices that are all accessible on their website.<sup>xv</sup> This source of solid waste education is useful for county residents who are unaware of the processes and benefits of recycling, composting, and a circular economy.

## Local Efforts

Public education concerning solid waste is currently limited at the county level. There is opportunity within Boone and Winnebago Counties to increase participation rates by educating residents about the process and benefits of recycling measures, in addition to sustainable waste management practices and diversion options.

## Winnebago County Soil & Water Conservation District

Soil & Water Conservation Districts (SWCD) were established in 1937 under the Illinois Soil and Water Conservation District Act, and are local units of government.<sup>xvi</sup> Since they do not have taxing authority, primary funding is provided by the Illinois Department of Agriculture, while additional funding is utilized for operation and education programs. The Winnebago County Soil and Water Conservation District offers a number of environmental education field trip programs, including composting and wildlife conservation.<sup>xvii</sup> The Winnebago County SWCD also provides additional online web pages and educational resources for middle school and younger children regarding recycling and waste reduction.

## Boone County Conservation District

The Boone County Conservation District (BCCD) has a "Leave No Trace" page on their website detailing proper waste disposal when on the campgrounds and registration for environmentally involved extracurricular activities.<sup>xviii</sup> Leave No Trace programming for Cub and Girl Scouts utilize waste reduction related issues and behaviors throughout the program. Although the BCCD is primarily geared towards land stewardship and providing outdoor experiences to the youth of Boone County, it is still important to discuss the impacts unmanaged solid waste can have on the surrounding environment, wildlife, and ecosystem.

## Keep Northern Illinois Beautiful

Keep Northern Illinois Beautiful (KNIB) offers year-round environmental education programs that focus on waste reduction, reuse, and recycling.<sup>xix</sup> They also offer seasonally themed programs during the spring, summer, and fall. All programs are geared towards children between Pre-K and sixth grade.

## Resource Guide

### List of Public Educational

### Resources

#### National Service Center for Environmental Publications (NSCEP)

Search tool containing links to multitudes of publications related to MSW, hazardous waste, and recycling management.

**W** <https://nepis.epa.gov>

#### Keep Northern Illinois Beautiful (KNIB)

Provides educational materials on waste reduction and recycling practices to businesses, schools, and the public. KNIB has two recycling locations in Winnebago County.

**W** <https://www.knib.org/recycling-center>

**P** (815)-637-1343

**E** [info@knib.org](mailto:info@knib.org)

**A** Main Office: Rockford Recycle Center 665 Hydraulic Rd. Rockford, IL 61109

#### Severson Dells Nature Center

The nature center provides online resources for waste reduction and source separation practices in addition to a wide range of other environmental topics.

**W** <https://www.seversondells.com/>

**P** (815)-335-2915

**A** 8786 Montague Rd., Rockford, IL, USA, 61102

#### Illinois EPA (IEPA)

Contains state-specific information regarding a diverse variety of environmental topics, including solid waste. IEPA provides educational materials, data, and reports that are accessible to the public.

**W** <https://www2.illinois.gov/epa/Pages/default.aspx>

**P** (217)-782-3397

**E** [EPA.ContactUs@illinois.gov](mailto:EPA.ContactUs@illinois.gov)

**A** 1021 North Grand Ave. East P.O. Box 19276 Springfield, IL 62794-9276

Additional Educational Materials:

- [IEPA Food Waste FAQ and Activities Packet](#)
- [IEPA Recycling Guidelines](#)

## Solid Waste Agency of Lake County (SWALCO)

SWALCO provides insight into the regional solid waste management system of Lake County, IL. Their website includes educational materials regarding waste disposal, recycling, and composting methods in addition to stressing the importance of solid waste management.

**W** <https://www.swalco.org/>

**P** (847)-336-9340 or (847)-377-4950

**E** [info@swalco.org](mailto:info@swalco.org)

**A** 1311 N Estes Street Gurnee, IL 60031

## Winnebago County Soil & Water Conservation District (SWCD)

The SWCD is a resource for information regarding soil and water conservation practices and opportunities. Their website contains links to fun educational activities, videos, and texts that are intended for children to learn more about conservation and recycling.

**W** <https://winnebago.swcd.org/swcd/>

**P** (815)-965-2392, Ext. 3

**A** 4833 Owen Center Road, IL 61101-6007

## Boone County Conservation District (BCCD)

The BCCD works to protect the environment by providing web-based and in-person learning opportunities to foster interest in conservation. BCCD hosts environmental programs and events for recreational and educational purposes.

**W** <https://www.bccdil.org/>

**P** (815)-547-7935

**A** 603 North Appleton Road Belvidere, IL 61008

## List of Other Outreach Resources

### Illinois Food Scrap Coalition (IFSC)

IFSC is a non-profit organization that provides educational resources to mitigate food waste by placing importance on composting.

**W** <https://illinoiscomposts.org/about-2/>

**E** [illinoiscomposts@gmail.com](mailto:illinoiscomposts@gmail.com)

### Illinois Recycling Foundation (IRF)

IRF is a statewide coalition dedicated to outreach and education in favor of waste reduction and reuse.

**W** <https://illinoisrecycles.org/>

**P** (708)-358-0050

**A** PO Box 411 Geneva, IL 60134



## The Illinois Product Stewardship Council (ILPSC)

The ILPSC is an informational council that strives to encourage waste diversion and recycling by placing more responsibilities on waste generators.

**W** <https://illinoispsc.org/about/about-ilpsc>

**E** [illinoispsc@gmail.com](mailto:illinoispsc@gmail.com)

## Illinois Counties Solid Waste Management Association (ILCSWMA)

ILCSWMA is an informational forum for solid waste management professionals.

**W** <https://www.ilcswma.org/>

**A** 3764 State Route 13/127 c/o Rebecca Tracy Pickneyville, IL, 62274

## Illinois Chapter of the Solid Waste Association of North America (SWANA-IL)

SWANA-IL is an organization committed to making advancements to the solid waste management system through education, advocacy, and research. Their website offers resources, training, and relevant news stories.

**W** <https://swana.org/>

**P** (1-800)-467-9262

**E** 301.589.7068

**A** 1100 Wayne Avenue, Suite 650, Silver Spring, MD 20910

## Seven Generations Ahead (SGA)

SGA collaborates with local governments, private sectors, and the community to provide outreach and implement projects of various environmental topics, including solid waste.

**W** <https://sevendgenerationsahead.org/>

**P** (708)-660-9909

**E** [act@sevendgenerationsahead.org](mailto:act@sevendgenerationsahead.org)

**A** P.O. Box 3125 Oak Park, IL 60303

## School & Community Assistance for Recycling and Composting Education (SCARCE)

SCARCE is a non-profit organization that works to create a sustainable community by providing hands-on education to students.

**W** <https://www.scarce.org/>

**P** (630)-545-9710

**E** [info@scarce.org](mailto:info@scarce.org)

**A** 800 S. Rohlwing Rd (Route 53) Unit D Addison, IL 60101

## Wasted Food Action Alliance (WFAA)

WFAA works to reduce the amount of food waste that is landfilled by providing education and programs that encourage donating food, reducing the amount of food that becomes waste, and recycling food waste via composting or anaerobic digestion.

**W** <https://wastedfoodaction.org/>

**E** [wastedfoodaction@gmail.com](mailto:wastedfoodaction@gmail.com)

## Inventory of Available Infrastructure Educational Resources

**Utility bills** provide educational materials to a large portion of the community.

**Public schools** educate students on reducing, reusing, and recycling practices that can be taken home and applied to their households.

## Garden Prairie Organics, LLC

Compost facility in Boone County that accepts landscape waste.

**W** <http://www.gpocompost.com/default.aspx>

**P** (815)-597-1318

**E** [mike@gpocompost.com](mailto:mike@gpocompost.com)

**A** 11887 US-20, Garden Prairie, IL 61038

## Paper Recovery Service Corp (PRSC)

Material recovery facility in Winnebago County that recycles cardboard, scrap metal, and provides on site paper shredding.

**W** <https://www.paperrecovery.com/>

**P** (815)-636-2329

**A** 7972 Crest Hills Dr, Loves Park, IL 61111

## Keep Northern Illinois Beautiful (KNIB)

Provides educational materials on waste reduction and recycling practices to businesses, schools, and the public. Has two recycling locations in Winnebago County.

**W** <https://www.knib.org/recycling-center>

**P** (815)-637-1343

**E** [info@knib.org](mailto:info@knib.org)

**A** Main Office: Rockford Recycle Center 665 Hydraulic Rd. Rockford, IL 61109

## Roscoe Transfer Station

Transfer station located in Winnebago County that accepts drop off of recyclable materials including number one and tow plastics, glass bottles, paper, metals, and aluminum.

**W** <https://www.advanceddisposal.com/il/roscoe/roscoe-transfer-station>

**P** (815)-977-7733

**A** 13125 N. 2nd Street Roscoe, IL 61073

## City of Rockford Household Hazardous Waste Site

Collection site for household hazardous waste in Winnebago County.

**W** <https://www.knib.org/items-taken-at-the-hazardous-waste-site>

**P** This site does not have phone service. Call KNIB at 815-637-1343

**A** 3333 Kishwaukee St. Rockford, IL 61109

## Rock River Valley Composting Facility

Composting facility that accepts commercial and residential landscape waste between the months of April and November.

**W** <https://www.winnebago landfill.com/compost/>

**P** (815)-874-5870

**A** 6200 Baxter Road Cherry Valley, IL 61016

## Area Salvage and Recycling

Scrap metal facility that is located in Winnebago County. It is open to the public and accepts copper, aluminum, batteries, cast and lead, brass (all types), catalytic converters, computer equipment, and appliances.

**W** <https://www.areasalvageandrecycling.net/>

**P** (779)-500-0162

**E** [supmn24@yahoo.com](mailto:supmn24@yahoo.com)

**A** 207 Peoples Ave. Rockford, IL 61104

## Cimco Recycling Loves Park, Inc.

Scrap metal facility that is open to the public in Winnebago County. Purchases all grades of ferrous and non-ferrous metals.

**W** <https://www.cimcoresources.com/locations/loves-park-il/>

**P** (815)-986-7211

**E** [info@cimcoresources.com](mailto:info@cimcoresources.com)

**A** 1616 Windsor Road Loves Park, IL 61111

## Goals & Recommendations

**Goal 1.** Educate the public on waste diversion practices, program information and local waste systems to increase participation in waste diversion efforts.

**Rec. 1.** Design and implement community-focused adult and youth solid waste management educational programming and workshops using IEPA and other relevant resources.

**Rec. 2.** Explore, produce, and standardize informative signage for waste and recycling bins within Boone and Winnebago Counties.

**Rec. 3.** Create, distribute, and regularly update solid waste educational information for Boone and Winnebago Counties' websites.

**Goal 2.** Engage regularly with area residents, business owners and community leaders regarding local solid waste issues, targeted materials, needs and opportunities.

**Rec. 1.** Create a low barrier participation citizen engagement committee (CEC ) to connect with communities on a regional scale.

**Rec. 2.** Educate high-volume waste producers in the area regarding waste diversion.

**Rec. 3.** Celebrate, recognize, and uplift significant area achievements in waste reduction and environmental improvements.

# Chapter 7: Partnerships, Policy, & Funding

## Partnerships

There are many partnership opportunities in the Northern Illinois region for community organizations, private industry, and public partners to collaborate on solving solid waste management problems. Partnership activities consist of but are not limited to: regional drop-off locations, community collection events, expansion of commercial recycling, and educational programming. The following chapter illustrates key partners to target to advance solid waste management in the region.

## Goals & Recommendations

**Goal 1.** Develop community partnerships to grow and integrate waste diversion services and events.

**Rec. 1.** Increase awareness and establish regional community drop-off locations for recycling.

**Goal 2.** Collaborate with neighboring counties to maximize resources and efforts through standardizing public messaging and educational materials.

**Rec. 1.** Regularly meet with municipalities to explore and encourage multi-level government collaboration and share outreach materials.

**Goal 3.** Pursue Green Business Program partnerships to assist businesses with waste reduction and diversion.

**Rec. 1.** Establish a local green business coalition to support waste reduction strategies.

**Rec. 2.** Utilize partnerships with licensed haulers, local governments, and other entities to maximize area capacity and create educational campaigns, programs, and events.

## Public Partnerships

Public partnerships capitalize on the collective power of multiple organizations. The following subsections discuss two types of public partnerships: committee creation and joint contracting. Committees can bring together local leadership across municipalities and joint contracting can allow for better negotiation power.

### Solid Waste Advisory Committee

A solid waste advisory committee (SWAC) is responsible for investigating current recycling and solid waste practices and recommending options to divert waste from landfills.<sup>i</sup>

A SWAC was created for this Plan update. This committee is made up of waste industry professionals, county administrators, and local citizens who collaborate on plan direction and provide expert advice. Post plan publication, local municipalities could continue having SWAC meetings to receive updates on current efforts.

### Joint Contracting

Joint contracting for waste management occurs when multiple municipalities contract to provide, maintain, or operate facilities for the collection, transfer, and disposal of solid wastes.<sup>ii</sup> Local municipalities could work together to develop joint contracting for collection agreements, cross-jurisdictional recycling, or commercial and municipal franchise agreements. The advantage of joint contracting for solid waste is that it could provide lower costs for garbage and recycling services, increase community recycling, and allow for greater accountability over fees.

## Community Partnerships

Community partnerships can be mutually beneficial to both parties involved. Municipalities partnering with strong local organizations can have a positive impact on the community. Community organizations often strive to serve their communities as do municipal governments.

### Rock River Valley Young Men's Christian Association (YMCA)

The popularity and reach YMCA has within the local community makes it a great candidate for partnership for activities such as co-hosting recycling education events or providing recycling programming. The Rock River Valley YMCA has served approximately 30,000 people through memberships and programs, has had 575 kids enrolled in before and afterschool programming, and has completed 15,675 hours of community service through volunteer initiatives.<sup>iii</sup>

### Keep Northern Illinois Beautiful (KNIB)

Keep Northern Illinois Beautiful is a non-profit organization with a focus on recycling education and community outreach. KNIB has two locations: Rockford Recycle Center and Machesney Park Recycle Center. KNIB's mission statement is to "improve our environment through education, public awareness, and community involvement".<sup>iv</sup> Several local municipalities currently partner with KNIB, but can further expand efforts to assist businesses with waste diversion and recycling.

### Natural Land Institute (NLI)

The Natural Land Institute is a non-profit organization whose goal is to preserve land for future generations. To date, NLI has protected, managed, and restored 18,000 acres in Illinois and southern Wisconsin.<sup>v</sup> Local municipalities could potentially partner with NLI on educational events about the benefits of waste diversion and other land use related elements in waste management.

### Mercy House

Mercy House is a charity shop within the Bethesda Church in Rockford. Mercy House collects various items such as kitchen items, clothing, linens, and nonperishable food items.<sup>vi</sup> These items must be new or like new to be accepted.

## Empower Boone Food Pantry

Empower Boone Food Pantry is a charity shop located in Capron. Empower Boone provides food, clothing, and resources to community members in need.<sup>vii</sup> Clothing items accepted are coats, jackets, tops, pants, pajamas, blankets, towels, and other housewares.

## Private Partnerships

Private partnerships are useful for municipalities with little to no resources or facilities to recycle materials on their own. The following private organizations were considered as potential partnership ideas for local municipalities should they decide to pursue them. This is not an exhaustive list, rather a fraction of potential private waste management partners in the area.

### Winnebago Landfill

The Winnebago Landfill site is privately run by Waste Connections. The company provides solid waste disposal and recycling services throughout Northern Illinois. Local governments could partner with Winnebago Landfill, a private landfill, to develop joint action agencies made up of multiple government entities where data is shared, planning efforts are aligned, and potential contracts are generated.

### Area Salvage and Recycling

Area Salvage and Recycling is a recycling center located in Rockford that pays customers for their recyclables. The center collects vehicles, scrap metal, equipment, and other materials from residents and businesses. Partnering with a business like Area Salvage Recycling could be beneficial as residents may be incentivized by the financial compensation for their recyclables.

### Paper Recovery Services Corporation

Paper Recovery Services Corporation is a recycling organization that offers customers shredding and destruction of paper materials and buys ferrous and non-ferrous scrap metal materials of all types and sizes. Local municipalities can partner with Paper Recovery Services Corporation to increase commercial recycling of paper and scrap metal.

### Best Buy

Best Buy, located in the City of Rockford, has electronic waste recycling collections and promotions. Best Buy allows recycling of up to three items per household per day. Eligible items include: TVs and videos, computers, cell phones and radios, appliances, ink and toner, audio equipment, music and movies, video games and gadgets, cameras and camcorders, car audio, video, and GPS devices.

### Staples

Staples, located in the City of Rockford, has free recycling services offered which focus on a wide range of items. Eligible items include: Accessories/adapters/cables, all-in-one computers, cable/satellite receivers, calculators, camcorders, CD/DVD/Blu-ray players, coffee brewers (less than 40 lb.), computer speakers, connected home devices, copiers, cordless phones, desktop computers, digital cameras, digital projectors, eReaders, fax machines, flash drives, gaming consoles/handhelds, GPS devices, hard drives, iPod®/MP3 players, keyboards & mice, laptops, mobile phones, modems, monitors (including CRT, LED/LCD, plasma), printers/multifunction devices, routers, scanners, shredders, small servers, stereo receivers, tablets, UPS/battery backup devices, video streaming devices (Apple TV®, Roku Player, etc.), and webcams.

Local governments may further explore community e-waste event partnerships with private retailers.

## Policy: Regulation & Legislation

Strategic policy actions at all levels of government support efforts to reduce waste, solve waste-related public health issues, and ultimately reduce pollution. Regulation and monetary penalties can be used to incentivize waste diversion efforts and waste-related behaviors among consumers and manufacturers. Local, state, and federal governments have frameworks within which they can operate in the most cost-effective way possible while protecting public and environmental health.

## Goals & Recommendations

**Goal 1.** Increase transparency of waste management legislation and efforts.

**Rec. 1.** Establish local policies and processes to support consistent record keeping, data collection, monitoring, and reporting for solid waste generation and diversion.

**Goal 2.** Establish local policies that lower barriers and increase access to source reduction and waste diversion efforts.

**Rec. 1.** Require licensed haulers to provide recycling collection data on all residential and commercial accounts.

**Rec. 2.** Support local government bans or fees to reduce the number of single use plastic bags within the next 10 years.

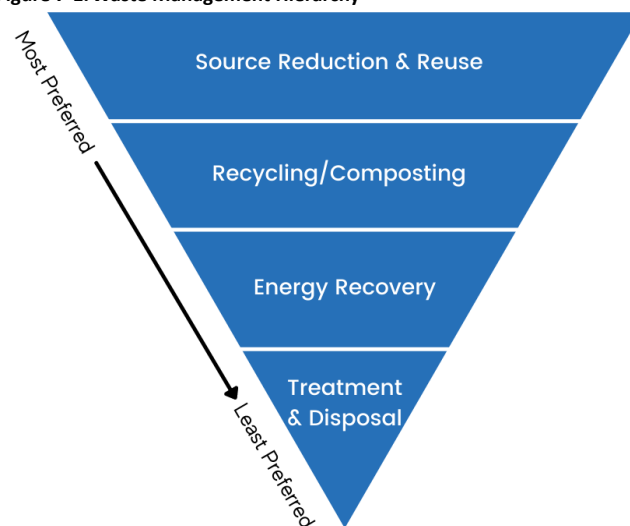
**Goal 3.** Incentivize waste-related GHG emissions reductions and the use of emerging technologies through local policy.

**Rec. 1.** Evaluate and consider alternative technologies, taxes, and subsidies for materials management.

## State Policy

Statewide policy, legislation, and regulation related to solid waste management in Illinois is primarily maintained by the Illinois General Assembly (IGA) and the Illinois Environmental Protection Agency (IEPA).<sup>viii</sup> The State of Illinois has three separate laws that regulate waste management: the Illinois Solid Waste Management Act, the Illinois Solid Waste Planning and Recycling Act; and the Illinois Environmental Protection Act.

Figure 7-1. Waste Management Hierarchy



Source: EPA



## The Solid Waste Management Act (1965)

The Illinois Solid Waste Management Act (SWMA) established a waste management hierarchy based on the EPA standards in 1965. The preventative strategy of source reduction and reuse is the most preferred waste management method as outlined in this Act, with waste treatment and disposal being the least preferred. Additionally, the SWMA requires state-funded colleges and universities to create waste reduction plans and corresponding five-year updates. The IEPA reviews and approves these updated plans.

## The Illinois Solid Waste Planning and Recycling Act (1990)

The Illinois Solid Waste Planning and Recycling Act (SWPRA) required all Illinois counties to develop solid waste management plans by March 1, 1995. SWPRA encouraged counties to use multi-county planning processes via intergovernmental agreements. The first plans also required details regarding recycling programs and implementation, with the initial goal of 25 percent of municipal solid waste generated to be recycled annually. The IEPA reviews and approves the county plans and five-year updates.

## The Illinois Environmental Protection Act (1970)

The Illinois Environmental Protection Act (IEPA) regulates several environmental pollutants including used tires, refuse, and facilities such as landfills and compost sites. Unlike recycling centers, “non-clean” material recovery facilities (MRFs) require permits and are limited in what they can accept. This act banned several dangerous items from landfills, such as yard waste, car batteries, tires, large appliances, used oil, and many electronic products, or E-waste (see the Electronic Products Recycling and Reuse Act). The IEPA also authorized surcharges on tipping fees at Illinois landfills and retail fees on tires in Illinois. All of these regulations aim to decrease the volume of waste on a statewide level, protect the environment from harmful toxins, and act as revenue generation for the Solid Waste Management Fund, the IEPA, and the Illinois Emergency Public Health Fund.<sup>x</sup>

The Illinois Pollution Control Board (IPCB) was constructed as a result of this Act. The Board is independent from the IEPA and serves as an impartial decision maker responsible for managing and constructing Illinois environmental control standards, determining alleged non-criminal Act violations, reviewing permit and determination appeals, and pollution control facility siting determinations set forth by local government. The Board has several law and rulemaking developments listed on their website, including the Environmental Protection Act and Title 35 Procedural and Environmental Rules. A portion of the provisions detailed in Title 35 of the Illinois Administrative Code aim to streamline the permitting process and operational guidelines for entities that work with hazardous waste near drinking wells or within a Superfund site.<sup>x</sup>

## Consumer Electronics Recycling Act (2017)

The Consumer Electronic Recycling Act (CERA) went into effect in 2017 to update electronics recycling for the State of Illinois upon the termination of the Electronic Products Recycling and Reuse Act (EPRRA) in 2020. Consumer technology has significantly advanced since 2008 when the EPRRA was first established, requiring an update to the Act.

CERA related programming officially started in 2019. The law specifies that each Covered Electronic Device (CED) manufacturer must provide an annual E-waste program plan and is also responsible for conducting it. Recyclers must pay an annual registration fee (\$3,000), and CEDs must be accepted at program collection sites at no cost (excluding monitors and computers).

## National Policy

Along with EPA programs, several pieces of legislation have been passed by Congress and regulated by the EPA in an attempt to protect human and environmental health through the reduction of waste.<sup>xi</sup>

## The Resource Conservation and Recovery Act (RCRA) of 1976 (Formerly SWDA 1965)

The Solid Waste Disposal Act (SWDA) of 1965 improved disposal methods and was amended by the Resource Recovery Act of 1970 and eventually the Resource Conservation and Recovery Act (RCRA) of 1976. These amendments provided funding for the EPA’s resource recovery programs and cradle-to-grave management of hazardous waste. Compliance monitoring for RCRA is delegated to the states and local authorities. This act is essential to ensuring the environmental and public health of local communities.

The Act also established six other major amendments over the next 20 years: the Used Oil Recycling Act, Solid Waste Disposal Act Amendments, Hazardous and Solid Waste Amendments, Medical Waste Tracking Act, Federal Facility Compliance Act, and the Land Disposal Program Flexibility Act. These acts provide a regulatory framework for Treatment, Storage, and Disposal Facilities (TSDs), source reduction and reuse, hazardous waste, waste transporters, waste generators, and other pollution prevention techniques.<sup>xii</sup>

## Economic Incentives

Economic incentives are utilized by all levels of government in the U.S. to prevent various acts of environmental pollution.<sup>xiii</sup> Some of these economic incentives include: fees, charges, and taxes; deposit-refund systems; marketable permits; subsidies; liability; information disclosure; and voluntary actions. Waste-related fees are a strategy to change disposal behavior with cost based on volumes and material type, and may discourage haulers from excessive disposal or encourage more stringent material diversion. Other examples include consumer product waste subsidies that reward waste minimization through tax breaks or credits.

In Boone and Winnebago Counties, residents are able to trade unwanted items for cash at locations like Area Salvage and Recycling, previously identified in the local partnership opportunity subsection. Private businesses can incentivize waste reduction by offering discounts for personal cups or charging fees for single use bags. These efforts are mutually beneficial, as they provide cost savings for both consumers and business owners.

# Traditional Regulatory Incentives

## Performance Based Standards

In contrast to regulatory mandates, market-based incentives encourage the private sector to factor waste minimization into production decision making. Pollution taxes and waste hauler disposal fees can provide economic and environmental benefits by incentivizing firms to operate their business competitively while decreasing pollution.<sup>xiv,xv</sup>

Pollution taxes do not regulate pollution at all, and instead charge a certain amount for each ton emitted. This method establishes a price for carbon but doesn't measure emissions, instead allowing businesses to reduce their pollution in order to remain competitive and avoid paying the fees. Additionally, solid waste disposal fees regulate waste disposal on a smaller scale. Disposal fees may regulate waste by volume or material type, and are dependent on target materials and local context. A higher waste disposal fee will incentivize companies to find another way to dispose of materials instead of in landfills. These fees (enabled by the State's Environmental Protection Act (415 ILCS 5/), go into a fund maintained by Winnebago County, which is discussed in subsection Funding.<sup>xvi</sup>

## Product Design Standards

Other examples of private incentives are hazardous waste management liabilities for companies that frequently work with these materials. Hazardous waste management liability regulation provides the legal infrastructure to hold manufacturers accountable for related damages. For consumers, a container deposit law or "Bottle Bill" encourages consumer product recycling and decreases littering by requiring refundable deposits on beverage containers. Product material costs such as glass, plastic, or aluminum are temporarily increased and consumers must recycle them to recover the deposit.<sup>xvii</sup> Bottle bill states have an approximate 60 percent beverage recycling rate, compared to non-deposit states, around 24 percent.

**Figure 7-1. Advantages of "Bottle Bills"**



Source: Container-Recycling.org

There are many factors to consider when weighing the options of market-based incentives, but market-based approaches for environmental protection are frequently used in modern policy making across the world.<sup>xviii</sup>

## Existing Waste Ordinances & Recommendations Regional Pollution Control Facility Siting Ordinance Provisions

Boone and Winnebago Counties' Codes of Ordinances regulate several areas of waste management by addressing restrictions, associated penalties, and permit requirements. These ordinances are put in place to protect citizens from improper disposal methods and to provide guidance on safety and cleanliness standards. Reviewing current legislation allows for analysis of existing policy, public education on the current policies, and development of new recommendations to reduce gaps or meet new goals. A full list of existing waste-related ordinances for Boone and Winnebago Counties can be found in Appendix C: Existing & Model Ordinances.

### Boone County Existing Ordinances

Existing Boone County ordinances outline specific restrictions on waste transportation, recycling, and disposal. One of the key ordinances include stipulations such as required monthly reports of waste-related activities to be filed by all collection, disposal, and transportation persons in the county. These reports, as well as disposal facilities and transportation vehicles, are subject to inspections. The five transportation restrictions pertaining to waste include:

- The prohibition of transporting garbage over 25 miles from the disposal area;
- Transporting garbage from outside the county except in totally enclosed trucks or units;
- Transporting garbage that has not been deposited in a state-approved landfill within 24 hours of the time it is collected;
- Transporting garbage in the county outside of the hours of 6:00 a.m. to 6:00 p.m.; and
- Transporting garbage into or out of the county by any other method except motor vehicles.

Additionally, the associated violations and permit requirements that are outlined in Boone County ordinances pertain to property owners, landfill operators, and garbage haulers. Boone County requires all waste haulers to sell or provide customers with recycling containers and regular collection services for items specified by the county. The specified items are newsprint, clean glass, aluminum, steel or tin food, and beverage bottles or containers. Other items may be collected by haulers at their discretion. Recycling and garbage collection occur on the same day, with garbage collection taking place at least once per week and recycling at the discretion of the hauler, but no less than once per month.



Overall, it is written that all waste haulers and occupants of a dwelling or dwelling unit shall store, transport, and dispose of all rubbish in a clean, sanitary, and safe manner. This includes within the county's sanitary landfills, in closed containers resistant to pests, and/or in vehicles constructed to contain all contents to minimize nuisances.<sup>xx</sup>

## Winnebago County Existing Ordinances

While Winnebago County has over five times the population of Boone County, the County includes many of the same waste ordinances. However, Winnebago County includes more details in some areas like storage. For example, all occupants are responsible for the cleanliness of garbage containers and bulk storage containers that must be kept on premises and used in conjunction with plastic bags or liners. Owners of dwellings with three or more units and the occupants of dwellings with one or two units are responsible for maintaining the premises and supplying facilities for the safe and sanitary storage and disposal of garbage. Similar to Boone County, all county inhabitants must store, collect, transport, and dispose of garbage in an approved manner and suitable container at least once per week. Permits, inspections, insurance fees, violations, and penalties are explicitly reviewed for those who own and operate transportation vehicles or sanitary landfills. Violations can be applied to dwelling occupants or property owners who refuse or neglect garbage removal. Based on the County's Code of Ordinances, penalties may include fines of varying degrees, with each day's failure to comply constituting a separate violation.<sup>xx</sup>

## Recommendations

The current ordinances for Boone and Winnebago Counties provide the basis for a safe waste management system. The following are recommendations to address gaps present in these ordinances. Additional ordinance recommendations can be found in Appendix C: Proposed Tactics & Timelines.

### Ordinance Recommendation #1

Currently, only Boone County includes language for waste hauler reporting requirements in their Code of Ordinances. Under Ch. 34, Article II, Sec. 29 Monthly reports of collectors, Boone County has established requirements for waste collection personnel to report waste characteristics on a monthly basis.

<sup>xxi</sup> Such characteristics include the number of hauling vehicles utilized and the nature, source, and tonnage of refuse that is collected, transported, and disposed. In addition to this, Boone County also includes language in their ordinance about the mandatory reporting of recycling collection and utilization information. On a quarterly basis, reports are required on the type of recyclables collected, prices per unit, and revenue produced by its sale. It is recommended that Winnebago County establish similar ordinances as Boone County requiring an annual report of disposal characteristics in order to address gaps in waste reporting. This will increase availability of data for analysis when reporting on goal progress. In order to ensure transparency and increase awareness, it is recommended that both counties require reports to be shared publicly via media advisories for municipalities and accessible on websites.

### Ordinance Recommendation #2

To encourage increased waste diversion, both counties should include language regarding source separation and source reduction. These practices work to minimize the amount of waste that is generated by separating or reducing it at its source.

This can be accomplished by implementing an ordinance that requires the separation of waste, recyclables, and compostables at the point of disposal. Another method to encourage source separation is the establishment of a Pay-As-You-Throw (PAYT) program, in which waste disposal costs are dependent on the amount of waste generated. County ordinances may also include building regulations regarding waste infrastructure. These ordinances can include mandatory recycling areas to meet capacity requirements. Taxes and bans on difficult to recycle materials may also be included in county ordinances. The model ordinances detailed in [Appendix C: Existing & Model Ordinances] utilize plastic bags as an example material and outlines the process of implementing specific material bans and taxes.

## Funding

Securing funding is critical for the implementation of solid waste management plans. There are several opportunities for funding from local, state, and federal sources. These sources include grants, initiatives, programs, or projects that could impact solid waste management in the region.

## Goals & Recommendations

**Goal 1.** Collaborate regionally to maximize funding and programming while prioritizing source reduction efforts.

**Rec. 1.** Research the costs and benefits of pursuing various solid waste management funding sources.

**Goal 2.** Receive sufficient public or private funding to implement the Regional Solid Waste Management Plan recommendations.

**Rec. 1.** Explore public funding mechanisms that support sustainable waste planning and management efforts.

## Current Waste Revenue

Boone and Winnebago Counties use the Winnebago Landfill to dispose of a majority of their waste. The Winnebago Landfill pays host fees to their siting authority, Winnebago County, for each ton of waste deposited into the landfill.<sup>xxii</sup> The host fee is an agreed-upon amount paid to Winnebago County, in addition to taxes and other fees the Winnebago Landfill is responsible for paying. These fees go directly to Winnebago County's general fund and are used at the discretion of the Winnebago County Board. Boone County currently has no identified revenue to support its waste management efforts.

## Local Funding Sources

Boone and Winnebago Counties contract out waste hauling and landfill services through private companies. County residents and business owners pay fees directly to the appropriate private waste hauler in their area, which funds the waste management in the community. In contrast, other communities have publicly run waste management services which utilize additional funding sources.

## Additional Funding Sources

**City revenues** – Municipalities can use a portion of general revenues (such as sales or property taxes) to fund solid waste management programs.

**User fees** – User fees are a common source for funding community-based solid waste management, which include land-fill dumping fees and waste collection fees.

**Sale of recyclables** – Municipalities can earn revenue from the sale of certain recyclables.

**Tippling fees** – Municipalities can charge fees to surrounding communities that use a locally owned landfill.

**Bulk collection fees** – Municipalities can charge for one-day pick up of bulk items.

*Source: SWM Programs Zender Group*

## State Funding Sources Illinois Department of Commerce and Economic Opportunity

The Community Development Block Grant (CDBG) Public Infrastructure Program provides federal funding for community-based projects in non-metropolitan areas. The program consists of the following components: Housing Rehabilitation, Public Infrastructure, Disaster Response, and Economic Development. Public infrastructure CDBG funds could potentially go towards funding solid waste management facilities.<sup>xxxiii</sup>

With a maximum request of \$550,000, local governments can use the funds towards public infrastructure and improvement of public health, safety, and welfare.<sup>xxxiv</sup> Additional information can be found on the Illinois Department of Commerce and Economic Opportunity website.<sup>xxxv</sup>

## Federal Funding Sources

The Environmental Protection Agency (EPA) provides financial assistance for land, air, and water-related projects. Annually, the EPA awards more than \$4 billion in funding for organizations focused on environmental goals.<sup>xxxvi</sup>

### Multipurpose Grants to States

Multipurpose Grants to States (MPG) are funded by the EPA to provide funding to states, tribes, and territories for high priority activities that complement programs under established environmental statutes. States are encouraged to consider using MPG funds to address per- and polyfluoroalkyl substances (PFAS) and other emerging contaminants.<sup>xxxvii</sup> States can also use funds on advancing environmental justice and tackling climate change.<sup>xxxviii</sup> Multipurpose grants could fund recommendations for solid waste management that advance environmental justice areas and lower GHGs from waste management activities.

EPA intends to award \$8,500,000 to eligible state and territorial recipients with a base award amount of \$25,000.<sup>xxxix</sup> This funding could be given to subrecipients, which could allow local governments to execute aligned projects. MPG funding authority does not have a match, cost share, or maintenance of effort requirement.<sup>xxx</sup> FY2021 deadline has passed; however, it is likely this program will continue as it has been awarded since 2018. Additional grant information can be found on the EPA website.<sup>xxxi</sup>

## Air Grants and Funding

The Air Grants and Funding Program has grant funding announcements for projects and programs relating to air quality, transportation, climate change, indoor air, and other related topics.<sup>xxxii</sup> Air grants could fund recommendations for solid waste management that would improve air quality, such as composting to divert food waste from landfills and reduce methane and carbon dioxide emissions. Eligible entities vary by funding announcement. Additional information can be found on the EPA website.<sup>xxxiii</sup>

## The Environmental Justice Collaborative Problem-Solving (CPS)

### Cooperative Agreement Program

The Environmental Justice Collaborative Problem-Solving (CPS) Cooperative Agreement Program provides funding for eligible applicants for projects that address local environmental and public health issues within an affected community.<sup>xxxiv</sup> The CPS Program helps communities address environmental and public health concerns. Around \$3.2 million funds have been distributed, with awards of up to \$200,000 each for two-year projects.<sup>xxxv</sup> The program funding is now closed for FY2021. Eligible entities are non-profit organizations. Local governments could collaborate on project ideas and assist in the application process with local non-profits. Additional information can be found on the EPA website.<sup>xxxvi</sup>

### Pollution Prevention (P2) Grant Program

Pollution Prevention (P2) Grant Program provides matching funds to state programs that support pollution prevention and develop state-based programs.<sup>xxxvii</sup> P2 funding can provide technical assistance to businesses to develop source reduction practices with the goal of reducing or eliminating pollutants from entering the waste stream prior to recycling, treatment, or disposal.<sup>xxxviii</sup> Businesses generate large amounts of waste depending on their industry and size. Eliminating waste before it enters the waste stream is an essential component in solid waste management and could have a dramatic impact on the region. A total of \$9.3 million in funding has been awarded to 42 organizations for FY2020-FY2021 grants.<sup>xxxix</sup> The deadline for applications has closed. Additional information can be found on the EPA website.<sup>xl</sup>

## Office of Land and Emergency Management Grants and Funding

The Office of Land and Emergency Management Grants and Funding provides competitive grant funding announcements for projects and programs relating to brownfields, federal facilities restoration and reuse, solid waste management, resource conservation and recovery, underground storage tanks, and other related topics.<sup>xli</sup> Applying for funding related to solid waste management would support the implementation of projects for the Regional Solid Waste Management Plan. Additional information can be found on the EPA website.<sup>xlii</sup>

## Office of Resource Conservation and Recovery

The Office of Resource Conservation and Recovery (ORCR) promotes conservation, proper waste management, and oversees cleanup of land for productive use.<sup>xliii</sup> The ORCR manages several programs and projects that promote reduction in waste and proper waste management.

One of their programs is Sustainable Materials Management (SMM), where the EPA provides public recognition and awards to SMM Electronics Challenge participants for their commitment to sustainable materials management and recycling electronics responsibly.<sup>xliv</sup> Local governments could collaborate with local private electronics recycling companies like Best Buy or Staples to apply for the SMM recognition. Additional information can be found on the EPA website.

## Private Funding Sources

### Closed Loop Partners

Closed Loop Partners funds replicable, scalable, and financially sustainable recycling infrastructure and innovation projects across four primary categories:<sup>xlv</sup>

- Collection
- Sortation
- Processing or reclamation
- End product manufacturing

Closed Loop Partners provide zero interest loans to municipalities and below market rate loans to private companies. The typical loan size is between \$3 million to \$5 million dollars over a three to 10-year term.<sup>xlvii</sup> Additional information can be found on the Closed Loop Partners website.<sup>xlviii</sup>

### Recycling Partnership Cart Grant

Grant funding ranging from \$300,000 to \$825,000 is available to support publicly sponsored curbside recycling programs. The applicant must be a local government, solid waste authority, or federally recognized tribe and must provide or intend to provide curbside recycling collection on a weekly or every-other-week basis.<sup>xlix</sup> This grant program allows communities to consider different implementation strategies, from providing every household in the jurisdiction with a recycling cart, to implementing cart-based collection in phases or even allowing citizens to opt-in or opt-out of recycling service.<sup>i</sup> Additional information can be found on the Recycle Partnership website.<sup>ii</sup>

## Environmental Research & Education Foundation (EREF)

The Environmental Research & Education Foundation (EREF) is a private grant making institution that funds solid waste research and education initiatives with \$15,000 to \$500,000 grants.<sup>iii</sup> Typical projects last two years and there are two deadlines a year (December 1 and May 1) for proposals on the following topics:

1. Waste minimization
2. Recycling
3. Waste-to-Energy (WTE), biofuels, chemicals or other useful products. This includes, but is not limited to, the following technologies:
  - Anaerobic digestion
  - Composting
  - Other thermal or biological conversion technologies
4. Strategies to promote diversion to higher and better uses (such as organics diversion, market analysis, optimized material management, logistics, etc.)
5. Landfilling

Additional information can be found on the EREF website.<sup>iiii</sup>

## Patagonia Environmental Grant

Patagonia is a private company that offers grants ranging from \$2,500 to \$15,000 to support environmental organizations with an emphasis on bold action, public engagement, and inclusion.<sup>lv</sup> Local municipalities could partner with environmental organizations to apply for grant funding for a major project in the area. Additional information can be found on the Patagonia website.<sup>lv</sup>

The purpose of the goals and recommendations outlined in the Plan above are to provide a framework for the successful implementation of waste reduction and diversion strategies for Boone and Winnebago Counties. These goals will serve as a pathway for both counties to deal with future waste capacity constraints by focusing on building a sustainable solid waste management system that addresses community concerns, environmental impacts, and economic development. Moreover, these goals will connect existing resources and partners together with the common aim of improving the current solid waste management system in the region.

## Summary of Goals & Recommendations

To create this framework, the Plan first identified key themes or groups under which to list the goals. These themes were material diversion, public education and outreach, circular economy and GHG emissions, system organization and administration, partnerships, policy, and funding. Under each theme, a set of goals, recommendations, and actions were identified, along with the responsible and supporting parties, funding needed, and projected timeline. In an effort to address the many facets of the solid waste management system, both quantitative and qualitative selections were considered. The full list of goals, recommendations, and actions were reviewed by the Solid Waste Advisory Committee (SWAC) to gather additional feedback.

Collectively, these goals, recommendations, and actions form the building blocks for the counties to take action towards meeting their long-term zero waste goals. As identified throughout this planning process, efforts to meet these goals will require significant resources and collaboration. Moving forward, this framework will be used on a continuous basis for all parties to track progress, achievements, and to revise if necessary.

**RESOLUTION  
OF THE  
COUNTY BOARD OF THE COUNTY OF WINNEBAGO, ILLINOIS**

2022 CR \_\_\_\_

SUBMITTED BY: OPERATIONS AND ADMINISTRATIVE COMMITTEE

SPONSORED BY: KEITH MCDONALD

**RESOLUTION AUTHORIZING THE CHAIRMAN OF THE COUNTY BOARD  
TO EXECUTE AN AMENDED DELINQUENT TAX SALE TRUSTEE AGENCY  
INTERGOVERNMENTAL AGREEMENT BETWEEN THE COUNTY OF  
WINNEBAGO, ILLINOIS AND REGION 1 PLANNING COUNCIL**

**WHEREAS**, since 1997 the County of Winnebago, Illinois has operated a delinquent tax program pursuant to section 21-90 of the Illinois Property Tax Code; and

**WHEREAS**, on October 24, 2019, the Winnebago County Board adopted a resolution, 2019-CR-127, authorizing the execution of a contract with Region 1 Planning Council to act as the County's agent in the operation of a delinquent tax program; and

**WHEREAS**, the Operations and Administrative Committee finds it is in the best interests of the citizens and taxing bodies in Winnebago County, Illinois for the County to continue to operate a delinquent tax program and for Region 1 Planning Council to continue to act as the County's Agent in the operation of that program, pursuant to certain amendments to the agreement.

**NOW, THEREFORE, BE IT RESOLVED**, by the County Board of the County of Winnebago, Illinois, that the Winnebago County Board Chairman is hereby authorized and directed to, on behalf of the County of Winnebago, to execute the Amended Delinquent Tax Sale Trustee Agency Intergovernmental Agreement between the County of Winnebago, Illinois and Region 1 Planning Council, and in substantially the same form as that set forth in Exhibit A.

**BE IT FURTHER RESOLVED**, that this Resolution shall be in full force and effect immediately upon its adoption.

**BE IT FURTHER RESOLVED**, that the Clerk of the County Board is hereby directed to prepare and deliver certified copies of this Resolution to the Executive Director of Region 1 Planning Council, County Chief Financial Officer and the County Treasurer.

Respectfully submitted,  
**OPERATIONS AND ADMINISTRATIVE COMMITTEE**

**AGREE**

**DISAGREE**

\_\_\_\_\_  
Keith McDonald, Chairman

\_\_\_\_\_  
Keith McDonald, Chairman

\_\_\_\_\_  
John Butitta, Vice Chairman

\_\_\_\_\_  
John Butitta, Vice Chairman

\_\_\_\_\_  
Jean Crosby

\_\_\_\_\_  
Jean Crosby

\_\_\_\_\_  
Paul Arena

\_\_\_\_\_  
Paul Arena

\_\_\_\_\_  
Joe Hoffman

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Joe Hoffman

\_\_\_\_\_  
Dorothy Redd

\_\_\_\_\_  
Dorothy Redd

\_\_\_\_\_  
Jaime Salgado

\_\_\_\_\_  
Jaime Salgado

The above and foregoing Resolution was adopted by the County Board of the  
County of Winnebago, Illinois, this \_\_\_\_\_ day of \_\_\_\_\_, 2022.

\_\_\_\_\_  
Joseph V. Chiarelli, Chairman of the  
County Board of the  
County of Winnebago, Illinois

ATTEST:

\_\_\_\_\_  
Lori Gummow, Clerk of the  
County Board of the  
County of Winnebago, Illinois

AMENDED DELINQUENT  
TAX SALE TRUSTEE  
AGENCY AGREEMENT

This Amended Delinquent Tax Sale Trustee Agency Agreement ("Agreement") is entered into by and between the COUNTY OF WINNEBAGO, ILLINOIS, (hereinafter referred to as the "COUNTY") and, REGION 1 PLANNING COUNCIL, (hereinafter referred to as the "AGENT") ~~(together the "Parties.")~~.

PREAMBLE

Pursuant to the section 21-90 of the Property Tax Code (35 ILCS 200/ 21-90), the County of Winnebago may appoint an Agent to represent the County as Trustee, including attending the Annual Tax Sale(s) of Delinquent Property on the County's behalf (as Trustee for all taxing districts having a taxing interest in that property), and, in the absence of other bidders, bid on the property being sold. It is the overall conviction of the County Board of Winnebago County that such appointment and the creation of a Delinquent Tax Sale Program for Winnebago County (hereinafter referred to as the "Program") will further two (2) specific goals of the County and taxing districts within the County:

1. To recover delinquent real estate taxes for the benefit of all taxing districts having an interest in the particular parcel of real estate, and,
2. In the case of property to which the County of Winnebago, as Trustee, ultimately takes a tax deed pursuant to the Property Tax Code, it will aid in the expeditious transfer of ownership and the return of that property to a responsible property owner.

The Chairman of the Winnebago County Board, with the advice and consent of the County Board by resolution duly adopted, has appointed Region 1 Planning Council to act as the County's Agent to operate the Program in accordance with the provisions of 35 ILCS 200/21-90.

The Agent understands the County's purpose for entering into this Agreement and acknowledges that the appointment of it as the Agent pursuant to the Property Tax Code places it in a position of representing the County of Winnebago to the public, insofar as the operation of the Program is concerned. The Agent further acknowledges that the services to be rendered are uniquely created and described in the Property Tax Code and that these services are intended to inure to the benefit of the public of Winnebago County, Illinois. As such, both ~~parties~~Parties believe that the Agent's position shall be in the nature of service to the public and that the Agent must at all times abide by the general principles guiding a fiduciary in the public employ in both the immediate and long term.

The County and the Agent recognize that the operation of the Program is a complex matter difficult of precise description and that from time to time the Agent may be required to take action not specifically covered in detail in the body of this Agreement. It is the intention of the ~~parties~~Parties in setting forth this Preamble, that at such times, the Agent will make the necessary decisions and act only in pursuit of the goals and intentions as hereinabove stated by the ~~parties~~Parties, and will notify the County that such action has been taken.



NOW THEREFORE, in consideration of the joint and several promises set forth below, the COUNTY and the AGENT agree as follows:

**A. Appointment and Duties of Agent**

- Pursuant to 35 ILCS 200/21-90 of the Property Tax Code, the County hereby appoints Region 1 Planning Council to be the County's agent to attend the Winnebago County Treasurer's Annual Tax Sale(s) of Delinquent Property and in the absence of other bidders, bid in the name of WINNEBAGO COUNTY, TRUSTEE, on the County's behalf (as Trustee for all taxing districts), the maximum penalty interest permitted by law on full amount of taxes and penalties on all tracts of land or lots being sold.
- The AGENT agrees to establish and administer the Program.
- The AGENT shall act as the County's Agent for the purposes of [a] securing redemptions, [b] prepare all notices required by law, [c] assist the Winnebago County State's Attorney in preparing and filing of petitions, applications and orders for tax deed, [d] ascertain the identity and location of parties of interest, [e] inspect properties, [f] arrange for the service of notices as required by law, and [g] perform all other procedures necessary for obtaining tax deeds and then conveying property so acquired, including preparing deeds of conveyance. Subject to the approval of the COUNTY Board Chairman ~~or a designee selected by the Chairman, or a~~ Any designee selected by the Chairman shall be with the ~~advice and consent and advice of~~ the County Board ("Chairman Designee"), AGENT may file extensions of the period of redemption and petition for tax deeds as it may deem necessary. The AGENT shall implement contemporary marketing practices to inform the public, and expeditiously sell and convey to third parties, the properties acquired by tax deed. AGENT shall not use any marketing or sales practice with respect to which the County Board Chairman, or ~~a designee selected by the Chairman~~ Chairman Designee, instructs AGENT not to use. All properties shall be identified and marketed as solely Trustee owned properties.
- The COUNTY, as Trustee for the taxing districts, reserves the right to assign tax sale certificates of purchase obtained by the AGENT to a taxing district. In the event the AGENT desires to effect an assignment of a tax sale certificate, such assignment must be with the consent of the Winnebago County Board Chairman or ~~a designee selected by the Chairman~~ Chairman Designee.
- On property to which a tax deed is taken in the name of WINNEBAGO COUNTY, TRUSTEE, the AGENT, with the advice and consent of the Winnebago County Board Chairman or ~~a designee selected by the Chairman~~ Chairman Designee, may establish and collect rents on said property prior to sale or conveyance of the property. All monies collected will be deposited on or before the fifth (5<sup>th</sup>) following business day into the program proceeds account described below.
- Continuously throughout the duration of this Agreement, the AGENT shall market and sell property on which an order for the issuance of a tax deed has been entered in favor of the WINNEBAGO COUNTY, TRUSTEE and property on which tax deeds have been taken in the name of WINNEBAGO COUNTY TRUSTEE. The AGENT shall, at its expense, answer all inquiries relating to said properties, furnish sales and marketing material and pursue diligently any and all actions which will produce a prompt conveyance of any and all parcels of property acquired. Unless otherwise set forth herein, prior to any sale, the AGENT must

accept offers on a property for a reasonable time period.

The AGENT shall inform the COUNTY, through the County Board Chairman or ~~a designee selected by the Chairman~~ Chairman Designee, as to the operation of the program and shall cooperate with the Chairman or ~~a designee selected by the Chairman~~ Chairman Designee, in establishing minimum sale prices, rules of sales, and general accountability. The COUNTY, as Trustee, through the County Board Chairman or ~~a designee selected by the Chairman~~ Chairman Designee, reserves the right to direct the AGENT not to bid on certain parcels of real property at the County Treasurer's Annual Tax Sale(s) of Delinquent Property.

- The AGENT shall assist the Winnebago County State's Attorney in periodically pursuing marketable title to parcels acquired through the Program that prove otherwise unmerchantable. All required actions will be pursued in the name of WINNEBAGO COUNTY, as TRUSTEE, and any notices, summons or other papers which may not legally be served by the AGENT will be served by the Sheriff of Winnebago County. The expense of any such legal action concerning merchantable title will be paid from the proceeds of the Program (see Section B.), unless the action is made necessary by gross negligence on the part of AGENT or anyone in their employ, in which case the cost shall be borne by the AGENT.
- The ~~parties~~ Parties agree that a special Assistant State's Attorney may be appointed by the Winnebago County State's Attorney to assist with the tax deed proceedings, including necessary court appearances and matters related to the court proceedings, as agreed to by the ~~parties~~ Parties. The State's Attorney shall review and approve any appointment of a Special Assistant State's Attorney for the Program. The special Assistant State's Attorney shall report to, and be under the direction and control of the Winnebago County State's Attorney. All expenses paid by the Special Assistant State's Attorney shall be made from the proceeds of the program, except as provided above. All clerical assistance required by the Special Assistant State's Attorney shall be provided by the AGENT's employees at AGENT's expense.
- All files pertaining to the operation of program and maintained by the AGENT shall remain in the office of the AGENT. However, all such files and all papers, documents, letters, and memoranda contained therein or pertaining thereto shall remain the property of the COUNTY, and the COUNTY shall have full access to the files at all times during normal business hours.

#### **B. Program Proceeds**

1. Redemptions and Assignments. In cases of redemptions and assignment of tax sale certificates, the maximum amount of penalties and fees as provided within the Property Tax Code shall be charged and collected into the Program Proceeds Account. Additionally, an assignment fee of Twenty-Five Dollars (\$25.00) per assigned tax sale certificate, except when assigning to a unit of local government, shall be deposited in the Program Proceeds Account. Said assignment fee to be paid by and collected from the assignee at the time of such assignment. Assignments of tax sale certificates will not be made without the consent of the Winnebago County Board Chairman or Chairman Designee. ~~AGENT~~ after a Petition for Tax Deed has been filed.
2. Rents. In cases of rents, when a tax deed has been taken in the name of WINNEBAGO COUNTY, TRUSTEE, and AGENT has collected rents on the property in question prior to its conveyance to a third party, all rents shall be collected and deposited into the Program Proceeds account.

3. Distribution of Net Proceeds. After the program costs are disbursed, (refer to Section D.), the balance shall be divided between the AGENT and the Winnebago County Treasurer. The AGENT shall receive thirty-three percent (33%) of the balance as an investment to continue blight reduction efforts, as determined by R1 Planning Council Board. The AGENT shall provide an annual report to the COUNTY demonstrating how the AGENT's funds were utilized for blight reduction efforts in Winnebago County--. The Winnebago County Treasurer shall receive the remaining sixty-seven percent (67%) of the balance to distribute to the taxing bodies, as provided by law. The balance distributed to the AGENT and Winnebago County Treasurer shall not include principal interest on redemptions that is owed to taxing bodies.

#### C. County Fees

The COUNTY, as Trustee, agrees to discount in whole all fees (within its authority) associated with the management of the Program, with the approval of the applicable department or office. This shall include services prescribed by 35 ILCS 200/Property Tax Code to be rendered by the County Treasurer, Judicial Circuit Court, Circuit Clerk, County Clerk, Sheriff, and State's Attorney, except as otherwise stated within this Agreement.

#### D. Mechanics of Operation

- a. The COUNTY TREASURER and AGENT shall keep a strict accounting of all expenses drawn on the Program Proceeds and it shall be the duty of the COUNTY TREASURER to report the status of said accounts quarterly to the County Board Chairman. The amount of expenses drawn from the revolving accounts will be reimbursed on a priority basis from the sale or redemption of each parcel of property. The AGENT shall properly maintain a record of all transactions for the Program, which shall be readily available to the County. The COUNTY shall inform the AGENT of the proper format for reporting purposes.
- b. Upon request by the COUNTY, the AGENT shall provide the COUNTY with copies of any invoices, receipts, legal expenses, and any other source documents for all expenses drawn on the Program Proceeds account. This includes providing the Winnebago County Treasurer with an accounting by Property Index Number and by Tax Code of (a) the expenses incurred in obtaining tax deeds to parcels, maintenance costs, and (b) the sales proceeds.
- c. A Program Proceeds Account shall be created at a bank designated by the Winnebago County Treasurer and shall be maintained jointly by the AGENT and the Treasurer of Winnebago County for the purpose of depositing program proceeds. All money collected by, or coming into the hands of the AGENT in any manner shall be deposited into the Program Proceeds Account on or before the fifth (5<sup>th</sup>) following business day. This account shall be balanced monthly and shall at all times be open to the County and any Auditor of the County for inspection. The Program Proceeds Account shall not receive redemption payments directly. ~~Any redemption payments that are directly paid to the AGENT, including payments covering the principal tax delinquency ("Principal Tax Payment"), should be returned to the County Clerk to process as a tax redemption payment.~~ Principal property tax payments are not included in the program proceeds distribution set out in Paragraph D(k).
- d. The AGENT will issue a request for proposals (RFP) for mowing and security at Trustee properties. Budget will be monitored to appropriate mowing throughout seasons of growth. The budget and quality of the service will be reviewed by the AGENT. The

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Agent will receive a 12.5% contract management fee.

- e. AGENT shall attend the Winnebago County Treasurer's annual tax sale each year and bid the maximum penalty interest rate on all properties not bid upon by another tax buyer.
- f. It is contemplated by the ~~parties~~Parties that a Winnebago County Assistant State's Attorney will represent the Program in court appearances in the 17<sup>th</sup> Judicial Circuit Court of the State of Illinois. The AGENT retains the right to contract legal counsel for other necessary legal services.
- g. The COUNTY shall furnish to AGENT a duplicate or photocopy of each tax sale certificate and shall provide, free of charge, with any documentation or information known by the offices of the County Clerk and/or Recorder, County Treasurer, and Supervisor of Assessments, as to owners, occupants, parties of interest, the condition of the subject property, and all other relevant information in the possession of said offices to be used in obtaining tax redemptions or tax deeds.
- h. Certificates of Purchase acquired through this Agreement shall be in the name of WINNEBAGO COUNTY TRUSTEE, and shall be ~~surrendered to deposited with~~ the Winnebago County Treasurer. It is the intent of the ~~parties~~Parties that all redemptions shall be made directly to the Winnebago County Clerk. Subsequent to redemption, the County Clerk shall submit to the Winnebago County Treasurer and AGENT a list of parcels redeemed. The Treasurer shall forthwith deliver the certificates to the County Clerk of Winnebago County for cancellation. The County Clerk shall then issue to the Treasurer a check, made payable to the Program Proceeds account for the amount received from the redeeming party, less the Principal Tax Payment amount. The Treasurer shall deposit the check into the Program Proceeds Account and furnish a copy of the deposit slip to the AGENT. The Principal Tax Payment amount shall be sent to the Treasurer for direct payment to appropriate taxing bodies, as provided by law.
- i. On all property to which title has been taken in the name of WINNEBAGO COUNTY, TRUSTEE, the AGENT shall exercise diligent effort to expediently sell such property. The AGENT is responsible for marketing and selling the property to the highest, responsible buyer. If a municipality objects to the highest bid, the municipality shall have a right of first refusal to purchase the property at the minimum bid ~~(as typically charged for municipal acquisitions of \$500, unless otherwise approved by the County Board Chairman and AGENT.)~~. If the municipality declines to exercise their right of first refusal, the property shall go to the highest bidder. Upon receiving a bid to purchase a property, the AGENT, through its website, will notify the public that a bid has been received on a property. The public will be allowed to present additional bids for a period not less than seven (7) days after the initial bid is received.
- j. Any Purchase Agreement for the sale of property which is not paid in full within ninety (90) days shall be considered in default and all money received on said Purchase Agreement shall be treated as liquidated damages.
- k. Upon the determination that the contract has been defaulted, the Program Proceeds

account shall first be reimbursed the amount of fees and expenses advanced from that account on the parcel.

- I. Upon receiving proof that payment in full has been received from the purchaser of any parcel of property sold under the provisions of this Program and the proceeds deposited into the Program Proceeds Account, the County Board Chairman shall execute a quit claim deed conveying the property to the purchaser. The AGENT shall file the deed of conveyance with the Winnebago County Recorder for recordation.
- m. ~~Upon completion of a sale, collection of redemption interest of a parcel of property, or the assignment of a tax sale certificate of purchase, the~~ The following checks will be drawn as needed from the Program Proceeds Account, with the Treasurer of Winnebago County and the AGENT co-signing all checks. The accounting period closes on September 30 each year. Checks designated to be remitted annually will be disbursed no later than October 31 each year.
  - a. ~~First Throughout the year, a~~ checks will be made payable to the AGENT ~~for the to pay for operational~~ expenses to which it is entitled under the terms of the Agreement. This includes legal expenses, marketing efforts and other expenses required by the AGENT to fulfill the duties of the Agreement. The AGENT shall request a withdrawal from this account to pay for allowable expenses as needed.
  - b. ~~Next, a second~~ Throughout the year, ~~a~~ checks will be made payable to the Winnebago County Treasurer for reimbursement for actual costs incurred assisting the program. Valid expenses to be submitted are limited to costs for public publication of notices and ~~postage~~ expenses.
  - c. ~~Next, a Quarterly, third a~~ check will be drawn for Recorder of Deed expenses. ~~This expense shall be remitted quarterly.~~
  - d. ~~Last, Annually,~~ proceeds will be set aside in the Program Proceeds Account to restore the reserve of \$150,000 to be held in the account for next year's maintenance.
  - e. ~~Next, a~~ Quarterly, ~~a fourth~~ check will be drawn for expenses of the County Clerk for cancellation of certificates. ~~This expense shall be remitted quarterly.~~
  - f. ~~Next, a Annually, a fifth~~ check will be made payable to the AGENT for thirty-three percent (33%) of the balance remaining in Program Proceeds Account. This check ~~shall be remitted annually and~~ will not include the \$150,000 held in reserve for next year's maintenance.
  - g. ~~Next, a Annually, sixth a~~ check will be made payable to the Treasurer of Winnebago County for sixty-seven percent (67%) of the balance remaining from the Program Proceeds Account. The AGENT will provide the Treasurer with property sales information, by tax code, for disbursement to the taxing bodies, as provided by law. This check ~~shall be remitted annually and~~ will not include the \$150,000 held in reserve for next year's maintenance.

E. Administration of the Delinquent Tax Program

For administration of the program and its day-to-day operations, the COUNTY representative shall be the County Board Chairman, or ~~his or her~~Chairman Ddesignee, and for the AGENT, its Executive Director or his or her designee.

F. Reporting

In addition to the requirements of Paragraph (D)(b), the AGENT will perform one (1) annual update regarding the Program to the Winnebago County Board. Further, upon request of the Winnebago County Board Chairman or Chairman Ddesignee, the AGENT will provide the COUNTY with necessary source documents and data for a presentation to the appropriate standing committee of the County Board.

G. Conflict of Interest

Neither the AGENT nor anyone employed by the AGENT or any relative or representative of the AGENT, during the term of this agreement, shall possess or acquire any pecuniary interest directly, indirectly or beneficially, or by any derivative process, in any real estate tax delinquency or forfeiture in Winnebago County. The foregoing notwithstanding, however, the COUNTY recognizes that the AGENT, their employees, agents or subagents, may, at the date of this Agreement have an interest in real property which would otherwise be in violation of this paragraph, and such present interests shall not be deemed in violation hereof.

H. General Conditions of Agreement

1. Agent not an Employee of the County

It is mutually understood and agreed that it is the intent of the partiesParties that an independent contractor relationship be and hereby established under the terms and conditions of this Agreement. It is further understood and agreed that it is the intent of the partiesParties that the employees of the AGENT are not nor shall they be deemed employees of the COUNTY and that the employees of the COUNTY are not nor shall they be deemed employees of the AGENT. It is further understood and agreed that it is the intent of the partiesParties that the COUNTY has not created any type of COUNTY office through the creation of this Program. Nor shall the AGENT be considered a public officer in performing their duties pursuant to this Agreement.

2. Assignment

The AGENT and the COUNTY agree that this Agreement is one contemplating that personal services are to be rendered by the AGENT and their employees. Neither party hereto may assign or transfer this Agreement or any part thereof, without the written consent of the other party.

3. Maps and Copies

The COUNTY shall, without expense to AGENT, furnish AGENT with one complete set of current tax maps and plat books for use by AGENT in identifying and locating tax delinquent parcels within the Program. The COUNTY shall, without expense to AGENT, provide copies of recorded documents when requested by AGENT in performing its contractual obligation of ascertaining the identities of interested parties of tax delinquent parcels.



#### 4. Written Notices

All notices, approvals, demands, requests or other documents required or permitted under this Agreement, other than routine communications necessary for the day-to-day operation of this Program, shall be deemed properly given if hand delivered or sent by nationally recognized overnight carrier or mailed by certified mail, postage prepaid, return receipt requested, to the following addresses:

The County of Winnebago  
Winnebago County Clerk  
404 Elm Street – Suite 104  
Rockford, Illinois 61101

Region 1 Planning Council, Trustee Agent  
313 N Main St  
Rockford, Illinois 61101

#### 5. Indemnification

AGENT shall indemnify and hold harmless COUNTY from and against all claims, suits, damages, costs, losses, and expenses in any manner arising from, out of, or in any way connected with the improper performance of AGENT, their agents, subagents, in actions taken pursuant to this Agreement.

#### 6. Term of Agreement and Effects of Termination.

- a. The term of this Agreement shall be in effect ~~until December 31, 2025 for three (3) years from the date of signing~~ and shall renew annually thereafter until terminated by either the AGENT or the COUNTY. However, either party has the right to terminate this Agreement by giving notice of no less than One Hundred Twenty (120) days prior to the effective date of termination. The notice period shall be sixty (60) days for a substantial breach of any term set forth in this Agreement
- b. Upon termination of this Agreement, AGENT shall be allowed to complete all sales, assignments, and re-conveyances to third parties which were entered into prior to the date of termination and are not completed as of the date of termination, and shall further be allowed to hold one auction after the date of termination to attempt to sell any properties for which a tax deed petition is pending as of the date of termination and a tax deed is later procured. The AGENT shall receive the compensation which it would otherwise be entitled to under this Agreement for such sales. The AGENT shall also be entitled to receive the penalty interest on redemptions it is entitled to receive under this Agreement for those certificates with respect to which AGENT has served Take Notices. The percentage of the redemption interest AGENT will be entitled to receive subsequent to the termination of this Agreement will be based on what the redemption interest would have been on a redemption as of the date of the termination of this Agreement.
- c. Additionally, the Agent, Treasurer, and County Clerk, shall within sixty (60) days after the date of termination furnish to the County Board Chairman and Administrator full and accurate records of all certificates of purchase awarded, owner redemptions, deed transfers, , purchase contracts not fully executed, petitions for tax deed, auction records, sales-in-error filed and granted, accounting of proceeds, interests, and fees, and other pertinent records relative to the management of the Program.

**Commented [LV1]:** Reads as follows:

"Upon termination of this Agreement, AGENT shall be allowed to complete all sales, assignments, and re-conveyances to third parties which were entered into prior to the date of termination and are not completed as of the date of termination, and shall further be allowed to hold one auction after the date of termination to attempt to sell any properties for which a tax deed petition is pending as of the date of termination and a tax deed is later procured."

This Agreement entered into and signed this \_\_\_\_\_  
day of \_\_\_\_\_ 2022.

**COUNTY OF WINNEBAGO COUNTY, ILLINOIS**

**REGION 1 PLANNING COUNCIL**

BY: \_\_\_\_\_  
Joseph V. Chiarelli  
Chairman of the County Board of the  
County of Winnebago, Illinois

BY: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Lori Gummow  
Clerk of the County Board of the  
County of Winnebago, Illinois

DRAFT

STATE OF ILLINOIS,  
COUNTY OF WINNEBAGO } ss.

*I, LORI GUMMOW, County Clerk in and for said County, in the State aforesaid, do hereby certify that I have compared the foregoing attached copy of:*

**RESOLUTION AUTHORIZING THE EXECUTION OF A CONTRACT WITH  
REGION 1 PLANNING COUNCIL TO ACT AS THE COUNTY OF  
WINNEBAGO'S AGENT IN THE OPERATION OF A DELINQIENT TAX  
PROGRAM**

*with the original document which is on file in my office; and found it to be a true, perfect and complete copy of the original document.*

*IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seal of said County, at my office in the City of Rockford, in said County,*

*This* 25TH DAY OF OCTOBER, 2019.

LORI GUMMOW, Winnebago County Clerk

BY: Angela Reina Deputy County Clerk



# RESOLUTION

of the

COUNTY BOARD OF THE COUNTY OF WINNEBAGO, ILLINOIS

SUBMITTED BY: OPERATIONS AND ADMINISTRATIVE COMMITTEE

**2019 CR 127**

**RESOLUTION AUTHORIZING THE EXECUTION OF A CONTRACT  
WITH REGION 1 PLANNING COUNCIL TO ACT AS THE COUNTY OF  
WINNEBAGO'S AGENT IN THE OPERATION OF A DELINQUENT TAX PROGRAM**

WHEREAS, since 1997 the County of Winnebago has operated a delinquent tax program pursuant to section 21-90 of the Illinois Property Tax Code; and

WHEREAS, in May of 2019 the County sent out a Request for Qualifications for the purpose of updating its contract with an agent to operate the County's delinquent tax program; and

WHEREAS, after reviewing the responses received to the Request for Qualifications, County Board Chairman Frank Haney has decided he intends to appoint the Region 1 Planning Council to act as the County's agent in the operation of a delinquent tax program; and

WHEREAS, the Operations and Administrative Committee finds it is in the best interests of the citizens and taxing bodies in Winnebago County, Illinois for the County to continue to operate a delinquent tax program, and for Region 1 Planning Council to act as the County's agent in the operation of that program.

NOW, THEREFORE, BE IT RESOLVED, by the County Board of the County of Winnebago, Illinois, that the Winnebago County Board Chairman is County Board hereby authorized and directed to, on behalf of the County of Winnebago, enter into a contract with Region 1 Planning Council to act as the County's agent in the operation of a delinquent tax program.

BE IT FURTHER RESOLVED, that any contract entered into by the Chairman pursuant to the authority granted by this Resolution shall contain substantially the same terms as the contract attached hereto as "Exhibit A".

BE IT FURTHER RESOLVED, that this Resolution shall be in full force and effect immediately upon its adoption.

BE IT FURTHER RESOLVED, that the Clerk of the County Board is hereby directed to prepare and deliver a certified copy of this Resolution to Eric Setter, Land Bank Coordinator, 313 N. Main Street, Rockford, Illinois 61101.

Respectfully submitted,

OPERATIONS AND ADMINISTRATIVE COMMITTEE

AGREE

  
Keith McDonald, Chairman

Paul Arena

  
John Butitta

  
Jean Crosby

  
Joe Hoffman

Dorothy Redd

Jaime Salgado

DISAGREE

Keith McDonald, Chairman

  
Paul Arena

John Butitta


Jean Crosby

Joe Hoffman


Dorothy Redd

Jaime Salgado

The above and foregoing Resolution was adopted by the County Board of the County of Winnebago, Illinois, this 24 day of October, 2019.

  
Frank Haney, Chairman of the  
County Board of the County of  
Winnebago, Illinois

ATTEST:

  
Lori Gummow, Clerk of the  
County Board of the County  
of Winnebago, Illinois

**DELINQUENT TAX SALE TRUSTEE AGENCY  
INTERGOVERNMENTAL AGREEMENT**

PREAMBLE

Pursuant to the 35 ILCS 200/Property Tax Code 200/21-90, Winnebago County may appoint an Agent to represent the County as Trustee. It is the overall conviction of the County Board of Winnebago County that such appointment and the creation of a Delinquent Tax Program will further two specific goals of the County and taxing districts within the County:

1. To recover delinquent real estate taxes for the benefit of all taxing districts having an interest in the particular parcel of real estate, and,
2. In the case of property to which the County of Winnebago, as Trustee, ultimately takes a tax deed pursuant to the Property Tax Code, it will aid in the expeditious transfer of ownership and the return of that property to a responsible property owner.

The Agent, Region 1 Planning Council, understands the County's purpose for entering into this Intergovernmental Agreement and acknowledges that the appointment of the Agent pursuant to the Property Tax Code places the Agent in a position of representing the County of Winnebago to the public, insofar as the operation of the Delinquent Tax Sale Program is concerned. The Agent further acknowledges that the services to be rendered are uniquely created and described in the Property Tax Code and that these services are intended to inure to the benefit of the public of Winnebago County. As such, both parties believe that the Agent's position shall be in the nature of service to the public and that the Agent must at all times abide by the general principles guiding a fiduciary in the public employ in both the immediate and long term.

The County and the Agent recognize that the operation of the Delinquent Tax Sale Program is a complex matter difficult of precise description and that from time to time the Agent may be required to take action not specifically covered in detail in the body of the Agreement. It is the intention of the parties in setting forth this Preamble, that at such times, the Agent will make the necessary decisions and act only in pursuit of the goals and intentions as hereinabove stated by the parties.



## AGREEMENT

This Intergovernmental Agreement is entered into by and between the COUNTY OF WINNEBAGO, ILLINOIS, hereinafter referred to as the COUNTY and, Region 1 Planning Council, hereinafter referred to as the AGENT. Pursuant to a resolution passed by the County Board of Winnebago County, Illinois, at their regular meeting held on October 24, 2019, the COUNTY and the AGENT hereby agree:

### A. Appointment and Duties of Agent

Pursuant to 35ILCS 200/21-90 Property Tax Code, Region 1 Planning Council shall be appointed the AGENT of the Winnebago County Board, which is the Trustee for all taxing districts, to, during the term of this Agreement, attend the Annual Tax Sale(s) and bid the full amount of taxes and penalties on all tracts of land or lots in the absence of other bidders, in the name of WINNEBAGO COUNTY, TRUSTEE.

Region 1 Planning Council agrees to establish and administer the Delinquent Tax Sale Program of Winnebago County.

Region 1 Planning Council shall act as AGENT of the COUNTY for the purposes of securing redemptions, preparing all notices, assisting in the preparation and filing of petitions, applications and orders for tax deed, locating parties of interest, inspecting properties, preparing notices for service under the authorization of the Sheriff, and assisting in all other procedures necessary for obtaining tax deeds and conveying property so acquired. The AGENT shall diligently pursue a continuous program of collection in the name of the COUNTY, and subject to the direction of the COUNTY Board Chairman or designee, may file extensions of the period of redemption and petition for tax deeds as he may deem necessary. The AGENT shall implement contemporary marketing practices to inform the public, and expeditiously transfer property out of Trust.

The COUNTY OF WINNEBAGO reserves the right to assign tax certificates obtained by the AGENT. In the event the AGENT desires to effect an assignment, such assignment must be with the consent of the Winnebago County Board Chairman.

On property to which a tax deed is taken in the name of WINNEBAGO COUNTY, TRUSTEE, the AGENT, with the advice and consent of the Winnebago County Board Chairman, may establish and collect rents on said property prior to sale or liquidation. All monies collected will be deposited on or before the fifth following business day into the program proceeds account described below.

Continuously throughout the duration of this contract, the AGENT shall market and sell property on which tax deeds have been taken in the name of WINNEBAGO COUNTY, TRUSTEE. The AGENT shall, at their expense, answer all inquiries relating to said properties, furnish sales and marketing material and pursue diligently any action which will produce a responsible disposal of property through a sale. Prior to any sale, the AGENT must accept offers on a property for a reasonable time period.

The AGENT shall inform the COUNTY, through the County Board Chairman, as to the operation of the program and shall cooperate with the Chairman, or a County designated staff member, in establishing minimum sale prices, rules of sales, and general accountability. The COUNTY reserves the right to direct the AGENT not to purchase certain parcels of real property at the county's annual tax sale.

The AGENT shall assist the State's Attorney in periodically pursuing marketable title to items that prove otherwise unmerchantable. All required actions will be pursued in the name of WINNEBAGO COUNTY, as TRUSTEE, and any notices, summons or other papers which may not legally be served by the AGENT will be served by the Sheriff of Winnebago County. The expense of any such legal action concerning merchantable title will be paid from the proceeds of the program (see Section B.), unless the action is made necessary by gross negligence on the part of AGENT or anyone in their employ, in which case the cost shall be borne by the AGENT.

It is the intent of the parties that a special Assistant State's Attorney will be appointed by the Winnebago County State's Attorney to initiate and pursue tax deed proceedings and any necessary quiet title actions, and prepare deeds of conveyance. The special Assistant State's Attorney shall report to, and be under the direction and control of the Winnebago County State's Attorney. All expenses paid by the Special Assistant State's Attorney shall be made from the proceeds of the program, except as provided above. All clerical assistance required by the Special Assistant State's Attorney shall be provided by the AGENT's employees at AGENT's expense.

All files pertaining to its program and maintained by the AGENT shall remain in the office of the AGENT. However, all such files and all papers, documents, letters, and memoranda contained therein or pertaining thereto shall remain the property of the COUNTY, and the COUNTY shall have full access to the files at all times during normal business hours.

**B. Program Proceeds**

1. In cases of redemptions and assignment of tax certificates, the maximum amount of penalties and fees as provided within the Property Tax Code shall be charged and collected into the Program Proceeds Account. Additionally, an assignment fee of Twenty-Five Dollars (\$25.00) per assigned certificate, except when assigning to a unit of local government, shall be deposited in the Program Proceeds Account. Said assignment fee to be paid by and collected from the assignee at the time of such assignment. Assignments of certificates will not be made without the consent of the AGENT after a Petition for Tax Deed has been filed.
2. After calculating the program costs are disbursed, (refer to Section D.), the balance shall be divided between the AGENT and the Winnebago County Treasurer. The AGENT shall receive 33% of the balance as an investment to continue blight reduction efforts. The Winnebago County Treasurer shall receive the remaining 67% of the balance to distribute to the taxing bodies. The balance distributed to the AGENT and Winnebago County Treasurer shall not include principal interest on redemptions that is owed to taxing bodies.

**C. County Fees**

The COUNTY, as Trustee, agrees to discount in whole all fees (within its authority) associated with the management of the Trust. This shall include services prescribed by 35 ILCS 200/Property Tax Code to be rendered by the County Treasurer, Judicial Court, Circuit Clerk, County Clerk, Sheriff, and State's Attorney, except as otherwise stated within this agreement.

D. Mechanics of Operation

- a. The COUNTY agrees to deposit a one-time seed sum of One Hundred-Fifty Thousand Dollars (\$150,000) for maintenance of property into the Program Proceeds Account. The COUNTY TREASURER OF WINNEBAGO COUNTY shall draw from this account only the amount necessary for basic maintenance costs of mowing and securing Trustee properties, and to mitigate actual or imminent threats to public health and safety of Trustee properties.
- b. The COUNTY TREASURER and AGENT shall keep a strict accounting of all expenses drawn on the Program Proceeds and it shall be the duty of the TREASURER to report the status of said accounts at least monthly to the County Board Chairman. The amount of expenses drawn from the revolving accounts will be reimbursed on a priority basis from the sale or redemption of each item of property.
- c. A Program Proceeds Account shall be created in any Winnebago County Bank and shall be maintained jointly by the AGENT and the Treasurer of Winnebago County for the purpose of depositing program proceeds. All money collected by, or coming into the hands of the AGENT in any manner shall be deposited into the Account on or before the fifth following business day. This account shall be balanced monthly and shall at all times be open to the County Board and any Auditor of the County of Winnebago for inspection. The intent of the account is not to receive redemption funds owed to taxing bodies. Should principal property tax redemption funds be deposited into the account, the funds should be moved to a separate account as soon as possible for disbursement to taxing bodies. Principal property tax payments are not included in the program proceeds distribution set out in Paragraph I.
- d. The AGENT will issue a request for proposals (RFP) for mowing and security Trustee properties. Budget will be monitored to appropriate mowing throughout seasons of growth. The budget and quality of the service will be reviewed after the first year of the contract. The Agent will receive a 12.5% contract management fee.
- e. The COUNTY shall provide an Assistant or Special State's Attorney to represent the Trust in court appearances in the 17<sup>th</sup> Judicial Court of the State of Illinois. The AGENT retains the right to contract legal counsel for the other necessary legal services.
- f. The COUNTY shall furnish a duplicate or photocopy of each tax sale certificate and shall provide any information known by offices of the County Clerk and/or Recorder, County Treasurer, a Supervisor of Assessments, as to owners, occupants, parties of interest, the condition of the subject property, and all other relevant information in the possession of said offices to be used in obtaining tax redemptions or tax deeds.
- g. Certificates of Purchase acquired through this agreement shall be in the name of WINNEBAGO COUNTY TRUSTEE, and shall be deposited with the Treasurer of Winnebago County. It is the intent of the parties that all redemptions shall be made directly to the Winnebago County Clerk. Subsequent to redemption, the County Clerk shall submit to the Winnebago County Treasurer and AGENT a list of items redeemed. The Treasurer shall forthwith deliver the certificates to the County Clerk of Winnebago County for cancellation. The County Clerk shall then issue to the Treasurer a check, made payable to the Program Proceeds account for the amount received from the

redeeming party, less principal on redemption. The Treasurer shall deposit the check into the Program Proceeds Account and furnish a copy of the deposit slip to the AGENT. The principal redemption amount shall be sent to the Treasurer for direct payment to appropriate taxing bodies.

- h. On all property to which title has been taken in the name of WINNEBAGO COUNTY, TRUSTEE, the AGENT shall exercise diligent effort to expediently sell such property. The AGENT is responsible for marketing and selling the property to the highest, responsible buyer. Should a bid that was not the highest bid be recommended based on due diligence, the property shall be brought to the County Board for consideration of the sale. Upon receiving a bid to purchase a property, the AGENT, through its website, will notify the public that a bid has been received on a property. The public will be allowed to present additional bids for a period not less than seven (7) days after the initial bid is received.
- i. A Purchase Agreement for the sale of property which is not paid in full within ninety (90) days shall be considered in default and all money received on said Purchase Agreement shall be treated as liquidated damages.
- j. Upon the determination that the contract has been defaulted, the Program Proceeds shall first be reimbursed the amount of fees and expenses advanced from that account on the item.
- k. Upon receiving proof that payment in full has been received from the purchaser of any parcel of property sold under the provisions of this Delinquent Tax Sale Program and the proceeds deposited into the Account, the County Board Chairman shall execute a quit claim deed conveying the property to the purchaser. The AGENT shall file the deed of conveyance with the Winnebago County Recorder for recordation.
- l. Upon completion of a sale, collection of redemption interest of a parcel of property, or the assignment of a certificate of purchase, the following checks will be drawn as needed from the Program Proceeds Account, with the Treasurer of Winnebago County and the AGENT co-signing all checks. The accounting period closes on September 30 each year. Checks designated to be remitted annually will be disbursed no later than October 31 each year.
  - a. A check will be made payable to the AGENT for the expenses to which it is entitled under the terms of the Agreement. This includes legal expenses, marketing efforts and other expenses required by the AGENT to fulfill the duties of the Agreement. The AGENT shall request a withdrawal from this account to pay for allowable expenses as needed.
  - b. A check will be made payable to the Winnebago County Treasurer for reimbursement for actual costs incurred assisting the program. Valid expenses to be submitted are limited to costs for public publication of notices and postage expenses.
  - c. A minimum balance reserve of \$150,000 will be held in the account for next year's maintenance.
  - d. A check will be drawn for Recorder of Deed expenses. This expense shall be remitted quarterly.

- e. A check will be drawn for expenses of the County Clerk for cancellation of certificates. This expense shall be remitted quarterly.
- f. A check will be made payable to WINNEBAGO COUNTY for repayment of the one-time initial seed funding. This loan repayment will be distributed each year until paid in full.
- g. A check will be made payable to the AGENT for 33% of the balance remaining in Program Proceeds Account. This check shall be remitted annually and will not include the \$150,000 held in reserve for next year's maintenance.
- h. A check will be made payable to the Treasurer of Winnebago County for 67% of the balance remaining from the Program Proceeds Account. The AGENT will provide the Treasurer with property sales information, by tax code, for disbursement. This check shall be remitted annually and will not include the \$150,000 held in reserve for next year's maintenance.

#### E. Conflict of Interest

Neither the AGENT nor any employed by the AGENT or any relative or representative of the AGENT, during the term of this agreement, shall possess or acquire any pecuniary interest directly, indirectly or beneficially, or by any derivative process, in any real estate tax delinquency or forfeiture in Winnebago County. The foregoing notwithstanding, however, the COUNTY recognizes that the AGENT, their employees, agents or subagents, may, at the date of this Agreement have an interest in real property which would otherwise be in violation of this paragraph, and such present interests shall not be deemed in violation hereof.

#### F. General Conditions of Agreement

##### 1. Agent not an Employee of the County

It is mutually understood, agreed, and it is the intent of the parties that an independent contractor relationship be and hereby established under the terms and conditions of this Agreement. It is further understood, agreed and it is the intent of the parties that the employees of the AGENT are not nor shall they be deemed employees of the COUNTY and that the employees of the COUNTY are not nor shall they be deemed employees of the AGENT. It is further understood, agreed and is the intent of the parties that the COUNTY has not created any type of COUNTY office through the creation of this Delinquent Tax Collection Program. Nor shall the AGENT be considered a public officer in performing their duties pursuant to this Agreement.

##### 2. Assignment

The AGENT and the COUNTY agree that this Agreement is one contemplating that personal services are to be rendered by the AGENT and their employees, therefore neither party hereto may assign or transfer this Agreement or any part thereof, without the written consent of the other party.

##### 3. Maps and Copies

The COUNTY shall, without expense to AGENT, furnish AGENT with one complete set of current tax maps and plat books for use by AGENT in identifying and locating tax delinquent

parcels within the Program. The COUNTY shall, without expense to AGENT, provide copies of recorded documents when ascertaining interested parties of tax delinquent parcels.

#### 4. Written Notices

Any written notices which may be required to be sent pursuant to this Agreement shall be addressed and sent as follows:

The County of Winnebago  
Winnebago County Clerk  
404 Elm Street - Ground Level  
Rockford, Illinois 61101

Region 1 Planning Council, Trustee Agent  
313 N Main St  
Rockford, IL, 61101

#### 5. Indemnification

AGENT shall indemnify and hold harmless COUNTY from and against all claims, suits, damages, costs, losses, and expenses in any manner arising from, out of, or in any way connected with the improper performance of AGENT, their agents subagents, in actions taken pursuant to this Agreement.

#### 6. Term of Agreement

The term of this Agreement shall be in effect for three (3) years from the date of signing and shall renew annually thereafter until terminated by either the AGENT or the COUNTY. However, either party has the right to terminate this Agreement by giving notice of no less than One Hundred Twenty (120) days prior to the effective date of termination.

Upon termination of this Agreement, AGENT shall be allowed to complete all sales, assignments, and reconveyances in process, and AGENT shall receive the compensation which he would otherwise be entitled to under this Agreement and the normal service charges on money collected. Additionally, the Agent, Treasurer, and County Clerk, shall furnish to the County Board Chairman and Administrator full and accurate records of all annual tax buyer certificate issuances, tax buyer certificates awarded/redeemed/unredeemed, owner redemptions, deed transfers into the Trust, deed transfers out of the Trust, purchase contracts not fully executed, petitions for tax deed, auction records, sales-in-error filed and granted, accounting of proceeds, interests, and fees, and other pertinent records relative to the management of the Trust and transition of agency.

This Agreement entered into and signed at the County Office Building of Winnebago County, Illinois this 24<sup>th</sup> day of October, 2019.



(13)

COMMITTEE: Operations + AdministrativeSUBJECT: Amendment

	AYES	NAYES	PRESENT	ABSENT	ABSTAINED
1. ARENA, PAUL	✓				
2. BILICH, JAS	✓				
3. BOOKER, AARON	✓				
4. BOOMER, DAVID	✓				
5. BUTITTA, JOHN	✓				
6. CROSBY, JEAN	✓				
7. FELLARS, DANIEL	✓				
8. FIDUCCIA, DAVE	✓				
9. GERL, BURT	✓				
10. GORAL, ANGIE	✓				
11. HOFFMAN, JOE	✓				
12. KELLEY, DAVE	✓				
13. MC DONALD, KEITH	✓				
14. NABORS, JR., TIMOTHY	✓				
15. REDD, DOROTHY	✓				
16. SALGADO, JAIME				✓	
17. SCHULTZ, STEVE		✓			
18. TASSONI, DAVE	✓				
19. WEBSTER, JIM	✓				
20. WESCOTT, FRED	✓				
TOTALS Roll Call	18	1		1	

(13)

COMMITTEE: Operations & AdministrativeSUBJECT: Contract with  
Region 1

	AYES	NAYES	PRESENT	ABSENT	ABSTAINED
1. ARENA, PAUL	✓				
2. BILICH, JAS	✓				
3. BOOKER, AARON	✓				
4. BOOMER, DAVID	✓				
5. BUTITTA, JOHN	✓				
6. CROSBY, JEAN	✓				
7. FELLARS, DANIEL	✓				
8. FIDUCCIA, DAVE	✓				
9. GERL, BURT	✓				
10. GORAL, ANGIE	✓				
11. HOFFMAN, JOE	✓				
12. KELLEY, DAVE	✓				
13. MC DONALD, KEITH	✓				
14. NABORS, JR., TIMOTHY	✓				
15. REDD, DOROTHY	✓				
16. SALGADO, JAIME				✓	
17. SCHULTZ, STEVE		✓			
18. TASSONI, DAVE	✓				
19. WEBSTER, JIM	✓				
20. WESCOTT, FRED	✓				
TOTALS	18	1		1	

**AMENDED DELINQUENT TAX SALE**  
**TRUSTEE AGENCY AGREEMENT**

This Amended Delinquent Tax Sale Trustee Agency Agreement ("Agreement") is entered into by and between the COUNTY OF WINNEBAGO, ILLINOIS, (hereinafter referred to as the "COUNTY") and, REGION 1 PLANNING COUNCIL, (hereinafter referred to as the "AGENT") (together the "Parties").

**PREAMBLE**

Pursuant to the section 21-90 of the Property Tax Code (35 ILCS 200/21-90), the County of Winnebago may appoint an Agent to represent the County as Trustee, including attending the Annual Tax Sale(s) of Delinquent Property on the County's behalf (as Trustee for all taxing districts having a taxing interest in that property) and, in the absence of other bidders, bid on the property being sold. It is the overall conviction of the County Board of Winnebago County that such appointment and the creation of a Delinquent Tax Sale Program for Winnebago County (hereinafter referred to as the "Program") will further two (2) specific goals of the County and taxing districts within the County:

1. To recover delinquent real estate taxes for the benefit of all taxing districts having an interest in the particular parcel of real estate; and
2. In the case of property to which the County of Winnebago, as Trustee, ultimately takes a tax deed pursuant to the Property Tax Code, it will aid in the expeditious transfer of ownership and the return of that property to a responsible property owner.

The Chairman of the Winnebago County Board, with the advice and consent of the County Board by resolution duly adopted, has appointed Region 1 Planning Council to act as the County's Agent to operate the Program in accordance with the provisions of 35 ILCS 200/21-90.

The Agent understands the County's purpose for entering this Agreement and acknowledges that the appointment of it as the Agent pursuant to the Property Tax Code places it in a position of representing the County of Winnebago to the public, insofar as the operation of the Program is concerned. The Agent further acknowledges that the services to be rendered are uniquely created and described in the Property Tax Code and that these services are intended to inure to the benefit to the public of Winnebago County, Illinois. As such, both Parties believe that the Agent's position shall be in the nature of service to the public and that the Agent must at all times abide by the general principles guiding a fiduciary in the public employ in both the immediate and long term.

The County and the Agent recognize that the operation of the Program is a complex matter difficult of precise description and that from time to time the Agent may be required to take action not specifically covered in detail in the body of this Agreement. It is the intention of the Parties in setting forth this Preamble, that at such times, the Agent will make the necessary

decisions and act only in pursuit of the goals and intentions as hereinabove stated by the Parties, and will notify the County that such action has been taken.

NOW THEREFORE, in consideration of the joint and several promises set forth below, the COUNTY and the AGENT agree as follows:

**A. APPOINTMENT AND DUTIES OF AGENT**

1. Pursuant to 35 ILCS 200/21-90 of the Property Tax Code, the County hereby appoints Region 1 Planning Council to be the County's agent to attend the Winnebago County Treasurer's Annual Tax Sale(s) of Delinquent Property and in the absence of other bidders, bid in the name of WINNEBAGO COUNTY, TRUSTEE, on the County's behalf (as Trustee for all taxing districts), the maximum penalty interest permitted by law on full amount of taxes and penalties on all tracts of land or lots being sold.
2. The AGENT agrees to establish and administer the Program.
3. The AGENT shall act as the County's Agent for the purposes of [a] securing redemptions, [b] prepare all notices required by law, [c] assist the Winnebago County State's Attorney in preparing and filing of petitions, applications and orders for tax deed, [d] ascertain the identity and location of parties of interest, [e] inspect properties, [f] arrange for the service of notices as required by law, and [g] perform all other procedures necessary for obtaining tax deeds and then conveying property so acquired, including preparing deeds of conveyance. Subject to the approval of the COUNTY Board Chairman, or *any designee selected by the Chairman* with the advice and consent of the County Board ("Chairman Designee"), AGENT may file extensions of the period of redemption and petition for tax deeds as it may deem necessary. The AGENT shall implement contemporary marking practices to inform the public, and expeditiously sell and convey to third parties, the properties acquired by tax deed. AGENT shall not use any marketing or sales practice with respect to which the Winnebago County Board Chairman, or Chairman Designee, instructs AGENT not to use. All properties shall be identified and marketed as solely Trustee owned properties.
4. The COUNTY, as Trustee for the taxing districts, reserves the right to assign tax sale certificates of purchase obtained by the AGENT to a taxing district. In the event the AGENT desires to effect an assignment of a tax sale certificate, such assignment must be with the consent of the Winnebago County Board Chairman, or Chairman Designee.

5. On property to which a tax deed is taken in the name of WINNEBAGO COUNTY, TRUSTEE, the AGENT, with the advice and consent of the Winnebago County Board Chairman, or Chairman Designee, may establish and collect rents on said property prior to sale or conveyance of the property. All monies collected will be deposited on or before the fifth (5<sup>th</sup>) following business day into the program proceeds account described below.
6. Continuously throughout the duration of this Agreement, the AGENT shall market and sell property on which an order for the issuance of a tax deed has been entered in favor of the WINNEBAGO COUNTY, TRUSTEE and property on which tax deeds have been taken in the name of WINNEBAGO COUNTY, TRUSTEE. The AGENT shall, at its expense, answer all inquiries relating to said properties, furnish sales and marketing material and pursue diligently any and all actions which will procedure a prompt conveyance of any and all parcels of property acquired. Unless otherwise set forth herein, prior to any sale, the AGENT must accept offers on a property for a reasonable time period.
7. The AGENT shall inform the COUNTY, through the Winnebago County Board Chairman, or Chairman Designee, as to the operation of the program and shall cooperate with the Winnebago County Board Chairman, or Chairman Designee, in establishing minimum sale prices, rules of sales, and general accountability. The COUNTY, as Trustee, through the Winnebago County Board Chairman, or Chairman Designee, reserves the right to direct the AGENT not to bid on certain parcels of real property of real property at the County Treasurer's Annual Tax Sale(s) of Delinquent Property.
8. The AGENT shall assist the Winnebago County State's Attorney in periodically pursuing marketable title to parcels acquired through the Program that prove otherwise unmerchantable. All required actions will be pursued in the name of WINNEBAGO COUNTY, as TRUSTEE, and any notices, summons or other papers which may not legally be served by the AGENT will be served by the Sheriff of Winnebago County. The expense of any such legal action concerning merchantable title will be paid from the proceeds of the Program (see Section B.), unless the action is made necessary by gross negligence on the part of AGENT or anyone in their employ, in which case the cost shall be borne by the AGENT.
9. The Parties agree that a Special Assistant State's Attorney may be appointed by the Winnebago County State's Attorney to assist with the tax deed proceedings, including necessary court appearances and matters related to the court proceedings, as agreed to by the Parties. The State's Attorney shall review and approve any appointment of a Special Assistant State's Attorney for the Program. The Special Assistant State's Attorney shall report to, and be under the direction and control of the Winnebago County State's Attorney. All expenses paid by the Special Assistant State's Attorney shall be made from

the proceeds of the program, except as provided above. All clerical assistance required by the Special Assistant State's Attorney shall be provided by the AGENT's employees at AGENT's expense.

10. All files pertaining to the operation of program and maintained by the AGENT shall remain in the office of the AGENT. However, all such files and all papers, documents, letters, and memoranda contained therein or pertaining thereto shall remain the property of the COUNTY, and the COUNTY shall have full access to the files at all times during normal business hours.

## **B. PROGRAM PROCEEDS**

1. Redemptions and Assignments. In cases of redemptions and assignment of tax sale certificates, the maximum amount of penalties and fees as provided within the Property Tax Code shall be charged and collected into the Program Proceeds Account. Additionally, an assignment fee of Twenty-Five Dollars (\$25.00) per assigned tax sale certificate, except when assigning to a unit of local government, shall be deposited in the Program Proceeds Account. Said assignment fee to be paid by and collected from the assignee at the time of such assignment. Assignments of tax sale certificates will not be made without the consent of the Winnebago County Board Chairman or Chairman Designee after a Petition for Tax Deed has been filed.
2. Rents. In cases of rents, when a tax deed has been taken in the name of WINNEBAGO COUNTY, TRUSTEE, and AGENT has collected rents on the property in question prior to its conveyance to a third party, all rents shall be collected and deposited into the Program Proceeds account.
3. Distribution of Net Proceeds. After the program costs are disbursed, (refer to Section D.), the balance shall be divided between the AGENT and the Winnebago County Treasurer. The AGENT shall receive thirty-three percent (33%) of the balance as an investment to continue blight reduction efforts, as determined by Region 1 Planning Council Board. The AGENT shall provide an annual report to the COUNTY demonstrating how the AGENT's funds were utilized for blight reduction efforts in Winnebago County. The Winnebago County Treasurer shall receive the remaining sixty-seven percent (67%) of the balance to distribute to the taxing bodies, as provided by law. The balance distributed to the AGENT and Winnebago County Treasurer shall not include principal interest on redemptions that is owed to taxing bodies.



### **C. COUNTY FEES**

The COUNTY, as Trustee, agrees to discount in whole all fees (within its authority) associated with the management of the Program, with the approval of the applicable department or office. This shall include services prescribed by 35 ILCS 200/Property Tax Code to be rendered by the County Treasurer, Judicial Circuit Court, Circuit Clerk, County Clerk, Sheriff, and State's Attorney, except as otherwise stated within this Agreement.

### **D. MECHANICS OF OPERATION**

1. The COUNTY TREASURER and AGENT shall keep a strict accounting of all expenses drawn on the Program Proceeds and it shall be the duty of the COUNTY TREASURER to report the status of said accounts quarterly to the County Board Chairman. The amount of expenses drawn from the revolving accounts will be reimbursed on a priority basis from the sale or redemption of each parcel of property. The AGENT shall properly maintain a record of all transactions for the Program, which shall be readily available to the County. The COUNTY shall inform the AGENT of the proper format for reporting purposes.
2. Upon request by the COUNTY, the AGENT shall provide the COUNTY with copies of any invoices, receipts, legal expenses, and any other source documents for all expenses drawn on the Program Proceeds account. This includes providing the Winnebago County Treasurer with an accounting by Property Index Number and by Tax Code of (a) the expenses incurred in obtaining tax deeds to parcels, maintenance costs, and (b) the sales proceeds.
3. A Program Proceeds Account shall be created at a bank designated by the Winnebago County Treasurer and shall be maintained jointly by the AGENT and the Winnebago County Treasurer for the purpose of depositing program proceeds. All money collected by, or coming into the hands of the AGENT in any manner shall be deposited into the Program Proceeds Account on or before the fifth (5<sup>th</sup>) following business day. This account shall be balanced monthly and shall at all times be open to the County and any Auditor of the County for inspection. The Program Proceeds Account shall not receive redemption payments directly. Principal property tax payments are not included in the program proceeds distribution set out in Paragraph D (13).
4. The AGENT will issue a request for proposals (RFP) for mowing and security at Trustee properties. Budget will be monitored to appropriate mowing throughout seasons of growth. The budget and quality of the service will be reviewed by the AGENT. The AGENT will receive a 12.5% contract management fee.

5. AGENT shall attend the Winnebago County Treasurer's annual tax sale each year and bid the maximum penalty interest rate on all properties not bid upon by another tax buyer.
6. It is contemplated by the Parties that a Winnebago County Assistant State's Attorney will represent the Program in court appearances in the 17th Judicial Circuit Court of the State of Illinois. The AGENT retains the right to contract legal counsel for other necessary legal services.
7. The COUNTY shall furnish to AGENT a duplicate or photocopy of each tax sale certificate and shall provide, free of charge, with any documentation or information known by the offices of the County Clerk and/or Recorder, County Treasurer, and Supervisor of Assessments, as to owners, occupants, parties of interest, the condition of the subject property, and all other relevant information in the possession of said offices to be used in obtaining tax redemptions or tax deeds.
8. Certificates of Purchase acquired through this Agreement shall be in the name of WINNEBAGO COUNTY TRUSTEE, and shall be surrendered to the Winnebago County Treasurer. It is the intent of the Parties that all redemptions shall be made directly to the Winnebago County Clerk. Subsequent to redemption, the County Clerk shall submit to the Winnebago County Treasurer and AGENT a list of parcels redeemed. The Treasurer shall forthwith deliver the certificates to the County Clerk of Winnebago County for cancellation. The County Clerk shall then issue to the Treasurer a check, made payable to the Program Proceeds account for the amount received from the redeeming party, less the Principal Tax Payment amount. The Treasurer shall deposit the check into the Program Proceeds Account and furnish a copy of the deposit slip to the AGENT. The Principal Tax Payment amount shall be sent to the Treasurer for direct payment to appropriate taxing bodies, as provided by law.
9. On all property to which title has been taken in the name of WINNEBAGO COUNTY, TRUSTEE, the AGENT shall exercise diligent effort to expediently sell such property. The AGENT is responsible for marketing and selling the property to the highest, responsible buyer. If a municipality objects to the highest bid, the municipality shall have a right of first refusal to purchase the property at the minimum bid of \$500, unless otherwise approved by the County Board Chairman. If the municipality declines to exercise their right of first refusal, the property shall go to the highest bidder. Upon receiving a bid to purchase a property, the AGENT, through its website, will notify the public that a bid has

been received on a property. The public will be allowed to present additional bids for a period not less than seven (7) days after the initial bid is received.

10. Any Purchase Agreement for the sale of property which is not paid in full within ninety (90) days shall be considered in default and all money received on said Purchase Agreement shall be treated as liquidated damages.
11. Upon the determination that the contract has been defaulted, the Program Proceeds account shall first be reimbursed the amount of fees and expenses advanced from that account on the parcel.
12. Upon receiving proof that payment in full has been received from the purchaser of any parcel of property sold under the provisions of this Program and the proceeds deposited into the Program Proceeds Account, the County Board Chairman shall execute a quit claim deed conveying the property to the purchaser. The AGENT shall file the deed of conveyance with the Winnebago County Recorder for recordation.
13. The following checks will be drawn as needed from the Program Proceeds Account, with the Treasurer of Winnebago County and the AGENT co-signing all checks. The accounting period closes on September 30 each year. Checks designated to be remitted annually will be disbursed no later than October 31 each year.
  - i. Throughout the year, checks will be made payable to the AGENT to pay for operational expenses to which it is entitled under the terms of the Agreement. This includes legal expenses, marketing efforts and other expenses required by the AGENT to fulfill the duties of the Agreement. The AGENT shall request a withdrawal from this account to pay for allowable expenses as needed.
  - ii. Throughout the year, checks will be made payable to the Winnebago County Treasurer for reimbursement for actual costs incurred assisting the program. Valid expenses to be submitted are limited to costs for public publication of notices and expenses.
  - iii. Quarterly, a check will be drawn for Recorder of Deed expenses.
  - iv. Annually, proceeds will be set aside in the Program Proceeds Account to restore the reserve of \$150,000 to be held in the account for next year's maintenance.

- v. Quarterly, a check will be drawn for expenses of the County Clerk for cancellation of certificates.
- vi. Annually, a check will be made payable to the AGENT for thirty-three percent (33%) of the balance remaining in Program Proceeds Account. This check will not include the \$150,000 held in reserve for next year's maintenance.
- vii. Annually, a check will be made payable to the Treasurer of Winnebago County for sixty-seven percent (67%) of the balance remaining from the Program Proceeds Account. The AGENT will provide the Treasurer with property sales information, by tax code, for disbursement to the taxing bodies, as provided by law. This check will not include the \$150,000 held in reserve for next year's maintenance.

#### **E. ADMINISTRATION OF THE DELINQUENT TAX PROGRAM**

For administration of the program and its day-to-day operations, the COUNTY representative shall be the County Board Chairman, or Chairman Designee, and for the AGENT, its Executive Director or his or her designee.

#### **F. REPORTING**

In addition to the requirements of Paragraph (D)(2), the AGENT will perform one (1) annual update regarding the Program to the Winnebago County Board. Further, upon request of the Winnebago County Board Chairman or Chairman Designee, the AGENT will provide the COUNTY with necessary source documents and data for a presentation to the appropriate standing committee of the County Board.

#### **G. CONFLICT OF INTEREST**

Neither the AGENT nor anyone employed by the AGENT or any relative or representative of the AGENT, during the term of this agreement, shall possess or acquire any pecuniary interest directly, indirectly or beneficially, or by any derivative process, in any real estate tax delinquency or forfeiture in Winnebago County. The foregoing notwithstanding, however, the COUNTY recognizes that the AGENT, their employees, agents or subagents, may, at the date of this Agreement have an interest in real property which would otherwise be in violation of this paragraph, and such present interests shall not be deemed in violation hereof.

## **H. GENERAL CONDITIONS OF AGREEMENT**

### **1. Agent not an Employee of the County**

It is mutually understood and agreed that it is the intent of the Parties that an independent contractor relationship be and hereby established under the terms and conditions of this Agreement. It is further understood and agreed that it is the intent of the Parties that the employees of the AGENT are not nor shall they be deemed employees of the COUNTY and that the employees of the COUNTY are not nor shall they be deemed employees of the AGENT. It is further understood and agreed that it is the intent of the Parties that the COUNTY has not created any type of COUNTY office through the creation of this Program. Nor shall the AGENT be considered a public officer in performing their duties pursuant to this Agreement.

### **2. Assignment**

The AGENT and the COUNTY agree that this Agreement is one contemplating that personal services are to be rendered by the AGENT and their employees. Neither party hereto may assign or transfer this Agreement or any part thereof, without the written consent of the other party.

### **3. Maps and Copies**

The COUNTY shall, without expense to AGENT, furnish AGENT with one complete set of current tax maps and plat books for use by AGENT in identifying and locating tax delinquent parcels within the Program. The COUNTY shall, without expense to AGENT, provide copies of recorded documents when requested by AGENT in performing its contractual obligation of ascertaining the identities of interested parties of tax delinquent parcels.

### **4. Written Notices**

All notices, approvals, demands, requests or other documents required or permitted under this Agreement, other than routine communications necessary for the day-to-day operation of this Program, shall be deemed properly given if hand delivered or sent by nationally recognized overnight carrier or mailed by certified mail, postage prepaid, return receipt requested, to the following addresses:

The County of Winnebago  
Winnebago County Clerk  
404 Elm Street – Suite 104  
Rockford, Illinois 61101

Region 1 Planning Council, Trustee Agent  
313 N Main St  
Rockford, Illinois 61101

## **5. Indemnification**

AGENT shall indemnify and hold harmless COUNTY from and against all claims, suits, damages, costs, losses, and expenses in any manner arising from, out of, or in any way connected with the improper performance of AGENT, their agents, subagents, in actions taken pursuant to this Agreement.

## **6. Term of Agreement and Effects of Termination**

- i. The term of this Agreement shall be in effect until December 31, 2025 and shall renew annually thereafter until terminated by either the AGENT or the COUNTY. However, either party has the right to terminate this Agreement by giving notice of no less than One Hundred Twenty (120) days prior to the effective date of termination. The notice period shall be sixty (60) days for a substantial breach of any term set forth in this Agreement.
- ii. Upon termination of this Agreement, AGENT shall be allowed to complete all sales, assignments, and re-conveyances to third parties which were entered into prior to the date of termination and are not completed as of the date of termination, and shall further be allowed to hold one auction after the date of termination to attempt to sell any properties for which a tax deed petition is pending as of the date of termination and a tax deed is later procured. The AGENT shall receive the compensation which it would otherwise be entitled to under this Agreement for such sales. The AGENT shall also be entitled to receive the penalty interest on redemptions it is entitled to receive under this Agreement for those certificates with respect to which AGENT has served Take Notices. The percentage of the redemption interest AGENT will be entitled to receive subsequent to the termination of this Agreement will be based on what the redemption interest would have been on a redemption as of the date of the termination of this Agreement.
- iii. Additionally, the AGENT, Treasurer, and County Clerk, shall within sixty (60) days after the date of termination furnish to the County Board Chairman and Administrator full and accurate records of all certificates of purchase awarded, owner redemptions, deed transfers, , purchase



contracts not fully executed, petitions for tax deed, auction records, sales-in-error filed and granted, accounting of proceeds, interests, and fees, and other pertinent records relative to the management of the Program.

This Agreement entered into and signed this \_\_\_\_\_ day of November, 2022.

**COUNTY OF WINNEBAGO, ILLINOIS**

**REGION 1 PLANNING COUNCIL**

BY: \_\_\_\_\_  
Joseph V. Chiarelli  
Chairman of the County Board of the  
County of Winnebago, Illinois

BY: \_\_\_\_\_  
Michael Dunn Jr.  
Executive Director

ATTEST:

BY: \_\_\_\_\_  
Lori Gummow  
Clerk of the County Board of the  
County of Winnebago, Illinois

**Attachment**  
**ZONING COMMITTEE**  
**OF THE COUNTY BOARD AGENDA**  
November 10, 2022

**Zoning Committee.....Jim Webster, Committee Chairman**

**PLANNING AND/OR ZONING REQUESTS:**

**TO BE VOTED ON:**

1. Z-04-22 A MAP AMENDMENT TO REZONE 5.46 +-ACRES FROM THE AG, AGRICULTURAL PRIORITY DISTRICT TO THE RA, RURAL AGRICULTURAL RESIDENTIAL DISTRICT (A SUB-DISTRICT OF THE RA DISTRICT) requested by Harold and Penny Wirtjes, Property Owners, represented by James Hursh, Attorney, for a portion of the property that is commonly known as 11834 Winslow Road, Durand, IL 61024 in Harrison Township.

Part of PIN: 06-17-400-002

C.B. District 2

Lesa Rating: Very High

Consistent W/2030 LRMP-Future Map: NO

**ZBA Recommendation: *MOTION TO APPROVE FAILED (3-3)***

**ZC Recommendation: *APPROVAL (5-2)***

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# WINNEBAGO COUNTY

— ILLINOIS —

## Announcements & Communications

Date: November 10, 2022

Item: Correspondence to the Board

Prepared by: County Clerk Lori Gummow

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**Governing Statute(s):** State of Illinois Counties Code [55 ILCS 5/Div. 3-2, Clerk](#)

**County Code:** [Ch 2. Art. II. Div. 4, Sec. 2.86 – Record Keeping & Communications](#)

**Background:** The items listed below were received as correspondence.

1. None.



# Executive Summary

Date: 9/29/22

From: County Board Chairman Joseph V. Chiarelli

Topic: **Winnebago County Health Department Board Appointment**

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**State of Illinois Public Act 099-0634** requires disclosure of appointments to local public entities.

**County Code Chapter 2, Article II, Division 4, Section 2-88** states, "The chairman shall make all appointments to commissions, boards, authorities, or special districts with the advice and consent of the county board, or as otherwise provided by law."

**Recommendation:** County Board Chairman Joseph V. Chiarelli recommends **Derrick Kunz** of Rockford, Illinois to serve a 3-year term from October 2022 – October 2025 on the Winnebago County Health Department Board.

	Winnebago County Health Department
<i>Location:</i>	555 North Court Street, Rockford, IL 61011
<i>Service Description:</i>	Prevent disease, promote health and enlist community efforts to improve the health of all Winnebago County residents. Ensures all State Laws and County Ordinances regarding the preservation of health are upheld through observation and enforcement. Board of Health executes any necessary health inspections and investigations. Issues rules and regulations for programs. <a href="https://www.wchd.org/about-wchd">https://www.wchd.org/about-wchd</a>
<i>Board Composition:</i>	Twelve Member Board appointed by the County Board Chairman with advice and consent of the County Board. <a href="#">55 ILCS 5/5-25012</a> Two (2) licensed Physicians One (1) Dentist One (1) Veterinarian One (1) Mental Health Professional One (1) Nurse One (1) County Board Member One (1) City Council Member (City Appointment) Four (4) Citizens at Large <a href="#">Organization of board; powers and duties</a>
<i>Term of Office:</i>	Three (3) year terms, One (1) year term for County Board Representative
<i>Bond:</i>	None
<i>Attorney:</i>	State's Attorney's Office

<i>Compensation:</i>	None
<i>Meetings:</i>	3 <sup>rd</sup> Tuesday of the month at 6:30 p.m. at the Health Department
<i>Origin of Entity:</i>	City and County Health Departments were combined based on a referendum in 1970. Authority under <a href="#">55 ILCS 5/5-25001</a>
<i>Property Tax/Funding:</i>	Designated property tax as well as fees for services and federal and state grants
<i>Consolidation/ Dissolution Plans:</i>	<i>If applicable</i> City and County Health Department were combined in 1970

# Derrick Kunz

512 Verona Drive. Rockford, IL. 61107 TEL 815.979.1000 EMAIL [Derrick.Kunz@gmail.com](mailto:Derrick.Kunz@gmail.com)

## EXPERIENCE

### ***Territory Sales Manager, Cricket Wireless***

(Great Lakes Jan. 2009 to Present)

- Leads, coaches, guides, advises, mentors, recruits, develops a team that drive sales, increase category share, increase brand awareness, and influence market share
- Develops and maintains positive, professional, collaborative relationships with clients ensuring client satisfaction and retention
- Serves as the primary, dedicated, expert for each team member's successful performance in client service and retention
- Partners with clients serving as an expert in field marketing to achieve measurable success
- Manages sales metrics for region/team for quarterly performance measures
- Oversees management of region, territory, and budgets/expenses
- Supervises the construction and maintenance of annual operational plans & store builds

### ***Real Estate Agent, Keller Williams Realty Signature***

(Rockford, IL 2018 – Present)

- Residential and Commercial Sales/Leasing

### ***Vice President of Board, Northwest Community Center***

(Rockford, IL June 2015 – May 2022)

- Executive Director oversight/supervision
- HR policies and procedures
- Building and grounds oversight
- Board oversight/by-laws
- Building rentals oversight
- Golf play day

### ***Rural of Tap/ Owner***

(Rockford, IL 2015 – 2017)

- Development of Business and Strategy for location
- Food Certified during time as Owner
- Organizer of “Roc Party” and “Roctober Fest”
- Maintained positive relationships in neighborhood and community
- Worked with City and Local Governments Bodies to ensure proper openings and continued compliance for establishment
- Severed on first committee of “Business First” in Rockford (still active today)
- Development of “How to open bar or restaurant” for “Business First”

## SOFTWARE

MS Applications POS Software

## EDUCATION

Rock Valley College, Rockford, IL — General Education

Christian Life High School Diploma - 1996



## Executive Summary

Date: 9/29/22

From: County Board Chairman Joseph V. Chiarelli

Topic: **Seward Sanitary Board Appointment**

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**State of Illinois Public Act 099-0634** requires disclosure of appointments to local public entities.

**County Code Chapter 2, Article II, Division 4, Section 2-88** states, "The chairman shall make all appointments to commissions, boards, authorities, or special districts with the advice and consent of the county board, or as otherwise provided by law."

**Recommendation:** County Board Chairman Joseph V. Chiarelli recommends **Kelsey Heslop** of Pecatonica, Illinois to serve a 3-year term from May 2022 – May 2025 on the Seward Sanitary District Board.

Seward Sanitary District	
<i>Location:</i>	PO Box 57, Seward, IL 61077
<i>Service Description:</i>	Provides sanitary sewer service to the Seward area
<i>Board Composition:</i>	Three members, must reside in District, appointed by the Winnebago County Board Chairman with the advice and consent of the County Board. Must reside in District – 89 homes, 9 businesses
<i>Compensation:</i>	None
<i>Bond:</i>	\$10,000
<i>Attorney:</i>	None
<i>Meetings:</i>	2nd Saturday of the month – 8 am at the Township Building on Grant Street
<i>Origin of Entity:</i>	<a href="#">Sanitary District Act of 1917 (70 ILCS 2405/3)</a>
<i>Property Tax/Funding:</i>	District levies an annual property tax, charges for service and replacement tax
<i>Consolidation/Dissolution Plans:</i>	<i>If applicable</i>



Kelsey Heslop  
16127 Edwardsville Road  
Pecatonica, IL 61063  
815-997-7147

9/14/2022

Dear Joe Chiarelli and Winnebago County Board,

Please consider me for one of the open seats on the Seward Sanitation Districts Board of Trustees. I live within the district's boundaries and would like to continue the current boards' good work of holding down costs while maintaining IEPA compliance.

I am currently employed by the Winnebago School District as a district assistant. My role consists of purchasing items for the district that are approved by the school board, managing and documentation of cash receipts/deposits made to the district, and payroll for the district. I feel my role at the school district would make a positive contribution to the Seward Sanitation Board.

Please consider this request for appointment to one of the open seats on the Seward Sanitations Districts Board of Trustees.

Thank you,

A handwritten signature in black ink that reads "Kelsey Heslop". The signature is written in a cursive, flowing style.

Kelsey Heslop

## Seward Sanitation District

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09/12/2022

Dear Winnebago Country Board,

The current Seward Sanitation District Board of Trustees would like to recommend Kelsey Heslop to fill one of the open seats we have on the Seward Sanitation Districts Board of Trustees. Kelsey lives within the Sanitation District and has taken an interest in its operation and maintenance.

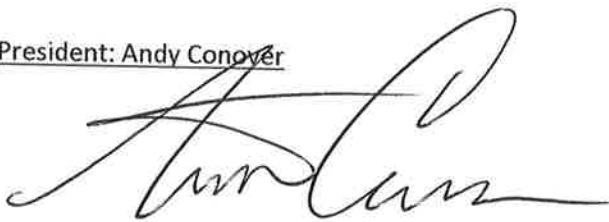
It is always nice to have people come forward to help with their local communities. Kelsey has been attending our regular monthly board meetings. We have found her observations and ideas to be very valuable.

Kelsey and her family are well respected in Seward and we feel he would be a solid asset to the Sanitation Districts Board.

Respectfully,

The Seward Sanitation Board of Trustees

President: Andy Conover

A handwritten signature in cursive script, appearing to read 'Andy Conover', written in black ink.

Treasure: Dennis Hille

A handwritten signature in cursive script, appearing to read 'Dennis Hille', written in black ink.



## Executive Summary

Date: 9/29/22

From: County Board Chairman Joseph V. Chiarelli

Topic: **Seward Sanitary Board Appointment**

---

**State of Illinois Public Act 099-0634** requires disclosure of appointments to local public entities.

**County Code Chapter 2, Article II, Division 4, Section 2-88** states, “The chairman shall make all appointments to commissions, boards, authorities, or special districts with the advice and consent of the county board, or as otherwise provided by law.”

**Recommendation:** County Board Chairman Joseph V. Chiarelli recommends **Dennis Hille** of Seward, Illinois to serve a 3-year term from May 2022 – May 2025 on the Seward Sanitary District Board.

Seward Sanitary District	
<i>Location:</i>	PO Box 57, Seward, IL 61077
<i>Service Description:</i>	Provides sanitary sewer service to the Seward area
<i>Board Composition:</i>	Three members, must reside in District, appointed by the Winnebago County Board Chairman with the advice and consent of the County Board. Must reside in District – 89 homes, 9 businesses
<i>Compensation:</i>	None
<i>Bond:</i>	\$10,000
<i>Attorney:</i>	None
<i>Meetings:</i>	2nd Saturday of the month – 8 am at the Township Building on Grant Street
<i>Origin of Entity:</i>	<a href="#">Sanitary District Act of 1917 (70 ILCS 2405/3)</a>
<i>Property Tax/Funding:</i>	District levies an annual property tax, charges for service and replacement tax
<i>Consolidation/Dissolution Plans:</i>	<i>If applicable</i>



Dennis Hille

16443 Sheridan St

PO Box 92

Seward IL 61077

815-821-2970

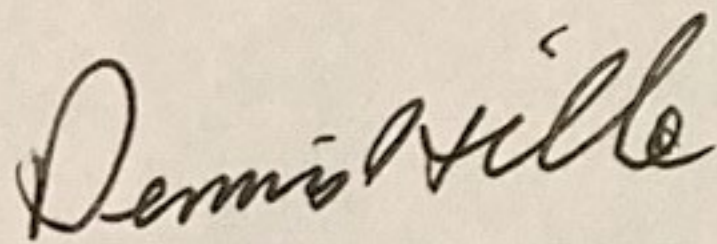
Dear Joseph Chiarelli and the Winnebago County Board,

Please consider me for the treasurer seat on the Seward Sanitation District Board of Trustees which I am already undertaking. I live within the district's boundaries, have attended past meetings, and would like to continue in the decision-making process regarding the future of the district's wastewater facilities and helping to uphold the high standards of efficiency and compliance the board already maintains.

I am currently employed by Valley Jlg Grinding In Rockford, IL as a tool maker. I feel I can use my understanding of sustainability along with my understanding of current operations to make positive contributions to the district.

Please consider this request for re-appointment to the treasurer seat on the Seward Sanitation District Board of Trustees.

Thank you,

A handwritten signature in cursive script that reads "Dennis Hille". The signature is written in dark ink and is positioned above the printed name.

Dennis Hille