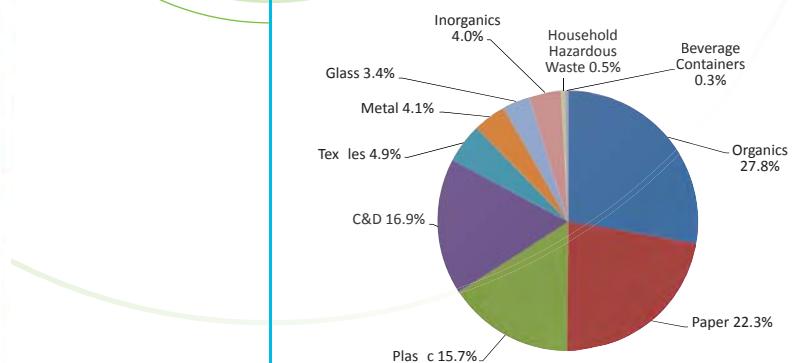
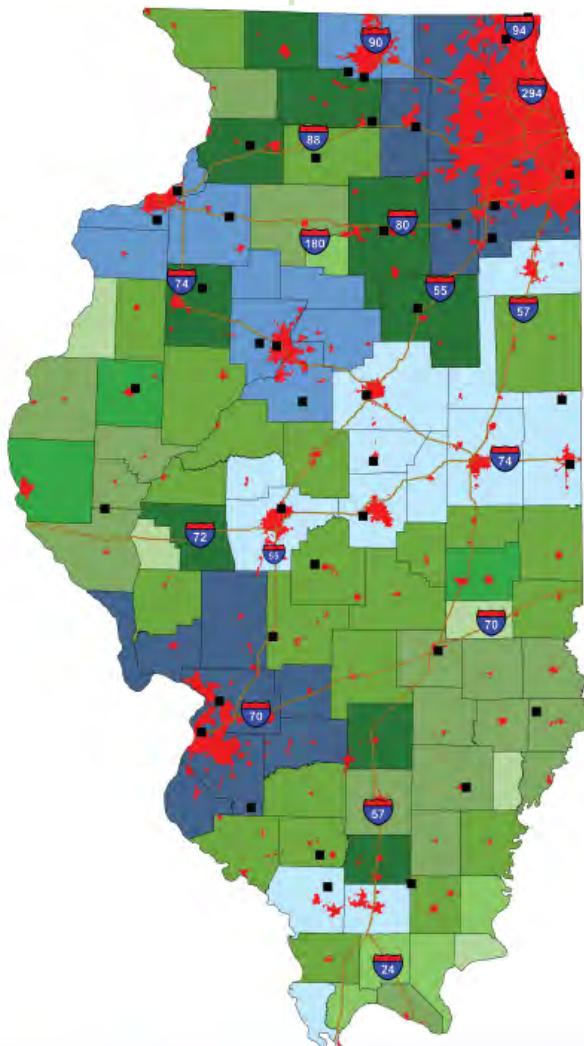


# Illinois Commodity/ Waste Generation and Characterization Study Update

March 30, 2015



Commissioned by:



Contracted by:



Prepared by:





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## Appendices

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- Appendix B – MSW Characterization Data
- Appendix C – Generation Results
- Appendix D – Photographic Log

## Acknowledgements

The Illinois Recycling Association would like to thank the Illinois Department of Commerce and Economic Opportunity, Division of Recycling and Waste Reduction, who provided funding for this study.

- Mr. David Smith, Grant Manager
- Mr. David Ross, Recycling Staff

The Illinois Recycling Association and CDM Smith Inc. would like to thank the following persons for their assistance in providing review and comments; and the landfill and transfer station owners/operators for their cooperation and participation in this study:

- Ms. Wynne Coplea, President of the Illinois Recycling Association
- Mr. Rod Fletcher, Consultant to the Illinois Recycling Association
- Marta Keane, Will County Land Use Department's Resource Recovery and Energy Division

The following Republic Services staff and facilities:

- Steve Smith, Brian Holcomb, Sergio Ferness, Daniel Zurek, Rich Galloway, Alan Cox, Bill Janes, Jim Allen, Ken Scott, Brian Hughes, Nick Bauer, Gary Blue, Dave Vasbinder, Anthony Berg, Roger Cochran, Nina Anthony, Roy Whittinghill, Dave Farley, Shawn Underwood; and
- Staff at Northlake Transfer, Roxana Landfill, Groen Transfer Station, Lee County Landfill, LandComp Landfill, Liberty Waste Services, Sangamon Valley Landfill, Livingston Landfill, Southern Illinois Regional Landfill, ARC Disposal & Recycling, Calumet Transfer, Shred-All Recycling Systems Transfer Station, Momence & Apollo Transfer Station, Sumner Landfill, Urbana Transfer Station, ADS/McLean County Landfill #2, Planet Recovery Transfer Station.
- The staff and the following facilities:
  - Jon Schroeder and staff at Homewood Disposal Service
  - Steve Schilling, Solid Waste Agency of Northern Cook County (SWANCC)
  - Frank Fulkerts of Groot and staff at SWANCC Transfer Station
  - Chris Sauve of Chicago Streets and Sanitation and staff at Medill Transfer;
  - Tom Hilbert, Bob Lichtry, Jeff Theien, Troy Keip and staff at Winnebago Landfill;
  - Ronald Welk of PDC and staff at Hickory Ridge Landfill; and
  - Jerry Renolds and staff at Knox County Landfill #3;
- The following Waste Management staff and facilities:
  - Chris Rubak, Mike Hey, Mike Wiersema, Lisa Disbrow, Doug Hopkins, Joe Farris, Kelvin Kirkman, Joe Durako, Bill Rainer; and
  - Staff at Cottonwood Hills Landfill, Countryside Landfill Inc., Peoria City/County Landfill #2, Prairie View Recycling and Disposal Facility.



# Executive Summary

## Introduction

The Illinois Department of Commerce and Economic Opportunity (DCEO), Division of Recycling and Waste Reduction, commissioned the Illinois Recycling Association (IRA) to develop an update to the 2008 Illinois Commodity/Waste Generation and Characterization Study (ICWGC). CDM Smith Inc. (CDM) was contracted by IRA to conduct both the 2008 ICWGC and the 2014 update. This study will assist DCEO in fulfilling its recycling and waste reduction related missions:

- Supporting efforts to increase the quantity of materials recycled or composted in Illinois.
- Supporting efforts to develop and expand markets for recyclable materials.
- Supporting efforts to advance the self-sufficiency of the recycling industry in Illinois.

In Illinois, there are three primary laws that address the management of solid waste and discarded materials: The Solid Waste Management Act (SWMA), the Solid Waste Planning and Recycling Act (SWPRA) and the Illinois Environmental Protection Act (EPAct). Each of these laws includes important language that guides the management of solid waste in Illinois.

## Purpose

In order to effectively manage resources and waste pursuant with the intent of the SWMA, SWPRA, and EPAct, it is important to understand the types and quantities of materials generated, the generating sectors, the quantities that are potentially recoverable and those that are otherwise disposed. Acquiring this data can enable sound policy and program design, implementation and program analyses for both the public sector and private sector. The data gained from this Study can be used for strategic planning; developing future legislative initiatives; evaluating effectiveness of current recovery efforts; targeting programs and educational efforts to advance recovery of commodities; providing guidance to state agencies and local governments; and aid in fulfilling the responsibilities required under the SWMA, SWPRA, and EPAct by local governments or management districts. This is the second statewide report to study this data in Illinois and will be used in conjunction with the Illinois statewide study that was conducted in 2008.

## Project Tasks and Objectives

The following tasks and objectives outline the activities that were conducted as a part of this Study:

**Waste Characterization** – Develops the composition and quantification of the municipal solid waste (MSW) originating and disposed within the state:

- Determine the aggregate composition of Illinois' MSW disposed statewide according to the material categories.
- For the State as a whole, differentiate and compare MSW composition of defined material categories disposed from the Residential, Industrial/Commercial/Institutional (ICI), and C&D generation sectors.
- For the State as a whole, differentiate and compare MSW composition of defined material categories generated and disposed from urban and rural areas by residential and ICI sectors.
- Determine the estimated recovery rates by material types, and in gross aggregate, being recovered by subtracting out the amount that will be estimated as being disposed from generation data.

- Identify key opportunities for diversion, recovery (including composting) or reuse of specific types of disposed material categories.
- Identify the types and quantities of disposed materials generated from residential, commercial and C&D sectors that could be recoverable and the estimated value of those materials based upon Midwest markets.

**Waste Generation-** Develops the quantity of MSW generated within the state:

- Determine the estimated generation of Illinois' MSW by generating source.
- By pounds per capita per day (PCD), differentiating urban and rural values.
- By the Illinois EPA's seven regions in aggregate.
- By county.
- Statewide in aggregate.
- Comparison of findings to national data.

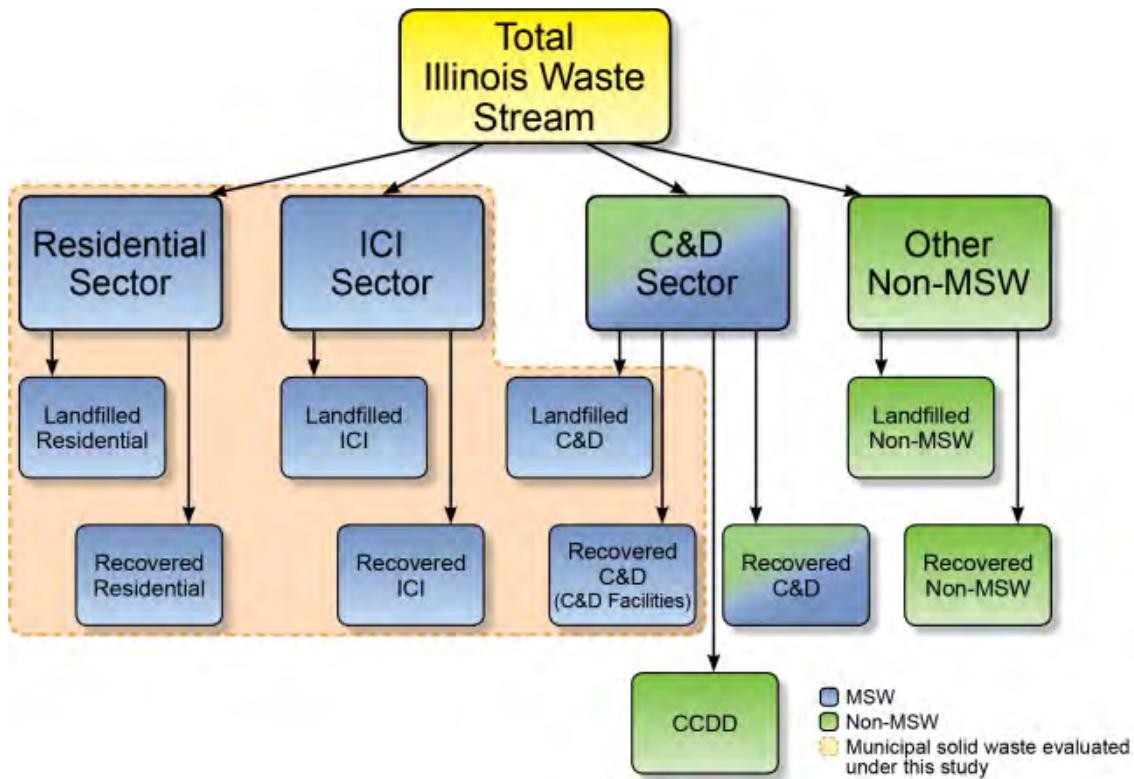
**Planning Model** – Development and implementation of an excel based commodity/waste generation and characterization (CWGC) planning model. This model is intended to provide communities or counties a tool to estimate the quantity and composition of waste generated based upon certain parameters as inputs, or as a default, the results of this study. Specific data can also be entered, such as recycling data, to determine diversion rates.

This report will present the results of these tasks and objectives; determine statewide recycling diversion rate estimates, basic economic impacts, limited environmental impacts, and compare the results to the 2008 ICWGC.

## Illinois Municipal Solid Waste

For the purposes of the study, a waste sector is identified by the particular generation characteristics that make it a unique portion of the total waste stream. This study is limited to analysis of the statutory definition of municipal solid waste (MSW or municipal waste), which is defined by Illinois law as "garbage, general household, institutional and commercial waste, landscape waste and construction or demolition debris" as per 415 ILCS 5/3.290 (see Figure 1-1). As a note, in this report the terms municipal waste and MSW are used interchangeably. Based on the definition of MSW several waste sectors were not considered as part of this study, specifically the following materials were excluded:

- Special waste which includes any of the following per 415 ILCS 5/3.475:
  - potentially infectious medical waste;
  - hazardous waste;
  - industrial process waste or pollution control waste. (415 ILCS 5/3.235).
- Clean construction or demolition debris (CCDD) is not considered a "waste" if it is separated or processed and returned to the economic mainstream as raw materials or used as fill material (415 ILCS 5/3.160), with the exception of CCDD materials within the definition that are disposed at MSW landfills; and
- Diverted C&D materials.

**Figure 1. Illinois Municipal Solid Waste**

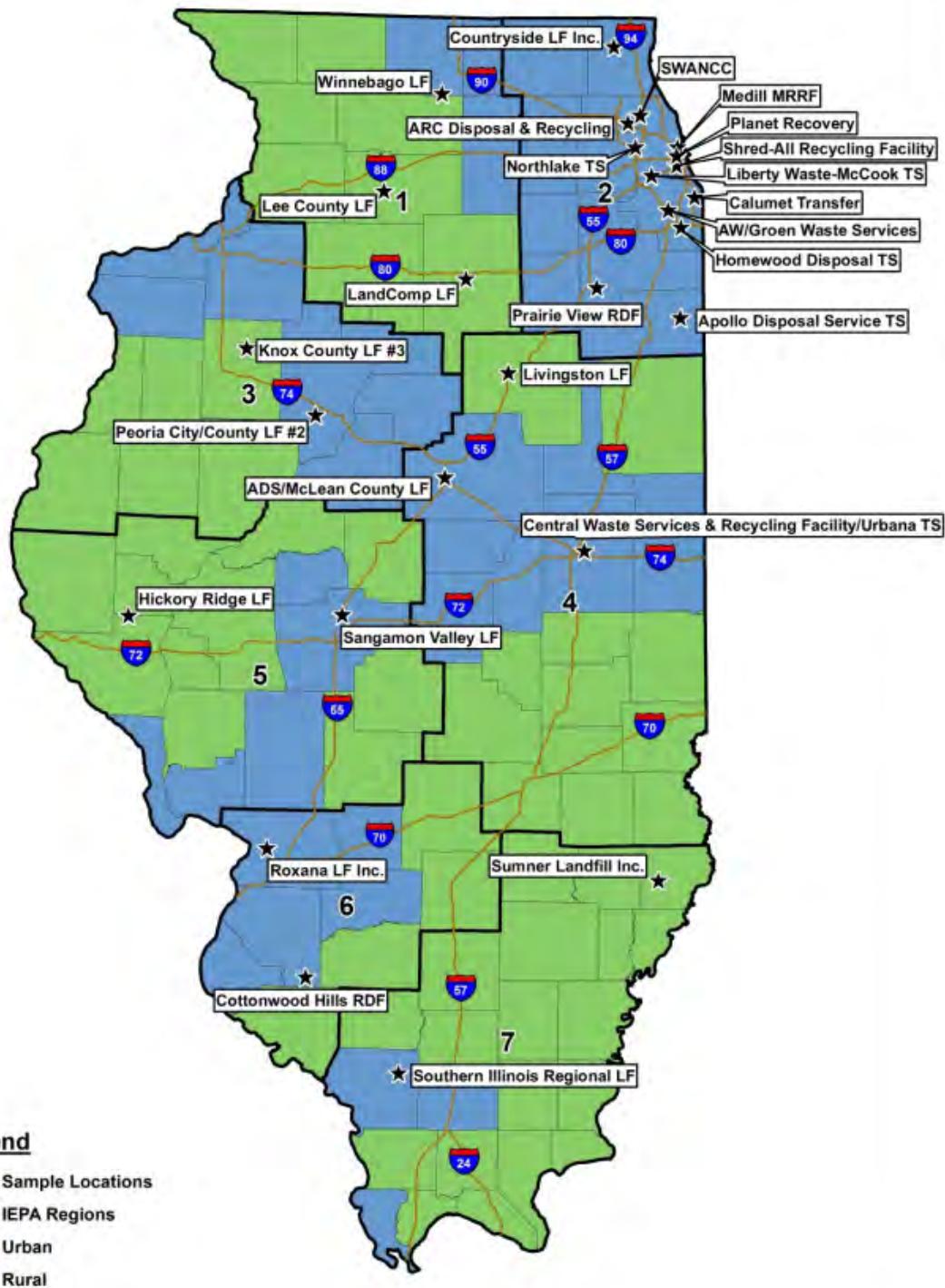
## Principal Findings

### MSW Characterization

This section develops MSW composition and quantification estimates for the residential, ICI and C&D sectors of MSW originating within the State of Illinois. All of the results in this section are for materials found to be landfilled; landfilled means disposed in landfills or destined for landfills (for data obtained from transfer stations). These composition and quantification estimates are later compared to the MSW generation estimates, developed in Section 3, to provide an estimate of the recovery efforts in the State of Illinois.

### Methodology

A sampling plan was developed for the MSW characterization task to comply with the industry standards for conducting waste characterization studies and the American Society for Testing and Materials (ASTM) standard D5231 for samples size. This plan was developed to ensure that the samples collected were representative of Illinois' statewide waste stream.

**Figure 2. Sample Location Map**

Overall, CDM Smith conducted 28 sampling events at 27 solid waste facilities located throughout Illinois, 15 landfills and 12 transfer stations (TS), over 31 days between September 10, 2014 and December 2, 2014 (Figure 2). Twenty-two sampling events were conducted for the IRA statewide study and six sampling events were completed at additional Suburban Cook County facilities through a waste characterization study for the Cook County Department of Environmental Control and The Delta Institute titled: Cook County, Illinois Commodity/Waste Generation and Characterization Study (CCICWGCS). A total of 263 waste samples (60

from the additional CCICWGCS facilities and 203 statewide Illinois facilities) from the Residential and ICI waste sector were hand-sorted and “physically” characterized and 161 samples (14 from the additional CCICWGCS facilities and 147 statewide Illinois facilities) from the C&D waste sector were visually characterized to develop the waste composition profiles provided in this section. A summary of the sample allocation is provided in Table 1.

**Table 1. Number of Samples by Waste Sector**

Sampling Group	Sample Count		Total Sample Wt.	Mean Sample Wt.
	No.	%	(pounds)	
Residential	133	100%	28,532	214.5
<i>Urban</i>	102	76.7%	22,575	221.33
<i>Rural</i>	31	23.3%	5,956	192.1
ICI	130	100%	30,514	234.73
<i>Urban</i>	100	76.9%	23,853	238.5
<i>Rural</i>	30	23.1%	6,661	222.0
Total Res./ICI	263	100%	59,046 (29.5 tons)	224.5
C&D – State	<b>161</b>		<b>918 tons</b>	<b>5.7 tons</b>

After the samples were collected they were sorted into material categories and weighed. The samples were sorted into 10 material classes; Paper, Beverage Containers, Plastics, Glass, Metals, Organics, C&D, Inorganics, Household Hazardous Waste (HHW), and Textiles. Materials within these classes were further separated into 79 individual material categories as shown in Section 2.2.3.

### Landfilled MSW Composition

Figure 3 shows the percentage, by weight, of each of the ten material classes for landfilled MSW. Organics, Paper, and C&D material classes account for approximately 66% (27.8%, 22.3%, and 16.9%, respectively) of landfilled MSW.

**Figure 3. Composition of Landfilled MSW by Material Class**

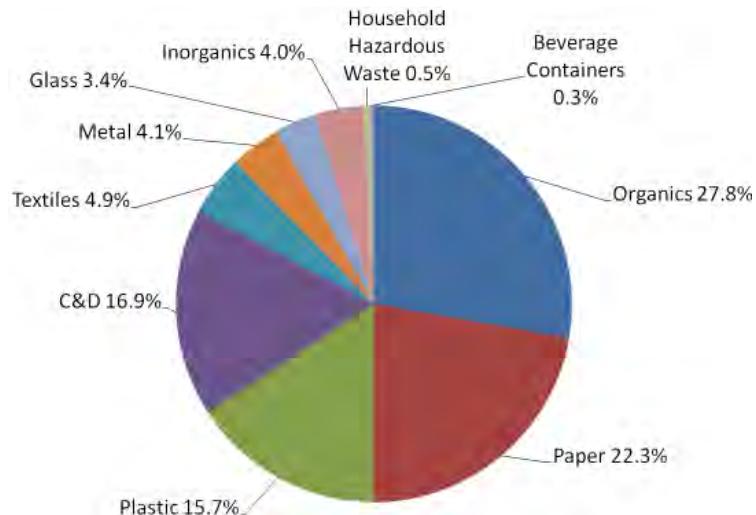


Table 2 lists the top ten material categories that were found in landfilled MSW. These ten categories account for approximately 50% of landfilled MSW. Food Scraps, Uncoated OCC/Kraft, and Compostable Paper material categories account for 30% (17.5%, 8.8%, and 3.7 respectively) of landfilled MSW.

**Table 2. Top Ten individual Material Categories in Landfilled MSW**

Component	Waste Composition %	Cum. %
Food Scraps	17.5%	17.5%
Uncoated OCC/Kraft	8.8%	26.3%
Compostable Paper	3.7%	30.0%
Other Film	3.1%	33.1%
Painted Wood	3.0%	36.1%
Bottom Fines & Dirt	3.0%	39.2%
Mixed Paper - Recyclable	2.7%	41.9%
Yard Waste - Compostable	2.6%	44.5%
Recyclable Glass Bottles & Jars	2.6%	47.0%
Other Rigid Plastic Products	2.5%	49.6%
<b>Total</b>	<b>49.6%</b>	

### Comparison of Landfilled MSW Composition by Waste Sector

The overall waste stream is relatively similar to the residential and ICI MSW sectors as these two sectors comprise the majority of the landfilled waste stream, when compared to the C&D sector. As anticipated there are numerous classes where the C&D sector differs from the residential and ICI sectors.

Approximately 71% of the C&D sector consists of material categories that fall within the C&D class of materials (e.g., composite shingles, concrete, rock and other aggregates, etc.) and 29% of the C&D sector consists of material categories that fall within the nine other classes of waste materials (e.g., Paper, Plastics, HHW, etc.).

Residential and ICI waste sectors have many commonalities (Figure 4). The majority of the material classes fall within the 90% confidence interval. However, when the residential composition profile is compared to the ICI composition profile, Glass, Organics, and C&D classes were statistically different. The other material classes were not statistically different. The 90% confidence interval means that 90% of the time the composition results will be within the error bars (+- %). There is significantly more C&D disposed by the ICI sector, while there is significantly more Glass and Organics disposed by the residential sector.

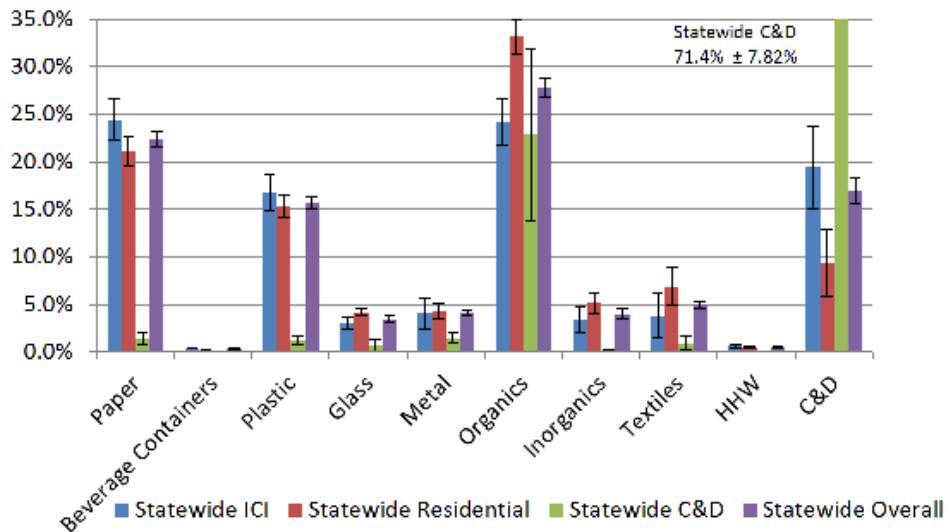
**Figure 4. Comparison of MSW Waste Sectors Composition**

Figure 5 compares the waste composition profiles for the Residential waste sector and its subsectors. When considering the residential MSW waste, the majority of the material classes fall within the 90% confidence interval for the rural and urban sectors, with the exception of the Paper, Plastic and Organics classes. There is significantly more papers and plastics disposed within the rural counties of Illinois and there are significantly more organics disposed within urban areas of Illinois.

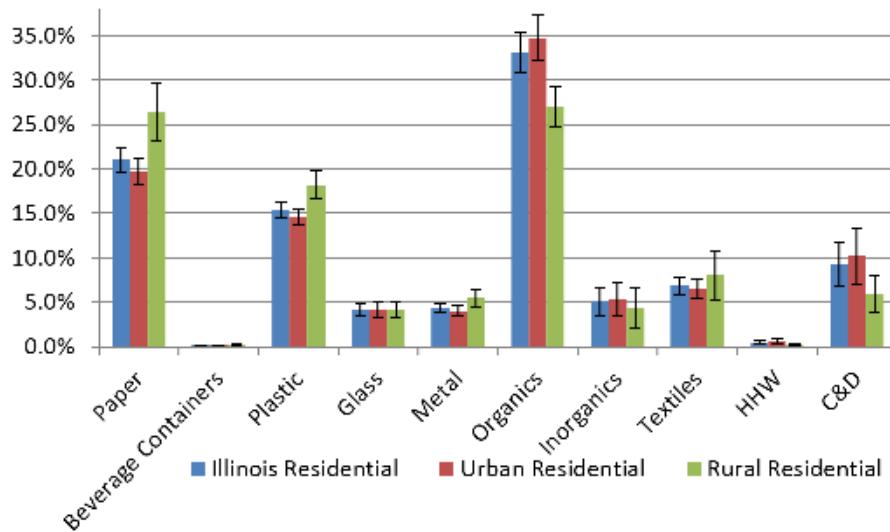
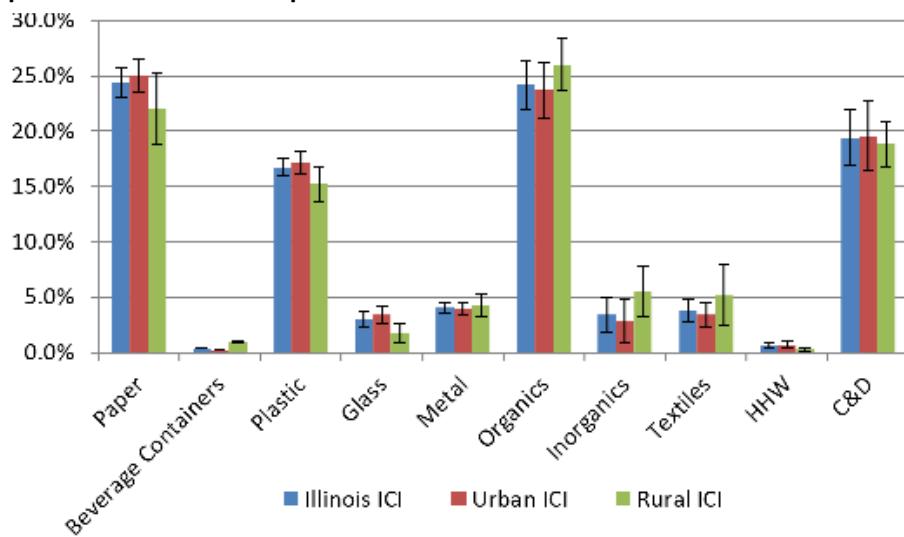
**Figure 5. Comparison of Residential MSW Composition**

Figure 6 compares the waste composition profiles for the ICI waste sector and subsectors. The majority of the material classes fall within the 90% confidence interval for the rural and urban sectors, with the exception of the Beverage Containers classes. There is significantly more beverage containers disposed within the rural counties of Illinois.

**Figure 6. Comparison of ICI MSW Composition**

## MSW Generation

### Introduction and Methodology

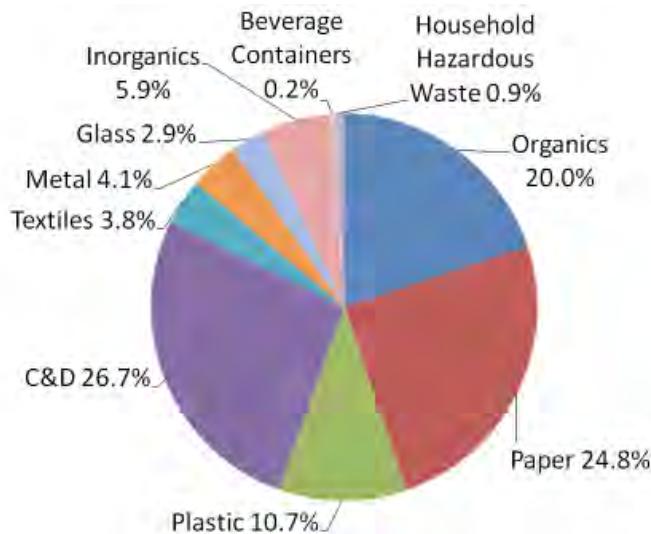
This task develops statewide, regional, and county-by-county municipal solid waste (MSW) generation estimates. Generation is that quantity of products considered municipal waste entering the waste management system from residential, commercial, industrial, institutional and C&D sources before materials recovery or disposal takes place. To develop the generation estimates, factors based on Illinois specific economic indicators were applied to 2013 national per capita generation rates that were derived from the U.S. EPA national data *Municipal Solid Waste Generation, Recycling, and Disposal in the United States Tables and Figures for 2012*<sup>1</sup>. The Illinois factors were adjusted using the composition and waste sector quantity results presented in the report.

### Total Statewide MSW Generation

**Total statewide MSW generation in 2014 was 19.3 million tons or 8.20 pounds per person per day.** Generation by material class is shown in Figure 7. C&D materials comprise the largest portion of MSW generated, at 26.7%. Paper products were the second largest fraction, at 24.8%. The third largest category of MSW generation is Organic material, which made up 20.0% of total MSW generation. Plastic products are 10.7% of generation and the remaining categories total 28.5%. Table 3 depicts the top ten individual material categories and their respective generation in tons.

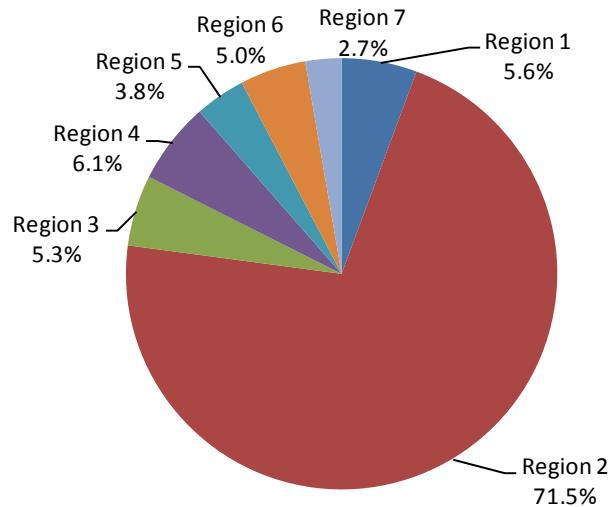
<sup>1</sup> U. S. Environmental Protection Agency U.S. Environmental Protection Agency Office of Resource Conservation and Recovery February 2014.

[http://www.epa.gov/epawaste/nonhaz/municipal/pubs/2012\\_msw\\_dat\\_tbls.pdf](http://www.epa.gov/epawaste/nonhaz/municipal/pubs/2012_msw_dat_tbls.pdf)

**Figure 7. Statewide MSW Generation by Material Class****Table 3. Top Ten MSW Generation Individual Material Categories**

Category	Waste Composition Tons	Cum. Tons
Uncoated OCC/Kraft	2,470,980	2,470,980
Food Scraps	2,147,760	4,618,740
Yard Waste - Compostable	758,110	5,376,850
Clean Engineered Wood	582,340	5,959,190
Newsprint	561,670	6,520,860
Clean Dimensional Lumber	559,010	7,079,870
Other C&D	556,440	7,636,310
Concrete	507,840	8,144,150
Compostable Paper	471,650	8,615,800
Recyclable Glass Bottles & Jars	439,980	9,055,780
<b>Total</b>	<b>9,055,780</b>	

MSW Generation by IEPA Region is shown in Figure 8. Region 2 generates approximately 71.5% of the total statewide MSW generation. Table 4 compares the per capita MSW generation rates for the seven IEPA Regions.

**Figure 8. MSW Generation by IEPA Regions (% of statewide generation)****Table 4. Per Capita MSW Generation Rates by IEPA Region**

IEPA Region	Waste Generated (per capita day)
One: Northwestern Illinois	7.1
Two: Chicago Metropolitan	8.7
Three: Peoria/Quad Cities	7.4
Four: East Central Illinois	7.1
Five: West Central Illinois	7.1
Six: Metropolitan East St. Louis	7.2
Seven: Southern Illinois	6.6
<b>Total</b>	<b>8.2</b>

## MSW Diversion Data

It is the intent of Illinois law that the recovery of resources and diversion of commodities from landfills should be a fundamental concept in Illinois management goals and can be accomplished using a variety of strategies including source reduction, re-use, recycling, composting and other techniques. The diversion rate is a key indicator as to the success or failure of recovery efforts. In order to calculate a diversion rate, the quantity of materials generated must be known as well as a knowledge of the quantity of materials recovered using the strategies named above. Unfortunately, the task of ascertaining the quantity of materials being recovered was beyond the scope of this Study. Nonetheless, a diversion rate can be estimated by assuming that the difference between the generation quantities developed in Section 3 – 19.3 million tons, and disposal quantities developed in Section 2 – 12.1 million tons, is the quantity of materials recovered – some 7.2 million tons. Based on this methodology, **the estimated overall Illinois diversion rate is 37.3% by weight.**

## Comparison of the 2008 ICWGC Study and 2014 Update Study

This section compares the results of the 2008 ICWGC study and the 2014 ICWGC study. DCEO and IRA commissioned the 2008 ICWGC Study and the 2014 ICWGC Study update to determine what differences

have occurred during this time period for the estimated quantity and types of materials generated, landfilled, and recovered in Illinois. Every effort was made to repeat the 2008 ICWGC study as closely as possible using the same methods and data sources. This section presents the results of the two studies, providing comparisons of the Landfilled MSW Characterization, Generated MSW and MSW Recovery/Diversion at the state level. Additional comparisons of waste sectors, subsectors and material classes are provided in Section 5.

### **Landfilled MSW Composition 2008 and 2014**

Figure 9 compares the waste composition profiles of total Illinois landfilled MSW for 2008 and 2014. The percentages of Beverage Containers, Glass, and HHW material classes are not statistically different between 2008 and 2014. There was significantly more Plastic, Organic, and Inorganics landfilled in 2014 than in 2008 and significantly less Paper, Metal, Textiles, and C&D landfilled in 2014 than in 2008.

**Figure 9. Comparison of 2008 and 2014 Illinois Landfilled MSW**

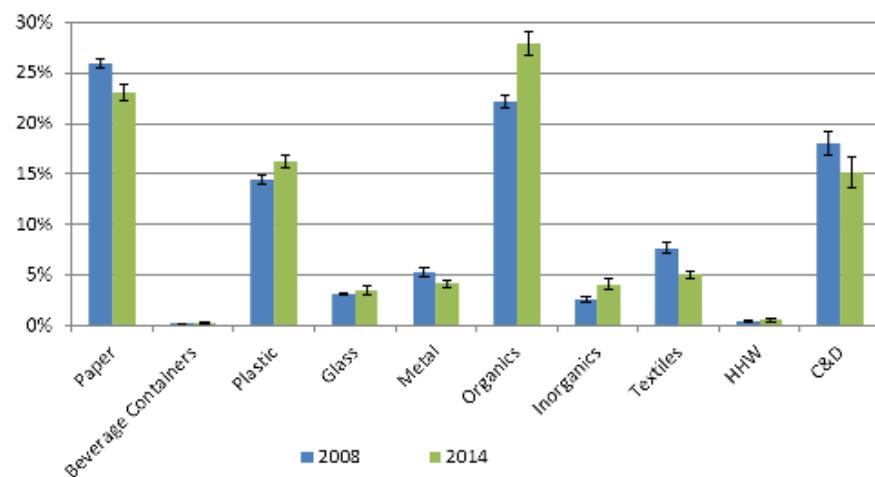


Figure 10 compares the top ten commodity products that were landfilled in Illinois. These ten material categories account for 34% and approximately 38% of the overall waste stream in 2008 and 2014, respectively. There was more High Grade Office Paper, Boxboard, Yard Waste – Compostable, and Food Scraps landfilled in 2014 than in 2008; and less Newsprint, Uncoated OCC/Kraft, and Aluminum Beverage Containers landfilled in 2014 than in 2008.

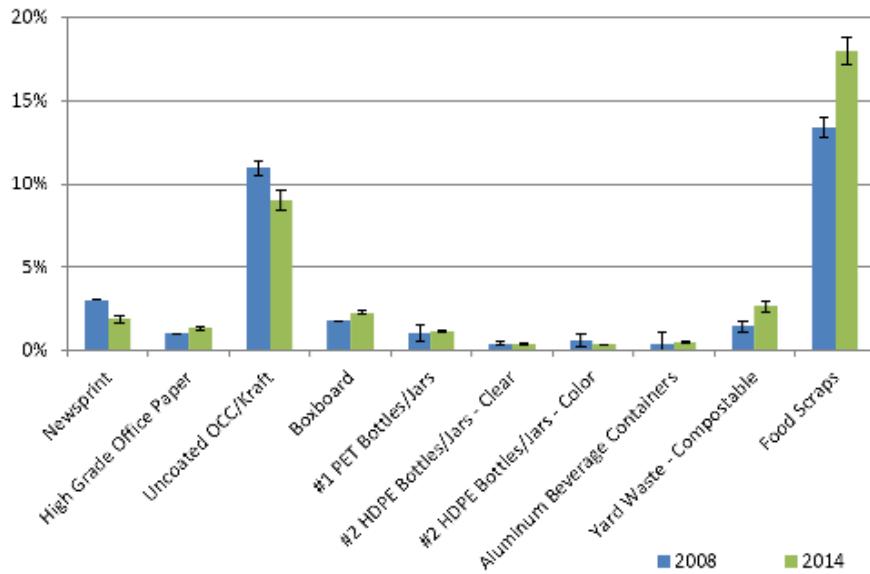
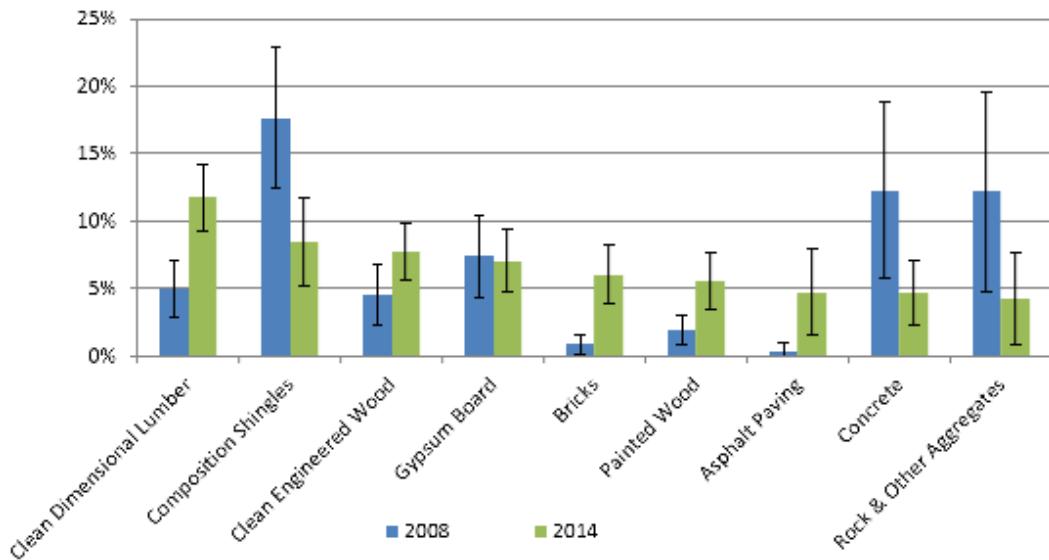
**Figure 10. Comparison of 2008 and 2014 Illinois MSW Landfilled Commodity Materials**

Table 11 lists the top ten material categories that were found in the 2014 landfilled C&D waste sector. These ten categories account for 69% and approximately 80% of the C&D waste streams in 2008 and 2014, respectively. The waste composition percentages for Clean Engineered Wood, Gypsum Board, Concrete, and Rock & Other Aggregates are not statistically different. There was more Clean Dimensional Lumber, Bricks, Painted Wood, and Asphalt Paving landfilled in 2014 than in 2008; there was less Composition Shingles landfilled in 2014 than in 2008. It should be noted that the C&D waste stream characterization has inherent greater variability than Residential or ICI waste streams and thus greater variability in the study results is expected, as noted by the larger error bars.

**Figure 11. Comparison of 2008 and 2014 C&D Landfilled Waste**

### Total Statewide MSW Generation 2008 and 2014

Figure 12 summarizes the ten material class generation estimates for 2008 and 2014. Estimates indicate overall tonnage of waste produced in the state in 2014 has increased approximately 20% from 2008, much

of that originating from increases in inorganics and the C&D waste sector. It should be noted again, that availability of data on C&D disposal, as well as recovery, has changed dramatically over the past few years and this comparison should be further assessed, in the future. Also, estimates indicate an approximate 30% reduction in Textiles generation in 2014 when compared to 2008. Total Illinois MSW pounds per person per year (ppy) generation is estimated at 2% higher in 2014 (2,993) than in 2008 (2,942). Expressed in pounds per person per day (ppd), Total Illinois MSW generation is estimated at 8.20 ppd in 2014 and 8.06 ppd in 2008.

**Figure 12. Comparison of 2014 and 2008 Statewide MSW Generation**

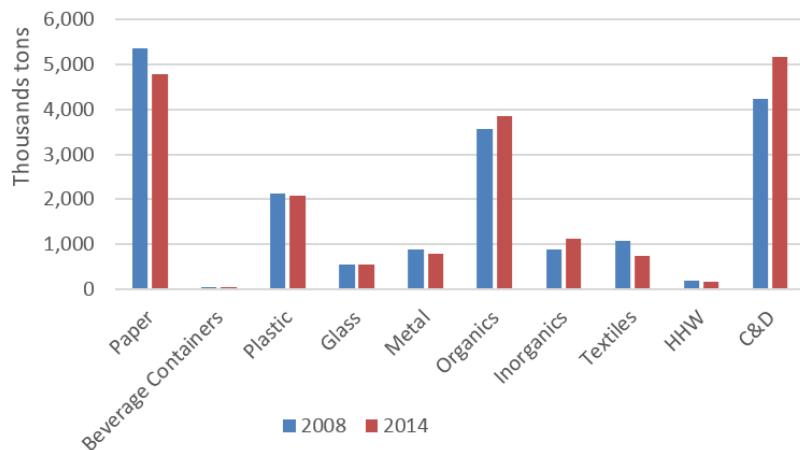
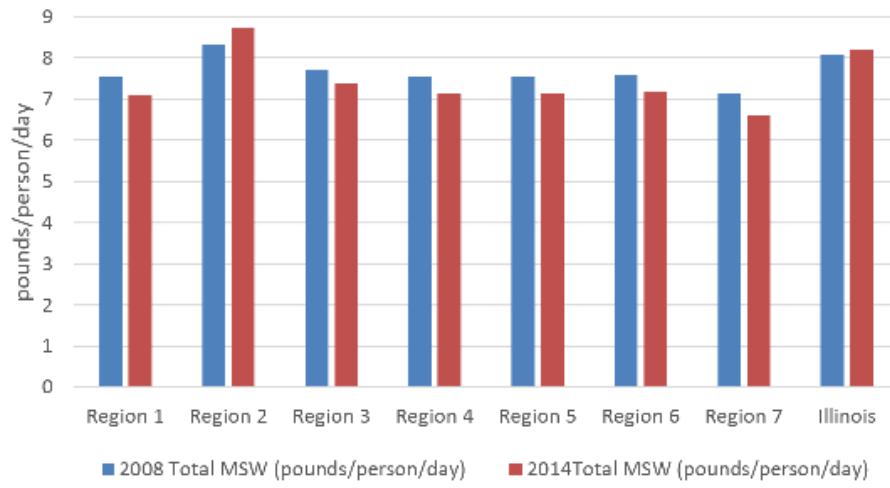


Figure 13 shows that on a per capita basis, Region 2 is the only IEPA region to show increased MSW generation estimates between 2008 to 2014, at a rate of 5% increase (i.e.,  $8.72/8.31\% = 105\%$ ). The remaining regions show decreasing estimates of waste generation of between 4% and 7% reduction in 2014.

**Figure 13. Comparison of 2014 and 2008 IEPA Region MSW Generation**



### MSW Diversion 2008 and 2014

The studies indicate material recovery for six of the ten material classes remained relatively static, including Beverage Containers, Plastic, Glass, Organics, Inorganics, and HHW. The recovery estimates shown in Figure 14, indicate Paper, Metal, Textiles, and C&D material recovery has substantially increased.

However, some portion of the increase in C&D materials recovery may be attributed to quality of data available in 2014 vs 2008, as discussed in Section 5.3.1.

**Figure 14. Comparison of 2014 and 2008 Illinois Recovery/Diversion Rates**

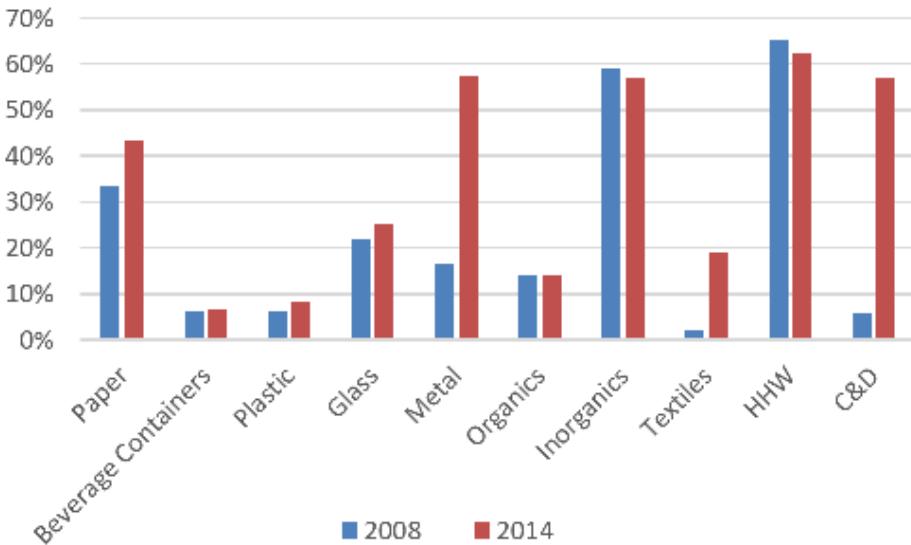
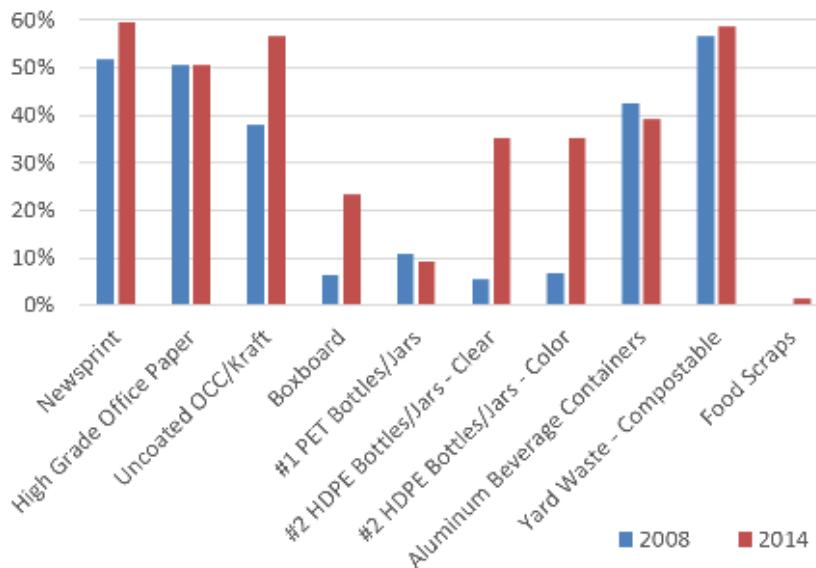


Figure 15 compares the top ten commodity products. The recovery rates of five of these commodity materials is similar in 2014 and 2008, including High Grade Office Paper, #1 PET Bottles/Jars, Aluminum Beverage Containers, Yard Waste - Compostable, and Food Scraps. There is increased recovery in 2014 for the other five commodity materials, including Newsprint, Boxboard, Uncoated OCC/Kraft, #2 HDPE Bottles/Jars - Clear, and #2 HDPE Bottles/Jars - Color.

**Figure 15. Comparison of 2014 and 2008 Illinois Recovery/Diversion of Commodity Materials**



## Market Values of Landfilled Commodities

One of the sub-goals of this Study is to determine the estimated value of commodities that are landfilled and thus being lost to the overall economy – wasting jobs, natural resources, and contributing to negative

environmental impacts. A comprehensive economic evaluation would include direct, indirect and induced economic values of all commodities being landfilled, and is a complete study in and of itself. In light of this, it was determined to focus on the “traditional” commodities typically collected in residential or commercial recycling programs. Recognizing that there are other significant quantities of commodities being recycled, the value presented here then should be viewed as a minimum. The market value was calculated based on the average 2014 commodity values from January 2014 through December 2014 obtained from market data detailed in Section 4.5 for the Midwest region. **The direct market value of the landfilled materials shown in Table 4-5 is calculated at over \$360 Million.**

## MSW Greenhouse Gas Data

Global warming is an issue that has been steadily gaining national and worldwide attention and concern. It is widely agreed that greenhouse gases (GHG) that result from the burning of fossil fuels and other human activities, is contributing to climate change. Illinois has a sustainable energy plan and is a signatory to the Midwestern Greenhouse Gas Accord. Recovering commodities from discarded materials through recycling, composting, and waste reduction strategies can play a significant role in reducing GHG's by reducing emissions. Recovering commodities:

1. Avoids emissions from raw material extraction and transport,
2. Avoids emissions from raw material processing into “manufacturing ready” feedstock,
3. Avoids emissions from landfilling (methane),
4. Sustains forest carbon sequestration,
5. Reuses carbon based plastics indefinitely, rather than one time btu value for combustion.

The Illinois MSW generation and disposal information was inputted into the U.S. Environmental Protection Agency (EPA) Waste Reduction Model (WARM)<sup>2</sup>, to determine equivalent greenhouse gas emissions resulting from the landfilling of MSW in Illinois and to determine the emission reductions resulting from the quantities estimated to be recovered. The GHG emission factors were developed following a life-cycle assessment methodology using estimation techniques developed for national inventories of GHG emissions. Default values for all variables were used for this model. CDM Smith assumed the national landfill average for methane recovery for flare and assumed default transport distances for emissions that occur during transport to landfills.

**The total GHG emissions produced from the annual landfilled MSW (12.1 million tons) is approximately 2,516,928 MTCO<sub>2</sub>E.** This is equivalent to the annual greenhouse gas emissions from approximately 461,000 passenger vehicles or the carbon sequestered annually by 17,600 acres of forest preserved from deforestation<sup>3</sup>.

The total GHG emissions reduced from materials currently recycled (7.2 million tons) is 17,242,620 MTCO<sub>2</sub>E. This is equivalent to the annual greenhouse gas emissions from approximately 3,158,000 passenger vehicles or the carbon sequestered annually by 120,600 acres of forest.

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<sup>2</sup> EPA's report Solid Waste Management and Greenhouse Gases: A Life-Cycle Assessment of Emissions and Sinks (EPA 530-R-06-004) describes this methodology in detail. visit <http://epa.gov/climatechange/wycd/waste/SWMGHGreport.html> [http://www.epa.gov/climatechange/wycd/waste/calculators/Warm\\_home.html](http://www.epa.gov/climatechange/wycd/waste/calculators/Warm_home.html).

<sup>3</sup> EPA. 2009. Greenhouse Gas Equivalencies Calculator. <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>



# Section 1

## Introduction

The Illinois Department of Commerce and Economic Opportunity (DCEO), Division of Recycling and Waste Reduction, commissioned the Illinois Recycling Association (IRA) to develop an update to the 2008 Illinois Commodity/Waste Generation and Characterization Study (ICWGC). CDM Smith Inc. (CDM) was contracted by IRA to conduct both the 2008 ICWGC and the 2014 update. This study will assist DCEO in fulfilling its recycling and waste reduction related missions:

- Supporting efforts to increase the quantity of materials recycled or composted in Illinois.
- Supporting efforts to develop and expand markets for recyclable materials.
- Supporting efforts to advance the self-sufficiency of the recycling industry in Illinois.

In Illinois, there are three primary laws that address the management of solid waste: The Solid Waste Management Act (SWMA), the Solid Waste Planning and Recycling Act (SWPRA) and the Illinois Environmental Protection Act (EPAct). Each of these laws includes important language that guides the management of solid waste in Illinois.

The SWMA, adopted in 1986, establishes the following waste management hierarchy, in descending order of preference, as State policy:

1. Volume reduction at the source [of generation];
2. Recycling and reuse;
3. Combustion with energy recovery;
4. Combustion for volume reduction; and
5. Disposal in landfill facilities.

Under the SWPRA, adopted in 1988, all Illinois counties as well as the City of Chicago shall develop and implement comprehensive solid waste management plans that are required to place a substantial emphasis on recycling and landfill alternatives, encourage recycling and source reduction, and to promote composting. Each county waste management plan is required to be updated and reviewed every 5 years by IEPA to ensure compliance with the purpose and provisions of the Act. Each plan must include provisions for the implementation of a recycling program(s) designed to recycle 25 percent of the municipal waste generated in their jurisdiction. SWPRA acknowledges that recovering certain materials from municipal waste will decrease flows to landfills, aid in the conservation and recovery of valuable resources, conserve energy in manufacturing processes, increase the supply of materials for state industries, and substantially reduce the need for municipal waste incinerators.

The EPAct contains Illinois' environmental regulations and this legislation establishes requirements for the issuance of permits for pollution control facilities such as landfills and transfer stations. (Recycling centers and "clean" material recovery facilities (MRFs) do not require permits.) It also regulates the disposal of used tires and garbage. In addition, The EPAct also establishes fees that support DCEO's and IEPA's solid waste management programs.

The EPAct also contains provisions that prohibit a variety of items from being disposed of in Illinois' landfills. The following items are currently banned: landscape waste; lead-acid batteries; whole waste tires; "white goods" (appliances); and used motor oil. The Electronic Products Recycling and Reuse Act, signed into law on September 17, 2008, advances a producer responsibility model for managing end-of-life electronics and banned covered electronic devices from being landfilled in Illinois that started January 1, 2012.

## 1.1 Purpose

In order to effectively manage resources and waste pursuant with the intent of the SWMA, SWPRA, and EPAct, it is important to understand the types and quantities of materials generated, the generating sectors, the quantities that are potentially recoverable and those that are otherwise disposed. Acquiring this data can enable sound policy and program design, implementation and program analyses for both the public sector and private sector. The data gained from this Study can be used for strategic planning; developing future legislative initiatives; evaluating effectiveness of current recovery efforts; targeting programs and educational efforts to advance recovery of commodities; providing guidance to state agencies and local governments; and aid in fulfilling the responsibilities required under the SWMA, SWPRA, and EPAct by local governments or management districts. This is the second statewide report to study this data in Illinois and will be used in conjunction with the Illinois statewide study that was conducted in 2008.

## 1.2 Project Tasks and Objectives

The following tasks and objectives outline the activities that were conducted as a part of this Study:

**Waste Characterization** – Develops the composition and quantification of the municipal solid waste (MSW) originating and disposed within the state:

- Determine the aggregate composition of Illinois' MSW disposed statewide according to the material categories.
- For the State as a whole, differentiate and compare MSW composition of defined material categories disposed from the Residential, Industrial/Commercial/Institutional (ICI), and C&D generation sectors.
- For the State as a whole, differentiate and compare MSW composition of defined material categories generated and disposed from urban and rural areas by residential and ICI sectors.
- Determine the estimated recovery rates by material types, and in gross aggregate, being recovered by subtracting out the amount that will be estimated as being disposed from generation data.
- Identify key opportunities for diversion, recovery (including composting) or reuse of specific types of disposed material categories.
- Identify the types and quantities of disposed materials generated from residential, commercial and C&D sectors that could be recoverable and the estimated value of those materials based upon Midwest markets.

**Waste Generation**- Develops the quantity of MSW generated within the state:

- Determine the estimated generation of Illinois' MSW by generating source.
- By pounds per capita per day (PCD), differentiating urban and rural values.

- By the Illinois EPA's seven regions in aggregate.
- By county.
- Statewide in aggregate.
- Comparison of findings to national data.

**Planning Model** – Development and implementation of an excel based commodity/waste generation and characterization (CWGC) planning model. This model is intended to provide communities or counties a tool to estimate the quantity and composition of waste generated based upon certain parameters as inputs, or as a default, the results of this study. Specific data can also be entered, such as recycling data, to determine diversion rates.

This report will present the results of these tasks and objectives; determine statewide recycling diversion rate estimates, basic economic impacts, limited environmental impacts, and compare the results to the 2008 ICWGC.

## 1.3 Consulting Team

CDM Smith conducted the above tasks with the assistance of its subconsultants Franklin Associates (Franklin) and Cascadia Consulting Group (Cascadia). CDM Smith has performed numerous solid waste planning and management projects in the State of Illinois and has conducted waste characterization sampling and sorted more than 3,000 waste samples. Franklin has completed the “Characterization of Municipal Solid Waste in the United States” for the USEPA for the past 28 years. Cascadia brings thousands of waste composition sample results from past national studies already classified in a database by SIC code. The availability of this source-sampled data was used to validate, augment, and improve data collected and generated as part of this study.

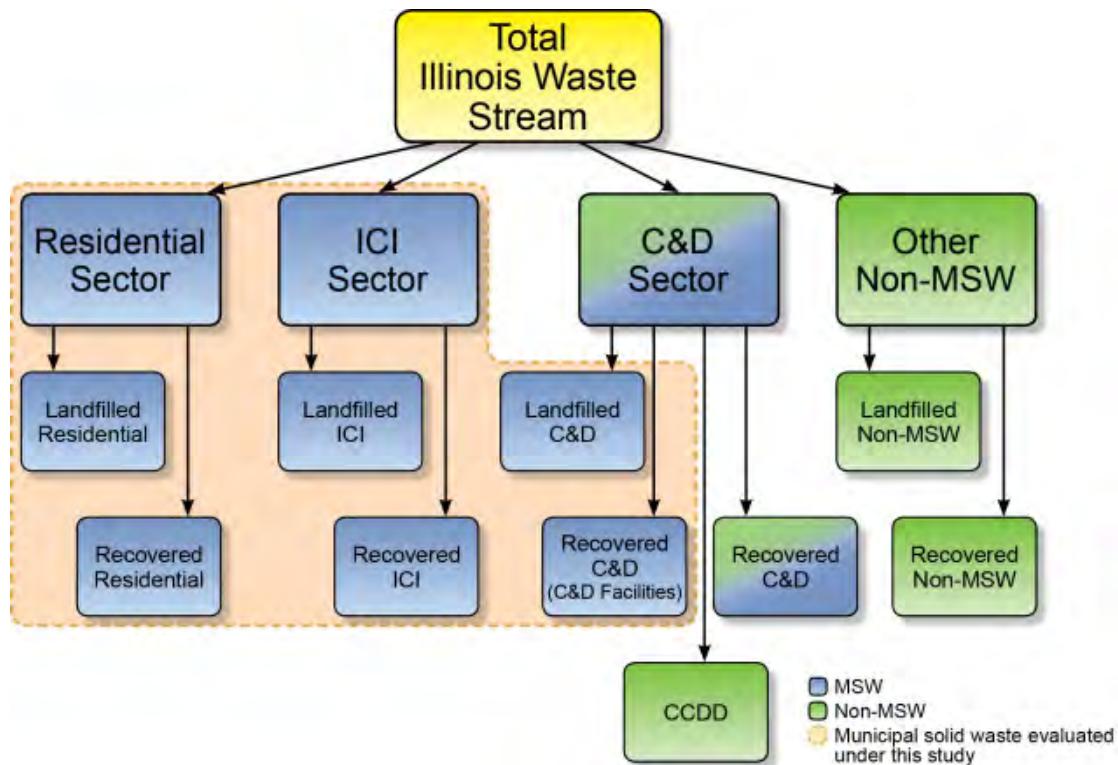
## 1.4 Defining the Waste Stream

For the purposes of the study, a waste sector is identified by the particular generation characteristics that make it a unique portion of the total waste stream. This study is limited to analysis of the statutory definition of municipal solid waste (MSW or municipal waste), which is defined by Illinois law as “garbage, general household, institutional and commercial waste, landscape waste and construction or demolition debris” as per 415 ILCS 5/3.290 (see Figure 1-1). As a note, in this report the terms municipal waste and MSW are used interchangeably. Based on the definition of MSW several waste sectors were not considered as part of this study, specifically the following materials were excluded:

- Special waste which includes any of the following per 415 ILCS 5/3.475:
  - potentially infectious medical waste;
  - hazardous waste;
  - industrial process waste or pollution control waste. (415 ILCS 5/3.235).
- Clean construction or demolition debris (CCDD) is not considered a “waste” if it is separated or processed and returned to the economic mainstream as raw materials or used as fill material (415 ILCS 5/3.160), with the exception of CCDD materials within the definition that are disposed at MSW landfills; and
- Diverted C&D materials.

In the State of Illinois, clean construction or demolition debris (CCDD) is not considered a “waste” if it is separated or processed and returned to the economic mainstream as raw materials or used as fill material (415 ILCS 5/3.160(a)). CCDD includes the following uncontaminated materials (415 ILCS 5/3.160(b)): broken concrete without protruding metal bars; bricks; rock; stone; reclaimed asphalt pavement; and dirt or sand generated from construction or demolition activities.

**Figure 1-1. Illinois Municipal Solid Waste**



This study examines the following distinct waste sectors for the State of Illinois:

1. Residential – waste generated by single and multifamily residences. This waste is primarily collected in packer trucks (e.g., side-loading or rear loading vehicles).
2. Industrial/Commercial/Institutional (ICI) – waste generated by fabricated manufacturing facilities, mills, and mines; various commercial, retail and wholesale businesses; and institutions. This waste is collected in a variety of vehicles including loose and compactor drop boxes, rear-loading and front-end loading trucks.
3. Construction and Demolition (C&D) – waste generated from new construction, renovation activities, or demolition. This waste is collected in vehicles such as dump trucks, loose roll-off boxes, and end dump vehicles. As noted above, CCDD and diverted C&D were not considered as part of this study except those materials disposed at MSW landfills.

In addition to separating the Illinois MSW into the above waste sectors, the Illinois residential and ICI MSW was further evaluated at the rural and urban subsector level to provide additional planning information. The U.S. Department of Agriculture assigns each county a rural-urban continuum code (RUC), which identifies it as a metropolitan or nonmetropolitan county (Figure 1-2).<sup>1</sup> A metropolitan area is defined by

the federal Office of Management and Budget as a core area with a city of 50,000 or more inhabitants, plus adjacent communities having a high degree of economic and social integration with that core or an Urbanized Area (UA) and a total population of at least 100,000. The county or counties containing the largest city and surrounding densely settled territory are central counties of the metropolitan area. A non-metro area is any area located outside of the metropolitan areas as defined above.

The RUC codes classify metropolitan (i.e., urban) counties with codes 1 through 3 and nonmetropolitan (i.e., rural) counties with codes 4 through 9. This same distribution was assumed for the urban/rural split in this report. The rural and urban county definitions below mirror the U.S. Department of Agriculture definitions of metropolitan and nonmetropolitan counties.

1. Urban – waste generated by metropolitan counties as identified by the Census Rural-Urban Continuum (RUC) Codes number 1 through 3.<sup>4</sup> [40 Counties]
2. Rural - waste generated by nonmetropolitan counties as identified by the Census RUC Codes 4 through 9.<sup>1</sup> [62 Counties]

The following sections and appendices provide a detailed discussion of the tasks conducted to meet the goals and objectives of this study.

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<sup>4</sup> U.S. Department of Agriculture. Economic Research Center.

<http://www.ers.usda.gov/data-products/rural-urban-continuum-codes.aspx>

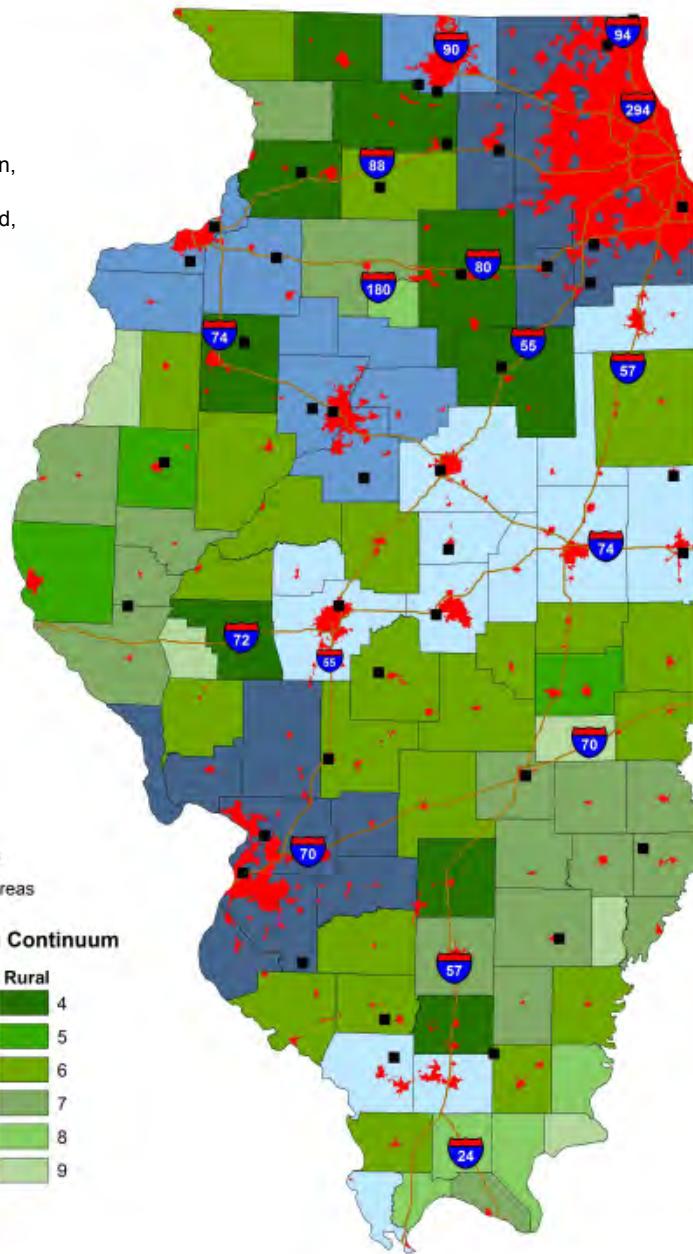
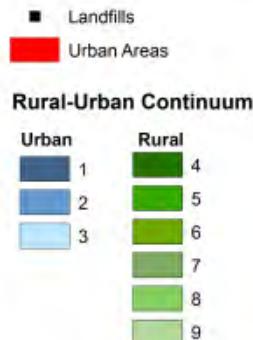
**Figure 1-2. Urban and Rural Counties within Illinois**

**Urban Counties**

Alexander, Bond, Boone, Calhoun, Champaign, Clinton, Cook, De Witt, DeKalb, DuPage, Ford, Grundy, Henry, Jackson, Jersey, Kane, Kankakee, Kendall, Lake, Macon, Macoupin, Madison, Marshall, McHenry, McLean, Menard, Mercer, Monroe, Peoria, Piatt, Rock Island, Sangamon, St. Clair, Stark, Tazewell, Vermilion, Will, Williamson, Winnebago, Woodford.

**Rural Counties**

Adams, Brown, Bureau, Carroll, Cass, Christian, Clark, Clay, Coles, Crawford, Cumberland, Douglas, Edgar, Edwards, Effingham, Fayette, Franklin, Fulton, Gallatin, Greene, Hamilton, Hancock, Hardin, Henderson, Iroquois, Jasper, Jefferson, Jo Daviess, Johnson, Knox, La Salle, Lawrence, Lee, Livingston, Logan, Marion, Mason, Massac, McDonough, Montgomery, Morgan, Moultrie, Ogle, Perry, Pike, Pope, Pulaski, Putnam, Randolph, Richland, Saline, Schuyler, Scott, Shelby, Stephenson, Union, Wabash, Warren, Washington, Wayne, White, Whiteside



Source:

Landfill locations provided by the Illinois EPA report  
*Nonhazardous Solid Waste Management and Landfill Capacity in Illinois: 2013.*

Urban Areas and the Rural –Urban county designations provided by U.S. Census Bureau. Population Division.  
 December 27, 2013.

## Section 2

# MSW Characterization

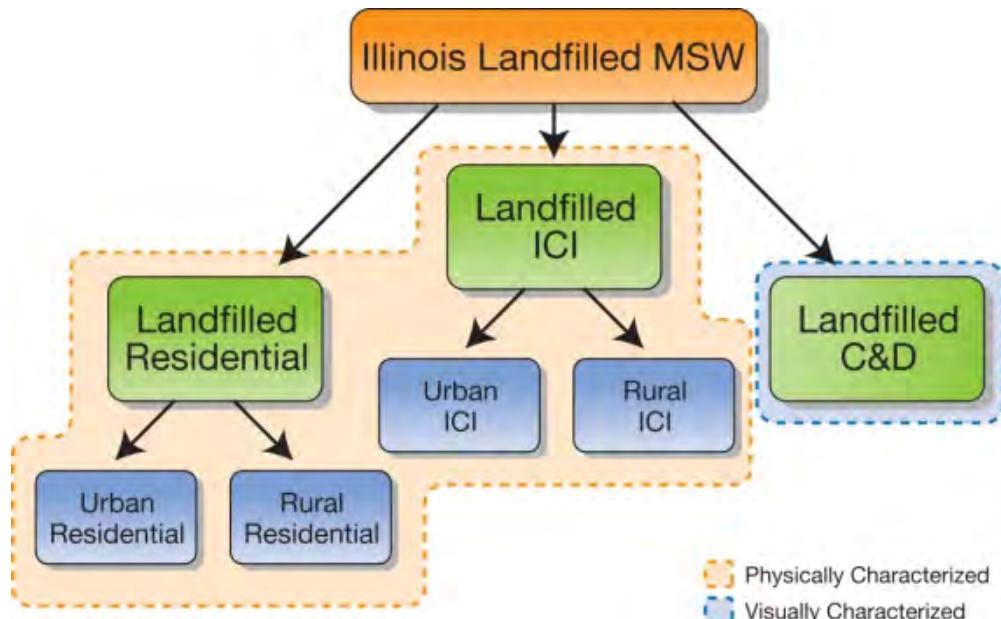
### 2.1 Purpose

This section develops MSW composition and quantification estimates for the residential, ICI and C&D sectors of MSW originating within the State of Illinois. All of the results in this section are for materials found to be landfilled; landfilled means disposed in landfills or destined for landfills (for data obtained from transfer stations). These composition and quantification estimates are later compared to the MSW generation estimates, developed in Section 3, to provide an estimate of the recovery efforts in the State of Illinois.

The following sections discuss the methodology used to obtain representative MSW composition estimates. This includes the study parameters, the number and allocation of samples, the solid waste facilities where sampling activities were conducted, and the basis for selecting waste samples.

Overall, CDM Smith conducted 28 sampling events at 27 solid waste facilities, 15 landfills and 12 transfer stations (TS), over 31 days between September 10, 2014 and December 2, 2014. Twenty-two sampling events were conducted for the IRA statewide study and six sampling events were completed at additional Suburban Cook County facilities through a waste characterization study for the Cook County Department of Environmental Control and The Delta Institute titled: Cook County, Illinois Commodity/Waste Generation and Characterization Study (CCICWGCS). The data collected at all 27 sites (28 sampling events total) were combined and presented in this report to develop the comprehensive statewide MSW composition. A total of 263 waste samples (60 from the additional CCICWGCS facilities and 203 statewide Illinois facilities) from the Residential and ICI waste sector were hand-sorted and "physically" characterized and 161 samples (14 from the additional CCICWGCS facilities and 147 statewide Illinois facilities) from the C&D waste sector were visually characterized. Due to the bulky nature of C&D materials, visual characterization of entire vehicles was used as it is considered by the industry to yield more accurate results. This approach is depicted in Figure 2-1.

**Figure 2-1. Illinois MSW Characterization**



## 2.2 Methodology

This section presents a summary of the data collection methods and calculation procedures used in this study. A copy of the approved sampling plan can be found in **Appendix A**.

An alternative method for visual characterization of C&D loads was applied in the field. The work plan stated the C&D characterization would be conducted by visually estimating volumes of material categories and total volume of the load. During this 2014 field sampling event, percentage by weight of total load of material categories were estimated, thus considering density of the different materials.

All material categories within the load were first marked on the Visual Characterization Form. Next, estimates of the volumetric percentages of those materials, weighted based on density of the material, were recorded to the nearest 0.5%. This process was conducted starting with the smallest material category by volume and repeated for all of the material categories present in the load. The benefit of this method is having a total estimated composition of the load by weight for the option of field revisions, rather than applying density multipliers at a later date.

### 2.2.1 Sample Allocation

To ensure that samples were representative of Illinois' statewide waste stream, sampling was conducted 27 disposal facilities located throughout Illinois. Disposal locations were distributed in both rural and urban counties of Illinois, as shown on Figure 2-2 and listed in Table 2-1, to provide data for urban and rural MSW sectors.

At each sampling location (landfill or transfer station), physical and visual characterizations (where available) of samples were performed. The total number of samples conducted at each site was maximized to the extent possible with the allocated field staff; however, the number varied based on the number of C&D loads available that particular day, site conditions, site staff assistance, weather conditions, the time that loads were delivered to the site, and a number of other factors. Samples collected as part of the MSW characterization sampling were generally allocated equally between the residential and ICI sectors, corresponding to the approximate ratio of disposed quantities for each sector. The number of C&D visual characterization samples was maximized based on the number of samples that could be completed at each facility, which was influenced mostly by the number of loads disposed that day.

A total of 263 samples (60 from the additional CCICWGCS facilities and 203 statewide Illinois facilities) were physically sorted from the residential and ICI sectors and 161 source separated C&D loads (14 from the additional CCICWGCS facilities and 147 statewide Illinois facilities) were visually characterized to develop the waste composition profiles provided in this section. Suburban Cook County was sampled during this study; however, additional samples from the CCICWGCS conducted by CDM Smith for Cook County Department of Environmental Control and The Delta Institute were used to develop comprehensive statewide MSW composition. The 60 residential and ICI samples collected and 14 C&D visually characterized loads from the Fall 2014 CCICWGCS were incorporated into this Illinois statewide report with permission by Cook County Department of Environmental Control and The Delta Institute. The CCICWGCS samples were collected and sorted using the same methods as this study.

**Table 2-1. Sampling Locations**

IEPA Region	Landfill or Transfer Station	County (County)	Operator	Sample Date
1	Winnebago Landfill	Rockford (Winnebago)	Winnebago Reclamation Service	10/01/14
	Lee County Landfill Inc.	Dixon (Lee)	Republic Services	10/02/14
	LandComp Landfill	Ottawa (La Salle)	Republic Services	10/03/14
2	AW/Groen Waste Services Transfer Station#	Crestwood (Cook)	Republic Services	09/10/14
	ARC Disposal & Recycling Transfer Station#	Mt. Prospect (Cook)	Republic Services	09/11/14
	Liberty Waste-McCook Transfer Station#	McCook (Cook)	Liberty Waste Services	09/12/14
	Northlake Transfer Station#	Northlake (Cook)	Republic Services	09/16/14
	Homewood Disposal Transfer Station#	Homewood (Cook)	Homewood Disposal	09/17/14
	SWANCC Transfer Station#	Des Plaines (Cook)	Groot Industries	09/18/14
	Countryside Landfill Inc.	Grayslake (Lake)	Waste Management	09/24/14
	Calumet Transfer	Chicago (Cook)	Republic Services	09/25/14
	Shred-All Recycling Facility (TS)	Chicago (Cook)	Republic Services	09/26/14
	Medill Transfer Station	Chicago (Cook)	Allied Waste	10/15/14
	Prairie View Recycling and Disposal Facility	Wilmington (Will)	Waste Management	10/16/14
	Apollo Disposal Service Transfer Station - Momence Kankakee	Momence (Cook)	Republic Services	10/17/14
3	Planet Recovery Transfer Station	Chicago (Cook)	Republic Services	11/06/14
	Northlake Transfer Station*	Northlake (Cook)	Republic Services	11/11/14
4	Knox County Landfill #3	Oneida (Knox)	Knox County	10/29/14
	Peoria City/County Landfill #2	Brimfield (Peoria)	Waste Management	10/30/14
5	Central Waste Services & Recycling Facility/Urbana Transfer Station	Urbana (Champaign)	Republic Services	10/22/14
	ADS/McLean County Landfill #2	Bloomington (McLean)	Republic Services	10/23/14
	Livingston Landfill	Pontiac (Livingston)	Republic Services	10/24/14
6	Sangamon Valley Landfill	Springfield (Sangamon)	Republic Services	10/10/14
	Hickory Ridge Landfill (Formerly Pike )	Baylis (Pike)	Peoria Disposal Company	10/28/14
7	Cottonwood Hills Recycling and Disposal Facility	Marissa (St. Clair)	Waste Management	10/08/14
	Roxana Landfill Inc.	Edwardsville (Madison)	Republic Services	10/09/14
7	Southern Illinois Regional Landfill	DeSoto (Jackson)	Republic Services	10/07/14
	Sumner Landfill Inc.	Sumner (Lawrence)	Republic Services	10/24/14

\*Sampling activities were conducted by CDM Smith at these additional Suburban Cook County facilities under separate contract/project for the Cook County Department of Environmental Control and The Delta Institute.

\*Sampling activities conducted at Northlake Transfer Station on two separate dates. First sampling event focused on Cook County MSW and second focused on DuPage County MSW.

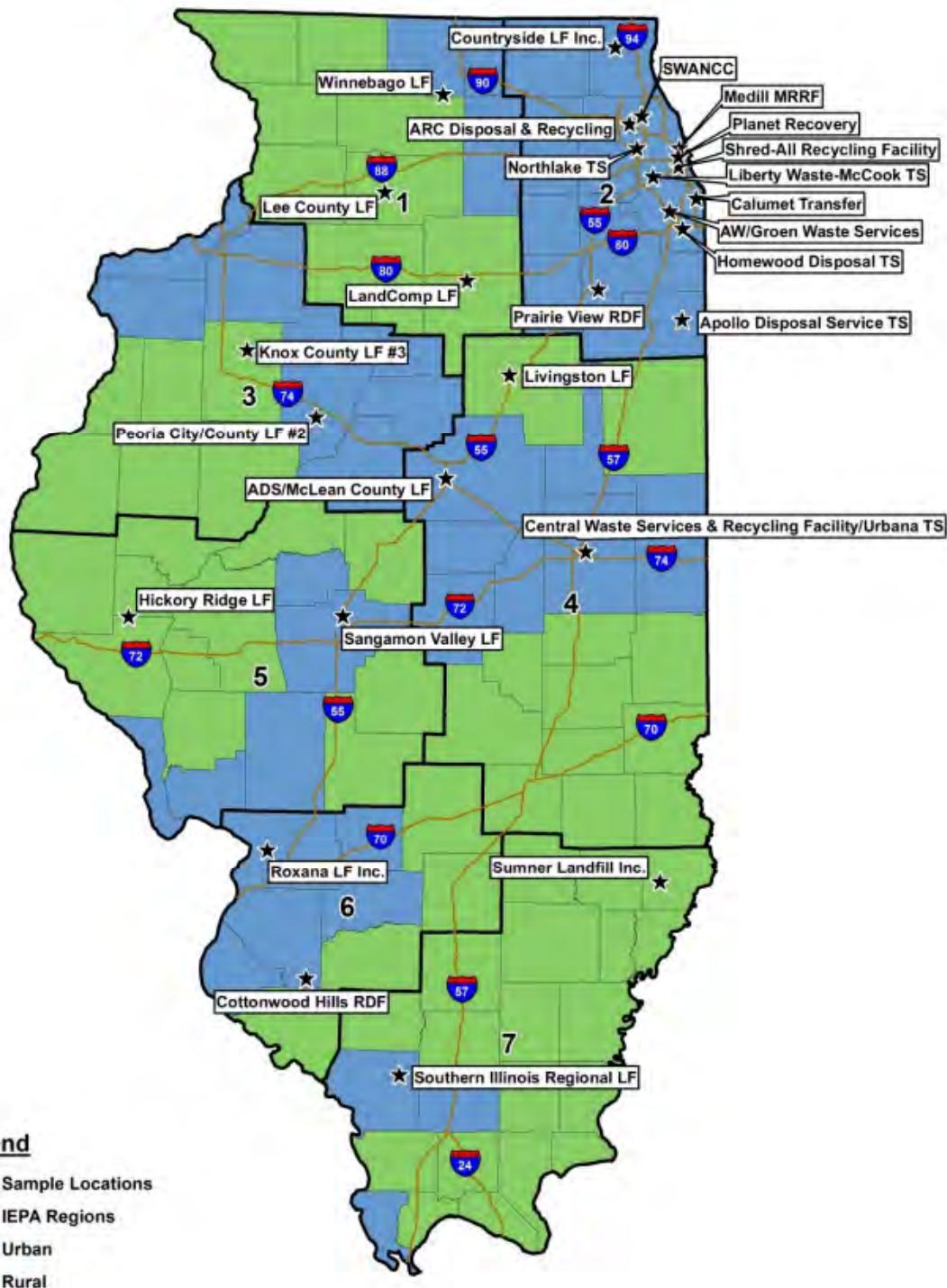
**Figure 2-2. Sample Location Map**

Table 2-2 summarizes the samples that were used to determine the landfilled MSW composition. A total of 263 waste samples were collected from the residential and commercial waste sectors in 2014. Of the 263 samples collected, 130 (49%) were samples of commercial waste, and 133 (51%) were samples of residential waste, of those samples a total of 202 (77%) were samples from urban areas and 61 (23%) were samples from rural areas.

**Table 2-2. Number of Samples by Waste Sector**

Sampling Group	Sample Count		Total Sample Wt.	Mean Sample Wt.
	No.	%	(pounds)	
Residential	133	100%	28,532	214.5
<i>Urban</i>	102	76.7%	22,575	221.33
<i>Rural</i>	31	23.3%	5,956	192.1
ICI	130	100%	30,514	234.73
<i>Urban</i>	100	76.9%	23,853	238.5
<i>Rural</i>	30	23.1%	6,661	222.0
Total Res./ICI	263	100%	59,046 (29.5 tons)	224.5
C&D – State	161		918 tons	5.7 tons

## 2.2.2 Sampling Plan

CDM Smith contacted the 27 facilities for permission to sample at the facilities identified above and to coordinate with the site managers. CDM Smith requested information for each of the 27 selected disposal facilities to determine the relative mix of waste sectors that are disposed at each facility. From this information, CDM Smith constructed a sampling plan for the selection of vehicles at each facility. The sampling plan was developed to comply with the industry standards for conducting waste characterization studies and the American Society for Testing and Materials (ASTM) standard D5231 for samples size (provided in Appendix A). All work was completed in general accordance with the approved sampling plan.

## 2.2.3 Data Collection Procedures

Scale house personnel were employed to assist CDM Smith in the selection of samples and in the gatehouse surveys that were used to determine the mix of waste disposed in Illinois. Selected vehicles were tipped in a designated location and samples were collected from a randomly selected portion of each tipped pile. The samples consisted of approximately 200 to 300 pounds of waste were then sorted into 10 material classes; Paper, Beverage Containers, Plastics, Glass, Metals, Organics, C&D, Inorganics, Household Hazardous Waste (HHW), and Textiles. Materials within these classes were further separated into 79 individual material categories (definitions are provided in [Appendix A](#)):

1. **Paper** – Newsprint, High Grade Office Paper, Magazines/Catalogs, Uncoated OCC/Kraft, Boxboard, Mixed Paper - Recyclable, Compostable Paper, Other Paper;
2. **Beverage Containers** - Milk And Juice Cartons/Boxes, Coated;
3. **Plastics** - #1 Pet Bottles/Jars, #1 Other Pet Containers & Packaging, #2 HDPE Bottles/Jars – Clear, #2 HDPE Bottles/Jars – Color, #2 Other HDPE Containers & Packaging, #6 Expanded Polystyrene Packaging (EPS), #3-#7 Other – All, Other Rigid Plastic Products, Grocery & Merchandise Bags, Trash Bags, Commercial & Industrial Film, Other Film, Remainder / Composite Plastic;
4. **Glass** - Recyclable Glass Bottles And Jars, Flat Glass, Other Glass;
5. **Metals** - Aluminum Beverage Containers, Other Aluminum, HVACs Ducting, Ferrous Containers (Tin Cans), Other Ferrous, Other Non-Ferrous, Other Metal;

6. **Organics** - Yard Waste (Compostable), Yard Waste (Woody), Food Scraps, Bottom Fines And Dirt, Diapers, Other Organic;
7. **C&D** - Clean Dimensional Lumber, Clean Engineered Wood, Wood Pallets, Painted Wood, Treated Wood, Concrete, Reinforced Concrete, Asphalt Paving, Rock & Other Aggregates, Bricks, Gypsum Board, Composition Shingles, Other Roofing, Plastic C&D Materials, Ceramics/Porcelain, Other C&D;
8. **Inorganics** – Televisions, Computer Monitors, Computer Equipment/Peripherals, Electronic Equipment, White Goods – Refrigerated, White Goods - Not Refrigerated, Lead-Acid Batteries, Other Household Batteries, Tires, Household Bulky Items, Fluorescent Lights/Ballasts;
9. **HHW** - Latex Paint, Oil Paint, Plant/Organism/Pest Control/Growth, Used Oil/Filters, Other Automotive Fluids, Mercury-Containing Items, Sharps & Infectious Waste, Ash, Sludge, & Other Industrial Processed Wastes, Sewage Solids, Other HHW; and
10. **Textiles** – Carpet, Carpet Padding, Clothing, Other Textiles.

After the samples were sorted each material category was weighed. Weight and load information associated with each sample were recorded on the *Hand Sort Characterization Form*.

#### **2.2.4 Calculation Procedures**

The overall approach to developing the waste composition estimates in this report was to calculate the percent composition of each material in the waste sectors as outlined in the Sampling Plan provided in **Appendix A**.

All composition results presented in this report were calculated at a 90% confidence interval. This means that there is a 90% probability that the material is between the mean percentage value plus or minus the confidence interval. For example, there is a 90% probability that the overall Residential/ICI Illinois MSW composition of newsprint is between 1.71% and 2.15% (1.93% plus or minus 0.22%).

### **2.3 MSW Physical Characterization Results**

The MSW physical characterization results incorporate the sample results from both this study and the CCICWGCS. Table 2-2 summarizes the sample information for each of the study's sampling groups and sectors. The goal for this study was to physically characterize 200 samples with a sample size of between 200 and 300 lbs (ASTM D5231). In September through November 2014, 203 waste samples were selected and hand sorted at 22 locations evenly distributed throughout the State of Illinois. The samples sizes and numbers were within the sample plan goals. The average sample weight for the 203 statewide Illinois samples was 220 pounds. A total of 44,672 pounds of MSW was physically sorted and classified during the Illinois study. An additional 60 waste samples were collected from additional CCICWGCS facilities and hand sorted earlier in September 2014. The average sample weight for the 60 additional CCICWGCS samples was approximately 239 pounds, with a total of 14,374 pounds of MSW physically sorted.

In the following sections, the landfilled MSW composition results are presented for the ICI and residential waste sectors, as well as for the urban and rural waste sectors. The landfilled MSW composition was determined by combining the sample results from both the statewide samples collected through this study and the additional CCICWGCS samples. The number of samples from the additional CCICWGCS (60 samples) accounts for approximately 23% of the total number of samples; however, Cook County's actual percentage of the Illinois population is approximately 19%. Because the ratio is not significantly disproportionate, the samples were used equally in determining the waste composition. The combined

residential/ICI composition was determined by weighting the ICI and Residential Sampling results by using the ratio of residential to ICI MSW determined by the gatehouse surveys (Section 2.5). The equation used for weighting samples is provided in the sampling plan ([Appendix A](#)).

Each composition profile is presented as follows:

- A pie chart depicting the ten material classes by weight (i.e., Paper, Plastic, Beverage Containers, Organics, Textiles, Glass, C&D, Metal, Inorganics, And HHW);
- A list of the ten largest material categories by weight (e.g., Food Scraps, High Grade Office Paper, Televisions, etc.);
- A comprehensive table detailing the full composition results for the entire 79 material categories.

### 2.3.1 Landfilled Residential MSW Composition

Figure 2-3 shows the percentage, by weight, of each of the ten material classes for the landfilled residential MSW sector. Organics, Paper, and Plastic account for approximately 70% (33.1%, 21.1%, and 15.4%, respectively) of the landfilled residential MSW for this sector.

**Figure 2-3. Composition of Landfilled Residential MSW by Material Class**

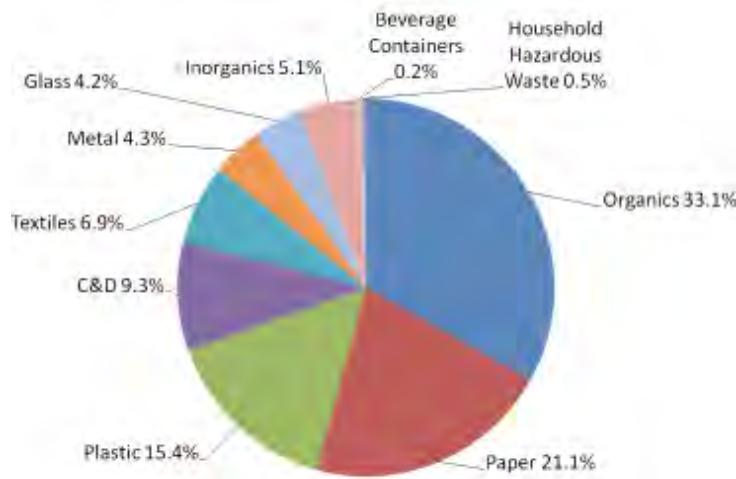


Table 2-3 lists the top ten material categories that were found in the landfilled residential MSW sector. These ten categories account for approximately 53% of landfilled residential MSW. Food Scraps, Yard Waste - Compostable, and Uncoated OCC/Kraft material categories account for 29% (20.2%, 4.7%, and 4.3%, respectively) of landfilled residential MSW.

**Table 2-3. Top Ten Individual Material Categories in Landfilled Residential MSW**

Category	Waste Composition %	Cum. %
Food Scraps	20.2%	20.2%
Yard Waste - Compostable	4.7%	24.9%
Uncoated OCC/Kraft	4.3%	29.2%
Compostable Paper	4.2%	33.4%
Mixed Paper - Recyclable	3.8%	37.2%
Recyclable Glass Bottles & Jars	3.6%	40.8%
Other Organic	3.4%	44.2%
Diapers	3.2%	47.4%
Other Film	3.0%	50.4%
Painted Wood	3.0%	53.3%
<b>Total</b>	<b>53.3%</b>	

Table 2-4 provides a composition profile of landfilled residential MSW.

**Table 2-4. Composition Profile of Landfilled Residential MSW**

*Calculated at a 90% confidence level*

	Mean	+/-		Mean	+/-
<b>Paper</b>	<b>21.1%</b>	<b>1.38%</b>	<i>Inorganics</i>	<b>5.1%</b>	<b>1.58%</b>
Newsprint	2.4%	0.38%	Televisions	0.3%	0.41%
High Grade Office Paper	1.2%	0.41%	Computer Monitors	0.1%	0.14%
Magazines/Catalogs	1.6%	0.24%	Computer Equipment/Peripherals	0.2%	0.20%
Uncoated OCC/Kraft	4.3%	0.78%	Electronic Equipment	0.7%	0.27%
Boxboard	3.0%	0.24%	White Goods - Refrigerated	0.0%	0.00%
Mixed Paper - Recyclable	3.8%	0.46%	White Goods - Not refrigerated	0.4%	0.26%
Compostable Paper	4.2%	0.27%	Lead-acid Batteries	0.0%	0.00%
Other Paper	0.6%	0.17%	Other Household Batteries	0.4%	0.43%
			Tires	0.2%	0.19%
<b>Beverage Containers</b>	<b>0.2%</b>	<b>0.03%</b>	Household Bulky Items	2.9%	1.29%
Milk & Juice Cartons/Boxes - Coated	0.2%	0.03%	Fluorescent Lights/Ballasts	0.0%	0.01%
<b>Plastic</b>	<b>15.4%</b>	<b>0.84%</b>	<i>Textiles</i>	<b>6.9%</b>	<b>1.00%</b>
#1 PET Bottles/Jars	1.2%	0.11%	Carpet	1.3%	0.58%
#1 Other PET Containers	0.5%	0.06%	Carpet Padding	0.4%	0.32%
#2 HDPE Bottles/Jars - Clear	0.4%	0.05%	Clothing	2.8%	0.54%
#2 HDPE Bottles/Jars - Color	0.5%	0.05%	Other Textiles	2.3%	0.38%
#2 Other HDPE Containers	0.0%	0.02%			
#6 Exp. Polystyrene Packaging	1.0%	0.08%	<b>Household Hazardous Waste</b>	<b>0.5%</b>	<b>0.22%</b>
#3-#7 Other - All	0.9%	0.11%	Latex Paint	0.2%	0.09%
Other Rigid Plastic Products	2.8%	0.50%	Oil Paint	0.0%	0.08%
Grocery & Merchandise Bags	1.1%	0.10%	Plant/Organism/Pest Control/Growth	0.0%	0.00%
Trash Bags	1.5%	0.13%	Used Oil/Filters	0.1%	0.06%
Commercial & Industrial Film	0.2%	0.11%	Other Automotive Fluids	0.0%	0.00%
Other Film	3.0%	0.26%	Mercury-Containing Items	0.0%	0.00%
Other Plastic	2.2%	0.31%	Sharps & Infectious Waste	0.0%	0.01%
			Ash, Sludge, & Industrial Wastes	0.1%	0.12%
<b>Glass</b>	<b>4.2%</b>	<b>0.69%</b>	Sewage Solids	0.0%	0.00%
Recyclable Glass Bottles & Jars	3.6%	0.44%	Other HHW	0.1%	0.12%
Flat Glass	0.4%	0.55%			
Other Glass	0.1%	0.05%	<b>C&amp;D</b>	<b>9.3%</b>	<b>2.52%</b>
			Clean Dimensional Lumber	0.7%	0.24%
<b>Metal</b>	<b>4.3%</b>	<b>0.51%</b>	Clean Engineered Wood	1.2%	0.38%
Aluminum Beverage Containers	0.7%	0.10%	Wood Pallets	0.1%	0.14%
Other Aluminum	0.4%	0.05%	Painted Wood	3.0%	1.26%
HVAC Ducting	0.0%	0.00%	Treated Wood	0.1%	0.06%
Ferrous Containers (Tin Cans)	1.0%	0.11%	Concrete	0.3%	0.45%
Other Ferrous	1.2%	0.32%	Reinforced Concrete	0.0%	0.00%
Other Non-Ferrous	0.2%	0.06%	Asphalt Paving	0.0%	0.01%
Other Metal	0.9%	0.23%	Rock & Other Aggregates	0.6%	0.47%
			Bricks	0.0%	0.01%
<b>Organics</b>	<b>33.1%</b>	<b>2.20%</b>	Gypsum Board	0.5%	0.44%
Yard Waste - Compostable	4.7%	1.21%	Composition Shingles	1.2%	1.81%
Yard Waste - Woody	0.4%	0.17%	Other Roofing	0.0%	0.00%
Food Scraps	20.2%	1.48%	Plastic C&D Materials	0.7%	0.33%
Bottom Fines & Dirt	1.3%	0.36%	Ceramics/Porcelain	0.5%	0.20%
Diapers	3.2%	0.43%	Other C&D	0.3%	0.15%
Other Organic	3.4%	0.65%			
			<b>Total Percentage</b>	100.0%	

### 2.3.2 Landfilled ICI MSW Composition

Figure 2-4 shows the percentage, by weight, of each of the ten material classes for the landfilled ICI MSW sector. Paper, Organics, and C&D account for 68% (24.4%, 24.2%, and 19.4%, respectively) of the landfilled MSW for this sector.

**Figure 2-4. Composition of Landfilled ICI MSW by Material Class**

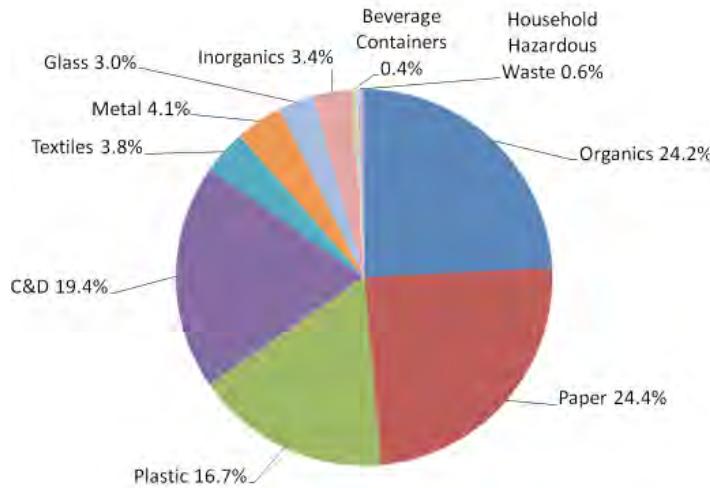


Table 2-5 lists the top ten material categories that were found in the landfilled ICI MSW sector. These ten categories account for approximately 55% of landfilled ICI MSW. Food Scraps, Uncoated OCC/Kraft, and Wood Pallets material categories account for approximately 33%(16.4%, 12.5%, and 4.0%, respectively) of landfilled ICI MSW.

**Table 2-5. Top Ten Individual Material Categories in Landfilled ICI MSW**

Category	Waste Composition %	Cum. %
Food Scraps	16.4%	16.4%
Uncoated OCC/Kraft	12.5%	28.9%
Wood Pallets	4.0%	32.9%
Compostable Paper	3.6%	36.5%
Other Film	3.4%	39.9%
Bottom Fines & Dirt	3.3%	43.2%
Other C&D	3.1%	46.3%
Commercial & Industrial Film	3.0%	49.3%
Painted Wood	2.9%	52.2%
Other Rigid Plastic Products	2.5%	54.7%
<b>Total</b>	<b>54.7%</b>	

Table 2-6 provides the composition profile of the landfilled ICI MSW sector.

**Table 2-6. Composition Profile of Landfilled ICI MSW**

Calculated at a 90% confidence level

	Mean	+/-		Mean	+/-
<b>Paper</b>	<b>24.4%</b>	<b>2.29%</b>	<b>Inorganics</b>	<b>3.4%</b>	<b>1.25%</b>
Newsprint	1.6%	0.61%	Televisions	0.1%	0.13%
High Grade Office Paper	1.5%	0.30%	Computer Monitors	0.1%	0.12%
Magazines/Catalogs	0.7%	0.18%	Computer Equipment/Peripherals	0.1%	0.17%
Uncoated OCC/Kraft	12.5%	1.78%	Electronic Equipment	0.4%	0.19%
Boxboard	1.8%	0.24%	White Goods - Refrigerated	0.1%	0.17%
Mixed Paper - Recyclable	2.1%	0.40%	White Goods - Not refrigerated	0.3%	0.37%
Compostable Paper	3.6%	0.55%	Lead-acid Batteries	0.0%	0.00%
Other Paper	0.6%	0.14%	Other Household Batteries	0.1%	0.11%
			Tires	0.2%	0.20%
<b>Beverage Containers</b>	<b>0.4%</b>	<b>0.18%</b>	Household Bulky Items	2.0%	1.13%
Milk & Juice Cartons/Boxes - Coated	0.4%	0.18%	Fluorescent Lights/Ballasts	0.0%	0.02%
<b>Plastic</b>	<b>16.7%</b>	<b>1.82%</b>	<b>Textiles</b>	<b>3.8%</b>	<b>1.03%</b>
#1 PET Bottles/Jars	1.1%	0.19%	Carpet	1.2%	0.79%
#1 Other PET Containers	0.2%	0.05%	Carpet Padding	0.3%	0.22%
#2 HDPE Bottles/Jars - Clear	0.4%	0.11%	Clothing	1.3%	0.38%
#2 HDPE Bottles/Jars - Color	0.3%	0.05%	Other Textiles	1.1%	0.30%
#2 Other HDPE Containers	0.0%	0.01%			
#6 Exp. Polystyrene Packaging	1.0%	0.40%	<b>Household Hazardous Waste</b>	<b>0.6%</b>	<b>0.30%</b>
#3-#7 Other - All	0.5%	0.10%	Latex Paint	0.0%	0.04%
Other Rigid Plastic Products	2.5%	0.75%	Oil Paint	0.0%	0.02%
Grocery & Merchandise Bags	0.5%	0.09%	Plant/Organism/Pest Control/Growth	0.0%	0.00%
Trash Bags	2.1%	0.30%	Used Oil/Filters	0.2%	0.15%
Commercial & Industrial Film	3.0%	1.28%	Other Automotive Fluids	0.0%	0.00%
Other Film	3.4%	0.68%	Mercury-Containing Items	0.0%	0.00%
Other Plastic	1.8%	0.33%	Sharps & Infectious Waste	0.0%	0.04%
			Ash, Sludge, & Industrial Wastes	0.1%	0.17%
<b>Glass</b>	<b>3.0%</b>	<b>1.10%</b>	Sewage Solids	0.0%	0.00%
Recyclable Glass Bottles & Jars	2.0%	0.38%	Other HHW	0.2%	0.21%
Flat Glass	0.6%	0.91%			
Other Glass	0.5%	0.55%	<b>C&amp;D</b>	<b>19.4%</b>	<b>4.12%</b>
			Clean Dimensional Lumber	1.4%	0.66%
<b>Metal</b>	<b>4.1%</b>	<b>0.90%</b>	Clean Engineered Wood	1.7%	0.55%
Aluminum Beverage Containers	0.4%	0.07%	Wood Pallets	4.0%	1.78%
Other Aluminum	0.2%	0.05%	Painted Wood	2.9%	1.33%
HVAC Ducting	0.0%	0.01%	Treated Wood	0.1%	0.11%
Ferrous Containers (Tin Cans)	0.9%	0.34%	Concrete	1.3%	1.62%
Other Ferrous	1.4%	0.52%	Reinforced Concrete	0.0%	0.00%
Other Non-Ferrous	0.5%	0.64%	Asphalt Paving	0.1%	0.15%
Other Metal	0.6%	0.19%	Rock & Other Aggregates	0.4%	0.29%
			Bricks	0.1%	0.10%
<b>Organics</b>	<b>24.2%</b>	<b>3.18%</b>	Gypsum Board	0.8%	0.48%
Yard Waste - Compostable	1.2%	0.63%	Composition Shingles	1.4%	1.28%
Yard Waste - Woody	0.5%	0.31%	Other Roofing	0.5%	0.79%
Food Scraps	16.4%	2.34%	Plastic C&D Materials	1.0%	0.49%
Bottom Fines & Dirt	3.3%	2.14%	Ceramics/Porcelain	0.5%	0.33%
Diapers	1.2%	0.35%	Other C&D	3.1%	1.23%
Other Organic	1.5%	0.93%			
			<b>Total Percentage</b>	100.0%	

### 2.3.3 Landfilled Combined Residential/ICI MSW Composition

Figure 2-5 shows the percentage, by weight, of each of the ten material classes for the combined residential and ICI MSW sectors in Illinois. Organics, Paper, and Plastic account for over 67% (27.9%, 23.0%, and 16.2%, respectively) of the landfilled combined residential/ICI MSW.

**Figure 2-5. Composition of Landfilled Combined Residential/ICI MSW by Material Class**

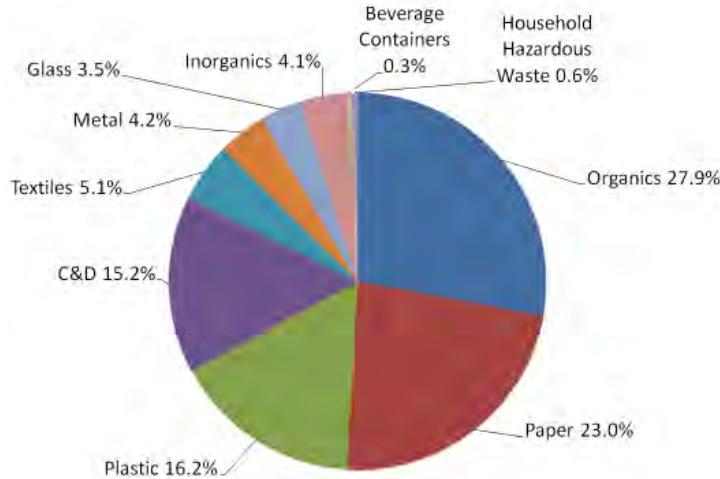


Table 2-7 lists the top ten material categories that were found in the landfilled combined residential/ICI MSW. These ten categories account for over 50% of landfilled residential/ICI MSW. Food Scraps, Uncoated OCC/Kraft, and Compostable Paper material categories account for approximately 31% (18.0%, 9.1%, and 3.8%, respectively) of landfilled residential/ICI MSW.

**Table 2-7. Top Ten Individual Material Categories in Landfilled Combined Residential/ICI MSW**

Category	Waste Composition %	Cum. %
Food Scraps	18.0%	18.0%
Uncoated OCC/Kraft	9.1%	27.1%
Compostable Paper	3.8%	30.9%
Other Film	3.2%	34.1%
Painted Wood	2.9%	37.1%
Mixed Paper - Recyclable	2.8%	39.9%
Yard Waste - Compostable	2.7%	42.5%
Recyclable Glass Bottles & Jars	2.7%	45.2%
Other Rigid Plastic Products	2.6%	47.8%
Bottom Fines & Dirt	2.5%	50.3%
<b>Total</b>	<b>50.3%</b>	

Table 2-8 provides the composition profile of the landfilled combined residential/ICI MSW.

**Table 2-8. Composition Profile of Landfilled Residential/ICI MSW**

Calculated at a 90% confidence level

	Mean	+/-		Mean	+/-
<b>Paper</b>	<b>23.01%</b>	<b>0.81%</b>	<i>Inorganics</i>	4.1%	0.50%
Newsprint	1.93%	0.22%	Televisions	0.2%	0.08%
High Grade Office Paper	1.37%	0.13%	Computer Monitors	0.1%	0.05%
Magazines/Catalogs	1.07%	0.07%	Computer Equipment/Peripherals	0.2%	0.07%
Uncoated OCC/Kraft	9.06%	0.62%	Electronic Equipment	0.5%	0.08%
Boxboard	2.30%	0.09%	White Goods - Refrigerated	0.1%	0.06%
Mixed Paper - Recyclable	2.81%	0.16%	White Goods - Not refrigerated	0.3%	0.13%
Compostable Paper	3.83%	0.19%	Lead-acid Batteries	0.0%	0.00%
Other Paper	0.65%	0.06%	Other Household Batteries	0.2%	0.08%
<b>Beverage Containers</b>	<b>0.29%</b>	<b>0.06%</b>	Tires	0.2%	0.08%
Milk & Juice Cartons/Boxes - Coated	0.29%	0.06%	Household Bulky Items	2.4%	0.44%
<b>Plastic</b>	<b>16.17%</b>	<b>0.63%</b>	Fluorescent Lights/Ballasts	0.0%	0.01%
#1 PET Bottles/Jars	1.13%	0.07%	<b>Textiles</b>	<b>5.1%</b>	<b>0.39%</b>
#1 Other PET Containers	0.32%	0.02%	Carpet	1.2%	0.29%
#2 HDPE Bottles/Jars - Clear	0.41%	0.04%	Carpet Padding	0.3%	0.09%
#2 HDPE Bottles/Jars - Color	0.38%	0.02%	Clothing	1.9%	0.16%
#2 Other HDPE Containers	0.02%	0.01%	Other Textiles	1.6%	0.12%
#6 Exp. Polystyrene Packaging	0.99%	0.14%	<b>Household Hazardous Waste</b>	<b>0.6%</b>	<b>0.11%</b>
#3-#7 Other - All	0.71%	0.04%	Latex Paint	0.1%	0.02%
Other Rigid Plastic Products	2.61%	0.27%	Oil Paint	0.0%	0.02%
Grocery & Merchandise Bags	0.75%	0.04%	Plant/Organism/Pest Control/Growth	0.0%	0.00%
Trash Bags	1.84%	0.10%	Used Oil/Filters	0.1%	0.05%
Commercial & Industrial Film	1.86%	0.44%	Other Automotive Fluids	0.0%	0.00%
Other Film	3.23%	0.23%	Mercury-Containing Items	0.0%	0.00%
Other Plastic	1.93%	0.12%	Sharps & Infectious Waste	0.0%	0.01%
<b>Glass</b>	<b>3.50%</b>	<b>0.39%</b>	Ash, Sludge, & Industrial Wastes	0.1%	0.06%
Recyclable Glass Bottles & Jars	2.66%	0.15%	Sewage Solids	0.0%	0.00%
Flat Glass	0.53%	0.32%	Other HHW	0.2%	0.07%
Other Glass	0.31%	0.19%	<b>C&amp;D</b>	<b>15.2%</b>	<b>1.46%</b>
<b>Metal</b>	<b>4.16%</b>	<b>0.32%</b>	Clean Dimensional Lumber	1.1%	0.23%
Aluminum Beverage Containers	0.51%	0.03%	Clean Engineered Wood	1.5%	0.20%
Other Aluminum	0.30%	0.02%	Wood Pallets	2.4%	0.60%
HVAC Ducting	0.00%	0.00%	Painted Wood	2.9%	0.50%
Ferrous Containers (Tin Cans)	0.93%	0.12%	Treated Wood	0.1%	0.04%
Other Ferrous	1.31%	0.18%	Concrete	0.9%	0.55%
Other Non-Ferrous	0.41%	0.22%	Reinforced Concrete	0.0%	0.00%
Other Metal	0.70%	0.08%	Asphalt Paving	0.1%	0.05%
<b>Organics</b>	<b>27.94%</b>	<b>1.14%</b>	Rock & Other Aggregates	0.5%	0.13%
Yard Waste - Compostable	2.67%	0.30%	Bricks	0.1%	0.03%
Yard Waste - Woody	0.43%	0.11%	Gypsum Board	0.6%	0.18%
Food Scraps	18.02%	0.83%	Composition Shingles	1.3%	0.54%
Bottom Fines & Dirt	2.48%	0.73%	Other Roofing	0.3%	0.27%
Diapers	2.03%	0.14%	Plastic C&D Materials	0.9%	0.17%
Other Organic	2.31%	0.33%	Ceramics/Porcelain	0.5%	0.12%
			Other C&D	1.9%	0.42%
			<b>Total Percentage</b>	100.0%	

## 2.3.4 Landfilled Urban MSW Composition

In determining the landfilled urban MSW composition for residential and ICI MSW sectors, the samples were identified based on the RUC code for the city/county that they were generated. Out of 263 samples, a total of 202 (77%) of the samples were collected from the urban MSW sector. 102 (50.5%) urban samples were collected from residential MSW and 100 (49.5%) urban samples were collected from ICI MSW.

### 2.3.4.1 Landfilled Urban Residential MSW

Figure 2-6 shows the percentage, by weight, of each of the ten material classes for the landfilled urban residential MSW subsector. Organics, Paper, and Plastic account for 69% (34.7%, 19.7%, and 14.6%, respectively) of the landfilled MSW for this sector.

**Figure 2-6. Composition of Landfilled Urban Residential MSW by Material Class**

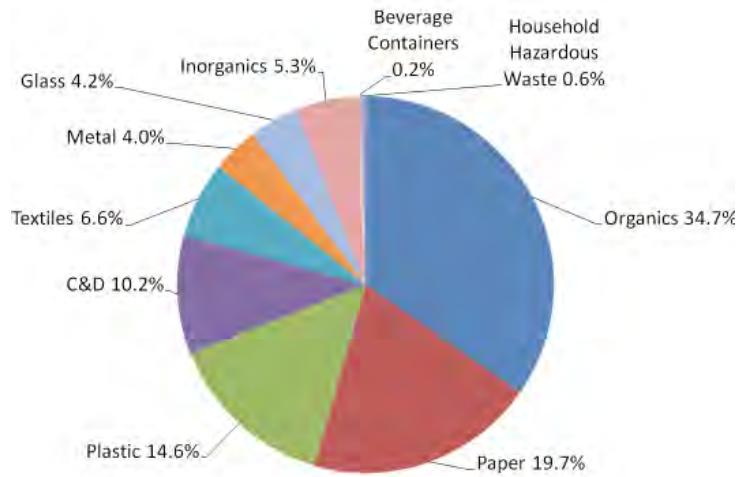


Table 2-9 lists the top ten material categories that were found in the landfilled urban residential MSW subsector. These ten categories account for approximately 55% of landfilled urban residential MSW. Food Scraps, Yard Waste – Compostable, and Uncoated OCC/Kraft material categories account for over 30% (20.6%, 5.4%, and 4.3%, respectively) of landfilled urban residential MSW.

**Table 2-9. Top Ten Individual Material Categories in Landfilled Urban Residential MSW**

Category	Waste Composition %	Cum. %
Food Scraps	20.6%	20.6%
Yard Waste - Compostable	5.4%	26.0%
Uncoated OCC/Kraft	4.3%	30.3%
Compostable Paper	4.1%	34.5%
Recyclable Glass Bottles & Jars	3.6%	38.0%
Other Organic	3.6%	41.6%
Painted Wood	3.4%	45.0%
Mixed Paper - Recyclable	3.2%	48.2%
Diapers	3.2%	51.5%
Household Bulky Items	3.2%	54.7%
<b>Total</b>	<b>54.7%</b>	

Table 2-10 provides the composition profile of landfilled urban residential MSW.

**Table 2-10. Composition Profile of Landfilled Urban Residential MSW**

Calculated at a 90% confidence level

	Mean	+/-		Mean	+/-
<b>Paper</b>	<b>19.7%</b>	<b>1.52%</b>	<b>Inorganics</b>	<b>5.3%</b>	<b>1.90%</b>
Newsprint	2.2%	0.46%	Televisions	0.0%	0.00%
High Grade Office Paper	0.9%	0.26%	Computer Monitors	0.1%	0.18%
Magazines/Catalogs	1.5%	0.26%	Computer Equipment/Peripherals	0.2%	0.25%
Uncoated OCC/Kraft	4.3%	0.89%	Electronic Equipment	0.7%	0.33%
Boxboard	2.7%	0.26%	White Goods - Refrigerated	0.0%	0.00%
Mixed Paper - Recyclable	3.2%	0.42%	White Goods - Not refrigerated	0.4%	0.29%
Compostable Paper	4.1%	0.32%	Lead-acid Batteries	0.0%	0.00%
Other Paper	0.7%	0.21%	Other Household Batteries	0.4%	0.54%
			Tires	0.2%	0.24%
<b>Beverage Containers</b>	<b>0.2%</b>	<b>0.03%</b>	Household Bulky Items	3.2%	1.60%
Milk & Juice Cartons/Boxes - Coated	0.2%	0.03%	Fluorescent Lights/Ballasts	0.0%	0.01%
<b>Plastic</b>	<b>14.6%</b>	<b>0.98%</b>	<b>Textiles</b>	<b>6.6%</b>	<b>1.04%</b>
#1 PET Bottles/Jars	1.1%	0.13%	Carpet	1.5%	0.72%
#1 Other PET Containers	0.4%	0.06%	Carpet Padding	0.4%	0.35%
#2 HDPE Bottles/Jars - Clear	0.4%	0.06%	Clothing	2.6%	0.48%
#2 HDPE Bottles/Jars - Color	0.5%	0.06%	Other Textiles	2.0%	0.38%
#2 Other HDPE Containers	0.0%	0.03%			
#6 Exp. Polystyrene Packaging	0.9%	0.09%	<b>Household Hazardous Waste</b>	<b>0.6%</b>	<b>0.27%</b>
#3-#7 Other - All	0.9%	0.13%	Latex Paint	0.2%	0.10%
Other Rigid Plastic Products	2.6%	0.59%	Oil Paint	0.1%	0.10%
Grocery & Merchandise Bags	1.1%	0.11%	Plant/Organism/Pest Control/Growth	0.0%	0.00%
Trash Bags	1.4%	0.13%	Used Oil/Filters	0.1%	0.08%
Commercial & Industrial Film	0.2%	0.13%	Other Automotive Fluids	0.0%	0.00%
Other Film	2.9%	0.29%	Mercury-Containing Items	0.0%	0.00%
Other Plastic	2.2%	0.38%	Sharps & Infectious Waste	0.0%	0.01%
			Ash, Sludge, & Industrial Wastes	0.1%	0.15%
<b>Glass</b>	<b>4.2%</b>	<b>0.84%</b>	Sewage Solids	0.0%	0.05%
Recyclable Glass Bottles & Jars	3.6%	0.51%	Other HHW	0.1%	0.15%
Flat Glass	0.5%	0.69%			
Other Glass	0.1%	0.06%	<b>C&amp;D</b>	<b>10.2%</b>	<b>3.12%</b>
			Clean Dimensional Lumber	0.8%	0.29%
<b>Metal</b>	<b>4.0%</b>	<b>0.58%</b>	Clean Engineered Wood	1.1%	0.40%
Aluminum Beverage Containers	0.6%	0.11%	Wood Pallets	0.1%	0.10%
Other Aluminum	0.4%	0.06%	Painted Wood	3.4%	1.56%
HVAC Ducting	0.0%	0.00%	Treated Wood	0.1%	0.08%
Ferrous Containers (Tin Cans)	0.8%	0.11%	Concrete	0.4%	0.57%
Other Ferrous	1.2%	0.39%	Reinforced Concrete	0.0%	0.01%
Other Non-Ferrous	0.2%	0.06%	Asphalt Paving	0.0%	0.01%
Other Metal	0.8%	0.24%	Rock & Other Aggregates	0.8%	0.60%
			Bricks	0.0%	0.02%
<b>Organics</b>	<b>34.7%</b>	<b>2.57%</b>	Gypsum Board	0.5%	0.54%
Yard Waste - Compostable	5.4%	1.47%	Composition Shingles	1.5%	2.29%
Yard Waste - Woody	0.5%	0.21%	Other Roofing	0.0%	0.00%
Food Scraps	20.6%	1.76%	Plastic C&D Materials	0.6%	0.35%
Bottom Fines & Dirt	1.5%	0.45%	Ceramics/Porcelain	0.6%	0.25%
Diapers	3.2%	0.52%	Other C&D	0.3%	0.14%
Other Organic	3.6%	0.80%			
			<b>Total Percentage</b>	100.0%	

### 2.3.4.2 Landfilled Urban ICI MSW

Figure 2-7 shows the percentage, by weight, of each of the ten material classes for the landfilled urban ICI MSW subsector. Paper, Organics, and C&D account for over 68% (25.0%, 23.7%, and 19.6%) of the landfilled MSW for this subsector.

**Figure 2-7. Composition of Landfilled Urban ICI MSW by Material Class**

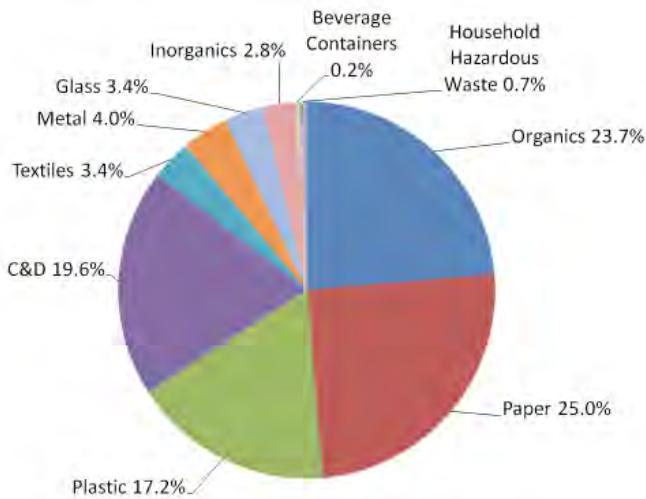


Table 2-11 lists the top ten material categories that were found in the landfilled urban ICI MSW subsector. These ten categories account for approximately 56% of the landfilled urban ICI MSW. Food Scraps, Uncoated OCC/Kraft, and Bottom Fines & Dirt material categories account for approximately 33% (15.6%, 13.3%, and 3.8%, respectively) of landfilled urban ICI MSW.

**Table 2-11. Top Ten Individual Material Categories in Landfilled Urban ICI MSW**

Category	Waste Composition %	Cum. %
Food Scraps	15.6%	15.6%
Uncoated OCC/Kraft	13.3%	28.9%
Bottom Fines & Dirt	3.8%	32.7%
Other C&D	3.7%	36.4%
Compostable Paper	3.6%	40.0%
Commercial & Industrial Film	3.6%	43.6%
Wood Pallets	3.4%	47.0%
Other Film	3.3%	50.3%
Painted Wood	2.7%	53.0%
Other Rigid Plastic Products	2.6%	55.6%
<b>Total</b>	<b>55.6%</b>	

Table 2-12 provides the composition profile of the landfilled urban ICI MSW sector.

**Table 2-12. Composition Profile of Landfilled Urban ICI MSW**

Calculated at a 90% confidence level

	Mean	+/-		Mean	+/-
<b>Paper</b>	<b>25.0%</b>	<b>2.57%</b>	<b>Inorganics</b>	<b>2.8%</b>	<b>1.22%</b>
Newsprint	1.5%	0.54%	Televisions	0.1%	0.16%
High Grade Office Paper	1.5%	0.36%	Computer Monitors	0.1%	0.15%
Magazines/Catalogs	0.7%	0.23%	Computer Equipment/Peripherals	0.2%	0.21%
Uncoated OCC/Kraft	13.3%	2.12%	Electronic Equipment	0.3%	0.15%
Boxboard	1.8%	0.28%	White Goods - Refrigerated	0.0%	0.00%
Mixed Paper - Recyclable	2.0%	0.36%	White Goods - Not refrigerated	0.4%	0.48%
Compostable Paper	3.6%	0.68%	Lead-acid Batteries	0.0%	0.00%
Other Paper	0.6%	0.13%	Other Household Batteries	0.1%	0.14%
<b>Beverage Containers</b>	<b>0.2%</b>	<b>0.06%</b>	Tires	0.1%	0.11%
Milk & Juice Cartons/Boxes - Coated	0.2%	0.06%	Household Bulky Items	1.6%	1.05%
<b>Plastic</b>	<b>17.2%</b>	<b>2.20%</b>	Fluorescent Lights/Ballasts	0.0%	0.03%
#1 PET Bottles/Jars	1.0%	0.23%	<b>Textiles</b>	<b>3.4%</b>	<b>0.96%</b>
#1 Other PET Containers	0.2%	0.04%	Carpet	0.9%	0.57%
#2 HDPE Bottles/Jars - Clear	0.3%	0.07%	Carpet Padding	0.3%	0.28%
#2 HDPE Bottles/Jars - Color	0.3%	0.06%	Clothing	1.1%	0.30%
#2 Other HDPE Containers	0.0%	0.01%	Other Textiles	1.1%	0.36%
#6 Exp. Polystyrene Packaging	1.0%	0.50%	<b>Household Hazardous Waste</b>	<b>0.7%</b>	<b>0.37%</b>
#3-#7 Other - All	0.5%	0.11%	Latex Paint	0.0%	0.05%
Other Rigid Plastic Products	2.6%	0.88%	Oil Paint	0.0%	0.03%
Grocery & Merchandise Bags	0.5%	0.11%	Plant/Organism/Pest Control/Growth	0.0%	0.00%
Trash Bags	2.0%	0.34%	Used Oil/Filters	0.2%	0.18%
Commercial & Industrial Film	3.6%	1.62%	Other Automotive Fluids	0.0%	0.00%
Other Film	3.3%	0.81%	Mercury-Containing Items	0.0%	0.00%
Other Plastic	1.9%	0.40%	Sharps & Infectious Waste	0.0%	0.05%
<b>Glass</b>	<b>3.4%</b>	<b>1.39%</b>	Ash, Sludge, & Industrial Wastes	0.2%	0.21%
Recyclable Glass Bottles & Jars	2.1%	0.46%	Sewage Solids	0.0%	0.00%
Flat Glass	0.8%	1.17%	Other HHW	0.2%	0.25%
Other Glass	0.5%	0.70%	<b>C&amp;D</b>	<b>19.6%</b>	<b>4.45%</b>
<b>Metal</b>	<b>4.0%</b>	<b>1.07%</b>	Clean Dimensional Lumber	1.6%	0.83%
Aluminum Beverage Containers	0.4%	0.07%	Clean Engineered Wood	1.7%	0.56%
Other Aluminum	0.3%	0.06%	Wood Pallets	3.4%	1.57%
HVAC Ducting	0.0%	0.01%	Painted Wood	2.7%	1.35%
Ferrous Containers (Tin Cans)	0.6%	0.19%	Treated Wood	0.1%	0.14%
Other Ferrous	1.5%	0.63%	Concrete	1.7%	2.07%
Other Non-Ferrous	0.7%	0.82%	Reinforced Concrete	0.0%	0.00%
Other Metal	0.6%	0.23%	Asphalt Paving	0.1%	0.19%
<b>Organics</b>	<b>23.7%</b>	<b>3.61%</b>	Rock & Other Aggregates	0.4%	0.36%
Yard Waste - Compostable	1.4%	0.80%	Bricks	0.2%	0.12%
Yard Waste - Woody	0.6%	0.39%	Gypsum Board	0.5%	0.33%
Food Scraps	15.6%	2.47%	Composition Shingles	0.9%	0.81%
Bottom Fines & Dirt	3.8%	2.69%	Other Roofing	0.6%	1.01%
Diapers	1.2%	0.39%	Plastic C&D Materials	1.2%	0.61%
Other Organic	1.1%	0.58%	Ceramics/Porcelain	0.7%	0.41%
			Other C&D	3.7%	1.54%
			<b>Total Percentage</b>	100.0%	

### 2.3.4.3 Landfilled Urban Residential/ICI MSW Composition

Figure 2-8 shows the percentage, by weight, of each of the ten material classes for the landfilled urban residential/ICI MSW sector. Organics, Paper, and Plastic account for over 67% (28.3%, 22.8%, and 16.1%) of the landfilled MSW for this sector.

**Figure 2-8. Composition of Landfilled Urban Residential/ICI MSW by Material Class**

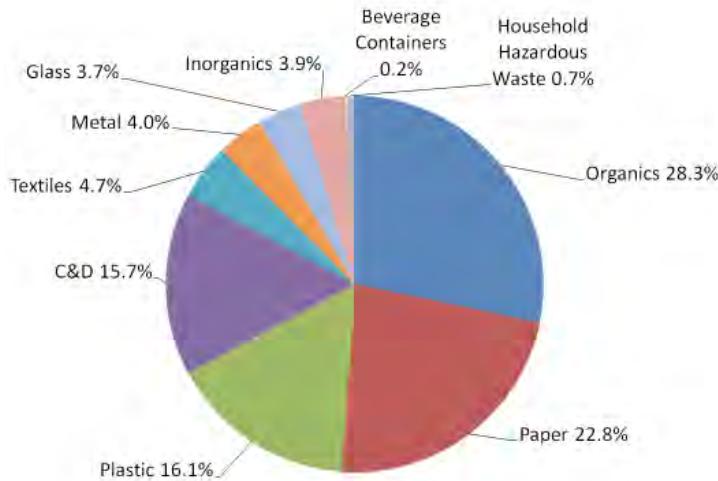


Table 2-13 lists the top ten material categories that were found in the landfilled urban residential/ICI MSW sector. These ten categories account for approximately 51% of landfilled urban MSW. Food Scraps, Uncoated OCC/Kraft, and Compostable Paper material categories account for over 31% (17.7%, 9.5%, and 3.9%, respectively) of landfilled urban residential/ICI MSW.

**Table 2-13. Top Ten Individual Material Categories in Landfilled Urban Residential/ICI MSW**

Category	Waste Composition %	Cum. %
Food Scraps	17.7%	17.7%
Uncoated OCC/Kraft	9.5%	27.2%
Compostable Paper	3.9%	31.1%
Other Film	3.1%	34.2%
Yard Waste - Compostable	3.1%	37.3%
Painted Wood	3.0%	40.3%
Bottom Fines & Dirt	2.8%	43.1%
Recyclable Glass Bottles & Jars	2.7%	45.8%
Other Rigid Plastic Products	2.6%	48.4%
Mixed Paper - Recyclable	2.5%	50.9%
<b>Total</b>	<b>50.9%</b>	

Table 2-14 provides the composition profile of landfilled urban residential/ICI MSW.

**Table 2-14. Composition Profile of Landfilled Urban Residential/ICI MSW**

Calculated at a 90% confidence level

	Mean	+/-		Mean	+/-
<b>Paper</b>	<b>22.8%</b>	<b>0.91%</b>	<b>Inorganics</b>	<b>3.9%</b>	<b>0.53%</b>
Newsprint	1.8%	0.20%	Televisions	0.1%	0.06%
High Grade Office Paper	1.3%	0.13%	Computer Monitors	0.1%	0.06%
Magazines/Catalogs	1.0%	0.09%	Computer Equipment/Peripherals	0.2%	0.08%
Uncoated OCC/Kraft	9.5%	0.74%	Electronic Equipment	0.4%	0.08%
Boxboard	2.2%	0.11%	White Goods - Refrigerated	0.0%	0.00%
Mixed Paper - Recyclable	2.5%	0.14%	White Goods - Not refrigerated	0.4%	0.17%
Compostable Paper	3.9%	0.24%	Lead-acid Batteries	0.0%	0.00%
Other Paper	0.6%	0.06%	Other Household Batteries	0.3%	0.11%
<b>Beverage Containers</b>	<b>0.2%</b>	<b>0.02%</b>	Tires	0.1%	0.06%
Milk & Juice Cartons/Boxes - Coated	0.2%	0.02%	Household Bulky Items	2.3%	0.45%
<b>Plastic</b>	<b>16.1%</b>	<b>0.77%</b>	Fluorescent Lights/Ballasts	0.0%	0.01%
#1 PET Bottles/Jars	1.1%	0.08%	<b>Textiles</b>	<b>4.7%</b>	<b>0.37%</b>
#1 Other PET Containers	0.3%	0.02%	Carpet	1.2%	0.23%
#2 HDPE Bottles/Jars - Clear	0.3%	0.03%	Carpet Padding	0.4%	0.11%
#2 HDPE Bottles/Jars - Color	0.4%	0.02%	Clothing	1.7%	0.13%
#2 Other HDPE Containers	0.0%	0.01%	Other Textiles	1.5%	0.14%
#6 Exp. Polystyrene Packaging	0.9%	0.17%	<b>Household Hazardous Waste</b>	<b>0.7%</b>	<b>0.13%</b>
#3-#7 Other - All	0.7%	0.04%	Latex Paint	0.1%	0.03%
Other Rigid Plastic Products	2.6%	0.32%	Oil Paint	0.0%	0.02%
Grocery & Merchandise Bags	0.8%	0.04%	Plant/Organism/Pest Control/Growth	0.0%	0.00%
Trash Bags	1.7%	0.12%	Used Oil/Filters	0.2%	0.06%
Commercial & Industrial Film	2.2%	0.55%	Other Automotive Fluids	0.0%	0.00%
Other Film	3.1%	0.28%	Mercury-Containing Items	0.0%	0.00%
Other Plastic	2.0%	0.15%	Sharps & Infectious Waste	0.0%	0.02%
<b>Glass</b>	<b>3.7%</b>	<b>0.49%</b>	Ash, Sludge, & Industrial Wastes	0.1%	0.08%
Recyclable Glass Bottles & Jars	2.7%	0.18%	Sewage Solids	0.0%	0.01%
Flat Glass	0.7%	0.41%	Other HHW	0.2%	0.09%
Other Glass	0.3%	0.24%	<b>C&amp;D</b>	<b>15.7%</b>	<b>1.60%</b>
<b>Metal</b>	<b>4.0%</b>	<b>0.38%</b>	Clean Dimensional Lumber	1.3%	0.29%
Aluminum Beverage Containers	0.5%	0.03%	Clean Engineered Wood	1.4%	0.20%
Other Aluminum	0.3%	0.02%	Wood Pallets	2.0%	0.53%
HVAC Ducting	0.0%	0.00%	Painted Wood	3.0%	0.53%
Ferrous Containers (Tin Cans)	0.7%	0.07%	Treated Wood	0.1%	0.05%
Other Ferrous	1.4%	0.22%	Concrete	1.2%	0.71%
Other Non-Ferrous	0.5%	0.28%	Reinforced Concrete	0.0%	0.00%
Other Metal	0.7%	0.09%	Asphalt Paving	0.1%	0.06%
<b>Organics</b>	<b>28.3%</b>	<b>1.30%</b>	Rock & Other Aggregates	0.6%	0.16%
Yard Waste - Compostable	3.1%	0.37%	Bricks	0.1%	0.04%
Yard Waste - Woody	0.5%	0.14%	Gypsum Board	0.5%	0.15%
Food Scraps	17.7%	0.89%	Composition Shingles	1.1%	0.49%
Bottom Fines & Dirt	2.8%	0.91%	Other Roofing	0.4%	0.34%
Diapers	2.0%	0.16%	Plastic C&D Materials	1.0%	0.22%
Other Organic	2.1%	0.24%	Ceramics/Porcelain	0.6%	0.15%
			Other C&D	2.3%	0.52%
			<b>Total Percentage</b>	100.0%	

## 2.3.5 Landfilled Rural MSW Composition

In determining the landfilled rural MSW composition for the residential and ICI sectors, the samples were split based on the county that they were generated from and its RUC code. Out of 263 samples collected throughout the state, a total of 61 (23%) samples were collected from the rural MSW sector, 31 (51%) rural samples were collected from the rural residential MSW subsector and 30 (49%) rural samples were collected from the rural ICI MSW subsector.

### 2.3.5.1 Landfilled Rural Residential MSW

Figure 2-9 shows the percentage, by weight, of each of the ten material classes for the landfilled rural residential MSW subsector. Organics, Paper, and Plastic account for approximately 72% (27.0%, 26.5%, and 18.2%) of the total MSW for this sector.

**Figure 2-9. Composition of Landfilled Rural Residential MSW by Material Class**

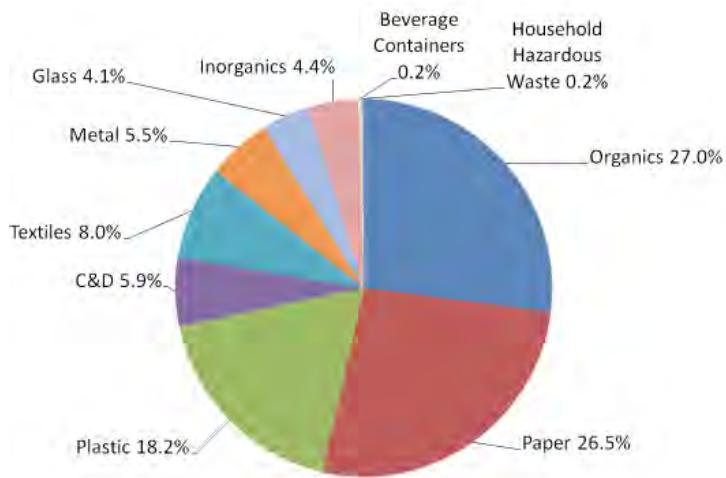


Table 2-15 lists the top ten material categories that were found in the landfilled rural residential MSW subsector. These ten categories account for approximately 56% of the landfilled rural residential MSW. Food Scraps, Mixed Paper - Recyclable, and Compostable Paper material categories account for over 29% (19.0%, 5.9%, and 4.4%, respectively) of the landfilled rural residential MSW.

**Table 2-15. Top Ten Individual Material Categories in Landfilled Rural Residential MSW**

Category	Waste Composition %	Cum. %
Food Scraps	19.0%	19.0%
Mixed Paper - Recyclable	5.9%	24.9%
Compostable Paper	4.4%	29.3%
Uncoated OCC/Kraft	4.2%	33.5%
Boxboard	4.1%	37.6%
Recyclable Glass Bottles & Jars	3.9%	41.5%
Other Rigid Plastic Products	3.6%	45.1%
Other Film	3.6%	48.7%
Other Textiles	3.6%	52.2%
Clothing	3.5%	55.7%
<b>Total</b>	<b>55.7%</b>	

Table 2-16 provides the composition profile of landfilled rural residential MSW.

**Table 2-16. Composition Profile of Landfilled Rural Residential MSW**

Calculated at a 90% confidence level

	Mean	+/-		Mean	+/-
<b>Paper</b>	<b>26.5%</b>	<b>3.21%</b>	<b>Inorganics</b>	<b>4.4%</b>	<b>2.25%</b>
Newsprint	2.8%	0.59%	Televisions	1.2%	1.98%
High Grade Office Paper	2.4%	1.69%	Computer Monitors	0.0%	0.00%
Magazines/Catalogs	2.1%	0.54%	Computer Equipment/Peripherals	0.0%	0.00%
Uncoated OCC/Kraft	4.2%	1.54%	Electronic Equipment	0.5%	0.23%
Boxboard	4.1%	0.47%	White Goods - Refrigerated	0.0%	0.00%
Mixed Paper - Recyclable	5.9%	1.44%	White Goods - Not refrigerated	0.5%	0.55%
Compostable Paper	4.4%	0.48%	Lead-acid Batteries	0.0%	0.00%
Other Paper	0.5%	0.10%	Other Household Batteries	0.2%	0.07%
<b>Beverage Containers</b>	<b>0.2%</b>	<b>0.07%</b>	Tires	0.0%	0.00%
Milk & Juice Cartons/Boxes - Coated	0.2%	0.07%	Household Bulky Items	2.0%	1.05%
<b>Plastic</b>	<b>18.2%</b>	<b>1.59%</b>	Fluorescent Lights/Ballasts	0.0%	0.02%
#1 PET Bottles/Jars	1.5%	0.24%	<b>Textiles</b>	<b>8.0%</b>	<b>2.78%</b>
#1 Other PET Containers	0.7%	0.11%	Carpet	0.5%	0.36%
#2 HDPE Bottles/Jars - Clear	0.6%	0.13%	Carpet Padding	0.4%	0.73%
#2 HDPE Bottles/Jars - Color	0.7%	0.13%	Clothing	3.5%	1.85%
#2 Other HDPE Containers	0.0%	0.01%	Other Textiles	3.6%	1.12%
#6 Exp. Polystyrene Packaging	1.3%	0.16%	<b>Household Hazardous Waste</b>	<b>0.2%</b>	<b>0.17%</b>
#3-#7 Other - All	1.2%	0.22%	Latex Paint	0.1%	0.14%
Other Rigid Plastic Products	3.6%	0.85%	Oil Paint	0.0%	0.00%
Grocery & Merchandise Bags	1.0%	0.14%	Plant/Organism/Pest Control/Growth	0.0%	0.00%
Trash Bags	2.0%	0.34%	Used Oil/Filters	0.0%	0.04%
Commercial & Industrial Film	0.2%	0.14%	Other Automotive Fluids	0.0%	0.00%
Other Film	3.6%	0.66%	Mercury-Containing Items	0.0%	0.00%
Other Plastic	1.9%	0.27%	Sharps & Infectious Waste	0.0%	0.02%
<b>Glass</b>	<b>4.1%</b>	<b>0.88%</b>	Ash, Sludge, & Industrial Wastes	0.0%	0.00%
Recyclable Glass Bottles & Jars	3.9%	0.87%	Sewage Solids	0.0%	0.00%
Flat Glass	0.1%	0.04%	Other HHW	0.0%	0.03%
Other Glass	0.2%	0.13%	<b>C&amp;D</b>	<b>5.9%</b>	<b>2.05%</b>
<b>Metal</b>	<b>5.5%</b>	<b>1.03%</b>	Clean Dimensional Lumber	0.5%	0.30%
Aluminum Beverage Containers	1.0%	0.26%	Clean Engineered Wood	1.3%	1.01%
Other Aluminum	0.4%	0.06%	Wood Pallets	0.4%	0.59%
HVAC Ducting	0.0%	0.01%	Painted Wood	1.2%	1.04%
Ferrous Containers (Tin Cans)	1.6%	0.31%	Treated Wood	0.0%	0.00%
Other Ferrous	0.9%	0.36%	Concrete	0.0%	0.00%
Other Non-Ferrous	0.3%	0.19%	Reinforced Concrete	0.0%	0.00%
Other Metal	1.3%	0.59%	Asphalt Paving	0.0%	0.00%
<b>Organics</b>	<b>27.0%</b>	<b>2.32%</b>	Rock & Other Aggregates	0.0%	0.03%
Yard Waste - Compostable	1.7%	1.14%	Bricks	0.0%	0.00%
Yard Waste - Woody	0.0%	0.01%	Gypsum Board	0.3%	0.29%
Food Scraps	19.0%	2.08%	Composition Shingles	0.1%	0.13%
Bottom Fines & Dirt	0.8%	0.22%	Other Roofing	0.0%	0.00%
Diapers	3.0%	0.64%	Plastic C&D Materials	1.2%	0.91%
Other Organic	2.5%	0.68%	Ceramics/Porcelain	0.2%	0.12%
			Other C&D	0.6%	0.52%
			<b>Total Percentage</b>	100.0%	

### 2.3.5.2 Landfilled Rural ICI MSW

Figure 2-10 shows the percentage, by weight, of each of the ten material classes for the landfilled rural ICI MSW subsector. Organics, Paper, and C&D account for approximately 67% (26.0%, 22.0%, and 18.8%) of the landfilled MSW for this subsector.

**Figure 2-10. Composition of Landfilled Rural ICI MSW by Material Class**

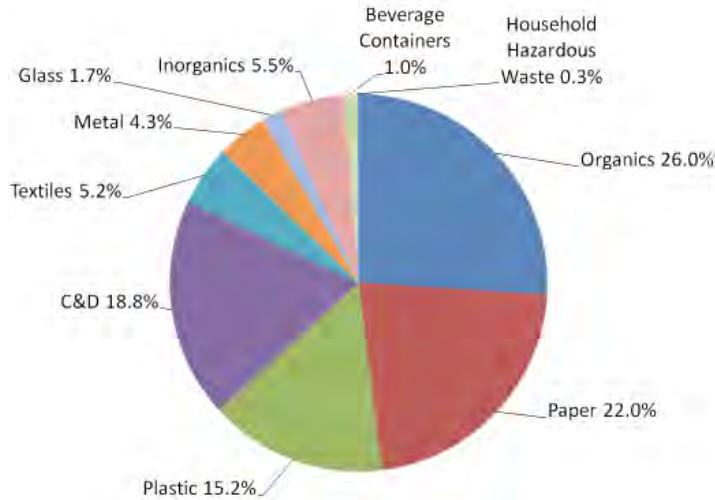


Table 2-17 lists the top ten material categories that were found in the landfilled rural ICI MSW subsector. These ten categories account for over 58% of landfilled rural ICI MSW. Food Scraps, Uncoated OCC/Kraft, and Wood Pallets material categories account for over 35% (19.4%, 9.7%, and 6.3%, respectively) of landfilled rural ICI MSW.

**Table 2-17. Top Ten Individual Material Categories in Landfilled Rural ICI MSW**

Category	Waste Composition %	Cum. %
Food Scraps	19.4%	19.4%
Uncoated OCC/Kraft	9.7%	29.0%
Wood Pallets	6.3%	35.4%
Painted Wood	3.7%	39.1%
Other Film	3.6%	42.7%
Household Bulky Items	3.5%	46.2%
Compostable Paper	3.2%	49.4%
Composition Shingles	3.2%	52.6%
Other Organic	3.1%	55.7%
Mixed Paper - Recyclable	2.6%	58.3%
<b>Total</b>	<b>58.3%</b>	

Table 2-18 provides the composition profile of landfilled rural ICI MSW.

**Table 2-18. Composition Profile of Landfilled Rural ICI MSW**

Calculated at a 90% confidence level

	Mean	+/-		Mean	+/-
<b>Paper</b>	<b>22.0%</b>	<b>5.00%</b>	<b>Inorganics</b>	<b>5.5%</b>	<b>3.68%</b>
Newsprint	2.0%	2.07%	Televisions	0.0%	0.00%
High Grade Office Paper	1.3%	0.55%	Computer Monitors	0.0%	0.00%
Magazines/Catalogs	0.6%	0.25%	Computer Equipment/Peripherals	0.0%	0.03%
Uncoated OCC/Kraft	9.7%	2.74%	Electronic Equipment	0.9%	0.68%
Boxboard	1.8%	0.47%	White Goods - Refrigerated	0.5%	0.79%
Mixed Paper - Recyclable	2.6%	1.31%	White Goods - Not refrigerated	0.1%	0.06%
Compostable Paper	3.2%	0.73%	Lead-acid Batteries	0.0%	0.00%
Other Paper	0.8%	0.43%	Other Household Batteries	0.1%	0.04%
<b>Beverage Containers</b>	<b>1.0%</b>	<b>0.76%</b>	Tires	0.5%	0.82%
Milk & Juice Cartons/Boxes - Coated	1.0%	0.76%	Household Bulky Items	3.5%	3.58%
<b>Plastic</b>	<b>15.2%</b>	<b>2.67%</b>	Fluorescent Lights/Ballasts	0.0%	0.01%
#1 PET Bottles/Jars	1.2%	0.32%	<b>Textiles</b>	<b>5.2%</b>	<b>3.21%</b>
#1 Other PET Containers	0.4%	0.13%	Carpet	2.0%	3.01%
#2 HDPE Bottles/Jars - Clear	0.6%	0.43%	Carpet Padding	0.0%	0.06%
#2 HDPE Bottles/Jars - Color	0.3%	0.09%	Clothing	2.1%	1.35%
#2 Other HDPE Containers	0.0%	0.02%	Other Textiles	1.0%	0.48%
#6 Exp. Polystyrene Packaging	1.2%	0.31%	<b>Household Hazardous Waste</b>	<b>0.3%</b>	<b>0.35%</b>
#3-#7 Other - All	0.5%	0.16%	Latex Paint	0.0%	0.00%
Other Rigid Plastic Products	2.2%	1.38%	Oil Paint	0.0%	0.00%
Grocery & Merchandise Bags	0.3%	0.11%	Plant/Organism/Pest Control/Growth	0.0%	0.00%
Trash Bags	2.5%	0.62%	Used Oil/Filters	0.0%	0.08%
Commercial & Industrial Film	1.1%	0.83%	Other Automotive Fluids	0.0%	0.00%
Other Film	3.6%	1.11%	Mercury-Containing Items	0.0%	0.00%
Other Plastic	1.4%	0.38%	Sharps & Infectious Waste	0.0%	0.00%
<b>Glass</b>	<b>1.7%</b>	<b>0.64%</b>	Ash, Sludge, & Industrial Wastes	0.0%	0.00%
Recyclable Glass Bottles & Jars	1.4%	0.55%	Sewage Solids	0.0%	0.00%
Flat Glass	0.1%	0.07%	Other HHW	0.2%	0.35%
Other Glass	0.2%	0.31%	<b>C&amp;D</b>	<b>18.8%</b>	<b>10.22%</b>
<b>Metal</b>	<b>4.3%</b>	<b>1.53%</b>	Clean Dimensional Lumber	0.7%	0.55%
Aluminum Beverage Containers	0.4%	0.15%	Clean Engineered Wood	1.7%	1.51%
Other Aluminum	0.2%	0.09%	Wood Pallets	6.3%	5.95%
HVAC Ducting	0.0%	0.00%	Painted Wood	3.7%	3.76%
Ferrous Containers (Tin Cans)	2.1%	1.37%	Treated Wood	0.0%	0.01%
Other Ferrous	1.0%	0.71%	Concrete	0.0%	0.02%
Other Non-Ferrous	0.1%	0.04%	Reinforced Concrete	0.0%	0.00%
Other Metal	0.5%	0.31%	Asphalt Paving	0.0%	0.00%
<b>Organics</b>	<b>26.0%</b>	<b>6.89%</b>	Rock & Other Aggregates	0.3%	0.39%
Yard Waste - Compostable	0.6%	0.44%	Bricks	0.0%	0.00%
Yard Waste - Woody	0.0%	0.01%	Gypsum Board	1.6%	1.84%
Food Scraps	19.4%	6.11%	Composition Shingles	3.2%	5.12%
Bottom Fines & Dirt	1.6%	1.78%	Other Roofing	0.0%	0.00%
Diapers	1.3%	0.83%	Plastic C&D Materials	0.4%	0.34%
Other Organic	3.1%	3.73%	Ceramics/Porcelain	0.0%	0.04%
			Other C&D	0.9%	0.91%
			<b>Total Percentage</b>	100.0%	

### 2.3.5.3 Landfilled Rural Residential/ICI MSW Composition

Figure 2-11 shows the percentage, by weight, of each of the ten material classes for the landfilled rural residential/ICI MSW sector. Organics, Paper, and Plastic account for approximately 67% (26.4%, 23.9%, and 16.5%) of the landfilled MSW for this sector.

**Figure 2-11. Composition of Landfilled Rural Residential/ICI MSW by Material Class**

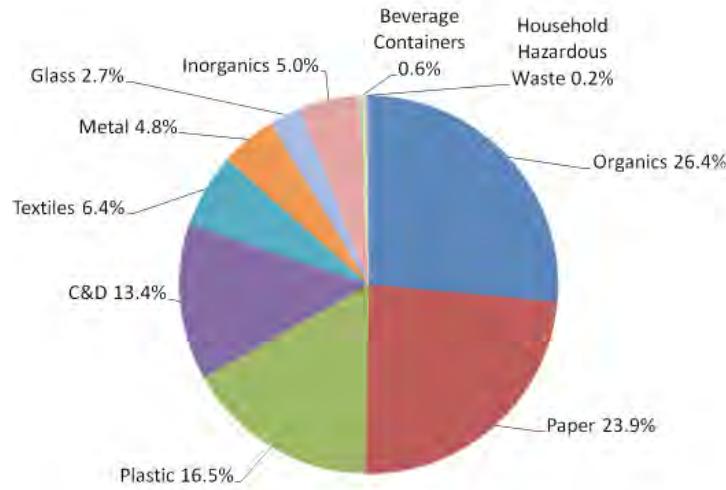


Table 2-19 lists the top ten material categories that were found in the landfilled rural residential/ICI MSW sector. These ten categories account for approximately 53% of landfilled rural residential/ICI MSW. Food Scraps, Uncoated OCC/Kraft, and Mixed Paper - Recyclable material categories account for approximately 31% (19.2%, 7.4%, and 4.0%, respectively) of landfilled rural residential/ICI MSW.

**Table 2-19. Top Ten Individual Material Categories in Landfilled Rural Residential/ICI MSW**

Category	Waste Composition %	Cum. %
Food Scraps	19.2%	19.2%
Uncoated OCC/Kraft	7.4%	26.6%
Mixed Paper - Recyclable	4.0%	30.6%
Wood Pallets	3.8%	34.4%
Compostable Paper	3.7%	38.1%
Other Film	3.6%	41.7%
Household Bulky Items	2.9%	44.6%
Boxboard	2.8%	47.3%
Other Rigid Plastic Products	2.8%	50.1%
Other Organic	2.8%	52.9%
<b>Total</b>	<b>52.9%</b>	

Table 2-20 provides the composition profile of landfilled rural residential/ICI MSW.

**Table 2-20. Composition Profile of Landfilled Rural Residential/ICI MSW**

Calculated at a 90% confidence level

	Mean	+/-		Mean	+/-
<b>Paper</b>	<b>23.9%</b>	<b>1.79%</b>	<b>Inorganics</b>	<b>5.0%</b>	<b>1.31%</b>
Newsprint	2.4%	0.71%	Televisions	0.5%	0.35%
High Grade Office Paper	1.7%	0.35%	Computer Monitors	0.0%	0.00%
Magazines/Catalogs	1.3%	0.13%	Computer Equipment/Peripherals	0.0%	0.01%
Uncoated OCC/Kraft	7.4%	0.97%	Electronic Equipment	0.7%	0.23%
Boxboard	2.8%	0.18%	White Goods - Refrigerated	0.3%	0.27%
Mixed Paper - Recyclable	4.0%	0.51%	White Goods - Not refrigerated	0.2%	0.10%
Compostable Paper	3.7%	0.26%	Lead-acid Batteries	0.0%	0.00%
Other Paper	0.7%	0.15%	Other Household Batteries	0.1%	0.02%
<b>Beverage Containers</b>	<b>0.6%</b>	<b>0.26%</b>	Tires	0.3%	0.28%
Milk & Juice Cartons/Boxes - Coated	0.6%	0.26%	Household Bulky Items	2.9%	1.22%
<b>Plastic</b>	<b>16.5%</b>	<b>0.95%</b>	Fluorescent Lights/Ballasts	0.0%	0.00%
#1 PET Bottles/Jars	1.3%	0.12%	<b>Textiles</b>	<b>6.4%</b>	<b>1.19%</b>
#1 Other PET Containers	0.5%	0.05%	Carpet	1.4%	1.02%
#2 HDPE Bottles/Jars - Clear	0.6%	0.15%	Carpet Padding	0.2%	0.13%
#2 HDPE Bottles/Jars - Color	0.5%	0.04%	Clothing	2.7%	0.56%
#2 Other HDPE Containers	0.0%	0.01%	Other Textiles	2.1%	0.26%
#6 Exp. Polystyrene Packaging	1.2%	0.11%	<b>Household Hazardous Waste</b>	<b>0.2%</b>	<b>0.12%</b>
#3-#7 Other - All	0.8%	0.07%	Latex Paint	0.1%	0.02%
Other Rigid Plastic Products	2.8%	0.49%	Oil Paint	0.0%	0.00%
Grocery & Merchandise Bags	0.6%	0.05%	Plant/Organism/Pest Control/Growth	0.0%	0.00%
Trash Bags	2.3%	0.22%	Used Oil/Filters	0.0%	0.03%
Commercial & Industrial Film	0.7%	0.28%	Other Automotive Fluids	0.0%	0.00%
Other Film	3.6%	0.40%	Mercury-Containing Items	0.0%	0.00%
Other Plastic	1.6%	0.14%	Sharps & Infectious Waste	0.0%	0.00%
<b>Glass</b>	<b>2.7%</b>	<b>0.27%</b>	Ash, Sludge, & Industrial Wastes	0.0%	0.00%
Recyclable Glass Bottles & Jars	2.4%	0.24%	Sewage Solids	0.0%	0.00%
Flat Glass	0.1%	0.03%	Other HHW	0.1%	0.12%
Other Glass	0.2%	0.11%	<b>C&amp;D</b>	<b>13.4%</b>	<b>3.48%</b>
<b>Metal</b>	<b>4.8%</b>	<b>0.55%</b>	Clean Dimensional Lumber	0.6%	0.19%
Aluminum Beverage Containers	0.7%	0.07%	Clean Engineered Wood	1.5%	0.54%
Other Aluminum	0.3%	0.03%	Wood Pallets	3.8%	2.02%
HVAC Ducting	0.0%	0.00%	Painted Wood	2.7%	1.29%
Ferrous Containers (Tin Cans)	1.9%	0.47%	Treated Wood	0.0%	0.00%
Other Ferrous	1.0%	0.25%	Concrete	0.0%	0.01%
Other Non-Ferrous	0.2%	0.04%	Reinforced Concrete	0.0%	0.00%
Other Metal	0.8%	0.15%	Asphalt Paving	0.0%	0.00%
<b>Organics</b>	<b>26.4%</b>	<b>2.37%</b>	Rock & Other Aggregates	0.2%	0.13%
Yard Waste - Compostable	1.1%	0.25%	Bricks	0.0%	0.00%
Yard Waste - Woody	0.0%	0.00%	Gypsum Board	1.1%	0.63%
Food Scraps	19.2%	2.10%	Composition Shingles	1.9%	1.73%
Bottom Fines & Dirt	1.3%	0.61%	Other Roofing	0.0%	0.00%
Diapers	2.0%	0.30%	Plastic C&D Materials	0.7%	0.20%
Other Organic	2.8%	1.27%	Ceramics/Porcelain	0.1%	0.02%
			Other C&D	0.8%	0.32%
			<b>Total Percentage</b>	100.0%	

## 2.4 Visual Characterization of C&D Results

A total of 161 source separated C&D loads were visually characterized at the 18 sampling locations, where C&D loads were accepted on the date of study site visits. Due to the bulky nature of C&D materials, visual characterization of entire vehicles was used as it is considered by the industry to yield more accurate results. Visual characterization of C&D and bulky materials is used in waste characterization studies because it allows the entire load to be characterized, rather than physically sampling a manageable-sized sample or fewer larger samples that may be less representative of the waste stream. The large and heavy nature of C&D materials makes physical sorting impractical and typically inappropriate. The C&D composition profile is presented in the following ways:

- A pie chart depicting the C&D material categories by weight.
- A list of the ten largest material categories by weight.
- A comprehensive table detailing the full composition results for the entire 79 material categories.
- Figure 2-12 shows the percentage, by weight, of each of the individual material categories that account for greater than two percent of the total observed materials for the landfilled C&D waste sector in Illinois.

**Figure 2-12. Composition of Landfilled C&D**

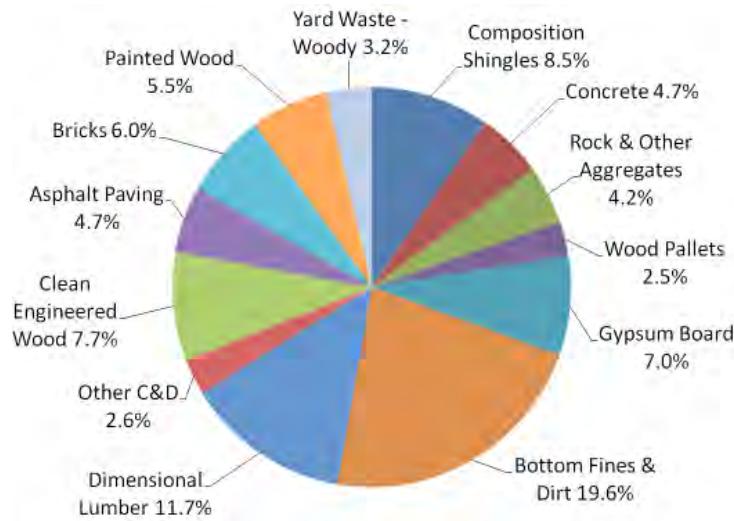


Table 2-21 lists the top ten material categories that were found in the landfilled C&D waste sector. These ten categories account for approximately 80% of the overall C&D waste stream. Bottom Fines & Dirt, Clean Dimensional Lumber, and Composite Shingles material categories account for approximately 40% (19.6%, 11.7%, and 8.5% respectively) of the landfilled C&D waste.

**Table 2-21. Top Ten Individual Material Categories in Landfilled C&D**

Category	Waste Composition %	Cum. %
Bottom Fines & Dirt	19.6%	19.6%
Clean Dimensional Lumber	11.7%	31.3%
Composition Shingles	8.5%	39.8%
Clean Engineered Wood	7.7%	47.6%
Gypsum Board	7.0%	54.6%
Bricks	6.0%	60.7%
Painted Wood	5.5%	66.2%
Asphalt Paving	4.7%	70.9%
Concrete	4.7%	75.6%
Rock & Other Aggregates	4.2%	79.8%
<b>Total</b>	<b>79.6%</b>	

Table 2-22 provides the composition profile of landfilled C&D waste.

Table 2-22. Composition Profile of Landfilled C&D

Calculated at a 90% confidence level

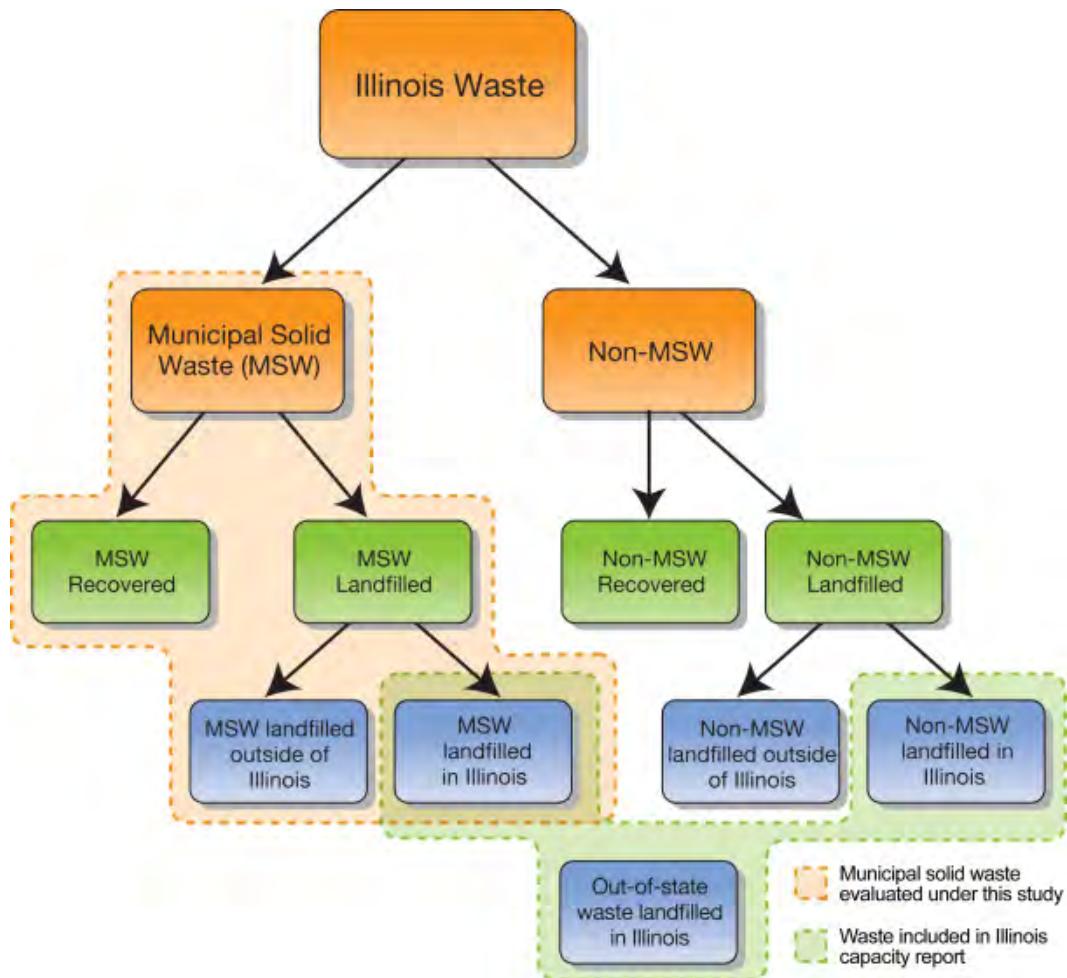
	Mean	+/-		Mean	+/-
<b>Paper</b>	<b>1.4%</b>	<b>0.61%</b>	<b>Inorganics</b>	<b>0.1%</b>	<b>0.08%</b>
Newsprint	0.0%	0.02%	Televisions	0.0%	0.00%
High Grade Office Paper	0.0%	0.00%	Computer Monitors	0.0%	0.00%
Magazines/Catalogs	0.0%	0.00%	Computer Equipment/Peripherals	0.0%	0.00%
Uncoated OCC/Kraft	1.4%	0.60%	Electronic Equipment	0.0%	0.00%
Boxboard	0.0%	0.03%	White Goods - Refrigerated	0.0%	0.00%
Mixed Paper - Recyclable	0.0%	0.00%	White Goods - Not refrigerated	0.0%	0.00%
Compostable Paper	0.0%	0.02%	Lead-acid Batteries	0.0%	0.00%
Other Paper	0.0%	0.00%	Other Household Batteries	0.0%	0.00%
			Tires	0.0%	0.00%
<b>Beverage Containers</b>	<b>0.0%</b>	<b>0.00%</b>	Household Bulky Items	0.1%	0.08%
Milk & Juice Cartons/Boxes - Coated	0.0%	0.00%	Fluorescent Lights/Ballasts	0.0%	0.00%
<b>Plastic</b>	<b>1.2%</b>	<b>0.48%</b>	<b>Textiles</b>	<b>0.9%</b>	<b>0.67%</b>
#1 PET Bottles/Jars	0.0%	0.01%	Carpet	0.5%	0.45%
#1 Other PET Containers	0.0%	0.01%	Carpet Padding	0.3%	0.23%
#2 HDPE Bottles/Jars - Clear	0.0%	0.00%	Clothing	0.0%	0.01%
#2 HDPE Bottles/Jars - Color	0.0%	0.02%	Other Textiles	0.1%	0.04%
#2 Other HDPE Containers	0.0%	0.08%			
#6 Exp. Polystyrene Packaging	0.1%	0.07%	<b>Household Hazardous Waste</b>	<b>0.0%</b>	<b>0.00%</b>
#3-#7 Other - All	0.0%	0.00%	Latex Paint	0.0%	0.00%
Other Rigid Plastic Products	0.3%	0.21%	Oil Paint	0.0%	0.00%
Grocery & Merchandise Bags	0.0%	0.00%	Plant/Organism/Pest Control/Growth	0.0%	0.00%
Trash Bags	0.0%	0.01%	Used Oil/Filters	0.0%	0.00%
Commercial & Industrial Film	0.3%	0.11%	Other Automotive Fluids	0.0%	0.00%
Other Film	0.1%	0.03%	Mercury-Containing Items	0.0%	0.00%
Other Plastic	0.3%	0.15%	Sharps & Infectious Waste	0.0%	0.00%
			Ash, Sludge, & Industrial Wastes	0.0%	0.00%
<b>Glass</b>	<b>0.7%</b>	<b>0.64%</b>	Sewage Solids	0.0%	0.00%
Recyclable Glass Bottles & Jars	0.0%	0.02%	Other HHW	0.0%	0.00%
Flat Glass	0.7%	0.64%			
Other Glass	0.0%	0.01%	<b>C&amp;D</b>	<b>71.4%</b>	<b>7.82%</b>
			Clean Dimensional Lumber	11.7%	2.43%
<b>Metal</b>	<b>1.4%</b>	<b>0.53%</b>	Clean Engineered Wood	7.7%	2.09%
Aluminum Beverage Containers	0.0%	0.01%	Wood Pallets	2.5%	1.04%
Other Aluminum	0.3%	0.14%	Painted Wood	5.5%	2.11%
HVAC Ducting	0.2%	0.11%	Treated Wood	0.8%	0.65%
Ferrous Containers (Tin Cans)	0.0%	0.01%	Concrete	4.7%	2.39%
Other Ferrous	0.4%	0.20%	Reinforced Concrete	0.4%	0.59%
Other Non-Ferrous	0.4%	0.14%	Asphalt Paving	4.7%	3.19%
Other Metal	0.1%	0.20%	Rock & Other Aggregates	4.2%	3.41%
			Bricks	6.0%	2.17%
<b>Organics</b>	<b>22.8%</b>	<b>9.10%</b>	Gypsum Board	7.0%	2.35%
Yard Waste - Compostable	0.0%	0.02%	Composition Shingles	8.5%	3.28%
Yard Waste - Woody	3.2%	3.73%	Other Roofing	0.4%	0.28%
Food Scraps	0.0%	0.00%	Plastic C&D Materials	2.8%	0.88%
Bottom Fines & Dirt	19.6%	8.25%	Ceramics/Porcelain	1.8%	1.38%
Diapers	0.0%	0.00%	Other C&D	2.6%	1.94%
Other Organic	0.0%	0.01%			
			<b>Total Percentage</b>	<b>100.0%</b>	

Total Disposed Quantities\_C&D

## 2.5 MSW Landfilled Quantities

The MSW Characterization results discussed above provide a composition profile for MSW landfilled in Illinois. The MSW generation estimates calculated in Section 3 are based on all waste generated by Illinois residents. In order to compare the two results, a total Illinois MSW landfilled quantity must be calculated. Figure 2-13 provides a conceptual model of the Illinois waste stream and was used to develop the quantities provided in this section.

**Figure 2-13. Illinois Waste Stream**



In order to determine the MSW landfilled quantities, a distribution between the waste sectors (i.e., residential, ICI, etc.) was needed. The Illinois EPA report *Nonhazardous Solid Waste Management and Landfill Capacity in Illinois: 2014* (Illinois 2013 Capacity Report) does not provide quantities for each waste sector because this data is not required to be reported by landfills (and is difficult to obtain as many loads delivered to landfills include a mix of waste from the different sectors). As such, a gatehouse survey of the waste sectors disposed at each facility studied was conducted as part of the MSW characterization study. Use of gatehouse surveys has its limitations as the surveys are only a one day “snapshot” of the data; however, this was determined to be the most appropriate method based on budgetary limitations and has been used in numerous waste characterization studies nationwide.

Data collected during the gatehouse surveys were used to determine the percentages of each waste sector that is disposed in Illinois landfills (Table 2-23). A weighted average was computed using the data collected

at each landfill (weighted based on the total reported waste tonnage accepted in 2013 based on the Illinois 2013 Capacity Report). Because the landfills chosen as sampling locations receive approximately half of the waste disposed in Illinois, this waste sector distribution was assumed to be accurate for the entire Illinois waste stream (excluding waste originating from out-of-state). The out-of-state waste sector was determined by using both the results from the gatehouse surveys and as well as the quantities provided in the Illinois 2013 Capacity Report. The waste sector distribution estimates are provided in Table 2-23.

**Table 2-23. Illinois Landfilled Waste Sector Distribution**

Waste Sector	Percentage (by Weight)
Residential Waste	30.8%
ICI Waste	42.9%
C&D Waste	2.4%
Other Non-MSW	15.8%
Out-of-State Waste	8.1%
<b>Total</b>	<b>100.0%</b>

Notes: Based on gatehouse surveys and Illinois 2013 Capacity Report

As shown in Figure 2-13, the Illinois 2013 Capacity Report only summarizes the quantity of waste disposed in Illinois landfills and does not include the quantity of waste generated within Illinois and disposed outside the State. Table 2-24 summarizes the total quantity of Illinois waste that is landfilled (i.e., landfilled). The Illinois landfill waste quantities were calculated using the Illinois 2013 Capacity Report quantity estimates multiplied times the waste sector distribution estimates provided above. The total Illinois waste disposed was calculated using the quantity of Illinois waste disposed in Illinois landfills plus the quantity of Illinois waste disposed outside of Illinois in neighboring states (Indiana, Michigan and Wisconsin). Since the actual waste sector distribution disposed outside of Illinois is unknown, the distribution of the waste sectors disposed outside of Illinois was assumed to be the same as the waste sector distribution at the Illinois landfills. **Subtracting Non-MSW from the total tons disposed, leaves a net 12,166,761 tons landfilled.**

**Table 2-24. Illinois Waste Disposed**

Disposal Location <sup>1,2</sup>	Residential (Tons)	ICI (Tons)	C&D (Tons)	Non-MSW <sup>3</sup> (Tons)	Annual Waste (Tons)
<b>Illinois Waste Disposed Within Illinois</b>					<b>11,930,293</b>
Illinois	3,999,733	5,568,668	305,263	2,056,629	11,930,293
<b>Illinois Waste Disposed Outside of Illinois<sup>4</sup></b>					<b>2,734,488</b>
Indiana					2,612,644
Michigan					19,261
Wisconsin					102,583
<b>Total Waste<sup>4</sup></b>	<b>4,916,493</b>	<b>6,845,037</b>	<b>375,231</b>	<b>2,528,020</b>	<b>14,664,781</b>

<sup>1</sup> Illinois quantities calculate using Illinois 2013 Capacity Report landfill quantities and the waste distribution provided in Table 2-23. Does not include the out-of-state waste disposed in Illinois.

<sup>2</sup> Indiana, Michigan and Wisconsin quantities provided by the state agencies (Indiana - IDEM Solid Waste Facility Quarterly Reports Online (2013), Michigan - MDEQ Annual Solid Waste Report January 31, 2013, Wisconsin - WDNR website resource for waste imports and exports)

<sup>3</sup> Any landfilled waste that is not included within definition of MSW (e.g., industrial process waste).

<sup>4</sup> Distribution assumed to be the same as the Illinois distribution provided in Table 2-23.

## 2.6 Landfilled MSW Composition

The MSW quantities provided in Table 2-24 were combined with the waste composition profiles to determine the total landfilled MSW quantity by weight of each material type landfilled. Table 2-25 compares the weight composition of the three waste sectors: residential, ICI, and C&D and provides a composition of the overall Illinois MSW. The residential, ICI, and C&D quantities were added together to develop an overall Illinois MSW composition by weight.

Figure 2-14 shows the percentage, by weight, of each of the ten material classes for landfilled MSW. Organics, Paper, and C&D material classes account for approximately 66% (27.8%, 22.3%, and 16.9%, respectively) of landfilled MSW.

**Figure 2-14. Composition of Landfilled MSW by Material Class**

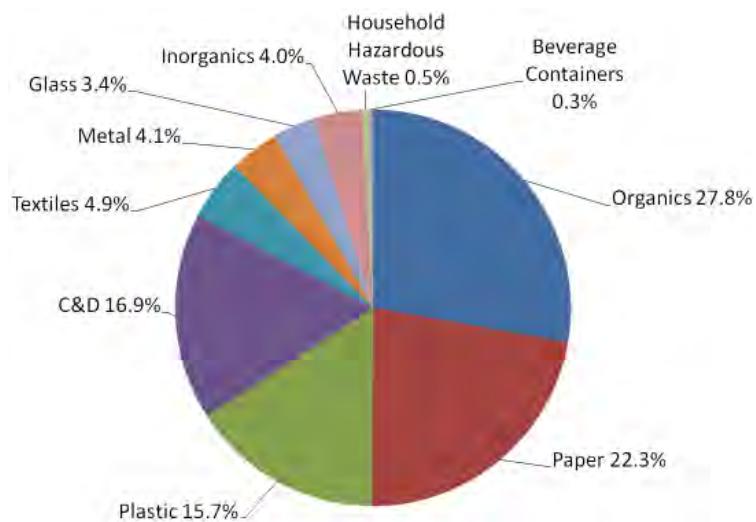


Table 2-26 lists the top ten material categories that were found in landfilled MSW. These ten categories account for approximately 50% of landfilled MSW. Food Scraps, Uncoated OCC/Kraft, and Compostable Paper material categories account for 30% (17.5%, 8.8%, and 3.7 respectively) of landfilled MSW.

**Table 2-25. Top Ten Individual Material Categories in Landfilled MSW**

Component	Waste Composition %	Cum. %
Food Scraps	17.5%	17.5%
Uncoated OCC/Kraft	8.8%	26.3%
Compostable Paper	3.7%	30.0%
Other Film	3.1%	33.1%
Painted Wood	3.0%	36.1%
Bottom Fines & Dirt	3.0%	39.2%
Mixed Paper - Recyclable	2.7%	41.9%
Yard Waste - Compostable	2.6%	44.5%
Recyclable Glass Bottles & Jars	2.6%	47.0%
Other Rigid Plastic Products	2.5%	49.6%
<b>Total</b>	<b>49.6%</b>	

**Table 2-26. Illinois Landfilled MSW Sector Tonnages**

	Residential Tons	ICI Tons	C&D Tons	Illinois MSW Tons		Residential Tons	ICI Tons	C&D Tons	Illinois MSW Tons
<b>Paper*</b>	<b>1,037,200</b>	<b>1,669,100</b>	<b>5,400</b>	<b>2,711,700</b>	<i>Inorganics*</i>	<b>250,800</b>	<b>234,700</b>	<b>200</b>	<b>485,700</b>
Newsprint	116,260	110,860	50	227,170	Televisions	12,370	6,660	-	19,030
High Grade Office Paper	59,970	101,060	-	161,030	Computer Monitors	4,290	5,000	-	9,290
Magazines/Catalogs	80,300	45,310	10	125,620	Computer Equipment/Peripherals	9,240	9,780	-	19,020
Uncoated OCC/Kraft	210,370	854,820	5,160	1,070,350	Electronic Equipment	32,710	27,340	-	60,050
Boxboard	145,520	124,990	120	270,630	White Goods - Refrigerated	-	7,160	-	7,160
Mixed Paper - Recyclable	186,100	144,080	10	330,190	White Goods - Not refrigerated	20,300	20,230	-	40,530
Compostable Paper	206,690	243,480	50	450,220	Lead-acid Batteries	-	-	-	-
Other Paper	31,950	44,460	20	76,430	Other Household Batteries	18,510	7,900	-	26,410
					Tires	8,120	11,130	-	19,250
<b>Beverage Containers*</b>	<b>8,700</b>	<b>25,900</b>	<b>-</b>	<b>34,600</b>	Household Bulky Items	<b>144,400</b>	<b>137,870</b>	<b>200</b>	<b>282,470</b>
Milk & Juice Cartons/Boxes - Coated	8,680	25,930	-	34,610	Fluorescent Lights/Ballasts	900	1,620	-	2,520
<b>Plastic*</b>	<b>755,300</b>	<b>1,146,400</b>	<b>4,500</b>	<b>1,906,200</b>	<i>Textiles*</i>	<b>337,500</b>	<b>259,000</b>	<b>3,400</b>	<b>599,900</b>
#1 PET Bottles/Jars	59,850	73,150	50	133,050	Carpet	64,790	79,480	2,020	146,290
#1 Other PET Containers	22,950	14,330	10	37,290	Carpet Padding	21,610	17,380	1,050	40,040
#2 HDPE Bottles/Jars - Clear	20,970	26,920	10	47,900	Clothing	135,860	88,450	50	224,360
#2 HDPE Bottles/Jars - Color	25,830	18,390	50	44,270	Other Textiles	115,280	73,670	320	189,270
#2 Other HDPE Containers	1,590	1,320	180	3,090					
#6 Exp. Polystyrene Packaging	46,890	69,920	450	117,260	<b>Household Hazardous Waste*</b>	<b>23,800</b>	<b>41,400</b>	-	<b>65,200</b>
#3-#7 Other - All	46,630	36,630	10	83,270	Latex Paint	7,690	2,180	-	9,870
Other Rigid Plastic Products	136,390	170,960	1,110	308,460	Oil Paint	2,360	1,260	-	3,620
Grocery & Merchandise Bags	54,660	33,060	10	87,730	Plant/Organism/Pest Control/Growth	-	-	-	-
Trash Bags	73,490	142,650	120	216,260	Used Oil/Filters	4,510	10,570	-	15,080
Commercial & Industrial Film	11,240	207,650	1,100	219,990	Other Automotive Fluids	-	20	-	20
Other Film	148,710	230,600	220	379,530	Mercury-Containing Items	-	-	-	-
Other Plastic	106,130	120,800	1,120	228,050	Sharps & Infectious Waste	1,086	2,510	-	3,600
					Ash, Sludge, & Industrial Wastes	3,520	8,880	-	12,400
<b>Glass*</b>	<b>204,500</b>	<b>207,300</b>	<b>2,700</b>	<b>414,500</b>	Sewage Solids	-	-	-	-
Recyclable Glass Bottles & Jars	179,120	133,520	60	312,700	Other HHW	4,650	15,990	-	20,600
Flat Glass	19,800	42,370	2,580	64,800					
Other Glass	5,620	31,400	10	37,030	<b>C&amp;D*</b>	<b>457,000</b>	<b>1,327,900</b>	<b>268,000</b>	<b>2,052,900</b>
<b>Metal*</b>	<b>211,800</b>	<b>277,500</b>	<b>5,400</b>	<b>494,700</b>	Clean Dimensional Lumber	35,380	98,230	44,060	177,670
Aluminum Beverage Containers	33,340	27,100	30	60,470	Clean Engineered Wood	57,740	114,180	29,080	201,000
Other Aluminum	18,900	16,060	1,030	35,990	Wood Pallets	6,820	276,700	9,220	292,740
HVAC Ducting	70	340	600	1,000	Painted Wood	146,250	199,580	20,770	366,600
Ferrous Containers (Tin Cans)	47,660	61,170	30	108,860	Treated Wood	2,690	7,020	2,950	12,660
Other Ferrous	57,800	95,990	1,580	155,370	Concrete	17,010	91,950	17,540	126,500
Other Non-Ferrous	11,030	37,370	1,620	50,020	Reinforced Concrete	140	-	1,370	1,510
Other Metal	43,040	39,440	480	82,960	Asphalt Paving	170	6,350	17,620	24,140
			-		Rock & Other Aggregates	30,900	26,290	15,730	72,920
<b>Organics*</b>	<b>1,629,700</b>	<b>1,655,900</b>	<b>85,700</b>	<b>3,371,300</b>	Bricks	470	8,520	22,690	31,680
Yard Waste - Compostable	228,770	84,970	120	313,860	Gypsum Board	23,350	51,840	26,430	101,620
Yard Waste - Woody	17,830	32,170	12,070	62,070	Composition Shingles	60,120	93,540	31,910	185,570
Food Scraps	995,310	1,123,840	-	2,119,200	Other Roofing	-	32,640	1,650	34,290
Bottom Fines & Dirt	66,200	225,890	73,430	365,520	Plastic C&D Materials	33,830	71,720	10,510	116,060
Diapers	156,090	83,160	-	239,250	Ceramics/Porcelain	25,262	37,190	6,869	69,320
Other Organic	165,530	105,830	30	271,390	Other C&D	16,920	212,160	9,580	238,660
					Other MSW	-	-	-	-
<b>Total*</b>						<b>4,916,500</b>	<b>6,845,000</b>	<b>375,100</b>	<b>12,136,700</b>

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\* Numbers rounded to nearest 100 Tons

## 2.7 Comparison of Waste Sectors

Figure 2-15 compares the waste composition profiles for the residential waste sector and subsectors. The 90% confidence intervals are shown on these figures. When comparing the rural to urban sectors, there is a significant difference in the material classes when the error bars do not overlap.

### 2.7.1 Comparison by Rural vs. Urban Sectors

When considering the residential MSW waste, the majority of the material classes fall within the 90% confidence interval for the rural and urban sectors, with the exception of the Paper, Plastic and Organics classes. There is significantly more papers and plastics disposed within the rural counties of Illinois and there are significantly more organics disposed within urban areas of Illinois.

**Figure 2-15. Comparison of Residential MSW Composition**

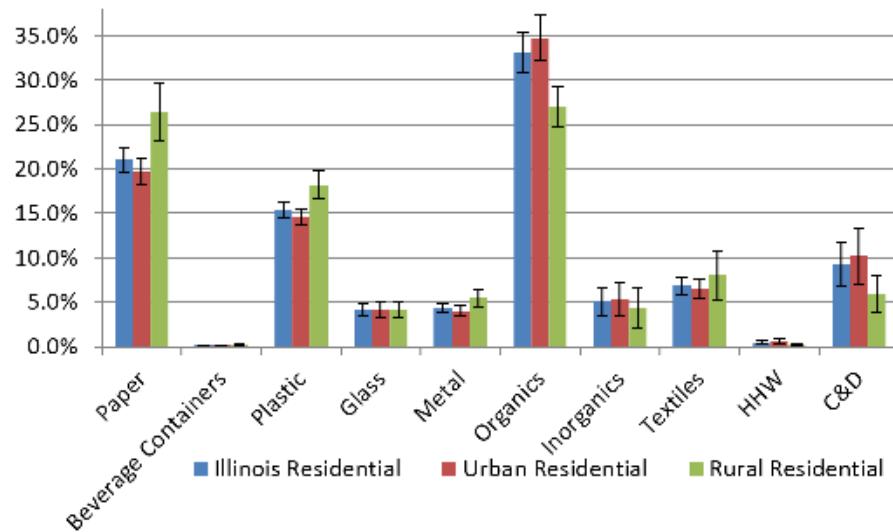
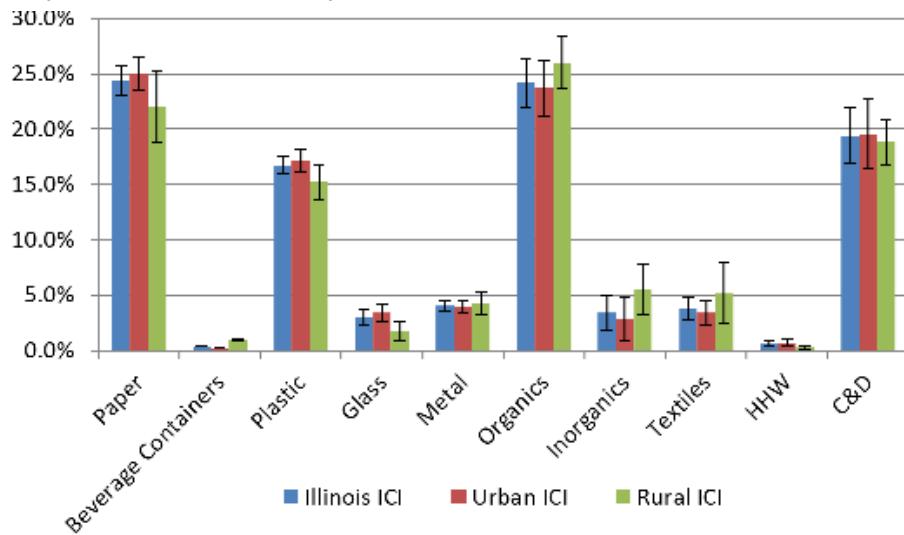


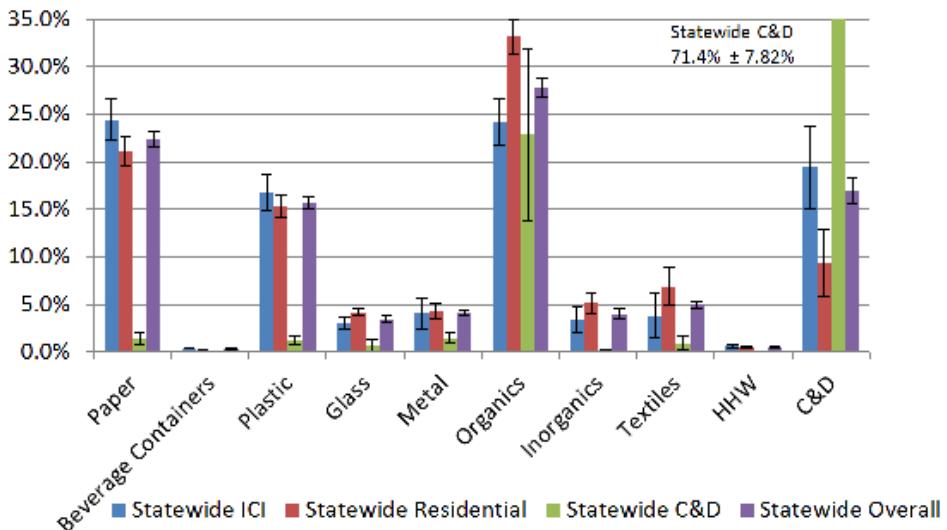
Figure 2-16 compares the waste composition profiles for the ICI waste sector and subsectors. The majority of the material classes fall within the 90% confidence interval for the rural and urban sectors, with the exception of the Beverage Containers classes. There is significantly more beverage containers disposed within the rural counties of Illinois.

**Figure 2-16. Comparison of ICI MSW Composition**

## 2.7.2 Comparison by Waste Generation Sector

The overall waste stream is relatively similar to the residential and ICI MSW sectors as these two sectors comprise the majority of the landfilled waste stream, when compared to the C&D sector that is often diverted from landfills due to economic drivers. As anticipated there are numerous classes where the C&D sector differs from the residential and ICI sectors. Approximately 71% of the C&D sector consists of material categories that fall within the C&D class of materials (e.g., composite shingles, concrete, rock and other aggregates, etc.) and 29% of the C&D sector consists of material categories that fall within the nine other classes of waste materials (e.g., Paper, Plastics, HHW, etc.).

Residential and ICI waste sectors have many commonalities. The majority of the material classes fall within the 90% confidence interval when comparing the residential sector to the ICI sector, with the exception of the Glass, Organics, and C&D classes. There is significantly more C&D disposed by the ICI sector, while there is significantly more Glass and Organics disposed by the residential sector.

**Figure 2-17. Comparison of MSW Waste Sectors Composition**

**Table 2-27. Comparison of Waste Sector Composition Profiles**

	Residential	ICI	C&D	Rural	Urban		Residential	ICI	C&D	Rural	Urban
	Mean %		Mean %								
<b>Paper</b>	<b>21.1%</b>	<b>24.4%</b>	<b>1.4%</b>	<b>26.7%</b>	<b>25.7%</b>	<i>Inorganics</i>	<b>5.1%</b>	<b>3.4%</b>	<b>0.1%</b>	<b>5.0%</b>	<b>3.9%</b>
Newspaper	2.4%	1.6%	0.0%	2.4%	1.8%	Televisions	0.3%	0.1%	0.0%	0.5%	0.1%
High Grade Office Paper	1.2%	1.5%	0.0%	1.7%	1.3%	Computer Monitors	0.1%	0.1%	0.0%	0.0%	0.1%
Magazines/Catalogs	1.6%	0.7%	0.0%	1.3%	1.0%	Computer Equipment/Peripherals	0.2%	0.1%	0.0%	0.0%	0.2%
Uncoated OCC/Kraft	4.3%	12.5%	1.4%	7.4%	9.5%	Electronic Equipment	0.7%	0.4%	0.0%	0.7%	0.4%
Boxboard	3.0%	1.8%	0.0%	2.8%	2.2%	White Goods - Refrigerated	0.0%	0.1%	0.0%	0.3%	0.0%
Mixed Paper - Recyclable	3.8%	2.1%	0.0%	4.0%	2.5%	White Goods - Not refrigerated	0.4%	0.3%	0.0%	0.2%	0.4%
Compostable Paper	4.2%	3.6%	0.0%	6.5%	6.7%	Lead-acid Batteries	0.0%	0.0%	0.0%	0.0%	0.0%
Other Paper	0.6%	0.6%	0.0%	0.7%	0.6%	Other Household Batteries	0.4%	0.1%	0.0%	0.1%	0.3%
	<b>0.0%</b>					Tires	0.2%	0.2%	0.0%	0.3%	0.1%
<b>Beverage Containers</b>	<b>0.2%</b>	<b>0.4%</b>	<b>0.0%</b>	<b>0.6%</b>	<b>0.2%</b>	Household Bulky Items	2.9%	2.0%	0.1%	2.9%	2.3%
Milk & Juice Cartons/Boxes - Coated	0.2%	0.4%	0.0%	0.6%	0.2%	Fluorescent Lights/Ballasts	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Plastic</b>	<b>15.4%</b>	<b>16.7%</b>	<b>1.2%</b>	<b>16.5%</b>	<b>16.1%</b>	<i>Textiles</i>	<b>6.9%</b>	<b>3.8%</b>	<b>0.9%</b>	<b>6.4%</b>	<b>4.7%</b>
#1 PET Bottles/Jars	1.2%	1.1%	0.0%	1.3%	1.1%	Carpet	1.3%	1.2%	0.5%	1.4%	1.2%
#1 Other PET Containers	0.5%	0.2%	0.0%	0.5%	0.3%	Carpet Padding	0.4%	0.3%	0.3%	0.2%	0.4%
#2 HDPE Bottles/Jars - Clear	0.4%	0.4%	0.0%	0.6%	0.3%	Clothing	2.8%	1.3%	0.0%	2.7%	1.7%
#2 HDPE Bottles/Jars - Color	0.5%	0.3%	0.0%	0.5%	0.4%	Other Textiles	2.3%	1.1%	0.1%	2.1%	1.5%
#2 Other HDPE Containers	0.0%	0.0%	0.0%	0.0%	0.0%						
#6 Exp. Polystyrene Packaging	1.0%	1.0%	0.1%	1.2%	0.9%	<i>Household Hazardous Waste</i>	<b>0.5%</b>	<b>0.6%</b>	<b>0.0%</b>	<b>0.2%</b>	<b>0.7%</b>
#3-#7 Other - All	0.9%	0.5%	0.0%	0.8%	0.7%	Latex Paint	0.2%	0.0%	0.0%	0.1%	0.1%
Other Rigid Plastic Products	2.8%	2.5%	0.3%	2.8%	2.6%	Oil Paint	0.0%	0.0%	0.0%	0.0%	0.0%
Grocery & Merchandise Bags	1.1%	0.5%	0.0%	0.6%	0.8%	Plant/Organism/Pest Control/Growth	0.0%	0.0%	0.0%	0.0%	0.0%
Trash Bags	1.5%	2.1%	0.0%	2.3%	1.7%	Used Oil/Filters	0.1%	0.2%	0.0%	0.0%	0.2%
Commercial & Industrial Film	0.2%	3.0%	0.3%	0.7%	2.2%	Other Automotive Fluids	0.0%	0.0%	0.0%	0.0%	0.0%
Other Film	3.0%	3.4%	0.1%	3.6%	3.1%	Mercury-Containing Items	0.0%	0.0%	0.0%	0.0%	0.0%
Other Plastic	2.2%	1.8%	0.3%	1.6%	2.0%	Sharps & Infectious Waste	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Glass</b>	<b>4.2%</b>	<b>3.0%</b>	<b>0.7%</b>	<b>2.7%</b>	<b>3.7%</b>	Ash, Sludge, & Industrial Wastes	0.1%	0.1%	0.0%	0.0%	0.1%
Recyclable Glass Bottles & Jars	3.6%	2.0%	0.0%	2.4%	2.7%	Sewage Solids	0.0%	0.0%	0.0%	0.0%	0.0%
Flat Glass	0.4%	0.6%	0.7%	0.1%	0.7%	Other HHW	0.1%	0.2%	0.0%	0.1%	0.2%
Other Glass	0.1%	0.5%	0.0%	0.2%	0.3%	<i>C&amp;D</i>	<b>9.3%</b>	<b>19.4%</b>	<b>71.4%</b>	<b>13.4%</b>	<b>15.7%</b>
<b>Metal</b>	<b>4.3%</b>	<b>4.1%</b>	<b>1.4%</b>	<b>4.8%</b>	<b>4.0%</b>	Clean Dimensional Lumber	0.7%	1.4%	11.7%	0.6%	1.3%
Aluminum Beverage Containers	0.7%	0.4%	0.0%	0.7%	0.5%	Clean Engineered Wood	1.2%	1.7%	7.7%	1.5%	1.4%
Other Aluminum	0.4%	0.2%	0.3%	0.3%	0.3%	Wood Pallets	0.1%	4.0%	2.5%	3.8%	2.0%
HVAC Ducting	0.0%	0.0%	0.2%	0.0%	0.0%	Painted Wood	3.0%	2.9%	5.5%	2.7%	3.0%
Ferrous Containers (Tin Cans)	1.0%	0.9%	0.0%	1.9%	0.7%	Treated Wood	0.1%	0.1%	0.8%	0.0%	0.1%
Other Ferrous	1.2%	1.4%	0.4%	1.0%	1.4%	Concrete	0.3%	1.3%	4.7%	0.0%	1.2%
Other Non-Ferrous	0.2%	0.5%	0.4%	0.2%	0.5%	Reinforced Concrete	0.0%	0.0%	0.4%	0.0%	0.0%
Other Metal	0.9%	0.6%	0.1%	0.8%	0.7%	Asphalt Paving	0.0%	0.1%	4.7%	0.0%	0.1%
<b>Organics</b>	<b>33.1%</b>	<b>24.2%</b>	<b>22.8%</b>	<b>23.7%</b>	<b>25.4%</b>	Rock & Other Aggregates	0.6%	0.4%	4.2%	0.2%	0.6%
Yard Waste - Compostable	4.7%	1.2%	0.0%	1.1%	3.1%	Bricks	0.0%	0.1%	6.0%	0.0%	0.1%
Yard Waste - Woody	0.4%	0.5%	3.2%	0.0%	0.5%	Gypsum Board	0.5%	0.8%	7.0%	1.1%	0.5%
Food Scraps	20.2%	16.4%	0.0%	16.4%	14.8%	Composition Shingles	1.2%	1.4%	8.5%	1.9%	1.1%
Bottom Fines & Dirt	1.3%	3.3%	19.6%	1.3%	2.8%	Other Roofing	0.0%	0.5%	0.4%	0.0%	0.4%
Diapers	3.2%	1.2%	0.0%	2.0%	2.0%	Plastic C&D Materials	0.7%	1.0%	2.8%	0.7%	1.0%
Other Organic	3.4%	1.5%	0.0%	2.8%	2.1%	Ceramics/Porcelain	0.5%	0.5%	1.8%	0.1%	0.6%
						Other C&D	0.3%	3.1%	2.6%	0.8%	2.3%
						<i>Other MSW</i>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>#REF!</b>	<b>0.0%</b>
						Total Percentage	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>



# Section 3

## Municipal Solid Waste Generation

### 3.1 Introduction and Purpose of Task

This task develops statewide, regional, and county-by-county municipal solid waste (MSW) generation estimates. Generation is that quantity of products considered municipal waste entering the waste management system from residential, commercial, industrial, institutional and C&D sources before materials recovery or disposal takes place. To develop the generation estimates, factors based on Illinois specific economic indicators were applied to 2012 national per capita generation rates that were derived from the U.S. EPA national data *Municipal Solid Waste Generation, Recycling, and Disposal in the United States Tables and Figures for 2012*.<sup>5</sup> The Illinois factors were adjusted using the composition and waste sector quantity results presented in Section 2 of the report.

The indicators include direct economic data from the U.S. Census Bureau such as median income and product sales as well as indirect indicators such as employment. Federal Highway Administration transportation data were used for tires, lead-acid battery, oil, and oil filter generation. In addition to government statistics, product-specific marketing data was incorporated for the paper and beverage industries.

A description of the generation methodology and the statewide results for total generation; the residential and ICI sectors; and the urban and rural sectors are shown below. Regional results are also summarized. Detailed regional and individual county results are included in Appendix C.

### 3.2 Methodology

The national average MSW per capita generation rates were derived from the U.S. EPA national data *Municipal Solid Waste Generation, Recycling, and Disposal in the United States Tables and Figures for 2012*. The national generation rates are developed by a materials flow method, which relies on a mass balance approach. This methodology, developed by the U.S. EPA, has been used consistently since the late eighties in a series of reports sponsored by the Agency to characterize municipal solid waste. The 2012 data used in this study is the latest in that series. The data presented in the EPA report are “as generated” which means the materials are dry and clean and have not been cross-contaminated from wet materials such as food waste or other liquid wastes or have not absorbed moisture from precipitation. Since the Illinois generation estimates are compared to disposal estimates obtained from field sampling and gate house records, the national generation rates were adjusted to account for this increase in weight from moisture contamination.

Determining the moisture contamination of MSW field samples is a costly undertaking. Only one study<sup>6</sup> was identified that included the laboratory analysis necessary to determine contamination levels on a product-by-product basis. Although caution should be used when applying the data to other locations, adjustment of the national generation rates was determined to be critical to this analysis and the Oregon results were applied to the 2012 national rates.

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<sup>5</sup> U. S. Environmental Protection Agency U.S. Environmental Protection Agency Office of Resource Conservation and Recovery February 2014. [http://www.epa.gov/epawaste/nonhaz/municipal/pubs/2012\\_msw\\_dat\\_tbls.pdf](http://www.epa.gov/epawaste/nonhaz/municipal/pubs/2012_msw_dat_tbls.pdf)

<sup>6</sup> Oregon Department of Environmental Quality. *Waste Composition Study. 2009/2010*. Preliminary data Table A2. <http://www.deq.state.or.us/lq/pubs/docs/sw/WasteComp2009TableA2.pdf>

After the national per capita rates were determined, economic indicators were identified that would demonstrate whether Illinois residents generated MSW products at a rate higher or lower than the U.S. average. For example, 2012 Illinois motor vehicle registrations compared to U.S. registrations shows Illinois had 3.99% of the U.S. registered vehicles in that year. Since Illinois had 4.10% of the U.S. population in 2012, a factor of 0.97 was assumed for lead-acid battery generation in Illinois ( $3.99/4.10$ ). The U.S. average generation rate was then multiplied by this factor to determine the Illinois per capita rate. Using ESRI projected 2014 Illinois population statistics,<sup>7</sup> the total tons of lead-acid battery generation was then calculated.

Estimated generation of glass bottles and jars provides an example of how marketing data were used to estimate Illinois generation. The Beer Institute publishes Illinois beer and wine consumption and beer packaging data.<sup>8</sup> The distilled Spirits Council publishes Illinois consumption of liquor.<sup>9</sup> Beverage Marketing Corporation publishes wine and liquor packaging statistics.<sup>10</sup> The gallons of alcohol consumed in Illinois in glass bottles divided by the average unit volume of a bottle multiplied by the weight of a bottle equals the tons of glass beer, wine, and liquor bottles generated. Per capita rates for beer, wine, and liquor were calculated and added to national per capita rates for soft drink, food, and other bottles and jars to arrive at total recyclable glass bottles and jars generation.

Analyses similar to these two examples were conducted for the other MSW products. For some MSW products, county level indicators were available, while indicator data for other products were available on a state basis.

For some products, local and national average generation estimates do not exist. Examples of these products include flat glass, HVAC ducting, and household batteries. For products without local or national generation estimates, field sampling data were used to estimate generation. Generation estimates for all products were compared to the disposal estimates developed from the field sampling and gate-house records and available recovery data to check for reasonableness.

C&D generation is based on a combination of field sampling data and Illinois recovery data. The amount of C&D measured (Section 2) combined with recovery data equals *total* C&D generation. Most recovery data are reported as totals without individual product detail. A separate methodology is used to distribute this total to the individual C&D products shown in this section. Illinois C&D recycling facility data provide a profile of mixed C&D recovered. Total C&D generation is distributed to individual C&D products based on this limited profile. This is different from the other MSW product categories where product generation estimates were summed to total category generation. This method is also different than the method used in the previous IRA study.<sup>11</sup> During the mid-2000s, limited recovery of C&D was happening. In the 2009 study, C&D generation was assumed to equal disposal with the exception of wood pallets.

For this study, a waste sector is identified by the particular generation characteristics that make it a unique portion of the total waste stream. This study examined waste generated by the distinct waste sectors residential, ICI and C&D, as defined in Section 1.

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<sup>7</sup> ESRI Market Profiles for counties in Illinois. 2014 projected population. [www.esri.com](http://www.esri.com)

<sup>8</sup> The Beer Institute. Brewers Almanac 2013. March 28, 2013. Illinois packaging and consumption data.

<sup>9</sup> The Distilled Spirits Council of the United States (DISCUS). October 2013. Apparent Consumption of Distilled Spirits by State, 2012. Illinois total consumption data.

<sup>10</sup> Beverage Marketing Corporation. *2005 Beverage Packaging in the U.S.* November 2005.

<sup>11</sup> IRA. Illinois Commodity/Waste Generation and Characterization Study. May 22, 2009.

The percentages of residential and ICI MSW at the point of generation will vary slightly from the same measurement at the point of disposal due to recovery of recyclable materials. This change in composition is primarily due to the recovery of old corrugated containers (OCC) and office paper from the commercial sector.

The residential and ICI MSW estimates were compared to the previously published statewide residential MSW generation and the statewide ICI MSW generation.<sup>12</sup> For those products with minimal or no recovery (e.g., diapers, bottom fines), landfilled MSW characterization results (Section 2) were used to determine the distribution between the residential MSW generation and the ICI MSW generation. For products with moderate to strong recovery markets (e.g., newspapers and boxboard), the previously published product distributions were used. The average landfilled MSW characterization results (Section 2) for total C&D were used to determine the distribution of C&D to the residential and ICI sectors. The average for all products (26% residential: 74% ICI) was assumed for the individual C&D products.

As described in Section 1, counties were classified as either urban or rural based on the RUC code and the generation estimates were summed for each classification.

Table 3-1 lists the material categories used for this study compared to the corresponding U.S. product categories, and the Illinois methodology and indicators used to estimate MSW generation. For some products, there is a direct match between the IRA sorting categories and the U.S. product categories (see newsprint, high grade office paper). For other products, U.S. product categories were combined to match the IRA categories (see magazines/catalogs, uncoated OCC/Kraft). When IRA categories were more detailed than the U.S. categories (see HDPE bottles, jars, and containers), the U.S. product categories were combined and then redistributed to the IRA categories based on the field sampling data. The IRA sorting categories with no corresponding U.S. product category relied on Illinois field sampling data. As described in Section 1, CCDD was not considered as part of Illinois MSW generation.

**Table 3-1. MSW Generation Methodology Summary**

Material Class	Material Category	U.S. Product Category	Data Source/ Methodology
PAPER	Newsprint	Newsprint (ONP)	County level market data; circulation of newspapers and weight of newspapers
	High Grade Office Paper	High Grade Office Paper	Generation factors applied to county employment statistics
	Magazines/Catalogs	Magazines	County level market data; circulation of magazines
		Commercial Printing	National average
	Uncoated OCC/Kraft	Old Corrugated Containers	Generation factors applied to county employment statistics
		Paper Bags and Sacks	National average adjusted with economic indicator - County level median income
		Other Paperboard Packaging	National average adjusted with economic indicator - County level median income
	Boxboard	Boxboard	National average adjusted with economic indicator - Illinois food store sales
	Mixed Paper - Recyclable	Standard Mail	National average adjusted with sampling data
		Directories	National average adjusted with sampling data

<sup>12</sup> IRA. *Illinois Commodity/Waste Generation and Characterization Study*. May 22, 2009.

Material Class	Material Category	U.S. Product Category	Data Source/ Methodology
Compostable Paper and Other Paper - <i>Distribution of U.S. categories based on sampling study results</i>		Books	National average adjusted with sampling data
		Tissue Paper & Towels	National average
		Paper Plates and Cups	National average
		Other Nonpackaging Paper	National average
		Other Paper Packaging	National average adjusted with economic indicator - State level median income
Beverage Containers	Milk & Juice Cartons/Boxes - Coated	Milk Cartons	National average adjusted with economic indicator - Illinois food store sales
PLASTICS	#1 PET Bottles/Jars and #1 Other PET Containers - <i>Distribution of U.S. categories based on sampling study results</i>	PET Soft Drink	National average adjusted with economic indicator - Illinois food store sales & adjusted with sampling data
		PET Containers & Packaging	National average adjusted with economic indicator - Illinois food store sales & adjusted with sampling data
	#2 HDPE Bottles/Jars - Clear, #2 HDPE Bottles/Jars - Color, and #2 Other HDPE Containers - <i>Distribution of U.S. categories based on sampling study results</i>	HDPE Milk	National average adjusted with economic indicator - Illinois food store sales & adjusted with sampling data
		HDPE Other Containers	National average adjusted with economic indicator - Illinois food store sales & adjusted with sampling data
	#6 Exp. Polystyrene Packaging and #3-#7 Other - All - <i>Distribution of U.S. categories based on sampling study results</i>	Other Containers	National average adjusted with sampling data
		Plastic Food Service	National average adjusted with sampling data
		Other Plastics Packaging	National average
	Other Rigid Plastic Products		See Inorganics section below
	Grocery & Merchandise Bags	Plastic Bags and Sacks	National average adjusted with economic indicator - County level median income adjusted with sampling data
	Trash Bags	Trash Bags	National average adjusted with sampling data
	Commercial & Industrial Film	Wrap	National average adjusted with economic indicator - County level median income adjusted with sampling data
	Other Film	Other Film	Illinois sampling data
	Other Plastic	Other Miscellaneous Packaging	National average adjusted with economic indicator - County level median income
		Miscellaneous Nondurables	National average adjusted with economic indicator - County level median income adjusted with sampling data

Material Class	Material Category	U.S. Product Category	Data Source/ Methodology
GLASS	Recyclable Glass Bottles & Jars	Glass Beer and Soft Drink Bottles	Illinois market data and national average
		Glass Wine and Liquor Bottles	Illinois market data
		Food and Other Bottles & Jars	National Average
	Flat Glass		Illinois sampling data
	Other Glass		See Inorganics section below
METALS	Aluminum Beverage Containers	Aluminum Beverage Containers & Foil and Closures	Illinois and U.S. national average data
	Other Aluminum		See Inorganics section below
	HVAC Ducting		Illinois sampling data adjusted with Illinois recovery data
	Ferrous Containers (Tin Cans)	Steel Food and Other Cans and Other Steel Packaging	National average adjusted with sampling data
	Other Ferrous		See Inorganics section below
	Other Non-Ferrous	Other Non-Ferrous	Illinois sampling data
	Other Metal		See Inorganics section below
ORGANICS	Yard Waste - Compostable and Yard Waste - Woody - <i>Distribution of U.S. category based on sampling study results</i>	Yard waste	National average adjusted for affect of yard waste legislation
	Food Scraps	Food Scraps	National average adjusted with economic indicators – Consumer spending - Residential - consumer spending food at home, Commercial - consumer spending away-from-home adjusted with sampling data
	Bottom Fines & Dirt		Illinois sampling data
	Diapers	Diapers	National average adjusted with sampling data
	Other Organic	Other Organic	Illinois sampling data
INORGANICS	Televisions	Televisions	National average adjusted with economic indicator - Illinois electronics store sales
	Computer Monitors	Computer Monitors	National average adjusted with economic indicator - Illinois electronics store sales
	Computer Equipment/Peripherals	Computer Equipment/Peripherals	National average adjusted with economic indicator - Illinois electronics store sales
	Electronic Equipment - <i>Distribution of U.S. categories based on sampling study results</i>	Other Electronic Equipment	National average adjusted with economic indicator - Illinois electronics store sales
		Small Appliances	National average adjusted with economic indicator - Illinois electronics store sales

Material Class	Material Category	U.S. Product Category	Data Source/ Methodology
<b>Household Hazardous Waste (HHW)</b>	White Goods - Refrigerated	White Goods - refrigerated	National average adjusted with economic indicator - Illinois historical appliance store sales
	White Goods - Not refrigerated	White Goods - not refrigerated	National average adjusted with economic indicator - Illinois historical appliance store sales
	Lead-acid Batteries	Lead-acid Batteries	National average adjusted with Illinois motor vehicle registrations
	Other Household Batteries		Illinois sampling data
	Tires	Tires	National average adjusted with Illinois automotive fuel consumed and miles traveled per registered vehicle
	Other Rigid Plastic Products, Other Glass, Other Ferrous, Other Metal, Household Bulky Items - <i>Distribution of U.S. categories based on sampling study results</i>	Furniture and Furnishings	National average adjusted with economic indicator - Illinois historical furniture and furnishings store sales
		Miscellaneous Durable Goods	National average adjusted with economic indicator - average of factors developed for white goods, electronics, furniture & furnishings
		Miscellaneous Inorganic Wastes	Illinois sampling data adjusted with Illinois HHW data
	Fluorescent Lights/Ballasts		National average adjusted with economic indicator - Illinois electronics store sales
<b>TEXTILES</b>	Carpet	Carpet and rugs	National average adjusted with economic indicator - Illinois number of carpet installers adjusted with sampling data
	Carpet Padding	Carpet padding	National average adjusted with economic indicator - Illinois number of carpet installers adjusted with sampling data
	Clothing	Clothing	National average adjusted with economic indicator - County median income
	Other Textiles	Footwear and Linen	National average adjusted with sampling data

Material Class	Material Category	U.S. Product Category	Data Source/ Methodology
Construction & Demolition (C&D)	Other HHW		Illinois sampling data adjusted with Illinois HHW data
	Clean Dimensional Lumber		Illinois sampling data adjusted with Illinois recovery data
	Clean Engineered Wood		Illinois sampling data adjusted with Illinois recovery data
	Wood Pallets	Wood Pallets	National average adjusted with economic indicator - County level median income
	Painted Wood		Illinois sampling data
	Treated Wood		Illinois sampling data
	Concrete		Illinois sampling data adjusted with Illinois recovery data
	Reinforced Concrete		Illinois sampling data adjusted with Illinois recovery data
	Asphalt Paving		Illinois sampling data adjusted with Illinois recovery data
	Rock & Other Aggregates		Illinois sampling data adjusted with Illinois recovery data
	Bricks		Illinois sampling data adjusted with Illinois recovery data
	Gypsum Board		Illinois sampling data adjusted with Illinois recovery data
	Composition Shingles		Illinois sampling data adjusted with Illinois recovery data
	Other Roofing		Illinois sampling data
	Plastic C&D materials		Illinois sampling data adjusted with Illinois recovery data
	Ceramics/Porcelain		Illinois sampling data
	Other C&D		Illinois sampling data adjusted with Illinois recovery data
	HVAC Ducting		Illinois sampling data adjusted with Illinois recovery data
	Bottom Fines & Dirt		Illinois sampling data
	Mixed C&D Metals		Illinois sampling data adjusted with Illinois recovery data

### 3.3 Summary of Results

The Illinois MSW generation, shown in the following tables and figures, is divided into the following ten material classes:

- Paper
- Beverage Containers
- Plastic
- Glass

- Metals
- Organics
- Inorganics
- Textiles
- HHW
- C&D

The generation composition and quantity results are provided both on a per capita basis and total tons generated in 2014. The percentages that are shown on the tables and figures are calculated as a percentage of total generation. Results are provided for the following MSW sectors:

- Total Illinois MSW Generation
- Residential MSW Generation
- ICI MSW Generation
- Urban MSW Generation (from urban county data)
- Rural MSW Generation (from rural county data)
- IEPA Regions 1 through 7 Generation (from county data)
- County Generation (Appendix C)

### 3.3.1 Per Capita Statewide MSW Generation

Table 3-2 compares U.S. and Illinois per capita generation. For most products, Illinois generation rates are higher than national averages. Two MSW generation demographic drivers that increase generation include median income and level of urbanization. The Illinois statewide 2012 median income was seven percent higher than the U.S. average and 88% of the Illinois population lives in urban areas compared to 85% on the national level.<sup>13</sup>

The Illinois total MSW generation rate was determined to be 2,993 pounds per person per year or 8.20 pounds per person per day. This rate includes household hazardous waste, C&D, and other wastes such as flat glass and HVAC ducting that are not included in national average per capita rates referenced.

A summation of those categories shown in Table 3-2 with *both* U.S. and Illinois average per capita rates, estimates that the Illinois per capita rates is 23% higher than the national average (2,009 pounds per person per year in Illinois compared to 1,631 pounds per person per year for the national average).

Paper products make up the largest material category, by weight. Newsprint is generated at about 1.5 times the national average. Uncoated Old Corrugated Containers (OCC)/Kraft are generated at about 1.7 times the national average. Newsprint generation was estimated from county-level circulation data on number of papers sold combined with newsprint consumption (by weight) of the individual papers. OCC generation was estimated by county-level employment statistics multiplied by per employee generation factors.

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<sup>13</sup> U.S. Department of Commerce. Economics and Statistics Administration. Household Income 2012 American Community Survey Briefs. Amanda Noss. September 2013. U.S. Department of Agriculture. Economic Research Service. <http://www.ers.usda.gov/topics/rural-economy-population/population-migration.aspx>

Table 3-2. Statewide Per Capita Municipal Solid Waste (MSW) Generation  
(pounds per person per year)

	U.S. Generation* (lb/c/yr)	Illinois Generation (lb/c/yr)		U.S. Generation* (lb/c/yr)	Illinois Generation (lb/c/yr)
<b>Paper</b>			<b>Metal</b>		
Newsprint	58.8	87.0	Other Ferrous	63.2	51.2
High Grade Office Paper	31.4	50.4	Other Non-Ferrous		9.1
Magazines/Catalogs	29.2	29.9	Other Metal		15.9
Uncoated OCC/Kraft	226.8	382.7			
Boxboard	42.2	54.6	<b>Organics</b>		
Mixed Paper - Recyclable	35.5	53.2	Yard Waste - Compostable	180.6	117.4
Compostable Paper	89.1	73.0	Yard Waste - Woody	35.7	23.2
Other Paper	15.1	12.4	Food Scraps	232.1	332.6
			Bottom Fines & Dirt		45.2
<b>Beverage Containers</b>			Diapers	22.9	37.1
Milk & Juice Cartons/Boxes - Coated	4.4	5.7	Other Organic		42.0
<b>Plastic</b>			<b>Inorganics</b>		
#1 PET Bottles/Jars	17.6	22.7	Televisions	4.7	5.0
#1 Other PET Containers	4.9	6.4	Computer Monitors	3.0	3.2
#2 HDPE Bottles/Jars - Clear	8.9	11.5	Computer Equipment/Peripherals	6.6	7.1
#2 HDPE Bottles/Jars - Color	8.2	10.6	Electronic Equipment	7.5	14.5
#2 Other HDPE Containers	0.6	0.7	White Goods - Refrigerated	8.3	10.4
#6 Exp. Polystyrene Packaging	28.3	18.4	White Goods - Not refrigerated	18.5	23.1
#3-#7 Other - All	20.1	13.0	Lead-acid Batteries	18.8	18.2
Other Rigid Plastic Products	55.0	58.0	Other Household Batteries		4.3
Grocery & Merchandise Bags	6.7	13.7	Tires	30.0	25.8
Trash Bags	9.1	33.5	Household Bulky Items	59.9	63.1
Commercial & Industrial Film	10.1	38.4	Fluorescent Lights/Ballasts		0.4
Other Film	17.4	58.8			
Other Plastic	27.5	35.5	<b>Textiles</b>		
			Carpet	19.6	24.5
<b>Glass</b>			Carpet Padding	5.3	6.6
Recyclable Glass Bottles & Jars	59.5	68.1	Clothing	58.3	53.0
Flat Glass		10.0	Other Textiles		30.7
Other Glass	11.5	7.8			
			<b>Household Hazardous Waste</b>		26.8
<b>Metal</b>					
Aluminum Beverage Containers	14.5	15.4	<b>Construction and Demolition Debris (C&amp;D)</b>		799.0
Other Aluminum	8.3	8.7			
Ferrous Containers (Tin Cans)	15.2	22.8	<b>Total MSW (pounds/person/year)</b>		2,993
			<b>Total MSW (pounds/person/day)</b>		8.20

\* U.S. generation estimates adjusted for moisture contamination.

Sources: United States Environmental Protection. Municipal Solid Waste Generation, Recycling, and Disposal in the United States Tables and Figures for 2012, February 2014.

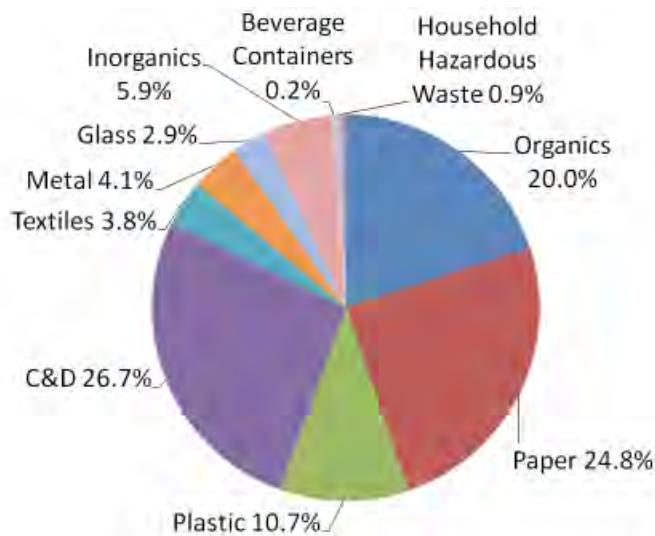
Oregon Department of Environmental Quality. Oregon DEQ. 2009/2010 Oregon Recycling Characterization and Composition Study, Preliminary Data. Sky Valley Associates. Table A2.

Individual products generated at a rate of about three times the national rate include plastic film products (trash bags, commercial and industrial film, and other film). Grocery and merchandise bags are generated at two times the national average. The generation methodology for these products included an adjustment of the economic indicator estimates with Illinois sampling data. This would suggest that these products had a higher than anticipated contamination rate from food and other liquid wastes and possibly precipitation.

### 3.3.2 Total Statewide MSW Generation

Total statewide MSW generation in 2014 was 19.3 million tons or 8.20 pounds per person per day (see Table 3-4). Generation by material class is shown in Figure 3-1. C&D materials comprise the largest portion of MSW generated, at 27%. Paper products are the second largest fraction, at 25%. The third largest category of MSW generation is organic material, which made up 20% of total MSW generation. Plastic products are 11% of generation and the remaining categories total 17%. Table 3-3 depicts the top ten material categories and their respective generation in tons. The top ten material categories account for almost 50% of total generation.

**Figure 3-1. Statewide MSW Generation by Material Class, (% of Generation)**



Paper products account for 4.8 million tons of MSW generation. Uncoated OCC/Kraft is by far the largest single component of paper products, at 2.5 million tons. Newsprint is the next largest at about 0.6 million tons.

C&D products are estimated at almost 5.2 million tons. Clean engineered wood, dimensional lumber, the mixed category other C&D, and concrete account for between 0.5 and 0.6 million tons each.

Total plastic generation is estimate at 2.1 million tons. Other Rigid Plastic Products accounts for almost 0.4 million tons. Examples of Other Rigid Plastic Products include plastic outdoor furniture, plastic toys, sporting goods, CDs, plastic house wares, tool boxes, and plastic buckets.

Total glass generation is estimated at about 0.6 million tons. Recyclable glass bottles and jars account for over 0.4 million tons. The remaining glass products are flat glass (e.g. windows and flat automotive glass) and other glass products including glass tableware and cookware.

**Table 3-3. Top Ten MSW Generation Individual Material Categories**

Category	Waste Composition Tons	Cum. Tons
Uncoated OCC/Kraft	2,470,980	2,470,980
Food Scraps	2,147,760	4,618,740
Yard Waste - Compostable	758,110	5,376,850
Clean Engineered Wood	582,340	5,959,190
Newsprint	561,670	6,520,860
Clean Dimensional Lumber	559,010	7,079,870
Other C&D	556,440	7,636,310
Concrete	507,840	8,144,150
Compostable Paper	471,650	8,615,800
Recyclable Glass Bottles & Jars	439,980	9,055,780
<b>Total</b>	<b>9,055,780</b>	

### 3.3.3 Residential/ICI Statewide MSW Generation

Table 3-4 also shows the MSW generation split between residential and ICI. The residential portion is 39% of total generation; the ICI portion is 61%. Total MSW generation excluding C&D is shown at 44% from residential and 56% from ICI. Major product categories range from 52% of the organics to 63% of textiles is generated from the residential sector.

Some categories such as other automotive fluids and mercury-containing items are generated only in the commercial sector. Since the methodology for estimating these materials relied on field sampling data, it is possible that these materials are generated in both the residential and ICI sectors but were missed during the field sampling period.

White goods and tires are shown as generated at 90% or more from the ICI sector. Although these products are used in the residential sector, collection (i.e., generation) mostly occurs in the ICI sector.

### 3.3.4 Urban/Rural Statewide MSW Generation

MSW generation is typically higher in an urban community compared to a rural community. Urban newspapers tend to be larger and there is increased commercial activity in urbanized areas.

The statewide urban/rural split was derived from the individual county generation estimates shown in the appendices to this report. Counties were classified as either urban or rural and the generation estimates were summed for each classification. Figure 3-2 summarizes the county annual generation estimates.

Tables 3-5 and 3-6 show Illinois urban and rural MSW generation. Eighty-eight percent of the state's population lives in urban areas; 12% reside in rural areas. Ninety percent of the statewide MSW generation is from urban areas (17.5 million tons / 19.3 million tons). Table 3-5 shows total MSW generation in urban areas is 8.40 pounds per person per day; MSW generation in rural areas is 6.73 pounds per person per day (see Table 3-6).

Table 3-4. Statewide MSW Generation

	Total (tons)	Residential (tons)	ICI (tons)			Total (tons)	Residential (tons)	ICI (tons)
<b>Paper</b>	<b>4,798,920</b>	<b>1,786,220</b>	37%	<b>3,012,700</b>	63%	<i>Inorganics</i>		
Newsprint	561,670	466,190		95,480		White Goods - Not refrigerated	149,310	14,930
High Grade Office Paper	325,390	121,180		204,210		Lead-acid Batteries	117,750	94,200
Magazines/Catalogs	192,990	125,440		67,550		Other Household Batteries	27,990	19,620
Uncoated OCC/Kraft	2,470,980	395,360		2,075,620		Tires	166,630	10,000
Boxboard	352,380	211,430		140,950		Household Bulky Items	407,310	208,370
Mixed Paper - Recyclable	343,790	216,590		127,200		Fluorescent Lights/Ballasts	2,870	1,020
Compostable Paper	471,650	216,550		255,100				1,850
Other Paper	80,070	33,480		46,590		<i>Textiles</i>		
						Carpet	157,960	108,990
						Carpet Padding	42,750	22,660
<b>Beverage Containers</b>	<b>37,020</b>	<b>9,290</b>	25%	<b>27,730</b>	75%	Clothing	342,120	212,110
Milk & Juice Cartons/Boxes - Coated	37,020	9,290		27,730		Other Textiles	198,150	120,900
								77,250
<b>Plastic</b>	<b>2,073,870</b>	<b>824,570</b>	40%	<b>1,249,300</b>	60%	<i>Household Hazardous Waste</i>		
#1 PET Bottles/Jars	146,510	65,930		80,580		Latex Paint	10,070	7,850
#1 Other PET Containers	41,070	25,280		15,790		Oil Paint	3,770	2,460
#2 HDPE Bottles/Jars - Clear	74,040	32,420		41,620		Plant/Organism/Pest Control/Growth	250	80
#2 HDPE Bottles/Jars - Color	68,430	39,970		28,460		Used Oil/Filters	104,380	31,250
#2 Other HDPE Containers	4,770	2,600		2,170		Other Automotive Fluids	17,100	0
#6 Exp. Polystyrene Packaging	118,620	47,610		71,010		Mercury-Containing Items	<10	<10
#3-#7 Other - All	84,230	47,170		37,060		Sharps & Infectious Waste	3,600	1,090
Other Rigid Plastic Products	374,330	166,120		208,210		Ash, Sludge, & Industrial Wastes	12,780	3,620
Grocery & Merchandise Bags	88,350	55,050		33,300		Sewage Solids	-	-
Trash Bags	216,260	73,530		142,730		Other HHW	21,290	4,800
Commercial & Industrial Film	248,200	12,740		235,460				16,490
Other Film	379,530	148,800		230,730				
Other Plastic	229,530	107,350		122,180		<i>MSW Excluding C&amp;D (tons)</i>	<b>14,163,490</b>	<b>6,265,420</b>
							44%	56%
<b>Glass</b>	<b>554,980</b>	<b>280,350</b>	51%	<b>274,630</b>	49%	<i>MSW Excluding C&amp;D (pounds/person/day)</i>	<b>6.01</b>	<b>2.66</b>
Recyclable Glass Bottles & Jars	439,980	252,090		187,890				3.35
Flat Glass	64,800	20,640		44,160		<i>Construction and Demolition Debris (C&amp;D)</i>	<b>5,158,730</b>	<b>1,320,870</b>
Other Glass	50,200	7,620		42,580			26%	74%
<b>Metal</b>	<b>794,900</b>	<b>355,700</b>	45%	<b>439,200</b>	55%	Clean Dimensional Lumber	559,010	143,130
Aluminum Beverage Containers	99,340	69,540		29,800		Clean Engineered Wood	582,340	149,110
Other Aluminum	56,170	30,370		25,800		Wood Pallets	422,960	108,300
HVAC Ducting	-	-		-		Painted Wood	366,600	93,870
Ferrous Containers (Tin Cans)	147,410	64,560		82,850		Treated Wood	12,660	3,240
Other Ferrous	330,810	124,330		206,480		Concrete	507,840	130,030
Other Non-Ferrous	58,520	13,330		45,190		Reinforced Concrete	96,840	24,800
Other Metal	102,650	53,570		49,080		Asphalt Paving	24,140	6,180
						Rock & Other Aggregates	327,140	83,760
<b>Organics</b>	<b>3,858,530</b>	<b>2,019,860</b>	52%	<b>1,838,670</b>	48%	Bricks	270,010	69,130
Yard Waste - Compostable	758,110	553,420		204,690		Gypsum Board	228,730	58,570
Yard Waste - Woody	149,930	49,470		100,460		Composition Shingles	385,570	98,720
Food Scraps	2,147,760	1,013,020		1,134,740		Painted Wood	34,290	8,780
Bottom Fines & Dirt	292,090	82,850		209,240		Plastic C&D Materials	274,950	70,400
Diapers	239,250	156,090		83,160		Ceramics/Porcelain	69,320	17,750
Other Organic	271,390	165,010		106,380		Other C&D	556,440	142,470
						HVAC Ducting	48,680	12,460
<b>Inorganics</b>	<b>1,131,050</b>	<b>473,620</b>	42%	<b>657,430</b>	58%	Bottom Fines & Dirt	73,430	18,800
Televisions	32,490	30,870		1,620		Mixed C&D Metals	317,780	81,370
Computer Monitors	20,530	9,650		10,880				236,410
Computer Equipment/Peripherals	45,860	22,270		23,590		<i>C&amp;D (pounds/person/day)</i>	<b>2.19</b>	<b>0.56</b>
Electronic Equipment	93,320	55,990		37,330			26%	74%
White Goods - Refrigerated	66,990	6,700		60,290		<i>Total MSW (tons)</i>	<b>19,322,220</b>	<b>7,586,290</b>
							39%	61%
						<i>Total MSW (pounds/person/day)</i>	<b>8.20</b>	<b>3.22</b>
								4.98

Sources: Total generation -Table 3.2 per capita generation times Illinois projected population of 12,913,544.

Illinois Commodity/Waste Generation and Characterization Study. Illinois Recycling Association. May 22, 2009.

Residential/ICI - Illinois sampling study. Fall 2014.

HVAC Ducting is included in C&amp;D.

Sewage Solids are included in Other Organics.

Table 3-5. Urban MSW Generation

	Urban Generation (lb/c/yr)	Urban Generation (tons)		Urban Generation (lb/c/yr)	Urban Generation (tons)
<b>Paper</b>	<b>762.4</b>	<b>4,342,250</b>	<b>Metal</b>		
Newsprint	91.4	520,320	Other Ferrous	51.2	291,820
High Grade Office Paper	52.0	296,360	Other Non-Ferrous	9.1	51,610
Magazines/Catalogs	29.6	168,850	Other Metal	15.9	90,520
Uncoated OCC/Kraft	396.1	2,255,880			
Boxboard	54.6	310,840	<b>Organics</b>	<b>600.7</b>	<b>3,421,350</b>
Mixed Paper - Recyclable	53.2	303,270	Yard Waste - Compostable	117.4	668,720
Compostable Paper	73.1	416,090	Yard Waste - Woody	23.2	132,270
Other Paper	12.4	70,640	Food Scraps	335.7	1,912,260
			Bottom Fines & Dirt	45.2	257,630
<b>Beverage Containers</b>	<b>5.8</b>	<b>33,120</b>	Diapers	37.1	211,060
Milk & Juice Cartons/Boxes - Coated	5.8	33,120	Other Organic	42.0	239,410
<b>Plastic</b>	<b>324.1</b>	<b>1,845,870</b>	<b>Inorganics</b>	<b>175.2</b>	<b>997,730</b>
#1 PET Bottles/Jars	23.0	131,220	Televisions	5.0	28,630
#1 Other PET Containers	6.5	36,790	Computer Monitors	3.2	18,080
#2 HDPE Bottles/Jars - Clear	11.6	66,350	Computer Equipment/Peripherals	7.1	40,440
#2 HDPE Bottles/Jars - Color	10.8	61,280	Electronic Equipment	14.5	82,330
#2 Other HDPE Containers	0.8	4,310	White Goods - Refrigerated	10.4	59,100
#6 Exp. Polystyrene Packaging	18.4	104,640	White Goods - Not refrigerated	23.1	131,700
#3/#7 Other - All	13.0	74,280	Lead-acid Batteries	18.2	103,880
Other Rigid Plastic Products	58.0	330,190	Other Household Batteries	4.3	24,680
Grocery & Merchandise Bags	14.0	79,770	Tires	25.8	146,990
Trash Bags	33.5	190,790	Household Bulky Items	63.1	359,320
Commercial & Industrial Film	39.4	224,180	Fluorescent Lights/Ballasts	0.5	2,580
Other Film	58.8	334,800			
Other Plastic	36.4	207,270	<b>Textiles</b>	<b>116.7</b>	<b>664,910</b>
			Carpet	24.5	139,300
<b>Glass</b>	<b>85.9</b>	<b>489,520</b>	Carpet Padding	6.6	37,730
Recyclable Glass Bottles & Jars	68.1	388,110	Clothing	54.2	308,960
Flat Glass	10.0	57,150	Other Textiles	31.4	178,920
Other Glass	7.8	44,260			
			<b>Household Hazardous Waste</b>	<b>26.8</b>	<b>152,910</b>
<b>Metal</b>	<b>123.1</b>	<b>701,150</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>843.6</b>	<b>4,805,040</b>
Aluminum Beverage Containers	15.4	87,630			
Other Aluminum	8.7	49,540			
HVAC Ducting	-	-	<b>Total MSW (tons)</b>		<b>17,453,850</b>
Ferrous Containers (Tin Cans)	22.8	130,030	<b>Total MSW (pounds/person/day)</b>		<b>8.40</b>

Sources: Urban/rural - U.S. Department of Agriculture. Economic Research Center. <http://www.ers.usda.gov/data-products/rural-urban-continuum-codes/documentation.aspx>

2014 projected population 11,391,543

HVAC Ducting is included in C&D.

Alexander, Bond, Boone, Calhoun, Champaign, Clinton, Cook, DeKalb, DeWitt, DuPage, Ford, Grundy, Henry, Jackson, Jersey, Kane, Kankakee, Kendall, Lake, Macon, Macoupin, Madison, Marshall, McHenry, McLean, Menard, Mercer, Monroe, Peoria, Piatt, Rock Island, Sangamon, St. Clair, Stark, Tazewell, Vermilion, Will, Williamson, Winnebago, Woodford Counties.

Table 3-6. Rural MSW Generation

	Rural Generation (lb/c/yr)	Rural Generation (tons)		Rural Generation (lb/c/yr)	Rural Generation (tons)
<b>Paper</b>	<b>600.1</b>	<b>456,670</b>	<b>Metal</b>		
Newsprint	54.3	41,350	Other Ferrous	51.2	38,990
High Grade Office Paper	38.1	29,030	Other Non-Ferrous	9.1	6,910
Magazines/Catalogs	31.7	24,140	Other Metal	15.9	12,130
Uncoated OCC/Kraft	282.7	215,100			
Boxboard	54.6	41,540	<b>Organics</b>	<b>574.5</b>	<b>437,170</b>
Mixed Paper - Recyclable	53.2	40,520	Yard Waste - Compostable	117.5	89,390
Compostable Paper	73.0	55,560	Yard Waste - Woody	23.2	17,660
Other Paper	12.4	9,430	Food Scraps	309.4	235,490
			Bottom Fines & Dirt	45.3	34,460
<b>Beverage Containers</b>	<b>5.1</b>	<b>3,900</b>	Diapers	37.0	28,190
Milk & Juice Cartons/Boxes - Coated	5.1	3,900	Other Organic	42.0	31,980
<b>Plastic</b>	<b>299.6</b>	<b>228,000</b>	<b>Inorganics</b>	<b>175.2</b>	<b>133,320</b>
#1 PET Bottles/Jars	20.1	15,290	Televisions	5.1	3,860
#1 Other PET Containers	5.6	4,280	Computer Monitors	3.2	2,450
#2 HDPE Bottles/Jars - Clear	10.1	7,690	Computer Equipment/Peripherals	7.1	5,420
#2 HDPE Bottles/Jars - Color	9.4	7,150	Electronic Equipment	14.4	10,990
#2 Other HDPE Containers	0.6	460	White Goods - Refrigerated	10.4	7,890
#6 Exp. Polystyrene Packaging	18.4	13,970	White Goods - Not refrigerated	23.1	17,610
#3/#7 Other - All	13.1	9,960	Lead-acid Batteries	18.2	13,870
Other Rigid Plastic Products	58.0	44,140	Other Household Batteries	4.3	3,310
Grocery & Merchandise Bags	11.3	8,580	Tires	25.8	19,640
Trash Bags	33.5	25,470	Household Bulky Items	63.1	47,990
Commercial & Industrial Film	31.6	24,020	Fluorescent Lights/Ballasts	0.4	290
Other Film	58.8	44,730			
Other Plastic	29.3	22,260	<b>Textiles</b>	<b>100.0</b>	<b>76,070</b>
			Carpet	24.5	18,660
<b>Glass</b>	<b>86.0</b>	<b>65,460</b>	Carpet Padding	6.6	5,020
Recyclable Glass Bottles & Jars	68.2	51,870	Clothing	43.6	33,160
Flat Glass	10.1	7,650	Other Textiles	25.3	19,230
Other Glass	7.8	5,940			
			<b>Household Hazardous Waste</b>	<b>26.7</b>	<b>20,330</b>
<b>Metal</b>	<b>123.2</b>	<b>93,750</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>464.8</b>	<b>353,690</b>
Aluminum Beverage Containers	15.4	11,710			
Other Aluminum	8.7	6,630			
HVAC Ducting	-	-	<b>Total MSW (tons)</b>		<b>1,868,360</b>
Ferrous Containers (Tin Cans)	22.8	17,380	<b>Total MSW (pounds/person/day)</b>		<b>6.73</b>

Sources: Urban/rural - U.S. Department of Agriculture. Economic Research Center. <http://www.ers.usda.gov/data-products/rural-urban-continuum-codes/documentation.aspx>

2014 projected population

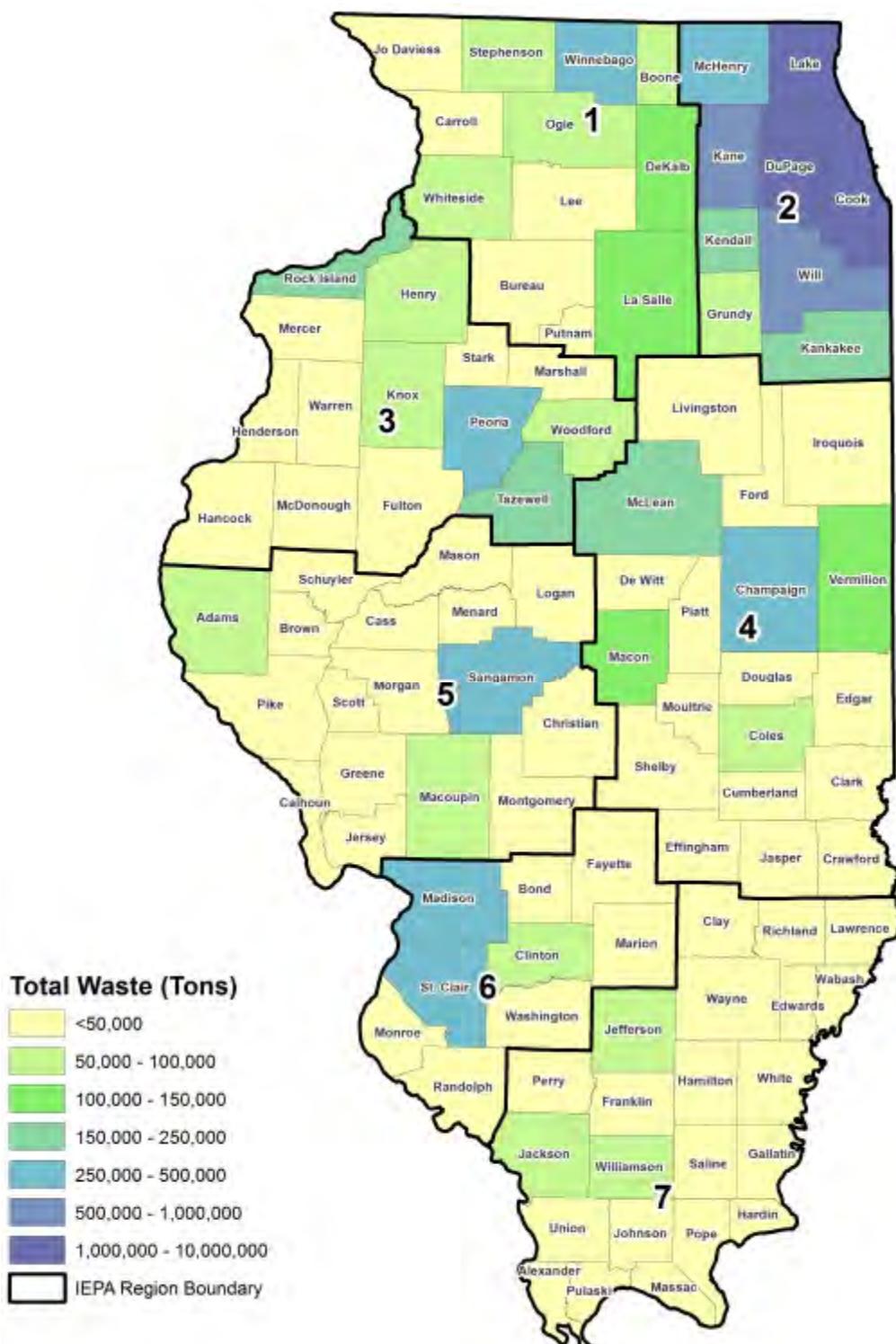
1,522,001

HVAC Ducting is included in C&D.

Adams, Brown, Bureau, Carroll, Cass, Christian, Clark, Clay, Coles, Crawford, Cumberland, Douglas, Edgar, Edwards, Effingham, Fayette, Franklin, Fulton, Gallatin, Greene, Hamilton, Hancock, Hardin, Henderson, Iroquois, Jasper , Jefferson, Jo Daviess, Johnson, Knox, LaSalle, Lawrence, Lee, Livingston, Logan, Marion, Mason, Massac, McDonough, Montgomery, Morgan, Moultrie, Ogle, Perry, Pike, Pope, Pulaski, Putnam, Randolph, Richland, Saline, Schuyler, Scott, Shelby, Stephenson, Union, Wabash, Washington, Wayne, White, Whiteside Counties.

Comparing the per capita rates shown in these two tables shows that paper generation is 27% higher in urban areas (762 pounds per capita per year urban/ 600 pounds per capita per year rural). Plastics are 8% higher, organics are 5% higher, and textiles are 17% higher in urban areas. C&D generation is 82% higher in urban areas.

**Figure 3-2. Illinois County Annual MSW Generation**



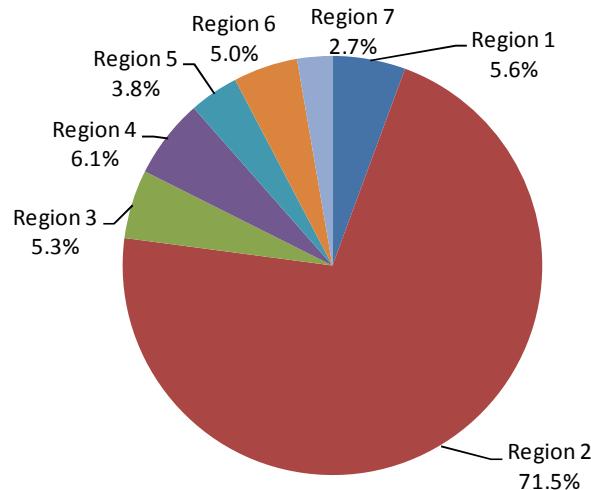
### 3.3.5 MSW Generation by IEPA Region

The regional summary shown in Table 3-7 was derived from the summation of the individual county generation estimates included in the appendices to this report and shown in Figure 3-2. Table 3-7 displays the ten main product categories for each region on a per person basis and total generation in tons.

Figure 3-2 identifies the counties included in each IEPA Region and detailed region-by-region MSW data are provided in the appendices.

As illustrated in Figure 3-3, Region 2 generates the largest portion of Illinois MSW at 72%. This region includes 67% of the state's population. The remaining regions each generate between 3 and 6% of the statewide MSW.

**Figure 3-3. MSW Generation by IEPA Regions (% of statewide generation)**



On a per capita basis, Region 2 also has the highest waste generation rate at 8.7 pounds per person per day (see Table 3-7 and Figure 3-4). The other regions range from 6.6 to 7.4 pounds per person per day. The statewide per capita rate is 8.2 pounds per person per day.

**Figure 3-4. Per Capita MSW Generation by IEPA Region (pound per capita per day)**

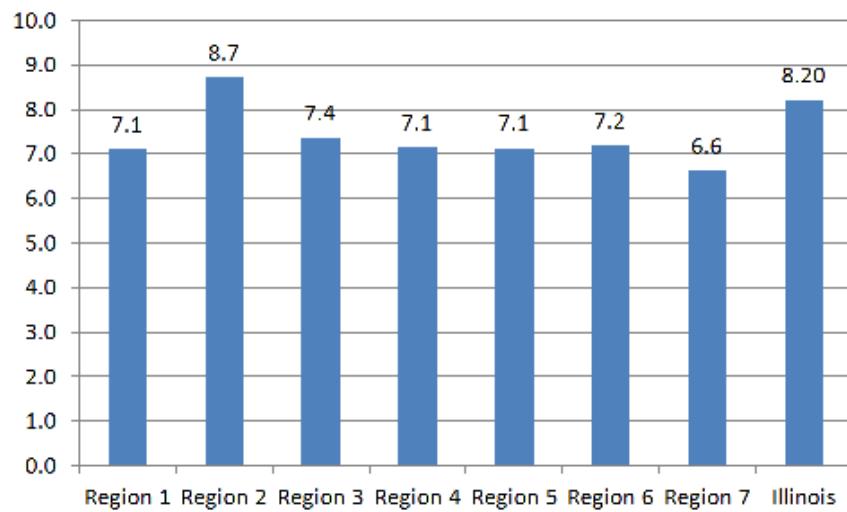


Table 3-7. MSW Generation by IEPA Regions

	Regional Generation (lb/c/yr)	Regional Generation (tons)		Regional Generation (lb/c/yr)	Regional Generation (tons)		Regional Generation (lb/c/yr)	Regional Generation (tons)
<b>Region 1</b>			<b>Region 2</b>			<b>Region 3</b>		
Paper	642.0	269,290	Paper	793.2	3,440,930	Paper	675.0	257,730
Beverage Containers	5.0	2,090	Beverage Containers	6.0	26,030	Beverage Containers	6.0	2,290
Plastic	306.0	128,350	Plastic	328.5	1,425,010	Plastic	316.6	120,880
Glass	86.0	36,050	Glass	86.0	372,860	Glass	85.9	32,810
Metal	123.1	51,640	Metal	123.1	534,010	Metal	123.2	47,030
Organics	575.6	241,410	Organics	606.4	2,630,390	Organics	601.0	229,480
Inorganics	175.3	73,520	Inorganics	175.2	759,880	Inorganics	175.1	66,850
Textiles	107.5	45,080	Textiles	123.8	517,580	Textiles	107.8	41,150
HHW	26.8	11,260	HHW	26.9	116,530	HHW	26.8	10,250
C&D	545.7	228,870	C&D	918.8	3,985,720	C&D	573.3	218,910
<b>Total MSW (tons)</b>	<b>1,087,560</b>		<b>Total MSW (tons)</b>		<b>13,808,940</b>	<b>Total MSW (tons)</b>		<b>1,027,380</b>
<b>Total MSW (pounds/person/day)</b>		<b>7.10</b>	<b>Total MSW (pounds/person/day)</b>		<b>8.72</b>	<b>Total MSW (pounds/person/day)</b>		<b>7.37</b>
<b>Region 4</b>			<b>Region 5</b>			<b>Region 6</b>		
Paper	640.4	290,400	Paper	656.8	184,720	Paper	633.3	232,020
Beverage Containers	5.2	2,340	Beverage Containers	5.2	1,460	Beverage Containers	5.1	1,870
Plastic	306.5	138,990	Plastic	307.6	86,510	Plastic	307.3	112,590
Glass	85.9	38,970	Glass	85.9	24,150	Glass	86.0	31,500
Metal	123.1	55,810	Metal	123.3	34,680	Metal	123.1	45,090
Organics	578.5	262,300	Organics	577.7	162,460	Organics	578.7	212,010
Inorganics	175.1	79,420	Inorganics	175.6	49,390	Inorganics	175.0	64,130
Textiles	106.1	48,120	Textiles	106.9	30,070	Textiles	107.2	39,290
HHW	26.8	12,140	HHW	26.7	7,500	HHW	26.8	9,820
C&D	558.4	253,200	C&D	537.0	151,030	C&D	581.6	213,090
<b>Total MSW (tons)</b>	<b>1,181,690</b>		<b>Total MSW (tons)</b>		<b>731,970</b>	<b>Total MSW (tons)</b>		<b>961,410</b>
<b>Total MSW (pounds/person/day)</b>		<b>7.14</b>	<b>Total MSW (pounds/person/day)</b>		<b>7.13</b>	<b>Total MSW (pounds/person/day)</b>		<b>7.19</b>
<b>Region 7</b>						<b>Illinois Total</b>		
Paper	572.2	123,830				Paper	743.2	4,798,920
Beverage Containers	4.3	940				Beverage Containers	5.7	37,020
Plastic	284.4	61,540				Plastic	321.2	2,073,870
Glass	86.1	18,640				Glass	86.0	554,980
Metal	123.1	26,640				Metal	123.1	794,900
Organics	556.7	120,470				Organics	597.6	3,858,520
Inorganics	175.0	37,860				Inorganics	175.2	1,131,050
Textiles	91.0	19,690				Textiles	114.8	740,980
HHW	26.5	5,740				HHW	26.8	173,240
C&D	498.7	107,910				C&D	799.0	5,158,730
<b>Total MSW (tons)</b>	<b>523,260</b>					<b>Total MSW (tons)</b>		<b>19,322,210</b>
<b>Total MSW (pounds/person/day)</b>		<b>6.62</b>				<b>Total MSW (pounds/person/day)</b>		<b>8.20</b>

Sources: Regional Appendix Tables. See appendix for additional detail and a list of counties included in each region.

2014 population estimated by ESRI based on US Census Bureau 2010 population data.

Region 1	838,855	Region 2	8,676,137	Region 3	763,673
Region 4	906,891	Region 5	562,476	Region 6	732,728
Region 7	432,784			Total population	12,913,544

Beverage Containers - Milk & Juice Cartons/Boxes - Coated

HHW - Household Hazardous Waste

C&D - Construction and Demolition Debris



## Section 4

# MSW Diversion

### 4.1 Introduction

It is the intent of Illinois law that the recovery of resources and diversion of commodities from landfills should be a fundamental concept in Illinois management goals and can be accomplished using a variety of strategies including source reduction, re-use, recycling, composting and other techniques. The following sections identify materials that could be diverted, estimate the current Illinois diversion rate, compare select Illinois diversion rates to national averages, determine the market value of the recoverable materials, and determine the impact of these materials on the environment.

### 4.2 Illinois Diversion/Recovery Rates

The diversion rate is a key indicator as to the success or failure of recovery efforts. In order to calculate a diversion rate, the quantity of materials generated must be known as well as a knowledge of the quantity of materials recovered using the strategies named above. Unfortunately the task of ascertaining the quantity of materials being recovered was beyond the scope of this Study. Nonetheless, a diversion rate can be estimated by assuming that the difference between the generation quantities developed in Section 3 – 19.3 million tons, and disposal quantities developed in Section 2 – 12.1 million tons, is the quantity of materials recovered – some 7.2 million tons. Based on this methodology, **the overall Illinois diversion rate is estimated to be 37.3% by weight**. Table 4-1 summarizes the material diversion/recovery rates and overall Illinois diversion rate estimates.

Currently there is no mechanism in Illinois that establishes a protocol for or requires the type and quantity of materials recovered through programs and efforts throughout the state to be reported to a central entity. Therefore, Illinois cannot verify the estimated diversion rate calculated in this report using the methodology above..

### 4.3 Illinois Recovery Rates Compared to National Recovery

The Illinois recovery rates presented in Section 4.3 are compared to national recovery rates in Table 4-2. The national recovery rates are developed for the U.S. EPA report series Municipal Solid Waste in the National recovery of most MSW products is estimated from industry data. The data are typically supplied through trade groups such as the American Forest & Paper Association, the Aluminum Association, the American Chemistry Council, Rubber Manufacturers Association, and the Steel Recycling Institute. This type of data is only available on a national level.

Recovery of other products such as yard waste and food scraps are estimated from facility information supplied by state agencies and trade publications such as *BioCycle*.

National recovery rates are available for only a portion of the IRA product categories. The product categories where a comparison can be made between Illinois and the U.S. are shown in Table 4-2 as a percent of generation of each product. It should be noted that only individual product recovery rate comparisons between Illinois and the U.S. can be made. Since the Illinois definition of MSW includes products and materials not included in EPA's definition, total Illinois MSW recovery shown in this report is *not comparable* to the total U.S. MSW recovery rate shown in the EPA report.

**Table 4-1. Illinois Recovery/Diversion Rates**

	Generated Tons	Disposed Tons	Recovery Tons*	Recovery %		Generated Tons	Disposed Tons	Recovery Tons*	Recovery %
<b>Paper</b>	<b>4,798,920</b>	<b>2,711,700</b>	<b>2,087,200</b>	<b>43.5%</b>	<i>Inorganics</i>	<b>1,131,050</b>	<b>485,700</b>	<b>645,400</b>	<b>57.1%</b>
Newsprint	561,670	227,170	334,500	59.6%	Televisions	32,490	19,030	13,500	41.6%
High Grade Office Paper	325,390	161,030	164,400	50.5%	Computer Monitors	20,530	9,290	11,200	54.6%
Magazines/Catalogs	192,990	125,620	67,400	34.9%	Computer Equipment/Peripherals	45,860	19,020	26,800	58.4%
Uncoated OCC/Kraft	2,470,980	1,070,350	1,400,600	56.7%	Electronic Equipment	93,320	60,050	33,300	35.7%
Boxboard	352,380	270,630	81,800	23.2%	White Goods - Refrigerated	66,990	7,160	59,800	89.3%
Mixed Paper - Recyclable	343,790	330,190	13,600	4.0%	White Goods - Not refrigerated	149,310	40,530	108,800	72.9%
Compostable Paper	471,650	450,220	21,400	4.5%	Lead-acid Batteries	117,750	-	117,750	100.0%
Other Paper	80,070	76,430	3,600	4.5%	Other Household Batteries	27,990	26,410	1,600	5.7%
					Tires	166,630	19,250	147,400	88.5%
<b>Beverage Containers</b>	<b>37,020</b>	<b>34,600</b>	<b>2,400</b>	<b>6.5%</b>	Household Bulky Items	407,310	282,470	124,800	30.6%
Milk & Juice Cartons/Boxes - Coated	37,020	34,610	2,400	6.5%	Fluorescent Lights/Ballasts	2,870	2,520	400	13.9%
<b>Plastic</b>	<b>2,073,870</b>	<b>1,906,200</b>	<b>167,700</b>	<b>8.1%</b>	<i>Textiles</i>	<b>740,980</b>	<b>599,900</b>	<b>141,100</b>	<b>19.0%</b>
#1 PET Bottles/Jars	146,510	133,050	13,500	9.2%	Carpet	157,960	146,290	11,700	7.4%
#1 Other PET Containers	41,070	37,290	3,800	9.3%	Carpet Padding	42,750	40,040	2,700	6.3%
#2 HDPE Bottles/Jars - Clear	74,040	47,900	26,100	35.3%	Clothing	342,120	224,360	117,800	34.4%
#2 HDPE Bottles/Jars - Color	68,430	44,270	24,200	35.4%	Other Textiles	198,150	189,270	8,900	4.5%
#2 Other HDPE Containers	4,770	3,090	1,700	35.6%					
#6 Exp. Polystyrene Packaging	118,620	117,260	1,400	1.2%	<b>Household Hazardous Waste</b>	<b>173,240</b>	<b>65,200</b>	<b>108,000</b>	<b>62.3%</b>
#3-#7 Other - All	84,230	83,270	1,000	1.2%	Latex Paint	10,070	9,870	200	2.0%
Other Rigid Plastic Products	374,330	308,460	65,900	17.6%	Oil Paint	3,770	3,620	200	5.3%
Grocery & Merchandise Bags	88,350	87,730	600	0.7%	Plant/Organism/Pest Control/Growth	250	-	250	100.0%
Trash Bags	216,260	216,260	-	0.0%	Used Oil/Filters	104,380	15,080	89,300	85.6%
Commercial & Industrial Film	248,200	219,990	28,200	11.4%	Other Automotive Fluids	17,100	20	17,080	99.9%
Other Film	379,530	379,530	-	0.0%	Mercury-Containing Items	<10	<10	-	0.0%
Other Plastic	229,530	228,050	1,500	0.7%	Sharps & Infectious Waste	3,600	3,600	-	0.0%
					Ash, Sludge, & Industrial Wastes	12,780	12,400	400	3.1%
<b>Glass</b>	<b>554,980</b>	<b>414,500</b>	<b>140,500</b>	<b>25.3%</b>	Sewage Solids	-	-	-	0.0%
Recyclable Glass Bottles & Jars	439,980	312,700	127,300	28.9%	Other HHW	21,290	20,600	700	3.3%
Flat Glass	64,800	64,800	-	0.0%					
Other Glass	50,200	37,030	13,200	26.3%	<b>C&amp;D</b>	<b>4,767,540</b>	<b>2,052,900</b>	<b>2,714,600</b>	<b>56.9%</b>
<b>Metal</b>	<b>1,161,360</b>	<b>494,700</b>	<b>666,700</b>	<b>57.4%</b>	Clean Dimensional Lumber	559,010	177,670	381,300	68.2%
Aluminum Beverage Containers	99,340	60,470	38,900	39.2%	Clean Engineered Wood	582,340	201,000	381,300	65.5%
Other Aluminum	56,170	35,990	20,200	36.0%	Wood Pallets	422,960	292,740	130,200	30.8%
HVAC Ducting	48,680	1,000	47,700	98.0%	Painted Wood	366,600	366,600	-	0.0%
Ferrous Containers (Tin Cans)	147,410	108,860	38,600	26.2%	Treated Wood	12,660	12,660	-	0.0%
Other Ferrous	330,810	155,370	175,400	53.0%	Concrete	507,840	126,500	381,300	75.1%
Other Non-Ferrous	58,520	50,020	8,500	14.5%	Reinforced Concrete	96,840	1,510	95,300	98.4%
Other Metal + mixed C&D metals	420,430	82,960	337,500	80.3%	Asphalt Paving	24,140	24,140	-	0.0%
					Rock & Other Aggregates	327,140	72,920	254,200	77.7%
<b>Organics</b>	<b>3,931,960</b>	<b>3,371,300</b>	<b>560,700</b>	<b>14.3%</b>	Bricks	270,010	31,680	238,300	88.3%
Yard Waste - Compostable	758,110	313,860	444,300	58.6%	Gypsum Board	228,730	101,620	127,100	55.6%
Yard Waste - Woody	149,930	62,070	87,900	58.6%	Composition Shingles	385,570	185,570	200,000	51.9%
Food Scraps	2,147,760	2,119,200	28,600	1.3%	Other Roofing	34,290	34,290	-	0.0%
Bottom Fines & Dirt	365,520	365,520	-	0.0%	Plastic C&D Materials	274,950	116,060	158,900	57.8%
Diapers	239,250	239,250	-	0.0%	Ceramics/Porcelain	69,320	69,320	-	0.0%
Other Organic	271,390	271,390	-	0.0%	Other C&D	556,440	238,660	317,800	57.1%
					Other MSW	48,700	-	48,700	100.0%
					<b>Total*</b>	<b>19,370,900</b>	<b>12,136,700</b>	<b>7,234,300</b>	<b>37.3%</b>

\* Numbers rounded to nearest 100 Tons

HVAC Ducting and mixed C&D metals are included in Metal

All Bottom Fines & Dirt are included in Organics

Sewage Solids are included in Other Organics.

Table 4-2. Comparison of Illinois Recovery Rates to National Averages

	Illinois Recovery (%)	U.S. Recovery (%)		Illinois Recovery (%)	U.S. Recovery (%)
<b>Paper</b>			<b>Metal</b>		
Newsprint	60%	70%	Aluminum Beverage Containers	39%	55%
High Grade Office Paper	51%	53%	Ferrous Containers (Tin Cans)	26%	71%
Uncoated OCC/Kraft	57%	91%	<b>Organics</b>		
Boxboard	23%	25%	Yard Waste - Compostable	59%	58%
			Yard Waste - Woody	59%	58%
			Food Waste	1%	5%
			<b>Inorganics</b>		
<b>Beverage Containers</b>			Televisions	55%	29%
Milk & Juice Cartons/Boxes - Coated	7%	6%	Computer Monitors	59%	29%
			Computer Equipment/Peripherals	36%	29%
			White Goods - Refrigerated	89%	82%
<b>Plastic</b>			White Goods - Not refrigerated	73%	82%
#1 PET Bottles/Jars	9%	31%	Lead-acid Batteries	100%	96%
#1 Other PET Containers	9%	21%	Tires	88%	96%
#2 HDPE Bottles/Jars - Clear	35%	28%	<b>Textiles</b>		
#2 HDPE Bottles/Jars - Color	35%	21%	Carpet	7%	8%
#2 Other HDPE Containers	35%	21%	Carpet Padding	6%	8%
#6 Exp. Polystyrene Packaging	1%	7%	Clothing	34%	14%
#3-#7 Other - All	1%	negligible	<b>Construction and Demolition Debris (C&amp;D)</b>		
Other Rigid Plastic Products	18%	7%	Wood Pallets	31%	25%
Grocery & Merchandise Bags	1%	12%			
Commercial & Industrial Film	11%	12%			
<b>Glass</b>					
Recyclable Glass Bottles & Jars	29%	34%			

Sources U.S. Recovery:

United States Environmental Protection. Municipal Solid Waste Generation, Recycling, and Disposal in the United States Tables and Figures for 2012, February 2014.

All products except for products listed separately.

United States Environmental Protection. Municipal Solid Waste in the United States: 2009 Facts and Figures. Milk & Juice Cartons/boxes.

American Forest & Paper Association (AF&PA). Paper Recycles. Recovery of Printing and Writing Paper. 2013 AF&PA recovery assumed for High Grade Office Paper.

Steel Recycling Institute. Steel Recycling Rates. 2013 Appliances.

Rubber Manufacturers Association (RMA). 2013 U.S. Scrap Tire Management Summary. November 2014. 2013 tire utilization.

Grocery & Merchandise Bags and Commercial & Industrial Film material categories are a combined recovery value.

Table 4-2 shows that in Illinois, recovery of individual products are varied as compared to the national average. Of the material categories presented in Table 4-2, roughly one-third are above the national average, one-third are at or very near the national average, and the remaining one-third are below the national average.

Material categories with Illinois recovery rates within  $\pm 10\%$  of the national average include High Grade Office Paper (ex: 51%/53% = 5% variation), Boxboard, Milk & Juice Cartons/Boxes – Coated, Plastics #3-#7 Other – All, Grocery & Merchandise Bags, Commercial & Industrial Film, Yard Waste – Compostable, Yard Waste – Woody, Lead-acid Batteries, Tires, and Carpet.

Although all paper grades are estimated to be recovered below national average, OCC/Kraft is at 62% of the national recovery rate (57%/91%). This result is consistent with our previous study's data for Illinois and the national average.

Most plastic products are recovered at or below national average with the exception of HDPE products, where the HDPE material categories were each recovered at 35% compared to 21% to 28% for the U.S. Other Rigid Plastic Products are estimated to be recovered in Illinois at a higher rate (18%) than for the U.S. (7%).

The U.S. PET plastic container recycling is shown at 9% for both PET categories in Table 4-2. In reality, some PET containers are recycled at a higher rate than others. In the EPA report, PET bottles and jars are recovered at 30.8% and other PET packaging are recovered at 2.4% of generation, respectively. Since the IRA product categories do not follow this same structure, all PET container recovery at the national level was combined into one rate (9%).

Most inorganics are estimated to be recovered in Illinois at rates higher than the national average, with exception for White Goods – Not Refrigerated (89%) and Tires (92%). It is possible that these rates are inflated by the lack of large inorganic items in the loads sampled during the field sorting conducted in 2014. Items such as televisions that are a small percentage of the waste stream do not enter the waste stream as consistently as other products, such as newspapers or glass bottles. This can cause large variability in the composition estimates and an inflated recovery number. Recovery of lead-acid batteries and White Goods - Refrigerated are estimated to be similar to U.S. recovery. These products have well established recovery infrastructures that result in high recovery rates.

Recyclable glass bottles and jars, aluminum beverage containers, Ferrous Containers (Tin Cans), and food waste are all estimated to be recovered at levels that are below the U.S. average (i.e., 29%/34% = 85% for glass bottles).

Recovery of textiles are estimated to be recovered in Illinois at or above the U.S. average recovery, where clothing was most recovered in Illinois at 34%.

The only component of the C&D waste stream that could be directly compared to the U.S. is wood pallets. Illinois recovery is estimated at 31%, a little higher than the U.S. average of 25%. The pallet reuse market may be slightly more active in Illinois than other states. Other recovery markets such as chipping for land cover or fuel may also be more established in Illinois. Another explanation for the high recovery might be that the waste composition profile underestimated the quantity of wood pallets disposed.

## 4.4 MSW Recovery Rates

The following table summarizes the materials recovered in Illinois as estimated by this study. The list is organized by materials most recovered by percentage of generation in Illinois. The list illustrates material categories banned from landfilling and commonly collected in curbside recycling programs.

**Table 4-3. Listing of Materials Recovered**

	Generated tons	Disposed tons	Recovered tons	Recovery %
<b>Lead-acid Batteries</b>	<b>117,750</b>	-	<b>117,750</b>	<b>100.0%</b>
<b>Automotive Fluids</b>	<b>17,100</b>	<b>20</b>	<b>17,080</b>	<b>99.9%</b>
Reinforced Concrete	96,840	1,510	95,300	98.4%
HVAC Ducting	48,680	1,000	47,700	98.0%
<b>White Goods - Refrigerated</b>	<b>66,990</b>	<b>7,160</b>	<b>59,800</b>	<b>89.3%</b>
<b>Tires</b>	<b>166,630</b>	<b>19,250</b>	<b>147,400</b>	<b>88.5%</b>
Bricks	270,010	31,680	238,300	88.3%
<b>Used Oil/Filters</b>	<b>104,380</b>	<b>15,080</b>	<b>89,300</b>	<b>85.6%</b>
Other Metal + mixed C&D metals	420,430	82,960	337,500	80.3%
Rock & Other Aggregates	327,140	72,920	254,200	77.7%
Concrete	507,840	126,500	381,300	75.1%
White Goods - Not refrigerated	149,310	40,530	108,800	72.9%
Clean Dimensional Lumber	559,010	177,670	381,300	68.2%
Clean Engineered Wood	582,340	201,000	381,300	65.5%
<b>Newsprint</b>	<b>561,670</b>	<b>227,170</b>	<b>334,500</b>	<b>59.6%</b>
<b>Yard Waste - Woody</b>	<b>149,930</b>	<b>62,070</b>	<b>87,900</b>	<b>58.6%</b>
<b>Yard Waste - Compostable</b>	<b>758,110</b>	<b>313,860</b>	<b>444,300</b>	<b>58.6%</b>
Computer Equipment/Peripherals	45,860	19,020	26,800	58.4%
Plastic C&D Materials	274,950	116,060	158,900	57.8%
Other C&D	556,440	238,660	317,800	57.1%
<b>Uncoated OCC/Kraft</b>	<b>2,470,980</b>	<b>1,070,350</b>	<b>1,400,600</b>	<b>56.7%</b>
Gypsum Board	228,730	101,620	127,100	55.6%
Computer Monitors	20,530	9,290	11,200	54.6%
Other Ferrous	330,810	155,370	175,400	53.0%
Composition Shingles	385,570	185,570	200,000	51.9%

	Generated tons	Disposed tons	Recovered tons	Recovery %
High Grade Office Paper	325,390	161,030	164,400	50.5%
Televisions	32,490	19,030	13,500	41.6%
Aluminum Beverage Containers	99,340	60,470	38,900	39.2%
Other Aluminum	56,170	35,990	20,200	36.0%
Electronic Equipment	93,320	60,050	33,300	35.7%
#2 Other HDPE Containers	4,770	3,090	1,700	35.6%
#2 HDPE Bottles/Jars - Color	68,430	44,270	24,200	35.4%
#2 HDPE Bottles/Jars - Clear	74,040	47,900	26,100	35.3%
Magazines/Catalogs	192,990	125,620	67,400	34.9%
Clothing	342,120	224,360	117,800	34.4%
Wood Pallets	422,960	292,740	130,200	30.8%
Household Bulky Items	407,310	282,470	124,800	30.6%
Recyclable Glass Bottles & Jars	439,980	312,700	127,300	28.9%
Other Glass	50,200	37,030	13,200	26.3%
Ferrous Containers (Tin Cans)	147,410	108,860	38,600	26.2%
Boxboard	352,380	270,630	81,800	23.2%
Other Rigid Plastic Products	374,330	308,460	65,900	17.6%
Other Non-Ferrous	58,520	50,020	8,500	14.5%
Fluorescent Lights/Ballasts	2,870	2,520	400	13.9%
Commercial & Industrial Film	248,200	219,990	28,200	11.4%
#1 Other PET Containers	41,070	37,290	3,800	9.3%
#1 PET Bottles/Jars	146,510	133,050	13,500	9.2%
Carpet	157,960	146,290	11,700	7.4%
Milk & Juice Cartons/Boxes - Coated	37,020	34,610	2,400	6.5%
Carpet Padding	42,750	40,040	2,700	6.3%
Other Household Batteries	27,990	26,410	1,600	5.7%
Oil Paint	3,770	3,620	200	5.3%
Compostable Paper	471,650	450,220	21,400	4.5%

	Generated tons	Disposed tons	Recovered tons	Recovery %
Compostable Paper	471,650	450,220	21,400	4.5%
Other Paper	80,070	76,430	3,600	4.5%
Other Textiles	198,150	189,270	8,900	4.5%
Mixed Paper - Recyclable	343,790	330,190	13,600	4.0%
Other HHW	21,290	20,600	700	3.3%
Ash, Sludge, & Industrial Wastes	12,780	12,400	400	3.1%
Latex Paint	10,070	9,870	200	2.0%
Food Scraps	2,147,760	2,119,200	28,600	1.3%
#3-#7 Other - All	84,230	83,270	1,000	1.2%
#6 Exp. Polystyrene Packaging	118,620	117,260	1,400	1.2%
Grocery & Merchandise Bags	88,350	87,730	600	0.7%
Other Plastic	229,530	228,050	1,500	0.7%

Notes:

The 64 individual materials listed represent all of the total recovered materials, by weight.

The materials in bold and gray shaded cells represent items banned from landfilling.

The materials in green shaded cells are materials commonly accepted in curbside programs.

## 4.5 Market Values of Landfilled Commodities

One of the goals of this Study is to determine the estimated value of commodities that are landfilled and thus being lost to the overall economy – wasting jobs, natural resources, and contributing to negative environmental impacts. A comprehensive economic evaluation would include direct, indirect and induced economic values of all commodities being landfilled, and is a complete study in and of itself. In light of this, it was determined to focus on the “traditional” commodities typically collected in residential or commercial recycling programs. Recognizing that there are other significant quantities of commodities being recycled, the value presented here then should be viewed as a minimum. The market value was calculated based on the average 2014 commodity values from January 2014 through December 2014,<sup>17 18</sup> obtained from market data detailed in Section 4.5 for the Midwest region.

Table 4-4 summarizes the market value of the commodities landfilled based on these values. **The direct market value is calculated at over \$360 Million.**

<sup>17</sup> Recycling Manager Archives, [www.amm.com/recman/archives](http://www.amm.com/recman/archives), Cahners Business Information, American Metal Market LLC, a division of Metal Bulletin PLC.

<sup>18</sup> Official Board Markets: The Yellow Sheet, <https://prices.packaging-online.com>.

**Table 4-4. Market Value of Disposed Materials<sup>19 20 21</sup>**

	Tons	\$/Ton*	Value
<b>Paper</b>			
Newsprint	227,170	\$ 52.50	\$ 11,926,425
High Grade Office Paper	161,030	\$ 131.00	\$ 21,094,930
Magazines/Catalogs	125,620	\$ 82.00	\$ 10,300,840
Uncoated OCC/Kraft	1,070,350	\$ 80.50	\$ 86,163,175
Boxboard	270,630	\$ 37.50	\$ 10,148,625
Mixed Paper - Recyclable	330,190	\$ 37.50	\$ 12,382,125
<b>Plastic</b>			
#1 PET Bottles/Jars	133,050	\$ 335.00	\$ 44,571,750
#2 HDPE Bottles/Jars - Clear	47,900	\$ 893.00	\$ 42,774,700
#2 HDPE Bottles/Jars - Color	44,270	\$ 545.00	\$ 24,127,150
<b>Glass</b>			
Recyclable Glass Bottles & Jars	312,700	\$ (10.00)	\$ (3,127,000)
<b>Metal</b>			
Aluminum Beverage Containers	60,470	\$ 1,493.00	\$ 90,281,710
Ferrous Containers (Tin Cans)	108,860	\$ 110.00	\$ 11,974,600
<b>Total</b>	<b>2,892,240</b>		<b>\$ 362,619,030</b>

\* Market values are based on an annual average of Midwest markets from January 2014 through December 2014.

## 4.6 Greenhouse Gas Emissions

Global warming is an issue that has been steadily gaining national and worldwide attention and concern. It is widely agreed that greenhouse gases (GHG) that result from the burning of fossil fuels and other human activities, is contributing to climate change. Illinois has a sustainable energy plan and is a signatory to the Midwestern Greenhouse Gas Accord. Recovering commodities from discarded materials through recycling, composting and waste reduction strategies can play a significant role in reducing GHG's by reducing emissions. Recovering commodities:

1. Avoids emissions from raw material extraction and transport,
2. Avoids emissions from raw material processing into "manufacturing ready" feedstock,
3. Avoids emissions from landfilling (methane),
4. Sustains forest carbon sequestration,
5. Reuses carbon based plastics indefinitely, rather than one time btu value for combustion.

<sup>19</sup> Recycling Manager Archives, [www.amm.com/recman/archives](http://www.amm.com/recman/archives), Cahners Business Information, American Metal Market LLC, a division of Metal Bulletin PLC.

<sup>20</sup> Official Board Markets: The Yellow Sheet, <https://prices.packaging-online.com>.

<sup>21</sup> Elgin Recycling price quote: <http://www.elginrecycling.com/>

The Illinois MSW generation and recovery information from Table 4-1 was inputted into the U.S. Environmental Protection Agency (EPA) Waste Reduction Model (WARM)<sup>22</sup>, to determine equivalent greenhouse gas emissions resulting from the landfilling of MSW in Illinois and to determine the emission reductions resulting from the quantities estimated to be recovered. The WARM model was created by the U.S. EPA to help solid waste planners and organizations estimate greenhouse gas (GHG) emission reductions from several different waste management practices. WARM calculates GHG emissions for baseline and alternative waste management practices, including source reduction, recycling, combustion, composting, and landfilling. The model calculates emissions in metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>E) across a wide range of material types commonly found in municipal solid waste (MSW). The GHG emission factors were developed following a life-cycle assessment methodology using estimation techniques developed for national inventories of GHG emissions. Default values for all variables were used for this model. CDM Smith assumed the national landfill average for methane recovery for flare and assumed default transport distances for emissions that occur during transport to landfills.

**The total GHG emissions produced from the annual landfilled MSW (12.1million tons) is approximately 2,516,928 MTCO<sub>2</sub>E.** This is equivalent to the annual greenhouse gas emissions from approximately 461,000 passenger vehicles or the carbon sequestered annually by 17,600 acres of forest preserved from deforestation<sup>23</sup>.

**The total GHG emissions reduced from materials currently recycled (7.2 million tons) is 17,242,620 MTCO<sub>2</sub>E,** which is equivalent to the annual greenhouse gas emissions from approximately 3,158,000 passenger vehicles or the carbon sequestered annually by 120,600 acres of forest.

#### 4.6.1 Limitations

The WARM is a tool used to estimate GHG emissions from waste management practices. It is not the definitive protocol for municipal solid waste GHG management and should only be expected to provide a rough approximation. There are notable challenges with the WARM. As listed in Table 4-5, The WARM recognizes 34 material categories whereas there are 79 Illinois material categories in this study. Consequently, the WARM combines Illinois disposal categories. Most of the Illinois categories logically fit into the WARM. The WARM material type "Mixed Recyclable" includes the Illinois disposal categories that do not clearly match a listed WARM material type and are defined as recoverable or potentially recoverable. Illinois disposal categories defined as non-recoverable are included in the WARM "Mixed MSW" material type. For example, painted and treated wood, oil paint, sewage solids, and mercury-containing items among other non-recoverable material are classified in "Mixed MSW." Electronic equipment, wood pallets, clothing, and ceramics are included in "Mixed Recyclable." GHG emissions may be highly variable due to differences in classification; however, understanding the limitations, and for purposes of this tool, the waste categorization is adequate in assessing the approximate GHG emissions from Illinois landfill waste. A more comprehensive model which takes into account actual landfill age, transportation of waste, could provide additional detail on the actual GHG emission that could be saved by reducing the amount of materials that are disposed in Illinois landfills.

<sup>22</sup> EPA's report Solid Waste Management and Greenhouse Gases: A Life-Cycle Assessment of Emissions and Sinks (EPA 530-R-06-004) describes this methodology in detail. visit <http://epa.gov/climatechange/wycd/waste/SWMGHGreport.html> [http://www.epa.gov/climatechange/wycd/waste/calculators/Warm\\_home.html](http://www.epa.gov/climatechange/wycd/waste/calculators/Warm_home.html).

<sup>23</sup> EPA. 2009. Greenhouse Gas Equivalencies Calculator. <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>

**Table 4-5. WARM Material Types**

WARM Material Type	Illinois Material Type
Aluminum Cans	Aluminum Beverage Containers
Steel Cans	Ferrous Containers (Tins Containers)
Copper Wire	N/A
Glass	Recyclable Glass Bottles & Jars Flat Glass Other Glass
HDPE	#2 HDPE Bottles/Jars – Clear #2 HDPE Bottles/Jars – Color #2 Other HDPE Containers
LDPE	N/A
PET	#1 PET Bottles/Jars #1 Other PET Containers
Corrugated Cardboard	Uncoated OCC/Kraft
Magazines/Third-class Mail	Magazines/Catalogs
Newspaper	Newsprint
Office Paper	High Grade Office Paper
Phonebooks	N/A
Textbooks	N/A
Dimensional Lumber	Clean Dimensional Lumber
Medium-density Fiberboard	Clean Engineered Wood
Food Scraps	Food Scraps
Yard Trimmings	Yard Waste-Compostable
Grass	N/A
Leaves	N/A
Branches	Yard Waste - Woody
Mixed Paper (general)	Boxboard Mixed Paper - Recyclable Compostable Paper Other paper Milk & Juice Cartons/Boxes - Coated
Mixed Paper (primarily residential)	N/A
Mixed Paper (primarily from offices)	N/A
Mixed Metals	Other Aluminum HVAC Ducting Other Ferrous Other Non-Ferrous Other Metal

WARM Material Type	Illinois Material Type
Mixed Plastics	#6 Exp. Polystyrene Packaging #3-7 Other - All Other Rigid Plastic Products Grocery & Merchandise Bags Trash Bags Commercial & Industrial Film Other Film Other Plastic
Mixed Recyclables	Electronic Equipment White Goods - Refrigerated White Goods - Not Refrigerated Lead-acid Batteries Televisions Household Bulky Items Fluorescent Lights/Ballasts Clothing Latex Paint Used Oil/Filters Wood Pallets Asphalt Paving Rock & Other Aggregates Gypsum Board Composition Shingles Other Roofing Plastic C&D Materials Ceramics/Porcelain
Mixed Organics	Bottom Fines Diapers Other Organic
Mixed MSW	Other Household Batteries Other Textiles Oil Paint Plan/Organisms/Pest Control Growth Other Automotive Fluids Mercury – Containing Items Sharps & Infectious Waste Ash/ Sludge & Industrial Wastes Sewage Solids Other HHW Painted Wood Treated Wood Other C&D Other MSW
Carpet	Carpet Carpet Padding
Personal Computers	Computer Monitors/Peripherals Electronic Equipment
Clay Bricks	Bricks
Concrete	Concrete Reinforced concrete
Fly Ash	N/A
Tires	Tires



# Section 5

## Comparison

### 5.1 Introduction

This section compares the results of the 2008 ICWGC study and the 2014 ICWCG study. DCEO and IRA commissioned the 2008 ICWGC Study and the 2014 ICWGC Study update to determine what differences have occurred during this time period for the estimated quantity and types of materials generated, landfilled, and recovered in Illinois. Every effort was made to repeat the 2008 ICWGC study as closely as possible using the same methods and data sources. Any changes to methodology due to availability or lack of data have been described in earlier sections of this report. This section provides a comparison of the results of the two studies. It provides comparisons of the Landfilled MSW Characterization and Generated MSW for totals statewide as well as residential, ICI, urban, rural and C&D waste sectors. It also provides comparison of material classes, summaries of commodity material categories, and/or summaries of the largest material categories by weight. Lastly, comparisons of statewide MSW Recovery/Diversion rates are presented.

### 5.2 MSW Characterization Comparisons

The landfilled MSW composition results are presented in Section 2. Total MSW, residential, ICI, urban, rural, and C&D disposal waste sector and subsector study comparisons are presented below in similar format as provided in Section 2. The same results from the studies and the 90% confidence intervals from the two studies are presented for comparability. Figures showing the 90% confidence intervals illustrate there is significant difference in the material class or category from the 2008 ICWGC Study results and the 2014 ICWGC Study results, where the error bars do not overlap. Where the error bars do overlap, no significant difference has been measured.

#### 5.2.1 Landfilled Illinois MSW Composition

Figure 5-1 compares the waste composition profiles of total Illinois MSW for 2008 and 2014. The percentages of Beverage Containers, Glass, and HHW material classes are not statistically different between 2008 and 2014. There was significantly more Plastic, Organic, and Inorganics landfilled in 2014 than in 2008 and significantly less Paper, Metal, Textiles, and C&D landfilled in 2014 than in 2008.

**Figure 5-1. Comparison of 2008 and 2014 Illinois Landfilled MSW**

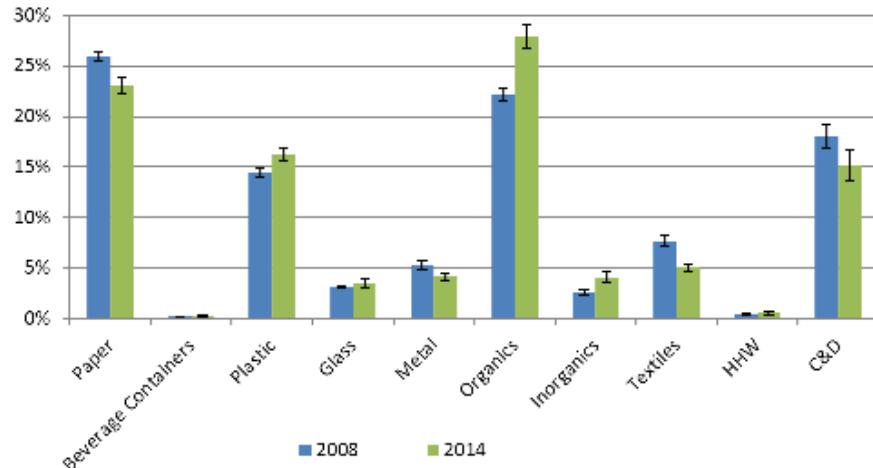


Figure 5-2 compares the top ten commodity products that were landfilled in Illinois. These ten material categories account for 34% and approximately 38% of the overall waste stream in 2008 and 2014, respectively. There was more High Grade Office Paper, Boxboard, Yard Waste – Compostable, and Food Scraps landfilled in 2014 than in 2008; and less Newsprint, Uncoated OCC/Kraft, and Aluminum Beverage Containers landfilled in 2014 than in 2008.

**Figure 5-2. Comparison of 2008 and 2014 Illinois MSW Landfilled Commodity Materials**

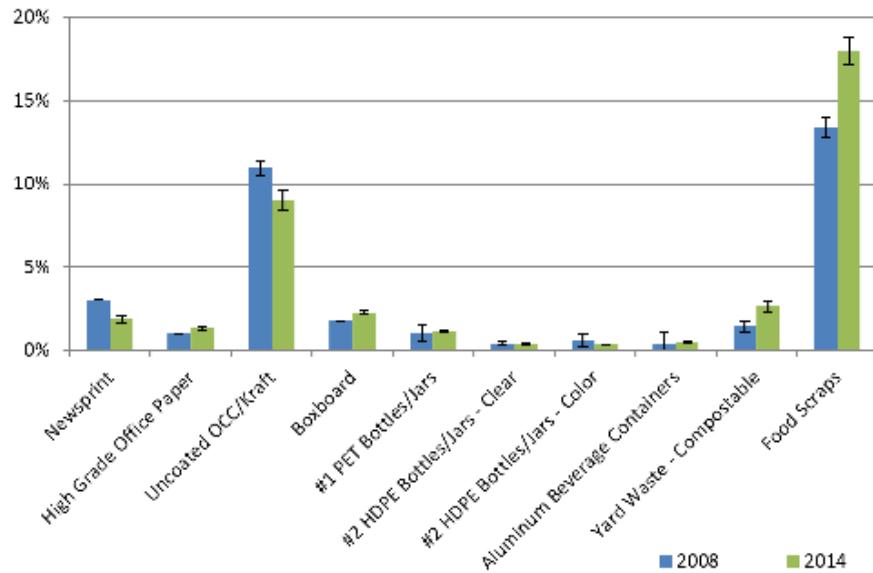


Table 5-1 provides the waste composition profiles of the landfilled total Illinois MSW for 2008 and 2014.

**Table 5-1. Comparison of 2014 and 2008 Landfilled MSW Tonnages - Total Illinois MSW**

	2008					2014					2008					2014				
	Total	2008 Mean %	2008 Total MSW	2014 Mean %	2014 Total MSW	Difference	Total	2008 Mean %	2008 Total MSW	2014 Mean %	2014 Total MSW	Difference	Total	2008 Mean %	2008 Total MSW	2014 Mean %	2014 Total MSW	Difference		
<b>Paper</b>		<b>26.0%</b>	<b>0.43%</b>	<b>23.0%</b>	<b>0.81%</b>	<b>-2.96%</b>									<b>2.6%</b>	<b>0.35%</b>	<b>4.1%</b>	<b>0.50%</b>	<b>1.53%</b>	
Newsprint	3.1%	0.16%	1.9%	0.22%	-1.13%		Televisions	0.0%	0.00%	0.2%	0.08%	0.08%	0.16%							
High Grade Office Paper	1.1%	0.13%	1.4%	0.13%	0.32%		Computer Monitors	0.2%	0.08%	0.1%	0.05%	0.05%	-0.13%							
Magazines/Catalogs	1.8%	0.16%	1.1%	0.07%	-0.70%		Computer Equipment/Peripherals	0.2%	0.05%	0.2%	0.07%	0.07%	-0.07%							
Uncoated OCC/Kraft	11.0%	0.30%	9.1%	0.62%	-1.92%		Electronic Equipment	1.0%	0.16%	0.5%	0.08%	0.08%	-0.46%							
Boxboard	1.8%	0.11%	2.3%	0.09%	0.52%		White Goods - Refrigerated	0.0%	0.00%	0.1%	0.06%	0.06%								
Mixed Paper - Recyclable	3.1%	0.12%	2.8%	0.16%	-0.25%		White Goods - Not refrigerated	0.0%	0.01%	0.3%	0.13%	0.32%								
Compostable Paper	3.3%	0.14%	3.8%	0.19%	0.53%		Lead-acid Batteries	0.0%	0.00%	0.0%	0.00%	0.00%								
Other Paper	1.0%	0.10%	0.6%	0.06%	-0.34%		Other Household Batteries	0.0%	0.01%	0.2%	0.08%	0.18%								
<b>Beverage Containers</b>	<b>0.2%</b>	<b>0.02%</b>	<b>0.3%</b>	<b>0.06%</b>	<b>0.06%</b>		Tires	0.2%	0.05%	0.2%	0.08%	-0.05%								
Milk & Juice Cartons/Boxes - Coated	0.2%	0.02%	0.3%	0.06%	0.06%		Household Bulky Items	0.9%	0.31%	2.4%	0.44%	1.51%								
<b>Plastic</b>	<b>14.4%</b>	<b>0.50%</b>	<b>16.2%</b>	<b>0.63%</b>	<b>1.75%</b>		<b>Textiles</b>	<b>7.7%</b>	<b>0.58%</b>	<b>5.1%</b>	<b>0.39%</b>	<b>-2.61%</b>								
#1 PET Bottles/Jars	1.1%	0.05%	1.1%	0.07%	0.06%		Carpet	1.7%	0.39%	1.2%	0.29%	-0.52%								
#1 Other PET Containers	0.1%	0.01%	0.3%	0.02%	0.23%		Carpet Padding	0.3%	0.08%	0.3%	0.09%	0.08%								
#2 HDPE Bottles/Jars - Clear	0.4%	0.03%	0.4%	0.04%	-0.04%		Clothing	2.3%	0.16%	1.9%	0.16%	-0.40%								
#2 HDPE Bottles/Jars - Color	0.6%	0.03%	0.4%	0.02%	-0.26%		Other Textiles	3.4%	0.34%	1.6%	0.12%	-1.77%								
#2 Other HDPE Containers	0.1%	0.02%	0.0%	0.01%	-0.06%		<b>Household Hazardous Waste</b>	<b>0.5%</b>	<b>0.07%</b>	<b>0.6%</b>	<b>0.11%</b>	<b>0.08%</b>								
#6 Exp. Polystyrene Packaging	0.9%	0.03%	1.0%	0.14%	0.14%		Latex Paint	0.1%	0.03%	0.1%	0.02%	0.00%								
#3/#7 Other - All	0.9%	0.05%	0.7%	0.04%	-0.16%		Oil Paint	0.0%	0.01%	0.0%	0.02%	0.02%								
Other Rigid Plastic Products	3.7%	0.31%	2.6%	0.27%	-1.04%		Plant/Organism/Pest Control/Growth	0.0%	0.00%	0.0%	0.00%	0.00%								
Grocery & Merchandise Bags	0.6%	0.02%	0.7%	0.04%	0.16%		Used Oil/Filters	0.1%	0.02%	0.1%	0.05%	0.04%								
Trash Bags	1.2%	0.05%	1.8%	0.10%	0.63%		Other Automotive Fluids	0.0%	0.00%	0.0%	0.00%	-0.01%								
Commercial & Industrial Film	1.6%	0.18%	1.9%	0.44%	0.29%		Mercury-Containing Items	0.0%	0.00%	0.0%	0.00%	0.00%								
Other Film	1.4%	0.10%	3.2%	0.23%	1.81%		Sharps & Infectious Waste	0.0%	0.00%	0.0%	0.00%	0.00%								
Other Plastic	1.9%	0.34%	1.9%	0.12%	-0.01%		Ash, Sludge, & Industrial Wastes	0.1%	0.04%	0.1%	0.06%	0.05%								
<b>Glass</b>	<b>3.2%</b>	<b>0.14%</b>	<b>3.5%</b>	<b>0.39%</b>	<b>0.35%</b>		Sewage Solids	0.0%	0.00%	0.0%	0.00%	0.00%								
Recyclable Glass Bottles & Jars	2.9%	0.13%	2.7%	0.15%	-0.27%		Other HHW	0.2%	0.05%	0.2%	0.07%	-0.02%								
Flat Glass	0.2%	0.07%	0.5%	0.32%	0.36%		<b>C&amp;D</b>	<b>18.0%</b>	<b>1.17%</b>	<b>15.2%</b>	<b>1.46%</b>	<b>-2.81%</b>								
Other Glass	0.1%	0.01%	0.3%	0.19%	0.26%		Clean Dimensional Lumber	2.2%	0.16%	1.1%	0.23%	-1.06%								
<b>Metal</b>	<b>5.3%</b>	<b>0.42%</b>	<b>4.2%</b>	<b>0.32%</b>	<b>-1.17%</b>		Clean Engineered Wood	2.1%	0.26%	1.5%	0.20%	-0.68%								
Aluminum Beverage Containers	0.4%	0.02%	0.5%	0.03%	0.09%		Wood Pallets	1.0%	0.18%	2.4%	0.60%	1.44%								
Other Aluminum	0.5%	0.07%	0.3%	0.02%	-0.22%		Painted Wood	1.7%	0.20%	2.9%	0.50%	1.20%								
HVAC Ducting	0.0%	0.02%	0.0%	0.00%	-0.03%		Treated Wood	3.0%	0.44%	0.1%	0.04%	-2.95%								
Ferrous Containers (Tin Cans)	1.0%	0.06%	0.9%	0.12%	-0.12%		Concrete	1.5%	0.14%	0.9%	0.55%	-0.56%								
Other Ferrous	2.2%	0.36%	1.3%	0.18%	-0.90%		Reinforced Concrete	0.0%	0.00%	0.0%	0.00%	-0.04%								
Other Non-Ferrous	0.2%	0.06%	0.4%	0.22%	0.17%		Asphalt Paving	0.0%	0.00%	0.1%	0.05%	0.06%								
Other Metal	0.9%	0.13%	0.7%	0.08%	-0.16%		Rock & Other Aggregates	0.3%	0.06%	0.5%	0.13%	0.22%								
<b>Organics</b>	<b>22.2%</b>	<b>0.68%</b>	<b>27.9%</b>	<b>1.14%</b>	<b>5.78%</b>		Bricks	0.4%	0.09%	0.1%	0.03%	-0.30%								
Yard Waste - Compostable	1.5%	0.11%	2.7%	0.30%	1.21%		Gypsum Board	2.6%	0.47%	0.6%	0.18%	-1.94%								
Yard Waste - Woody	1.3%	0.16%	0.4%	0.11%	-0.91%		Composition Shingles	0.9%	0.31%	1.3%	0.54%	0.41%								
Food Scraps	13.4%	0.51%	18.0%	0.83%	4.63%		Other Roofing	0.1%	0.05%	0.3%	0.27%	0.16%								
Bottom Fines & Dirt	0.9%	0.10%	2.5%	0.73%	1.54%		Plastic C&D Materials	0.1%	0.05%	0.9%	0.17%	0.77%								
Diapers	2.2%	0.24%	2.0%	0.14%	-0.16%		Ceramics/Porcelain	1.0%	0.49%	0.5%	0.12%	-0.52%								
Other Organic	2.8%	0.30%	2.3%	0.33%	-0.53%		Other C&D	1.0%	0.24%	1.9%	0.42%	0.98%								
							<b>Total</b>		<b>100%</b>		<b>100%</b>									

## 5.2.2 Landfilled Residential MSW Composition

Figure 5-3 compares the waste composition profiles of residential MSW for 2008 and 2014. When comparing residential landfilled waste, all of the material classes fall within the 90% confidence interval for 2008 and 2014, with the exception of organics. There was significantly more Organics landfilled from the residential sector in 2014 than in 2008.

**Figure 5-3. Comparison of 2008 and 2014 Residential Landfilled MSW**

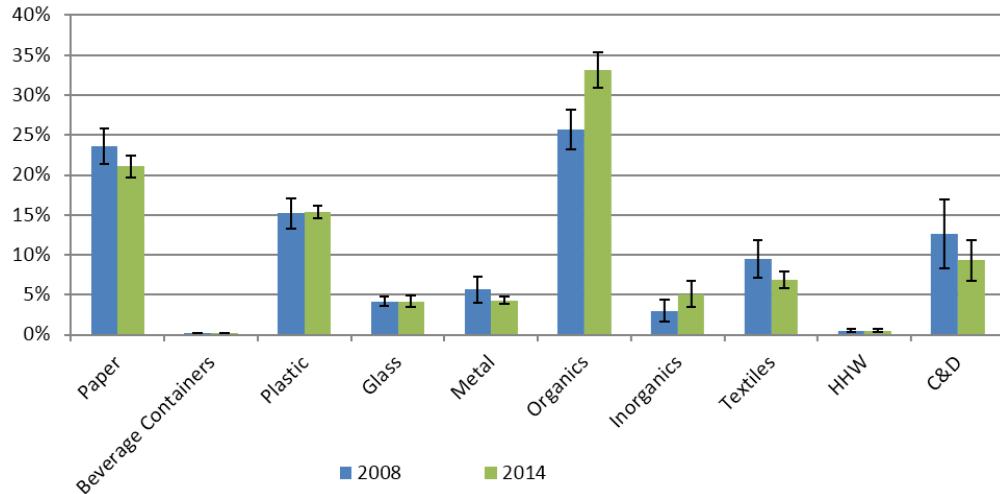


Figure 5-4 compares the top ten commodity products that were landfilled from the residential waste sector. These ten material categories account for approximately 33% and approximately 39% of the residential waste stream in 2008 and 2014, respectively. There was less Newsprint landfilled in 2014 than in 2008 and more Yard Waste – Compostable and Food Scraps landfilled in 2014 than in 2008.

**Figure 5-4. Comparison of 2008 and 2014 Residential MSW Landfilled Commodity Materials**

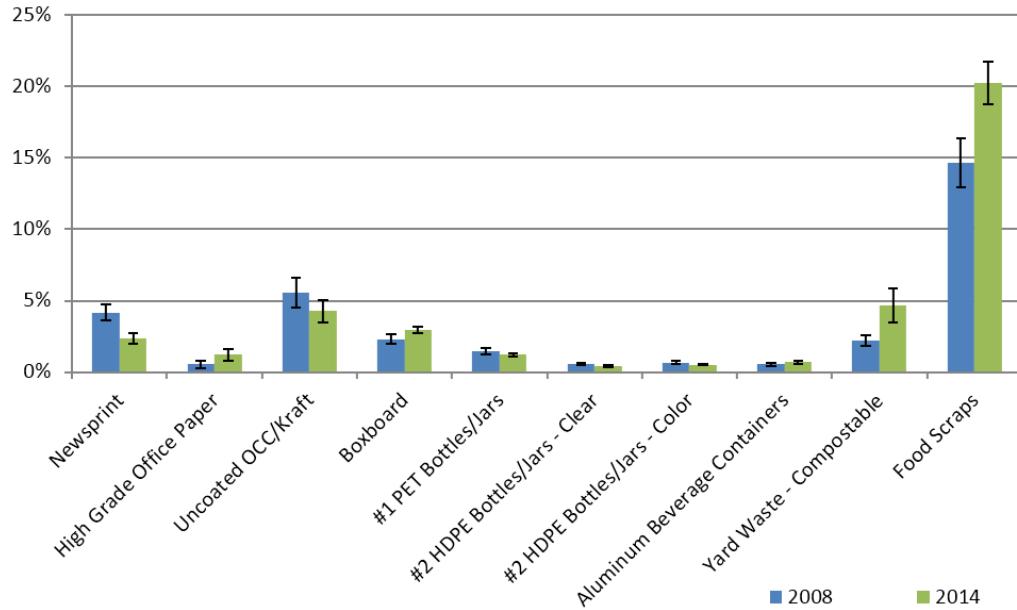


Table 5-2 provides the waste composition profiles of the landfilled residential MSW for 2008 and 2014.

**Table 5-2. Comparison of 2014 and 2008 Landfilled MSW Tonnages - Residential**

	2008					2014					2008					2014					
	RES MSW		RES MSW		RES MSW		RES MSW		Difference		RES MSW		RES MSW		RES MSW		RES MSW		Difference		
	Mean %	+/-	Mean %	+/-	Mean %	+/-	Mean %	+/-			Mean %	+/-	Mean %	+/-	Mean %	+/-	Mean %	+/-			
<b>Paper</b>	<b>23.6%</b>	<b>2.20%</b>	<b>21.1%</b>	<b>1.38%</b>	<b>-2.48%</b>		<b>Inorganics</b>				<b>3.0%</b>	<b>1.36%</b>	<b>5.1%</b>	<b>1.58%</b>	<b>2.09%</b>						
Newsprint	4.2%	0.58%	2.4%	0.38%	-1.81%		Televisions				0.0%	0.00%	0.3%	0.41%	0.24%						
High Grade Office Paper	0.5%	0.28%	1.2%	0.41%	0.68%		Computer Monitors				0.2%	0.30%	0.1%	0.14%	-0.12%						
Magazines/Catalogs	1.9%	0.62%	1.6%	0.24%	-0.23%		Computer Equipment/Peripherals				0.1%	0.16%	0.2%	0.20%	0.10%						
Uncoated OCC/Kraft	5.6%	1.01%	4.3%	0.78%	-1.28%		Electronic Equipment				1.2%	0.54%	0.7%	0.27%	-0.54%						
Boxboard	2.3%	0.33%	3.0%	0.24%	0.65%		White Goods - Refrigerated				0.0%	0.00%	0.4%	0.26%	0.41%						
Mixed Paper - Recyclable	3.8%	0.48%	3.8%	0.46%	0.01%		White Goods - Not refrigerated				0.0%	0.00%	0.0%	0.00%	0.00%						
Compostable Paper	4.1%	0.46%	4.2%	0.27%	0.06%		Lead-acid Batteries				0.0%	0.01%	0.0%	0.00%	0.00%						
Other Paper	1.2%	0.38%	0.6%	0.17%	-0.55%		Other Household Batteries				0.1%	0.04%	0.4%	0.43%	0.30%						
<b>Beverage Containers</b>	<b>0.2%</b>	<b>0.04%</b>	<b>0.2%</b>	<b>0.03%</b>	<b>0.01%</b>		Tires				0.2%	0.20%	0.2%	0.19%	0.01%						
Milk & Juice Cartons/Boxes - Coated	0.2%	0.04%	0.2%	0.03%	0.01%		Household Bulky Items				1.3%	1.25%	2.9%	1.29%	1.68%						
<b>Plastic</b>	<b>15.2%</b>	<b>1.92%</b>	<b>15.4%</b>	<b>0.84%</b>	<b>0.18%</b>		<b>Textiles</b>				<b>9.4%</b>	<b>2.36%</b>	<b>6.9%</b>	<b>1.00%</b>	<b>-2.57%</b>						
#1 PET Bottles/Jars	1.4%	0.20%	1.2%	0.11%	-0.23%		Carpet				2.5%	1.61%	1.3%	0.58%	-1.16%						
#1 Other PET Containers	0.1%	0.05%	0.5%	0.06%	0.37%		Carpet Padding				0.3%	0.25%	0.4%	0.32%	0.16%						
#2 HDPE Bottles/Jars - Clear	0.6%	0.09%	0.4%	0.05%	-0.14%		Clothing				3.0%	0.67%	2.8%	0.54%	-0.28%						
#2 HDPE Bottles/Jars - Color	0.7%	0.11%	0.5%	0.05%	-0.13%		Other Textiles				3.6%	1.39%	2.3%	0.38%	-1.30%						
#2 Other HDPE Containers	0.1%	0.06%	0.0%	0.02%	-0.04%		<b>Household Hazardous Waste</b>				<b>0.5%</b>	<b>0.19%</b>	<b>0.5%</b>	<b>0.22%</b>	<b>0.01%</b>						
#6 Exp. Polystyrene Packaging	0.8%	0.09%	1.0%	0.08%	0.16%		Latex Paint				0.2%	0.13%	0.2%	0.09%	-0.01%						
#3/#7 Other - All	1.1%	0.17%	0.9%	0.11%	-0.20%		Oil Paint				0.0%	0.05%	0.0%	0.08%	0.02%						
Other Rigid Plastic Products	3.9%	1.27%	2.8%	0.50%	-1.15%		Plant/Organism/Pest Control/Growth				0.0%	0.00%	0.0%	0.00%	0.00%						
Grocery & Merchandise Bags	0.9%	0.10%	1.1%	0.10%	0.25%		Used Oil/Filters				0.1%	0.06%	0.1%	0.06%	0.02%						
Trash Bags	1.2%	0.16%	1.5%	0.13%	0.30%		Other Automotive Fluids				0.0%	0.00%	0.0%	0.00%	-0.01%						
Commercial & Industrial Film	0.4%	0.19%	0.2%	0.11%	-0.21%		Mercury-Containing Items				0.0%	0.00%	0.0%	0.00%	0.00%						
Other Film	1.6%	0.26%	3.0%	0.26%	1.39%		Sharps & Infectious Waste				0.0%	0.00%	0.0%	0.00%	0.00%						
Other Plastic	2.3%	1.38%	2.2%	0.31%	-0.18%		Ash, Sludge, & Industrial Wastes				0.0%	0.00%	0.1%	0.12%	0.07%						
<b>Glass</b>	<b>4.2%</b>	<b>0.56%</b>	<b>4.2%</b>	<b>0.69%</b>	<b>-0.02%</b>		Sewage Solids				0.0%	0.00%	0.0%	0.00%	0.00%						
Recyclable Glass Bottles & Jars	3.9%	0.51%	3.6%	0.44%	-0.24%		Other HHW				0.2%	0.11%	0.1%	0.12%	-0.09%						
Flat Glass	0.2%	0.30%	0.4%	0.55%	0.19%		<b>C&amp;D</b>				<b>12.6%</b>	<b>4.36%</b>	<b>9.3%</b>	<b>2.52%</b>	<b>-3.31%</b>						
Other Glass	0.1%	0.05%	0.1%	0.05%	0.03%		Clean Dimensional Lumber				0.8%	0.40%	0.7%	0.24%	-0.09%						
<b>Metal</b>	<b>5.6%</b>	<b>1.65%</b>	<b>4.3%</b>	<b>0.51%</b>	<b>-1.32%</b>		Clean Engineered Wood				1.3%	0.73%	1.2%	0.38%	-0.10%						
Aluminum Beverage Containers	0.5%	0.09%	0.7%	0.10%	0.14%		Wood Pallets				0.2%	0.35%	0.1%	0.14%	-0.02%						
Other Aluminum	0.5%	0.27%	0.4%	0.05%	-0.15%		Painted Wood				1.7%	0.77%	3.0%	1.26%	1.28%						
HVAC Ducting	0.1%	0.08%	0.0%	0.00%	-0.06%		Treated Wood				3.1%	1.58%	0.1%	0.06%	-3.07%						
Ferrous Containers (Tin Cans)	1.4%	0.22%	1.0%	0.11%	-0.41%		Concrete				0.2%	0.09%	0.3%	0.45%	0.14%						
Other Ferrous	2.2%	1.44%	1.2%	0.32%	-1.01%		Reinforced Concrete				0.0%	0.00%	0.0%	0.00%	0.00%						
Other Non-Ferrous	0.3%	0.25%	0.2%	0.06%	-0.07%		Asphalt Paving				0.0%	0.00%	0.0%	0.01%	0.00%						
Other Metal	0.6%	0.43%	0.9%	0.23%	0.24%		Rock & Other Aggregates				0.2%	0.23%	0.6%	0.47%	0.45%						
<b>Organics</b>	<b>25.7%</b>	<b>2.46%</b>	<b>33.1%</b>	<b>2.20%</b>	<b>7.42%</b>		Bricks				0.2%	0.21%	0.0%	0.01%	-0.16%						
Yard Waste - Compostable	2.2%	0.38%	4.7%	1.21%	2.46%		Gypsum Board				1.7%	1.69%	0.5%	0.44%	-1.18%						
Yard Waste - Woody	0.9%	0.64%	0.4%	0.17%	-0.54%		Composition Shingles				0.5%	0.45%	1.2%	1.81%	0.74%						
Food Scraps	14.6%	1.71%	20.2%	1.48%	5.60%		Other Roofing				0.2%	0.01%	0.0%	0.00%	-0.25%						
Bottom Fines & Dirt	1.1%	0.39%	1.3%	0.36%	0.26%		Plastic C&D Materials				0.1%	0.09%	0.7%	0.33%	0.64%						
Diapers	3.6%	0.98%	3.2%	0.43%	-0.39%		Ceramics/Porcelain				1.9%	2.08%	0.5%	0.20%	-1.38%						
Other Organic	3.3%	0.98%	3.4%	0.65%	0.02%		Other C&D				0.7%	0.75%	0.3%	0.15%	-0.31%						
							Total					100%		100%							

### 5.2.3 Landfilled ICI MSW Composition

Figure 5-5 compares the waste composition profiles of ICI MSW for 2008 and 2014. When comparing ICI landfilled waste, all of the material classes fall within the 90% confidence interval for 2008 and 2014, so there is no significant difference in the ICI waste sector composition profile by material class.

**Figure 5-5. Comparison of 2008 and 2014 ICI Landfilled MSW**

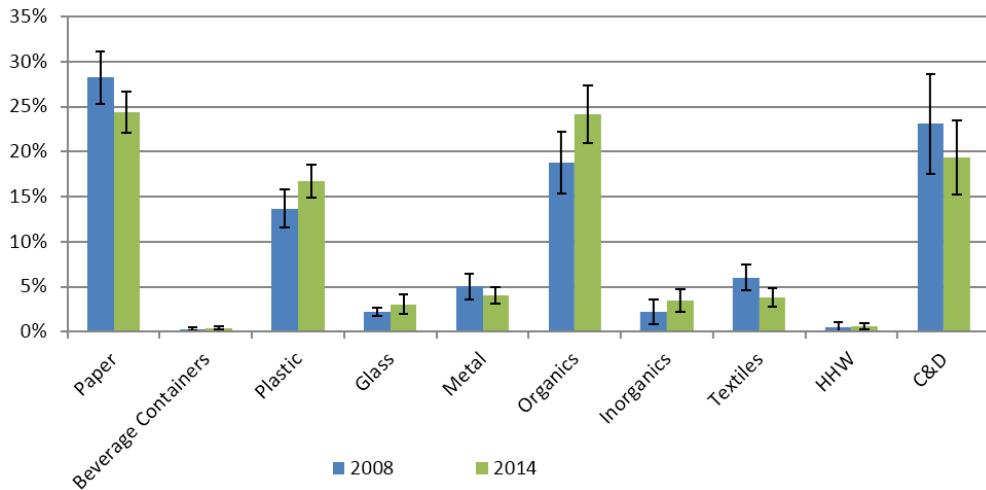


Figure 5-6 compares the top ten commodity products that were landfilled from the ICI waste sector. These ten material categories account for approximately 36% and over 37% of the ICI waste stream in 2008 and 2014, respectively. Half of the material categories were within the 90% confidence interval when comparing the 2008 and 2014 ICI waste sectors. There was less Uncoated OCC/Kraft and #2 HDPE Bottles/Jars - Color landfilled in 2014 and more Food Scraps and slightly more Boxboard and #1 PET Bottles/Jars landfilled in 2014.

**Figure 5-6. Comparison of 2008 and 2014 ICI MSW Landfilled Commodity Materials**

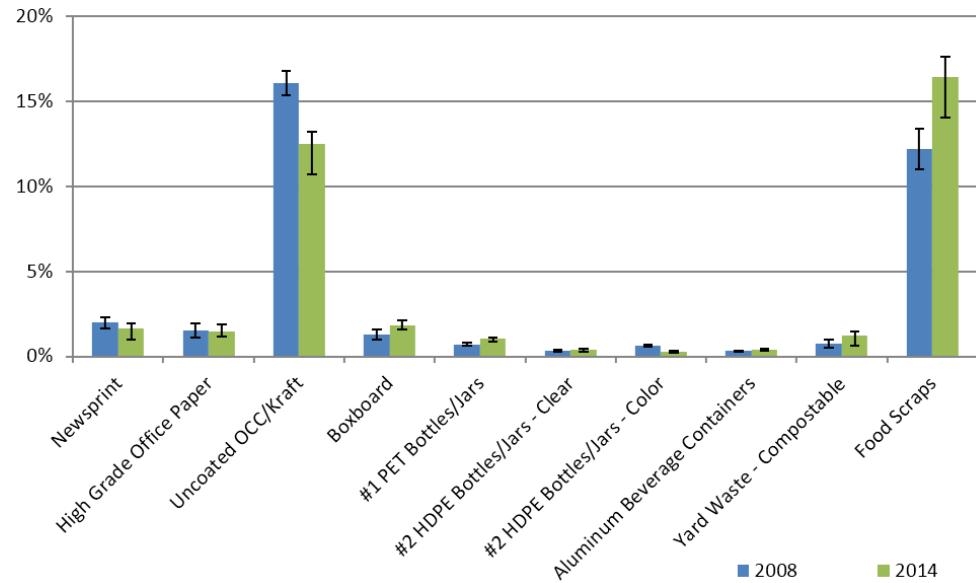


Table 5-3 provides the waste composition profiles of the landfilled ICI MSW for 2008 and 2014.

**Table 5-3. Comparison of 2014 and 2008 Landfilled MSW Tonnages - ICI**

	2008 ICI Mean %	2008 ICI MSW +/-	2014 ICI MSW Mean %	2014 ICI MSW +/-	Difference		2008 ICI MSW Mean %	2008 ICI MSW +/-	2014 ICI MSW Mean %	2014 ICI MSW +/-	Difference
<b>Paper</b>	<b>28.2%</b>	<b>2.93%</b>	<b>24.4%</b>	<b>2.29%</b>	<b>-3.85%</b>	<b>Inorganics</b>	<b>2.2%</b>	<b>1.33%</b>	<b>3.4%</b>	<b>1.25%</b>	<b>1.22%</b>
Newsprint	2.0%	0.33%	1.6%	0.61%	-0.38%	Televisions	0.0%	0.01%	0.1%	0.13%	0.10%
High Grade Office Paper	1.5%	0.41%	1.5%	0.30%	-0.06%	Computer Monitors	0.2%	0.17%	0.1%	0.12%	-0.15%
Magazines/Catalogs	1.7%	0.27%	0.7%	0.18%	-1.01%	Computer Equipment/Peripherals	0.4%	0.11%	0.1%	0.17%	-0.22%
Uncoated OCC/Kraft	16.1%	0.72%	12.5%	1.78%	-3.60%	Electronic Equipment	0.7%	0.34%	0.4%	0.19%	-0.35%
Boxboard	1.3%	0.28%	1.8%	0.24%	0.55%	White Goods - Refrigerated	0.0%	0.00%	0.1%	0.17%	0.10%
Mixed Paper - Recyclable	2.4%	0.17%	2.1%	0.40%	-0.26%	White Goods - Not refrigerated	0.0%	0.05%	0.3%	0.37%	0.26%
Compostable Paper	2.5%	0.31%	3.6%	0.55%	1.06%	Lead-acid Batteries	0.0%	0.00%	0.0%	0.00%	0.00%
Other Paper	0.8%	0.20%	0.6%	0.14%	-0.15%	Other Household Batteries	0.0%	0.01%	0.1%	0.11%	0.09%
						Tires	0.3%	0.07%	0.2%	0.20%	-0.11%
<b>Beverage Containers</b>	<b>0.3%</b>	<b>0.15%</b>	<b>0.4%</b>	<b>0.18%</b>	<b>0.08%</b>	<b>Household Bulky Items</b>	<b>0.6%</b>	<b>0.32%</b>	<b>2.0%</b>	<b>1.13%</b>	<b>1.46%</b>
Milk & Juice Cartons/Boxes - Coated	0.3%	0.06%	0.4%	0.18%	0.08%	Fluorescent Lights/Ballasts	0.0%	0.00%	0.0%	0.02%	0.02%
<b>Plastic</b>	<b>13.7%</b>	<b>2.11%</b>	<b>16.7%</b>	<b>1.82%</b>	<b>3.05%</b>	<b>Textiles</b>	<b>6.0%</b>	<b>1.40%</b>	<b>3.8%</b>	<b>1.03%</b>	<b>-2.24%</b>
#1 PET Bottles/Jars	0.7%	0.06%	1.1%	0.19%	0.35%	Carpet	1.1%	0.31%	1.2%	0.79%	0.10%
#1 Other PET Containers	0.1%	0.02%	0.2%	0.05%	0.13%	Carpet Padding	0.2%	0.19%	0.3%	0.22%	0.03%
#2 HDPE Bottles/Jars - Clear	0.3%	0.05%	0.4%	0.11%	0.07%	Clothing	1.6%	0.17%	1.3%	0.38%	-0.32%
#2 HDPE Bottles/Jars - Color	0.6%	0.06%	0.3%	0.05%	-0.35%	Other Textiles	3.1%	0.26%	1.1%	0.30%	-2.04%
#2 Other HDPE Containers	0.1%	0.06%	0.0%	0.01%	-0.08%						
#6 Exp. Polystyrene Packaging	0.9%	0.09%	1.0%	0.40%	0.12%	<b>Household Hazardous Waste</b>	<b>0.5%</b>	<b>0.58%</b>	<b>0.6%</b>	<b>0.30%</b>	<b>0.14%</b>
#3-#7 Other - All	0.6%	0.09%	0.5%	0.10%	-0.06%	Latex Paint	0.0%	0.02%	0.0%	0.04%	0.02%
Other Rigid Plastic Products	3.4%	0.33%	2.5%	0.75%	-0.90%	Oil Paint	0.0%	0.00%	0.0%	0.02%	0.02%
Grocery & Merchandise Bags	0.3%	0.04%	0.5%	0.09%	0.15%	Plant/Organism/Pest Control/Growth	0.0%	0.00%	0.0%	0.00%	0.00%
Trash Bags	1.2%	0.14%	2.1%	0.30%	0.87%	Used Oil/Filters	0.1%	0.05%	0.2%	0.15%	0.05%
Commercial & Industrial Film	2.7%	0.64%	3.0%	1.28%	0.38%	Other Automotive Fluids	0.0%	0.01%	0.0%	0.00%	0.00%
Other Film	1.2%	0.30%	3.4%	0.68%	2.17%	Mercury-Containing Items	0.0%	0.00%	0.0%	0.00%	0.00%
Other Plastic	1.6%	0.34%	1.8%	0.33%	0.20%	Sharps & Infectious Waste	0.0%	0.04%	0.0%	0.04%	0.00%
						Ash, Sludge, & Industrial Wastes	0.1%	0.14%	0.1%	0.17%	0.02%
<b>Glass</b>	<b>2.2%</b>	<b>0.46%</b>	<b>3.0%</b>	<b>1.10%</b>	<b>0.85%</b>	<b>Sewage Solids</b>	<b>0.0%</b>	<b>0.00%</b>	<b>0.0%</b>	<b>0.00%</b>	<b>0.00%</b>
Recyclable Glass Bottles & Jars	2.0%	0.19%	2.0%	0.38%	-0.07%	<b>Other HHW</b>	<b>0.2%</b>	<b>0.17%</b>	<b>0.2%</b>	<b>0.21%</b>	<b>0.03%</b>
Flat Glass	0.1%	0.08%	0.6%	0.91%	0.50%						
Other Glass	0.0%	0.01%	0.5%	0.55%	0.43%	<b>C&amp;D</b>	<b>23.1%</b>	<b>5.50%</b>	<b>19.4%</b>	<b>4.12%</b>	<b>-3.67%</b>
						Clean Dimensional Lumber	3.5%	1.27%	1.4%	0.66%	-2.06%
<b>Metal</b>	<b>5.0%</b>	<b>1.42%</b>	<b>4.1%</b>	<b>0.90%</b>	<b>-0.99%</b>	Clean Engineered Wood	3.0%	1.94%	1.7%	0.55%	-1.29%
Aluminum Beverage Containers	0.3%	0.03%	0.4%	0.07%	0.08%	Wood Pallets	1.7%	1.60%	4.0%	1.78%	2.30%
Other Aluminum	0.5%	0.13%	0.2%	0.05%	-0.27%	Painted Wood	1.8%	0.88%	2.9%	1.33%	1.13%
HVAC Ducting	0.0%	0.01%	0.0%	0.01%	0.00%	Treated Wood	2.9%	2.31%	0.1%	0.11%	-2.84%
Ferrous Containers (Tin Cans)	0.7%	0.12%	0.9%	0.34%	0.16%	Concrete	2.7%	1.30%	1.3%	1.62%	-1.36%
Other Ferrous	2.2%	0.44%	1.4%	0.52%	-0.83%	Reinforced Concrete	0.1%	0.00%	0.0%	0.00%	-0.07%
Other Non-Ferrous	0.2%	0.06%	0.5%	0.64%	0.36%	Asphalt Paving	0.0%	0.00%	0.1%	0.15%	0.09%
Other Metal	1.1%	0.33%	0.6%	0.19%	-0.50%	Rock & Other Aggregates	0.3%	0.06%	0.4%	0.29%	0.03%
						Bricks	0.6%	0.79%	0.1%	0.10%	-0.44%
<b>Organics</b>	<b>18.8%</b>	<b>3.43%</b>	<b>24.2%</b>	<b>3.18%</b>	<b>5.41%</b>	Gypsum Board	3.5%	2.46%	0.8%	0.48%	-2.70%
Yard Waste - Compostable	0.8%	0.24%	1.2%	0.63%	0.47%	Composition Shingles	1.3%	2.83%	1.4%	1.28%	0.08%
Yard Waste - Woody	1.8%	0.25%	0.5%	0.31%	-1.28%	Other Roofing	0.0%	0.00%	0.5%	0.79%	0.48%
Food Scraps	12.2%	1.19%	16.4%	2.34%	4.21%	Plastic C&D Materials	0.2%	0.42%	1.0%	0.49%	0.84%
Bottom Fines & Dirt	0.8%	0.14%	3.3%	2.14%	2.49%	Ceramics/Porcelain	0.3%	0.18%	0.5%	0.33%	0.29%
Diapers	0.9%	0.21%	1.2%	0.35%	0.32%	Other C&D	1.3%	1.56%	3.1%	1.23%	1.83%
Other Organic	2.4%	0.73%	1.5%	0.93%	-0.81%						
						<b>Total</b>		<b>100%</b>		<b>100%</b>	

## 5.2.4 Landfilled Urban MSW Composition

Figure 5-7 compares the waste composition profiles of Urban MSW for 2008 and 2014. When comparing Urban waste, there was less Paper, Metal, Textiles, and C&D landfilled in 2014 than in 2008, while there was more Plastic, Organics, and Inorganics landfilled in 2014.

**Figure 5-7. Comparison of 2008 and 2014 Urban Landfilled MSW**

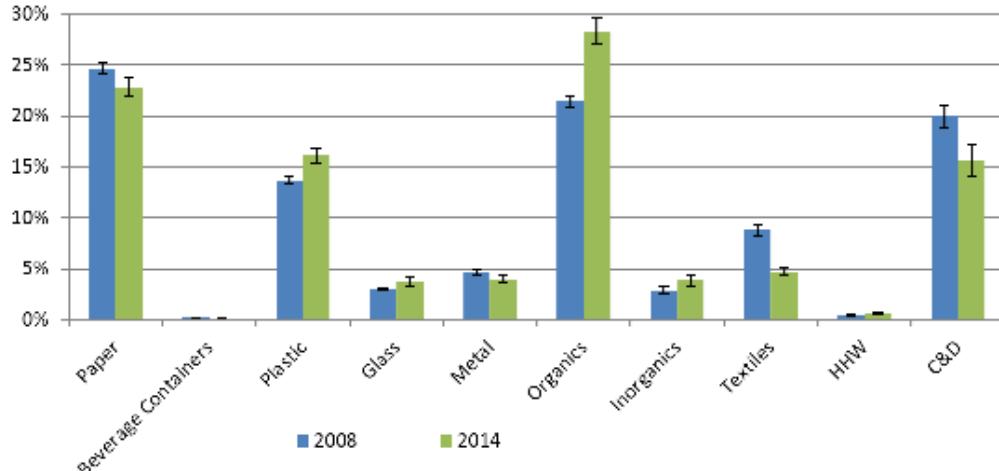


Table 5-4 provides the waste composition profiles of the Urban landfilled MSW for 2008 and 2014.

## 5.2.5 Landfilled Rural MSW Composition

Figure 5-8 compares the waste composition profiles of Rural MSW for 2008 and 2014. When comparing Rural waste, there was less Paper and Metal landfilled in 2014 than in 2008, while there was more Beverage Containers, Inorganics, and Textiles landfilled in 2014 than in 2008.

**Figure 5-8. Comparison of 2008 and 2014 Rural Landfilled MSW**

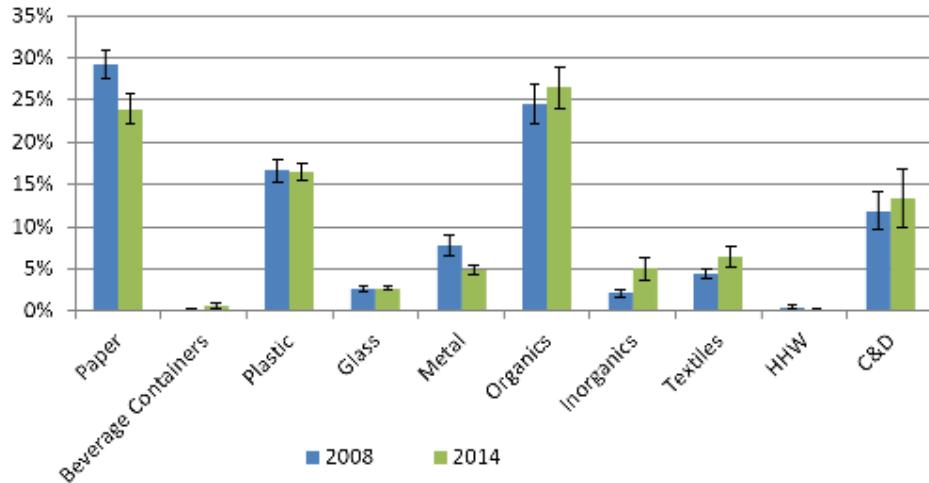


Table 5-5 provides the waste composition profiles of the Rural landfilled MSW for 2008 and 2014.

**Table 5-4. Comparison of 2014 and 2008 Landfilled MSW Tonnages - Urban**

	2008 Urban Mean	2008 Urban +/-	2014 Urban Mean	2014 Urban +/-	Urban Difference		2008 Urban Mean	2008 Urban +/-	2014 Urban Mean	2014 Urban +/-	Urban Difference
<b>Paper</b>	<b>24.7%</b>	<b>0.49%</b>	<b>22.8%</b>	<b>0.91%</b>	<b>-1.87%</b>	<i>Inorganics</i>	<b>2.9%</b>	<b>0.31%</b>	<b>3.9%</b>	<b>0.53%</b>	<b>0.93%</b>
Newsprint	2.8%	0.11%	1.8%	0.20%	-0.98%	Televisions	0.0%	0.00%	0.1%	0.06%	0.06%
High Grade Office Paper	1.0%	0.14%	1.3%	0.13%	0.26%	Computer Monitors	0.2%	0.06%	0.1%	0.06%	-0.07%
Magazines/Catalogs	1.7%	0.13%	1.0%	0.09%	-0.67%	Computer Equipment/Peripherals	0.3%	0.05%	0.2%	0.08%	-0.07%
Uncoated OCC/Kraft	10.8%	0.23%	9.5%	0.74%	-1.29%	Electronic Equipment	1.0%	0.14%	0.4%	0.08%	-0.53%
Boxboard	1.4%	0.06%	2.2%	0.11%	0.78%	White Goods - Refrigerated	0.0%	0.00%	0.0%	0.00%	0.00%
Mixed Paper - Recyclable	2.9%	0.09%	2.5%	0.14%	-0.38%	White Goods - Not refrigerated	0.0%	0.02%	0.4%	0.17%	0.35%
Compostable Paper	3.1%	0.10%	3.9%	0.24%	0.72%	Lead-acid Batteries	0.0%	0.00%	0.0%	0.00%	0.00%
Other Paper	0.9%	0.07%	0.6%	0.06%	-0.31%	Other Household Batteries	0.0%	0.00%	0.3%	0.11%	0.22%
<b>Beverage Containers</b>	<b>0.2%</b>	<b>0.01%</b>	<b>0.2%</b>	<b>0.02%</b>	<b>-0.03%</b>	Tires	0.2%	0.03%	0.1%	0.06%	-0.07%
Milk & Juice Cartons/Boxes - Coated	0.2%	0.01%	0.2%	0.02%	-0.03%	Household Bulky Items	1.3%	0.28%	2.3%	0.45%	1.01%
<b>Plastic</b>	<b>13.7%</b>	<b>0.36%</b>	<b>16.1%</b>	<b>0.77%</b>	<b>2.45%</b>	<i>Textiles</i>	<b>8.8%</b>	<b>0.50%</b>	<b>4.7%</b>	<b>0.37%</b>	<b>-4.11%</b>
#1 PET Bottles/Jars	1.0%	0.04%	1.1%	0.08%	0.05%	Carpet	2.1%	0.34%	1.2%	0.23%	-0.91%
#1 Other PET Containers	0.1%	0.01%	0.3%	0.02%	0.18%	Carpet Padding	0.3%	0.08%	0.4%	0.11%	0.08%
#2 HDPE Bottles/Jars - Clear	0.4%	0.02%	0.3%	0.03%	-0.08%	Clothing	2.5%	0.14%	1.7%	0.13%	-0.86%
#2 HDPE Bottles/Jars - Color	0.6%	0.03%	0.4%	0.02%	-0.27%	Other Textiles	3.9%	0.30%	1.5%	0.14%	-2.42%
#2 Other HDPE Containers	0.1%	0.02%	0.0%	0.01%	-0.06%	<i>Household Hazardous Waste</i>	<b>0.5%</b>	<b>0.08%</b>	<b>0.7%</b>	<b>0.13%</b>	<b>0.17%</b>
#6 Exp. Polystyrene Packaging	0.8%	0.03%	0.9%	0.17%	0.13%	Latex Paint	0.1%	0.02%	0.1%	0.03%	0.00%
#3-#7 Other - All	0.8%	0.03%	0.7%	0.04%	-0.10%	Oil Paint	0.0%	0.01%	0.0%	0.02%	0.02%
Other Rigid Plastic Products	4.0%	0.28%	2.6%	0.32%	-1.39%	Plant/Organism/Pest Control/Growth	0.0%	0.00%	0.0%	0.00%	0.00%
Grocery & Merchandise Bags	0.6%	0.02%	0.8%	0.04%	0.20%	Used Oil/Filters	0.1%	0.01%	0.2%	0.06%	0.08%
Trash Bags	1.1%	0.05%	1.7%	0.12%	0.64%	Other Automotive Fluids	0.0%	0.00%	0.0%	0.00%	-0.01%
Commercial & Industrial Film	1.4%	0.19%	2.2%	0.55%	0.76%	Mercury-Containing Items	0.0%	0.00%	0.0%	0.00%	0.00%
Other Film	1.1%	0.04%	3.1%	0.28%	2.04%	Sharps & Infectious Waste	0.0%	0.01%	0.0%	0.02%	0.01%
Other Plastic	1.7%	0.15%	2.0%	0.15%	0.35%	Ash, Sludge, & Industrial Wastes	0.1%	0.05%	0.1%	0.08%	0.06%
<b>Glass</b>	<b>3.1%</b>	<b>0.10%</b>	<b>3.7%</b>	<b>0.49%</b>	<b>0.62%</b>	Sewage Solids	0.0%	0.00%	0.0%	0.01%	0.01%
Recyclable Glass Bottles & Jars	2.8%	0.08%	2.7%	0.18%	-0.12%	Other HHW	0.2%	0.06%	0.2%	0.09%	0.00%
Flat Glass	0.2%	0.06%	0.7%	0.41%	0.46%	<i>C&amp;D</i>	<b>20.0%</b>	<b>1.09%</b>	<b>15.7%</b>	<b>1.60%</b>	<b>-4.32%</b>
Other Glass	0.1%	0.01%	0.3%	0.24%	0.28%	Clean Dimensional Lumber	2.2%	0.16%	1.3%	0.29%	-0.88%
<b>Metal</b>	<b>4.7%</b>	<b>0.22%</b>	<b>4.0%</b>	<b>0.38%</b>	<b>-0.67%</b>	Clean Engineered Wood	2.4%	0.28%	1.4%	0.20%	-0.93%
Aluminum Beverage Containers	0.4%	0.02%	0.5%	0.03%	0.05%	Wood Pallets	1.2%	0.23%	2.0%	0.53%	0.81%
Other Aluminum	0.6%	0.07%	0.3%	0.02%	-0.31%	Painted Wood	1.8%	0.18%	3.0%	0.53%	1.17%
HVAC Ducting	0.0%	0.02%	0.0%	0.00%	-0.04%	Treated Wood	3.8%	0.42%	0.1%	0.05%	-3.72%
Ferrous Containers (Tin Cans)	1.0%	0.05%	0.7%	0.07%	-0.29%	Concrete	1.6%	0.15%	1.2%	0.71%	-0.40%
Other Ferrous	1.7%	0.19%	1.4%	0.22%	-0.29%	Reinforced Concrete	0.0%	0.00%	0.0%	0.00%	-0.04%
Other Non-Ferrous	0.3%	0.05%	0.5%	0.28%	0.20%	Asphalt Paving	0.0%	0.00%	0.1%	0.06%	0.07%
Other Metal	0.7%	0.08%	0.7%	0.09%	0.01%	Rock & Other Aggregates	0.2%	0.02%	0.6%	0.16%	0.35%
<b>Organics</b>	<b>21.5%</b>	<b>0.54%</b>	<b>28.3%</b>	<b>1.30%</b>	<b>6.82%</b>	Bricks	0.5%	0.12%	0.1%	0.04%	-0.38%
Yard Waste - Compostable	1.6%	0.11%	3.1%	0.37%	1.53%	Gypsum Board	2.3%	0.30%	0.5%	0.15%	-1.83%
Yard Waste - Woody	1.6%	0.16%	0.5%	0.14%	-1.06%	Composition Shingles	1.2%	0.39%	1.1%	0.49%	-0.03%
Food Scraps	13.1%	0.40%	17.7%	0.89%	4.57%	Other Roofing	0.1%	0.06%	0.4%	0.34%	0.21%
Bottom Fines & Dirt	0.8%	0.06%	2.8%	0.91%	1.98%	Plastic C&D Materials	0.2%	0.06%	1.0%	0.22%	0.79%
Diapers	2.0%	0.19%	2.0%	0.16%	0.00%	Ceramics/Porcelain	1.4%	0.44%	0.6%	0.15%	-0.77%
Other Organic	2.3%	0.16%	2.1%	0.24%	-0.21%	Other C&D	1.0%	0.18%	2.3%	0.52%	1.26%
						<b>Total</b>			<b>100.0%</b>		<b>100.0%</b>

**Table 5-5. Comparison of 2014 and 2008 Landfilled MSW Tonnages - Rural**

	2008						2014						2008					
	Rural		Rural		Rural		Rural		Rural		Rural		Rural		Rural		Rural	
	Mean	+/-	Mean	+/-	Mean	+/-	Mean	+/-	Mean	+/-	Mean	+/-	Mean	+/-	Mean	+/-	Mean	+/-
<b>Paper</b>	<b>29.2%</b>	<b>1.65%</b>	<b>23.9%</b>	<b>1.79%</b>	<b>-5.34%</b>		<b>Inorganics</b>						<b>2.1%</b>	<b>0.50%</b>	<b>5.0%</b>	<b>1.31%</b>	<b>2.93%</b>	
Newsprint	4.1%	0.65%	2.4%	0.71%	-1.71%		Televisions						0.0%	0.00%	0.5%	0.35%	0.50%	
High Grade Office Paper	1.1%	0.25%	1.7%	0.35%	0.60%		Computer Monitors						0.4%	0.26%	0.0%	0.00%	-0.43%	
Magazines/Catalogs	2.0%	0.53%	1.3%	0.13%	-0.70%		Computer Equipment/Peripherals						0.1%	0.04%	0.0%	0.01%	-0.04%	
Uncoated OCC/Kraft	10.1%	1.17%	7.4%	0.97%	-2.71%		Electronic Equipment						1.1%	0.34%	0.7%	0.23%	-0.40%	
Boxboard	3.3%	0.55%	2.8%	0.18%	-0.54%		White Goods - Refrigerated						0.0%	0.00%	0.3%	0.27%	0.28%	
Mixed Paper - Recyclable	3.3%	0.25%	4.0%	0.51%	0.65%		White Goods - Not refrigerated						0.0%	0.00%	0.2%	0.10%	0.23%	
Compostable Paper	4.2%	0.57%	3.7%	0.26%	-0.43%		Lead-acid Batteries						0.0%	0.00%	0.0%	0.00%	0.00%	
Other Paper	1.2%	0.23%	0.7%	0.15%	-0.49%		Other Household Batteries						0.1%	0.02%	0.1%	0.02%	0.03%	
							Tires						0.1%	0.12%	0.3%	0.28%	0.14%	
<b>Beverage Containers</b>	<b>0.2%</b>	<b>0.11%</b>	<b>0.6%</b>	<b>0.26%</b>	<b>0.39%</b>		Household Bulky Items						0.3%	0.12%	2.9%	1.22%	2.61%	
Milk & Juice Cartons/Boxes - Coated	0.2%	0.11%	0.6%	0.26%	0.39%		Fluorescent Lights/Ballasts						0.0%	0.00%	0.0%	0.00%	0.01%	
<b>Plastic</b>	<b>16.6%</b>	<b>1.32%</b>	<b>16.5%</b>	<b>0.95%</b>	<b>-0.17%</b>		<b>Textiles</b>						<b>4.4%</b>	<b>0.59%</b>	<b>6.4%</b>	<b>1.19%</b>	<b>1.98%</b>	
#1 PET Bottles/Jars	1.2%	0.11%	1.3%	0.12%	0.14%		Carpet						1.0%	0.35%	1.4%	1.02%	0.38%	
#1 Other PET Containers	0.1%	0.03%	0.5%	0.05%	0.42%		Carpet Padding						0.2%	0.07%	0.2%	0.13%	0.04%	
#2 HDPE Bottles/Jars - Clear	0.5%	0.06%	0.6%	0.15%	0.16%		Clothing						1.6%	0.26%	2.7%	0.56%	1.10%	
#2 HDPE Bottles/Jars - Color	0.6%	0.08%	0.5%	0.04%	-0.12%		Other Textiles						1.6%	0.25%	2.1%	0.26%	0.45%	
#2 Other HDPE Containers	0.1%	0.05%	0.0%	0.01%	-0.09%													
#6 Exp. Polystyrene Packaging	1.0%	0.13%	1.2%	0.11%	0.25%		<b>Household Hazardous Waste</b>						<b>0.5%</b>	<b>0.16%</b>	<b>0.2%</b>	<b>0.12%</b>	<b>-0.24%</b>	
#3-#7 Other - All	1.1%	0.18%	0.8%	0.07%	-0.31%		Latex Paint						0.1%	0.05%	0.1%	0.02%	-0.01%	
Other Rigid Plastic Products	2.7%	0.36%	2.8%	0.49%	0.04%		Oil Paint						0.0%	0.00%	0.0%	0.00%	0.00%	
Grocery & Merchandise Bags	0.5%	0.05%	0.6%	0.05%	0.07%		Plant/Organism/Pest Control/Growth						0.0%	0.00%	0.0%	0.00%	0.00%	
Trash Bags	1.6%	0.16%	2.3%	0.22%	0.69%		Used Oil/Filters						0.2%	0.10%	0.0%	0.03%	-0.15%	
Commercial & Industrial Film	2.4%	0.71%	0.7%	0.28%	-1.67%		Other Automotive Fluids						0.0%	0.00%	0.0%	0.00%	0.00%	
Other Film	2.6%	0.58%	3.6%	0.40%	1.00%		Mercury-Containing Items						0.0%	0.00%	0.0%	0.00%	0.00%	
Other Plastic	2.3%	0.79%	1.6%	0.14%	-0.73%		Sharps & Infectious Waste						0.0%	0.00%	0.0%	0.00%	0.02%	
							Ash, Sludge, & Industrial Wastes						0.0%	0.00%	0.0%	0.00%	0.00%	
<b>Glass</b>	<b>2.6%</b>	<b>0.30%</b>	<b>2.7%</b>	<b>0.27%</b>	<b>0.11%</b>		Sewage Solids						0.0%	0.00%	0.0%	0.00%	0.00%	
Recyclable Glass Bottles & Jars	2.4%	0.27%	2.4%	0.24%	0.06%		Other HHW						0.2%	0.09%	0.1%	0.12%	-0.09%	
Flat Glass	0.2%	0.14%	0.1%	0.03%	-0.13%													
Other Glass	0.0%	0.01%	0.2%	0.11%	0.17%		<b>C&amp;D</b>						<b>11.9%</b>	<b>2.21%</b>	<b>13.4%</b>	<b>3.48%</b>	<b>1.51%</b>	
<b>Metal</b>	<b>7.8%</b>	<b>1.20%</b>	<b>4.8%</b>	<b>0.55%</b>	<b>-3.05%</b>		Clean Dimensional Lumber						1.4%	0.44%	0.6%	0.19%	-0.77%	
Aluminum Beverage Containers	0.5%	0.05%	0.7%	0.07%	0.20%		Clean Engineered Wood						1.2%	0.37%	1.5%	0.54%	0.35%	
Other Aluminum	0.3%	0.05%	0.3%	0.03%	-0.01%		Wood Pallets						0.1%	0.07%	3.8%	2.02%	3.76%	
HVAC Ducting	0.0%	0.00%	0.0%	0.00%	0.00%		Painted Wood						1.4%	0.36%	2.7%	1.29%	1.30%	
Ferrous Containers (Tin Cans)	1.3%	0.16%	1.9%	0.47%	0.63%		Treated Wood						2.1%	0.77%	0.0%	0.00%	-2.09%	
Other Ferrous	4.0%	0.99%	1.0%	0.25%	-3.01%		Concrete						0.7%	0.52%	0.0%	0.01%	-0.69%	
Other Non-Ferrous	0.2%	0.11%	0.2%	0.04%	-0.03%		Reinforced Concrete						0.0%	0.00%	0.0%	0.00%	0.00%	
Other Metal	1.7%	0.67%	0.8%	0.15%	-0.84%		Asphalt Paving						0.0%	0.00%	0.0%	0.00%	0.00%	
							Rock & Other Aggregates						0.2%	0.14%	0.2%	0.13%	-0.06%	
<b>Organics</b>	<b>24.6%</b>	<b>2.31%</b>	<b>26.4%</b>	<b>2.37%</b>	<b>1.87%</b>		Bricks						0.0%	0.01%	0.0%	0.00%	-0.02%	
Yard Waste - Compostable	0.8%	0.23%	1.1%	0.25%	0.25%		Gypsum Board						2.7%	1.41%	1.1%	0.63%	-1.67%	
Yard Waste - Woody	0.3%	0.12%	0.0%	0.00%	-0.30%		Composition Shingles						0.4%	0.22%	1.9%	1.73%	1.53%	
Food Scraps	14.3%	1.97%	19.2%	2.10%	4.95%		Other Roofing						0.0%	0.00%	0.0%	0.00%	0.00%	
Bottom Fines & Dirt	1.1%	0.23%	1.3%	0.61%	0.16%		Plastic C&D Materials						0.0%	0.02%	0.7%	0.20%	0.68%	
Diapers	2.7%	0.45%	2.0%	0.30%	-0.69%		Ceramics/Porcelain						0.4%	0.19%	0.1%	0.02%	-0.26%	
Other Organic	5.3%	1.41%	2.8%	1.27%	-2.50%		Other C&D						1.3%	1.10%	0.8%	0.32%	-0.55%	
							Total						<b>100.0%</b>		<b>100.0%</b>			

## 5.2.6 Landfilled C&D Composition

Table 5-9 lists the top ten material categories that were found in the 2014 landfilled C&D waste sector. These ten categories account for 69% and approximately 80% of the C&D waste streams in 2008 and 2014, respectively. The waste composition percentages for Clean Engineered Wood, Gypsum Board, Concrete, and Rock & Other Aggregates are not statistically different. There was more Clean Dimensional Lumber, Bricks, Painted Wood, and Asphalt Paving landfilled in 2014 than in 2008; there was less Composition Shingles landfilled in 2014 than in 2008. It should be noted that the C&D waste stream characterization has inherent greater variability than Residential or ICI waste streams and thus greater variability in the study results is expected, as noted by the larger error bars.

**Figure 5-9. Comparison of 2008 and 2014 C&D Landfilled Waste**

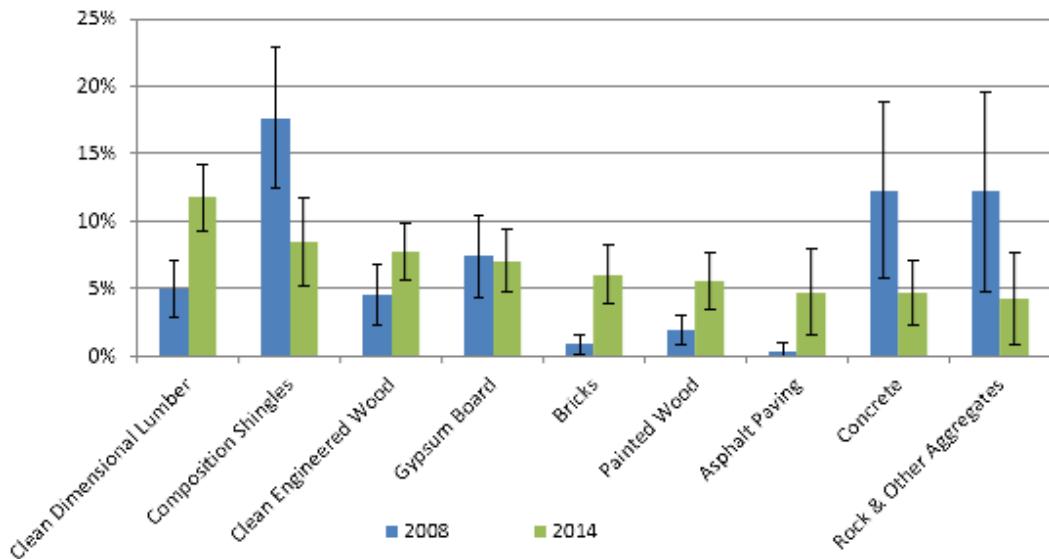


Table 5-6 provides the waste composition profiles of the C&D landfilled waste for 2008 and 2014.

## 5.3 MSW Generation

The statewide and regional MSW generation estimates are presented in Section 3. The tables and figures that follow summarize the waste generation, by material class, for Illinois statewide MSW, residential, ICI urban, and rural waste sectors and subsectors. MSW generated by IEPA Region summaries are provided as pounds per capita per year, pounds per person per day, and total tonnage. Total tonnage estimates can be useful information and planning tools, however, total MSW pounds per person per day are better estimates for comparing generation changes between 2008 and 2014.

**Table 5-6. Comparison of 2014 and 2008 Landfilled MSW Tonnages - Construction Demolition Debris**

	2008 C&D Mean %	2008 C&D +/-	2014 C&D Mean %	2014 C&D +/-	Difference		2008 C&D Mean %	2008 C&D +/-	2014 C&D Mean %	2014 C&D +/-	Difference
<b>Paper</b>	<b>1.4%</b>	<b>0.77%</b>	<b>1.4%</b>	<b>0.61%</b>	<b>0.05%</b>	<i>Inorganics</i>	<b>0.2%</b>	<b>0.22%</b>	<b>0.1%</b>	<b>0.08%</b>	<b>-0.16%</b>
Newsprint	0.0%	0.00%	0.0%	0.02%	0.01%	Televisions	0.0%	0.00%	0.0%	0.00%	0.00%
High Grade Office Paper	0.0%	0.00%	0.0%	0.00%	0.00%	Computer Monitors	0.0%	0.00%	0.0%	0.00%	0.00%
Magazines/Catalogs	0.0%	0.00%	0.0%	0.00%	0.00%	Computer Equipment/Peripherals	0.0%	0.00%	0.0%	0.00%	0.00%
Uncoated OCC/Kraft	1.3%	0.76%	1.4%	0.60%	0.04%	Electronic Equipment	0.0%	0.00%	0.0%	0.00%	0.00%
Boxboard	0.0%	0.01%	0.0%	0.03%	0.03%	White Goods - Refrigerated	0.0%	0.00%	0.0%	0.00%	0.00%
Mixed Paper - Recyclable	0.0%	0.00%	0.0%	0.00%	0.00%	White Goods - Not refrigerated	0.0%	0.00%	0.0%	0.00%	0.00%
Compostable Paper	0.0%	0.00%	0.0%	0.02%	0.01%	Lead-acid Batteries	0.0%	0.00%	0.0%	0.00%	0.00%
Other Paper	0.1%	0.08%	0.0%	0.00%	-0.06%	Other Household Batteries	0.0%	0.00%	0.0%	0.00%	0.00%
						Tires	0.0%	0.02%	0.0%	0.00%	-0.02%
<b>Beverage Containers</b>	<b>0.0%</b>	<b>0.00%</b>	<b>0.0%</b>	<b>0.00%</b>	<b>0.00%</b>	Household Bulky Items	<b>0.2%</b>	<b>0.22%</b>	<b>0.1%</b>	<b>0.08%</b>	<b>-0.15%</b>
Milk & Juice Cartons/Boxes - Coated	0.0%	0.00%	0.0%	0.00%	0.00%	Fluorescent Lights/Ballasts	0.0%	0.00%	0.0%	0.00%	0.00%
<b>Plastic</b>	<b>0.8%</b>	<b>0.88%</b>	<b>1.2%</b>	<b>0.48%</b>	<b>0.34%</b>	<i>Textiles</i>	<b>0.7%</b>	<b>0.50%</b>	<b>0.9%</b>	<b>0.67%</b>	<b>0.19%</b>
#1 PET Bottles/Jars	0.0%	0.00%	0.0%	0.01%	0.01%	Carpet	0.6%	0.38%	0.5%	0.45%	-0.05%
#1 Other PET Containers	0.0%	0.00%	0.0%	0.01%	0.00%	Carpet Padding	0.1%	0.19%	0.3%	0.23%	0.15%
#2 HDPE Bottles/Jars - Clear	0.0%	0.00%	0.0%	0.00%	0.00%	Clothing	0.0%	0.00%	0.0%	0.01%	0.01%
#2 HDPE Bottles/Jars - Color	0.0%	0.00%	0.0%	0.02%	0.01%	Other Textiles	0.0%	0.00%	0.1%	0.04%	0.09%
#2 Other HDPE Containers	0.0%	0.00%	0.0%	0.08%	0.05%						
#6 Exp. Polystyrene Packaging	0.3%	0.50%	0.1%	0.07%	-0.21%	<i>Household Hazardous Waste</i>	<b>0.0%</b>	<b>0.00%</b>	<b>0.0%</b>	<b>0.00%</b>	<b>0.00%</b>
#3/#7 Other - All	0.0%	0.01%	0.0%	0.00%	0.00%	Latex Paint	0.0%	0.00%	0.0%	0.00%	0.00%
Other Rigid Plastic Products	0.0%	0.04%	0.3%	0.21%	0.25%	Oil Paint	0.0%	0.00%	0.0%	0.00%	0.00%
Grocery & Merchandise Bags	0.0%	0.00%	0.0%	0.00%	0.00%	Plant/Organism/Pest Control/Growth	0.0%	0.00%	0.0%	0.00%	0.00%
Trash Bags	0.0%	0.01%	0.0%	0.01%	0.03%	Used Oil/Filters	0.0%	0.00%	0.0%	0.00%	0.00%
Commercial & Industrial Film	0.1%	0.07%	0.3%	0.11%	0.23%	Other Automotive Fluids	0.0%	0.00%	0.0%	0.00%	0.00%
Other Film	0.0%	0.00%	0.1%	0.03%	0.06%	Mercury-Containing Items	0.0%	0.00%	0.0%	0.00%	0.00%
Other Plastic	0.4%	0.58%	0.3%	0.15%	-0.10%	Sharps & Infectious Waste	0.0%	0.00%	0.0%	0.00%	0.00%
						Ash, Sludge, & Industrial Wastes	0.0%	0.00%	0.0%	0.00%	0.00%
<b>Glass</b>	<b>0.1%</b>	<b>0.15%</b>	<b>0.7%</b>	<b>0.64%</b>	<b>0.58%</b>	Sewage Solids	0.0%	0.00%	0.0%	0.00%	0.00%
Recyclable Glass Bottles & Jars	0.0%	0.00%	0.0%	0.02%	0.01%	Other HHW	0.0%	0.00%	0.0%	0.00%	0.00%
Flat Glass	0.1%	0.15%	0.7%	0.64%	0.56%						
Other Glass	0.0%	0.00%	0.0%	0.01%	0.00%	<i>C&amp;D</i>	<b>86.0%</b>	<b>11.62%</b>	<b>71.4%</b>	<b>7.82%</b>	<b>-14.59%</b>
						Clean Dimensional Lumber	5.0%	2.10%	11.7%	2.43%	6.77%
<b>Metal</b>	<b>0.7%</b>	<b>0.28%</b>	<b>1.4%</b>	<b>0.53%</b>	<b>0.77%</b>	Clean Engineered Wood	4.5%	2.26%	7.7%	2.09%	3.21%
Aluminum Beverage Containers	0.0%	0.00%	0.0%	0.01%	0.01%	Wood Pallets	1.0%	0.50%	2.5%	1.04%	1.43%
Other Aluminum	0.2%	0.12%	0.3%	0.14%	0.04%	Painted Wood	1.9%	1.06%	5.5%	2.11%	3.60%
HVAC Ducting	0.0%	0.00%	0.2%	0.11%	0.16%	Treated Wood	11.8%	6.18%	0.8%	0.65%	-11.02%
Ferrous Containers (Tin Cans)	0.0%	0.01%	0.0%	0.01%	0.00%	Concrete	12.3%	6.55%	4.7%	2.39%	-7.61%
Other Ferrous	0.4%	0.26%	0.4%	0.20%	0.03%	Reinforced Concrete	2.1%	3.41%	0.4%	0.59%	-1.71%
Other Non-Ferrous	0.0%	0.01%	0.4%	0.14%	0.42%	Asphalt Paving	0.4%	0.63%	4.7%	3.19%	4.31%
Other Metal	0.0%	0.02%	0.1%	0.20%	0.11%	Rock & Other Aggregates	12.2%	7.42%	4.2%	3.41%	-8.02%
						Bricks	0.8%	0.76%	6.0%	2.17%	5.20%
<b>Organics</b>	<b>8.4%</b>	<b>6.81%</b>	<b>22.8%</b>	<b>9.10%</b>	<b>14.47%</b>	Gypsum Board	7.4%	3.07%	7.0%	2.35%	-0.36%
Yard Waste - Compostable	0.3%	0.40%	0.0%	0.02%	-0.23%	Composition Shingles	17.7%	5.20%	8.5%	3.28%	-9.16%
Yard Waste - Woody	0.1%	0.10%	3.2%	3.73%	3.11%	Other Roofing	3.9%	2.88%	0.4%	0.28%	-3.46%
Food Scraps	0.3%	0.43%	0.0%	0.00%	-0.26%	Plastic C&D Materials	0.0%	0.03%	2.8%	0.88%	2.75%
Bottom Fines & Dirt	6.8%	6.70%	19.6%	8.25%	12.81%	Ceramics/Porcelain	0.3%	0.44%	1.8%	1.38%	1.51%
Diapers	0.0%	0.00%	0.0%	0.00%	0.00%	Other C&D	4.6%	1.86%	2.6%	1.94%	-2.03%
Other Organic	1.0%	1.21%	0.0%	0.01%	-0.96%						
						<i>Total</i>		<b>100%</b>		<b>100%</b>	

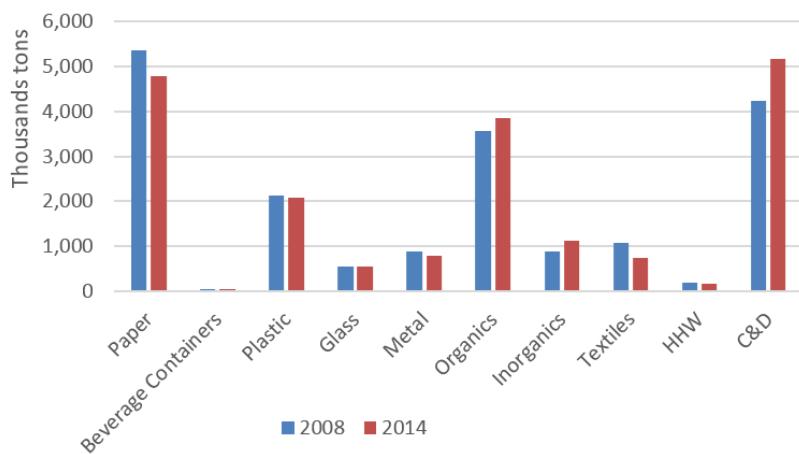
### 5.3.1 Total Statewide MSW Generation Comparison

Table 5-7 summarizes the ten material class generation estimates for 2008 and 2014. Figure 5-10 is a visual representation of these same estimates. Estimates indicate overall tonnage of waste produced in the state in 2014 has increased approximately 20% from 2008, much of that originating from increases in inorganics and the C&D waste sector. It should be noted again, that availability of data on C&D disposal, as well as recovery, has changed dramatically over the past few years and this comparison should be further assessed, in the future. Also, estimates indicate an approximate 30% reduction in Textiles generation in 2014 when compared to 2008. Total Illinois MSW pounds per person per year (ppy) generation is estimated at 2% higher in 2014 (2,993) than in 2008 (2,942). Expressed in pounds per person per day (ppd), Total Illinois MSW generation is estimated at 8.20 ppd in 2014 and 8.06 ppd in 2008.

**Table 5-7. Comparison of 2014 and 2008 Statewide MSW Generation**

	2008	2014
	Generation Tons	Generation Tons
Paper	5,354,230	4,798,920
Beverage Containers	34,460	37,020
Plastic	2,120,170	2,073,870
Glass	554,150	554,980
Metal	887,890	794,900
Organics	3,560,120	3,858,530
Inorganics	877,570	1,131,050
Textiles	1,085,650	740,980
HHW	184,790	173,240
C&D	4,247,060	5,158,730
<b>Total (tons)</b>	<b>18,906,090</b>	<b>19,322,220</b>

**Figure 5-10. Comparison of 2014 and 2008 Statewide MSW Generation**



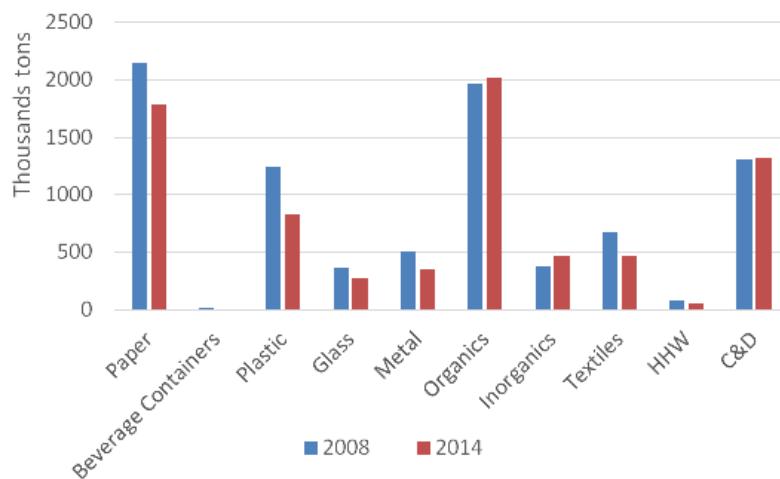
### 5.3.2 Residential Statewide MSW Generation Comparison

Table 5-8 summarizes the ten material class Residential generation estimates for 2008 and 2014. Figure 5-11 is a visual representation of these same estimates. Estimates indicate total tonnage waste produced within the Residential waste sector were generally lower in 2014 than 2008, where seven of the ten material classes and total waste were at least 10% less than the 2008 estimates (i.e.,  $2,153,700 / 1,786,220 = 17\%$  decrease). Organics and C&D were similar to the 2008 estimates (within 3% difference). Similar to statewide MSW estimates, Inorganics generation estimates increased approximately 24% in 2014. Residential MSW generation is estimated at 13% lower in 2014 (1,175 ppy) than in 2008 (1,351 ppy). Expressed in ppd, Residential MSW generation is estimated at 3.22 ppd in 2014 and 3.70 ppd in 2008.

**Table 5-8. Comparison of 2014 and 2008 Residential MSW Generation**

	2008	2014
	RES Tons	RES Tons
Paper	2,153,700	1,786,220
Beverage Containers	12,060	9,290
Plastic	1,239,080	824,570
Glass	360,040	280,350
Metal	504,800	355,700
Organics	1,970,080	2,019,860
Inorganics	382,610	473,620
Textiles	676,040	464,660
HHW	82,740	51,150
C&D	1,302,630	1,320,870
<b>Total (tons)</b>	<b>8,683,780</b>	<b>7,586,290</b>

**Figure 5-11. Comparison of 2014 and 2008 Residential MSW Generation**



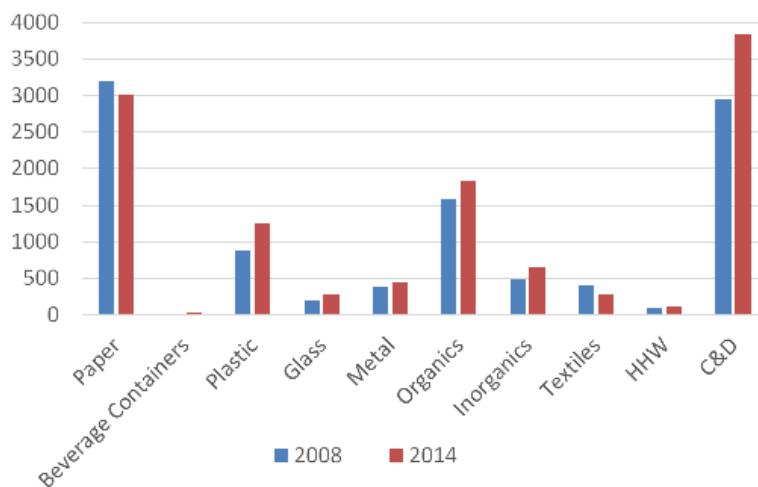
### 5.3.3 ICI Statewide MSW Generation Comparison

Table 5-9 summarizes the ten material class ICI generation estimates for 2008 and 2014. Figure 5-12 is a visual representation of these same estimates. Estimates indicate total tonnage waste produced within the ICI waste sector were generally higher in 2014 than 2008, where eight of the ten material classes and total waste were at least 15% greater than the 2008 estimates (i.e.,  $22,400 / 27,730 = 24\%$  increase). Paper and Textiles generation estimates decreased by 6% and 33%, respectively. ICI MSW generation is estimated at 14% higher in 2014 (1,818 ppy) than in 2008 (1,591 ppy). Expressed in ppd, ICI MSW generation is estimated at 4.98 ppd in 2014 and 4.36 ppd in 2008.

**Table 5-9. Comparison of 2014 and 2008 ICI MSW Generation**

	2008	2014
	ICI	ICI
	Tons	Tons
Paper	3,200,530	3,012,700
Beverage Containers	22,400	27,730
Plastic	881,090	1,249,300
Glass	194,110	274,630
Metal	383,090	439,200
Organics	1,590,040	1,838,670
Inorganics	494,960	657,430
Textiles	409,610	276,320
HHW	102,050	122,090
C&D	2,944,430	3,837,860
<b>Total (tons)</b>	<b>10,222,310</b>	<b>11,735,930</b>

**Figure 5-12. Comparison of 2014 and 2008 ICI MSW Generation**



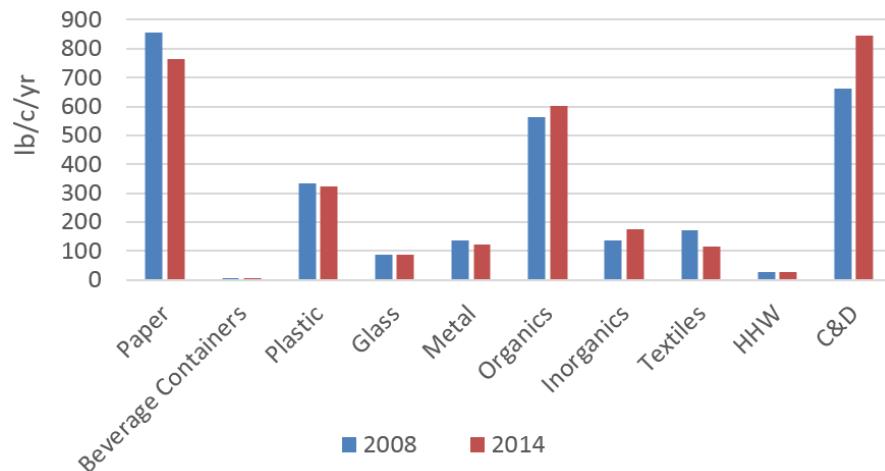
### 5.3.4 Urban Statewide MSW Generation Comparison

Table 5-10 summarizes the ten material class Urban generation estimates for 2008 and 2014. Figure 5-13 is a visual representation of these same estimates. Estimates indicate pounds per capita per year waste produced within the Urban communities was very similar in 2014 and 2008, where seven of the ten material classes and total waste were within 10% difference of the 2008 estimates (i.e.,  $2,982 / 3,064 = 3\%$  increase). Similar to statewide MSW estimates, Inorganics and C&D generation estimates increased approximately 28% in 2014 and Textiles generation has decreased approximately 33%. Total Urban MSW generation is estimated at 3% higher in 2014 (3,066 ppy) than in 2008 (2,982 ppy). Expressed in ppd, Total Urban MSW generation is estimated at 8.40 ppd in 2014 and 8.17 ppd in 2008.

**Table 5-10. Comparison of 2014 and 2008 Statewide Urban MSW Generation**

	2008	2014
	Urban (lb/c/yr)	Urban (lb/c/yr)
Paper	855.5	762.4
Beverage Containers	5.4	5.8
Plastic	334.0	324.1
Glass	86.2	85.9
Metal	138.2	123.1
Organics	561.5	600.7
Inorganics	136.6	175.2
Textiles	173.2	116.7
HHW	28.8	26.8
C&D	662.9	843.6
<b>Total (lb/c/yr)</b>	<b>2,982</b>	<b>3,064</b>

**Figure 5-13. Comparison of 2014 and 2008 Statewide Urban MSW Generation**



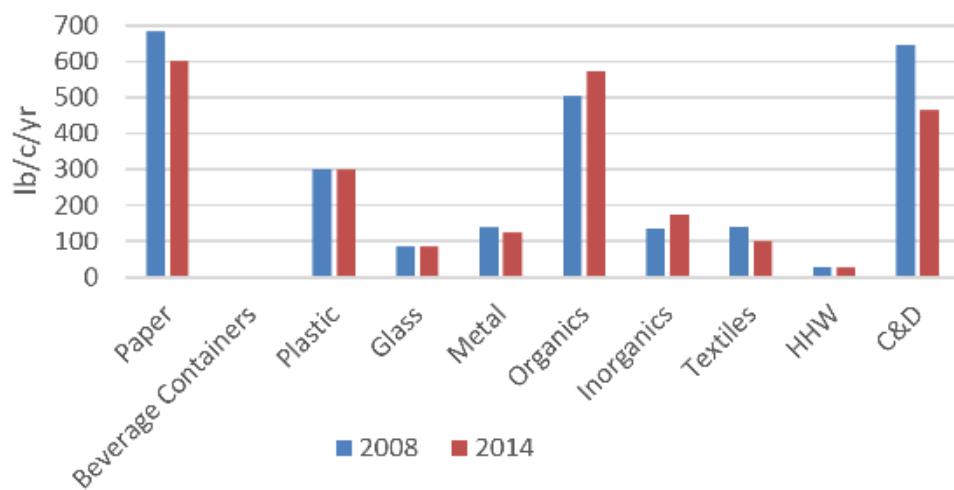
### 5.3.5 Rural Statewide MSW Generation Comparison

Table 5-11 summarizes the ten material class Rural generation estimates for 2008 and 2014. Figure 5-14 is a visual representation of these same estimates. Estimates indicate pounds per capita per year waste produced within the Rural communities were generally similar in 2014 and 2008, where five of the ten material classes and total waste were within 10% difference of the 2008 estimates (i.e., 2,672 / 2,455 = 8% decrease). Estimates indicate generation of Organics and Inorganics increased by 14% and 28%, respectively, whereas Paper, Textiles, and C&D decreased in 2014 by 12%, 29% and 28%, respectively. Total Rural MSW generation is estimated at 8% lower in 2014 (2,456 ppy) than in 2008 (2,672 ppy). Expressed in ppd, Total Rural MSW generation is estimated at 6.73 ppd in 2014 and 7.32 ppd in 2008.

**Table 5-11. Comparison of 2014 and 2008 Statewide Rural MSW Generation**

	2008 Rural (lb/c/yr)	2014 Rural (lb/c/yr)
Paper	683.4	600.1
Beverage Containers	5.4	5.1
Plastic	302.6	299.6
Glass	86.2	86.0
Metal	138.1	123.2
Organics	503.8	574.5
Inorganics	136.4	175.2
Textiles	140.4	100.0
HHW	28.5	26.7
C&D	647.4	464.8
<b>Total (lb/c/yr)</b>	<b>2,672</b>	<b>2,455</b>

**Figure 5-14. Comparison of 2014 and 2008 Statewide Rural MSW Generation**



### 5.3.6 MSW Generation by IEPA Region Comparison

Figure 5-15 and Table 5-12 show that on a per capita basis, Region 2 is the only IEPA region to show increased MSW generation estimates between 2008 to 2014, at a rate of 5% increase (i.e.,  $8.72/8.31\% = 105\%$ ). The remaining regions show decreasing estimates of waste generation of between 4% and 7% reduction in 2014.

**Figure 5-15. Comparison of 2014 and 2008 IEPA Region MSW Generation**

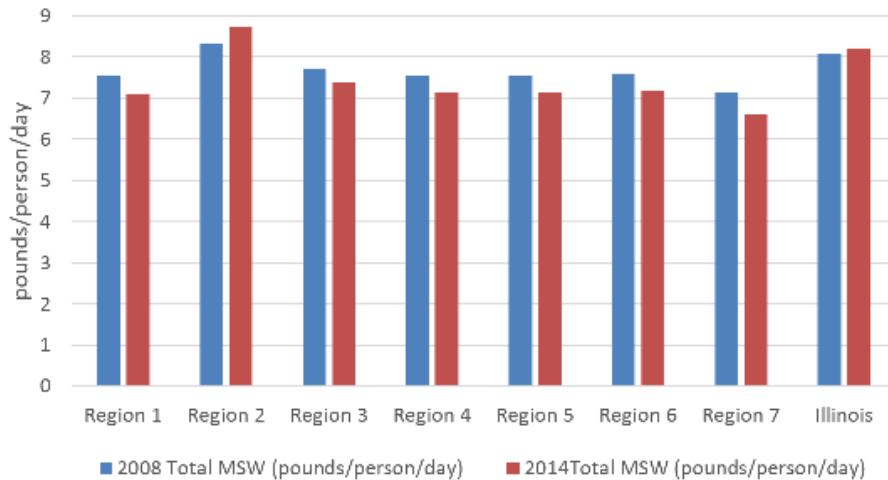


Table 5-12 provides generation profiles of the IEPA Regions MSW Generation for 2008 and 2014.

Table 5-12 Comparison of 2014 and 2008 Statewide MSW Generation - IEPA Regions

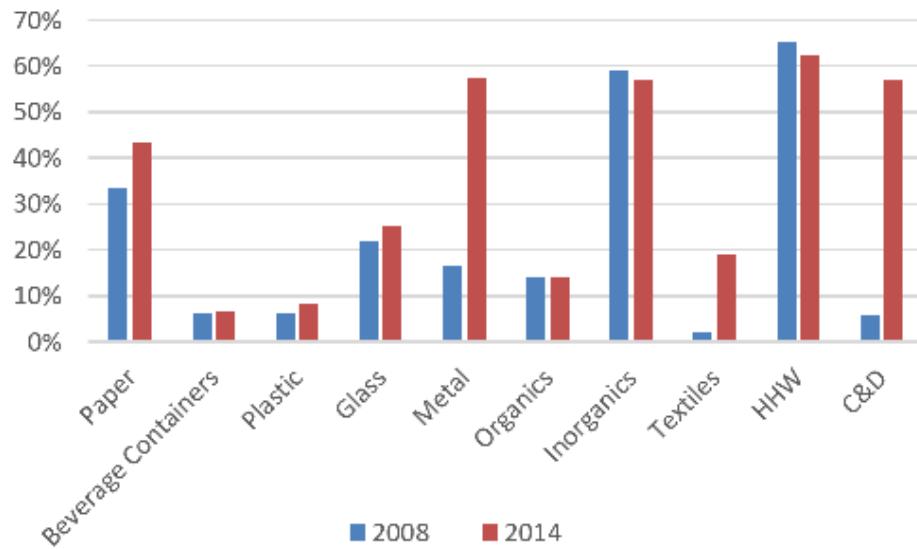
Regional Generation			Regional Generation			Regional Generation			Regional Generation			Regional Generation			Regional Generation			
2008 (lb/c/yr)	2014 (lb/c/yr)	Difference (lb/c/yr)	2008 Tons	2014 Tons	Difference Tons	2008 (lb/c/yr)	2014 (lb/c/yr)	Difference (lb/c/yr)	2008 Tons	2014 Tons	Difference Tons	2008 (lb/c/yr)	2014 (lb/c/yr)	Difference (lb/c/yr)	2008 Tons	2014 Tons	Difference Tons	
<b>Region 1</b>																		
Paper	722.1	642.0	-80.0															
Beverage																		
Containers	5.4	5.0	-0.4															
Plastic	316.8	306.0	-10.8															
Glass	86.2	86.0	-0.2															
Metal	138.2	123.1	-15.0															
Organics	511.9	575.6	63.7															
Inorganics	136.4	175.3	38.8															
Textiles	155.0	107.5	-47.5															
HHW	28.7	26.8	-1.8															
C&D	654.3	545.7	-108.6															
<b>Total MSW (tons)</b>	<b>1,162,770</b>	<b>1,087,560</b>	<b>-75,210</b>															
<b>Total MSW (pounds/person/day)</b>	<b>7.55</b>	<b>7.10</b>	<b>-0.44</b>															
<b>Region 2</b>																		
Paper	886.2	793.2	-93.0															
Beverage																		
Containers	5.4	6.0	0.6															
Plastic	339.0	328.5	-10.5															
Glass	86.2	86.0	-0.3															
Metal	138.2	123.1	-15.1															
Organics	568.4	606.4	37.9															
Inorganics	136.6	175.2	38.6															
Textiles	178.5	123.8	-54.6															
HHW	28.8	26.9	-1.9															
C&D	665.4	918.8	253.4															
<b>Total MSW (tons)</b>	<b>13,146,170</b>	<b>13,808,940</b>	<b>662,770</b>															
<b>Total MSW (pounds/person/day)</b>	<b>8.31</b>	<b>8.72</b>	<b>0.41</b>															
<b>Region 3</b>																		
Paper	760.8	675.0	-85.8															
Beverage																		
Containers	5.4	6.0	0.6															
Plastic	312.6	316.6	3.9															
Glass	86.1	85.9	-0.2															
Metal	138.2	123.2	-15.0															
Organics	538.3	601.0	62.7															
Inorganics	136.4	175.1	38.6															
Textiles	150.9	107.8	-43.2															
HHW	28.7	26.8	-1.9															
C&D	652.5	573.3	-79.2															
<b>Total MSW (tons)</b>	<b>1,052,670</b>	<b>1,027,380</b>	<b>-25,290</b>															
<b>Total MSW (pounds/person/day)</b>	<b>7.70</b>	<b>7.37</b>	<b>-0.33</b>															
<b>Region 4</b>																		
Paper	727.8	640.4	-87.4															
Beverage																		
Containers	5.4	5.2	-0.2															
Plastic	310.4	306.5	-3.9															
Glass	86.2	85.9	-0.3															
Metal	138.3	123.1	-15.2															
Organics	527.9	578.5	50.5															
Inorganics	136.5	175.1	38.7															
Textiles	148.8	106.1	-42.7															
HHW	28.6	26.8	-1.8															
C&D	651.4	558.4	-93.0															
<b>Total MSW (tons)</b>	<b>1,210,730</b>	<b>1,181,690</b>	<b>-29,040</b>															
<b>Total MSW (pounds/person/day)</b>	<b>7.57</b>	<b>7.14</b>	<b>-0.43</b>															
<b>Region 5</b>																		
Paper	726.9	656.8	-70.1															
Beverage																		
Containers	5.3	5.2	-0.1															
Plastic	311.2	307.6	-3.6															
Glass	86.3	85.9	-0.4															
Metal	138.0	123.3	-14.7															
Organics	521.7	577.7	55.9															
Inorganics	136.4	175.6	39.2															
Textiles	149.2	106.9	-42.3															
HHW	28.6	26.7	-1.9															
C&D	651.4	537.0	-114.4															
<b>Total MSW (tons)</b>	<b>767,740</b>	<b>731,970</b>	<b>-35,770</b>															
<b>Total MSW (pounds/person/day)</b>	<b>7.55</b>	<b>7.13</b>	<b>-0.42</b>															
<b>Region 6</b>																		
Paper	718.6	633.3	-85.3															
Beverage																		
Containers	5.4	5.1	-0.3															
Plastic	315.7	307.3	-8.4															
Glass	86.2	86.0	-0.2															
Metal	138.2	123.1	-15.2															
Organics	534.9	578.7	43.8															
Inorganics	136.5	175.0	38.5															
Textiles	154.0	107.2	-46.7															
HHW	28.8	26.8	-1.9															
C&D	653.9	581.6	-72.2															
<b>Total MSW (tons)</b>	<b>1,003,780</b>	<b>961,410</b>	<b>-42,370</b>															
<b>Total MSW (pounds/person/day)</b>	<b>7.60</b>	<b>7.19</b>	<b>-0.41</b>															
<b>Region 7</b>																		
Paper	654.4	572.2	-82.1															
Beverage																		
Containers	5.4	4.3	-1.0															
Plastic	290.3	284.4	-5.9															
Glass	86.2	86.1	-0.0															
Metal	137.9	123.1	-14.8															
Organics	500.6	556.7	56.1															
Inorganics	136.3	175.0	38.7															
Textiles	127.7	91.0	-36.7															
HHW	28.5	26.5	-2.0															
C&D	641.5	498.7	-142.8															
<b>Total MSW (tons)</b>	<b>562,230</b>	<b>523,260</b>	<b>-38,970</b>															
<b>Total MSW (pounds/person/day)</b>	<b>7.15</b>	<b>6.62</b>	<b>-0.52</b>															
<b>Illinois Total</b>																		

## 5.4 MSW Diversion

The total Illinois recovery of resources tonnage and rates are presented in Section 4. Estimates of Illinois material recovery for 2008 and 2014 are summarized in Figure 5-16 and Table 5-13, where recovery has been calculated by assuming the difference between the estimated generation quantities and landfilled quantities is the quantity of materials recovered. As stated in Section four, there is no mechanism in Illinois that establishes a protocol for or requires the type and quantity of materials recovered through programs and efforts throughout the state to be reported to a central entity. Therefore, Illinois cannot verify the estimated diversion rates calculated in both reports. **However, data indicates that diversion has increased from 19.1% to 37.3% in 2014.**

The studies indicate material recovery for six of the ten material classes remained relatively static, including Beverage Containers, Plastic, Glass, Organics, Inorganics, and HHW. The recovery estimates indicate Paper, Metal, Textiles, and C&D material recovery has substantially increased. However, some portion of the increase in C&D materials recovery may be attributed to quality of data available in 2014 vs 2008, as stated in Section 5.3.1.

**Figure 5-16. Comparison of 2014 and 2008 Illinois Recovery/Diversion Rates**

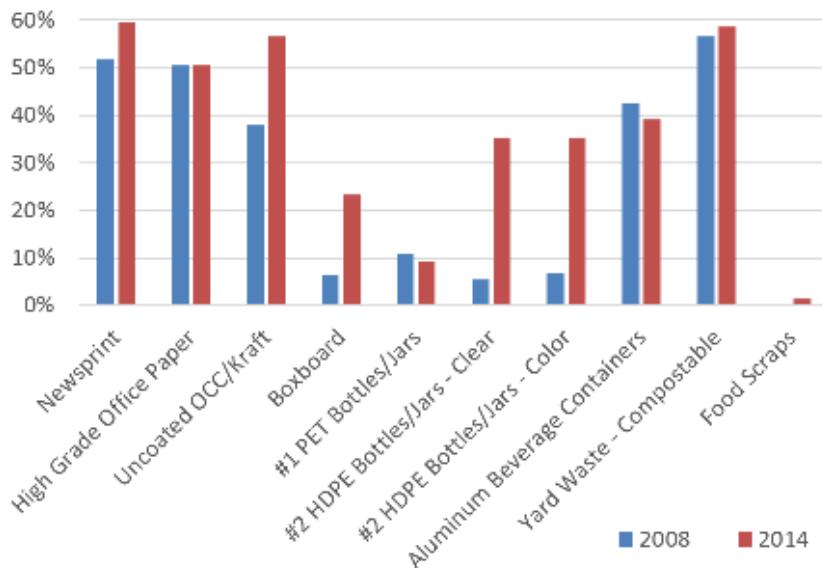


**Table 5-13. Comparison of 2014 and 2008 Illinois Recovery/Diversion Rates**

	2008 Recovery Tons*	2014 Recovery Tons*	2008 Recovery %	2014 Recovery %	Recovery Difference
Paper	1,790,500	2,087,200	33.3%	43.5%	10.2%
Beverage Containers	2,100	2,400	6.1%	6.5%	0.4%
Plastic	131,500	167,700	6.2%	8.1%	1.9%
Glass	120,500	140,500	21.7%	25.3%	3.6%
Metal	147,400	666,700	16.6%	57.4%	40.8%
Organics	516,400	560,700	14.0%	14.3%	0.2%
Inorganics	518,000	645,400	59.0%	57.1%	-2.0%
Textiles	21,900	141,100	2.0%	19.0%	17.0%
HHW	120,400	108,000	65.2%	62.3%	-2.8%
C&D	241,300	2,714,600	5.9%	56.9%	51.1%
<b>Total*</b>	<b>3,610,000</b>	<b>7,234,300</b>	<b>19.1%</b>	<b>37.3%</b>	<b>18.3%</b>

\* Numbers rounded to nearest 100 Tons

Figure 5-17 compares the top ten commodity products discussed throughout this Section. The recovery rates of five of these commodity materials is similar in 2014 and 2008, including High Grade Office Paper, #1 PET Bottles/Jars, Aluminum Beverage Containers, Yard Waste - Compostable, and Food Scraps. There is increased recovery in 2014 for the other five commodity materials, including Newsprint, Boxboard, Uncoated OCC/Kraft, #2 HDPE Bottles/Jars - Clear, and #2 HDPE Bottles/Jars - Color.

**Figure 5-17. Comparison of 2014 and 2008 Illinois Recovery/Diversion of Commodity Materials**



## Appendix A

### Work Plan



**Illinois Commodity/Municipal Solid  
Waste Disposal Characterization  
Study**

**WORK PLAN**

*Commissioned by:*  
**Illinois Department of Commerce &  
Economic Opportunity**

*Contracted by:*  
**Illinois Recycling Association and  
Cook County Department of  
Environmental Control**

August 2014

*Prepared by:*



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# Section 1

## Overview

### 1.1 Objective

This document is intended to serve as the sampling plan for the 2014 Illinois Recycling Association (IRA) Municipal Solid Waste (MSW) Disposal Characterization Study. It describes in detail the work required to provide IRA with a comprehensive and accurate waste composition of MSW disposed throughout the State of Illinois.

To develop precise waste composition estimates, CDM Smith Inc. (CDM Smith) will collect waste samples at 28 disposal facilities over one sampling season. Approximately 28 sampling days during September through November 2014 will be dedicated to hand-sorting and characterizing approximately 130 samples of residential waste, 130 samples of industrial/commercial/institutional (ICI) waste, as well as visual characterizations of approximately 150 loads of construction and demolition (C&D) waste.

Description and definitions of the waste sectors used to stratify data collection for the study are presented in the following sections. Detailed appendices follow.

### 1.2 Waste Sectors

Waste sampling will occur using a random sampling methodology. Waste will be sampled from the sectors listed below, in order to develop a waste composition profile for each sector. Then the sectors will be “added together” in a way that reflects each sector’s relative contribution to the overall waste stream, thus producing overall waste composition information.

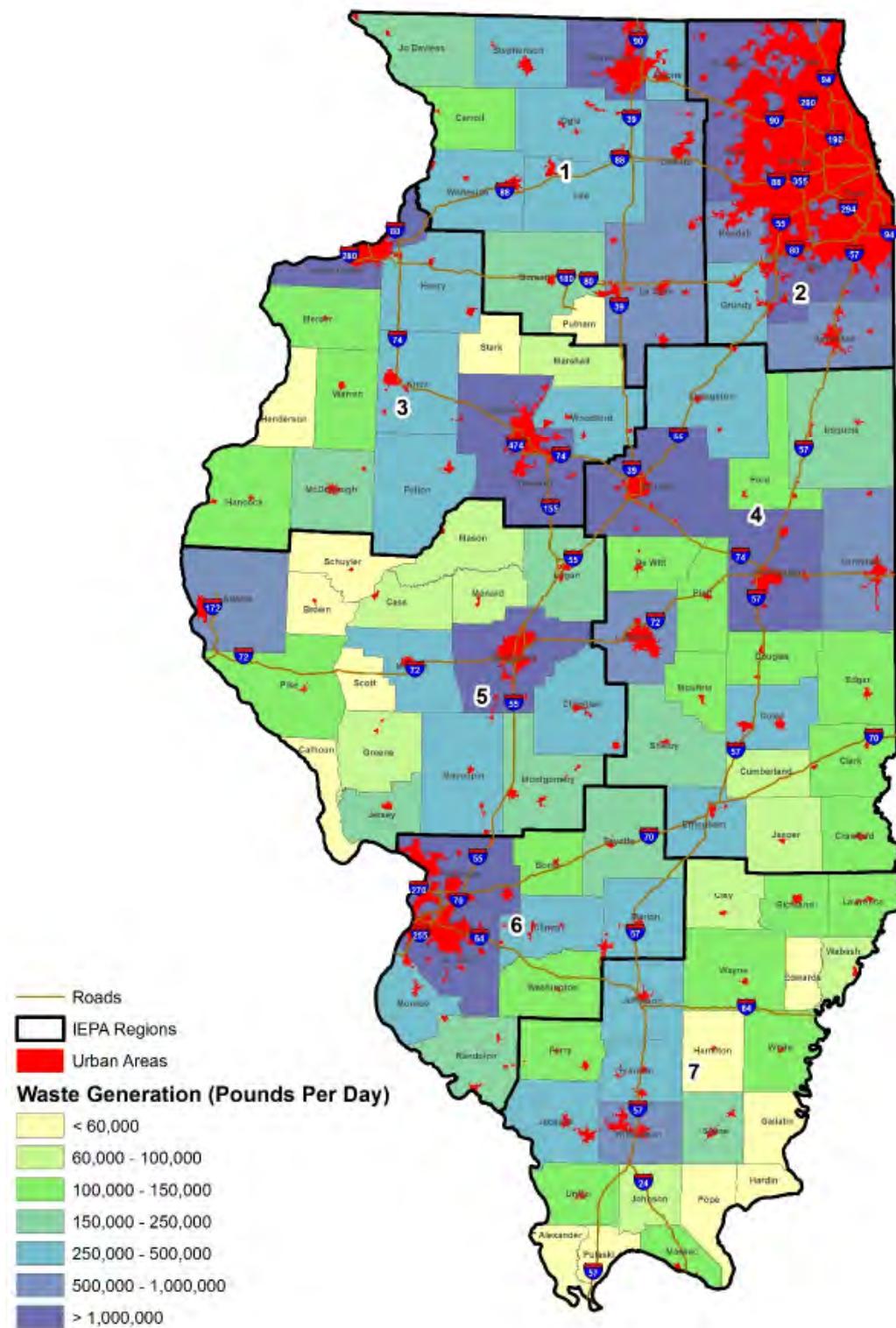
For this study, a waste sector is identified by the particular generation characteristics that make it a unique portion of the total waste stream. This study will examine waste disposed by three distinct sectors:

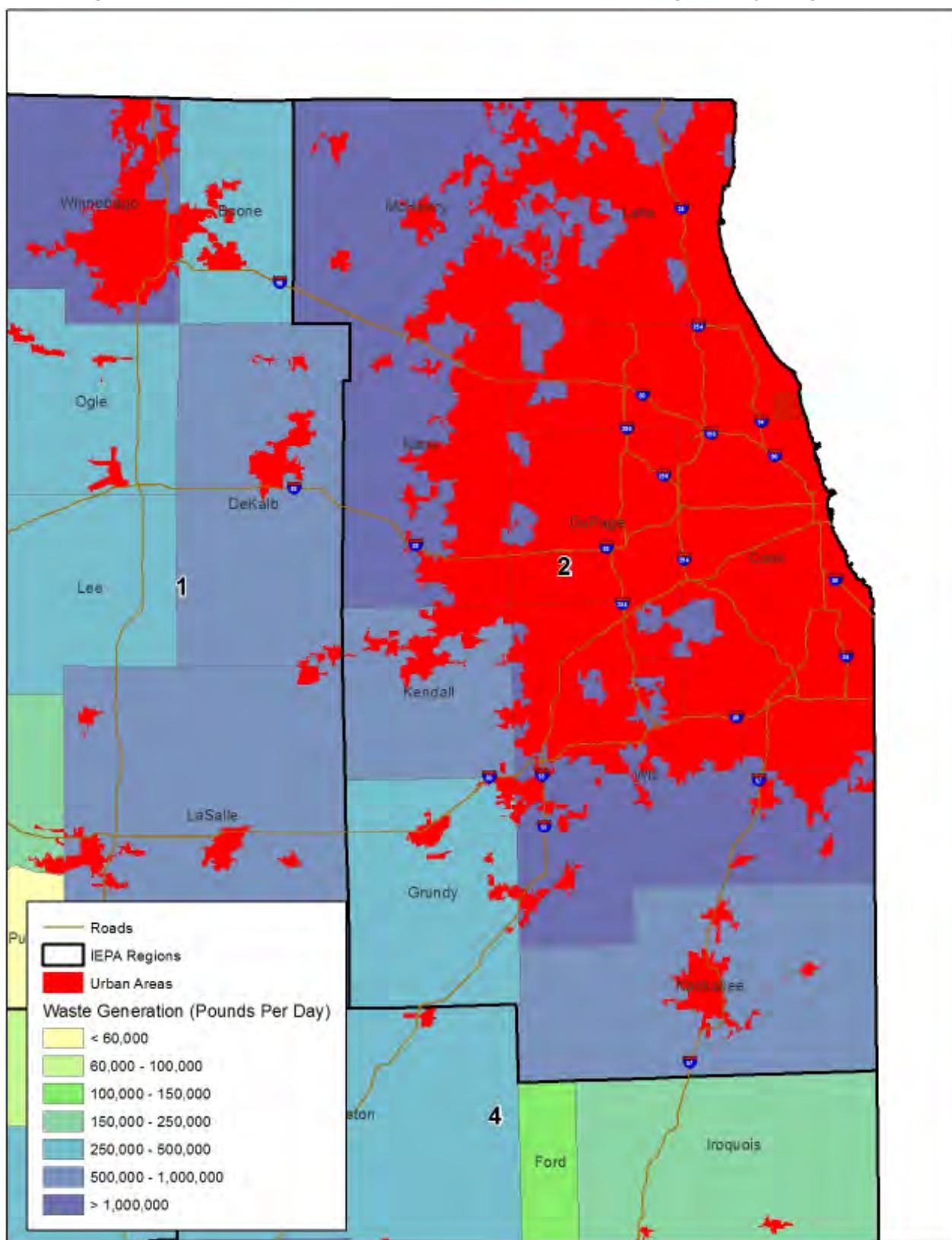
1. Residential – waste generated by single and multifamily residences. This waste is primarily collected in packer trucks (e.g., side-loading or rear loading vehicles).
2. Industrial/Commercial/Institutional (ICI) – waste generated by fabricated manufacturing facilities, mills, and mines; businesses and institutions. This waste is collected in a variety of vehicles including loose and compactor drop boxes, and front-end loading trucks.
3. Construction and demolition (C&D) – waste generated from new construction, renovation activities, or demolition. This waste is collected in vehicles such as dump trucks, loose roll-off boxes, and end dump vehicles.

### 1.3 Facility Selection

CDM Smith researched Illinois Waste Generation and disposal by reviewing its 2008 state wide study, the 2013 Illinois Environmental Protection Agency (Illinois EPA) Landfill Capacity Report, lists of Illinois transfer stations and recycling facilities, conducting phone interviews with landfill and transfer station staff, and interviewing numerous waste management professionals to assess where waste from all the different Illinois communities is finally disposed, as well as where it is temporarily staged for sorting and transport purposes. Figures 1 and 2 show approximate MSW waste generation rates at a county level based on 2013 Census population and employment data in conjunction with typical unit waste generation rates, as well as location of urban areas and Illinois EPA region boundaries, for reference.

**Figure 1. Waste Generation Rates, Urban Areas, and Illinois EPA Regions Map**



**Figure 2. Waste Generation Rates, Urban Areas, and Illinois EPA Regions Map – Region 2**

To ensure that samples are representative of Illinois' statewide waste stream, sampling will be conducted at 28 landfill facilities and transfer stations located throughout Illinois considering the facility selection criteria outlined below.

To adequately and efficiently sample waste sectors, preference was given to facilities that accept and receive sufficient amounts of all three selected waste sectors:

- Residential
- Industrial/Commercial/Institutional (ICI) and
- Construction and Demolition (C&D)

In addition to separating the Illinois MSW into the above waste sectors, the Illinois residential and ICI MSW was further evaluated at the rural and urban subsector level to provide additional planning information. The U.S. Department of Agriculture assigns each county a rural-urban continuum code (RUC), which identifies it as a metropolitan or nonmetropolitan county. A metropolitan area is defined by the federal Office of Management and Budget as a core area with a city of 50,000 or more inhabitants, plus adjacent communities having a high degree of economic and social integration with that core or an Urbanized Area (UA) and a total population of at least 100,000. The county or counties containing the largest city and surrounding densely settled territory are central counties of the metropolitan area. A non-metro area is any area located outside of the metropolitan areas as defined above. Selected facilities were distributed in both rural and urban counties of Illinois to provide data for urban and rural MSW sectors. Also, Transfer stations are preferred in urban areas, where waste sector and source (county/town/community) could be identified, rather than landfill facilities.

- Urban – waste generated by metropolitan counties
- Rural - waste generated by nonmetropolitan counties

For state wide geographic coverage, at least two facilities from each of the Illinois EPA's seven geographic regions were selected for sampling.

- Region 1 – 3 facilities
- Region 2 – 4 facilities
- Region 3 – 2 facilities
- Region 4 – 3 facilities
- Region 5 – 2 facilities
- Region 6 – 2 facilities
- Region 7 – 2 facilities

CDM Smith's team assessed what communities and municipalities each facility received waste from, to capture the majority of the waste stream.

- Four facilities selected from within City of Chicago
- Six facilities selected from the suburban Cook County
- Four facilities selected from collar communities
- Fourteen facilities selected from remainder of state

Similarly, facility selection to study the composition of suburban Cook County's MSW included the following considerations:

- Geographic distribution
  - Northern Cook County Suburbs – 2 facilities (20 samples total)
  - Western Cook County Suburbs – 2 facilities (20 samples total)
  - Southern Cook County Suburbs – 2 facilities (20 samples total)
- Waste sector
  - 50% of samples will be from residential sector
  - 50% of samples will be from ICI sector

In general, throughout the state waste is transported to and disposed of at nearby landfills. However, within the Chicago area waste is first delivered to transfer stations for sorting and redistributing into larger truck trailers and then transported to landfills further away in northwestern Illinois and Indiana. In the Chicago area, samples will be sorted at waste transfer stations, not at ultimate disposal locations. CDM Smith will not sample transferred trailers when sorting at facilities elsewhere in the state. Also, facility selection considered final disposal location as well as staging and sorting location, so that waste sector and municipality/service area would be known.

- Preferred transfer stations, MRRFs, and recycling facilities, where available.
- Selected landfills that accept minimum quantities of waste loads delivered directly from collection.

Facilities near the borders of Illinois can accept waste from neighboring state and likewise municipalities near the Illinois borders may dispose of waste out of state. This state wide waste study is focused on waste generated in Illinois and therefore geographic source of waste was collected through reported data and facility interviews.

- Prefer majority of accepted waste from within Illinois.
- Consideration given to facilities located outside of Illinois if most of accepted waste is from Illinois municipalities.

Finally, safety of work staff was assessed with input from facility managers.

- Prefer facilities that were comfortable identifying a safe space for sampling/sorting team's work area.
- Slight preference given to facilities that provided covered work areas (all other things considered equal).

## 1.4 Collecting Initial Data from Facilities

For each disposal facility included in the sampling schedule, information will be collected in order to prepare a unique sampling schedule and set of targets, as well as to prepare for the logistics of sampling. In addition to obtaining contact information for the staff who are able to assist in making arrangements for data collection at each facility, the following information will be requested or agreed upon with the facility:

- Written directions to the facility;
- The facility's days and hours of operation, and if they accept waste outside of these hours;
- Contact information for the owner of the facility, an employee who can provide permission to use the site, an on-site contact for logistics information, and a person who will be the point of contact on the day of sampling;

- A plan or agreement about the exact location of sampling and sorting operations at the facility;
- Confirmation of the facility's willingness to make a loader available for sample collection;
- A plan for the use of scales and the cooperation of gatehouse personnel to obtain vehicle net weights and assist in sample identification and collection;
- The number of scalehouses at the facility and the process by which vehicles are directed to the scalehouses (e.g., do ICI haulers use a separate gate from cash customers?);
- Approximate daily and weekly load counts by waste sector and total for the facility;
- Estimates regarding the vehicle traffic expected for each sector on each day of the week and the estimated peak time of day for each type of load;
- Specific information about numbers and types of vehicles arriving on weekend days;
- Any rules the facility follows in recording the net weight of vehicles and for recording alternate minimum weights for small vehicles;
- Information about existing recycling or recovery operations at the facility, and how the study team may obtain samples of waste after any recycling or recovery operations have already been applied to the waste;
- Tips about any unusual conditions (e.g., weather, anomalies in traffic patterns, etc.) that might affect data collection; and
- Information about the quantities and types of MRF residuals that the facility receives.

While administering the questionnaire, the study team will communicate the data collection crew's needs for space, their need for the assistance of a loader and operator, and the need for access to restrooms and shelter at the facility. A Facility Interview Questionnaire is provided in Appendix A.

## 1.5 Ongoing Communications with Disposal Sites

After a disposal facility has been recruited for participation in the study, a letter of confirmation will be sent to the facility's management via fax or email. The letter will summarize the crucial information that has been obtained through the recruitment and interview process, including the approximate dates of data collection activities, arrangements for the use of equipment such as a loader, arrangements for assistance of a loader and operator, arrangements for space in which to work, etc. The management of each facility will be asked to verify verbally the information summarized in the letter. Approximately a week prior to the scheduled visit, the management of each facility will be contacted by phone to remind them of the visit and their role in the sampling activities. An additional follow-up call will be conducted two days prior to the scheduled visit.

## Section 2

# Data Collection

This section provides a more detailed description of the sampling process. It includes plans for the collection of data to characterize residential, ICI, and C&D waste.

### 2.1 Numbers and Allocation of Waste Samples

To develop precise waste composition estimates for the State of Illinois, the consultants will collect waste samples at 28 solid waste facilities. The research team will obtain and hand-sort approximately 260 samples of disposed waste and visually characterize approximately 150 loads of disposed waste, as summarized below.

**Table 1. Approximate Target Number of Samples**

Sector or Subsector	Total Samples
Residential	130
ICI	130
C&D	150

The proposed solid waste facilities that are expected to be included in the study are listed Appendix B, along with secondary facilities that may be used as alternates.

### 2.2 Gatehouse Surveys

To determine the waste composition at each facility, CDM Smith will work with the scalehouse operators to conduct gatehouse surveys. These surveys will consist of a simple questionnaire that will ask what sector the waste is generated by (residential, ICI or C&D), the city or county that the waste comes from and the weight of the load. An example form is provided in Appendix C. This information will be used to determine an approximate distribution of waste disposed at each facility and to assist in collecting residential and ICI samples.

### 2.3 Sampling Residential and ICI Waste (Hand-Sorting)

The study will use slightly different methods for selecting vehicles to provide samples of residential waste versus ICI waste. However, the procedure for hand-sorting and characterizing residential and ICI waste samples will be the same. This section describes the distinct procedures for selecting vehicles from the residential and ICI sectors, as well as the procedure for obtaining and characterizing samples from selected vehicles from the residential and ICI sectors.

#### 2.3.1 Obtaining Residential and ICI Waste Loads for Sampling

The samples collected will be allocated among the 7 Illinois EPA Regions as shown in Figures 3, 4 and Appendix B. A minimum of 2 sampling days will be spent in each Illinois EPA Region and approximately 9 samples will be collected per day (10 samples per day at the six suburban Cook County facilities). The samples will be split equally between residential waste and ICI waste. Figures 1 and 2 also show approximate MSW waste generation rates at a county level based on 2006 Census population and employment data in conjunction with typical unit waste generation rates. This information was used in the

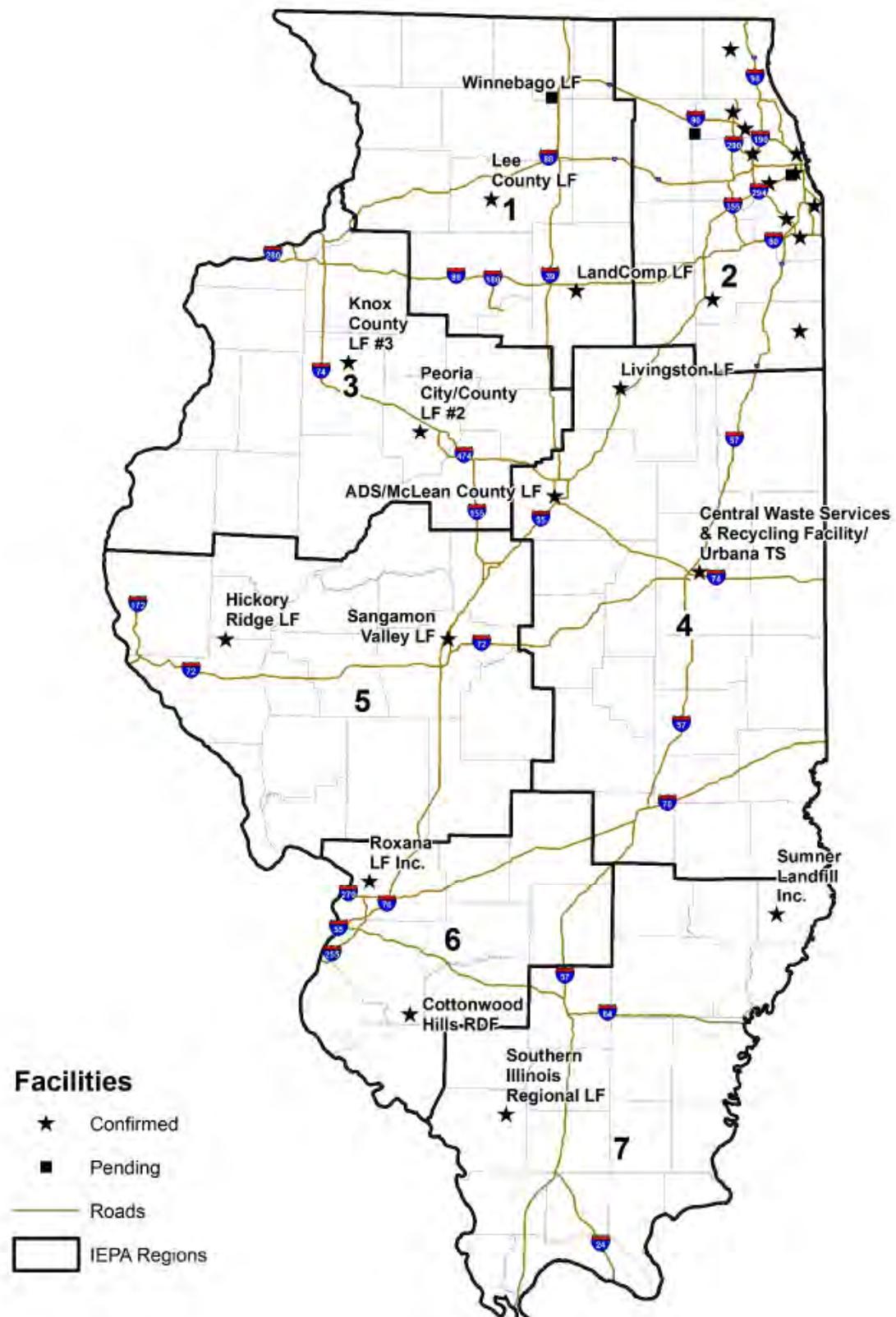
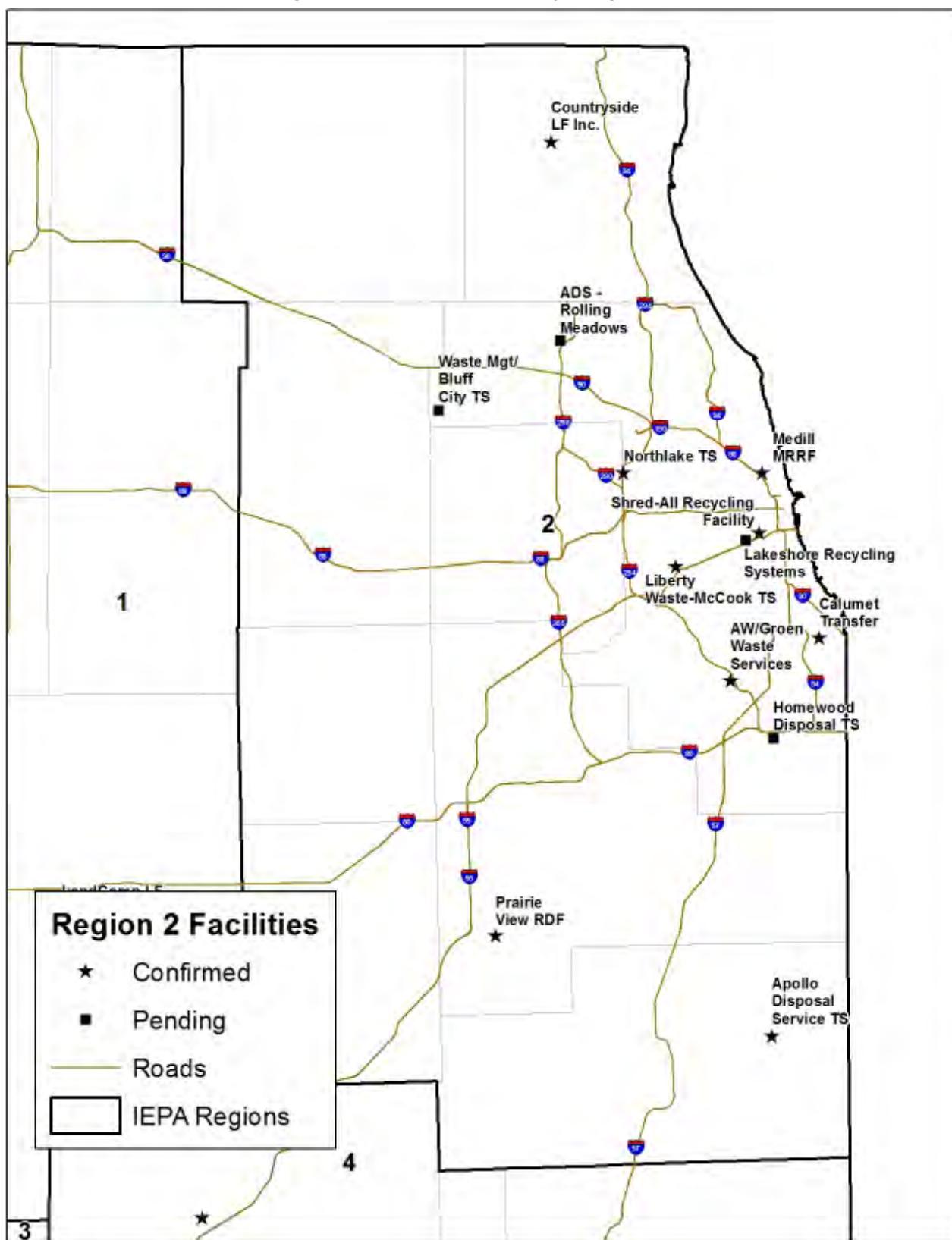
**Figure 3. Selected Facilities Map**

Figure 4. Selected Facilities Map – Region 2



selection of sampling locations to distribute the sample collection between rural and urban areas of the state as well as the 7 Illinois EPA Regions.

### **2.3.1.1 Developing a Procedure to Select Residential and ICI Waste Loads at Each Facility**

CDM will determine the approximate number of residential and ICI waste loads that arrive at each participating facility on each day of the week. These estimates will be used to inform the selection procedure for residential and ICI waste vehicles (i.e., to determine the intervals at which vehicles are selected for sampling as they arrive at the facility entrances).

Other factors that affect the logistics of vehicle selection at each facility include the number of entrances used by waste vehicles, the hours of operation, and the peak times for arrival of waste (if applicable). All of this information will be gathered from each facility and will be used to create two unique *Vehicle Selection Forms* (one for residential samples and one for ICI samples) for each sampling day, as described in more detail below.

### **2.3.1.2 Selection and Diversion Loads of Residential and ICI Waste for Sampling**

As discussed in Section 2.2, CDM will work with the scalehouse to identify the vehicles that are entering the facility and use that information to apply the vehicle selection procedure to identify and divert vehicles that will be used to provide samples of waste. The first step in this procedure will be to use the following screening criteria to determine whether the vehicle is eligible for sampling:

- The vehicle carries waste from the State of Illinois; and
- The vehicle carries mostly waste from ICI sources (i.e., it includes minimal waste from residential and C&D sources); or
- The vehicle carries mostly waste from residential sources (i.e., it includes minimal waste from ICI or C&D sources).

For vehicles that meet the screening criteria, the Sampling Coordinator, in coordination with the facility's scalehouse operator, will use a systematic selection procedure to identify the vehicles that will provide waste samples at each facility. Each facility was selected to provide a distribution throughout the State and between urban and rural areas of the State. The number of samples that can be collected at each facility is limited; therefore, the nth truck approach will be used to provide an unbiased selection of vehicles for sampling. A sampling interval (e.g., every 3<sup>rd</sup> residential vehicle or every 4<sup>th</sup> ICI vehicle) will be calculated for each facility and each sampling day, based on sampling quotas and based on the numbers of residential and ICI waste vehicles expected throughout the day.

The Sampling Coordinator or scalehouse operator will apply the sampling intervals by "checking off" eligible vehicles on the *Vehicle Selection Form* and directing selected vehicles to the Sorting Crew. An example of a *Vehicle Selection Form* is shown in Appendix A. Sampling intervals will be adjusted for any facility with multiple entrances, and facility staff at each entrance will be asked to select a portion of the vehicles to be sampled on that day.

To calculate vehicle sampling intervals for waste, CDM will divide the total number of available waste sector loads expected to arrive at the facility on a given day (to be estimated from disposal site interviews) by the number of each waste sector samples needed each day. The resulting number is the sampling interval and determines whether every third vehicle, every sixth vehicle, or every 20th vehicle is selected for sampling. Generally, waste vehicles will be selected during a six-hour to eight-hour period on each sampling day, such that the sampling period includes the "peak" arrival time for waste at that facility. On

the day of sampling, the sampling intervals may be adjusted at the discretion of the Sampling Coordinator in order to ensure that enough loads can be intercepted during the time available.

When a vehicle is selected for sampling, the gate keeper will record the following information about the vehicle on a sample placard:

- Unique sample number (i.e. RES1 or ICI2)
- Source Location
- Date and Time
- Vehicle type
- Hauler
- Truck number
- The Sample Placard will be placed on the vehicle's windshield or dashboard to identify it as a vehicle intended for sampling and the driver directed to the sampling area. Please see Appendix C for an example of a Sample Placard.

After the Sampling Coordinator identifies the designated vehicle, the facility forklift operator will be directed to collect a sample and the corresponding Sample Placard. The Crew Chief will instruct the operator as to where place the sample, collect the Sample Placard and record the information from the Sample Placard onto the Sample Characterization Form. The Crew Chief will also note any unusual circumstances associated with the load or the sample.

### **2.3.2 Obtaining and Sorting Samples from Residential and ICI Waste Loads**

Samples of waste will be obtained from selected residential and ICI loads using the same procedure, which is described below.

1. The driver of each selected load will be instructed to tip the load onto the facility floor or landfill surface in an elongated pile. The Sampling Coordinator will instruct the loader operator to capture waste from a randomly selected location in the load. At disposal sites where there is no space to tip the waste, the Sampling Coordinator will work with the loader operator to grab a sample as the load is tipped onto the waste platform.
2. The loader operator will select a sample weighing at least 200 pounds from the pile. Material will be placed onto a tarpaulin or table for sorting. If a loader is not available, samples will be removed from the pile by hand.
3. Photographs of the sample when it is placed in the sampling area will be taken using a digital camera. The *Sample Placard* that identifies each sample will be positioned so it is visible in each photograph.

All samples of residential and ICI waste will be sorted according to the sorting procedures described below.

The Crew Chief will record composition weights and the information obtained from the *Sample Placard* on the *Hand Sort Characterization Form*, an example of which is shown in Appendix C. At the end of each week, copies of the *Hand Sort Characterization Forms* will be made, and the originals kept at CDMs office for data entry.

Waste from residential and ICI sectors will be sorted and weighed as outlined below. The sorting operation will proceed as follows:

- The sample will be selected as outlined in the previous sections.
- The Sampling Coordinator will provide the Crew Chief vehicle information of each sample for the sampling data form via the *Sampling Placard*. Data recorded will include the date, the time, the area where the waste was collected, and any identifying numbers on the truck.
- The sample will be unloaded from a front-end loader bucket onto a tarp in the sample storage area near the sorting table.
- Large items (e.g., corrugated cardboard, wood) and bags containing a single waste category (most often yard waste) will be removed from the sample and set aside for weighing, bypassing the sorting box.
- The remainder of the sample will be transferred by increments into the sorting box, using broad-bladed shovels to transfer loose material.
- Sample sorting will be conducted using a sorting box which has a  $\frac{1}{4}$ -inch screen on the bottom.
- Samples will be sorted until the material particle size ranges from  $\frac{1}{4}$  to 2-inch. At that time the Crew Chief will apportion the material to the appropriate material categories. The residual fines that fall through the screen will be included in category 37 - Bottom fines and dirt, unless it can be visually categorized further (e.g. material is primarily food waste, etc.).
- The waste will be sorted into the containers surrounding the sorting box. The Crew Chief will check the containers periodically for accuracy of sorting.
- The containers will be brought to the scale, checked for accuracy of sorting by the Crew Chief, and weighed.
- The container number and weight of the waste in each container will be recorded in the appropriate space on the data form.
- Data quality control checks will be implemented which will include a secondary review of all data recorded and checks for missing data, categories without data, suspect weights, tare weights, and total sample weight.
- Once the data form has been checked the containers will be dumped in a designated area for disposal and recycling, if available, by the facility operator.

The containers used in sorting operations have individual tare weights that typically vary no more than 2 percent from their average tare weight; therefore, a representative tare weight will be used. The tare weight will be checked if containers become coated with food or other materials. If the sorted waste in a container weighs very little in proportion to the container, the waste will be removed from the container and weighed loose. The equipment used for the field activities is shown in the residential and ICI Hand Sort Equipment List provided below.

### 2.3.2.1 List of Equipment and Data Forms for Hand-Sorting

A list of equipment for hand-sorting is included below:

- Plastic bins/buckets
- Boots
- Gloves
- Hard hats
- Shovels
- Broom
- Tarps
- Scales
- Sorting tables
- Magnet
- Clipboards
- Hand wipes
- Calculator
- Rain gear
- Safety vests
- First aid kit
- 30-gallon garbage can
- Cell phone or two-way radio to communicate with scalehouse
- Field Forms
  - Hand Sort Characterization Form
  - Residential Sample Placard
  - ICI Sample Placard
  - Vehicle Selection and Quota Form

### 2.3.3 Staffing Plan, Training, and Supervision of Hand-Sorting Crew

The Field Manager is responsible for coordinating with the disposal facility, providing the quotas for sampling, supervising waste sorting, reviewing data quality on-site, and will also serve as a crew Chief or Sampling Coordinator. The field team will consist of a total of 6 personnel, a Crew Chief, a Sampling Coordinator, and 4 crew members who will serve as sorters. The Sampling Coordinator is responsible for coordinating with the scale house to select the designated samples, interviewing the vehicle driver, and providing the Crew Chief with the sample information. The Crew Chief is responsible for supervising waste sorting, logging the sample weights, and reviewing data quality on-site. The waste sorters will consist of personnel who have experience sorting waste.

To ensure data quality, the field crew will review the work plan/ health and safety plan, be trained to identify all 79 categories (Appendix D), and be trained in all data quality control measures that will be implemented in the field, prior to each period of field work. The team will have a kickoff meeting to train the sorting crew, discuss safety, and teach the proper procedures for sample collection and sorting. Daily

meetings will also be held during the sort to revisit the health and safety plan and ensure quality standards are met.

## 2.4 Sampling C&D Waste (Visual Characterization)

Construction and demolition (C&D) waste will be characterized at each facility. This section describes how vehicles will be selected and how loads will be characterized.

### 2.4.1 Obtaining C&D Loads

#### 2.4.1.1 Developing a Procedure to Select C&D Loads at Each Facility

The consultant team will determine the approximate number of C&D waste loads that arrive at each participating facility on each day of the week. These estimates will be used to determine the selection procedure for C&D waste vehicles (i.e., to determine the intervals at which vehicles are selected for sampling as they arrive at the facility entrances).

Other factors that affect the logistics of vehicle selection at each facility include the number of entrances used by C&D waste vehicles, the hours of operation, and the peak times for arrival of C&D waste (if applicable). All of this information will be gathered from each facility and will be used to create a unique *C&D vehicle selection form* for each sampling day, as described in more detail below.

#### 2.4.1.2 Selecting and Diverting C&D Loads

The consultant team will work with the scalehouse operators at each facility to apply the vehicle selection procedure in order to identify and divert vehicles that are to provide samples of industrial and C&D waste. The first step in this procedure will be to use the following screening criteria to determine whether the vehicle is eligible for sampling:

- The vehicle carries waste from the State of Illinois; and
- The vehicle carries mostly waste from C&D sources (small private contractor loads are permitted for C&D waste).

A sampling interval (e.g., every 3<sup>rd</sup> vehicle) will be calculated for each facility for each sampling day, based on sampling quotas and based on the numbers of C&D waste vehicles expected throughout the day. The purpose of using sampling intervals is to ensure an unbiased selection of C&D vehicles to provide waste samples. For vehicles that meet the screening criteria of C&D waste, the scalehouse operator will use CDM's selection procedure (every nth vehicle) to direct the vehicles to the visual characterization area.

The scalehouse operator will apply the sampling intervals by "checking off" eligible vehicles on the *C&D vehicle selection forms* and directing selected vehicles to the sampling area. An example of a *C&D vehicle selection form* is shown in Appendix C.

To calculate vehicle sampling intervals for C&D waste, the consultant team will divide the total number of C&D waste loads expected to arrive at the facility on a given day (to be estimated from disposal site interviews) by the number of C&D samples desired each day. The resulting number is the sampling interval and determines whether every third vehicle, every sixth vehicle, or every 20th vehicle is selected for sampling. Generally, C&D waste vehicles will be selected during an eight-hour period on each sampling day, such that the sampling period includes the "peak" arrival time for C&D waste at that facility. On the day of sampling, the sampling intervals may be adjusted at the discretion of the Sampling Coordinator in order to ensure that enough loads can be intercepted during the time available.

When a vehicle is selected for sampling, the scalehouse operator will place the *C&D Sample Placard* on the vehicle's windshield or dashboard to identify it as a vehicle intended for sampling and direct the driver to the sampling area. Please see Appendix C for an example of a *C&D Sample Placard*.

When the Sampling Coordinator identifies the designated vehicle, they will gather information from the driver such as vehicle type, hauler, truck number, etc. and will assign that load a sample number. The Sampling Coordinator will also note any unusual circumstances associated with the load sample and will instruct the driver as to where to tip the load.

## 2.4.2 Characterizing C&D Waste Loads

Visual estimation is the preferred method for characterizing solid waste that is relatively homogeneous in composition, or that contains predominantly large, bulky items. CDM will gather volume-based estimates of composition data in the field, and then convert to weight during data analysis, using volume-to-weight conversion factors. The Field Manager/Sampling Coordinator will work with the scalehouse to interview haulers to determine the source and type of waste material, along with other information on sampled loads, and will conduct the visual characterizations/field observations of each load sampled.

When a truckload that has been selected for observation arrives at the facility, the basic data for the truck, including (but not limited to) the hauler's name, origin of the load, type of material in the load, and size of the will be recorded. The Field Manager will also work with the scalehouse to select the loads to be visually characterized and determine where to observe the tipped load. After the visual observations of each load have been completed, the loader operator will be notified that that material is no longer needed.

Where the logistics of each facility allow, the field team will determine the actual weight of sample. For loads that are weighed by the facility, the Field Manager will collect weight information from the scalehouse as determined during the facility interviews.

The consultant team proposes the following visual characterization methods for each sample designated for evaluation:

- 1. Estimate total volume of load:** The first step in the observation process is to estimate the total volume of each load. This is accomplished by estimating three basic dimensions: length, width, and height of the load after it has been tipped, or by using the size of the vehicle.
- 2. Identify and record material categories in load:** Pictures of the load will be taken as it is tipped for reference. The load will be observed as it is tipped so that the load can be estimated from a distance.
- 3. Estimate composition by volume of load:** Beginning with the largest material category by volume, estimate the volumetric percentage of this material to the nearest 5% and record it on the Visual Characterization Form. Repeat this process (for the next most common material) until the percentage of each material that represents at least 5% of the load has been estimated.
- 4. Review the estimated volume of each component material in relation to other material types (i.e., if wood is 15%, is there more or less drywall?).**
- 5. Check and reconcile percentage data.** Make sure that the volumetric estimates of each material category add up to 100%. If they do not, adjust proportionally so that the total equals 100%.

#### **2.4.2.1 List of Equipment and Data Forms for Visual Characterization**

A list of equipment for visual characterizations is included below:

- Boots
- Gloves
- Hard hats
- Dust masks
- Safety glasses
- Clipboards
- Hand wipes
- Calculator
- Rain gear
- Safety vests
- First aid kit
- Cell phone or two-way radioto communicate with gatehouse
- Field Forms
  - Visual Characterization Form
  - C&D Vehicle Selection Form
  - C&D Sample Placard

#### **2.4.3 Staffing Plan, Training, and Supervision of Visual Characterization Crew**

The Field Manager/Sampling Coordinator will be responsible for coordinating with the scalehouse to interview haulers and to determine the source and type of waste material, along with other information on sampled loads, and performing/recording the visual characterizations/field observations of each load sampled. The Field Manager/Sampling Coordinator will be experienced in visually characterizing C&D Materials.

## **2.5 Health and Safety Plan**

The Health and Safety Plan for the IRA MSW Disposed Characterization Study is provided in Appendix E.

## **2.6 General Contingency Measures**

For hand-sorted samples, in the case that an insufficient number of vehicles is available for sampling at a disposal facility to reach the day's sampling goal, the sorting crew may resort to obtaining two samples from the same load, or electing to process additional samples from a different waste sector and make up the absent samples. This strategy may also be used when samples are missed for other unforeseen reasons. In all cases, the sampling plan will assign the frequencies of vehicles to be selected in such a way as to minimize the chance of "running out" of vehicles to represent a particular waste sector at a disposal facility.

## Section 3

# Data Management Plan

This section discusses how the sample and survey data will be stored and the analysis method that will be used to determine waste composition profiles for each subsector.

### 3.1 Data Entry and QA/QC

After the field forms are checked by the Field Manager/ Crew Chief and entered into the required data format, copies of the field forms will be taken to the CDM office where the Project Manager/ task manager will verify that all required data is recorded properly, that the targeted numbers of samples are obtained, and oversee data entry. CDM will provide IRA with a summary of sampling activities weekly during the field activities.

The compiled characterization data from individual samples will be entered into an analytical database, from which waste composition estimates will be calculated. In the analytical database, there will be a unique record for each sample of waste that is sorted. Throughout the waste results section, confidence intervals will be calculated at a 90% level of confidence, meaning that we can be 90% sure that the population mean falls within the upper and lower confidence intervals shown.

### 3.2 Waste Composition Calculations

#### 3.2.1 Visually Characterized Loads

The composition calculations rely on the availability of individual material weights for each sample. The data collected during visual characterizations in this study are volume estimates. CDM will convert volume estimates to weights using waste density conversion factors.

Using volume-to-weight conversion factors and the volume estimates obtained during the characterization of each sample, individual material weights were calculated using the following formula:

$$c = m \times s \times v \times d$$

where:

$c$  = the total weight of the specific material in the sample

$m$  = percentage estimate of the material, as a portion of the material class (e.g., the extent to which **Newspaper** constitutes all of the **Paper** in the sample)

$s$  = percentage estimate of the material class, as a portion of all the material in the sample (e.g., the extent to which **Paper** constitutes all of the material in the sample)

$v$  = total volume of the sample (in cubic yards)

$d$  = density conversion of the material (in pounds/cubic yard)

#### 3.2.2 Calculating Waste Composition Estimates

The following method will be used to estimate the composition of waste belonging to each waste sector or sub-sector. For a given sector (that is, for the samples belonging to the same waste sector within the same region), the composition estimate denoted by  $r_j$  represents the ratio of the components' weight to the total

weight of all the samples in the stratum. It will be derived by summing each component's weight across all of the selected samples belonging to a given stratum and dividing by the sum of the total weight of waste for all of the samples in that stratum, as shown in the following equation:

$$r_j = \frac{\sum_i c_{ij}}{\sum_i w_i}$$

where:

c = weight of particular component

w = sum of all component weights

for i = 1 to n, where n = number of selected samples

for j = 1 to m, where m = number of components

For example, the following simplified scenario involves three samples. For the purposes of this example, only the weights of the component *carpet* are shown.

	Sample 1	Sample 2	Sample 3
Weight (c) of carpet	5	3	4
Total Sample Weight (w)	80	70	90

$$r_{Carpet} = \sum \frac{5 + 3 + 4}{80 + 70 + 90} = 0.05$$

To find the composition estimate for the component *carpet*, the weights for that material are added for all selected samples and divided by the total sample weights of those samples. The resulting composition is 0.05, or 5 percent. In other words, 5 percent of the sampled material, by weight, is *carpet*. This finding is then projected onto the stratum being examined in this step of the analysis.

The confidence interval for this estimate will be derived in two steps. First, the variance around the estimate will be calculated, accounting for the fact that the ratio included two random variables (the component and total sample weights). The variance of the ratio estimator equation follows:

$$\text{Var}(r_j) \approx \left( \frac{1}{n} \right) \left( \frac{1}{\bar{w}^2} \right) \left( \frac{\sum_i (c_{ij} - r_j w_i)^2}{n-1} \right)$$

where:

$$\bar{w} = \frac{\sum_i w_i}{n}$$

(For more information regarding Equation 2, please refer to Sampling Techniques, 3rd Edition by William G. Cochran [John Wiley & Sons, Inc., 1977].)

Second, precision levels at the 90 percent confidence level will be calculated for a component's mean as follows:

$$r_j \pm \left( z \sqrt{\text{Var}(r_j)} \right)$$

where  $z$  = the value of the z-statistic (1.645) corresponding to a 90 percent confidence level.

Composition results for strata will then be combined, using a weighted averaging method, to estimate the composition of larger portions of the waste stream. The relative tonnages associated with each stratum serve as the weighting factors. The calculation will be performed as follows:

$$O_j = (p_1 * r_{j1}) + (p_2 * r_{j2}) + (p_3 * r_{j3}) + \dots$$

where:

$p$  = the proportion of tonnage contributed by the noted waste stratum (that is, the weighting factor)

$r$  = ratio of component weight to total waste weight in the noted waste stratum (that is, the composition percent for the given material component)

for  $j = 1$  to  $m$ , where  $m$  = number of material components

For example, the above equation is illustrated here using three waste strata.

	Stratum 1	Stratum 2	Stratum 3
Ratio ( $r$ ) of carpet	5%	10%	10%
Tonnage	25,000	100,000	50,000
Proportion of tonnage ( $p$ )	14.3%	57.1%	28.6%

To estimate the portion of larger portions of the waste stream, the composition results for the three strata are combined as follows.

$$O_{\text{Carpet}} = (0.143 * 0.05) + (0.571 * 0.10) + (0.286 * 0.10) = 0.092 = 9.2\%$$

Therefore, 9.2 percent of this examined portion of the waste stream is *carpet*.

The variance of the weighted average will be calculated as follows:

$$\text{Var}(O_j) = (p_1^2 \text{Var}(r_{j1})) + (p_2^2 \text{Var}(r_{j2})) + (p_3^2 \text{Var}(r_{j3})) + \dots$$

## **Appendix A**

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### **Facility Interview Questionnaire**

Each site selected for sampling will be interviewed prior to sorting waste at the facility. The purpose of each site interview is to obtain information for 1) creating sampling intervals and conducting data analysis following the sampling; and 2) arranging on-site logistics (e.g., designating an area for waste sorting).

A copy of the interview form is provided below.

## IRA Waste Characterization Study 2014

### Facilities Interview

Study background, including:

- Potentially sorting in September/October (September 10 - October 30<sup>th</sup>) 1 day at the facility.
- Letter of Support provided by the State of Illinois
- We will sort about **9 loads** of waste entering the site per day.

#### **Facility Information**

Facility Name _____	
Facility Address _____	
Owner of facility _____	Phone # _____
On-site Logistics Contact _____	Phone # _____
e-mail address _____	
Primary Field Contact _____	Phone # _____
Additional Information _____ _____	

1. During a typical week, what is the # of loads you receive? \_\_\_\_\_  
Total weekly tonnage? \_\_\_\_\_
2. Does the facility weigh all vehicles? Yes      No      In not, which vehicles does it weigh?
  - a. Can the facility provide actual net weights for every load? If not, what types of loads are estimated?
  - b. Will drivers know their net weight by the time they arrive at the tipping floor/face or not until they scale out?
3. How many entrances are there into the facility? Who uses each? (e.g., are commercial accounts different than cash customers?)
4. What time do you begin accepting garbage and what time do you normally close/reach your daily tonnage limit?
  - a. Do you have separate hours for commercial haulers? If yes, what are they?
5. Are vehicle net weights printed on customer receipts upon exiting the facility?
  - a. Yes      No

6. Do you have a space that we can use?  
Space requirements are equivalent to 2-3 truck bays adjacent to the working face/tip area of the facility. Samples will be collected from the working face/tip area so the area should be convenient for sample transport.
7. Can you provide me with a map of the site?
  - a. If so please send to fax # 312-346-5228 or [coxca@cdm.com](mailto:coxca@cdm.com)
  - b. Please indicate on the map or otherwise let us know where you would like us to set-up at the facility.
8. We would need your assistance in the following: a front-end loader or bobcat and operator who could collect ~9 200lb-samples throughout the day from the working face and transport it to our working area. Is this possible?
9. We would also need to develop a plan for the use of scales and the cooperation of gatehouse personnel to obtain vehicle net weights and selecting samples
  - a. Are there any rules that may be used for recording the net weight of vehicles and for recording alternate minimum weights for small vehicles?
  - b. Would we be able to have the scale house person assist us in obtaining load specific information through a brief ~ 3 question survey? The purpose of the survey is to determine the distribution of waste between the three categories (see definitions at the end of the survey) and waste source locations.
10. Are there any limits on your facility? i.e. types of waste you receive or accept waste only from certain cities, counties
11. Please share any information about existing recycling or recovery operations at the facility and quantities of materials recovered.
  - a. Magnitude (tons etc.)?
  - b. Materials recycled?
12. Do you have any tips about any unusual conditions (e.g., weather, anomalies in traffic patterns, etc.) that might affect data collection?
13. Can you provide me with written directions and/or a map to the site (such as used for directing tour groups)? Please send to fax # 312-346-5228 or [coxca@cdm.com](mailto:coxca@cdm.com).
14. Please complete the following table for waste accepted during a typical week:

**Waste Stream Definitions:**

- Residential – waste generated by single-family and multiple-family dwellings. This waste is primarily collected in packer trucks (e.g., rear loading vehicles).
- Commercial – waste generated by businesses and institutions. This waste is collected in a variety of vehicles including loose and compactor drop boxes, and front-end loading trucks.
- Industrial – waste generated by industrial activity, such as that of primary and fabricated manufacturing facilities, mills, and mines. Unlike regular MSW which is primarily food, packaging

and disposed products, industrial waste is the material disposed from the production of commercial and consumer goods or the treatment and disposal of waste and sewage.

- Construction and demolition (C&D) – waste generated from new construction, renovation activities, or demolition. This waste is collected in vehicles such as dump trucks, loose roll-off boxes, and end dump vehicles.

Please use % or you best guess if total number of trucks is known but number not per category.

	Weekdays		Weekends	
	# of trucks	Peak hours	# of trucks	Peak hours
Residential				
Commercial/Institutional				
Industrial				
C&D				
Total				

15. We will use this information to finalize the facilities that we would like to sample from and we will follow-up to a schedule a day for sampling in the time period outlined above. Please let us know if there are any days that would not work due to vacations, etc.

**Thank you for your time!**

## Appendix B

### Facility Information

IEPA Region	Primary (P) / Secondary (S)	Landfill or Transfer Station (TS)	County	Facility Address	Operator
1	P	Winnebago Landfill	Winnebago	8403 Lindenwood Road, Rockford	Winnebago Reclamation Service
	P	Lee County Landfill Inc.	Lee	1214 S. Bataan Road, Dixon	Republic Services
	P	LandComp LF	La Salle	2840 E. 13th Road, Ottawa	Republic Services
	S	Veolia (now ADS) ES Orchard Hills LF	Ogle	8290 Highway 251 South, Davis Junction	Advanced Disposal
	S	Prairie Hill Recycling and Disposal Facility	Whiteside	18762 Lincoln Road, Morrison	WMI
2	P	Liberty Waste-McCook TS	Cook	5100 South Lawndale Avenue, McCook	Liberty Waste Services
	P	Shred-All Recycling Facility	Cook	2608 S Damen Ave, Chicago	Republic Services
	P	Apollo Disposal Service TS - Momence Kankakee	Cook	120 E Industrial Drive, Momence	Republic Services
	P	Calumet Transfer	Cook	2040 E. 106th St, Chicago	Republic Services
	P	AW/Groen Waste Services	Cook	13701 S. Kostner Ave, Crestwood	Republic Services
	P	Northlake TS	Cook	605 Northwest Ave, Northlake	Republic Services
	P	ARC Disposal & Recycling Mt.	Cook	2101 S. Busse Road, Mt. Prospect	Republic Services
	P	Waste Mgt/ Bluff City TS	Cook	1225 Gifford Rd, Elgin	Waste Management
	P	Medill MRRF	Cook	1633 W Medill, Chicago	Allied Waste
	P	Lakeshore Recycling Systems	Cook	3152 S California Ave, Chicago	Lake Shore
	P	Homewood Disposal TS	Cook	1501 175th St, Homewood	Homewood Disposal
	P	Veolia (now ADS) Rolling Meadows	Cook	3851 Berdnick St, Rolling Meadows	Advanced Disposal
	P	Prairie View RDF	Will	29755 S. Prairie View Dr., Wilmington	Waste Management
	P	Countryside LF Inc.	Lake	31725 N. Route 83, Grayslake	Waste Management
3	S	Loop Transfer - Laflin	Cook	Laflin - 2464 S Laflin St, Chicago	Republic
	S	West Cook Transfer Station	Cook	6201 W Canal Bank Rd, Forest View	Lake Shore
	S	Laraway Recycling and Disposal Facility	Will	21233 W. Laraway Road, Joliet	WMI
	P	Peoria City/County LF #2	Peoria	11501 W. Cottonwood Road, Brimfield	Waste Management
4	P	Knox County LF #3	Knox	996 Knox Road 2150 North, Oneida	Knox County
	S	Quad Cities Landfill, Phase IV	Rock Island	13606 Knoxville Road, Milan	
	S	Indian Creek Landfill No. 2	Tazewell	24501 McMullen Road, Hopedale	
	P	Livingston LF	Livingston	14206 East 2100 North Road, Pontiac	Republic Services
5	P	Central Waste Services & Recycling Facility/Urbana TS	Champaign	915 W. Saline Ct., Urbana	Republic Services
	P	ADS/McLean County Landfill #2	McLean	2105 W. Oakland Ave., Bloomington	Republic Services
	S	Brickyard Disposal and Recycling Inc.	Vermillion	601 E. Brickyard Road, Danville	Republic
	S	Clinton Landfill #3	De Witt	9550 Heritage Road, Clinton	
	P	Hickory Ridge Landfill (Formerly Pike )	Pike	32246 375th Street, Baylis	Peoria Disposal Company
6	P	Sangamon Valley LF	Sangamon	2565 Sand Hill Road, Springfield	Republic Services
	S	Five Oaks Recycling and Disposal Facility	Christian	890 E. 1500 North Road, Taylorville	WMI
	S	Backridge Landfill	Adams County	*Services 26265 State Highway B, LaGrange, Missouri	Republic
	P	Roxana LF Inc.	Madison	4601 Cahokia Creek Road, Edwardsville	Republic Services
7	P	Cottonwood Hills RDF	St. Clair	10400 Hillstown Road, Marissa	Waste Management
	S	North Milam Landfill	St. Clair	601 Madison Road, East St. Louis	WMI
	P	Southern Illinois Regional LF	Jackson	1540 Landfill Road, DeSoto	Republic Services
	P	Sumner Landfill Inc.	Lawrence	10054 4H Road, Sumner	Republic Services
	S	Perry Ridge Landfill Inc.	Perry	6305 Sacred Heart Road, DuQuoin	
	S	Herrin Solid Waste TS	Williamson	1410 W. Longstreet Road, Marion	Republic

P - Indicates Primary Sampling Location

S - Indicates Secondary Sampling Location

## Appendix C

### Field Forms

The field forms for this study are included in the following order:

- Vehicle selection forms (number of loads required per facility, waste sector, and sub-stream)
  - Residential vehicle selection form
  - ICI vehicle selection form
  - C&D vehicle selection form
- Sample identification placards
  - Residential Sample Placard
  - ICI Sample Placard
  - C&D Sample Placard
- Waste Characterization forms
  - Hand Sort Characterization Form
  - Visual Characterization Form

## Vehicle Selection and Quota Form – Example

Note: The following form is only an example. When we receive the total numbers of loads expected at each facility, this form will be customized and replicated for each sampling day at a given facility.

<b>Waste Characterization Study Vehicle Selection Form</b>									
<b>Site:</b>	34th Street MRRF								
<b>Date:</b>	8/28/2008								
<b>Goal:</b> <u>15 Samples Total</u>									
<b>DSS RESIDENTIAL: (Sample IDs RES 1-15)      NEED    15 TOTAL</b>									
<small>*Must be at least 80% residential waste.</small>									
<i>Wards needed today:</i> _____									
Each number below represents an expected vehicle based on the available data. If driver answers "yes" to any of the above wards, then cross off one number below for that driver's vehicle as it enters the landfill. When you reach a circled number, give the vehicle a placard and ask the vehicle to go to the sorting area.									
<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input checked="" type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9 <input type="radio"/> 10 <input type="radio"/> 11 <input checked="" type="radio"/> 12 <input type="radio"/> 13 <input type="radio"/> 14 <input checked="" type="radio"/> 15 <input type="radio"/> 16 <input type="radio"/> 17 <input checked="" type="radio"/> 18 <input type="radio"/> 19 <input type="radio"/> 20 <input checked="" type="radio"/> 21 <input type="radio"/> 22 <input type="radio"/> 23 <input checked="" type="radio"/> 24 <input type="radio"/> 25 <input type="radio"/> 26 <input checked="" type="radio"/> 27 <input type="radio"/> 28 <input type="radio"/> 29 <input checked="" type="radio"/> 30 <input type="radio"/> 31 <input checked="" type="radio"/> 32 <input type="radio"/> 33 <input type="radio"/> 34 <input checked="" type="radio"/> 35 <input type="radio"/> 36 <input type="radio"/> 37 <input checked="" type="radio"/> 38 <input type="radio"/> 39 <input checked="" type="radio"/> 40									
(expect 40)									

**Sample Placard**

<b>«SAMPLE_ID»</b>	
<b>DATE/TIME:</b>	<b>LOCATION:</b>
<b>HAULER:</b>	<b>TRUCK #:</b>
<b>VEHICLE TYPE:</b>	

## Waste Characterization Form - Hand Sort

IRA Hand Sort - Waste Characterization Form							
Waste Stream: RES ICI	Sample ID: _____			Location: _____			
Total Sample Weight: _____	Date: _____			Truck #: _____			
Does load contain C&D? Y N	Time: _____			County/City _____			
Photo taken: <input type="checkbox"/>				Hauler: _____			
Vehicle type: frontloader / side loader / rear loader / loose drop box / compacted drop box / other: _____							
PAPER	Weight 1	Weight 2	Weight 3	CONSTRUCTION & DEMOLITION	Weight 1	Weight 2	Weight 3
Newsprint				Clean Dimensional Lumber			
High Grade Office Paper				Clean Engineered Wood			
Magazines/Catalogs				Wood Pallets			
Cardboard/Kraft				Painted Wood			
Boxboard				Treated Wood			
Mixed Paper - Recyclable				Concrete			
Compostable Paper				Reinforced Concrete			
Other Paper- Nonrecyclable				Asphalt Paving			
BEVERAGE CONTAINERS				Rock & Other Aggregates			
Milk and Juice cartons/Aseptic				Bricks			
PLASTIC				Gypsum Board			
#1 PET Bottles/Jars				Composition Shingles			
#1 Other PET Containers & Packaging				Other Roofing			
#2 HDPE Bottles/Jars - Clear				Plastic C&D materials			
#2 HDPE Bottles/Jars - Color				Ceramics/Porcelain			
#2 Other HDPE Containers & Packaging				Other C&D			
#6 Styrofoam/Polystyrene Packaging				INORGANICS			
#3-#7 Other- All				Televisions			
Other Rigid Plastic Products				Computer Monitors			
Grocery & Merchandise Bags				Computer Equipment/Peripherals			
Trash Bags				Electronic Equipment			
Commercial & Industrial Film				White Goods - refrigerated			
Other Film				White Goods - not refrigerated			
Remainder/ Composite Plastic				Lead-acid Batteries			
GLASS				Other Household Batteries			
Recyclable Glass Bottles and Jars				Tires			
Flat Glass				Household Bulky Items			
Other Glass				Fluorescent Lights/Ballasts			
METAL				HOUSEHOLD HAZARDOUS			
Aluminum Beverage Containers				Latex Paint			
Other Aluminum				Oil Paint			
HVAC Ducting				Plant/Organism/Pest Control/Growth			
Ferrous containers (tin cans)				Used Oil/Filters			
Other Ferrous				Other Automotive Fluids			
Other Non-Ferrous				Mercury-Containing Items			
Other Metal				Sharps & Infectious Waste			
ORGANIC				Asbestos, Sludge, & Other Industrial Processed Wastes			
Yard Waste - Compostable				Sewage Solids			
Yard Waste - Woody				Other HHW			
Food Scraps				TEXTILES			
Bottom Fines and Dirt				Carpet			
Diapers				Carpet Padding			
Other Organic				Clothing			
If found please call 312-346-5000. Reward offered.				Other Textiles			

Visual Sort - Waste Characterization Form			
Sample ID: _____	Field Supervisor: _____		
<input type="checkbox"/> Labeled & Photographed	Facility Name: _____		
Date: _____ Time: _____	Location: _____		
Hauler: _____	Load Weight: _____ pounds or tons		
Container Yardage: _____	Load Dump Dimensions: _____ x _____ x _____		
Percent Full: _____			
<b>Material Group</b>			
Boxboard	% By Volume	% By Volume	Notes
Compostable Paper	<input type="checkbox"/>		
High Grade Office Paper			
Magazines/Catalogs			
Mixed Paper - Recyclable			
Newsprint			
Uncoated OCC/Kraft			
Other Paper			Subtotal must equal 100%
<b>PAPER</b>			
Milk and Juice cartons/boxes, coated	<input type="checkbox"/>		
Recyclable Glass Bottles and Jars	<input type="checkbox"/>		
Flat Glass			
Other Glass			Subtotal must equal 100%
#1 PET Bottles/Jars	<input type="checkbox"/>		
#1 Other PET Containers & Packaging			
#2 HDPE Bottles/Jars - Clear			
#2 HDPE Bottles/Jars - Color			
#2 Other HDPE Containers & Packaging			
#6 Expanded Polystyrene Packaging (EPS)			
#3-#7 Other - all			
Other Rigid Plastic Products			
Grocery & Merchandise Bags			
Trash Bags			
Commercial & Industrial Film			
Other Film			
Remainder/ Composite Plastic			Subtotal must equal 100%
Aluminum Beverage Containers	<input type="checkbox"/>		
Ferrous containers (tin cans)			
HVAC Ducting			
Other Aluminum			
Other Ferrous			
Other Non-Ferrous			
Other Metal			Subtotal must equal 100%
<b>METAL</b>			
Yard Waste - Compostable	<input type="checkbox"/>		
Yard Waste - Woody			
Food Scraps			
Bottom Fines and Dirt			
Diapers			
Other Organic			Subtotal must equal 100%
Clean Dimensional Lumber	<input type="checkbox"/>		
Clean Engineered Wood			
Wood Pallets			
Painted Wood			
Treated Wood			
Concrete			
Reinforced Concrete			
<b>ORGANIC</b>			
Asphalt Paving			
Rock & Other Aggregates			
Bricks			
Gypsum Board			
Composition Shingles			
Other Roofing			
Plastic C&D materials			
Ceramics/Porcelain			
Other C&D			Subtotal must equal 100%
<b>C&amp;D MATERIALS</b>			
Televisions	<input type="checkbox"/>		
Computer Monitors			
Computer Equipment/Peripherals			
Electronic Equipment			
White Goods - refrigerated			
White Goods - not refrigerated			
Lead-acid Batteries			
Other Household Batteries			
Tires			
Household Bulky Items			
Fluorescent Lights/Ballasts			Subtotal must equal 100%
<b>SCRAP/ABANDONED</b>			
Latex Paint	<input type="checkbox"/>		
Oil Paint			
Plant/Organism/Pest Control/Growth			
Used Oil/Filters			
Other Automotive Fluids			
Mercury-Containing Items			
Sharps & Infectious Waste			
Ash, Sludge, & Other Industrial Processed Wastes			
Sewage Solids			
Other HHW			Subtotal must equal 100%
<b>HHW</b>			
Carpet	<input type="checkbox"/>		
Carpet Padding			
Clothing			
Other Textiles			Subtotal must equal 100%
Total category must equal 100%			
Notes			

## Waste Characterization Form - Hand Sort

## Appendix D

### Materials List and Definitions

**IRA Proposed Material List**

	Material Group	Divertibility	Notes/Examples
1	Newsprint	Recoverable	Includes newspaper and glossy inserts, and all items made from newsprint, such as free advertising guides, election guides, plain news packing paper, stapled college schedules of classes, and tax instruction booklets.
2	High Grade Office Paper	Recoverable	Includes white and pastel bond, rag, or stationary grade paper, with or without ink. Examples include photocopy, ledger paper, computer paper used for computer printouts, notebook or ledger paper, and index cards.
3	Magazines/Catalogs	Recoverable	Includes magazines and catalogs and other items made of glossy coated paper. This paper is usually slick, smooth to the touch, and reflects light. Does not include phone books.
P A P E R	Uncoated OCC/Kraft Recovered Boxboard Recovered Mixed Paper - Recyclable Compostable Paper Omnipaper	Recoverable Recoverable Recoverable Recoverable Recoverable Non-recoverable Recoverable	Includes uncoated cardboard items with a wavy core, without wax coating on the inside or outside. Examples include shipping and moving boxes, computer packaging cartons, sheets and pieces of boxes and cartons, Kraft paper bags, and other Kraft paper. Does not include chipboard. Includes chipboard not coated with wax, metal, or plastic. Also includes paperboard such as cereal and tissue boxes. Includes all other recyclable papers not elsewhere described. Includes phone books and directories, junk mail, envelopes, brightly colored ledger paper and other dry paper, manila folders, index cards, carbonless forms, and egg cartons. Mixed Recyclable Paper may be combined with minor amounts of other materials such as wax or glues. Includes low grade and food contaminated paper which is compostable. Examples include paper towels, paper plates, waxed papers, and tissues. Includes items made mostly of paper but combined with large amounts of other materials such as wax, plastic, glues, foil, wire, food and moisture. Examples include blueprints, sepiia, onion skin, foiled lined fast food wrappers, carbon paper, coated OCC, and photographs. Includes aseptic packages and polycoated (gable top) cartons.
9	Milk and Juice Containers	Recoverable	Includes clear or colored PET bottles (i.e., narrow neck containers) and jars marked with a #1. May also bear the letters "PETE" or "PET." The color is usually transparent green or clear, and does not turn white when bent. Examples include soft drink bottles, some liquor bottles, and cooking oil containers.
10	#1 PET Bottles/Jars #1 Other PET Containers #1 & Packaging	Potentially Recoverable	Includes PET containers and packaging marked with a #1 and potentially bearing the letters "PETE" or "PET."
11	#2 HDPE Bottles/Jars - Clear	Recoverable	Includes bottles (i.e., narrow neck containers) and jars marked with #2 that are cloudy white, allowing light to pass through it (natural). Examples include milk jugs, water jugs, some hardcore bottles, and other clear empty fluid containers marked with #2 or "HDPE."

## **Proposed Material List**

		Material Group	Diverterability	Notes/Examples
13	P	#2 HDPE Bottles/Jars - Color	Recoverable	Includes bottles (i.e., narrow neck containers) and jars marked with #2 that are a solid color, preventing light from passing through it (pigmented). Examples include detergent bottles, some hair-care bottles, empty motor oil, empty antifreeze, and other empty vehicle and equipment fluid containers marked with #2 or "HDPE".
14	L	#2 Other HDPE Containers & Packaging	Potentially Recoverable	Includes HDPE containers and packaging marked with a #2 and potentially bearing the letters "HDPE".
15	A	#6 Expanded Polystyrene Packaging (EPS)	Recoverable	Includes formed or sheet expanded polystyrene (EPS) items marked with a #6 or a #6 used for packaging and shipping. Examples include items used for food packaging or food service, food trays, egg cartons, packaging peanuts, packaging blocks, and coolers.
16	S	#3-#7 Other - All	Potentially Recoverable	Includes bottles, jars, and containers marked #3-#7 or unmarked that are made of types of plastic other than HDPE (high-density polyethylene) or PETE (polyethylene terephthalate). Examples include syrup bottles, salad dressing bottles, clamshells, salad trays, lids, cookie tray inserts, plastic spoons, plastic frozen food trays, yogurt cups and lids, margarine tubs, clamshell-shaped fast food containers, shampoo containers, vitamin bottles, and toothpaste tubes. Also includes toxic product containers, such as for oil or antifreeze.
17	T	Other Rigid Plastic Products	Potentially Recoverable	Includes plastic items other than containers, film plastic, HDPE buckets, or #3-#7 buckets that are often made to last for more than one use. These items may bear the numbers 3 through 7 in the triangular recycling symbol. Examples include plastic outdoor furniture, plastic toys and sporting goods, CDs, and plastic house wares, such as mop buckets, dishes, cups, cutlery, fan blades, impact-resistant cases such as tool boxes and first aid boxes, and HDPE 5 gallon buckets.
18	I	Grocery & Merchandise Bags	Recoverable	Includes labeled grocery and merchandise, dry cleaner, and newspaper/polyethylene film bags that were not contaminated with food, liquid or grit during use.
19	C	Trash Bags	Non-recoverable	Includes polyethylene film bags that were used to contain garbage such as black or transparent trash bags.
20	S	Commercial & Industrial Film	Recoverable	Includes film plastic used for large-scale packaging or transport packaging, such as industrial film, wrappings, plastic strapping, other thin flexible plastic packaging, plastic sheeting, and shrink wrap.
21		Other Film	Non-recoverable	Includes film packaging not defined above, such as film that is woven together (e.g., grain bags); contains multiple layers of film or other materials that have been fused together (e.g., potato chip bags); is used to contain food or liquid (e.g., produce and bread bags); plastic sheeting, photographic negatives, and shower curtains.
22		Remainder/ Composite Plastic	Non-recoverable	Includes plastic items not elsewhere classified, as well as items made mostly of plastic but combined with other materials. Examples include disposable razors, pens, lighters, 3-ring binders, auto parts made of plastic attached to metal, plastic outdoor furniture, and other objects that contain more than 50% plastic, etc.

**IRA Proposed Material List**

		Material Group	Divertibility	Notes/Examples
G L	23	Recyclable Glass Bottles and Jars	Recoverable	Includes clear, green, brown, and other colored glass bottles and jars containing beverages, food, or consumable liquids. Examples include whole or broken clear or colored soda, beer bottles, fruit juice bottles, peanut butter jars, mayonnaise jars, wine bottles, cosmetic jars and non prescription medical bottles.
A S S	24	Flat Glass	Potentially Recoverable	Includes clear or tinted glass that is flat, such as glass window panes, doors, table tops, flat automobile window glass (side windows), safety glass, and architectural glass. This category does not include windshields, laminated glass, or any curved glass.
	25	Other Glass	Non-recoverable	Includes glass that cannot be put in any other type or subtype. It includes items made mostly of glass but combined with other materials, such as Pyrex, crystal and other glass tableware, auto windshields, and incandescent/light bulbs.
	26	Aluminum Beverage Containers	Recoverable	Includes any food or beverage container made mainly of aluminum, such as aluminum soda or beer cans and some pet food cans. This does not include bimetal containers with steel sides and aluminum ends.
	27	Other Aluminum	Potentially Recoverable	Includes items such as aluminum foil, pie plates, trays, siding, and furniture.
	28	HVAC Ducting	Recoverable	Includes sheet metal tubing, typically galvanized, used for conveying ventilation air.
M E	29	Ferrous containers (in cans)	Recoverable	Includes rigid containers made mainly of steel, such as items that will stick to a magnet and may be tin-coated. This subtype is used to store food, beverages, paint, and a variety of other household and consumer products. Examples include canned food and beverage containers, empty metal paint cans, empty spray paint and other aerosol containers, and bimetal containers with steel sides and aluminum ends.
T A L S	30	Other Ferrous	Recoverable	Includes iron or steel that is magnetic or any stainless steel item, other than ferrous/bimetal cans. Examples include structural steel beams, boilers, metal clothes hangers, metal pipes, rebar, stainless steel cookware, security bars, scrap ferrous items, and galvanized items such as nails and flashing.
	31	Other Non-Ferrous	Recoverable	Includes any metal item, other than aluminum cans, that is not magnetic. These items may be made of copper, brass, aluminum, bronze, lead, zinc, or other metals. Examples include aluminum window frames, aluminum siding, copper wire, shell casings, brass pipe, and aluminum foil.
	32	Other Metal	Non-recoverable	Includes metal that cannot be put in any other category. This category includes items made mostly or metal but combined with other materials and items made of both ferrous metals and non-ferrous metal combined. Examples include small non-electronic appliances such as toasters and hair dryers, motors, insulated wire, and finished products that contain a mixture of metals, or metals and other materials, whose weight is derived significantly from the metal portion of its construction.

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F-20170001-Recycling Association Field Forms 04/16/2017

**IRA Proposed Material List**

	Material Group	Divertibility	Notes/Examples
O	Yard Waste - Compostable	Compostable	Includes leaves, grass clippings, garden debris, pruning shrubs, and small branches up to 2 inches in diameter from any public or private landscapes.
R	Yard Waste - Woody	Compostable	Includes vegetative woody plant material, branches, shrubs, and stumps that exceed 2 inches in diameter from any public or private landscape.
G	Food Scraps	Compostable	Includes food material capable of being composted (including scrap animal parts). This type includes materials resulting from the processing, storage, preparation, cooking, handling or consumption of food and material from industrial, commercial or residential sources. Examples include discarded meat scraps, dairy products, egg shells, fruit or vegetable peels, and other food items from homes, stores, and restaurants. This type includes grape pomace and other processed residues or material from canneries, wineries, or other industrial sources.
A			
N			
I			
C	Bottom Fines and Dirt	Non-recoverable	Includes fragments that pass through 1/4 inch screen. Examples include mixed residue, sand, soil, clay, and dirt.
S	Diapers	Non-recoverable	Diapers made from a combination of fibers, synthetic, and/or natural, and made for the purpose of single use. This includes disposable baby diapers and adult protective undergarments.
37			
Other Organic	Non-recoverable		Includes organic material that cannot be put in any other category such as items made mostly of organic materials but combined with other materials. Examples include cork, hemp rope, rubber/vinyl garden hoses, hair, cigarette butts, full vacuum bags, sawdust, and animal feces.
38			
Clean Dimensional Lumber	Recoverable		Includes unpainted, non-treated processed wood for building, manufacturing, landscaping, packaging, and from demolition. Examples include dimensional lumber, lumber cutoffs, wood scraps, and wood siding, materials such as 2 x 4s, 2 x 6s, 2 x 12s, and other residual materials from framing and related construction activities. May contain nails or other trace contaminants.
39			
Clean Engineered Wood	Recoverable		Includes unpainted, non-treated wood such as sheeted goods like plywood, particleboard, wafer board, oriented strandboard, and other residual materials used for sheathing and related construction uses. May contain nails or other trace contaminants.
40			
Wood Pallets	Recoverable		Includes unpainted wood pallets, crates, and packaging made of lumber/engineered wood.
41			
Painted Wood	Non-recoverable		Includes wood that has been painted or stained like handrails or finished furniture. May contain nails or other contaminants.
42			
Treated Wood	Non-recoverable		Includes wood that has been treated with a chemical preservative for purposes of protecting the wood against attacks from insects, microorganisms, fungi, and other environmental conditions that can lead to decay of the wood. Examples include wood that has been pressure treated, chemically treated (with copper, etc.) or treated with creosote (e.g. railroad ties, marine timbers and pilings, landscape timbers, and telephone poles).
43			

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F-20170001-Recycling Association Field Forms v1.0, last updated 10/2017.

**IRA Proposed Material List**

		Material Group	Divertibility	Notes/Examples
		Concrete	Recoverable	Includes materials made of concrete, a hard material made from sand, gravel, aggregate, cement mix, and water. Examples include pieces of building foundations, concrete paving, cinder blocks, and man-made paving stones.
44		Reinforced Concrete	Potentially Recoverable	Includes concrete with a steel internal structure composed of reinforcing bars (re-bar) or metal mesh.
45	C	Asphalt Paving	Recoverable	Includes black or brown, tar-like material mixed with aggregate used as a paving material.
46	D	Rock & Other Aggregates		Includes aggregates (other than concrete and asphalt paving) such as masonry tile, clay roofing tiles, rock, stones, and materials made of rock.
47		Bricks	Potentially Recoverable	Includes bricks and materials made of bricks.
48		Gypsum Board	Potentially Recoverable	Includes gypsum interior wall covering made of a sheet of gypsum sandwiched between paper layers. This category includes used or unused, broken or whole sheets. Gypsum board may also be called sheetrock, drywall, plasterboard, gypsum, or wallboard.
49		Composition Shingles	Potentially Recoverable	Includes composite shingles composed of fiberglass or organic felts saturated with asphalt and covered with inert aggregates as well as attached roofing tar and tar paper. Does not include built-up roofing. Commonly known as three tab roofing. Examples include asphalt shingles and attached roofing tar and tar paper.
50		Other Roofing	Potentially Recoverable	Includes other roofing material made with layers of felt, asphalt, aggregates, and attached roofing tar and tar paper normally used on shallow pitched roofs usually on commercial buildings. Commonly known as built-up roofing.
51		Plastic C&D materials	Potentially Recoverable	Includes plastics such as piping, siding, drainage, and windows.
52		Ceramics/Porcelain	Potentially Recoverable	Includes inorganic non-metallic materials which are formed by the action of heat. Examples include clay pottery, tiles, stoneware, dishes, toilets, and other cement glasses.
53		Other C&D	Non-recoverable	Includes construction and demolition material that cannot be put in any other type or subtype. This type may include items from different categories combined, which would be very hard to separate, such as metal sinks, fiberglass insulation, linoleum, nails, and cabinets.
54				

**IRA Proposed Material List**

	<b>Material Group</b>	<b>Divertibility</b>	<b>Notes/Examples</b>
	55 Televisions	Recoverable	Includes televisions. Includes computer monitors containing a cathode ray tube (CRT), including oscilloscopes.
56	Computer Monitors	Recoverable	Does not include laptops and LCD monitors.
Computer	Computer Equipment/Peripherals	Recoverable	Includes keyboards, printers, modems, etc.
57	Electronic Equipment	Recoverable	Means large and small electronic goods that have circuitry. Examples include microwaves, stereos, VCRs, DVD players, radios, audiovisual equipment, and non-CRT televisions (such as LCD televisions); computer related electronics such as processors, mice, keyboards, laptops, disk drives, printers, modems, and fax machines; and other small consumer goods such as personal digital assistants (PDAs), cell phones, phone systems, phone answering machines, computer games and other electronic toys, portable CD players, camcorders, and digital cameras.
58	White Goods - refrigerated	Recoverable	Includes goods made mostly of metal but combined with other materials and items made of both ferrous and non-ferrous metals combined. Examples include large appliances such as refrigerators, freezers, and dehumidifiers.
O R G	White Goods - not refrigerated	Recoverable	Includes goods made mostly of metal but combined with other materials and items made of both ferrous and non-ferrous metals combined. Examples include large appliances and parts thereof such as stoves, washers, dryers, and water heaters; as well as small appliances such as fans, irons, and hair dryers.
A N	Lead-acid Batteries	Recoverable	Includes batteries with liquid acid and lead cells, such as car, truck, lawn mower, and other batteries used to store power.
C S	Other Household Batteries	Non-recoverable	Includes any type of dry cell battery, such as flashlight, small appliance, watch, cell phone, and hearing aid batteries.
62	Tires	Recoverable	Includes whole tires from automobiles, trucks, motorcycles, bicycles, wagons, and other transport vehicles.
63	Household Bulky Items	Potentially Recoverable	Includes multi-material furniture items such as couches, chairs, hutchess, tables, entertainment centers, fragments of furniture items, and mattresses (fabric coated framed or unframed wire coil bulky item used for sleeping).
64	Fluorescent Lights/Ballasts	Recoverable	Includes a lamp tube that is able to be screwed or plugged in to a lamp or over head light that produces visible light by fluorescence, especially a glass tube whose inner wall is coated with a material that fluoresces when an electrical current causes a vapor within the tube to discharge electrons. Includes fluorescent lights, ballasts, and compact fluorescent bulbs (CFL).
65			

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**IRA Proposed Material List**

		<b>Material Group</b>	<b>Divertibility</b>	<b>Notes/Examples</b>
	66	Latex Paint	Recoverable	Includes wet water-based paints and similar products.
	67	Oil Paint	Non-recoverable	Includes wet and dry solvent-based paints, varnishes, and similar products.
	68	Plant/Organism/Pest Control/Growth	Non-recoverable	Includes a variety of chemicals such as fertilizers to encourage growth; herbicides and pesticides whose purpose is to discourage pests, weeds, or microorganisms; and fungicides and wood preservatives, such as pentachlorophenol.
	69	Used Oil/Filters	Recoverable	Includes used lubricating oils, primarily used in cars but including other types with similar characteristics and oil filters.
	70	Other Automotive Fluids	Non-recoverable	Includes automotive and other antifreeze mixtures based on ethylene or propylene glycol. Also includes brake and other automotive fluids, such as antifreeze, brake fluid, windshield wiper fluid, gasoline, and diesel fuel. Does not include motor oil.
	71	Mercury-Containing Items	Non-recoverable	Includes barometers, thermostat switches, thermometer. Does not include electrical ballasts.
H	72	Sharps & Infectious Waste	Non-recoverable	Includes any prescription medications and sharp objects used for medical procedures such as needles.
H	73	Ash, Sludge, & Other Industrial Processed Wastes	Non-recoverable	Includes material remaining after the combustion process, present in the waste stream as ash from fireplaces and wood stoves, used charcoal from grills. Also includes sludge and other industrial processed wastewater or treatment wastes.
W	74	Sewage Solids	Non-REcoverable	Includes residuals from the sewage treatment process.
	75	Other HHW	Non-recoverable	Includes any household hazardous material (HHW) that cannot be put in the other H-HW subtypes. This type also includes HHW that is mixed, such as waste which if improperly put in the solid waste stream may present handling problems or other hazards. Additional examples include cleaners and corrosives (various acids and bases whose primary purpose is to clean surfaces, unclog drains, or perform other actions), and solvents (including chlorinated and flammable solvents, paint strippers, solvents contaminated with other products such as paints, degreasers and some other cleaners if the primary ingredient is [or was] a solvent, and alcohols such as methanol and isopropanol).
T	76	Carpet	Potentially Recoverable	Includes material consisting mainly of carpet flooring applications consisting of various natural or synthetic fibers bonded to some type of backing material.
X	77	Carpet Padding	Potentially Recoverable	Includes plastic, foam, felt, and other materials used under carpet to provide insulation and padding.
T	78	Clothing	Potentially Recoverable	Includes items made of thread, yarn, fabric, cloth, clothes, natural and synthetic cloth fibers, and leather clothing goods.
L	79	Other Textiles	Non-recoverable	Includes drapes, curtains, bedding, blankets, upholstery, shoes, and other products comprised mostly of textiles and leather.
E				
S				

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## Appendix E

# Health and Safety Plan

**STANDARD HEALTH & SAFETY PLAN  
for  
FIELD SAMPLING AND SORTING FOR  
SOLID WASTE CHARACTERIZATION ANALYSIS**

**CDM Smith**  
**125 S. Wacker Drive, Suite 600**  
**Chicago, IL 60606**  
**312-346-5000**

**EMERGENCY CONTACT:** Chris Marlowe  
732-590-4632  
732-539-8128 (24 hour)

1. A copy of this Health and Safety Plan must be kept on site during the entire sampling and sorting event.
  2. All field sampling and sorting staff must complete two copies of the emergency contact form, Appendix A to this Plan. One copy of the emergency contact form for each staff person must be attached to this Plan and kept on site during the entire sampling and sorting event. The second copy of the form must be left with the CDM Smith emergency contact staff at the local CDM Smith office.
  3. The following information, for each field site, must be completed prior to beginning the sampling and sorting event.

**Name of Project** Illinois Commodity/Municipal Solid Waste Disposal Characterization Study

Client/No: IRA/DCEO 67680-105176

Fire Dept. Phone Number: 911  
Ambulance Phone Number: 911  
Police Phone Number: 911

Nearest Hospital and Directions: See **Appendix B**

CDM Smith Field Supervisor: Catherine Cox 312-523-9258  
CDM Smith Chicago Contact: Pam Johnson 312-346-5000  
CDM Smith Emergency Contact: Chris Marlowe 732-590-4632  
CDM Smith Local Office Phone: 312-346-5000

# **APPROVED**

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# **HEALTH & SAFETY PLAN**

## **FIELD SAMPLING AND SORTING FOR SOLID WASTE CHARACTERIZATION ANALYSIS**

### **1.0 INTRODUCTION**

The health and safety of field workers is a primary concern of CDM Smith. This document was developed to present guidelines for personal safety during solid waste characterization studies (also known as "trash sorts") at solid waste management facilities. This document will be reviewed by CDM Smith staff responsible for the field sampling and sorting events and the Field Supervisor. The guidelines in this document will be reviewed during the safety and training session required of all field staff. This document is not intended for sites containing hazardous or toxic wastes regulated under federal or state laws.

### **2.0 OVERVIEW OF FIELD SAMPLING AND SORTING SAFETY**

CDM Smith is committed to implement all reasonable precautions to:

- eliminate or reduce the potential for body contact with solid waste and airborne or "flying" waste;
- anticipate potential threats to field worker safety;
- permit visual observation of the solid waste prior to handling or sorting;
- provide adequate information and training to enable field workers and CDM Smith supervisory staff to perform the sampling and sorting in a safe and responsible manner; and,
- provide procedures for responding to emergencies.

### **3.0 REDUCING THE POTENTIAL FOR BODY CONTACT**

Due to the presence of bacteria, sharps, and other potentially dangerous materials in solid waste, the following precautions and procedures will be followed by all field workers during all solid waste sampling and sorting events. These are intended to minimize field workers coming in contact with solid waste and airborne solids.

#### **3.1 Site Orientation**

CDM Smith's Field Supervisor will participate in a site orientation provided by a representative from each facility to identify site hazards, work zones, restrooms, emergency procedures, evacuation route and gathering area, and any additional safety

procedures required by the facility. The Field Supervisor will communicate this information to the sampling and sorting staff daily.

### **3.2 Clothing**

Personal Clothing: All field workers are to wear ankle length pants; socks; sturdy boots or shoes with reinforced toes, and long sleeved shirts. No sandals or canvas shoes without safety toe caps will be worn during sampling and sorting.

Safety Clothing: CDM Smith will supply the safety equipment described below:

- dust masks (optional),
- hard hats (required if near tipping floor),
- safety glasses,
- safety vests,
- disposable or other coveralls,
- disposable latex gloves, and
- puncture-resistant outer gloves

Sturdy boots or shoes with reinforced toes are required for all personnel working at the facility. The hard hats and safety vests will be brightly colored to increase visibility of workers in the sampling and sorting areas. Safety vests and hard hats must be worn whenever a sampler or sorter is on the tipping floor or near the path of site traffic. Once safely in the sorting area both can be removed. Disposable latex inner gloves are provided to reduce contact between hands and dirty outer gloves during removal. Low-resistance respiratory protection (dust masks) will be provided if conditions cause waste material to become airborne. It is not anticipated that conditions shall cause material to become airborne, but if so other controls will be evaluated prior to implementing use of dust masks.

### **3.3 Hand-to-Mouth Contact**

No eating, smoking, drinking, or application of cosmetics will be permitted during the sampling or sorting. To reduce hand to mouth contact, chewing gum and chewing tobacco are also restricted. The crew may do these things on breaks after washing their hands and, if required by the field supervisor, their faces.

Fresh water for drinking and hand washing will be kept at the site at all times. Breaks will be taken regularly as indicated by weather conditions. Gloves will be removed before pouring or drinking water.

### **3.4 Accidental Exposure to Waste**

No crew will handle any solid waste without gloves. Accidental skin contact with waste will require cleansing with soap and water. A wash-up station will be available at the site.

All crew members must have had a tetanus shot within 5 years. If necessary, CDM Smith will cover the cost of the shot for all field workers prior to beginning the field work.

Permanent CDM Smith employees who participate in sampling and sorting activities must complete a 6-month hepatitis B vaccination program before or during the sorting program. Similarly, per diem (temporary) employees will be encouraged to get the hepatitis B vaccination. Per diem employee who don't participate in the vaccination and may have been exposed to bloodborne pathogens during sampling or sorting (for example, by being pricked by a hypodermic needle) must be offered an HB-Ig immunization immediately. If the employee refuses immunization, he or she must sign a form to that effect before resuming sampling or sorting work.

## **4.0 ANTICIPATION OF POTENTIAL THREATS**

Working in an active solid waste management facility presents a variety of potential dangers. The following procedures are intended to improve field worker safety.

### **4.1 Heat Stress**

Sampling and sorting will be conducted under cover, where available, however conditions may have limited ventilation and work could occur during higher temperatures. Fresh water and cups for drinking will be available at all times. An ice chest with cold, wet towels will be available at the sorting site. Vehicles with air conditioning will be utilized for breaks, if needed. Any field worker exhibiting signs of heat cramps or heat exhaustion will be immediately required to take a break and will be monitored until symptoms are gone.

### **4.1 Crew Visibility**

The CDM Smith field supervisor and the facility supervisor will jointly agree on the sorting site. The sorting site is located in an area out of the routes taken by waste hauling vehicles and facility equipment. Regardless of task, sorter or sampler, all field workers will wear steel toe boots, brightly colored hard hats and high-visibility vests when on the tipping floor.

## **4.2 Crew Behavior**

As a condition of employment, crew members will observe the following rules for site behavior.

- All field workers will complete the CDM Smith solid waste sampling and sorting safety training.
- No field workers may work under the influence of recreational drugs or alcohol.
- All field workers will wear personal and safety clothing as described in Section 3.1 above.
- No throwing or tossing of waste towards a person will be permitted during the sampling or sorting. Personnel may place waste within the volume of the sorting table towards the crew member closest to the appropriate collection barrel.

## **4.3 Rejecting a Sample**

The field supervisor will be responsible for determining if samples are potentially hazardous. Samples will be rejected if they: contain potentially infectious hospital or medical waste; are soaked in a liquid other than water; contain unidentifiable contents; contain hazardous waste or materials posing a safety hazard; or have an unusual odor not like other solid waste. If such a load is identified, it will be reported to the facility supervisor for removal from the sorting area.

## **4.4 Evacuation**

The field supervisor will determine routes for evacuation from the site and describe them to the work force at the initial site safety meeting. The field supervisor will be responsible for determining if circumstances warrant evacuation of the site.

## **4.5 Ergonomics Issues**

The sorting will occur on a sorting table that holds the waste at a height between 33" and 40". This table should have sturdy support and sides (between 3" and 12" high) to reduce spillage.

If a crew member determines that a trash container is too heavy for one person to lift comfortably (this often happens with containers of food waste), another crew member should help with the lift. Any items weighing over 50 pounds require the individual to obtain assistance.

# **5.0 VISUAL OBSERVATION OF WASTE**

To reduce the potential for cuts or puncture wounds, all waste will be spread out and viewed prior to handling or sorting. The selected waste sample will be extracted or loosened from a truckload at the site via a front end loader or similar machine. It will be transported to the sorting area and deposited on a tarp or a paved surface. Sampling

and sorting personnel will inform the field supervisor of any potentially dangerous materials observed in the sample.

Bags will be carefully lifted to the sorting table and cut open. Loose waste from the sample will be put onto the sorting table with a shovel. The crew will spread the waste out with hand tools such as gardening trowels or hand hoes so that contents can be visually examined prior to handling.

No crew member will pick up an armload of waste. No crew member will grasp or "hug" an unopened bag of waste. Such bags may be grasped only at the knot or the free edges.

## **6.0 STAFF TRAINING**

Understanding the procedures necessary to promote safety, and knowing how to respond to an emergency before it happens, are essential to ensuring worker safety. All field staff will participate in a waste characterization training prior to beginning the sampling or sorting. The training will be held as close as possible to the actual field work and may take place during the first part of the day the sampling and sorting begins. The training session will require approximately 1 hour.

### **6.1 Training Session**

Training for field workers will include:

- Introduction
  - purpose for waste characterization study
  - intended use
  - method of compensation (if using outside help)
  - dates of sorting and rain dates (if planned)
  - supervisory responsibility at site
- Sampling and Sorting Procedures
- Health and Safety Plan (specifics described in this plan)

### **6.2 Responsible Individual/CDM Smith Field Supervisor**

Safety during the field work is the responsibility of the CDM Smith Field Supervisor. The supervisor must have previous solid waste sampling and sorting experience. The Supervisor will make project level decisions regarding compliance with this Health and Safety Plan during field operations. The Supervisor may temporarily suspend work if there appears to be a threat to health and safety. The Supervisor, or one crew member, will have a current Red Cross First Aid Certificate. An individual who has a current First Aid Certificate will act as the project safety coordinator.

The Field Supervisor will work with project safety coordinator to:

- Ensure that appropriate personal protective equipment is available and properly utilized by all field staff during the sampling and sorting activities;
- Ensure that field staff are familiar with the Health and Safety Plan and trained in the work practices necessary for safe and efficient data collection;
- Ensure that field staff are aware of potential hazards associated with site operations, such as broken glass, heavy equipment, etc.; and,
- Be responsible for correcting any work practices or conditions that may result in injury to personnel or exposure to hazardous substances.

## **7.0 EMERGENCY PROCEDURES**

Most solid waste management facilities have safety plans and procedures for the site. Prior to beginning the sampling and sorting event, the facility supervisor will be contacted to deliver site specific safety procedures. CDM Smith staff will follow the existing procedure for handling an emergency on site. In addition, the following CDM Smith emergency procedures will be followed.

For the purpose of this plan, an emergency is a situation or condition which could require temporary suspension of field work. This includes but is not limited to: adverse weather conditions, fires, accidents or injuries to field staff, and discovery of waste samples that contain materials which are potentially hazardous.

In the event of a site emergency, such as a fire or release of hazardous chemicals, the facility's safety coordinator or the field supervisor will instruct the crew to leave the area by the pre-planned evacuation route. In general, CDM Smith personnel will not participate in efforts to control facility emergencies.

### **7.1 Responsible Party**

The Field Supervisor is responsible for deciding whether a situation or condition is an emergency. The Supervisor is responsible for deciding whether the situation requires evacuation, on-site medical attention, adjustments in procedures, or off-site medical attention.

### **7.2 Safety Equipment on Site**

The safety equipment listed in Table 7-1 will be kept on site throughout the sampling and sorting. Plans to maintain less equipment than the table describes must be approved by the divisional health and safety coordinator.

### **7.3 Onsite Treatment**

Minor injuries such as cuts, scrapes, and the initial stages of heat exposure, will be treated on site by the Safety Coordinator or Field Supervisor who is trained in First Aid.

### **7.4 Offsite and Professional Medical Treatment**

Unless the injury definitely requires first-aid only, the Field Supervisor will seek professional medical assistance. If such an injury occurs the following procedure will be followed.

- Immediate emergency first aid treatment will be given at the site.
- CDM Smith's project health and safety coordinator will notify the appropriate agencies listed in Appendix B.
- For non-emergency medical situations, contact the HSM for the nearest designated clinic.
- If necessary, the injured party will be transported immediately to the nearest emergency facility as identified on the front cover of this Plan.
- The supervisor or a member of the sort crew as designated by the Field Supervisor will call the emergency facility to inform them of the injury and that personnel are approaching for treatment.
- The CDM Smith staff emergency contact will be called and asked to contact the person, on the emergency contact form (APPENDIX A), identified by the injured party, to be called in case of an emergency. The CDM Smith emergency contact is a designated individual or individuals at the local CDM Smith office who is available during the sampling and sorting event to receive and make emergency phone calls for the sorting crew.
- If the injury was the result of a cut or puncture from a sharp or needle, the item will be retrieved and placed in a zip-lock plastic bag for further examination or testing.
- A report explaining the incident will be submitted to all interested parties including but not limited to: CDM Smith client officer, CDM Smith health and safety group, CDM Smith client contracting for the sampling and sorting, facility owner, and the injured party. Accident reports will be filled out where necessary.

NOTE: If the supervisor must leave the site, all field staff will stop work until a responsible CDM Smith substitute can arrive to supervise the sampling and sorting.

**Table 7-1**  
**Equipment for Solid Waste Characterization Sampling and Sorting**

Required Personal Protective Equipment:

Dust masks (user's option)  
Hard hats (required if near tipping floor)  
Coveralls (cloth or disposable)  
Safety vests  
Safety glasses  
Disposable undergloves  
Overgloves, puncture resistant  
Field boots

Site Safety Equipment:

Copy of Health and Safety Plan with cover sheet completed  
Copy of Emergency Contact Form for each field worker  
First Aid Kit containing at a minimum:  
eye wash, compresses, antiseptic wipes and spray, band-aids, gauze, tape, tweezers;  
Vehicle to permit immediate site evacuation  
Clean water and cups for drinking  
Clean water, wipes and antibacterial soap for washing  
Ice chest with cold water towels (to be wetted for heat stress conditions)  
Zip-lock plastic bags  
Paper towels, rags, or tissues  
Portable phone (if the sort area has no permanent phone)

Sampling and Sorting Equipment:

Sorting table  
Sorting buckets/pails/tubs  
Shovels, hoes, gardening hand tools  
Broom

**APPENDIX A**  
**Site Location and Contact Information**

Update with Selected Facility Info

**APPENDIX B**  
**Nearest Hospital and Driving Directions**

Update with Selected Facility Info

## **APPENDIX C**

### **Emergency Contact Form**

NOTE: Two copies of this form are to be completed by every field worker. One copy is to be kept at the site during the sampling and sorting event. One copy is to be left with the CDM Smith emergency contact person at the local CDM Smith office.

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

Home Phone: \_\_\_\_\_

Blood Type: \_\_\_\_\_

Date of Last Tetanus Shot: \_\_\_\_\_

Date of hepatitis vaccination, if any: \_\_\_\_\_

Medications Currently Taking: \_\_\_\_\_  
\_\_\_\_\_

Allergies to Medication: \_\_\_\_\_  
\_\_\_\_\_

If an emergency occurs during sampling or sorting, please contact

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

Phone: \_\_\_\_\_

Date Completed: \_\_\_\_\_

Signature: \_\_\_\_\_

**APPENDIX D**  
**Emergency Telephone Numbers**

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<b><u>Emergency Service</u></b>	<b><u>Provider</u></b>	<b><u>Telephone Number</u></b>
CDM Smith 24 hour Emergency	CDM Smith CHSO	800-313-5593
Health and Safety Manager	Paul Opem	303-383-2483
Project Manager	Chris Martel	312-346-5000
Project Safety Coordinator	Catherine Cox	cell: 312-523-9258
Client Contact	Rod Fletcher	217-384-2381
State Environmental Agency	IEPA	1-800-782-7860
Fire Department	Chicago	911
Police Department	Chicago	911
24-hour ambulance	Chicago	911
Health Department	Chicago	212-788-5261
Poison Control Center	Nationwide	1-800-222-1222
Illinois Poison Center		1-800-222-1222

**H&S Plan APPROVED:**\_\_\_\_\_

\_\_\_\_\_  
Health and Safety Manager

\_\_\_\_\_  
Date

## **HEALTH AND SAFETY PLAN SIGNATURE FORM**

**CDM Smith Health and Safety Plan**

**All** site personnel must sign this form indicating receipt of the H&SP. Keep this original on site. It becomes part of the permanent project files. Send a copy to the Health and Safety Manager (HSM).

SITE NAME/NUMBER: IRA Commodity/Waste Characterization Study 2014

**DIVISION/LOCATION:** EMO – North Group

## **CERTIFICATION:**

I understand, and agree to comply with, the provisions of the above referenced H&SP for work activities on this project. I agree to report any injuries, illnesses or exposure incidents to the site Health and Safety Coordinator (SHSC). I agree to inform the SHSC about any drugs (legal and illegal) that I take within three days of site work.

## Appendix B

### MSW Characterization Data

**Appendix B**  
**Residential MSW Characterization Data**

## **Appendix B**

### **Residential Waste Composition Sample Data (Data Shown in Pounds)**

**Appendix B**  
**Residential Waste Composition Sample Data**  
(Data Shown in Pounds)

Sample ID	GRES2	GRES3	GRES4	GRES5	HRES1	HRES2	HRES3	HRES4	IRES1	IRES2	IRES3	IRES4	JRES1	JRES2	JRES3	JRES4	KRES1	KRES2	KRES3	KRES4	LRES1	LRES2	LRES3	MRES2	MRES4	MRES5	NRES2	NRES5	NRES6	ORES1	ORES2	ORES3	ORES4	ORES5	PRES1	PRES2	PRES3		
City	Lake County	Lake County	Lake County	Cook County	CHI Rt 38	CHI Rt 44	CHI Rt 21	CHI Rt 33	Chinatown 31	CHI Rt 17	CHI Rt 30	Rockford, Perry St.	Rockford, west side	Rockford, Rockford, south	Dixon	Lost Nation	Lost Nation	La Moille	Ottawa	Mendota	Streator	Marion County	Jackson County	Jefferson County	Marissa	Monroe County	Floraville	Hartford	Holiday Shores	Highland	Valmeyer	Brighton	Springfield	Springfield	Springfield				
County	Lake	Lake	Lake	Cook	Cook	Cook	Cook	Cook	Cook	Cook	Cook	Winnebago	Winnebago	Winnebago	Winnebago	Lee	Ogle	Ogle	Bureau	La Salle	La Salle	La Salle	Marion	Jackson	Jefferson	St. Clair	Monroe	St. Clair	Madison	Madison	Madison	Monroe	Macoupin	Sangamon	Sangamon	Sangamon			
Urban or Rural	U	U	U	U	U	U	U	U	U	U	U	U	U	U	R	R	R	R	R	R	R	R	R	U	U	U	U	U	U	U	U	U	U	U	U	U	U		
RUC Code	1	1	1	1	1	1	1	1	1	1	1	2	2	2	6	4	4	7	4	4	4	3	7	1	1	1	1	1	1	1	1	1	3	3	3	3			
<b>Paper</b>	<b>37.5</b>	<b>28.4</b>	<b>22.7</b>	<b>24.6</b>	<b>34.5</b>	<b>64.4</b>	<b>24.0</b>	<b>41.4</b>	<b>63.2</b>	<b>41.3</b>	<b>34.6</b>	<b>118.0</b>	<b>11.8</b>	<b>54.4</b>	<b>35.9</b>	<b>52.0</b>	<b>63.9</b>	<b>67.6</b>	<b>50.4</b>	<b>55.9</b>	<b>49.8</b>	<b>36.5</b>	<b>40.8</b>	<b>29.1</b>	<b>58.2</b>	<b>78.4</b>	<b>30.6</b>	<b>53.9</b>	<b>36.5</b>	<b>94.0</b>	<b>30.5</b>	<b>34.2</b>	<b>56.7</b>	<b>85.5</b>	<b>45.0</b>	<b>42.6</b>	<b>54.7</b>	<b>53.3</b>	
Newsprint	1.5	1.3	6.6	3.5	5.7	7.0	0.5	22.2	0.0	3.7	0.1	2.5	0.0	2.4	3.3	10.1	9.9	0.0	3.2	9.1	13.9	10.7	7.0	1.8	7.4	6.8	3.4	3.6	3.8	11.5	1.9	1.0	3.9	5.1	5.1	0.6	6.3	3.3	
High Grade Office Paper	0.1	0.7	0.2	0.5	0.0	4.5	0.0	0.0	0.6	1.4	0.1	6.0	0.0	1.8	1.1	0.9	5.2	1.0	1.9	7.2	1.6	3.0	0.8	0.4	2.1	0.4	0.8	2.0	0.2	0.5	0.6	0.8	0.1	0.5	0.5	2.8			
Magazines/Catalogs	3.0	0.2	8.0	1.2	0.9	7.2	1.6	4.3	2.3	4.0	4.3	2.5	0.0	0.0	3.9	2.0	3.8	0.0	7.3	5.3	1.1	3.8	1.8	2.8	1.7	6.0	3.1	4.2	3.2	7.2	0.0	2.9	2.6	4.3	0.8	0.0	1.1	0.9	
Uncoated OCC/Kraft	3.8	5.8	1.6	5.7	7.5	21.4	11.5	2.7	37.3	6.8	18.4	75.5	11.4	18.8	8.0	12.9	11.1	55.2	4.5	11.7	5.0	4.8	6.7	3.3	3.8	11.0	0.4	13.8	0.9	49.2	4.9	3.2	10.7	13.8	3.6	24.8	14.2	28.0	
Boxboard	6.0	3.1	4.1	1.5	7.1	4.9	3.0	2.8	8.1	4.9	3.0	0.1	13.3	5.5	6.8	11.5	4.1	7.2	6.4	9.2	4.5	8.2	6.4	12.6	10.7	7.0	11.4	8.3	6.8	8.7	11.3	13.5	9.8	16.5	7.0	8.2	2.9		
Mixed Paper - Recyclable	11.5	9.6	0.8	3.6	5.8	10.9	3.4	3.6	0.7	4.6	3.2	8.5	0.0	0	4.7	7.9	11.5	10.2	2.3	9.4	8.4	5.7	3.7	8.1	6.2	15.5	31.4	6.2	8.6	13.6	7.2	6.1	7.9	8.6	13.4	7.1	3.1	10.1	0.0
Compostable Paper	10.6	6.6	1.1	7.3	6.9	8.0	3.4	5.1	13.8	14.2	5.0	12.5	0.1	10.8	4.5	7.3	10.2	4.9	15.8	7.3	12.6	5.4	7.4	7.2	13.8	11.1	8.4	9.3	5.6	10.8	7.1	6.6	12.0	14.3	10.0	5.8	12.5	14.1	
Other Paper- Nonrecyclable	1.0	1.1	0.3	1.3	0.6	0.5	0.6	0.7	0.4	1.7	0.5	1.4	0.2	2.6	1.7	0.5	2.0	0.1	1.1	0.5	0.7	0.6	1.0	1.3	1.0	0.9	0.8	1.2	0.5	2.7	24.0	1.8	0.8	1.8	1.3				
<b>Beverage Containers</b>	<b>0.5</b>	<b>0.1</b>	<b>0</b>	<b>0.2</b>	<b>0</b>	<b>0</b>	<b>0.2</b>	<b>0.2</b>	<b>0</b>	<b>0.2</b>	<b>1</b>	<b>0</b>	<b>0.1</b>	<b>0</b>	<b>0.3</b>	<b>0.2</b>	<b>0</b>	<b>0.4</b>	<b>0.3</b>	<b>0.9</b>	<b>0</b>	<b>0.6</b>	<b>0</b>	<b>0.3</b>	<b>0.4</b>	<b>0.1</b>	<b>3.8</b>	<b>0.1</b>	<b>0.6</b>	<b>0.3</b>	<b>0</b>	<b>0.8</b>	<b>0.4</b>	<b>0.4</b>	<b>0.8</b>	<b>0.9</b>			
Milk and Juice cartons/boxes, coated	0.5	0.1	0.0	0.2	0.0	0.0	0.0	0.2	0.2	0.0	0.2	1.0	0.0	0.1	0.0	0.3	0.2	0.0	0.4	0.3	0.9	0.0	0.0	0.0	0.3	0.4	0.1	0.8	0.0	0.4	0.4	0.0	0.8	0.9					
<b>Plastics</b>	<b>36.3</b>	<b>31.6</b>	<b>19.5</b>	<b>21.8</b>	<b>31.7</b>	<b>30.5</b>	<b>53.4</b>	<b>24.9</b>	<b>54.7</b>	<b>33.6</b>	<b>15.6</b>	<b>44.1</b>	<b>4.8</b>	<b>39</b>	<b>26.6</b>	<b>33.4</b>	<b>41.5</b>	<b>21.8</b>	<b>36.5</b>	<b>31.2</b>	<b>43.5</b>	<b>22.2</b>	<b>38.7</b>	<b>26.3</b>	<b>45.8</b>	<b>35.7</b>	<b>48.8</b>	<b>51.5</b>	<b>39.8</b>	<b>27.6</b>	<b>30.8</b>	<b>42.7</b>	<b>51.9</b>	<b>42.4</b>	<b>40.9</b>	<b>27.3</b>	<b>33.7</b>	<b>50.6</b>	
#1 PET Bottles/Jars	1.7	1.6	0.8	0.7	4.6	3.5	0.9	1.6	1.6	3.6	1.5	3.1	5.3	1.5	3.5	4.0	0.8	1.9	2.6	4.7	1.5	6.3	2.6	4.4	4.6	2.0	2.6	3.4	3.0	2.3	5.2	6.6	4.3	2.2	3.0	4.9			
#1 Other PET Containers & Packaging	0.2	0.3	0.4	0.1	0.2	0.6	0.0	0.7	0.0	0.1	0.2	0.3	0.0	0.17	0.6	0.9	2.0	0.0	0.6	1.0	2.1	0.8	0.17	0.3	2.1	0.2	1.4	1.8	2.2	3.8	3.0	4.2	1.6	0.8	0.17	1.7			
#2 HDPE Bottles/Jars - clear	0.1	1.1	0.3	0.0	1.0	0.1	0.1	0.5	2.7	1.0	1.2	1.5	0.0	0.3	0.4	0.7	3.2	0.2	1.2	2.1	1.9	1.5	2.1	0.3	2.6	1.2	0.6	0.8	1.9	1.5	1.4	2.0	1.9	2.3	1.6	0.8	3.2		
#2 HDPE Bottles/Jars - color	0.4	0.8	0.2	0.5	0.7	0.8	0.1	0.7	0.4	0.7	0.4	1.5																											

**Appendix B**  
**Residential Waste Composition Sample Data**  
**(Data Shown in Pounds)**

Sample ID	PRES4	PRESS	QRES1	QRES10	QRES11	QRES12	QRES2	QRES3	QRES4	QRES5	QRES6	QRES7	QRES8	QRES9	RRES1	RRES2	RRES3	RRES4	SRES1	SRES2	SRES3	SRES4	SRES5	TRES1	TRES2	TRES3	TRES4	TRES5	TRES6	URES1	URES2	URES5	VRES1	VRES2
City	Springfield	Springfield	CHI Rt 14	CHI Rt 11	CHI Rt 23	CHI Rt 15	CHI Rt 12	CHI Rt 06	CHI Rt 05	CHI Rt 18	CHI Rt 31	CHI Rt 28	CHI Rt 15	Wilmington	Wilmington	Wilmington	Wilmington	Momence	Kankakee	Bradley	Bourbonnais	Donovan	Sumner	Bridgeport	Richland County	Grayville	Bridgeport	Sumner	Urbana	Champaign	Rantoul	Lexington	Bloomington	
County	Sangamon	Sangamon	Cook	Greene	Greene	Greene	Kankakee	Kankakee	Kankakee	Kankakee	Iroquois	Lawrence	Lawrence	Richland	Edwards	Lawrence	Lawrence	Champaign	Champaign	Champaign	McLean	McLean												
Urban or Rural	U	U	U	U	U	U	U	U	U	U	U	U	R	R	R	U	U	U	U	R	R	R	R	R	R	R	U	U	U	U				
RUC Code	3	3	1	1	1	1	1	1	1	1	1	1	6	6	6	3	3	3	3	6	7	7	9	7	7	3	3	3	3	3				
<b>Paper</b>	<b>57.7</b>	<b>69.7</b>	<b>21.2</b>	<b>15.7</b>	<b>21.1</b>	<b>28.6</b>	<b>25.6</b>	<b>55.9</b>	<b>36.2</b>	<b>51.5</b>	<b>6.2</b>	<b>20.4</b>	<b>22.1</b>	<b>18.1</b>	<b>29.1</b>	<b>54.5</b>	<b>28.1</b>	<b>23.9</b>	<b>39.3</b>	<b>22.7</b>	<b>40.9</b>	<b>38.5</b>	<b>41.3</b>	<b>123.3</b>	<b>41.9</b>	<b>61.2</b>	<b>50.1</b>	<b>60.7</b>	<b>48.1</b>	<b>122.5</b>	<b>37.9</b>	<b>66.1</b>	<b>36.9</b>	<b>39.5</b>
Newsprint	14	7.2	0.2	0.3	2.7	7.7	0.3	21.1	7	10.8	0.1	1.5	2.5	2.5	4.7	1.2	3.4	2.5	3.2	1.2	4	5.1	7.0	3.2	3.5	3.7	8.8	4.3	7.6	49.2	5.7	2.3	8.5	1.3
High Grade Office Paper	1.3	0.5	0	1.1	0.7	0.8	0.4	2.1	0	1.6	0.3	0.7	0.4	0.0	1.0	0.8	1.4	0.9	1.2	0.5	1.5	1.6	4.4	61.0	0.8	1.7	1.1	11.6	0.0	5.8	1.0	1.7	0.9	3.8
Magazines/Catalogs	4.4	1.6	2	3.1	1.2	1.2	3.7	3.6	4.8	8.3	1.4	0	0.7	0.5	1.4	1.3	1.0	0.2	0.3	1.5	1.9	0.7	16.0	3.2	9.3	2.2	6.0	3.0	11.3	6.1	4.8	3.1	6.8	
Uncoated OCC/Kraft	2.9	23.6	9.7	0	1.4	3.7	4.9	8.6	2.4	10.1	0	1.2	3.5	2.4	0.8	8.1	4.6	5.1	4.1	2.8	6	7.4	10.7	14.6	3.3	4.1	11.2	4.8	3.9	11.8	4.0	20.5	1.7	2.3
Boxboard	9.8	8.1	1.5	2	2.9	5.7	4.6	6.5	5.2	5.1	2.3	4.6	5.1	3.4	4.2	8.2	6.1	3.8	7.0	0.0	9.7	5.3	4.9	10.3	12.8	10.9	8.5	14.8	11.6	15.1	5.0	14.8	6.5	5.3
Mixed Paper - Recyclable	14.6	17	2.9	5.7	4.6	2.4	5	8.4	9.3	6.1	0.9	3.9	2.1	1.9	5.9	22.9	4.4	4.0	12.7	3.8	7.2	8.7	5.7	5.9	8.5	18.9	13.4	16.4	12.2	18.4	5.6	10.2	9.1	10
Compostable Paper	8.5	10.3	4.5	3.4	7.2	6.2	6.1	5.3	7.0	8.6	1.2	8.0	7.3	6.5	9.8	8.8	6.0	6.2	8.8	10.3	9.4	6.4	6.7	11.7	8.8	11.0	4.2	2.6	8.7	9.4	9.3	10.0	5.8	8.5
Other Paper- Nonrecyclable	2.2	1.4	0.4	0.1	0.9	0.6	0.3	0.5	0.9	0	0.5	0.5	0.8	1.3	3.2	1.2	1.2	1.6	2.1	1.2	0.6	1.0	1.6	0.7	0.2	1.1	1.5	1.2	1.8	1.3	1.5	1.5		
<b>Beverage Containers</b>	<b>0.5</b>	<b>0.2</b>	<b>0.4</b>	<b>0.2</b>	<b>0.3</b>	<b>0.5</b>	<b>0.7</b>	<b>0.4</b>	<b>0.8</b>	<b>0.4</b>	<b>0.3</b>	<b>0.3</b>	<b>0.2</b>	<b>0</b>	<b>0.4</b>	<b>0.2</b>	<b>0.2</b>	<b>0.1</b>	<b>0.5</b>	<b>0.4</b>	<b>0.2</b>	<b>1.1</b>	<b>0.9</b>	<b>0.3</b>	<b>0.1</b>	<b>0.6</b>	<b>0.4</b>	<b>0.7</b>	<b>1.1</b>	<b>0.8</b>	<b>0.3</b>	<b>0.5</b>		
Milk and Juice cartons/boxes, coated	0.5	0.2	0.4	0.2	0.3	0.5	0.7	0.4	0.8	0.4	0.3	0.2	0.0	0.4	0.2	0.2	0.4	0.2	0.1	0.5	0.4	0.2	1.1	0.9	0.3	0.1	0.6	0.4	0.7	1.1	0.8	0.3	0.5	
<b>Plastics</b>	<b>42.1</b>	<b>33.8</b>	<b>35.3</b>	<b>11.3</b>	<b>19.5</b>	<b>17.1</b>	<b>50.6</b>	<b>21.3</b>	<b>24</b>	<b>29.3</b>	<b>18.9</b>	<b>23.3</b>	<b>21.5</b>	<b>19.3</b>	<b>29</b>	<b>34.7</b>	<b>36</b>	<b>20.1</b>	<b>22.5</b>	<b>29.8</b>	<b>44.6</b>	<b>26.8</b>	<b>22.4</b>	<b>43.3</b>	<b>28.8</b>	<b>50.1</b>	<b>33</b>	<b>55.7</b>	<b>37.5</b>	<b>49</b>	<b>24.3</b>	<b>37.7</b>	<b>25.9</b>	<b>24.9</b>
#1 PET Bottles/Jars	2.9	2	0.9	1.2	1.2	0.6	1	3.1	2.2	2.2	1.8	1.2	1	1.4	1.9	0.7	2.4	0.7	1.3	1.4	1.9	0.8	2.4	3.0	4.9	4.1	4.4	2.7	4.6	4.5	0.9	4.6	1.8	1.2
#1 Other PET Containers & Packaging	2.2	2.7	1.2	0.8	0.6	0.7	1.1	1.7	1.7	0.5	0.7	0.5	0.4	0.9	1	2.4	1.3	1.2	0.5	2.7	1	1.8	1.2	1.9	1.5	0.8	1.6	2.7	1.7	1.3	1.2	1.6	1.7	
#2 HDPE Bottles/Jars - clear	1.2	1.5	1.4	0	1.4	0	0.7	0.8	0.8	0.2	0.6	0.9	0.8	0.4	0.7	0.6	0.5	0.2	0.1	0.4	1	0.1	0.8	0.8	1.6	2.7	1.7	0.8	1.5	2.4	0			
#2 HDPE Bottles/Jars - color	2.2	1.3	0.9	0.6	0	0.7	1.4	1.8	0.2	1.3	0.3	0.8	1.2	1.9	1.7	2.4	0.2	0.3	1.3	0.7	1.4	1.0	3.1	2.3	1.0	2.8	1.6	0.8	1.1	2.9	1.2	0.1	0.3	
#2 Other HDPE Containers & Packaging	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
#6 Expanded Polystyrene Packaging (EPS)	3	3.7	1.5	0.3	1.1	1.4	1.2	2.9	1.5	2.5	0.8	3.3	1.1	1.3	1.7	2.1	1.9	2.8	2.6	2.0	2.6	1.5	1.5	3.8	2.6	3.7	2.9	2.6	1.9	3	2.7	2.7		
#3-#7 Other - all	3	1.4	0.7	0.7	3.9	0.6	2.4	0																										

**Appendix B**  
**Residential Waste Composition Sample Data**  
**(Data Shown in Pounds)**

Sample ID	WRES1	WRES2	WRES3	WRES4	WRES5	XRES1	XRES2	XRES3	XRES4	YRES1	YRES2	YRES3	YRES4	YRES5	ZRES1	ZRES2	ZRES3	ZRES4	ZRES5	ZRES6	ZRES7	ZRES8	ZRES9	
City	Pontiac	Forrest	Flanagan	Pontiac	Woodford	Mt. Sterling	Mt. Sterling	Carthage	Scott County	Kewanee	Waynesville	Galesburg	Galva	Galesburg	Bartonville	Peoria	Peoria	Peoria	Hanna City	Maquon	Brimfield	Peoria County	Chillicothe	
County	Livingston	Livingston	Livingston	Livingston	Brown	Brown	Hancock	Scott	Henry	De Witt	Knox	Henry	Knox	Peoria	Peoria	Peoria	Peoria	Peoria	Knox	Peoria	Peoria	Peoria	Peoria	
Urban or Rural	R	R	R	R	U	R	R	R	U	U	R	U	R	U	U	U	U	U	R	U	U	U	U	
RUC Code	4	4	4	4	2	7	7	9	2	3	4	2	4	2	2	2	2	2	4	2	2	2	2	
<b>Paper</b>	<b>78.1</b>	<b>93.2</b>	<b>61.8</b>	<b>25.5</b>	<b>57.7</b>	<b>62.7</b>	<b>42.1</b>	<b>53.7</b>	<b>69.2</b>	<b>32.3</b>	<b>52.2</b>	<b>44.0</b>	<b>50.2</b>	<b>38.8</b>	<b>4.4</b>	<b>30.5</b>	<b>40.1</b>	<b>86.5</b>	<b>55.8</b>	<b>36.1</b>	<b>34.9</b>	<b>28.1</b>	<b>45.9</b>	
Newsprint	11.7	0.5	7.4	0.0	10.6	11.8	9.1	4.2	9.8	6.3	7.2	2.4	2.4	0.4	0	2.4	4	4	12.5	3.9	1	9	0	
High Grade Office Paper	4.6	11.7	1.1	0.3	0.6	0.6	0.4	10.7	3.0	0.0	2.8	1.7	4	1.6	0.1	0.1	0.1	13.1	12.2	1.1	2.3	0.1	0.6	
Magazines/Catalogs	9.6	4.9	4.7	1.0	6.8	3.0	5.5	5.3	9.6	2.6	3.5	6.4	1.4	4	0.8	1.7	0.4	12.6	5.3	1.7	16	1.2	10.9	
Uncoated OCC/Kraft	16.1	5.2	21.6	4.5	3.6	3.7	3.5	0	6.7	5.3	5.4	2.8	12.8	3.7	3	5.1	5.4	4.4	7.4	13.6	1.2	2.8	17.3	
Boxboard	9.8	5.8	6.9	4.8	11.7	13.3	11.3	4.4	7.6	4.2	12.5	8.4	7.8	6.3	0.2	6.4	8	12.8	4.6	5.5	3.6	3.4	3.4	
Mixed Paper - Recyclable	11.5	52.5	12.5	4.4	11.2	9.7	6.4	17.3	20.4	4.1	9.4	12.5	9.6	15.6	0	7.1	2.7	36.5	7.6	6.4	5.4	2.1	11.7	
Compostable Paper	13.3	11.3	6.6	9.3	12.5	9.8	5.4	11.0	9.2	8.9	11.0	9.2	10.4	7.2	0.1	5.9	19.2	1.4	1.9	3.3	4.1	9.3	0.2	
Other Paper- Nonrecyclable	1.5	1.3	1.0	1.2	0.7	0.8	0.5	0.8	2.9	0.9	0.4	0.6	1.8	0	0.2	1.8	0.3	1.7	4.3	0.6	1.3	0.2	1.8	
<b>Beverage Containers</b>	<b>0.5</b>	<b>2.5</b>	<b>0.1</b>	<b>0.3</b>	<b>0.2</b>	<b>0</b>	<b>0.4</b>	<b>0.2</b>	<b>0.1</b>	<b>0</b>	<b>1.5</b>	<b>0.7</b>	<b>0.5</b>	<b>0</b>	<b>0</b>	<b>0.2</b>	<b>0</b>	<b>0</b>	<b>0.1</b>	<b>0.7</b>	<b>0.2</b>	<b>0</b>		
Milk and Juice cartons/boxes, coated	0.5	2.5	0.1	0.3	0.2	0.0	0.4	0.2	0.1	0.0	1.5	0.7	0.5	0	0	0.2	0	0	0.1	0.7	0.2	0	0	
<b>Plastics</b>	<b>50.3</b>	<b>23.3</b>	<b>49.1</b>	<b>30.9</b>	<b>50.3</b>	<b>35.1</b>	<b>31</b>	<b>35.9</b>	<b>50.7</b>	<b>25.1</b>	<b>38.5</b>	<b>28.8</b>	<b>26.3</b>	<b>24.7</b>	<b>37.4</b>	<b>23</b>	<b>33.7</b>	<b>66.7</b>	<b>7.8</b>	<b>20.6</b>	<b>16.2</b>	<b>28.1</b>	<b>66.2</b>	
#1 PET Bottles/Jars	2.6	2.0	3.6	6.0	4.5	3.4	3.8	2.8	4.3	3.4	3.3	2.6	3.8	0.4	0.2	2.6	2.6	3.8	0.1	1.1	1.0	1.1	5	0.4
#1 Other PET Containers & Packaging	1.9	0.4	2.2	1	2.5	1.6	1.1	0.2	0.6	0.7	1.3	2.2	1.6	0.8	0	0.6	2.3	0.1	0.2	1.3	1.1	0.4	0	
#2 HDPE Bottles/Jars - clear	1	0.3	1.1	0.5	0.0	1.7	2.6	0.4	1.1	0.7	1.4	0.3	1.7	0.3	0.1	0.6	1.7	1.1	0.9	0.6	0.5	2.3	0	
#2 HDPE Bottles/Jars - color	0.8	1.0	1.8	1.3	1.9	2.2	1.2	0.4	1.6	0.2	0.3	1.3	1.4	0.8	0.2	0.8	2.1	0.8	0.1	0.9	1.4	1.9	0.4	
#2 Other HDPE Containers & Packaging	0	0	0	0	3.7	0	0	0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	
#6 Expanded Polystyrene Packaging (EPS)	2.6	1.3	2.8	2.3	1.5	2.6	1.8	1.6	0.7	0.6	2.9	2.1	1.8	2.1	0.2	2.4	1.6	1.3	0.2	0.9	0.2	0.3	0.1	
#3-#7 Other - all	3.5	3.0	6.7	1.4	2.5	2.0	0.9	2.2	1.2	1.9	1.0	3.1	1.6	1.9	1.2	4.5	2.1	1	0.2	1.2	1.3	0.8	14	
Other Rigid Plastic Products	12.6	2.6	6.6	7.0	4.9	3.3	5.6	1.8	22.2	7.6	6.9	3	2.2	3.3	33.4	2.6	0.6	29	0.9	2.7	0.3	6.3	38	
Grocery & Merchandise Bags	1.7	0.6	2.2	1.8	1.8	3.1	1.8	1.1	1.9	1.4	3.4	1.5	2.4	2.7	0.1	1.2	1.3	1.6	0.7	0.9	1.7	0.8	0.5	
Trash Bags	6.7	4.9	2.9	2.2	2.6	4.3	4.7	2.9	3.9	0.0	5.6	2	1.5	4.3	0	2.5	4.2	1.8	0.4	2.1	3.2	3.8	0.4	
Commercial & Industrial Film	0	0	0	0	0	0.0	0.0	0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Other Film	11.3	5.8	16.4	4.2	9.4	8.5	3.7	20.1	5.3	5.2	9.5	5.9	6.2	5.7	0.6	1.4	8.5	19.3	2	3.2	3.8	5.3	3.8	
Remainder/ Composite Plastic	5.6	1.4	2.8	3.2	15.0	2.4	3.8	2.4	7.9	3.4	2.9	4.8	2.1	2.4	1.4	3.8	5.5	10.6	1.1	5.8	1.6	8.6		
<b>Glass</b>	<b>7.2</b>	<b>0.4</b>	<b>6.7</b>	<b>18.7</b>	<b>21.6</b>	<b>7.4</b>	<b>9.5</b>	<b>8.8</b>	<b>4.4</b>	<b>49.3</b>	<b>11.4</b>	<b>3.4</b>	<b>10.4</b>	<b>0</b>	<b>0.7</b>	<b>8.6</b>	<b>6.2</b>	<b>6.8</b>	<b>98.9</b>	<b>8.9</b>	<b>8.6</b>	<b>6.2</b>	<b>15.7</b>	
Recyclable Glass Bottles and Jars	7.1	0.4	6.5	18.6	20.0	3.4	8.9	8.6	4.3	49.0	10.8	3.3	9.7	0	0.7	7.3	5.6	3.2	3.8	8.8	8.6	4.6	6.3	
Flat Glass	0	0	0	0	0	1.4	0.5	0.5	0	0.0	0.1	0.6	0	0.7	0	0	0	0.2	0.7	95.1	0.0	0	0	
Other Glass	0.1	0	0.2	0.1	0.2	3.5	0.1	0.2	0.1	0.0	0.1	0	0	0	0	1.3	0.4	2.9	0	0.1	0	1.6	6.9	
<b>Metals</b>	<b>9.4</b>	<b>4.2</b>	<b>9.1</b>	<b>9.6</b>	<b>15.9</b>	<b>14.1</b>	<b>14.3</b> </																	

**Appendix B**  
**ICI MSW Characterization Data**



**Appendix B**  
**ICI Waste Composition Sample Data**  
(Data Shown in Pounds)

Sample_ID	AAIC1	AAIC2	AAIC4	AAIC5	AAIC6	AAIC7	AAIC8	AIC1	AIC2	AIC3	AIC4	AIC5	BBIC1	BBIC2	BBIC3	BBIC5	BIC1	BIC2	BIC3	BIC4	BIC6	CIC1	CIC2	CIC3	CIC4	DIC1	DIC2	DIC3	DIC4	DIC5	DIC6	EIC1	EIC2	EIC3	EIC4	FIC1	FIC2	FIC3									
City	CHI Humbolt Park	CHI Wrigleyville	CHI Belmont/ Craigen	CHI Streaterville	CHI Logan Square	CHI West side	Oak Lawn	Oak Lawn	Blue Island	Oak Forest	Crestwood	Elmhurst	Des Plaines	Addison	Addison	Mt Prospect	Arlington Heights	Rolling Meadows	Park Ridge	Glendale Heights	Summit	Countryside	Downers Grove	McCook	Addison	Elmhurst	Melrose Park	Harwood Heights	Stone Park	Melrose Park	Harvey	Glenwood	Frankfort	Orland Park	Tinley Park	Des Plaines	Niles	Glenview									
County	Cook	Cook	Cook	Cook	Cook	Cook	Cook	Cook	Cook	Cook	Cook	DuPage	Cook	DuPage	DuPage	Cook	Cook	Cook	DuPage	Cook	DuPage	Cook	DuPage	Cook	Cook	Cook	Cook	Cook	Cook	Cook	Cook	Cook	Cook	Cook	Cook	Cook											
Urban or Rural	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U											
RUC Code	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
<b>Paper</b>	<b>69.6</b>	<b>13.6</b>	<b>129.2</b>	<b>67.7</b>	<b>80.9</b>	<b>4.3</b>	<b>54.4</b>	<b>85.2</b>	<b>77.2</b>	<b>26.5</b>	<b>87.0</b>	<b>16.7</b>	<b>65.2</b>	<b>77.0</b>	<b>100.2</b>	<b>109.8</b>	<b>13.2</b>	<b>5.0</b>	<b>80.2</b>	<b>88.6</b>	<b>18.3</b>	<b>68.9</b>	<b>25.6</b>	<b>28.4</b>	<b>73.6</b>	<b>14.8</b>	<b>60.0</b>	<b>54.1</b>	<b>37.5</b>	<b>0.4</b>	<b>26.9</b>	<b>47.7</b>	<b>66.1</b>	<b>93.5</b>	<b>89.7</b>	<b>50.0</b>	<b>32.2</b>	<b>59.0</b>	<b>35.8</b>								
Newsprint	22.4	1.4	62.9	2.4	1.9	0	3.9	0.6	0	1.4	29.6	0	0	2	0	18.2	1.7	0	5.3	0	0	2.7	2.7	0	0.6	0	0	11.2	0	1.4	0.6	0.1	3	0.7	9.3	1.5	3.1	5									
High Grade Office Paper	9	3.7	9.8	5.2	5.6	0	0.4	14	7	0	8.9	0	14.2	15	0	33.2	0.4	0	9.4	0	0	0.1	0	0	1.8	0	1.9	0.3	0.2	0	4	9.5	2.2	12	3.5	1	0	0.3	0.3								
Magazines/Catalogs	2.9	0	6.1	1.1	14.6	0	0.7	1.6	0.2	2	0	0	0	3.6	0	7.7	0	0	4.9	0	1	0.1	0	0	0	0.4	0.4	1.4	0	0	0.2	2.2	3	0.5	1.3												
Uncoated OCC/Kraft	15.9	2.3	19.3	20.5	23.3	4.2	27.2	31.9	54.8	5.1	26.2	12.3	13.6	17.4	100.2	22.6	10.4	5	28.5	72.6	1.4	43.9	11.4	5.6	55.6	14.1	25.8	48.8	21.7	0	13.7	25	17.5	61	44	15.5	6.1	31.8	10.7								
Boxboard	4.7	1.5	10.3	3.5	6.9	0	5.9	2.8	6.1	10	0.1	14.1	12.4	0	2.9	0.6	0	4.7	8	6.7	3.7	2.8	1.1	0.8	0	2.7	0.2	2.8	0	1.6	1.4	6	8	6	5.2	4.4	5.9										
Mixed Paper - Recyclable	4	1.9	10.8	6.5	9.5	0	3.2	2.2	1.2	1.2	5.4	0.9	3.3	6.2	0	16.2	0	0	4.6	0.9	2.8	1.2	0.2	1	2.9	0.1	3.1	0.9	0	0	1.5	7.3	30.4	10.4	15.3	6.3	3.7	4.1									
Compostable Paper	9.4	1.8	7.8	19.5	15.9	0.0	11.0	27.9	6.9	7.2	2.9	2.6	7.7	18.9	0.0	8.8	0.1	0	19.6	6.6	5.4	16.0	8.5	18.8	11.8	0.2	23.3	1.9	1.5	0.0	1.8	13.8	0.1	15.3	9.4	10.1	13.6	7.7									
Other Paper	1.3	1	2.2	9	3.2	0.1	2.1	3.2	1.2	3.5	4	0.8	12.3	1.5	0	0.2	0	0	3.2	0.5	1	1.2	0	2.8	0.1	0	2.8	0.6	0.1	0.4	0.1	0.3	0.5	0.6	0.2	2.6	0.6	0.8									
<b>Beverage Containers</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0.1</b>	<b>0.5</b>	<b>0</b>	<b>0.3</b>	<b>0.6</b>	<b>0</b>	<b>1.4</b>	<b>0</b>	<b>0</b>	<b>0.2</b>	<b>0</b>	<b>0.1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.5</b>	<b>0.8</b>	<b>0.6</b>	<b>0</b>	<b>0.4</b>	<b>0.1</b>	<b>0</b>	<b>4.2</b>	<b>0</b>	<b>0</b>	<b>0.1</b>	<b>0</b>	<b>0.8</b>	<b>0</b>	<b>0.3</b>	<b>0.2</b>													
Milk and Juice cartons/boxes, coated	1	0	0	0.1	0.5	0	0.3	0.6	0	1.4	0	0	0	0.2	0	0.1	0	0	0.5	0.8	0.6	0	0.4	0.1	0	4.2	0	0	0.1	0	0.8	0.6	0.3	0.2													
<b>Plastics</b>	<b>28.3</b>	<b>16.3</b>	<b>38.2</b>	<b>110</b>	<b>40.7</b>	<b>2</b>	<b>32.3</b>	<b>49.2</b>	<b>56.1</b>	<b>37.2</b>	<b>16.4</b>	<b>13.3</b>	<b>119.5</b>	<b>33</b>	<b>37.2</b>	<b>21.8</b>	<b>31</b>	<b>1.2</b>	<b>58</b>	<b>24.4</b>	<b>27</b>	<b>39.9</b>	<b>133.5</b>	<b>24.1</b>	<b>139.2</b>	<b>5.7</b>	<b>54.7</b>	<b>10.8</b>	<b>8.9</b>	<b>1.2</b>	<b>51.1</b>	<b>15</b>	<b>20.9</b>	<b>37.2</b>	<b>60.6</b>	<b>30.3</b>	<b>26.6</b>	<b>47.7</b>	<b>36.4</b>								
#1 PET Bottles/Jars	2.9	3.4	2.8	6	1.8	0.1	2.4	15.9	0.7	4.6	1.1	1.6	0.4	2.5	0.1	0.5	0	0	6	0.6	4.3	1.1	0.5	0.4	0.7	0.2	2.7	0.1	0.1	0.2	0.5	1	0.8	3.7	2.3	2.5	3.7	0.7	3.8								
#1 Other PET Containers & Packaging	0.7	0.1	1.4	0.8	0.9	0	1	0	0	0	0	0	0.2	0	0.5	0	0	0.3	0.1	0.1	0	2	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
#2 HDPE Bottles/Jars - clear	0.6	0.1	1.2	0.4	0.1	0	4	2.1	0.5	0.8	0.1	0.2	0	0	0.1	0	0	1.2	0.3	1.8	0.6	4.5	1.2	0.1	0.2	4.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#2 HDPE Bottles/Jars - color	0.2	0	2.9	0.5	1	0	0	0.5	0.5	3.4	0	0.2	0	0.4	0.3	2.6	0</td																														

## **Appendix B**

### **CI Waste Composition Sample Data**

#### **(Data Shown in Pounds)**

**Appendix B**  
**ICI Waste Composition Sample Data**  
(Data Shown in Pounds)

Sample_ID	OICI1	OICI2	OICI3	OICI4	OICI5	PICI1	PICI2	PICI3	PICI4	RICI1	RICI2	RICI3	RICI4	RICI5	RICI6	SICI1	SICI2	SICI3	SICI4	SICI5	TICI1	TICI2	TICI3	TICI4	UICI1	UICI2	UICI3	UICI4	UICI5	VICI1	VICI10	VICI2	VICI3		
City	Belleville	Alton	Alton	Germantown	Roxana	Springfield	Springfield	Springfield	Joliet	Elwood	Coal City	Elwood	Wilmington	Joliet	Kankakee	Kankakee	Bourbonnais	Watseka	Kankakee	Olney	Fairfield	Lawrenceville	Flora	Champaign	Champaign	Champaign	Champaign	Champaign	Heyworth	Bloomington	Bloomington				
County	St. Clair	Madison	Madison	Clinton	Madison	Sangamon	Sangamon	Sangamon	Will	Will	Grundy	Will	Greene	Will	Kankakee	Kankakee	Iroquois	Kankakee	Richland	Wayne	Lawrence	Clay	Champaign	Champaign	Champaign	Champaign	Champaign	McLean	McLean	U	U				
Urban or Rural	U	U	U	U	U	U	U	U	U	U	R	U	U	U	U	R	U	R	R	R	R	U	U	U	U	U	U	U	U	U	U				
RUC Code	1	1	1	1	1	3	3	3	1	1	1	1	6	1	3	3	6	3	7	7	7	7	3	3	3	3	3	3	3	3	3				
<b>Paper</b>	<b>17.7</b>	<b>90.2</b>	<b>105.6</b>	<b>37.8</b>	<b>113.7</b>	<b>85.0</b>	<b>58.0</b>	<b>63.2</b>	<b>0.0</b>	<b>95.0</b>	<b>143.6</b>	<b>14.9</b>	<b>61.3</b>	<b>197.4</b>	<b>112.9</b>	<b>8.1</b>	<b>84.3</b>	<b>67.8</b>	<b>19.8</b>	<b>67.6</b>	<b>21.3</b>	<b>41.1</b>	<b>1.5</b>	<b>42.2</b>	<b>47.1</b>	<b>41.9</b>	<b>39.6</b>	<b>117.3</b>	<b>55.7</b>	<b>16.8</b>	<b>31.0</b>	<b>75.3</b>	<b>31.8</b>		
Newsprint	0	1.6	5.7	4.2	0	4.9	0.4	9.1	0	0	0	0	84.7	0	0	2.6	0.1	0	0	0.5	2.3	0	1	7.5	2.9	4.3	1.2	4.4	0	1.1	0	1.5			
High Grade Office Paper	0	4.9	0.5	0	0.2	1	3	3.6	0	0.5	1.8	0	12.7	2.9	2.9	0	5.6	2.3	0.1	0.2	3.8	0.9	0	1.2	0.7	14	0	6.9	0.5	7.2	0	8.9	1.3		
Magazines/Catalogs	0	0	0.7	0	0	1.7	0.6	4.9	0	0.2	0	0	0.5	3.3	0	0.2	0	0.1	0	0	0	0.8	0	2.5	2.3	3.3	1.8	2.2	0	1	0.8	0.3			
Uncoated OCC/Kraft	15.7	61.1	79.9	25.3	111.7	33.1	50.1	21	0	71.6	61.6	14.9	33	89	102.5	0.1	54.5	20.6	19.6	66.9	15.8	12.9	1.5	26	23.3	4.2	14.4	63.4	13.9	3.5	15.9	33.8	11.1		
Boxboard	1	0.4	1.1	3.9	0.8	17	1.6	8.4	0	4.1	1	0	0.9	4.4	1.6	0.8	5.8	14.7	0	0	0.1	6.1	0	2	3.4	6.1	5.4	7	2.9	0.9	5.5	5.1	5.3		
Mixed Paper - Recyclable	0.6	14.1	10.6	1.8	0	8.7	0.8	5.4	0	3	1.4	0	6.5	4.3	1.6	0	3.8	4.8	0	0	0.5	8	0	2.1	0	0.5	4.2	2.6	4.2	1.5	7.1	4.9			
Compostable Paper	0.3	8.0	6.9	2.6	0.6	16.0	1.2	7.6	0	14.4	77.5	0.0	7.2	6.9	3.1	0.1	10.1	19.2	0.1	0.5	0.5	6.7	0.0	6.6	6.0	5.2	8.3	7.7	8.2	0.9	5.4	17.7	6.3		
Other Paper	0.1	0.1	0.2	0	0.4	2.6	0.3	3.2	0	1.2	0.3	0	0.5	1.9	1.2	6.9	1.9	6	0	0	0.1	0.4	0	0.8	3.9	0.9	1.2	1.6	2	0.1	0.6	1.9	1.1		
<b>Beverage Containers</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0.3</b>	<b>0</b>	<b>0.6</b>	<b>0</b>	<b>0</b>	<b>0.1</b>	<b>0</b>	<b>0.2</b>	<b>0</b>	<b>2.9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4.2</b>	<b>1.4</b>	<b>0</b>	<b>0.2</b>	<b>0.3</b>	<b>0.1</b>	<b>0.6</b>	<b>1.8</b>	<b>1.5</b>	<b>0.1</b>	<b>2.2</b>	<b>3.2</b>	<b>0.2</b>		
Milk and Juice cartons/boxes, coated	0	0	0	0	0	0	1	0	0.3	0	0.6	0	0	0	0.1	0	0.2	0	0	0	0	0.2	0.3	0.1	0.1	0.6	1.8	1.5	0.1	2.2	3.2	0.2			
<b>Plastics</b>	<b>4.9</b>	<b>34.6</b>	<b>27.5</b>	<b>45.4</b>	<b>108</b>	<b>62.8</b>	<b>16.5</b>	<b>44.4</b>	<b>0</b>	<b>40.8</b>	<b>19.6</b>	<b>27.5</b>	<b>32</b>	<b>16.7</b>	<b>59.1</b>	<b>149.4</b>	<b>42.2</b>	<b>37.1</b>	<b>1.7</b>	<b>15.1</b>	<b>24.2</b>	<b>33.5</b>	<b>0</b>	<b>58.1</b>	<b>29.8</b>	<b>99.5</b>	<b>53.5</b>	<b>46.1</b>	<b>21.9</b>	<b>107.1</b>	<b>48.8</b>	<b>38.4</b>	<b>18.7</b>		
#1 PET Bottles/Jars	0.1	2.6	2.7	4	0.4	4.4	0.4	4.9	0	0.8	0.4	0	2.3	3.3	1.4	0	1.5	1.2	0.1	0.6	0.5	4	0	1.4	9	1.4	4	1.9	2.2	0.3	4.7	2.3			
#1 Other PET Containers & Packaging	0.1	0	0	0	0.1	4.2	0	1.1	0	0.4	0	0	0	0.3	0.2	0	0	0.5	0.4	0	0	0	1.5	0	0.2	0.3	0.1	0.1	0.4	0.8					
#2 HDPE Bottles/Jars - clear	0	0.8	2.6	1.3	0	1.6	0	1.5	0	2.1	0.2	0	0.3	0.8	0.5	0	0.7	0.6	0.2	0	0	17.7	1.6	0	0.8	0.2	0	1.3	0.7	1.4	0.1	0.1	1.5	0.6	
#2 HDPE Bottles/Jars - color	2.1	0.6	1.6	1.8	0.5	1.6	0	1.7	0	0	0	0	0.5	0.7	0.1	0	0.6	0.6	0	0	0	0	0	0	1.1	0.3	0.1	0.5	1	2.7	0.1	0.3	0.2	0.7	
#2 Other HDPE Containers & Packaging	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
#6 Expanded Polystyrene Packaging (EPS)	0.1	0.2	0.9	4.9	0.2	3.9	1	6.1	0	0.9	0	0	0	1.4	1.7	0.3	0	2	0.7	0.2	0	0	0	2.4	0	2.6	3	0.1	1.2	1.9	0.5	0.3	3.5	0.7	1.9
#3-#7 Other - all	0.3	0	0.4	0.6	0	7	0	3.6	0	1.4	0	0	0.3	0.2	0.7	0.1	1.4	0.6	0	0	0.4	2.6	0	0.8	0.4	0.3	1	0.8	1.6	0.5	1.8	0.7			
Other Rigid Plastic Products	0	2.8	4.3	20.6	0	3.6	0.3	2.5	0	12.2	0	0	26.6	0.7	0.6	0.5	0.6	5.5	5.8	0	2	0	1.9	0	25.7	0	0.5	1	5.1	1.6	102.1	35.3	9.4	2.1	
Grocery & Merchandise Bags	0	1.8	1	0	0																														

**Appendix B**  
**ICI Waste Composition Sample Data**  
(Data Shown in Pounds)

Sample_ID	VICI4	VICI5	VICI6	VICI7	WICI1	WICI3	WICI4	XICI1	XICI2	XICI3	XICI4	XICI5	XICI7	YICI1	YICI2	YICI3	YICI4	YICI5	
City	Bloomington	Bloomington	Lexington	Normal	Dwight	Pontiac	Streator	Quincy	Quincy	Morgan County	Quincy	Quincy	Griggsville	Galesburg	Galesburg	Monmouth	Galesburg	Macomb	
County	McLean	McLean	McLean	McLean	Livingston	Livingston	La Salle	Adams	Adams	Morgan	Adams	Adams	Pike	Knox	Knox	Warren	Knox	McDonough	
Urban or Rural	U	U	U	U	R	R	R	R	R	R	R	R	R	R	R	R	R		
RUC Code	3	3	3	3	4	4	4	5	5	4	5	5	7	4	4	6	4		
<b>Paper</b>	<b>10.5</b>	<b>7.5</b>	<b>39.5</b>	<b>66.8</b>	<b>48.2</b>	<b>58.0</b>	<b>64.4</b>	<b>51.9</b>	<b>51.5</b>	<b>34.7</b>	<b>38.1</b>	<b>0.0</b>	<b>11.1</b>	<b>44.2</b>	<b>76.9</b>	<b>34.3</b>	<b>42.2</b>	<b>86.4</b>	
Newsprint	0	0	1	2	1.3	0	1.3	0.8	4.5	4.2	0.4	0	0.4	2.4	4.3	1.5	4	4.9	
High Grade Office Paper	0	0	2.6	9.2	5.5	8.2	0.9	0.1	3.9	1.3	0.5	0	0.1	1.4	1	0.3	6.5	0.5	
Magazines/Catalogs	0	0	0.8	3.4	0.5	2.8	1.9	0	3.1	2.2	0.8	0	0	1.4	0	1.5	1.3	0	
Uncoated OCC/Kraft	10.5	3.9	11.5	27.7	10.9	30.4	29.1	4	21.3	7.5	12.6	0	6.6	17.6	49.4	16.5	9.4	52	
Boxboard	0	0.2	6.3	6.4	8.8	5.2	7.3	5.1	6.4	8.2	4.6	0	0.9	4.6	6.8	3.1	5.8	7.8	
Mixed Paper - Recyclable	0	1.4	4.7	2.5	4.6	3.6	5.4	2.2	4.1	5.2	9.1	0	0	5.1	6.5	0.9	6.9	9.1	
Compostable Paper	0.0	1.8	12.0	14.4	14.1	6.5	9.0	23.9	7.3	5.8	8.4	0.0	1.9	10.8	7.8	9.5	6.6	10.1	
Other Paper	0	0.2	0.6	1.2	2.5	1.3	9.5	15.8	0.9	0.3	1.7	0	1.2	0.9	1.1	1	1.7	2	
<b>Beverage Containers</b>	<b>0</b>	<b>0</b>	<b>1.2</b>	<b>3.7</b>	<b>0.4</b>	<b>0</b>	<b>0.5</b>	<b>0.3</b>	<b>1.9</b>	<b>0.2</b>	<b>0.2</b>	<b>0</b>	<b>0</b>	<b>0.3</b>	<b>0.3</b>	<b>0</b>	<b>0.6</b>	<b>0.1</b>	
Milk and Juice cartons/boxes, coated	0	0	1.2	3.7	0.4	0	0.5	0.3	1.9	0.2	0.2	0	0	0.3	0.3	0	0.6	0.1	
<b>Plastics</b>	<b>0.7</b>	<b>11.4</b>	<b>38.2</b>	<b>37.6</b>	<b>92</b>	<b>39.2</b>	<b>39.1</b>	<b>44</b>	<b>42.3</b>	<b>28.8</b>	<b>43.7</b>	<b>0.3</b>	<b>20.9</b>	<b>28.6</b>	<b>40.2</b>	<b>19.2</b>	<b>37</b>	<b>25.2</b>	
#1 PET Bottles/Jars	0	0.2	2.2	3.2	1.2	5.9	3.4	3	3.9	3.6	6.8	0	1.8	1.6	2	1.1	6.5	5.6	
#1 Other PET Containers & Packaging	0	0.4	0.3	0.1	1.8	0.1	1.2	1.8	1.4	1.6	0.2	0	0	1	0.3	1	2.8	1.2	
#2 HDPE Bottles/Jars - clear	0	0.3	0.6	0.2	0.7	0	1.4	0.9	1.2	1	0.9	0	0	1.5	1	0.9	1.2	0.1	
#2 HDPE Bottles/Jars - color	0	0.2	0.6	1.6	1.2	0	1.2	0.2	1.3	0.6	2.5	0	0.1	0.3	1.1	0.2	1.3	0.7	
#2 Other HDPE Containers & Packaging	0	0.1	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	
#6 Expanded Polystyrene Packaging (EPS)	0.1	0.1	0.7	3.3	1.8	1.3	5.8	3.7	2.8	1	2.6	0	0.2	1.7	2.4	0.8	2	1.8	
#3-#7 Other - all	0	0.1	2.4	1.9	2.1	1.4	0.7	0.3	2.3	1	0.6	0	0.1	0.8	1.4	1	2.4	0.7	
Other Rigid Plastic Products	0	7.8	1.2	6.9	51.5	1	9.4	6.4	9.5	3.8	2.7	0	0.2	0.8	4.8	1.3	3.5	2.1	
Grocery & Merchandise Bags	0	0.2	0.6	0.5	0.2	0.4	1.1	0.5	0.6	1.2	2.2	0	0.3	0.8	2.1	0.9	3	1	
Trash Bags	0	0.4	5.8	7.4	7.5	4.7	5	7.6	4.7	8.3	4.9	0	0.6	9.3	13.1	4.7	2.4	4.4	
Commercial & Industrial Film	0.5	0	0.2	0	0.1	2.3	0	0	0	0	0	0	0	16.3	0	0	0	0	
Other Film	0	0.5	20.2	6.8	17.4	15.3	6.1	13.1	6.9	4.5	15.8	0	1.2	8.8	8.2	5.6	7.1	5.1	
Remainder/ Composite Plastic	0.1	1.1	3	5.7	6.5	6.8	3.2	6.5	7.7	2.2	4.5	0	0.1	2	3.8	1.7	4.8	2.3	
<b>Glass</b>	<b>169.2</b>	<b>5.2</b>	<b>6.6</b>	<b>2.6</b>	<b>0.7</b>	<b>4.4</b>	<b>1.2</b>	<b>13.6</b>	<b>5</b>	<b>11.7</b>	<b>2.7</b>	<b>0</b>	<b>0</b>	<b>7.6</b>	<b>2.7</b>	<b>4.6</b>	<b>15.1</b>	<b>3.9</b>	
Recyclable Glass Bottles and Jars	0	2.2	6.6	2.6	0.7	4.2	1.2	1.1	5	10.6	2.7	0	0	7.6	2.4	4.6	12.8	3.9	
Flat Glass	169.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0	2.2	0	
Other Glass	0	3	0	0	0	0.2	0	12.5	0	1.1	0	0	0	0	0	0	0.1	0	
<b>Metals</b>	<b>0.3</b>	<b>1.8</b>	<b>4.2</b>	<b>5.2</b>	<b>8.3</b>	<b>6.8</b>	<b>6.3</b>	<b>7</b>	<b>9.4</b>	<b>12.5</b>	<b>7.1</b>	<b>0</b>	<b>5.2</b>	<b>35.8</b>	<b>4.7</b>	<b>4.9</b>	<b>8.5</b>	<b>9.3</b>	
Aluminum Beverage Containers	0	0.2	0.4	1.4	0.7	1.3	2.6	0.2	1.4	1.8	2.2	0	0.5	0.3	1	0.4	1.9	4.6	
Other Aluminum	0	0.1	0.5	2.1	0.1	0.6	0.2	1.2	1.4	0.6	0.3	0	0.1	0.6	0.2	0.8	0.4	0.1	
HVAC Ducting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ferrous containers (tin cans)	0	0	0.9	1.7	4.5	0	2.6	3.5	3.7	5.7	1.7	0	0.4	6.9	2	2.9	4.6	0.2	
Other Ferrous	0.1	1.3	0.1	0	0.9	3	0.4	1	1.1	0.6	2.8	0	0.3	3.4	27.8	0.3	0.6	0.7	
Other Non-Ferrous	0.2	0.2	0.1	0	0	0.2	0	0.7	0	0.1	0	0	0.7	0.2	0.1	0.1	0.6	0	
Other Metal	0	0	2.2	0	0	2.1	1.7	0.5	0.4	1.8	3.7	0	0	0.1	0.1	0.1	0.3	0	
<b>Organics</b>	<b>0.0</b>	<b>4.2</b>	<b>55.5</b>	<b>66.9</b>	<b>92.2</b>	<b>11.7</b>	<b>59.4</b>	<b>71.6</b>	<b>44.2</b>	<b>56.1</b>	<b>48.1</b>	<b>0.0</b>	<b>161.7</b>	<b>97.1</b>	<b>55.8</b>	<b>39.5</b>	<b>72.0</b>	<b>30.7</b>	
Yard Waste - Compostable	0	0	0	0	0	0	0.1	1.1	4	0	0	0	0	9.2	0	0.3	0.1	0.9	
Yard Waste - Woody	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0	0	0	
Food Scraps	0.0	1.4	49.6	50.6	67.7	9.5	51.9	57.5	36.1	48.0	43.9	0	0.0	7.9	86.8	49.6	29.4	48.9	26.3
Bottom Fines and Dirt	0	2.7	0	2.4	2.7	2.1	1.9	0.4	2.4	1.6	1.2	0							

Appendix B  
C&D MSW Characterization Data



**Appendix B**  
**Construction and Demolition Debris Waste Composition Sample Data**  
**(Data Shown in Pounds)**

**Appendix B**  
**Construction and Demolition Debris Waste Composition Sample Data**  
**(Data Shown in Pounds)**

**Appendix B**  
**Construction and Demolition Debris Waste Composition Sample Data**  
**(Data Shown in Pounds)**

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**Construction and Demolition Debris Waste Composition Sample Data**  
**(Data Shown in Pounds)**

**Appendix B**  
**Construction and Demolition Debris Waste Composition Sample Data**  
**(Data Shown in Pounds)**

Date	10/3/14	10/3/14	10/3/14	10/3/14	10/3/14	10/3/14	10/17/14	11/6/14
Time	957	1010	1022	1024	1103	1116	1307	1330
Hauler	R	Countline	PU	DHMayy	Thrush	oofsMayy	CousinC	
Truck #	3445	51	PU	4	2	50	-	
Sample_ID	LC&D3	LC&D4	LC&D5	LC&D6	LC&D7	LC&D8	SC&D1	AAC&D2
Paper	<b>0.33</b>	<b>0.02</b>	<b>0.00</b>	<b>0.05</b>	<b>2.30</b>	<b>0.01</b>	<b>0.00</b>	<b>0.00</b>
Newsprint	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
High Grade Office Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Magazines/Catalogs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uncoated OCC/Kraft	0.33	0.02	0.00	0.04	2.30	0.01	0.00	0.00
Boxboard	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mixed Paper - Recyclable	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compostable Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Paper- Nonrecyclable	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Beverage Containers</b>	<b>0.00</b>							
Milk and Juice cartons/boxes, coated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Plastics	<b>0.00</b>	<b>0.09</b>	<b>0.09</b>	<b>0.05</b>	<b>0.39</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>
#1 PET Bottles/Jars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
#1 Other PET Containers & Packaging	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
#2 HDPE Bottles/Jars - clear	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
#2 HDPE Bottles/Jars - color	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
#2 Other HDPE Containers & Packaging	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
#6 Expanded Polystyrene Packaging (EPS)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
#3/#7 Other - all	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Rigid Plastic Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grocery & Merchandise Bags	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trash Bags	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.01
Commercial & Industrial Film	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00
Other Film	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00
Remainder/ Composite Plastic	0.00	0.09	0.07	0.05	0.30	0.00	0.00	0.00
Glass	<b>0.00</b>	<b>0.00</b>	<b>0.03</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Recyclable Glass Bottles and Jars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Flat Glass	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00
Other Glass	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Metals	<b>0.00</b>	<b>0.07</b>	<b>0.00</b>	<b>0.06</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>
Aluminum Beverage Containers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Aluminum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
HVAC Ducting	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ferrous containers (tin cans)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Ferrous	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Ferrous	0.00	0.07	0.00	0.06	0.00	0.00	0.00	0.00
Other Metal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Organics	<b>0.00</b>	<b>0.09</b>	<b>0.17</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Yard Waste - Compostable	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
Yard Waste - Woody	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Food Scraps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bottom Fines and Dirt	0.00	0.09	0.13	0.00	0.00	0.00	0.00	0.00
Diapers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Organic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C&D	<b>6.35</b>	<b>0.53</b>	<b>0.39</b>	<b>1.89</b>	<b>3.28</b>	<b>2.04</b>	<b>2.82</b>	<b>1.22</b>
Clean Dimensional Lumber	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Clean Engineered Wood	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Pallets	1.34	0.00	0.00	0.00	0.30	0.00	0.00	0.01
Painted Wood	0.00	0.35	0.09	0.00	0.00	0.00	0.00	0.03
Treated Wood	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Concrete	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Reinforced Concrete	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rock & Other Aggregates	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bricks	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00
Gypsum Board	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Composition Shingles	0.00	0.00	0.00	1.80	0.00	2.04	2.68	0.00
Other Roofing	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00
Plastic C&D materials	1.00	0.18	0.22	0.00	1.79	0.00	0.00	1.18
Ceramics/Porcelain	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other C&D	0.00	0.00	0.00	0.00	1.19	0.00	0.00	0.00
Inorganics	<b>0.00</b>							
Televisions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Computer Monitors	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Computer Equipment/Peripherals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronic Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
White Goods - refrigerated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
White Goods - not refrigerated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lead-acid Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Household Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Household Bulky Items	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fluorescent Lights/Ballasts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HHW	<b>0.00</b>							
Latex Paint	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oil Paint	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Plant/Organism/Pest Control/Growth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Used Oil/Filters	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Automotive Fluids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mercury-Containing Items	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sharps & Infectious Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ash, Sludge, & Other Industrial Wastes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sewage Solids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other HHW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Textiles	<b>0.00</b>	<b>0.97</b>	<b>0.16</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.09</b>
Carpet	0.00	0.71	0.13	0.00	0.00	0.00	0.00	0.00
Carpet Padding	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.09
Clothing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Textiles	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00
Total Weight	6.68	1.77	0.86	2.05	5.97	2.05	2.82	1.33



## Appendix C

### Generation Results

## Appendix C

### Regional Generation Results

## Region 1 Municipal Solid Waste (MSW) Generation

	<b>Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>		<b>Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>
<b>Paper</b>	<b>642.0</b>	<b>269,290</b>	<b>Metal</b>		
Newsprint	63.2	26,500	Other Ferrous	51.2	21,490
High Grade Office Paper	44.6	18,720	Other Non-Ferrous	9.0	3,790
Magazines/Catalogs	31.6	13,260	Other Metal	15.9	6,680
Uncoated OCC/Kraft	309.4	129,750			
Boxboard	54.6	22,890	<b>Organics</b>	<b>575.6</b>	<b>241,410</b>
Mixed Paper - Recyclable	53.2	22,330	Yard Waste - Compostable	117.4	49,250
Compostable Paper	73.1	30,640	Yard Waste - Woody	23.2	9,750
Other Paper	12.4	5,200	Food Scraps	310.5	130,250
			Bottom Fines & Dirt	45.2	18,970
<b>Beverage Containers</b>	<b>5.0</b>	<b>2,090</b>	Diapers	37.1	15,550
Milk & Juice Cartons/Boxes - Coated	5.0	2,090	Other Organic	42.1	17,640
<b>Plastic</b>	<b>306.0</b>	<b>128,350</b>	<b>Inorganics</b>	<b>175.3</b>	<b>73,520</b>
#1 PET Bottles/Jars	19.6	8,220	Televisions	5.1	2,130
#1 Other PET Containers	5.5	2,300	Computer Monitors	3.2	1,340
#2 HDPE Bottles/Jars - Clear	9.9	4,140	Computer Equipment/Peripherals	7.1	2,990
#2 HDPE Bottles/Jars - Color	9.1	3,830	Electronic Equipment	14.4	6,050
#2 Other HDPE Containers	0.6	260	White Goods - Refrigerated	10.4	4,360
#6 Exp. Polystyrene Packaging	18.4	7,700	White Goods - Not refrigerated	23.1	9,700
#3-#7 Other - All	13.1	5,480	Lead-acid Batteries	18.2	7,650
Other Rigid Plastic Products	58.0	24,310	Other Household Batteries	4.3	1,820
Grocery & Merchandise Bags	12.4	5,220	Tires	25.8	10,830
Trash Bags	33.5	14,050	Household Bulky Items	63.1	26,460
Commercial & Industrial Film	34.9	14,630	Fluorescent Lights/Ballasts	0.5	190
Other Film	58.8	24,660			
Other Plastic	32.3	13,550	<b>Textiles</b>	<b>107.5</b>	<b>45,080</b>
			Carpet	24.5	10,270
<b>Glass</b>	<b>86.0</b>	<b>36,050</b>	Carpet Padding	6.6	2,780
Recyclable Glass Bottles & Jars	68.1	28,570	Clothing	48.4	20,280
Flat Glass	10.1	4,220	Other Textiles	28.0	11,750
Other Glass	7.8	3,260			
			<b>Household Hazardous Waste</b>	<b>26.8</b>	<b>11,260</b>
<b>Metal</b>	<b>123.1</b>	<b>51,640</b>			
Aluminum Beverage Containers	15.4	6,440	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>545.7</b>	<b>228,870</b>
Other Aluminum	8.7	3,660			
HVAC Ducting	0.0	0	<b>Total MSW (tons)</b>		<b>1,087,560</b>
Ferrous Containers (Tin Cans)	22.8	9,580	<b>Total MSW (pounds/person/day)</b>		<b>7.10</b>

2014 population 838,855

Boone, Bureau, Carroll, DeKalb, Jo Daviess, LaSalle, Lee, Ogle, Putnam, Stephenson, Whiteside, Winnebago Counties.

Source: County MSW Generation Appendix Tables

## Region 2 Municipal Solid Waste (MSW) Generation

	Generation (lb/c/yr)	Total Generation (tons)		Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>793.2</b>	<b>3,440,930</b>	<b>Metal</b>		
Newsprint	100.2	434,750	Other Ferrous	51.2	222,260
High Grade Office Paper	52.9	229,570	Other Non-Ferrous	9.1	39,280
Magazines/Catalogs	29.3	127,160	Other Metal	15.9	68,960
Uncoated OCC/Kraft	417.5	1,811,000			
Boxboard	54.6	236,750	<b>Organics</b>	<b>606.4</b>	<b>2,630,390</b>
Mixed Paper - Recyclable	53.2	230,990	Yard Waste - Compostable	117.4	509,320
Compostable Paper	73.1	316,900	Yard Waste - Woody	23.2	100,740
Other Paper	12.4	53,810	Food Scraps	341.4	1,481,040
			Bottom Fines & Dirt	45.2	196,210
<b>Beverage Containers</b>	<b>6.0</b>	<b>26,030</b>	Diapers	37.1	160,750
Milk & Juice Cartons/Boxes - Coated	6.0	26,030	Other Organic	42.0	182,330
<b>Plastic</b>	<b>328.5</b>	<b>1,425,010</b>	<b>Inorganics</b>	<b>175.2</b>	<b>759,880</b>
#1 PET Bottles/Jars	23.8	103,120	Televisions	5.0	21,800
#1 Other PET Containers	6.7	28,910	Computer Monitors	3.2	13,770
#2 HDPE Bottles/Jars - Clear	12.0	52,120	Computer Equipment/Peripherals	7.1	30,790
#2 HDPE Bottles/Jars - Color	11.1	48,160	Electronic Equipment	14.5	62,690
#2 Other HDPE Containers	0.8	3,370	White Goods - Refrigerated	10.4	45,000
#6 Exp. Polystyrene Packaging	18.4	79,670	White Goods - Not refrigerated	23.1	100,310
#3-#7 Other - All	13.0	56,560	Lead-acid Batteries	18.2	79,120
Other Rigid Plastic Products	58.0	251,470	Other Household Batteries	4.3	18,770
Grocery & Merchandise Bags	14.4	62,590	Tires	25.8	111,980
Trash Bags	33.5	145,310	Household Bulky Items	63.1	273,670
Commercial & Industrial Film	40.6	175,960	Fluorescent Lights/Ballasts	0.5	1,980
Other Film	58.8	254,980			
Other Plastic	37.5	162,790	<b>Textiles</b>	<b>119.3</b>	<b>517,580</b>
			Carpet	24.5	106,120
<b>Glass</b>	<b>86.0</b>	<b>372,860</b>	Carpet Padding	6.6	28,710
Recyclable Glass Bottles & Jars	68.1	295,610	Clothing	55.9	242,390
Flat Glass	10.0	43,530	Other Textiles	32.4	140,360
Other Glass	7.8	33,720			
			<b>Household Hazardous Waste</b>	<b>26.9</b>	<b>116,530</b>
<b>Metal</b>	<b>123.1</b>	<b>534,010</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>918.8</b>	<b>3,985,720</b>
Aluminum Beverage Containers	15.4	66,730			
Other Aluminum	8.7	37,740			
HVAC Ducting	0.0	0	<b>Total MSW (tons)</b>		<b>13,808,940</b>
Ferrous Containers (Tin Cans)	22.8	99,040	<b>Total MSW (pounds/person/day)</b>		<b>8.72</b>

2014 population 8,676

Cook, DuPage, Grundy, Kane, Kankakee, Kendall, Lake, McHenry, Will Counties.

Source: County MSW Generation Appendix Tables

### Region 3 Municipal Solid Waste (MSW) Generation

	<b>Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>		<b>Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>
<b>Paper</b>	<b>675.0</b>	<b>257,730</b>	<b>Metal</b>		
Newsprint	64.0	24,430	Other Ferrous	51.2	19,550
High Grade Office Paper	49.6	18,920	Other Non-Ferrous	9.1	3,490
Magazines/Catalogs	31.3	11,940	Other Metal	15.9	6,070
Uncoated OCC/Kraft	336.9	128,630			
Boxboard	54.6	20,850	<b>Organics</b>	<b>601.0</b>	<b>229,480</b>
Mixed Paper - Recyclable	53.2	20,330	Yard Waste - Compostable	117.4	44,830
Compostable Paper	73.0	27,890	Yard Waste - Woody	23.2	8,870
Other Paper	12.4	4,740	Food Scraps	336.1	128,320
			Bottom Fines & Dirt	45.2	17,260
<b>Beverage Containers</b>	<b>6.0</b>	<b>2,290</b>	Diapers	37.1	14,150
Milk & Juice Cartons/Boxes - Coated	6.0	2,290	Other Organic	42.0	16,050
<b>Plastic</b>	<b>316.6</b>	<b>120,880</b>	<b>Inorganics</b>	<b>175.1</b>	<b>66,850</b>
#1 PET Bottles/Jars	23.7	9,050	Televisions	5.0	1,920
#1 Other PET Containers	6.7	2,540	Computer Monitors	3.2	1,210
#2 HDPE Bottles/Jars - Clear	12.0	4,570	Computer Equipment/Peripherals	7.1	2,700
#2 HDPE Bottles/Jars - Color	11.1	4,220	Electronic Equipment	14.5	5,530
#2 Other HDPE Containers	0.8	300	White Goods - Refrigerated	10.4	3,960
#6 Exp. Polystyrene Packaging	18.4	7,010	White Goods - Not refrigerated	23.1	8,830
#3-#7 Other - All	13.1	5,010	Lead-acid Batteries	18.2	6,960
Other Rigid Plastic Products	58.0	22,150	Other Household Batteries	4.4	1,670
Grocery & Merchandise Bags	12.6	4,800	Tires	25.8	9,840
Trash Bags	33.5	12,800	Household Bulky Items	63.1	24,080
Commercial & Industrial Film	35.3	13,480	Fluorescent Lights/Ballasts	0.4	150
Other Film	58.8	22,440			
Other Plastic	32.8	12,510	<b>Textiles</b>	<b>107.8</b>	<b>41,150</b>
			Carpet	24.4	9,320
<b>Glass</b>	<b>85.9</b>	<b>32,810</b>	Carpet Padding	6.6	2,520
Recyclable Glass Bottles & Jars	68.1	26,020	Clothing	48.6	18,570
Flat Glass	10.0	3,830	Other Textiles	28.1	10,740
Other Glass	7.8	2,960			
			<b>Household Hazardous Waste</b>	<b>26.8</b>	<b>10,250</b>
<b>Metal</b>	<b>123.2</b>	<b>47,030</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>573.3</b>	<b>218,910</b>
Aluminum Beverage Containers	15.5	5,900			
Other Aluminum	8.7	3,310			
HVAC Ducting	0.0	0	<b>Total MSW (tons)</b>		<b>1,027,380</b>
Ferrous Containers (Tin Cans)	22.8	8,710	<b>Total MSW (pounds/person/day)</b>		<b>7.37</b>

2014 population 763,673

Fulton, Hancock, Henderson, Henry, Know, Marshall, McDonough, Mercer, Peoria, Rock Island, Stark, Tazewell, Warren, and Woodford Counties.

Source: County MSW Generation Appendix Tables

## Region 4 Municipal Solid Waste (MSW) Generation

	<b>Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>		<b>Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>
<b>Paper</b>	<b>640.4</b>	<b>290,400</b>	<b>Metal</b>		
Newsprint	59.1	26,820	Other Ferrous	51.2	23,230
High Grade Office Paper	45.8	20,790	Other Non-Ferrous	9.0	4,100
Magazines/Catalogs	30.6	13,860	Other Metal	15.9	7,220
Uncoated OCC/Kraft	311.7	141,320			
Boxboard	54.6	24,750	<b>Organics</b>	<b>578.5</b>	<b>262,300</b>
Mixed Paper - Recyclable	53.2	24,140	Yard Waste - Compostable	117.4	53,230
Compostable Paper	73.0	33,120	Yard Waste - Woody	23.2	10,520
Other Paper	12.3	5,600	Food Scraps	313.5	142,170
			Bottom Fines & Dirt	45.3	20,520
<b>Beverage Containers</b>	<b>5.2</b>	<b>2,340</b>	Diapers	37.0	16,800
Milk & Juice Cartons/Boxes - Coated	5.2	2,340	Other Organic	42.0	19,060
<b>Plastic</b>	<b>306.5</b>	<b>138,990</b>	<b>Inorganics</b>	<b>175.1</b>	<b>79,420</b>
#1 PET Bottles/Jars	20.3	9,220	Televisions	5.1	2,290
#1 Other PET Containers	5.7	2,590	Computer Monitors	3.2	1,460
#2 HDPE Bottles/Jars - Clear	10.3	4,660	Computer Equipment/Peripherals	7.1	3,220
#2 HDPE Bottles/Jars - Color	9.5	4,330	Electronic Equipment	14.5	6,560
#2 Other HDPE Containers	0.7	310	White Goods - Refrigerated	10.4	4,700
#6 Exp. Polystyrene Packaging	18.4	8,340	White Goods - Not refrigerated	23.1	10,480
#3-#7 Other - All	13.1	5,950	Lead-acid Batteries	18.2	8,260
Other Rigid Plastic Products	58.0	26,290	Other Household Batteries	4.3	1,970
Grocery & Merchandise Bags	12.2	5,550	Tires	25.8	11,680
Trash Bags	33.5	15,210	Household Bulky Items	63.1	28,610
Commercial & Industrial Film	34.4	15,600	Fluorescent Lights/Ballasts	0.4	190
Other Film	58.8	26,660			
Other Plastic	31.5	14,280	<b>Textiles</b>	<b>106.1</b>	<b>48,120</b>
			Carpet	24.5	11,100
<b>Glass</b>	<b>85.9</b>	<b>38,970</b>	Carpet Padding	6.7	3,020
Recyclable Glass Bottles & Jars	68.1	30,880	Clothing	47.5	21,530
Flat Glass	10.0	4,540	Other Textiles	27.5	12,470
Other Glass	7.8	3,550			
			<b>Household Hazardous Waste</b>	<b>26.8</b>	<b>12,140</b>
<b>Metal</b>	<b>123.1</b>	<b>55,810</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>558.4</b>	<b>253,200</b>
Aluminum Beverage Containers	15.4	6,970			
Other Aluminum	8.7	3,950			
HVAC Ducting	0.0	0	<b>Total MSW (tons)</b>		<b>1,181,690</b>
Ferrous Containers (Tin Cans)	22.8	10,340	<b>Total MSW (pounds/person/day)</b>		<b>7.14</b>

2014 population 906,891

Champaign, Clark, Coles, Crawford, Cumberland, DeWitt, Cougla, Edgar, Effingham, Ford, Iroquois, Jasper, Livingston, Macon, McLean, Moultrie, Piatt, Shelby, Vermilion Counties.

Source: County MSW Generation Appendix Tables

## Region 5 Municipal Solid Waste (MSW) Generation

	<b>Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>		<b>Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>
<b>Paper</b>	<b>656.8</b>	<b>184,720</b>	<b>Metal</b>		
Newsprint	60.1	16,900	Other Ferrous	51.3	14,430
High Grade Office Paper	49.0	13,780	Other Non-Ferrous	9.1	2,560
Magazines/Catalogs	31.9	8,980	Other Metal	15.9	4,480
Uncoated OCC/Kraft	322.6	90,730			
Boxboard	54.5	15,340	<b>Organics</b>	<b>577.7</b>	<b>162,460</b>
Mixed Paper - Recyclable	53.2	14,960	Yard Waste - Compostable	117.4	33,010
Compostable Paper	73.1	20,550	Yard Waste - Woody	23.3	6,540
Other Paper	12.4	3,480	Food Scraps	312.7	87,930
			Bottom Fines & Dirt	45.3	12,740
<b>Beverage Containers</b>	<b>5.2</b>	<b>1,460</b>	Diapers	37.1	10,420
Milk & Juice Cartons/Boxes - Coated	5.2	1,460	Other Organic	42.0	11,820
<b>Plastic</b>	<b>307.6</b>	<b>86,510</b>	<b>Inorganics</b>	<b>175.6</b>	<b>49,390</b>
#1 PET Bottles/Jars	20.4	5,740	Televisions	5.0	1,420
#1 Other PET Containers	5.7	1,610	Computer Monitors	3.3	920
#2 HDPE Bottles/Jars - Clear	10.3	2,910	Computer Equipment/Peripherals	7.1	2,010
#2 HDPE Bottles/Jars - Color	9.5	2,680	Electronic Equipment	14.5	4,070
#2 Other HDPE Containers	0.7	190	White Goods - Refrigerated	10.4	2,930
#6 Exp. Polystyrene Packaging	18.4	5,180	White Goods - Not refrigerated	23.2	6,520
#3-#7 Other - All	12.9	3,640	Lead-acid Batteries	18.2	5,130
Other Rigid Plastic Products	58.0	16,300	Other Household Batteries	4.4	1,250
Grocery & Merchandise Bags	12.4	3,490	Tires	25.8	7,260
Trash Bags	33.5	9,410	Household Bulky Items	63.1	17,750
Commercial & Industrial Film	34.8	9,780	Fluorescent Lights/Ballasts	0.5	130
Other Film	58.8	16,540			
Other Plastic	32.1	9,040	<b>Textiles</b>	<b>106.9</b>	<b>30,070</b>
			Carpet	24.5	6,890
<b>Glass</b>	<b>85.9</b>	<b>24,150</b>	Carpet Padding	6.6	1,860
Recyclable Glass Bottles & Jars	68.1	19,140	Clothing	48.0	13,490
Flat Glass	10.1	2,830	Other Textiles	27.8	7,830
Other Glass	7.8	2,180			
			<b>Household Hazardous Waste</b>	<b>26.7</b>	<b>7,500</b>
<b>Metal</b>	<b>123.3</b>	<b>34,680</b>			
Aluminum Beverage Containers	15.4	4,340	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>537.0</b>	<b>151,030</b>
Other Aluminum	8.7	2,440			
HVAC Ducting	0.0	0	<b>Total MSW (tons)</b>		<b>731,970</b>
Ferrous Containers (Tin Cans)	22.9	6,430	<b>Total MSW (pounds/person/day)</b>		<b>7.13</b>

2014 population 562,476

Adams, Brown, Calhoun, Cass, Christian, Greene, Jersey, Logan, Macoupin, Mason, Menard, Montgomery, Morgan, Pike, Sangamon, Schuyler, Scott Counties.

Source: County MSW Generation Appendix Tables

## Region 6 Municipal Solid Waste (MSW) Generation

	<b>Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>		<b>Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>
<b>Paper</b>	<b>633.3</b>	<b>232,020</b>	<b>Metal</b>		
Newsprint	58.6	21,480	Other Ferrous	51.2	18,760
High Grade Office Paper	43.3	15,870	Other Non-Ferrous	9.1	3,320
Magazines/Catalogs	30.8	11,290	Other Metal	15.9	5,820
Uncoated OCC/Kraft	307.3	112,570			
Boxboard	54.6	20,000	<b>Organics</b>	<b>578.7</b>	<b>212,010</b>
Mixed Paper - Recyclable	53.3	19,510	Yard Waste - Compostable	117.5	43,030
Compostable Paper	73.0	26,750	Yard Waste - Woody	23.2	8,490
Other Paper	12.4	4,550	Food Scraps	313.7	114,930
			Bottom Fines & Dirt	45.3	16,580
<b>Beverage Containers</b>	<b>5.1</b>	<b>1,870</b>	Diapers	37.1	13,580
Milk & Juice Cartons/Boxes - Coated	5.1	1,870	Other Organic	42.0	15,400
<b>Plastic</b>	<b>307.3</b>	<b>112,590</b>	<b>Inorganics</b>	<b>175.0</b>	<b>64,130</b>
#1 PET Bottles/Jars	20.1	7,360	Televisions	5.0	1,840
#1 Other PET Containers	5.6	2,060	Computer Monitors	3.1	1,140
#2 HDPE Bottles/Jars - Clear	10.2	3,720	Computer Equipment/Peripherals	7.1	2,610
#2 HDPE Bottles/Jars - Color	9.4	3,440	Electronic Equipment	14.5	5,300
#2 Other HDPE Containers	0.7	240	White Goods - Refrigerated	10.4	3,800
#6 Exp. Polystyrene Packaging	18.3	6,720	White Goods - Not refrigerated	23.1	8,460
#3/#7 Other - All	13.0	4,780	Lead-acid Batteries	18.3	6,690
Other Rigid Plastic Products	58.0	21,250	Other Household Batteries	4.3	1,580
Grocery & Merchandise Bags	12.5	4,570	Tires	25.8	9,450
Trash Bags	33.5	12,260	Household Bulky Items	63.1	23,100
Commercial & Industrial Film	35.0	12,810	Fluorescent Lights/Ballasts	0.4	160
Other Film	58.8	21,540			
Other Plastic	32.3	11,840	<b>Textiles</b>	<b>107.2</b>	<b>39,290</b>
			Carpet	24.5	8,960
<b>Glass</b>	<b>86.0</b>	<b>31,500</b>	Carpet Padding	6.6	2,430
Recyclable Glass Bottles & Jars	68.1	24,960	Clothing	48.2	17,670
Flat Glass	10.0	3,680	Other Textiles	27.9	10,230
Other Glass	7.8	2,860			
			<b>Household Hazardous Waste</b>	<b>26.8</b>	<b>9,820</b>
<b>Metal</b>	<b>123.1</b>	<b>45,090</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>581.6</b>	<b>213,090</b>
Aluminum Beverage Containers	15.4	5,630			
Other Aluminum	8.7	3,190			
HVAC Ducting	0.0	0	<b>Total MSW (tons)</b>		<b>961,410</b>
Ferrous Containers (Tin Cans)	22.8	8,370	<b>Total MSW (pounds/person/day)</b>		<b>7.19</b>

2014 population 732,728

Bond, Clinton, Fayette, Madison, Marion, Monroe, Randolph, St. Clair, Washington Counties.

Source: County MSW Generation Appendix Tables

## Region 7 Municipal Solid Waste (MSW) Generation

	<b>Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>		<b>Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>
<b>Paper</b>	<b>572.2</b>	<b>123,830</b>	<b>Metal</b>		
Newsprint	49.9	10,790	Other Ferrous	51.2	11,090
High Grade Office Paper	35.8	7,740	Other Non-Ferrous	9.2	1,980
Magazines/Catalogs	30.0	6,500	Other Metal	15.8	3,420
Uncoated OCC/Kraft	263.3	56,980			
Boxboard	54.5	11,800	<b>Organics</b>	<b>556.7</b>	<b>120,470</b>
Mixed Paper - Recyclable	53.3	11,530	Yard Waste - Compostable	117.6	25,440
Compostable Paper	73.0	15,800	Yard Waste - Woody	23.2	5,020
Other Paper	12.4	2,690	Food Scraps	291.6	63,110
			Bottom Fines & Dirt	45.3	9,810
<b>Beverage Containers</b>	<b>4.3</b>	<b>940</b>	Diapers	37.0	8,000
Milk & Juice Cartons/Boxes - Coated	4.3	940	Other Organic	42.0	9,090
<b>Plastic</b>	<b>284.4</b>	<b>61,540</b>	<b>Inorganics</b>	<b>175.0</b>	<b>37,860</b>
#1 PET Bottles/Jars	17.6	3,800	Televisions	5.0	1,090
#1 Other PET Containers	4.9	1,060	Computer Monitors	3.2	690
#2 HDPE Bottles/Jars - Clear	8.9	1,920	Computer Equipment/Peripherals	7.1	1,540
#2 HDPE Bottles/Jars - Color	8.2	1,770	Electronic Equipment	14.4	3,120
#2 Other HDPE Containers	0.5	100	White Goods - Refrigerated	10.4	2,240
#6 Exp. Polystyrene Packaging	18.4	3,990	White Goods - Not refrigerated	23.2	5,010
#3-#7 Other - All	13.0	2,820	Lead-acid Batteries	18.2	3,940
Other Rigid Plastic Products	58.0	12,560	Other Household Batteries	4.3	930
Grocery & Merchandise Bags	9.8	2,130	Tires	25.8	5,590
Trash Bags	33.4	7,220	Household Bulky Items	63.0	13,640
Commercial & Industrial Film	27.5	5,940	Fluorescent Lights/Ballasts	0.3	70
Other Film	58.7	12,710			
Other Plastic	25.5	5,520	<b>Textiles</b>	<b>91.0</b>	<b>19,690</b>
			Carpet	24.5	5,300
<b>Glass</b>	<b>86.1</b>	<b>18,640</b>	Carpet Padding	6.6	1,430
Recyclable Glass Bottles & Jars	68.4	14,800	Clothing	37.8	8,190
Flat Glass	10.0	2,170	Other Textiles	22.0	4,770
Other Glass	7.7	1,670			
<b>Metal</b>	<b>123.1</b>	<b>26,640</b>	<b>Household Hazardous Waste</b>	<b>26.5</b>	<b>5,740</b>
Aluminum Beverage Containers	15.4	3,330	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>498.7</b>	<b>107,910</b>
Other Aluminum	8.7	1,880			
HVAC Ducting	0.0	0	<b>Total MSW (tons)</b>		<b>523,260</b>
Ferrous Containers (Tin Cans)	22.8	4,940	<b>Total MSW (pounds/person/day)</b>		<b>6.62</b>

2014 population 432,784

Alexander, Clay, Edwards, Franklin, Gallatin, Hamilton, Hardin, Jackson, Jefferson, Johnson, Lawrence, Massac, Perry, Pope, Pulaski, Richland, Saline, Union, Wabash, Wayne, White, Williamson Counties.

Source: County MSW Generation Appendix Tables



## Appendix C County Generation Results



## Adams County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>769.3</b>	<b>26,020</b>	<b>Metal</b>		
Newsprint	45.2	1,530	Other Ferrous	51.1	1,730
High Grade Office Paper	53.2	1,800	Other Non-Ferrous	9.2	310
Magazines/Catalogs	31.9	1,080	Other Metal	16.0	540
Uncoated OCC/Kraft	445.5	15,070			
Boxboard	54.7	1,850	<b>Organics</b>	<b>566.5</b>	<b>19,160</b>
Mixed Paper - Recyclable	53.2	1,800	Yard Waste - Compostable	117.4	3,970
Compostable Paper	73.0	2,470	Yard Waste - Woody	23.4	790
Other Paper	12.4	420	Food Scraps	301.6	10,200
			Bottom Fines & Dirt	45.2	1,530
<b>Beverage Containers</b>	<b>4.7</b>	<b>160</b>	Diapers	37.0	1,250
Milk & Juice Cartons/Boxes - Coated	4.7	160	Other Organic	42.0	1,420
<b>Plastic</b>	<b>298.0</b>	<b>10,080</b>	<b>Inorganics</b>	<b>175.3</b>	<b>5,930</b>
#1 PET Bottles/Jars	18.6	630	Televisions	5.0	170
#1 Other PET Containers	5.3	180	Computer Monitors	3.3	110
#2 HDPE Bottles/Jars - Clear	9.5	320	Computer Equipment/Peripherals	7.1	240
#2 HDPE Bottles/Jars - Color	8.6	290	Electronic Equipment	14.5	490
#2 Other HDPE Containers	0.6	20	White Goods - Refrigerated	10.3	350
#6 Exp. Polystyrene Packaging	18.6	630	White Goods - Not refrigerated	23.1	780
#3-#7 Other - All	13.0	440	Lead-acid Batteries	18.3	620
Other Rigid Plastic Products	57.9	1,960	Other Household Batteries	4.4	150
Grocery & Merchandise Bags	11.5	390	Tires	25.7	870
Trash Bags	33.4	1,130	Household Bulky Items	63.0	2,130
Commercial & Industrial Film	32.2	1,090	Fluorescent Lights/Ballasts	0.6	20
Other Film	58.8	1,990			
Other Plastic	29.9	1,010	<b>Textiles</b>	<b>101.4</b>	<b>3,430</b>
			Carpet	24.5	830
<b>Glass</b>	<b>85.7</b>	<b>2,900</b>	Carpet Padding	6.5	220
Recyclable Glass Bottles & Jars	68.0	2,300	Clothing	44.6	1,510
Flat Glass	10.1	340	Other Textiles	25.7	870
Other Glass	7.7	260			
			<b>Household Hazardous Waste</b>	<b>26.9</b>	<b>910</b>
<b>Metal</b>	<b>123.0</b>	<b>4,160</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>465.6</b>	<b>15,750</b>
Aluminum Beverage Containers	15.4	520			
Other Aluminum	8.6	290			
Ferrous Containers (Tin Cans)	22.8	770	<b>Total MSW (tons)</b>		<b>88,500</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.17</b>

2014 population

67,648

Alexander County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>417.5</b>	<b>1,660</b>	<b>Metal</b>		
Newsprint	22.6	90	Other Ferrous	50.3	200
High Grade Office Paper	25.1	100	Other Non-Ferrous	10.1	40
Magazines/Catalogs	27.7	110	Other Metal	15.1	60
Uncoated OCC/Kraft	148.4	590			
Boxboard	55.3	220	<b>Organics</b>	<b>538.2</b>	<b>2,140</b>
Mixed Paper - Recyclable	52.8	210	Yard Waste - Compostable	118.2	470
Compostable Paper	72.9	290	Yard Waste - Woody	22.6	90
Other Paper	12.6	50	Food Scraps	271.6	1,080
			Bottom Fines & Dirt	45.3	180
<b>Beverage Containers</b>	<b>2.5</b>	<b>10</b>	Diapers	37.7	150
Milk & Juice Cartons/Boxes - Coated	2.5	10	Other Organic	42.8	170
<b>Plastic</b>	<b>266.6</b>	<b>1,060</b>	<b>Inorganics</b>	<b>173.5</b>	<b>690</b>
#1 PET Bottles/Jars	17.6	70	Televisions	5.0	20
#1 Other PET Containers	5.0	20	Computer Monitors	2.5	10
#2 HDPE Bottles/Jars - Clear	7.5	30	Computer Equipment/Peripherals	7.5	30
#2 HDPE Bottles/Jars - Color	7.5	30	Electronic Equipment	15.1	60
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	10.1	40
#6 Exp. Polystyrene Packaging	20.1	80	White Goods - Not refrigerated	22.6	90
#3-#7 Other - All	12.6	50	Lead-acid Batteries	17.6	70
Other Rigid Plastic Products	57.8	230	Other Household Batteries	5.0	20
Grocery & Merchandise Bags	7.5	30	Tires	25.1	100
Trash Bags	32.7	130	Household Bulky Items	62.9	250
Commercial & Industrial Film	20.1	80	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	57.8	230			
Other Plastic	20.1	80	<b>Textiles</b>	<b>75.4</b>	<b>300</b>
			Carpet	25.1	100
<b>Glass</b>	<b>88.0</b>	<b>350</b>	Carpet Padding	7.5	30
Recyclable Glass Bottles & Jars	70.4	280	Clothing	27.7	110
Flat Glass	10.1	40	Other Textiles	15.1	60
Other Glass	7.5	30			
<b>Metal</b>	<b>120.7</b>	<b>480</b>	<b>Household Hazardous Waste</b>	<b>25.1</b>	<b>100</b>
Aluminum Beverage Containers	15.1	60	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>570.9</b>	<b>2,270</b>
Other Aluminum	7.5	30			
Ferrous Containers (Tin Cans)	22.6	90	<b>Total MSW (tons)</b>		<b>9,060</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.24</b>

2014 population

7,953

## Bond County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>491.3</b>	<b>4,310</b>	<b>Metal</b>		
Newsprint	31.9	280	Other Ferrous	51.3	450
High Grade Office Paper	29.6	260	Other Non-Ferrous	9.1	80
Magazines/Catalogs	29.6	260	Other Metal	16.0	140
Uncoated OCC/Kraft	206.3	1,810			
Boxboard	54.7	480	<b>Organics</b>	<b>556.3</b>	<b>4,880</b>
Mixed Paper - Recyclable	53.6	470	Yard Waste - Compostable	117.4	1,030
Compostable Paper	73.0	640	Yard Waste - Woody	22.8	200
Other Paper	12.5	110	Food Scraps	290.7	2,550
			Bottom Fines & Dirt	45.6	400
<b>Beverage Containers</b>	<b>4.6</b>	<b>40</b>	Diapers	37.6	330
Milk & Juice Cartons/Boxes - Coated	4.6	40	Other Organic	42.2	370
<b>Plastic</b>	<b>295.2</b>	<b>2,590</b>	<b>Inorganics</b>	<b>174.4</b>	<b>1,530</b>
#1 PET Bottles/Jars	17.1	150	Televisions	4.6	40
#1 Other PET Containers	4.6	40	Computer Monitors	3.4	30
#2 HDPE Bottles/Jars - Clear	9.1	80	Computer Equipment/Peripherals	6.8	60
#2 HDPE Bottles/Jars - Color	8.0	70	Electronic Equipment	14.8	130
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	10.3	90
#6 Exp. Polystyrene Packaging	18.2	160	White Goods - Not refrigerated	22.8	200
#3-#7 Other - All	13.7	120	Lead-acid Batteries	18.2	160
Other Rigid Plastic Products	58.1	510	Other Household Batteries	4.6	40
Grocery & Merchandise Bags	11.4	100	Tires	26.2	230
Trash Bags	33.1	290	Household Bulky Items	62.7	550
Commercial & Industrial Film	33.1	290	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	59.3	520			
Other Plastic	29.6	260	<b>Textiles</b>	<b>102.6</b>	<b>900</b>
			Carpet	23.9	210
<b>Glass</b>	<b>85.5</b>	<b>750</b>	Carpet Padding	6.8	60
Recyclable Glass Bottles & Jars	67.3	590	Clothing	45.6	400
Flat Glass	10.3	90	Other Textiles	26.2	230
Other Glass	8.0	70			
<b>Metal</b>	<b>123.1</b>	<b>1,080</b>	<b>Household Hazardous Waste</b>	<b>26.2</b>	<b>230</b>
Aluminum Beverage Containers	14.8	130	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>597.3</b>	<b>5,240</b>
Other Aluminum	9.1	80			
Ferrous Containers (Tin Cans)	22.8	200	<b>Total MSW (tons)</b>		<b>21,550</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.73</b>

2014 population

17,546

## Boone County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>574.9</b>	<b>15,830</b>	<b>Metal</b>		
Newsprint	68.3	1,880	Other Ferrous	51.2	1,410
High Grade Office Paper	50.5	1,390	Other Non-Ferrous	9.1	250
Magazines/Catalogs	29.4	810	Other Metal	16.0	440
Uncoated OCC/Kraft	233.5	6,430			
Boxboard	54.5	1,500	<b>Organics</b>	<b>590.9</b>	<b>16,270</b>
Mixed Paper - Recyclable	53.4	1,470	Yard Waste - Compostable	117.3	3,230
Compostable Paper	73.0	2,010	Yard Waste - Woody	23.2	640
Other Paper	12.3	340	Food Scraps	325.8	8,970
			Bottom Fines & Dirt	45.4	1,250
<b>Beverage Containers</b>	<b>5.4</b>	<b>150</b>	Diapers	37.0	1,020
Milk & Juice Cartons/Boxes - Coated	5.4	150	Other Organic	42.1	1,160
<b>Plastic</b>	<b>327.6</b>	<b>9,020</b>	<b>Inorganics</b>	<b>175.8</b>	<b>4,840</b>
#1 PET Bottles/Jars	21.8	600	Televisions	5.1	140
#1 Other PET Containers	6.2	170	Computer Monitors	3.3	90
#2 HDPE Bottles/Jars - Clear	11.3	310	Computer Equipment/Peripherals	7.3	200
#2 HDPE Bottles/Jars - Color	10.2	280	Electronic Equipment	14.5	400
#2 Other HDPE Containers	0.7	20	White Goods - Refrigerated	10.5	290
#6 Exp. Polystyrene Packaging	18.5	510	White Goods - Not refrigerated	23.2	640
#3-#7 Other - All	13.1	360	Lead-acid Batteries	18.2	500
Other Rigid Plastic Products	58.1	1,600	Other Household Batteries	4.4	120
Grocery & Merchandise Bags	14.9	410	Tires	25.8	710
Trash Bags	33.4	920	Household Bulky Items	63.2	1,740
Commercial & Industrial Film	41.8	1,150	Fluorescent Lights/Ballasts	0.4	10
Other Film	58.8	1,620			
Other Plastic	38.9	1,070	<b>Textiles</b>	<b>121.7</b>	<b>3,350</b>
			Carpet	24.3	670
<b>Glass</b>	<b>85.7</b>	<b>2,360</b>	Carpet Padding	6.5	180
Recyclable Glass Bottles & Jars	67.9	1,870	Clothing	57.4	1,580
Flat Glass	10.2	280	Other Textiles	33.4	920
Other Glass	7.6	210			
<b>Metal</b>	<b>123.1</b>	<b>3,390</b>	<b>Household Hazardous Waste</b>	<b>26.9</b>	<b>740</b>
Aluminum Beverage Containers	15.3	420	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>612.3</b>	<b>16,860</b>
Other Aluminum	8.7	240			
Ferrous Containers (Tin Cans)	22.9	630	<b>Total MSW (tons)</b>		<b>72,810</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.24</b>

2014 population

55,071

## Brown County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>714.6</b>	<b>2,500</b>	<b>Metal</b>		
Newsprint	31.4	110	Other Ferrous	51.5	180
High Grade Office Paper	60.0	210	Other Non-Ferrous	8.6	30
Magazines/Catalogs	25.7	90	Other Metal	17.2	60
Uncoated OCC/Kraft	403.0	1,410			
Boxboard	54.3	190	<b>Organics</b>	<b>537.4</b>	<b>1,880</b>
Mixed Paper - Recyclable	54.3	190	Yard Waste - Compostable	117.2	410
Compostable Paper	74.3	260	Yard Waste - Woody	22.9	80
Other Paper	11.4	40	Food Scraps	271.5	950
			Bottom Fines & Dirt	45.7	160
<b>Beverage Containers</b>	<b>2.9</b>	<b>10</b>	Diapers	37.2	130
Milk & Juice Cartons/Boxes - Coated	2.9	10	Other Organic	42.9	150
<b>Plastic</b>	<b>288.7</b>	<b>1,010</b>	<b>Inorganics</b>	<b>174.4</b>	<b>610</b>
#1 PET Bottles/Jars	14.3	50	Televisions	5.7	20
#1 Other PET Containers	2.9	10	Computer Monitors	2.9	10
#2 HDPE Bottles/Jars - Clear	8.6	30	Computer Equipment/Peripherals	5.7	20
#2 HDPE Bottles/Jars - Color	5.7	20	Electronic Equipment	14.3	50
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	11.4	40
#6 Exp. Polystyrene Packaging	17.2	60	White Goods - Not refrigerated	22.9	80
#3-#7 Other - All	14.3	50	Lead-acid Batteries	17.2	60
Other Rigid Plastic Products	57.2	200	Other Household Batteries	5.7	20
Grocery & Merchandise Bags	11.4	40	Tires	25.7	90
Trash Bags	34.3	120	Household Bulky Items	62.9	220
Commercial & Industrial Film	31.4	110	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	60.0	210			
Other Plastic	31.4	110	<b>Textiles</b>	<b>102.9</b>	<b>360</b>
			Carpet	25.7	90
<b>Glass</b>	<b>88.6</b>	<b>310</b>	Carpet Padding	5.7	20
Recyclable Glass Bottles & Jars	68.6	240	Clothing	45.7	160
Flat Glass	11.4	40	Other Textiles	25.7	90
Other Glass	8.6	30			
			<b>Household Hazardous Waste</b>	<b>28.6</b>	<b>100</b>
<b>Metal</b>	<b>122.9</b>	<b>430</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>463.1</b>	<b>1,620</b>
Aluminum Beverage Containers	14.3	50			
Other Aluminum	8.6	30			
Ferrous Containers (Tin Cans)	22.9	80	<b>Total MSW (tons)</b>		<b>8,830</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.91</b>

2014 population

6,997

Bureau County Municipal Solid Waste (MSW) Generation

	<b>County Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>		<b>County Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>
<b>Paper</b>	<b>585.6</b>	<b>10,250</b>	<b>Metal</b>		
Newsprint	41.7	730	Other Ferrous	51.4	900
High Grade Office Paper	36.6	640	Other Non-Ferrous	9.1	160
Magazines/Catalogs	32.6	570	Other Metal	16.0	280
Uncoated OCC/Kraft	281.1	4,920			
Boxboard	54.8	960	<b>Organics</b>	<b>568.5</b>	<b>9,950</b>
Mixed Paper - Recyclable	53.1	930	Yard Waste - Compostable	117.7	2,060
Compostable Paper	73.1	1,280	Yard Waste - Woody	23.4	410
Other Paper	12.6	220	Food Scraps	302.8	5,300
			Bottom Fines & Dirt	45.1	790
<b>Beverage Containers</b>	<b>5.1</b>	<b>90</b>	Diapers	37.1	650
Milk & Juice Cartons/Boxes - Coated	5.1	90	Other Organic	42.3	740
<b>Plastic</b>	<b>301.7</b>	<b>5,280</b>	<b>Inorganics</b>	<b>174.8</b>	<b>3,060</b>
#1 PET Bottles/Jars	19.4	340	Televisions	5.1	90
#1 Other PET Containers	5.7	100	Computer Monitors	3.4	60
#2 HDPE Bottles/Jars - Clear	9.7	170	Computer Equipment/Peripherals	6.9	120
#2 HDPE Bottles/Jars - Color	9.1	160	Electronic Equipment	14.3	250
#2 Other HDPE Containers	0.6	10	White Goods - Refrigerated	10.3	180
#6 Exp. Polystyrene Packaging	17.7	310	White Goods - Not refrigerated	22.9	400
#3-#7 Other - All	13.1	230	Lead-acid Batteries	18.3	320
Other Rigid Plastic Products	57.7	1,010	Other Household Batteries	4.6	80
Grocery & Merchandise Bags	12.0	210	Tires	25.7	450
Trash Bags	33.7	590	Household Bulky Items	62.8	1,100
Commercial & Industrial Film	33.1	580	Fluorescent Lights/Ballasts	0.6	10
Other Film	58.8	1,030			
Other Plastic	30.9	540	<b>Textiles</b>	<b>104.6</b>	<b>1,830</b>
			Carpet	24.6	430
<b>Glass</b>	<b>86.8</b>	<b>1,520</b>	Carpet Padding	6.9	120
Recyclable Glass Bottles & Jars	68.6	1,200	Clothing	46.3	810
Flat Glass	10.3	180	Other Textiles	26.9	470
Other Glass	8.0	140			
<b>Metal</b>	<b>123.4</b>	<b>2,160</b>	<b>Household Hazardous Waste</b>	<b>26.9</b>	<b>470</b>
Aluminum Beverage Containers	15.4	270	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>468.5</b>	<b>8,200</b>
Other Aluminum	8.6	150			
Ferrous Containers (Tin Cans)	22.9	400	<b>Total MSW (tons)</b>		<b>42,810</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.70</b>

2014 population

35,006

## Calhoun County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>399.9</b>	<b>1,000</b>	<b>Metal</b>		
Newsprint	16.0	40	Other Ferrous	52.0	130
High Grade Office Paper	24.0	60	Other Non-Ferrous	8.0	20
Magazines/Catalogs	32.0	80	Other Metal	16.0	40
Uncoated OCC/Kraft	136.0	340			
Boxboard	56.0	140	<b>Organics</b>	<b>567.9</b>	<b>1,420</b>
Mixed Paper - Recyclable	52.0	130	Yard Waste - Compostable	116.0	290
Compostable Paper	72.0	180	Yard Waste - Woody	24.0	60
Other Paper	12.0	30	Food Scraps	303.9	760
			Bottom Fines & Dirt	44.0	110
<b>Beverage Containers</b>	<b>4.0</b>	<b>10</b>	Diapers	36.0	90
Milk & Juice Cartons/Boxes - Coated	4.0	10	Other Organic	44.0	110
<b>Plastic</b>	<b>299.9</b>	<b>750</b>	<b>Inorganics</b>	<b>180.0</b>	<b>450</b>
#1 PET Bottles/Jars	20.0	50	Televisions	4.0	10
#1 Other PET Containers	4.0	10	Computer Monitors	4.0	10
#2 HDPE Bottles/Jars - Clear	12.0	30	Computer Equipment/Peripherals	8.0	20
#2 HDPE Bottles/Jars - Color	8.0	20	Electronic Equipment	16.0	40
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	12.0	30
#6 Exp. Polystyrene Packaging	20.0	50	White Goods - Not refrigerated	24.0	60
#3-#7 Other - All	12.0	30	Lead-acid Batteries	20.0	50
Other Rigid Plastic Products	56.0	140	Other Household Batteries	4.0	10
Grocery & Merchandise Bags	12.0	30	Tires	24.0	60
Trash Bags	32.0	80	Household Bulky Items	64.0	160
Commercial & Industrial Film	32.0	80	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	60.0	150			
Other Plastic	32.0	80	<b>Textiles</b>	<b>104.0</b>	<b>260</b>
			Carpet	24.0	60
<b>Glass</b>	<b>88.0</b>	<b>220</b>	Carpet Padding	8.0	20
Recyclable Glass Bottles & Jars	68.0	170	Clothing	44.0	110
Flat Glass	12.0	30	Other Textiles	28.0	70
Other Glass	8.0	20			
			<b>Household Hazardous Waste</b>	<b>24.0</b>	<b>60</b>
<b>Metal</b>	<b>124.0</b>	<b>310</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>599.9</b>	<b>1,500</b>
Aluminum Beverage Containers	16.0	40			
Other Aluminum	8.0	20			
Ferrous Containers (Tin Cans)	24.0	60	<b>Total MSW (tons)</b>		<b>5,980</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.55</b>

2014 population

5,001

Carroll County Municipal Solid Waste (MSW) Generation

	<b>County Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>		<b>County Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>
<b>Paper</b>	<b>546.8</b>	<b>4,140</b>	<b>Metal</b>		
Newsprint	64.7	490	Other Ferrous	51.5	390
High Grade Office Paper	29.1	220	Other Non-Ferrous	9.2	70
Magazines/Catalogs	35.7	270	Other Metal	15.8	120
Uncoated OCC/Kraft	225.9	1,710			
Boxboard	54.2	410	<b>Organics</b>	<b>589.1</b>	<b>4,460</b>
Mixed Paper - Recyclable	52.8	400	Yard Waste - Compostable	117.6	890
Compostable Paper	72.6	550	Yard Waste - Woody	23.8	180
Other Paper	11.9	90	Food Scraps	323.6	2,450
			Bottom Fines & Dirt	44.9	340
<b>Beverage Containers</b>	<b>6.6</b>	<b>50</b>	Diapers	37.0	280
Milk & Juice Cartons/Boxes - Coated	6.6	50	Other Organic	42.3	320
<b>Plastic</b>	<b>311.7</b>	<b>2,360</b>	<b>Inorganics</b>	<b>175.7</b>	<b>1,330</b>
#1 PET Bottles/Jars	23.8	180	Televisions	5.3	40
#1 Other PET Containers	6.6	50	Computer Monitors	2.6	20
#2 HDPE Bottles/Jars - Clear	11.9	90	Computer Equipment/Peripherals	6.6	50
#2 HDPE Bottles/Jars - Color	10.6	80	Electronic Equipment	14.5	110
#2 Other HDPE Containers	1.3	10	White Goods - Refrigerated	10.6	80
#6 Exp. Polystyrene Packaging	18.5	140	White Goods - Not refrigerated	23.8	180
#3-#7 Other - All	13.2	100	Lead-acid Batteries	18.5	140
Other Rigid Plastic Products	58.1	440	Other Household Batteries	4.0	30
Grocery & Merchandise Bags	11.9	90	Tires	26.4	200
Trash Bags	33.0	250	Household Bulky Items	63.4	480
Commercial & Industrial Film	33.0	250	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	59.4	450			
Other Plastic	30.4	230	<b>Textiles</b>	<b>104.3</b>	<b>790</b>
			Carpet	25.1	190
<b>Glass</b>	<b>85.9</b>	<b>650</b>	Carpet Padding	6.6	50
Recyclable Glass Bottles & Jars	67.4	510	Clothing	46.2	350
Flat Glass	10.6	80	Other Textiles	26.4	200
Other Glass	7.9	60			
			<b>Household Hazardous Waste</b>	<b>23.8</b>	<b>180</b>
<b>Metal</b>	<b>124.2</b>	<b>940</b>			
Aluminum Beverage Containers	15.8	120	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>467.6</b>	<b>3,540</b>
Other Aluminum	9.2	70			
Ferrous Containers (Tin Cans)	22.5	170	<b>Total MSW (tons)</b>		<b>18,440</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.67</b>

2014 population

15,142

Cass County Municipal Solid Waste (MSW) Generation

	<b>County Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>		<b>County Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>
<b>Paper</b>	<b>655.1</b>	<b>4,430</b>	<b>Metal</b>		
Newsprint	51.8	350	Other Ferrous	51.8	350
High Grade Office Paper	45.8	310	Other Non-Ferrous	8.9	60
Magazines/Catalogs	29.6	200	Other Metal	16.3	110
Uncoated OCC/Kraft	335.7	2,270			
Boxboard	54.7	370	<b>Organics</b>	<b>561.9</b>	<b>3,800</b>
Mixed Paper - Recyclable	53.2	360	Yard Waste - Compostable	116.8	790
Compostable Paper	72.5	490	Yard Waste - Woody	23.7	160
Other Paper	11.8	80	Food Scraps	297.2	2,010
			Bottom Fines & Dirt	45.8	310
<b>Beverage Containers</b>	<b>4.4</b>	<b>30</b>	Diapers	37.0	250
Milk & Juice Cartons/Boxes - Coated	4.4	30	Other Organic	41.4	280
<b>Plastic</b>	<b>295.7</b>	<b>2,000</b>	<b>Inorganics</b>	<b>174.5</b>	<b>1,180</b>
#1 PET Bottles/Jars	17.7	120	Televisions	4.4	30
#1 Other PET Containers	4.4	30	Computer Monitors	3.0	20
#2 HDPE Bottles/Jars - Clear	8.9	60	Computer Equipment/Peripherals	7.4	50
#2 HDPE Bottles/Jars - Color	8.9	60	Electronic Equipment	14.8	100
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	10.4	70
#6 Exp. Polystyrene Packaging	19.2	130	White Goods - Not refrigerated	23.7	160
#3-#7 Other - All	13.3	90	Lead-acid Batteries	17.7	120
Other Rigid Plastic Products	57.7	390	Other Household Batteries	4.4	30
Grocery & Merchandise Bags	11.8	80	Tires	25.1	170
Trash Bags	34.0	230	Household Bulky Items	63.6	430
Commercial & Industrial Film	31.1	210	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	59.1	400			
Other Plastic	29.6	200	<b>Textiles</b>	<b>99.1</b>	<b>670</b>
			Carpet	25.1	170
<b>Glass</b>	<b>85.8</b>	<b>580</b>	Carpet Padding	5.9	40
Recyclable Glass Bottles & Jars	68.0	460	Clothing	42.9	290
Flat Glass	10.4	70	Other Textiles	25.1	170
Other Glass	7.4	50			
<b>Metal</b>	<b>122.7</b>	<b>830</b>	<b>Household Hazardous Waste</b>	<b>25.1</b>	<b>170</b>
Aluminum Beverage Containers	14.8	100	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>465.8</b>	<b>3,150</b>
Other Aluminum	8.9	60			
Ferrous Containers (Tin Cans)	22.2	150	<b>Total MSW (tons)</b>		<b>16,840</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.82</b>

2014 population

13,525

## Champaign County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>654.2</b>	<b>66,770</b>	<b>Metal</b>		
Newsprint	50.6	5,160	Other Ferrous	51.2	5,230
High Grade Office Paper	47.5	4,850	Other Non-Ferrous	9.0	920
Magazines/Catalogs	29.0	2,960	Other Metal	15.9	1,620
Uncoated OCC/Kraft	333.8	34,070			
Boxboard	54.6	5,570	<b>Organics</b>	<b>580.3</b>	<b>59,230</b>
Mixed Paper - Recyclable	53.2	5,430	Yard Waste - Compostable	117.4	11,980
Compostable Paper	73.1	7,460	Yard Waste - Woody	23.2	2,370
Other Paper	12.4	1,270	Food Scraps	315.4	32,190
			Bottom Fines & Dirt	45.3	4,620
<b>Beverage Containers</b>	<b>5.1</b>	<b>520</b>	Diapers	37.0	3,780
Milk & Juice Cartons/Boxes - Coated	5.1	520	Other Organic	42.0	4,290
<b>Plastic</b>	<b>301.7</b>	<b>30,790</b>	<b>Inorganics</b>	<b>175.1</b>	<b>17,870</b>
#1 PET Bottles/Jars	20.1	2,050	Televisions	5.0	510
#1 Other PET Containers	5.7	580	Computer Monitors	3.1	320
#2 HDPE Bottles/Jars - Clear	10.2	1,040	Computer Equipment/Peripherals	7.1	720
#2 HDPE Bottles/Jars - Color	9.4	960	Electronic Equipment	14.5	1,480
#2 Other HDPE Containers	0.7	70	White Goods - Refrigerated	10.4	1,060
#6 Exp. Polystyrene Packaging	18.4	1,880	White Goods - Not refrigerated	23.1	2,360
#3-#7 Other - All	13.1	1,340	Lead-acid Batteries	18.2	1,860
Other Rigid Plastic Products	58.0	5,920	Other Household Batteries	4.3	440
Grocery & Merchandise Bags	11.5	1,170	Tires	25.8	2,630
Trash Bags	33.5	3,420	Household Bulky Items	63.1	6,440
Commercial & Industrial Film	32.3	3,300	Fluorescent Lights/Ballasts	0.5	50
Other Film	58.8	6,000			
Other Plastic	30.0	3,060	<b>Textiles</b>	<b>101.6</b>	<b>10,370</b>
			Carpet	24.5	2,500
<b>Glass</b>	<b>85.8</b>	<b>8,760</b>	Carpet Padding	6.7	680
Recyclable Glass Bottles & Jars	68.1	6,950	Clothing	44.6	4,550
Flat Glass	10.0	1,020	Other Textiles	25.9	2,640
Other Glass	7.7	790			
			<b>Household Hazardous Waste</b>	<b>26.9</b>	<b>2,750</b>
<b>Metal</b>	<b>123.1</b>	<b>12,560</b>			
Aluminum Beverage Containers	15.4	1,570	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>596.6</b>	<b>60,900</b>
Other Aluminum	8.7	890			
Ferrous Containers (Tin Cans)	22.8	2,330	<b>Total MSW (tons)</b>		<b>270,520</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.26</b>

2014 population

204,140

Christian County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>604.3</b>	<b>10,490</b>	<b>Metal</b>		
Newsprint	75.5	1,310	Other Ferrous	51.3	890
High Grade Office Paper	34.6	600	Other Non-Ferrous	9.2	160
Magazines/Catalogs	32.8	570	Other Metal	16.1	280
Uncoated OCC/Kraft	267.9	4,650			
Boxboard	54.7	950	<b>Organics</b>	<b>561.7</b>	<b>9,750</b>
Mixed Paper - Recyclable	53.0	920	Yard Waste - Compostable	117.5	2,040
Compostable Paper	73.2	1,270	Yard Waste - Woody	23.0	400
Other Paper	12.7	220	Food Scraps	296.7	5,150
			Bottom Fines & Dirt	45.5	790
<b>Beverage Containers</b>	<b>4.6</b>	<b>80</b>	Diapers	36.9	640
Milk & Juice Cartons/Boxes - Coated	4.6	80	Other Organic	42.1	730
<b>Plastic</b>	<b>292.7</b>	<b>5,080</b>	<b>Inorganics</b>	<b>175.7</b>	<b>3,050</b>
#1 PET Bottles/Jars	18.4	320	Televisions	5.2	90
#1 Other PET Containers	5.2	90	Computer Monitors	3.5	60
#2 HDPE Bottles/Jars - Clear	9.2	160	Computer Equipment/Peripherals	6.9	120
#2 HDPE Bottles/Jars - Color	8.6	150	Electronic Equipment	14.4	250
#2 Other HDPE Containers	0.6	10	White Goods - Refrigerated	10.4	180
#6 Exp. Polystyrene Packaging	17.9	310	White Goods - Not refrigerated	23.0	400
#3-#7 Other - All	13.3	230	Lead-acid Batteries	18.4	320
Other Rigid Plastic Products	58.2	1,010	Other Household Batteries	4.6	80
Grocery & Merchandise Bags	10.9	190	Tires	25.9	450
Trash Bags	33.4	580	Household Bulky Items	62.8	1,090
Commercial & Industrial Film	30.0	520	Fluorescent Lights/Ballasts	0.6	10
Other Film	58.8	1,020			
Other Plastic	28.2	490	<b>Textiles</b>	<b>96.2</b>	<b>1,670</b>
			Carpet	24.2	420
<b>Glass</b>	<b>84.7</b>	<b>1,470</b>	Carpet Padding	6.3	110
Recyclable Glass Bottles & Jars	67.4	1,170	Clothing	41.5	720
Flat Glass	9.8	170	Other Textiles	24.2	420
Other Glass	7.5	130			
<b>Metal</b>	<b>123.9</b>	<b>2,150</b>	<b>Household Hazardous Waste</b>	<b>27.1</b>	<b>470</b>
Aluminum Beverage Containers	15.6	270	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>462.0</b>	<b>8,020</b>
Other Aluminum	8.6	150			
Ferrous Containers (Tin Cans)	23.0	400	<b>Total MSW (tons)</b>		<b>42,230</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.67</b>

Clark County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>515.9</b>	<b>4,180</b>	<b>Metal</b>		
Newsprint	32.1	260	Other Ferrous	51.8	420
High Grade Office Paper	30.9	250	Other Non-Ferrous	8.6	70
Magazines/Catalogs	32.1	260	Other Metal	16.0	130
Uncoated OCC/Kraft	228.3	1,850			
Boxboard	54.3	440	<b>Organics</b>	<b>576.4</b>	<b>4,670</b>
Mixed Paper - Recyclable	53.1	430	Yard Waste - Compostable	117.2	950
Compostable Paper	72.8	590	Yard Waste - Woody	23.4	190
Other Paper	12.3	100	Food Scraps	311.0	2,520
			Bottom Fines & Dirt	45.7	370
<b>Beverage Containers</b>	<b>4.9</b>	<b>40</b>	Diapers	37.0	300
Milk & Juice Cartons/Boxes - Coated	4.9	40	Other Organic	42.0	340
<b>Plastic</b>	<b>307.3</b>	<b>2,490</b>	<b>Inorganics</b>	<b>176.5</b>	<b>1,430</b>
#1 PET Bottles/Jars	21.0	170	Televisions	4.9	40
#1 Other PET Containers	6.2	50	Computer Monitors	3.7	30
#2 HDPE Bottles/Jars - Clear	11.1	90	Computer Equipment/Peripherals	7.4	60
#2 HDPE Bottles/Jars - Color	9.9	80	Electronic Equipment	14.8	120
#2 Other HDPE Containers	1.2	10	White Goods - Refrigerated	9.9	80
#6 Exp. Polystyrene Packaging	18.5	150	White Goods - Not refrigerated	23.4	190
#3-#7 Other - All	12.3	100	Lead-acid Batteries	18.5	150
Other Rigid Plastic Products	58.0	470	Other Household Batteries	4.9	40
Grocery & Merchandise Bags	12.3	100	Tires	25.9	210
Trash Bags	33.3	270	Household Bulky Items	62.9	510
Commercial & Industrial Film	33.3	270	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	59.2	480			
Other Plastic	30.9	250	<b>Textiles</b>	<b>102.4</b>	<b>830</b>
			Carpet	24.7	200
<b>Glass</b>	<b>85.2</b>	<b>690</b>	Carpet Padding	6.2	50
Recyclable Glass Bottles & Jars	67.9	550	Clothing	45.7	370
Flat Glass	9.9	80	Other Textiles	25.9	210
Other Glass	7.4	60			
<b>Metal</b>	<b>122.2</b>	<b>990</b>	<b>Household Hazardous Waste</b>	<b>25.9</b>	<b>210</b>
Aluminum Beverage Containers	14.8	120	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>466.5</b>	<b>3,780</b>
Other Aluminum	8.6	70			
Ferrous Containers (Tin Cans)	22.2	180	<b>Total MSW (tons)</b>		<b>19,310</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.53</b>

2014 population

16,205

## Clay County Municipal Solid Waste (MSW) Generation

	<b>County Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>		<b>County Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>
<b>Paper</b>	<b>545.7</b>	<b>3,750</b>	<b>Metal</b>		
Newsprint	16.0	110	Other Ferrous	50.9	350
High Grade Office Paper	39.3	270	Other Non-Ferrous	8.7	60
Magazines/Catalogs	30.6	210	Other Metal	16.0	110
Uncoated OCC/Kraft	264.9	1,820			
Boxboard	55.3	380	<b>Organics</b>	<b>558.8</b>	<b>3,840</b>
Mixed Paper - Recyclable	53.8	370	Yard Waste - Compostable	117.9	810
Compostable Paper	72.8	500	Yard Waste - Woody	23.3	160
Other Paper	13.1	90	Food Scraps	294.0	2,020
			Bottom Fines & Dirt	45.1	310
<b>Beverage Containers</b>	<b>4.4</b>	<b>30</b>	Diapers	36.4	250
Milk & Juice Cartons/Boxes - Coated	4.4	30	Other Organic	42.2	290
<b>Plastic</b>	<b>289.6</b>	<b>1,990</b>	<b>Inorganics</b>	<b>174.6</b>	<b>1,200</b>
#1 PET Bottles/Jars	18.9	130	Televisions	4.4	30
#1 Other PET Containers	5.8	40	Computer Monitors	2.9	20
#2 HDPE Bottles/Jars - Clear	8.7	60	Computer Equipment/Peripherals	7.3	50
#2 HDPE Bottles/Jars - Color	8.7	60	Electronic Equipment	14.6	100
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	10.2	70
#6 Exp. Polystyrene Packaging	18.9	130	White Goods - Not refrigerated	23.3	160
#3-#7 Other - All	13.1	90	Lead-acid Batteries	18.9	130
Other Rigid Plastic Products	58.2	400	Other Household Batteries	4.4	30
Grocery & Merchandise Bags	10.2	70	Tires	26.2	180
Trash Bags	33.5	230	Household Bulky Items	62.6	430
Commercial & Industrial Film	29.1	200	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	58.2	400			
Other Plastic	26.2	180	<b>Textiles</b>	<b>94.6</b>	<b>650</b>
			Carpet	24.7	170
<b>Glass</b>	<b>84.4</b>	<b>580</b>	Carpet Padding	7.3	50
Recyclable Glass Bottles & Jars	66.9	460	Clothing	39.3	270
Flat Glass	10.2	70	Other Textiles	23.3	160
Other Glass	7.3	50			
<b>Metal</b>	<b>123.7</b>	<b>850</b>	<b>Household Hazardous Waste</b>	<b>24.7</b>	<b>170</b>
Aluminum Beverage Containers	16.0	110	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>458.4</b>	<b>3,150</b>
Other Aluminum	8.7	60			
Ferrous Containers (Tin Cans)	23.3	160	<b>Total MSW (tons)</b>		<b>16,210</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.46</b>

2014 population

13,743

Clinton County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>620.2</b>	<b>11,830</b>	<b>Metal</b>		
Newsprint	58.2	1,110	Other Ferrous	51.4	980
High Grade Office Paper	50.3	960	Other Non-Ferrous	8.9	170
Magazines/Catalogs	29.9	570	Other Metal	15.7	300
Uncoated OCC/Kraft	288.4	5,500			
Boxboard	54.5	1,040	<b>Organics</b>	<b>580.4</b>	<b>11,070</b>
Mixed Paper - Recyclable	53.5	1,020	Yard Waste - Compostable	117.4	2,240
Compostable Paper	72.9	1,390	Yard Waste - Woody	23.1	440
Other Paper	12.6	240	Food Scraps	315.6	6,020
			Bottom Fines & Dirt	45.1	860
<b>Beverage Containers</b>	<b>5.2</b>	<b>100</b>	Diapers	37.2	710
Milk & Juice Cartons/Boxes - Coated	5.2	100	Other Organic	41.9	800
<b>Plastic</b>	<b>325.6</b>	<b>6,210</b>	<b>Inorganics</b>	<b>175.6</b>	<b>3,350</b>
#1 PET Bottles/Jars	20.4	390	Televisions	5.2	100
#1 Other PET Containers	5.8	110	Computer Monitors	3.1	60
#2 HDPE Bottles/Jars - Clear	10.5	200	Computer Equipment/Peripherals	7.3	140
#2 HDPE Bottles/Jars - Color	9.4	180	Electronic Equipment	14.7	280
#2 Other HDPE Containers	0.5	10	White Goods - Refrigerated	10.5	200
#6 Exp. Polystyrene Packaging	18.9	360	White Goods - Not refrigerated	23.1	440
#3-#7 Other - All	13.1	250	Lead-acid Batteries	18.4	350
Other Rigid Plastic Products	58.2	1,110	Other Household Batteries	4.2	80
Grocery & Merchandise Bags	15.2	290	Tires	25.7	490
Trash Bags	33.6	640	Household Bulky Items	62.9	1,200
Commercial & Industrial Film	42.5	810	Fluorescent Lights/Ballasts	0.5	10
Other Film	58.7	1,120			
Other Plastic	38.8	740	<b>Textiles</b>	<b>124.3</b>	<b>2,370</b>
			Carpet	24.6	470
<b>Glass</b>	<b>85.5</b>	<b>1,630</b>	Carpet Padding	6.8	130
Recyclable Glass Bottles & Jars	67.6	1,290	Clothing	58.7	1,120
Flat Glass	10.0	190	Other Textiles	34.1	650
Other Glass	7.9	150			
<b>Metal</b>	<b>123.2</b>	<b>2,350</b>	<b>Household Hazardous Waste</b>	<b>26.7</b>	<b>510</b>
Aluminum Beverage Containers	15.2	290	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>613.4</b>	<b>11,700</b>
Other Aluminum	8.9	170			
Ferrous Containers (Tin Cans)	23.1	440	<b>Total MSW (tons)</b>		<b>51,120</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.34</b>

2014 population

38,147

Coles County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>669.1</b>	<b>17,990</b>	<b>Metal</b>		
Newsprint	40.2	1,080	Other Ferrous	51.3	1,380
High Grade Office Paper	46.5	1,250	Other Non-Ferrous	8.9	240
Magazines/Catalogs	29.4	790	Other Metal	16.0	430
Uncoated OCC/Kraft	360.0	9,680			
Boxboard	54.7	1,470	<b>Organics</b>	<b>555.3</b>	<b>14,930</b>
Mixed Paper - Recyclable	53.2	1,430	Yard Waste - Compostable	117.5	3,160
Compostable Paper	72.9	1,960	Yard Waste - Woody	23.1	620
Other Paper	12.3	330	Food Scraps	290.1	7,800
			Bottom Fines & Dirt	45.4	1,220
<b>Beverage Containers</b>	<b>4.1</b>	<b>110</b>	Diapers	37.2	1,000
Milk & Juice Cartons/Boxes - Coated	4.1	110	Other Organic	42.0	1,130
<b>Plastic</b>	<b>277.1</b>	<b>7,450</b>	<b>Inorganics</b>	<b>175.5</b>	<b>4,720</b>
#1 PET Bottles/Jars	16.4	440	Televisions	5.2	140
#1 Other PET Containers	4.5	120	Computer Monitors	3.3	90
#2 HDPE Bottles/Jars - Clear	8.2	220	Computer Equipment/Peripherals	7.1	190
#2 HDPE Bottles/Jars - Color	7.8	210	Electronic Equipment	14.5	390
#2 Other HDPE Containers	0.4	10	White Goods - Refrigerated	10.4	280
#6 Exp. Polystyrene Packaging	18.6	500	White Goods - Not refrigerated	23.1	620
#3-#7 Other - All	13.4	360	Lead-acid Batteries	18.2	490
Other Rigid Plastic Products	58.0	1,560	Other Household Batteries	4.5	120
Grocery & Merchandise Bags	8.9	240	Tires	25.7	690
Trash Bags	33.5	900	Household Bulky Items	63.2	1,700
Commercial & Industrial Film	25.3	680	Fluorescent Lights/Ballasts	0.4	10
Other Film	58.8	1,580			
Other Plastic	23.4	630	<b>Textiles</b>	<b>85.9</b>	<b>2,310</b>
			Carpet	24.5	660
<b>Glass</b>	<b>85.9</b>	<b>2,310</b>	Carpet Padding	6.7	180
Recyclable Glass Bottles & Jars	68.1	1,830	Clothing	34.6	930
Flat Glass	10.0	270	Other Textiles	20.1	540
Other Glass	7.8	210			
<b>Metal</b>	<b>122.7</b>	<b>3,300</b>	<b>Household Hazardous Waste</b>	<b>26.8</b>	<b>720</b>
Aluminum Beverage Containers	15.2	410	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>454.1</b>	<b>12,210</b>
Other Aluminum	8.6	230			
Ferrous Containers (Tin Cans)	22.7	610	<b>Total MSW (tons)</b>		<b>66,050</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.73</b>

2014 population

53,774

## Cook County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>799.6</b>	<b>2,096,500</b>	<b>Metal</b>		
Newsprint	103.5	271,450	Other Ferrous	51.2	134,320
High Grade Office Paper	51.3	134,410	Other Non-Ferrous	9.1	23,740
Magazines/Catalogs	28.1	73,720	Other Metal	15.9	41,680
Uncoated OCC/Kraft	423.4	1,110,180			
Boxboard	54.6	143,090	<b>Organics</b>	<b>596.1</b>	<b>1,562,990</b>
Mixed Paper - Recyclable	53.2	139,610	Yard Waste - Compostable	117.4	307,830
Compostable Paper	73.0	191,520	Yard Waste - Woody	23.2	60,890
Other Paper	12.4	32,520	Food Scraps	331.2	868,330
			Bottom Fines & Dirt	45.2	118,590
<b>Beverage Containers</b>	<b>5.7</b>	<b>14,910</b>	Diapers	37.1	97,150
Milk & Juice Cartons/Boxes - Coated	5.7	14,910	Other Organic	42.0	110,200
<b>Plastic</b>	<b>314.7</b>	<b>825,050</b>	<b>Inorganics</b>	<b>175.2</b>	<b>459,260</b>
#1 PET Bottles/Jars	22.5	59,040	Televisions	5.0	13,180
#1 Other PET Containers	6.3	16,550	Computer Monitors	3.2	8,320
#2 HDPE Bottles/Jars - Clear	11.4	29,850	Computer Equipment/Peripherals	7.1	18,610
#2 HDPE Bottles/Jars - Color	10.5	27,570	Electronic Equipment	14.5	37,890
#2 Other HDPE Containers	0.7	1,930	White Goods - Refrigerated	10.4	27,200
#6 Exp. Polystyrene Packaging	18.4	48,160	White Goods - Not refrigerated	23.1	60,630
#3-#7 Other - All	13.0	34,190	Lead-acid Batteries	18.2	47,820
Other Rigid Plastic Products	58.0	151,990	Other Household Batteries	4.3	11,350
Grocery & Merchandise Bags	12.7	33,190	Tires	25.8	67,670
Trash Bags	33.5	87,820	Household Bulky Items	63.1	165,400
Commercial & Industrial Film	35.7	93,490	Fluorescent Lights/Ballasts	0.5	1,190
Other Film	58.8	154,110			
Other Plastic	33.2	87,160	<b>Textiles</b>	<b>108.6</b>	<b>284,630</b>
			Carpet	24.5	64,130
<b>Glass</b>	<b>86.0</b>	<b>225,350</b>	Carpet Padding	6.6	17,350
Recyclable Glass Bottles & Jars	68.1	178,660	Clothing	49.1	128,650
Flat Glass	10.0	26,310	Other Textiles	28.4	74,500
Other Glass	7.8	20,380			
			<b>Household Hazardous Waste</b>	<b>26.9</b>	<b>70,430</b>
<b>Metal</b>	<b>123.1</b>	<b>322,740</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>1102.3</b>	<b>2,890,010</b>
Aluminum Beverage Containers	15.4	40,330			
Other Aluminum	8.7	22,820			
Ferrous Containers (Tin Cans)	22.8	59,850	<b>Total MSW (tons)</b>		<b>8,751,870</b>
			<b>Total MSW (pounds/person/day)</b>		<b>9.15</b>

2014 population

5,243,730

## Crawford County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>639.3</b>	<b>6,260</b>	<b>Metal</b>		
Newsprint	57.2	560	Other Ferrous	51.1	500
High Grade Office Paper	43.9	430	Other Non-Ferrous	9.2	90
Magazines/Catalogs	31.7	310	Other Metal	16.3	160
Uncoated OCC/Kraft	313.5	3,070			
Boxboard	54.1	530	<b>Organics</b>	<b>565.7</b>	<b>5,540</b>
Mixed Paper - Recyclable	53.1	520	Yard Waste - Compostable	117.4	1,150
Compostable Paper	73.5	720	Yard Waste - Woody	23.5	230
Other Paper	12.3	120	Food Scraps	301.3	2,950
			Bottom Fines & Dirt	44.9	440
<b>Beverage Containers</b>	<b>5.1</b>	<b>50</b>	Diapers	36.8	360
Milk & Juice Cartons/Boxes - Coated	5.1	50	Other Organic	41.9	410
<b>Plastic</b>	<b>298.2</b>	<b>2,920</b>	<b>Inorganics</b>	<b>174.6</b>	<b>1,710</b>
#1 PET Bottles/Jars	19.4	190	Televisions	5.1	50
#1 Other PET Containers	5.1	50	Computer Monitors	3.1	30
#2 HDPE Bottles/Jars - Clear	10.2	100	Computer Equipment/Peripherals	7.1	70
#2 HDPE Bottles/Jars - Color	9.2	90	Electronic Equipment	14.3	140
#2 Other HDPE Containers	1.0	10	White Goods - Refrigerated	10.2	100
#6 Exp. Polystyrene Packaging	18.4	180	White Goods - Not refrigerated	23.5	230
#3-#7 Other - All	13.3	130	Lead-acid Batteries	18.4	180
Other Rigid Plastic Products	58.2	570	Other Household Batteries	4.1	40
Grocery & Merchandise Bags	11.2	110	Tires	25.5	250
Trash Bags	33.7	330	Household Bulky Items	63.3	620
Commercial & Industrial Film	30.6	300	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	59.2	580			
Other Plastic	28.6	280	<b>Textiles</b>	<b>98.0</b>	<b>960</b>
			Carpet	24.5	240
<b>Glass</b>	<b>86.8</b>	<b>850</b>	Carpet Padding	6.1	60
Recyclable Glass Bottles & Jars	68.4	670	Clothing	42.9	420
Flat Glass	10.2	100	Other Textiles	24.5	240
Other Glass	8.2	80			
			<b>Household Hazardous Waste</b>	<b>28.6</b>	<b>280</b>
<b>Metal</b>	<b>123.6</b>	<b>1,210</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>463.6</b>	<b>4,540</b>
Aluminum Beverage Containers	15.3	150			
Other Aluminum	9.2	90			
Ferrous Containers (Tin Cans)	22.5	220	<b>Total MSW (tons)</b>		<b>24,320</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.80</b>

2014 population

19,585

## Cumberland County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>495.4</b>	<b>2,780</b>	<b>Metal</b>		
Newsprint	53.5	300	Other Ferrous	51.7	290
High Grade Office Paper	23.2	130	Other Non-Ferrous	8.9	50
Magazines/Catalogs	42.8	240	Other Metal	16.0	90
Uncoated OCC/Kraft	181.8	1,020			
Boxboard	55.2	310	<b>Organics</b>	<b>563.1</b>	<b>3,160</b>
Mixed Paper - Recyclable	53.5	300	Yard Waste - Compostable	117.6	660
Compostable Paper	73.1	410	Yard Waste - Woody	23.2	130
Other Paper	12.5	70	Food Scraps	297.6	1,670
			Bottom Fines & Dirt	44.5	250
<b>Beverage Containers</b>	<b>5.3</b>	<b>30</b>	Diapers	37.4	210
Milk & Juice Cartons/Boxes - Coated	5.3	30	Other Organic	42.8	240
<b>Plastic</b>	<b>295.8</b>	<b>1,660</b>	<b>Inorganics</b>	<b>172.8</b>	<b>970</b>
#1 PET Bottles/Jars	19.6	110	Televisions	5.3	30
#1 Other PET Containers	5.3	30	Computer Monitors	3.6	20
#2 HDPE Bottles/Jars - Clear	8.9	50	Computer Equipment/Peripherals	7.1	40
#2 HDPE Bottles/Jars - Color	8.9	50	Electronic Equipment	14.3	80
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	10.7	60
#6 Exp. Polystyrene Packaging	17.8	100	White Goods - Not refrigerated	23.2	130
#3-#7 Other - All	14.3	80	Lead-acid Batteries	17.8	100
Other Rigid Plastic Products	58.8	330	Other Household Batteries	3.6	20
Grocery & Merchandise Bags	10.7	60	Tires	24.9	140
Trash Bags	33.9	190	Household Bulky Items	62.4	350
Commercial & Industrial Film	30.3	170	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	58.8	330			
Other Plastic	28.5	160	<b>Textiles</b>	<b>99.8</b>	<b>560</b>
			Carpet	24.9	140
<b>Glass</b>	<b>85.5</b>	<b>480</b>	Carpet Padding	7.1	40
Recyclable Glass Bottles & Jars	67.7	380	Clothing	42.8	240
Flat Glass	10.7	60	Other Textiles	24.9	140
Other Glass	7.1	40			
			<b>Household Hazardous Waste</b>	<b>24.9</b>	<b>140</b>
<b>Metal</b>	<b>124.7</b>	<b>700</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>463.3</b>	<b>2,600</b>
Aluminum Beverage Containers	16.0	90			
Other Aluminum	8.9	50			
Ferrous Containers (Tin Cans)	23.2	130	<b>Total MSW (tons)</b>		<b>13,080</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.39</b>

## DeKalb County Municipal Solid Waste (MSW) Generation

	<b>County Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>		<b>County Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>
<b>Paper</b>	<b>507.0</b>	<b>26,790</b>	<b>Metal</b>		
Newsprint	71.7	3,790	Other Ferrous	51.3	2,710
High Grade Office Paper	50.3	2,660	Other Non-Ferrous	9.1	480
Magazines/Catalogs	30.7	1,620	Other Metal	15.9	840
Uncoated OCC/Kraft	161.1	8,510			
Boxboard	54.5	2,880	<b>Organics</b>	<b>580.3</b>	<b>30,660</b>
Mixed Paper - Recyclable	53.2	2,810	Yard Waste - Compostable	117.3	6,200
Compostable Paper	73.1	3,860	Yard Waste - Woody	23.3	1,230
Other Paper	12.5	660	Food Scraps	315.3	16,660
			Bottom Fines & Dirt	45.2	2,390
<b>Beverage Containers</b>	<b>4.9</b>	<b>260</b>	Diapers	37.1	1,960
Milk & Juice Cartons/Boxes - Coated	4.9	260	Other Organic	42.0	2,220
<b>Plastic</b>	<b>306.4</b>	<b>16,190</b>	<b>Inorganics</b>	<b>175.1</b>	<b>9,250</b>
#1 PET Bottles/Jars	19.5	1,030	Televisions	5.1	270
#1 Other PET Containers	5.5	290	Computer Monitors	3.2	170
#2 HDPE Bottles/Jars - Clear	9.8	520	Computer Equipment/Peripherals	7.2	380
#2 HDPE Bottles/Jars - Color	9.1	480	Electronic Equipment	14.4	760
#2 Other HDPE Containers	0.6	30	White Goods - Refrigerated	10.4	550
#6 Exp. Polystyrene Packaging	18.4	970	White Goods - Not refrigerated	23.1	1,220
#3-#7 Other - All	13.1	690	Lead-acid Batteries	18.2	960
Other Rigid Plastic Products	57.9	3,060	Other Household Batteries	4.4	230
Grocery & Merchandise Bags	12.5	660	Tires	25.7	1,360
Trash Bags	33.5	1,770	Household Bulky Items	63.0	3,330
Commercial & Industrial Film	35.2	1,860	Fluorescent Lights/Ballasts	0.4	20
Other Film	58.9	3,110			
Other Plastic	32.6	1,720	<b>Textiles</b>	<b>110.0</b>	<b>5,810</b>
			Carpet	24.4	1,290
<b>Glass</b>	<b>85.9</b>	<b>4,540</b>	Carpet Padding	6.6	350
Recyclable Glass Bottles & Jars	68.1	3,600	Clothing	50.0	2,640
Flat Glass	10.0	530	Other Textiles	29.0	1,530
Other Glass	7.8	410			
			<b>Household Hazardous Waste</b>	<b>26.5</b>	<b>1,400</b>
<b>Metal</b>	<b>123.2</b>	<b>6,510</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>639.1</b>	<b>33,770</b>
Aluminum Beverage Containers	15.3	810			
Other Aluminum	8.7	460			
Ferrous Containers (Tin Cans)	22.9	1,210	<b>Total MSW (tons)</b>		<b>135,180</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.01</b>

2014 population

105,673

## DeWitt County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>466.3</b>	<b>3,890</b>	<b>Metal</b>		
Newsprint	49.1	410	Other Ferrous	51.5	430
High Grade Office Paper	50.3	420	Other Non-Ferrous	9.6	80
Magazines/Catalogs	31.2	260	Other Metal	15.6	130
Uncoated OCC/Kraft	142.6	1,190			
Boxboard	55.1	460	<b>Organics</b>	<b>587.3</b>	<b>4,900</b>
Mixed Paper - Recyclable	52.7	440	Yard Waste - Compostable	117.5	980
Compostable Paper	73.1	610	Yard Waste - Woody	22.8	190
Other Paper	12.0	100	Food Scraps	322.4	2,690
			Bottom Fines & Dirt	45.5	380
<b>Beverage Containers</b>	<b>6.0</b>	<b>50</b>	Diapers	37.2	310
Milk & Juice Cartons/Boxes - Coated	6.0	50	Other Organic	42.0	350
<b>Plastic</b>	<b>315.2</b>	<b>2,630</b>	<b>Inorganics</b>	<b>176.2</b>	<b>1,470</b>
#1 PET Bottles/Jars	21.6	180	Televisions	4.8	40
#1 Other PET Containers	6.0	50	Computer Monitors	3.6	30
#2 HDPE Bottles/Jars - Clear	10.8	90	Computer Equipment/Peripherals	7.2	60
#2 HDPE Bottles/Jars - Color	10.8	90	Electronic Equipment	14.4	120
#2 Other HDPE Containers	1.2	10	White Goods - Refrigerated	10.8	90
#6 Exp. Polystyrene Packaging	18.0	150	White Goods - Not refrigerated	22.8	190
#3-#7 Other - All	14.4	120	Lead-acid Batteries	18.0	150
Other Rigid Plastic Products	57.5	480	Other Household Batteries	4.8	40
Grocery & Merchandise Bags	13.2	110	Tires	26.4	220
Trash Bags	33.6	280	Household Bulky Items	63.5	530
Commercial & Industrial Film	36.0	300	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	58.7	490			
Other Plastic	33.6	280	<b>Textiles</b>	<b>110.3</b>	<b>920</b>
			Carpet	24.0	200
<b>Glass</b>	<b>85.1</b>	<b>710</b>	Carpet Padding	7.2	60
Recyclable Glass Bottles & Jars	68.3	570	Clothing	50.3	420
Flat Glass	9.6	80	Other Textiles	28.8	240
Other Glass	7.2	60			
			<b>Household Hazardous Waste</b>	<b>25.2</b>	<b>210</b>
<b>Metal</b>	<b>123.5</b>	<b>1,030</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>602.9</b>	<b>5,030</b>
Aluminum Beverage Containers	15.6	130			
Other Aluminum	8.4	70			
Ferrous Containers (Tin Cans)	22.8	190	<b>Total MSW (tons)</b>		<b>20,840</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.84</b>

2014 population

16,686

## Douglas County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>632.3</b>	<b>6,350</b>	<b>Metal</b>		
Newsprint	56.8	570	Other Ferrous	50.8	510
High Grade Office Paper	50.8	510	Other Non-Ferrous	9.0	90
Magazines/Catalogs	30.9	310	Other Metal	15.9	160
Uncoated OCC/Kraft	301.7	3,030			
Boxboard	54.8	550	<b>Organics</b>	<b>572.6</b>	<b>5,750</b>
Mixed Paper - Recyclable	52.8	530	Yard Waste - Compostable	117.5	1,180
Compostable Paper	72.7	730	Yard Waste - Woody	22.9	230
Other Paper	11.9	120	Food Scraps	308.7	3,100
			Bottom Fines & Dirt	44.8	450
<b>Beverage Containers</b>	<b>5.0</b>	<b>50</b>	Diapers	36.8	370
Milk & Juice Cartons/Boxes - Coated	5.0	50	Other Organic	41.8	420
<b>Plastic</b>	<b>313.7</b>	<b>3,150</b>	<b>Inorganics</b>	<b>173.3</b>	<b>1,740</b>
#1 PET Bottles/Jars	20.9	210	Televisions	5.0	50
#1 Other PET Containers	6.0	60	Computer Monitors	3.0	30
#2 HDPE Bottles/Jars - Clear	10.0	100	Computer Equipment/Peripherals	7.0	70
#2 HDPE Bottles/Jars - Color	10.0	100	Electronic Equipment	14.9	150
#2 Other HDPE Containers	1.0	10	White Goods - Refrigerated	10.0	100
#6 Exp. Polystyrene Packaging	18.9	190	White Goods - Not refrigerated	22.9	230
#3-#7 Other - All	12.9	130	Lead-acid Batteries	17.9	180
Other Rigid Plastic Products	57.8	580	Other Household Batteries	4.0	40
Grocery & Merchandise Bags	12.9	130	Tires	25.9	260
Trash Bags	33.9	340	Household Bulky Items	62.7	630
Commercial & Industrial Film	36.8	370	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	58.8	590			
Other Plastic	33.9	340	<b>Textiles</b>	<b>112.5</b>	<b>1,130</b>
			Carpet	24.9	250
<b>Glass</b>	<b>85.6</b>	<b>860</b>	Carpet Padding	7.0	70
Recyclable Glass Bottles & Jars	67.7	680	Clothing	50.8	510
Flat Glass	10.0	100	Other Textiles	29.9	300
Other Glass	8.0	80			
			<b>Household Hazardous Waste</b>	<b>27.9</b>	<b>280</b>
<b>Metal</b>	<b>122.5</b>	<b>1,230</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>475.0</b>	<b>4,770</b>
Aluminum Beverage Containers	14.9	150			
Other Aluminum	9.0	90			
Ferrous Containers (Tin Cans)	22.9	230	<b>Total MSW (tons)</b>		<b>25,310</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.90</b>

2014 population

20,085

DuPage County Municipal Solid Waste (MSW) Generation

	<b>County Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>		<b>County Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>
<b>Paper</b>	<b>1,004.0</b>	<b>461,610</b>	<b>Metal</b>		
Newsprint	107.1	49,230	Other Ferrous	51.2	23,560
High Grade Office Paper	69.6	32,000	Other Non-Ferrous	9.0	4,160
Magazines/Catalogs	33.3	15,330	Other Metal	15.9	7,310
Uncoated OCC/Kraft	600.7	276,190			
Boxboard	54.6	25,090	<b>Organics</b>	<b>641.3</b>	<b>294,860</b>
Mixed Paper - Recyclable	53.2	24,480	Yard Waste - Compostable	117.4	53,980
Compostable Paper	73.1	33,590	Yard Waste - Woody	23.2	10,680
Other Paper	12.4	5,700	Food Scraps	376.4	173,040
			Bottom Fines & Dirt	45.2	20,800
<b>Beverage Containers</b>	<b>7.2</b>	<b>3,320</b>	Diapers	37.1	17,040
Milk & Juice Cartons/Boxes - Coated	7.2	3,320	Other Organic	42.0	19,320
<b>Plastic</b>	<b>361.1</b>	<b>166,020</b>	<b>Inorganics</b>	<b>175.2</b>	<b>80,530</b>
#1 PET Bottles/Jars	28.6	13,150	Televisions	5.0	2,310
#1 Other PET Containers	8.0	3,690	Computer Monitors	3.2	1,460
#2 HDPE Bottles/Jars - Clear	14.5	6,650	Computer Equipment/Peripherals	7.1	3,260
#2 HDPE Bottles/Jars - Color	13.4	6,140	Electronic Equipment	14.5	6,650
#2 Other HDPE Containers	0.9	430	White Goods - Refrigerated	10.4	4,770
#6 Exp. Polystyrene Packaging	18.4	8,440	White Goods - Not refrigerated	23.1	10,630
#3-#7 Other - All	13.1	6,000	Lead-acid Batteries	18.2	8,380
Other Rigid Plastic Products	58.0	26,650	Other Household Batteries	4.3	1,990
Grocery & Merchandise Bags	18.6	8,530	Tires	25.8	11,870
Trash Bags	33.5	15,400	Household Bulky Items	63.1	29,000
Commercial & Industrial Film	52.1	23,960	Fluorescent Lights/Ballasts	0.5	210
Other Film	58.8	27,020			
Other Plastic	43.4	19,960	<b>Textiles</b>	<b>144.6</b>	<b>66,460</b>
			Carpet	24.5	11,250
<b>Glass</b>	<b>85.9</b>	<b>39,510</b>	Carpet Padding	6.6	3,040
Recyclable Glass Bottles & Jars	68.1	31,330	Clothing	71.9	33,040
Flat Glass	10.0	4,610	Other Textiles	41.6	19,130
Other Glass	7.8	3,570			
			<b>Household Hazardous Waste</b>	<b>26.9</b>	<b>12,350</b>
<b>Metal</b>	<b>123.1</b>	<b>56,600</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>630.1</b>	<b>289,710</b>
Aluminum Beverage Containers	15.4	7,070			
Other Aluminum	8.7	4,000			
Ferrous Containers (Tin Cans)	22.8	10,500	<b>Total MSW (tons)</b>		<b>1,470,970</b>
			<b>Total MSW (pounds/person/day)</b>		<b>8.77</b>

## Edgar County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>591.6</b>	<b>5,450</b>	<b>Metal</b>		
Newsprint	64.0	590	Other Ferrous	51.0	470
High Grade Office Paper	40.2	370	Other Non-Ferrous	8.7	80
Magazines/Catalogs	31.5	290	Other Metal	16.3	150
Uncoated OCC/Kraft	263.8	2,430			
Boxboard	54.3	500	<b>Organics</b>	<b>569.9</b>	<b>5,250</b>
Mixed Paper - Recyclable	53.2	490	Yard Waste - Compostable	117.2	1,080
Compostable Paper	72.7	670	Yard Waste - Woody	22.8	210
Other Paper	11.9	110	Food Scraps	305.0	2,810
			Bottom Fines & Dirt	45.6	420
<b>Beverage Containers</b>	<b>5.4</b>	<b>50</b>	Diapers	36.9	340
Milk & Juice Cartons/Boxes - Coated	5.4	50	Other Organic	42.3	390
<b>Plastic</b>	<b>293.1</b>	<b>2,700</b>	<b>Inorganics</b>	<b>175.8</b>	<b>1,620</b>
#1 PET Bottles/Jars	19.5	180	Televisions	5.4	50
#1 Other PET Containers	5.4	50	Computer Monitors	3.3	30
#2 HDPE Bottles/Jars - Clear	9.8	90	Computer Equipment/Peripherals	7.6	70
#2 HDPE Bottles/Jars - Color	9.8	90	Electronic Equipment	14.1	130
#2 Other HDPE Containers	1.1	10	White Goods - Refrigerated	10.9	100
#6 Exp. Polystyrene Packaging	17.4	160	White Goods - Not refrigerated	22.8	210
#3-#7 Other - All	13.0	120	Lead-acid Batteries	18.5	170
Other Rigid Plastic Products	57.5	530	Other Household Batteries	4.3	40
Grocery & Merchandise Bags	10.9	100	Tires	26.1	240
Trash Bags	33.6	310	Household Bulky Items	63.0	580
Commercial & Industrial Film	29.3	270	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	58.6	540			
Other Plastic	27.1	250	<b>Textiles</b>	<b>96.6</b>	<b>890</b>
			Carpet	25.0	230
<b>Glass</b>	<b>85.8</b>	<b>790</b>	Carpet Padding	6.5	60
Recyclable Glass Bottles & Jars	68.4	630	Clothing	41.2	380
Flat Glass	9.8	90	Other Textiles	23.9	220
Other Glass	7.6	70			
			<b>Household Hazardous Waste</b>	<b>27.1</b>	<b>250</b>
<b>Metal</b>	<b>122.7</b>	<b>1,130</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>464.6</b>	<b>4,280</b>
Aluminum Beverage Containers	15.2	140			
Other Aluminum	8.7	80			
Ferrous Containers (Tin Cans)	22.8	210	<b>Total MSW (tons)</b>		<b>22,410</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.66</b>

2014 population

18,425

## Edwards County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>634.9</b>	<b>2,140</b>	<b>Metal</b>		
Newsprint	65.3	220	Other Ferrous	50.4	170
High Grade Office Paper	35.6	120	Other Non-Ferrous	8.9	30
Magazines/Catalogs	29.7	100	Other Metal	14.8	50
Uncoated OCC/Kraft	311.5	1,050			
Boxboard	53.4	180	<b>Organics</b>	<b>563.7</b>	<b>1,900</b>
Mixed Paper - Recyclable	53.4	180	Yard Waste - Compostable	118.7	400
Compostable Paper	74.2	250	Yard Waste - Woody	23.7	80
Other Paper	11.9	40	Food Scraps	299.7	1,010
			Bottom Fines & Dirt	44.5	150
<b>Beverage Containers</b>	<b>5.9</b>	<b>20</b>	Diapers	35.6	120
Milk & Juice Cartons/Boxes - Coated	5.9	20	Other Organic	41.5	140
<b>Plastic</b>	<b>296.7</b>	<b>1,000</b>	<b>Inorganics</b>	<b>172.1</b>	<b>580</b>
#1 PET Bottles/Jars	20.8	70	Televisions	5.9	20
#1 Other PET Containers	5.9	20	Computer Monitors	3.0	10
#2 HDPE Bottles/Jars - Clear	8.9	30	Computer Equipment/Peripherals	5.9	20
#2 HDPE Bottles/Jars - Color	8.9	30	Electronic Equipment	14.8	50
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	8.9	30
#6 Exp. Polystyrene Packaging	17.8	60	White Goods - Not refrigerated	23.7	80
#3-#7 Other - All	11.9	40	Lead-acid Batteries	17.8	60
Other Rigid Plastic Products	59.3	200	Other Household Batteries	3.0	10
Grocery & Merchandise Bags	11.9	40	Tires	26.7	90
Trash Bags	32.6	110	Household Bulky Items	62.3	210
Commercial & Industrial Film	29.7	100	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	59.3	200			
Other Plastic	29.7	100	<b>Textiles</b>	<b>94.9</b>	<b>320</b>
			Carpet	23.7	80
<b>Glass</b>	<b>86.0</b>	<b>290</b>	Carpet Padding	5.9	20
Recyclable Glass Bottles & Jars	68.2	230	Clothing	41.5	140
Flat Glass	8.9	30	Other Textiles	23.7	80
Other Glass	8.9	30			
			<b>Household Hazardous Waste</b>	<b>26.7</b>	<b>90</b>
<b>Metal</b>	<b>121.6</b>	<b>410</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>459.9</b>	<b>1,550</b>
Aluminum Beverage Containers	14.8	50			
Other Aluminum	8.9	30			
Ferrous Containers (Tin Cans)	23.7	80	<b>Total MSW (tons)</b>		<b>8,300</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.75</b>

2014 population

6,741

## Effingham County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>922.2</b>	<b>16,200</b>	<b>Metal</b>		
Newsprint	77.4	1,360	Other Ferrous	51.2	900
High Grade Office Paper	58.1	1,020	Other Non-Ferrous	9.1	160
Magazines/Catalogs	32.4	570	Other Metal	15.9	280
Uncoated OCC/Kraft	560.7	9,850			
Boxboard	54.6	960	<b>Organics</b>	<b>576.6</b>	<b>10,130</b>
Mixed Paper - Recyclable	53.5	940	Yard Waste - Compostable	117.3	2,060
Compostable Paper	72.9	1,280	Yard Waste - Woody	23.3	410
Other Paper	12.5	220	Food Scraps	311.9	5,480
			Bottom Fines & Dirt	45.0	790
<b>Beverage Containers</b>	<b>5.1</b>	<b>90</b>	Diapers	37.0	650
Milk & Juice Cartons/Boxes - Coated	5.1	90	Other Organic	42.1	740
<b>Plastic</b>	<b>309.7</b>	<b>5,440</b>	<b>Inorganics</b>	<b>175.3</b>	<b>3,080</b>
#1 PET Bottles/Jars	19.9	350	Televisions	5.1	90
#1 Other PET Containers	5.7	100	Computer Monitors	3.4	60
#2 HDPE Bottles/Jars - Clear	10.2	180	Computer Equipment/Peripherals	6.8	120
#2 HDPE Bottles/Jars - Color	9.7	170	Electronic Equipment	14.2	250
#2 Other HDPE Containers	0.6	10	White Goods - Refrigerated	10.2	180
#6 Exp. Polystyrene Packaging	18.2	320	White Goods - Not refrigerated	23.3	410
#3-#7 Other - All	13.1	230	Lead-acid Batteries	18.2	320
Other Rigid Plastic Products	58.1	1,020	Other Household Batteries	4.6	80
Grocery & Merchandise Bags	12.5	220	Tires	25.6	450
Trash Bags	33.6	590	Household Bulky Items	63.2	1,110
Commercial & Industrial Film	35.9	630	Fluorescent Lights/Ballasts	0.6	10
Other Film	58.6	1,030			
Other Plastic	33.6	590	<b>Textiles</b>	<b>109.3</b>	<b>1,920</b>
			Carpet	24.5	430
<b>Glass</b>	<b>86.5</b>	<b>1,520</b>	Carpet Padding	6.8	120
Recyclable Glass Bottles & Jars	68.3	1,200	Clothing	49.5	870
Flat Glass	10.2	180	Other Textiles	28.5	500
Other Glass	8.0	140			
			<b>Household Hazardous Waste</b>	<b>26.8</b>	<b>470</b>
<b>Metal</b>	<b>123.0</b>	<b>2,160</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>472.5</b>	<b>8,300</b>
Aluminum Beverage Containers	15.4	270			
Other Aluminum	8.5	150			
Ferrous Containers (Tin Cans)	22.8	400	<b>Total MSW (tons)</b>		<b>49,310</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.69</b>

2014 population

35,135

## Fayette County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>493.1</b>	<b>5,410</b>	<b>Metal</b>		
Newsprint	29.2	320	Other Ferrous	51.0	560
High Grade Office Paper	27.3	300	Other Non-Ferrous	9.1	100
Magazines/Catalogs	28.3	310	Other Metal	15.5	170
Uncoated OCC/Kraft	215.1	2,360			
Boxboard	54.7	600	<b>Organics</b>	<b>554.2</b>	<b>6,080</b>
Mixed Paper - Recyclable	52.9	580	Yard Waste - Compostable	117.6	1,290
Compostable Paper	72.9	800	Yard Waste - Woody	22.8	250
Other Paper	12.8	140	Food Scraps	288.9	3,170
			Bottom Fines & Dirt	45.6	500
<b>Beverage Containers</b>	<b>4.6</b>	<b>50</b>	Diapers	37.4	410
Milk & Juice Cartons/Boxes - Coated	4.6	50	Other Organic	41.9	460
<b>Plastic</b>	<b>288.0</b>	<b>3,160</b>	<b>Inorganics</b>	<b>174.1</b>	<b>1,910</b>
#1 PET Bottles/Jars	17.3	190	Televisions	5.5	60
#1 Other PET Containers	4.6	50	Computer Monitors	2.7	30
#2 HDPE Bottles/Jars - Clear	8.2	90	Computer Equipment/Peripherals	7.3	80
#2 HDPE Bottles/Jars - Color	8.2	90	Electronic Equipment	14.6	160
#2 Other HDPE Containers	0.9	10	White Goods - Refrigerated	10.0	110
#6 Exp. Polystyrene Packaging	18.2	200	White Goods - Not refrigerated	22.8	250
#3-#7 Other - All	12.8	140	Lead-acid Batteries	18.2	200
Other Rigid Plastic Products	58.3	640	Other Household Batteries	4.6	50
Grocery & Merchandise Bags	10.9	120	Tires	25.5	280
Trash Bags	33.7	370	Household Bulky Items	62.9	690
Commercial & Industrial Film	29.2	320	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	58.3	640			
Other Plastic	27.3	300	<b>Textiles</b>	<b>95.7</b>	<b>1,050</b>
			Carpet	24.6	270
<b>Glass</b>	<b>86.6</b>	<b>950</b>	Carpet Padding	6.4	70
Recyclable Glass Bottles & Jars	68.4	750	Clothing	41.0	450
Flat Glass	10.0	110	Other Textiles	23.7	260
Other Glass	8.2	90			
			<b>Household Hazardous Waste</b>	<b>28.3</b>	<b>310</b>
<b>Metal</b>	<b>123.1</b>	<b>1,350</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>460.3</b>	<b>5,050</b>
Aluminum Beverage Containers	15.5	170			
Other Aluminum	9.1	100			
Ferrous Containers (Tin Cans)	22.8	250	<b>Total MSW (tons)</b>		<b>25,320</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.32</b>

## Ford County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>597.6</b>	<b>4,230</b>	<b>Metal</b>		
Newsprint	59.3	420	Other Ferrous	50.9	360
High Grade Office Paper	35.3	250	Other Non-Ferrous	8.5	60
Magazines/Catalogs	32.5	230	Other Metal	15.5	110
Uncoated OCC/Kraft	275.5	1,950			
Boxboard	55.1	390	<b>Organics</b>	<b>576.4</b>	<b>4,080</b>
Mixed Paper - Recyclable	53.7	380	Yard Waste - Compostable	117.3	830
Compostable Paper	73.5	520	Yard Waste - Woody	22.6	160
Other Paper	12.7	90	Food Scraps	312.2	2,210
			Bottom Fines & Dirt	45.2	320
<b>Beverage Containers</b>	<b>5.7</b>	<b>40</b>	Diapers	36.7	260
Milk & Juice Cartons/Boxes - Coated	5.7	40	Other Organic	42.4	300
<b>Plastic</b>	<b>309.4</b>	<b>2,190</b>	<b>Inorganics</b>	<b>173.8</b>	<b>1,230</b>
#1 PET Bottles/Jars	21.2	150	Televisions	5.7	40
#1 Other PET Containers	5.7	40	Computer Monitors	2.8	20
#2 HDPE Bottles/Jars - Clear	11.3	80	Computer Equipment/Peripherals	7.1	50
#2 HDPE Bottles/Jars - Color	9.9	70	Electronic Equipment	14.1	100
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	9.9	70
#6 Exp. Polystyrene Packaging	18.4	130	White Goods - Not refrigerated	22.6	160
#3-#7 Other - All	12.7	90	Lead-acid Batteries	18.4	130
Other Rigid Plastic Products	57.9	410	Other Household Batteries	4.2	30
Grocery & Merchandise Bags	12.7	90	Tires	25.4	180
Trash Bags	33.9	240	Household Bulky Items	63.6	450
Commercial & Industrial Film	33.9	240	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	59.3	420			
Other Plastic	32.5	230	<b>Textiles</b>	<b>104.5</b>	<b>740</b>
			Carpet	24.0	170
<b>Glass</b>	<b>86.2</b>	<b>610</b>	Carpet Padding	7.1	50
Recyclable Glass Bottles & Jars	67.8	480	Clothing	46.6	330
Flat Glass	9.9	70	Other Textiles	26.8	190
Other Glass	8.5	60			
			<b>Household Hazardous Waste</b>	<b>24.0</b>	<b>170</b>
<b>Metal</b>	<b>121.5</b>	<b>860</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>600.5</b>	<b>4,250</b>
Aluminum Beverage Containers	15.5	110			
Other Aluminum	8.5	60			
Ferrous Containers (Tin Cans)	22.6	160	<b>Total MSW (tons)</b>		<b>18,400</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.12</b>

2014 population

14,156

## Franklin County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>507.2</b>	<b>10,070</b>	<b>Metal</b>		
Newsprint	64.0	1,270	Other Ferrous	51.4	1,020
High Grade Office Paper	24.2	480	Other Non-Ferrous	9.1	180
Magazines/Catalogs	29.7	590	Other Metal	16.1	320
Uncoated OCC/Kraft	195.9	3,890			
Boxboard	54.4	1,080	<b>Organics</b>	<b>548.0</b>	<b>10,880</b>
Mixed Paper - Recyclable	53.4	1,060	Yard Waste - Compostable	117.4	2,330
Compostable Paper	73.0	1,450	Yard Waste - Woody	23.2	460
Other Paper	12.6	250	Food Scraps	283.1	5,620
			Bottom Fines & Dirt	45.3	900
<b>Beverage Containers</b>	<b>4.0</b>	<b>80</b>	Diapers	37.3	740
Milk & Juice Cartons/Boxes - Coated	4.0	80	Other Organic	41.8	830
<b>Plastic</b>	<b>281.6</b>	<b>5,590</b>	<b>Inorganics</b>	<b>175.3</b>	<b>3,480</b>
#1 PET Bottles/Jars	16.6	330	Televisions	5.0	100
#1 Other PET Containers	4.5	90	Computer Monitors	3.0	60
#2 HDPE Bottles/Jars - Clear	8.6	170	Computer Equipment/Peripherals	7.1	140
#2 HDPE Bottles/Jars - Color	7.6	150	Electronic Equipment	14.6	290
#2 Other HDPE Containers	0.5	10	White Goods - Refrigerated	10.6	210
#6 Exp. Polystyrene Packaging	18.6	370	White Goods - Not refrigerated	23.2	460
#3-#7 Other - All	13.1	260	Lead-acid Batteries	18.1	360
Other Rigid Plastic Products	57.9	1,150	Other Household Batteries	4.5	90
Grocery & Merchandise Bags	9.6	190	Tires	25.7	510
Trash Bags	33.2	660	Household Bulky Items	63.0	1,250
Commercial & Industrial Film	27.2	540	Fluorescent Lights/Ballasts	0.5	10
Other Film	58.9	1,170			
Other Plastic	25.2	500	<b>Textiles</b>	<b>90.7</b>	<b>1,800</b>
			Carpet	24.7	490
<b>Glass</b>	<b>85.6</b>	<b>1,700</b>	Carpet Padding	6.5	130
Recyclable Glass Bottles & Jars	68.0	1,350	Clothing	37.8	750
Flat Glass	10.1	200	Other Textiles	21.7	430
Other Glass	7.6	150			
			<b>Household Hazardous Waste</b>	<b>26.7</b>	<b>530</b>
<b>Metal</b>	<b>123.4</b>	<b>2,450</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>456.8</b>	<b>9,070</b>
Aluminum Beverage Containers	15.6	310			
Other Aluminum	8.6	170			
Ferrous Containers (Tin Cans)	22.7	450	<b>Total MSW (tons)</b>		<b>45,650</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.30</b>

2014 population

39,707

## Fulton County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>504.4</b>	<b>9,270</b>	<b>Metal</b>		
Newsprint	64.2	1,180	Other Ferrous	51.1	940
High Grade Office Paper	23.9	440	Other Non-Ferrous	9.3	170
Magazines/Catalogs	31.6	580	Other Metal	15.8	290
Uncoated OCC/Kraft	191.5	3,520			
Boxboard	54.4	1,000	<b>Organics</b>	<b>553.9</b>	<b>10,180</b>
Mixed Paper - Recyclable	53.3	980	Yard Waste - Compostable	117.5	2,160
Compostable Paper	72.9	1,340	Yard Waste - Woody	23.4	430
Other Paper	12.5	230	Food Scraps	288.9	5,310
			Bottom Fines & Dirt	45.2	830
<b>Beverage Containers</b>	<b>4.4</b>	<b>80</b>	Diapers	37.0	680
Milk & Juice Cartons/Boxes - Coated	4.4	80	Other Organic	41.9	770
<b>Plastic</b>	<b>288.9</b>	<b>5,310</b>	<b>Inorganics</b>	<b>175.2</b>	<b>3,220</b>
#1 PET Bottles/Jars	17.4	320	Televisions	4.9	90
#1 Other PET Containers	4.9	90	Computer Monitors	3.3	60
#2 HDPE Bottles/Jars - Clear	8.7	160	Computer Equipment/Peripherals	7.1	130
#2 HDPE Bottles/Jars - Color	8.2	150	Electronic Equipment	14.7	270
#2 Other HDPE Containers	0.5	10	White Goods - Refrigerated	10.3	190
#6 Exp. Polystyrene Packaging	18.5	340	White Goods - Not refrigerated	22.9	420
#3-#7 Other - All	13.1	240	Lead-acid Batteries	18.5	340
Other Rigid Plastic Products	58.2	1,070	Other Household Batteries	4.4	80
Grocery & Merchandise Bags	10.3	190	Tires	25.6	470
Trash Bags	33.7	620	Household Bulky Items	63.1	1,160
Commercial & Industrial Film	29.4	540	Fluorescent Lights/Ballasts	0.5	10
Other Film	58.8	1,080			
Other Plastic	27.2	500	<b>Textiles</b>	<b>95.2</b>	<b>1,750</b>
			Carpet	24.5	450
<b>Glass</b>	<b>85.4</b>	<b>1,570</b>	Carpet Padding	6.5	120
Recyclable Glass Bottles & Jars	68.0	1,250	Clothing	40.8	750
Flat Glass	9.8	180	Other Textiles	23.4	430
Other Glass	7.6	140			
			<b>Household Hazardous Waste</b>	<b>27.2</b>	<b>500</b>
<b>Metal</b>	<b>123.0</b>	<b>2,260</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>460.9</b>	<b>8,470</b>
Aluminum Beverage Containers	15.2	280			
Other Aluminum	8.7	160			
Ferrous Containers (Tin Cans)	22.9	420	<b>Total MSW (tons)</b>		<b>42,610</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.35</b>

2014 population

36,756

## Gallatin County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>444.4</b>	<b>1,230</b>	<b>Metal</b>		
Newsprint	25.3	70	Other Ferrous	50.6	140
High Grade Office Paper	25.3	70	Other Non-Ferrous	10.8	30
Magazines/Catalogs	32.5	90	Other Metal	14.5	40
Uncoated OCC/Kraft	169.8	470			
Boxboard	54.2	150	<b>Organics</b>	<b>563.7</b>	<b>1,560</b>
Mixed Paper - Recyclable	54.2	150	Yard Waste - Compostable	115.6	320
Compostable Paper	72.3	200	Yard Waste - Woody	21.7	60
Other Paper	10.8	30	Food Scraps	299.9	830
			Bottom Fines & Dirt	47.0	130
<b>Beverage Containers</b>	<b>3.6</b>	<b>10</b>	Diapers	36.1	100
Milk & Juice Cartons/Boxes - Coated	3.6	10	Other Organic	43.4	120
<b>Plastic</b>	<b>292.7</b>	<b>810</b>	<b>Inorganics</b>	<b>169.8</b>	<b>470</b>
#1 PET Bottles/Jars	21.7	60	Televisions	3.6	10
#1 Other PET Containers	7.2	20	Computer Monitors	3.6	10
#2 HDPE Bottles/Jars - Clear	10.8	30	Computer Equipment/Peripherals	7.2	20
#2 HDPE Bottles/Jars - Color	10.8	30	Electronic Equipment	14.5	40
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	10.8	30
#6 Exp. Polystyrene Packaging	18.1	50	White Goods - Not refrigerated	21.7	60
#3-#7 Other - All	14.5	40	Lead-acid Batteries	18.1	50
Other Rigid Plastic Products	57.8	160	Other Household Batteries	3.6	10
Grocery & Merchandise Bags	10.8	30	Tires	25.3	70
Trash Bags	32.5	90	Household Bulky Items	61.4	170
Commercial & Industrial Film	25.3	70	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	57.8	160			
Other Plastic	25.3	70	<b>Textiles</b>	<b>90.3</b>	<b>250</b>
			Carpet	25.3	70
<b>Glass</b>	<b>86.7</b>	<b>240</b>	Carpet Padding	7.2	20
Recyclable Glass Bottles & Jars	68.7	190	Clothing	36.1	100
Flat Glass	10.8	30	Other Textiles	21.7	60
Other Glass	7.2	20			
			<b>Household Hazardous Waste</b>	<b>25.3</b>	<b>70</b>
<b>Metal</b>	<b>119.2</b>	<b>330</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>455.3</b>	<b>1,260</b>
Aluminum Beverage Containers	14.5	40			
Other Aluminum	7.2	20			
Ferrous Containers (Tin Cans)	21.7	60	<b>Total MSW (tons)</b>		<b>6,230</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.17</b>

2014 population

5,535

## Greene County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>460.1</b>	<b>3,150</b>	<b>Metal</b>		
Newsprint	48.2	330	Other Ferrous	51.1	350
High Grade Office Paper	23.4	160	Other Non-Ferrous	8.8	60
Magazines/Catalogs	30.7	210	Other Metal	16.1	110
Uncoated OCC/Kraft	166.5	1,140			
Boxboard	54.0	370	<b>Organics</b>	<b>556.5</b>	<b>3,810</b>
Mixed Paper - Recyclable	52.6	360	Yard Waste - Compostable	116.8	800
Compostable Paper	73.0	500	Yard Waste - Woody	23.4	160
Other Paper	11.7	80	Food Scraps	292.1	2,000
			Bottom Fines & Dirt	45.3	310
<b>Beverage Containers</b>	<b>4.4</b>	<b>30</b>	Diapers	36.5	250
Milk & Juice Cartons/Boxes - Coated	4.4	30	Other Organic	42.4	290
<b>Plastic</b>	<b>290.7</b>	<b>1,990</b>	<b>Inorganics</b>	<b>173.8</b>	<b>1,190</b>
#1 PET Bottles/Jars	19.0	130	Televisions	4.4	30
#1 Other PET Containers	5.8	40	Computer Monitors	2.9	20
#2 HDPE Bottles/Jars - Clear	8.8	60	Computer Equipment/Peripherals	7.3	50
#2 HDPE Bottles/Jars - Color	8.8	60	Electronic Equipment	14.6	100
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	10.2	70
#6 Exp. Polystyrene Packaging	19.0	130	White Goods - Not refrigerated	23.4	160
#3-#7 Other - All	13.1	90	Lead-acid Batteries	17.5	120
Other Rigid Plastic Products	58.4	400	Other Household Batteries	4.4	30
Grocery & Merchandise Bags	10.2	70	Tires	26.3	180
Trash Bags	33.6	230	Household Bulky Items	62.8	430
Commercial & Industrial Film	29.2	200	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	58.4	400			
Other Plastic	26.3	180	<b>Textiles</b>	<b>94.9</b>	<b>650</b>
			Carpet	24.8	170
<b>Glass</b>	<b>84.7</b>	<b>580</b>	Carpet Padding	7.3	50
Recyclable Glass Bottles & Jars	67.2	460	Clothing	39.4	270
Flat Glass	10.2	70	Other Textiles	23.4	160
Other Glass	7.3	50			
			<b>Household Hazardous Waste</b>	<b>24.8</b>	<b>170</b>
<b>Metal</b>	<b>124.2</b>	<b>850</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>460.1</b>	<b>3,150</b>
Aluminum Beverage Containers	16.1	110			
Other Aluminum	8.8	60			
Ferrous Containers (Tin Cans)	23.4	160	<b>Total MSW (tons)</b>		<b>15,570</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.23</b>

2014 population

13,693

## Grundy County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>688.6</b>	<b>17,680</b>	<b>Metal</b>		
Newsprint	87.2	2,240	Other Ferrous	51.4	1,320
High Grade Office Paper	50.2	1,290	Other Non-Ferrous	9.0	230
Magazines/Catalogs	31.9	820	Other Metal	16.0	410
Uncoated OCC/Kraft	325.6	8,360			
Boxboard	54.5	1,400	<b>Organics</b>	<b>597.4</b>	<b>15,340</b>
Mixed Paper - Recyclable	53.4	1,370	Yard Waste - Compostable	117.2	3,010
Compostable Paper	73.2	1,880	Yard Waste - Woody	23.4	600
Other Paper	12.5	320	Food Scraps	332.6	8,540
			Bottom Fines & Dirt	45.2	1,160
<b>Beverage Containers</b>	<b>5.5</b>	<b>140</b>	Diapers	37.0	950
Milk & Juice Cartons/Boxes - Coated	5.5	140	Other Organic	42.1	1,080
<b>Plastic</b>	<b>332.6</b>	<b>8,540</b>	<b>Inorganics</b>	<b>174.9</b>	<b>4,490</b>
#1 PET Bottles/Jars	22.2	570	Televisions	5.1	130
#1 Other PET Containers	6.2	160	Computer Monitors	3.1	80
#2 HDPE Bottles/Jars - Clear	11.3	290	Computer Equipment/Peripherals	7.0	180
#2 HDPE Bottles/Jars - Color	10.5	270	Electronic Equipment	14.4	370
#2 Other HDPE Containers	0.8	20	White Goods - Refrigerated	10.5	270
#6 Exp. Polystyrene Packaging	18.3	470	White Goods - Not refrigerated	23.0	590
#3-#7 Other - All	12.9	330	Lead-acid Batteries	18.3	470
Other Rigid Plastic Products	58.0	1,490	Other Household Batteries	4.3	110
Grocery & Merchandise Bags	15.6	400	Tires	25.7	660
Trash Bags	33.5	860	Household Bulky Items	63.1	1,620
Commercial & Industrial Film	44.0	1,130	Fluorescent Lights/Ballasts	0.4	10
Other Film	58.8	1,510			
Other Plastic	40.5	1,040	<b>Textiles</b>	<b>127.7</b>	<b>3,280</b>
			Carpet	24.5	630
<b>Glass</b>	<b>86.1</b>	<b>2,210</b>	Carpet Padding	6.6	170
Recyclable Glass Bottles & Jars	68.2	1,750	Clothing	61.1	1,570
Flat Glass	10.1	260	Other Textiles	35.4	910
Other Glass	7.8	200			
			<b>Household Hazardous Waste</b>	<b>26.9</b>	<b>690</b>
<b>Metal</b>	<b>123.1</b>	<b>3,160</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>616.1</b>	<b>15,820</b>
Aluminum Beverage Containers	15.2	390			
Other Aluminum	8.6	220			
Ferrous Containers (Tin Cans)	23.0	590	<b>Total MSW (tons)</b>		<b>71,350</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.61</b>

2014 population

51,352

## Hamilton County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>429.8</b>	<b>1,840</b>	<b>Metal</b>		
Newsprint	16.4	70	Other Ferrous	51.4	220
High Grade Office Paper	23.4	100	Other Non-Ferrous	9.3	40
Magazines/Catalogs	30.4	130	Other Metal	16.4	70
Uncoated OCC/Kraft	168.2	720			
Boxboard	53.7	230	<b>Organics</b>	<b>555.9</b>	<b>2,380</b>
Mixed Paper - Recyclable	53.7	230	Yard Waste - Compostable	116.8	500
Compostable Paper	72.4	310	Yard Waste - Woody	23.4	100
Other Paper	11.7	50	Food Scraps	292.0	1,250
			Bottom Fines & Dirt	44.4	190
<b>Beverage Containers</b>	<b>4.7</b>	<b>20</b>	Diapers	37.4	160
Milk & Juice Cartons/Boxes - Coated	4.7	20	Other Organic	42.0	180
<b>Plastic</b>	<b>292.0</b>	<b>1,250</b>	<b>Inorganics</b>	<b>172.9</b>	<b>740</b>
#1 PET Bottles/Jars	18.7	80	Televisions	4.7	20
#1 Other PET Containers	4.7	20	Computer Monitors	2.3	10
#2 HDPE Bottles/Jars - Clear	9.3	40	Computer Equipment/Peripherals	7.0	30
#2 HDPE Bottles/Jars - Color	9.3	40	Electronic Equipment	14.0	60
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	9.3	40
#6 Exp. Polystyrene Packaging	18.7	80	White Goods - Not refrigerated	23.4	100
#3-#7 Other - All	11.7	50	Lead-acid Batteries	18.7	80
Other Rigid Plastic Products	58.4	250	Other Household Batteries	4.7	20
Grocery & Merchandise Bags	11.7	50	Tires	25.7	110
Trash Bags	32.7	140	Household Bulky Items	63.1	270
Commercial & Industrial Film	30.4	130	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	58.4	250			
Other Plastic	28.0	120	<b>Textiles</b>	<b>95.8</b>	<b>410</b>
			Carpet	23.4	100
<b>Glass</b>	<b>84.1</b>	<b>360</b>	Carpet Padding	7.0	30
Recyclable Glass Bottles & Jars	67.7	290	Clothing	42.0	180
Flat Glass	9.3	40	Other Textiles	23.4	100
Other Glass	7.0	30			
			<b>Household Hazardous Waste</b>	<b>25.7</b>	<b>110</b>
<b>Metal</b>	<b>126.1</b>	<b>540</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>467.2</b>	<b>2,000</b>
Aluminum Beverage Containers	16.4	70			
Other Aluminum	9.3	40			
Ferrous Containers (Tin Cans)	23.4	100	<b>Total MSW (tons)</b>		<b>9,650</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.18</b>

2014 population

8,562

## Hancock County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>448.3</b>	<b>4,250</b>	<b>Metal</b>		
Newsprint	40.1	380	Other Ferrous	51.7	490
High Grade Office Paper	24.3	230	Other Non-Ferrous	9.5	90
Magazines/Catalogs	32.7	310	Other Metal	15.8	150
Uncoated OCC/Kraft	158.2	1,500			
Boxboard	54.8	520	<b>Organics</b>	<b>572.8</b>	<b>5,430</b>
Mixed Paper - Recyclable	52.7	500	Yard Waste - Compostable	117.1	1,110
Compostable Paper	72.8	690	Yard Waste - Woody	23.2	220
Other Paper	12.7	120	Food Scraps	308.0	2,920
			Bottom Fines & Dirt	45.4	430
<b>Beverage Containers</b>	<b>5.3</b>	<b>50</b>	Diapers	36.9	350
Milk & Juice Cartons/Boxes - Coated	5.3	50	Other Organic	42.2	400
<b>Plastic</b>	<b>303.8</b>	<b>2,880</b>	<b>Inorganics</b>	<b>175.1</b>	<b>1,660</b>
#1 PET Bottles/Jars	21.1	200	Televisions	5.3	50
#1 Other PET Containers	6.3	60	Computer Monitors	3.2	30
#2 HDPE Bottles/Jars - Clear	10.5	100	Computer Equipment/Peripherals	7.4	70
#2 HDPE Bottles/Jars - Color	9.5	90	Electronic Equipment	14.8	140
#2 Other HDPE Containers	1.1	10	White Goods - Refrigerated	10.5	100
#6 Exp. Polystyrene Packaging	17.9	170	White Goods - Not refrigerated	23.2	220
#3-#7 Other - All	13.7	130	Lead-acid Batteries	17.9	170
Other Rigid Plastic Products	58.0	550	Other Household Batteries	4.2	40
Grocery & Merchandise Bags	11.6	110	Tires	25.3	240
Trash Bags	33.8	320	Household Bulky Items	63.3	600
Commercial & Industrial Film	31.6	300	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	59.1	560			
Other Plastic	29.5	280	<b>Textiles</b>	<b>99.2</b>	<b>940</b>
			Carpet	24.3	230
<b>Glass</b>	<b>86.5</b>	<b>820</b>	Carpet Padding	6.3	60
Recyclable Glass Bottles & Jars	68.6	650	Clothing	43.2	410
Flat Glass	10.5	100	Other Textiles	25.3	240
Other Glass	7.4	70			
			<b>Household Hazardous Waste</b>	<b>27.4</b>	<b>260</b>
<b>Metal</b>	<b>124.5</b>	<b>1,180</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>466.2</b>	<b>4,420</b>
Aluminum Beverage Containers	15.8	150			
Other Aluminum	8.4	80			
Ferrous Containers (Tin Cans)	23.2	220	<b>Total MSW (tons)</b>		<b>21,890</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.33</b>

2014 population

18,961

## Hardin County Municipal Solid Waste (MSW) Generation

	<b>County Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>		<b>County Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>
<b>Paper</b>	<b>445.6</b>	<b>960</b>	<b>Metal</b>		
Newsprint	13.9	30	Other Ferrous	51.1	110
High Grade Office Paper	23.2	50	Other Non-Ferrous	9.3	20
Magazines/Catalogs	27.8	60	Other Metal	13.9	30
Uncoated OCC/Kraft	185.7	400			
Boxboard	55.7	120	<b>Organics</b>	<b>561.6</b>	<b>1,210</b>
Mixed Paper - Recyclable	51.1	110	Yard Waste - Compostable	116.0	250
Compostable Paper	74.3	160	Yard Waste - Woody	23.2	50
Other Paper	13.9	30	Food Scraps	297.1	640
			Bottom Fines & Dirt	46.4	100
<b>Beverage Containers</b>	<b>4.6</b>	<b>10</b>	Diapers	37.1	80
Milk & Juice Cartons/Boxes - Coated	4.6	10	Other Organic	41.8	90
<b>Plastic</b>	<b>273.8</b>	<b>590</b>	<b>Inorganics</b>	<b>181.0</b>	<b>390</b>
#1 PET Bottles/Jars	18.6	40	Televisions	4.6	10
#1 Other PET Containers	4.6	10	Computer Monitors	4.6	10
#2 HDPE Bottles/Jars - Clear	9.3	20	Computer Equipment/Peripherals	9.3	20
#2 HDPE Bottles/Jars - Color	9.3	20	Electronic Equipment	13.9	30
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	9.3	20
#6 Exp. Polystyrene Packaging	18.6	40	White Goods - Not refrigerated	23.2	50
#3-#7 Other - All	9.3	20	Lead-acid Batteries	18.6	40
Other Rigid Plastic Products	55.7	120	Other Household Batteries	4.6	10
Grocery & Merchandise Bags	9.3	20	Tires	27.8	60
Trash Bags	32.5	70	Household Bulky Items	65.0	140
Commercial & Industrial Film	23.2	50	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	60.3	130			
Other Plastic	23.2	50	<b>Textiles</b>	<b>83.5</b>	<b>180</b>
			Carpet	23.2	50
<b>Glass</b>	<b>92.8</b>	<b>200</b>	Carpet Padding	4.6	10
Recyclable Glass Bottles & Jars	74.3	160	Clothing	37.1	80
Flat Glass	9.3	20	Other Textiles	18.6	40
Other Glass	9.3	20			
			<b>Household Hazardous Waste</b>	<b>23.2</b>	<b>50</b>
<b>Metal</b>	<b>120.7</b>	<b>260</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>440.9</b>	<b>950</b>
Aluminum Beverage Containers	13.9	30			
Other Aluminum	9.3	20			
Ferrous Containers (Tin Cans)	23.2	50	<b>Total MSW (tons)</b>		<b>4,800</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.10</b>

## Henderson County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>390.0</b>	<b>1,400</b>	<b>Metal</b>		
Newsprint	30.6	110	Other Ferrous	50.1	180
High Grade Office Paper	25.1	90	Other Non-Ferrous	8.4	30
Magazines/Catalogs	30.6	110	Other Metal	16.7	60
Uncoated OCC/Kraft	111.4	400			
Boxboard	55.7	200	<b>Organics</b>	<b>573.8</b>	<b>2,060</b>
Mixed Paper - Recyclable	52.9	190	Yard Waste - Compostable	117.0	420
Compostable Paper	72.4	260	Yard Waste - Woody	22.3	80
Other Paper	11.1	40	Food Scraps	312.0	1,120
			Bottom Fines & Dirt	44.6	160
<b>Beverage Containers</b>	<b>5.6</b>	<b>20</b>	Diapers	36.2	130
Milk & Juice Cartons/Boxes - Coated	5.6	20	Other Organic	41.8	150
<b>Plastic</b>	<b>306.4</b>	<b>1,100</b>	<b>Inorganics</b>	<b>178.3</b>	<b>640</b>
#1 PET Bottles/Jars	22.3	80	Televisions	5.6	20
#1 Other PET Containers	5.6	20	Computer Monitors	2.8	10
#2 HDPE Bottles/Jars - Clear	11.1	40	Computer Equipment/Peripherals	8.4	30
#2 HDPE Bottles/Jars - Color	11.1	40	Electronic Equipment	13.9	50
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	11.1	40
#6 Exp. Polystyrene Packaging	16.7	60	White Goods - Not refrigerated	22.3	80
#3-#7 Other - All	13.9	50	Lead-acid Batteries	19.5	70
Other Rigid Plastic Products	58.5	210	Other Household Batteries	5.6	20
Grocery & Merchandise Bags	11.1	40	Tires	25.1	90
Trash Bags	33.4	120	Household Bulky Items	64.1	230
Commercial & Industrial Film	33.4	120	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	58.5	210			
Other Plastic	30.6	110	<b>Textiles</b>	<b>100.3</b>	<b>360</b>
			Carpet	25.1	90
<b>Glass</b>	<b>86.4</b>	<b>310</b>	Carpet Padding	5.6	20
Recyclable Glass Bottles & Jars	66.9	240	Clothing	44.6	160
Flat Glass	11.1	40	Other Textiles	25.1	90
Other Glass	8.4	30			
			<b>Household Hazardous Waste</b>	<b>27.9</b>	<b>100</b>
<b>Metal</b>	<b>122.6</b>	<b>440</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>462.4</b>	<b>1,660</b>
Aluminum Beverage Containers	16.7	60			
Other Aluminum	8.4	30			
Ferrous Containers (Tin Cans)	22.3	80	<b>Total MSW (tons)</b>		<b>8,090</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.17</b>

2014 population

7,180

## Henry County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>449.2</b>	<b>11,260</b>	<b>Metal</b>		
Newsprint	43.5	1,090	Other Ferrous	51.1	1,280
High Grade Office Paper	50.3	1,260	Other Non-Ferrous	9.2	230
Magazines/Catalogs	31.9	800	Other Metal	16.0	400
Uncoated OCC/Kraft	130.4	3,270			
Boxboard	54.7	1,370	<b>Organics</b>	<b>580.0</b>	<b>14,540</b>
Mixed Paper - Recyclable	53.1	1,330	Yard Waste - Compostable	117.3	2,940
Compostable Paper	73.0	1,830	Yard Waste - Woody	23.1	580
Other Paper	12.4	310	Food Scraps	315.5	7,910
			Bottom Fines & Dirt	45.1	1,130
<b>Beverage Containers</b>	<b>5.2</b>	<b>130</b>	Diapers	37.1	930
Milk & Juice Cartons/Boxes - Coated	5.2	130	Other Organic	41.9	1,050
<b>Plastic</b>	<b>315.9</b>	<b>7,920</b>	<b>Inorganics</b>	<b>175.5</b>	<b>4,400</b>
#1 PET Bottles/Jars	21.1	530	Televisions	5.2	130
#1 Other PET Containers	6.0	150	Computer Monitors	3.2	80
#2 HDPE Bottles/Jars - Clear	10.8	270	Computer Equipment/Peripherals	7.2	180
#2 HDPE Bottles/Jars - Color	10.0	250	Electronic Equipment	14.4	360
#2 Other HDPE Containers	0.8	20	White Goods - Refrigerated	10.4	260
#6 Exp. Polystyrene Packaging	18.0	450	White Goods - Not refrigerated	23.1	580
#3-#7 Other - All	13.2	330	Lead-acid Batteries	18.3	460
Other Rigid Plastic Products	57.8	1,450	Other Household Batteries	4.4	110
Grocery & Merchandise Bags	13.6	340	Tires	25.9	650
Trash Bags	33.5	840	Household Bulky Items	63.0	1,580
Commercial & Industrial Film	37.9	950	Fluorescent Lights/Ballasts	0.4	10
Other Film	58.6	1,470			
Other Plastic	34.7	870	<b>Textiles</b>	<b>113.3</b>	<b>2,840</b>
			Carpet	24.3	610
<b>Glass</b>	<b>85.8</b>	<b>2,150</b>	Carpet Padding	6.8	170
Recyclable Glass Bottles & Jars	68.2	1,710	Clothing	51.9	1,300
Flat Glass	10.0	250	Other Textiles	30.3	760
Other Glass	7.6	190			
			<b>Household Hazardous Waste</b>	<b>26.7</b>	<b>670</b>
<b>Metal</b>	<b>123.3</b>	<b>3,090</b>			
Aluminum Beverage Containers	15.6	390	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>605.9</b>	<b>15,190</b>
Other Aluminum	8.8	220			
Ferrous Containers (Tin Cans)	22.7	570	<b>Total MSW (tons)</b>		<b>62,190</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.80</b>

## Iroquois County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>460.2</b>	<b>6,810</b>	<b>Metal</b>		
Newsprint	66.2	980	Other Ferrous	51.4	760
High Grade Office Paper	31.1	460	Other Non-Ferrous	8.8	130
Magazines/Catalogs	32.4	480	Other Metal	16.2	240
Uncoated OCC/Kraft	137.2	2,030			
Boxboard	54.7	810	<b>Organics</b>	<b>574.4</b>	<b>8,500</b>
Mixed Paper - Recyclable	53.4	790	Yard Waste - Compostable	117.6	1,740
Compostable Paper	73.0	1,080	Yard Waste - Woody	23.0	340
Other Paper	12.2	180	Food Scraps	309.5	4,580
			Bottom Fines & Dirt	45.3	670
<b>Beverage Containers</b>	<b>5.4</b>	<b>80</b>	Diapers	37.2	550
Milk & Juice Cartons/Boxes - Coated	5.4	80	Other Organic	41.9	620
<b>Plastic</b>	<b>304.8</b>	<b>4,510</b>	<b>Inorganics</b>	<b>174.3</b>	<b>2,580</b>
#1 PET Bottles/Jars	20.9	310	Televisions	4.7	70
#1 Other PET Containers	6.1	90	Computer Monitors	3.4	50
#2 HDPE Bottles/Jars - Clear	10.8	160	Computer Equipment/Peripherals	7.4	110
#2 HDPE Bottles/Jars - Color	9.5	140	Electronic Equipment	14.2	210
#2 Other HDPE Containers	0.7	10	White Goods - Refrigerated	10.1	150
#6 Exp. Polystyrene Packaging	18.2	270	White Goods - Not refrigerated	23.0	340
#3-#7 Other - All	12.8	190	Lead-acid Batteries	18.2	270
Other Rigid Plastic Products	58.1	860	Other Household Batteries	4.1	60
Grocery & Merchandise Bags	11.5	170	Tires	25.7	380
Trash Bags	33.8	500	Household Bulky Items	62.8	930
Commercial & Industrial Film	33.1	490	Fluorescent Lights/Ballasts	0.7	10
Other Film	58.8	870			
Other Plastic	30.4	450	<b>Textiles</b>	<b>102.7</b>	<b>1,520</b>
			Carpet	24.3	360
<b>Glass</b>	<b>85.8</b>	<b>1,270</b>	Carpet Padding	6.8	100
Recyclable Glass Bottles & Jars	67.6	1,000	Clothing	45.3	670
Flat Glass	10.1	150	Other Textiles	26.4	390
Other Glass	8.1	120			
			<b>Household Hazardous Waste</b>	<b>27.0</b>	<b>400</b>
<b>Metal</b>	<b>123.7</b>	<b>1,830</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>466.3</b>	<b>6,900</b>
Aluminum Beverage Containers	15.5	230			
Other Aluminum	8.8	130			
Ferrous Containers (Tin Cans)	23.0	340	<b>Total MSW (tons)</b>		<b>34,400</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.37</b>

2014 population

29,596

## Jackson County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>635.8</b>	<b>18,930</b>	<b>Metal</b>		
Newsprint	43.0	1,280	Other Ferrous	51.4	1,530
High Grade Office Paper	45.7	1,360	Other Non-Ferrous	9.1	270
Magazines/Catalogs	28.9	860	Other Metal	15.8	470
Uncoated OCC/Kraft	325.1	9,680			
Boxboard	54.4	1,620	<b>Organics</b>	<b>555.2</b>	<b>16,530</b>
Mixed Paper - Recyclable	53.4	1,590	Yard Waste - Compostable	117.6	3,500
Compostable Paper	72.9	2,170	Yard Waste - Woody	23.2	690
Other Paper	12.4	370	Food Scraps	290.2	8,640
			Bottom Fines & Dirt	45.3	1,350
<b>Beverage Containers</b>	<b>4.0</b>	<b>120</b>	Diapers	36.9	1,100
Milk & Juice Cartons/Boxes - Coated	4.0	120	Other Organic	42.0	1,250
<b>Plastic</b>	<b>269.7</b>	<b>8,030</b>	<b>Inorganics</b>	<b>175.0</b>	<b>5,210</b>
#1 PET Bottles/Jars	16.1	480	Televisions	5.0	150
#1 Other PET Containers	4.4	130	Computer Monitors	3.0	90
#2 HDPE Bottles/Jars - Clear	8.1	240	Computer Equipment/Peripherals	7.1	210
#2 HDPE Bottles/Jars - Color	7.4	220	Electronic Equipment	14.4	430
#2 Other HDPE Containers	0.7	20	White Goods - Refrigerated	10.4	310
#6 Exp. Polystyrene Packaging	18.5	550	White Goods - Not refrigerated	23.2	690
#3-#7 Other - All	13.1	390	Lead-acid Batteries	18.1	540
Other Rigid Plastic Products	58.1	1,730	Other Household Batteries	4.4	130
Grocery & Merchandise Bags	8.1	240	Tires	25.9	770
Trash Bags	33.6	1,000	Household Bulky Items	63.1	1,880
Commercial & Industrial Film	22.2	660	Fluorescent Lights/Ballasts	0.3	10
Other Film	58.8	1,750			
Other Plastic	20.8	620	<b>Textiles</b>	<b>79.6</b>	<b>2,370</b>
			Carpet	24.5	730
<b>Glass</b>	<b>86.0</b>	<b>2,560</b>	Carpet Padding	6.7	200
Recyclable Glass Bottles & Jars	68.2	2,030	Clothing	30.6	910
Flat Glass	10.1	300	Other Textiles	17.8	530
Other Glass	7.7	230			
			<b>Household Hazardous Waste</b>	<b>27.2</b>	<b>810</b>
<b>Metal</b>	<b>123.3</b>	<b>3,670</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>579.4</b>	<b>17,250</b>
Aluminum Beverage Containers	15.5	460			
Other Aluminum	8.7	260			
Ferrous Containers (Tin Cans)	22.8	680	<b>Total MSW (tons)</b>		<b>75,480</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.95</b>

2014 population

59,546

## Jasper County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>456.4</b>	<b>2,190</b>	<b>Metal</b>		
Newsprint	39.6	190	Other Ferrous	52.1	250
High Grade Office Paper	25.0	120	Other Non-Ferrous	8.3	40
Magazines/Catalogs	31.3	150	Other Metal	16.7	80
Uncoated OCC/Kraft	166.7	800			
Boxboard	54.2	260	<b>Organics</b>	<b>566.8</b>	<b>2,720</b>
Mixed Paper - Recyclable	54.2	260	Yard Waste - Compostable	116.7	560
Compostable Paper	72.9	350	Yard Waste - Woody	22.9	110
Other Paper	12.5	60	Food Scraps	302.2	1,450
			Bottom Fines & Dirt	45.8	220
<b>Beverage Containers</b>	<b>4.2</b>	<b>20</b>	Diapers	37.5	180
Milk & Juice Cartons/Boxes - Coated	4.2	20	Other Organic	41.7	200
<b>Plastic</b>	<b>304.3</b>	<b>1,460</b>	<b>Inorganics</b>	<b>173.0</b>	<b>830</b>
#1 PET Bottles/Jars	20.8	100	Televisions	4.2	20
#1 Other PET Containers	6.3	30	Computer Monitors	4.2	20
#2 HDPE Bottles/Jars - Clear	10.4	50	Computer Equipment/Peripherals	6.3	30
#2 HDPE Bottles/Jars - Color	8.3	40	Electronic Equipment	14.6	70
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	10.4	50
#6 Exp. Polystyrene Packaging	18.8	90	White Goods - Not refrigerated	22.9	110
#3-#7 Other - All	12.5	60	Lead-acid Batteries	18.8	90
Other Rigid Plastic Products	58.4	280	Other Household Batteries	4.2	20
Grocery & Merchandise Bags	12.5	60	Tires	25.0	120
Trash Bags	33.3	160	Household Bulky Items	62.5	300
Commercial & Industrial Film	33.3	160	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	58.4	280			
Other Plastic	31.3	150	<b>Textiles</b>	<b>106.3</b>	<b>510</b>
			Carpet	25.0	120
<b>Glass</b>	<b>87.5</b>	<b>420</b>	Carpet Padding	6.3	30
Recyclable Glass Bottles & Jars	68.8	330	Clothing	47.9	230
Flat Glass	10.4	50	Other Textiles	27.1	130
Other Glass	8.3	40			
			<b>Household Hazardous Waste</b>	<b>27.1</b>	<b>130</b>
<b>Metal</b>	<b>123.0</b>	<b>590</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>466.8</b>	<b>2,240</b>
Aluminum Beverage Containers	14.6	70			
Other Aluminum	8.3	40			
Ferrous Containers (Tin Cans)	22.9	110	<b>Total MSW (tons)</b>		<b>11,110</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.34</b>

2014 population

9,597

## Jefferson County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>792.0</b>	<b>15,390</b>	<b>Metal</b>		
Newsprint	75.7	1,470	Other Ferrous	51.5	1,000
High Grade Office Paper	53.5	1,040	Other Non-Ferrous	9.3	180
Magazines/Catalogs	30.9	600	Other Metal	16.0	310
Uncoated OCC/Kraft	439.0	8,530			
Boxboard	54.6	1,060	<b>Organics</b>	<b>557.3</b>	<b>10,830</b>
Mixed Paper - Recyclable	53.0	1,030	Yard Waste - Compostable	117.3	2,280
Compostable Paper	73.1	1,420	Yard Waste - Woody	23.2	450
Other Paper	12.4	240	Food Scraps	292.3	5,680
			Bottom Fines & Dirt	45.3	880
<b>Beverage Containers</b>	<b>4.1</b>	<b>80</b>	Diapers	37.1	720
Milk & Juice Cartons/Boxes - Coated	4.1	80	Other Organic	42.2	820
<b>Plastic</b>	<b>286.1</b>	<b>5,560</b>	<b>Inorganics</b>	<b>175.0</b>	<b>3,400</b>
#1 PET Bottles/Jars	17.0	330	Televisions	5.1	100
#1 Other PET Containers	4.6	90	Computer Monitors	3.1	60
#2 HDPE Bottles/Jars - Clear	8.7	170	Computer Equipment/Peripherals	7.2	140
#2 HDPE Bottles/Jars - Color	8.2	160	Electronic Equipment	14.4	280
#2 Other HDPE Containers	0.5	10	White Goods - Refrigerated	10.3	200
#6 Exp. Polystyrene Packaging	18.5	360	White Goods - Not refrigerated	23.2	450
#3-#7 Other - All	13.4	260	Lead-acid Batteries	18.0	350
Other Rigid Plastic Products	58.2	1,130	Other Household Batteries	4.1	80
Grocery & Merchandise Bags	10.3	200	Tires	25.7	500
Trash Bags	33.5	650	Household Bulky Items	63.3	1,230
Commercial & Industrial Film	28.3	550	Fluorescent Lights/Ballasts	0.5	10
Other Film	58.7	1,140			
Other Plastic	26.2	510	<b>Textiles</b>	<b>93.1</b>	<b>1,810</b>
			Carpet	24.7	480
<b>Glass</b>	<b>86.5</b>	<b>1,680</b>	Carpet Padding	6.7	130
Recyclable Glass Bottles & Jars	68.4	1,330	Clothing	39.1	760
Flat Glass	10.3	200	Other Textiles	22.6	440
Other Glass	7.7	150			
			<b>Household Hazardous Waste</b>	<b>26.2</b>	<b>510</b>
<b>Metal</b>	<b>123.5</b>	<b>2,400</b>			
Aluminum Beverage Containers	15.4	300	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>459.6</b>	<b>8,930</b>
Other Aluminum	8.7	170			
Ferrous Containers (Tin Cans)	22.6	440	<b>Total MSW (tons)</b>		<b>50,590</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.13</b>

2014 population

38,863

## Jersey County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>507.1</b>	<b>5,900</b>	<b>Metal</b>		
Newsprint	36.1	420	Other Ferrous	51.6	600
High Grade Office Paper	50.7	590	Other Non-Ferrous	9.5	110
Magazines/Catalogs	29.2	340	Other Metal	15.5	180
Uncoated OCC/Kraft	198.6	2,310			
Boxboard	54.2	630	<b>Organics</b>	<b>578.5</b>	<b>6,730</b>
Mixed Paper - Recyclable	53.3	620	Yard Waste - Compostable	117.8	1,370
Compostable Paper	73.1	850	Yard Waste - Woody	23.2	270
Other Paper	12.0	140	Food Scraps	312.9	3,640
			Bottom Fines & Dirt	45.6	530
<b>Beverage Containers</b>	<b>5.2</b>	<b>60</b>	Diapers	37.0	430
Milk & Juice Cartons/Boxes - Coated	5.2	60	Other Organic	42.1	490
<b>Plastic</b>	<b>311.2</b>	<b>3,620</b>	<b>Inorganics</b>	<b>175.3</b>	<b>2,040</b>
#1 PET Bottles/Jars	20.6	240	Televisions	5.2	60
#1 Other PET Containers	6.0	70	Computer Monitors	3.4	40
#2 HDPE Bottles/Jars - Clear	10.3	120	Computer Equipment/Peripherals	6.9	80
#2 HDPE Bottles/Jars - Color	9.5	110	Electronic Equipment	14.6	170
#2 Other HDPE Containers	0.9	10	White Goods - Refrigerated	10.3	120
#6 Exp. Polystyrene Packaging	18.9	220	White Goods - Not refrigerated	23.2	270
#3-#7 Other - All	12.9	150	Lead-acid Batteries	18.1	210
Other Rigid Plastic Products	57.6	670	Other Household Batteries	4.3	50
Grocery & Merchandise Bags	12.9	150	Tires	25.8	300
Trash Bags	33.5	390	Household Bulky Items	62.7	730
Commercial & Industrial Film	36.1	420	Fluorescent Lights/Ballasts	0.9	10
Other Film	58.4	680			
Other Plastic	33.5	390	<b>Textiles</b>	<b>110.0</b>	<b>1,280</b>
			Carpet	24.1	280
<b>Glass</b>	<b>86.0</b>	<b>1,000</b>	Carpet Padding	6.9	80
Recyclable Glass Bottles & Jars	67.9	790	Clothing	49.9	580
Flat Glass	10.3	120	Other Textiles	29.2	340
Other Glass	7.7	90			
			<b>Household Hazardous Waste</b>	<b>27.5</b>	<b>320</b>
<b>Metal</b>	<b>123.8</b>	<b>1,440</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>602.5</b>	<b>7,010</b>
Aluminum Beverage Containers	15.5	180			
Other Aluminum	8.6	100			
Ferrous Containers (Tin Cans)	23.2	270	<b>Total MSW (tons)</b>		<b>29,400</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.92</b>

2014 population

23,268

## Jo Daviess County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>638.1</b>	<b>7,200</b>	<b>Metal</b>		
Newsprint	49.6	560	Other Ferrous	51.4	580
High Grade Office Paper	37.2	420	Other Non-Ferrous	8.9	100
Magazines/Catalogs	36.3	410	Other Metal	16.0	180
Uncoated OCC/Kraft	321.7	3,630			
Boxboard	54.9	620	<b>Organics</b>	<b>587.6</b>	<b>6,630</b>
Mixed Paper - Recyclable	53.2	600	Yard Waste - Compostable	117.0	1,320
Compostable Paper	72.7	820	Yard Waste - Woody	23.0	260
Other Paper	12.4	140	Food Scraps	323.5	3,650
			Bottom Fines & Dirt	45.2	510
<b>Beverage Containers</b>	<b>6.2</b>	<b>70</b>	Diapers	37.2	420
Milk & Juice Cartons/Boxes - Coated	6.2	70	Other Organic	41.7	470
<b>Plastic</b>	<b>313.7</b>	<b>3,540</b>	<b>Inorganics</b>	<b>176.4</b>	<b>1,990</b>
#1 PET Bottles/Jars	23.0	260	Televisions	5.3	60
#1 Other PET Containers	6.2	70	Computer Monitors	3.5	40
#2 HDPE Bottles/Jars - Clear	11.5	130	Computer Equipment/Peripherals	7.1	80
#2 HDPE Bottles/Jars - Color	10.6	120	Electronic Equipment	14.2	160
#2 Other HDPE Containers	0.9	10	White Goods - Refrigerated	10.6	120
#6 Exp. Polystyrene Packaging	18.6	210	White Goods - Not refrigerated	23.0	260
#3-#7 Other - All	13.3	150	Lead-acid Batteries	18.6	210
Other Rigid Plastic Products	57.6	650	Other Household Batteries	4.4	50
Grocery & Merchandise Bags	12.4	140	Tires	25.7	290
Trash Bags	33.7	380	Household Bulky Items	62.9	710
Commercial & Industrial Film	34.6	390	Fluorescent Lights/Ballasts	0.9	10
Other Film	58.5	660			
Other Plastic	32.8	370	<b>Textiles</b>	<b>106.3</b>	<b>1,200</b>
			Carpet	24.8	280
<b>Glass</b>	<b>86.0</b>	<b>970</b>	Carpet Padding	6.2	70
Recyclable Glass Bottles & Jars	68.2	770	Clothing	47.9	540
Flat Glass	9.7	110	Other Textiles	27.5	310
Other Glass	8.0	90			
			<b>Household Hazardous Waste</b>	<b>27.5</b>	<b>310</b>
<b>Metal</b>	<b>123.2</b>	<b>1,390</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>469.7</b>	<b>5,300</b>
Aluminum Beverage Containers	15.1	170			
Other Aluminum	8.9	100			
Ferrous Containers (Tin Cans)	23.0	260	<b>Total MSW (tons)</b>		<b>28,600</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.94</b>

2014 population

22,567

## Johnson County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>381.3</b>	<b>2,490</b>	<b>Metal</b>		
Newsprint	26.0	170	Other Ferrous	50.5	330
High Grade Office Paper	24.5	160	Other Non-Ferrous	9.2	60
Magazines/Catalogs	30.6	200	Other Metal	15.3	100
Uncoated OCC/Kraft	105.7	690			
Boxboard	55.1	360	<b>Organics</b>	<b>551.3</b>	<b>3,600</b>
Mixed Paper - Recyclable	53.6	350	Yard Waste - Compostable	117.9	770
Compostable Paper	73.5	480	Yard Waste - Woody	23.0	150
Other Paper	12.3	80	Food Scraps	286.4	1,870
			Bottom Fines & Dirt	45.9	300
<b>Beverage Containers</b>	<b>4.6</b>	<b>30</b>	Diapers	36.8	240
Milk & Juice Cartons/Boxes - Coated	4.6	30	Other Organic	41.3	270
<b>Plastic</b>	<b>289.4</b>	<b>1,890</b>	<b>Inorganics</b>	<b>174.6</b>	<b>1,140</b>
#1 PET Bottles/Jars	16.8	110	Televisions	4.6	30
#1 Other PET Containers	4.6	30	Computer Monitors	3.1	20
#2 HDPE Bottles/Jars - Clear	9.2	60	Computer Equipment/Peripherals	7.7	50
#2 HDPE Bottles/Jars - Color	7.7	50	Electronic Equipment	13.8	90
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	10.7	70
#6 Exp. Polystyrene Packaging	18.4	120	White Goods - Not refrigerated	23.0	150
#3-#7 Other - All	13.8	90	Lead-acid Batteries	18.4	120
Other Rigid Plastic Products	58.2	380	Other Household Batteries	4.6	30
Grocery & Merchandise Bags	10.7	70	Tires	26.0	170
Trash Bags	33.7	220	Household Bulky Items	62.8	410
Commercial & Industrial Film	30.6	200	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	58.2	380			
Other Plastic	27.6	180	<b>Textiles</b>	<b>96.5</b>	<b>630</b>
			Carpet	24.5	160
<b>Glass</b>	<b>87.3</b>	<b>570</b>	Carpet Padding	6.1	40
Recyclable Glass Bottles & Jars	68.9	450	Clothing	41.3	270
Flat Glass	10.7	70	Other Textiles	24.5	160
Other Glass	7.7	50			
			<b>Household Hazardous Waste</b>	<b>26.0</b>	<b>170</b>
<b>Metal</b>	<b>122.5</b>	<b>800</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>465.5</b>	<b>3,040</b>
Aluminum Beverage Containers	15.3	100			
Other Aluminum	9.2	60			
Ferrous Containers (Tin Cans)	23.0	150	<b>Total MSW (tons)</b>		<b>14,360</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.02</b>

2014 population

13,060

## Kane County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>697.6</b>	<b>183,640</b>	<b>Metal</b>		
Newsprint	87.1	22,920	Other Ferrous	51.2	13,490
High Grade Office Paper	50.3	13,250	Other Non-Ferrous	9.0	2,380
Magazines/Catalogs	28.6	7,520	Other Metal	15.9	4,180
Uncoated OCC/Kraft	338.3	89,060			
Boxboard	54.6	14,370	<b>Organics</b>	<b>609.1</b>	<b>160,360</b>
Mixed Paper - Recyclable	53.3	14,020	Yard Waste - Compostable	117.4	30,910
Compostable Paper	73.0	19,230	Yard Waste - Woody	23.2	6,110
Other Paper	12.4	3,270	Food Scraps	344.1	90,600
			Bottom Fines & Dirt	45.2	11,910
<b>Beverage Containers</b>	<b>6.0</b>	<b>1,580</b>	Diapers	37.1	9,760
Milk & Juice Cartons/Boxes - Coated	6.0	1,580	Other Organic	42.0	11,070
<b>Plastic</b>	<b>337.0</b>	<b>88,730</b>	<b>Inorganics</b>	<b>175.2</b>	<b>46,120</b>
#1 PET Bottles/Jars	23.7	6,250	Televisions	5.0	1,320
#1 Other PET Containers	6.6	1,750	Computer Monitors	3.2	840
#2 HDPE Bottles/Jars - Clear	12.0	3,160	Computer Equipment/Peripherals	7.1	1,870
#2 HDPE Bottles/Jars - Color	11.1	2,920	Electronic Equipment	14.4	3,800
#2 Other HDPE Containers	0.8	200	White Goods - Refrigerated	10.4	2,730
#6 Exp. Polystyrene Packaging	18.3	4,830	White Goods - Not refrigerated	23.1	6,090
#3-#7 Other - All	13.0	3,430	Lead-acid Batteries	18.2	4,800
Other Rigid Plastic Products	58.0	15,260	Other Household Batteries	4.3	1,140
Grocery & Merchandise Bags	15.7	4,140	Tires	25.8	6,800
Trash Bags	33.5	8,820	Household Bulky Items	63.1	16,610
Commercial & Industrial Film	44.2	11,640	Fluorescent Lights/Ballasts	0.5	120
Other Film	58.8	15,470			
Other Plastic	41.3	10,860	<b>Textiles</b>	<b>127.3</b>	<b>33,520</b>
			Carpet	24.5	6,440
<b>Glass</b>	<b>86.0</b>	<b>22,630</b>	Carpet Padding	6.6	1,740
Recyclable Glass Bottles & Jars	68.1	17,940	Clothing	61.0	16,050
Flat Glass	10.0	2,640	Other Textiles	35.3	9,290
Other Glass	7.8	2,050			
			<b>Household Hazardous Waste</b>	<b>26.9</b>	<b>7,080</b>
<b>Metal</b>	<b>123.1</b>	<b>32,400</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>616.5</b>	<b>162,310</b>
Aluminum Beverage Containers	15.4	4,050			
Other Aluminum	8.7	2,290			
Ferrous Containers (Tin Cans)	22.8	6,010	<b>Total MSW (tons)</b>		<b>738,370</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.68</b>

2014 population

526,521

## Kankakee County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>696.4</b>	<b>39,280</b>	<b>Metal</b>		
Newsprint	74.1	4,180	Other Ferrous	51.2	2,890
High Grade Office Paper	43.3	2,440	Other Non-Ferrous	9.0	510
Magazines/Catalogs	30.1	1,700	Other Metal	16.0	900
Uncoated OCC/Kraft	355.6	20,060			
Boxboard	54.6	3,080	<b>Organics</b>	<b>564.1</b>	<b>31,820</b>
Mixed Paper - Recyclable	53.2	3,000	Yard Waste - Compostable	117.4	6,620
Compostable Paper	73.0	4,120	Yard Waste - Woody	23.2	1,310
Other Paper	12.4	700	Food Scraps	299.3	16,880
			Bottom Fines & Dirt	45.2	2,550
<b>Beverage Containers</b>	<b>4.4</b>	<b>250</b>	Diapers	37.1	2,090
Milk & Juice Cartons/Boxes - Coated	4.4	250	Other Organic	42.0	2,370
<b>Plastic</b>	<b>303.0</b>	<b>17,090</b>	<b>Inorganics</b>	<b>175.3</b>	<b>9,890</b>
#1 PET Bottles/Jars	17.7	1,000	Televisions	5.0	280
#1 Other PET Containers	5.0	280	Computer Monitors	3.2	180
#2 HDPE Bottles/Jars - Clear	8.9	500	Computer Equipment/Peripherals	7.1	400
#2 HDPE Bottles/Jars - Color	8.2	460	Electronic Equipment	14.5	820
#2 Other HDPE Containers	0.5	30	White Goods - Refrigerated	10.5	590
#6 Exp. Polystyrene Packaging	18.4	1,040	White Goods - Not refrigerated	23.0	1,300
#3-#7 Other - All	12.9	730	Lead-acid Batteries	18.3	1,030
Other Rigid Plastic Products	58.0	3,270	Other Household Batteries	4.3	240
Grocery & Merchandise Bags	12.6	710	Tires	25.9	1,460
Trash Bags	33.5	1,890	Household Bulky Items	63.1	3,560
Commercial & Industrial Film	35.6	2,010	Fluorescent Lights/Ballasts	0.5	30
Other Film	58.9	3,320			
Other Plastic	32.8	1,850	<b>Textiles</b>	<b>108.5</b>	<b>6,120</b>
			Carpet	24.5	1,380
<b>Glass</b>	<b>86.0</b>	<b>4,850</b>	Carpet Padding	6.6	370
Recyclable Glass Bottles & Jars	68.1	3,840	Clothing	49.1	2,770
Flat Glass	10.1	570	Other Textiles	28.4	1,600
Other Glass	7.8	440			
			<b>Household Hazardous Waste</b>	<b>26.8</b>	<b>1,510</b>
<b>Metal</b>	<b>123.2</b>	<b>6,950</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>601.7</b>	<b>33,940</b>
Aluminum Beverage Containers	15.4	870			
Other Aluminum	8.7	490			
Ferrous Containers (Tin Cans)	22.9	1,290	<b>Total MSW (tons)</b>		<b>151,700</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.37</b>

2014 population

112,812

Kendall County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>539.8</b>	<b>32,510</b>	<b>Metal</b>		
Newsprint	64.1	3,860	Other Ferrous	51.3	3,090
High Grade Office Paper	50.3	3,030	Other Non-Ferrous	9.1	550
Magazines/Catalogs	28.9	1,740	Other Metal	15.9	960
Uncoated OCC/Kraft	203.1	12,230			
Boxboard	54.6	3,290	<b>Organics</b>	<b>498.4</b>	<b>30,020</b>
Mixed Paper - Recyclable	53.3	3,210	Yard Waste - Compostable	117.4	7,070
Compostable Paper	73.1	4,400	Yard Waste - Woody	23.2	1,400
Other Paper	12.5	750	Food Scraps	233.6	14,070
			Bottom Fines & Dirt	45.2	2,720
<b>Beverage Containers</b>	<b>1.8</b>	<b>110</b>	Diapers	37.0	2,230
Milk & Juice Cartons/Boxes - Coated	1.8	110	Other Organic	42.0	2,530
<b>Plastic</b>	<b>319.8</b>	<b>19,260</b>	<b>Inorganics</b>	<b>175.0</b>	<b>10,540</b>
#1 PET Bottles/Jars	7.3	440	Televisions	5.0	300
#1 Other PET Containers	2.0	120	Computer Monitors	3.2	190
#2 HDPE Bottles/Jars - Clear	3.7	220	Computer Equipment/Peripherals	7.1	430
#2 HDPE Bottles/Jars - Color	3.5	210	Electronic Equipment	14.4	870
#2 Other HDPE Containers	0.2	10	White Goods - Refrigerated	10.3	620
#6 Exp. Polystyrene Packaging	18.3	1,100	White Goods - Not refrigerated	23.1	1,390
#3-#7 Other - All	13.1	790	Lead-acid Batteries	18.3	1,100
Other Rigid Plastic Products	57.9	3,490	Other Household Batteries	4.3	260
Grocery & Merchandise Bags	17.9	1,080	Tires	25.7	1,550
Trash Bags	33.5	2,020	Household Bulky Items	63.1	3,800
Commercial & Industrial Film	50.3	3,030	Fluorescent Lights/Ballasts	0.5	30
Other Film	58.8	3,540			
Other Plastic	53.3	3,210	<b>Textiles</b>	<b>140.6</b>	<b>8,470</b>
			Carpet	24.4	1,470
<b>Glass</b>	<b>86.0</b>	<b>5,180</b>	Carpet Padding	6.6	400
Recyclable Glass Bottles & Jars	68.2	4,110	Clothing	69.4	4,180
Flat Glass	10.0	600	Other Textiles	40.2	2,420
Other Glass	7.8	470			
			<b>Household Hazardous Waste</b>	<b>26.7</b>	<b>1,610</b>
<b>Metal</b>	<b>123.4</b>	<b>7,430</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>627.4</b>	<b>37,790</b>
Aluminum Beverage Containers	15.4	930			
Other Aluminum	8.6	520			
Ferrous Containers (Tin Cans)	22.9	1,380	<b>Total MSW (tons)</b>		<b>152,920</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.96</b>

2014 population

120,460

## Knox County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>668.5</b>	<b>17,640</b>	<b>Metal</b>		
Newsprint	50.0	1,320	Other Ferrous	51.2	1,350
High Grade Office Paper	40.6	1,070	Other Non-Ferrous	9.1	240
Magazines/Catalogs	31.1	820	Other Metal	15.9	420
Uncoated OCC/Kraft	353.2	9,320			
Boxboard	54.6	1,440	<b>Organics</b>	<b>849.7</b>	<b>22,420</b>
Mixed Paper - Recyclable	53.4	1,410	Yard Waste - Compostable	117.5	3,100
Compostable Paper	73.1	1,930	Yard Waste - Woody	23.1	610
Other Paper	12.5	330	Food Scraps	584.8	15,430
			Bottom Fines & Dirt	45.1	1,190
<b>Beverage Containers</b>	<b>15.2</b>	<b>400</b>	Diapers	37.1	980
Milk & Juice Cartons/Boxes - Coated	15.2	400	Other Organic	42.1	1,110
<b>Plastic</b>	<b>383.2</b>	<b>10,110</b>	<b>Inorganics</b>	<b>174.3</b>	<b>4,600</b>
#1 PET Bottles/Jars	59.5	1,570	Televisions	4.9	130
#1 Other PET Containers	16.7	440	Computer Monitors	3.0	80
#2 HDPE Bottles/Jars - Clear	29.9	790	Computer Equipment/Peripherals	7.2	190
#2 HDPE Bottles/Jars - Color	27.7	730	Electronic Equipment	14.4	380
#2 Other HDPE Containers	1.9	50	White Goods - Refrigerated	10.2	270
#6 Exp. Polystyrene Packaging	18.6	490	White Goods - Not refrigerated	23.1	610
#3-#7 Other - All	13.3	350	Lead-acid Batteries	18.2	480
Other Rigid Plastic Products	58.0	1,530	Other Household Batteries	4.2	110
Grocery & Merchandise Bags	10.2	270	Tires	25.8	680
Trash Bags	33.4	880	Household Bulky Items	62.9	1,660
Commercial & Industrial Film	28.8	760	Fluorescent Lights/Ballasts	0.4	10
Other Film	58.7	1,550			
Other Plastic	26.5	700	<b>Textiles</b>	<b>94.0</b>	<b>2,480</b>
			Carpet	24.6	650
<b>Glass</b>	<b>85.6</b>	<b>2,260</b>	Carpet Padding	6.4	170
Recyclable Glass Bottles & Jars	67.8	1,790	Clothing	39.8	1,050
Flat Glass	9.9	260	Other Textiles	23.1	610
Other Glass	8.0	210			
			<b>Household Hazardous Waste</b>	<b>27.3</b>	<b>720</b>
<b>Metal</b>	<b>123.2</b>	<b>3,250</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>459.7</b>	<b>12,130</b>
Aluminum Beverage Containers	15.5	410			
Other Aluminum	8.7	230			
Ferrous Containers (Tin Cans)	22.7	600	<b>Total MSW (tons)</b>		<b>76,010</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.89</b>

2014 population

52,773

## Lake County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>802.0</b>	<b>283,220</b>	<b>Metal</b>		
Newsprint	103.5	36,560	Other Ferrous	51.2	18,090
High Grade Office Paper	51.3	18,100	Other Non-Ferrous	9.1	3,200
Magazines/Catalogs	32.4	11,460	Other Metal	15.9	5,610
Uncoated OCC/Kraft	421.5	148,850			
Boxboard	54.6	19,270	<b>Organics</b>	<b>645.9</b>	<b>228,110</b>
Mixed Paper - Recyclable	53.2	18,800	Yard Waste - Compostable	117.4	41,470
Compostable Paper	73.1	25,800	Yard Waste - Woody	23.2	8,200
Other Paper	12.4	4,380	Food Scraps	381.0	134,540
			Bottom Fines & Dirt	45.2	15,970
<b>Beverage Containers</b>	<b>7.4</b>	<b>2,600</b>	Diapers	37.1	13,090
Milk & Juice Cartons/Boxes - Coated	7.4	2,600	Other Organic	42.0	14,840
<b>Plastic</b>	<b>365.2</b>	<b>128,990</b>	<b>Inorganics</b>	<b>175.2</b>	<b>61,870</b>
#1 PET Bottles/Jars	29.2	10,300	Televisions	5.0	1,780
#1 Other PET Containers	8.2	2,890	Computer Monitors	3.2	1,120
#2 HDPE Bottles/Jars - Clear	14.7	5,200	Computer Equipment/Peripherals	7.1	2,510
#2 HDPE Bottles/Jars - Color	13.6	4,810	Electronic Equipment	14.4	5,100
#2 Other HDPE Containers	1.0	340	White Goods - Refrigerated	10.4	3,660
#6 Exp. Polystyrene Packaging	18.4	6,490	White Goods - Not refrigerated	23.1	8,170
#3-#7 Other - All	13.0	4,600	Lead-acid Batteries	18.2	6,440
Other Rigid Plastic Products	58.0	20,470	Other Household Batteries	4.3	1,530
Grocery & Merchandise Bags	18.5	6,550	Tires	25.8	9,120
Trash Bags	33.5	11,830	Household Bulky Items	63.1	22,280
Commercial & Industrial Film	52.1	18,400	Fluorescent Lights/Ballasts	0.5	160
Other Film	58.8	20,760			
Other Plastic	46.3	16,350	<b>Textiles</b>	<b>144.6</b>	<b>51,060</b>
			Carpet	24.5	8,640
<b>Glass</b>	<b>85.9</b>	<b>30,340</b>	Carpet Padding	6.6	2,340
Recyclable Glass Bottles & Jars	68.1	24,060	Clothing	71.9	25,380
Flat Glass	10.0	3,540	Other Textiles	41.6	14,700
Other Glass	7.8	2,740			
			<b>Household Hazardous Waste</b>	<b>26.8</b>	<b>9,480</b>
<b>Metal</b>	<b>123.1</b>	<b>43,460</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>668.1</b>	<b>235,960</b>
Aluminum Beverage Containers	15.4	5,430			
Other Aluminum	8.7	3,070			
Ferrous Containers (Tin Cans)	22.8	8,060	<b>Total MSW (tons)</b>		<b>1,075,090</b>
			<b>Total MSW (pounds/person/day)</b>		<b>8.34</b>

2014 population

706,327

## LaSalle County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>701.7</b>	<b>39,360</b>	<b>Metal</b>		
Newsprint	80.0	4,490	Other Ferrous	51.2	2,870
High Grade Office Paper	41.9	2,350	Other Non-Ferrous	9.1	510
Magazines/Catalogs	32.8	1,840	Other Metal	15.9	890
Uncoated OCC/Kraft	353.5	19,830			
Boxboard	54.6	3,060	<b>Organics</b>	<b>570.1</b>	<b>31,980</b>
Mixed Paper - Recyclable	53.3	2,990	Yard Waste - Compostable	117.5	6,590
Compostable Paper	73.1	4,100	Yard Waste - Woody	23.2	1,300
Other Paper	12.5	700	Food Scraps	305.0	17,110
			Bottom Fines & Dirt	45.3	2,540
<b>Beverage Containers</b>	<b>4.5</b>	<b>250</b>	Diapers	37.1	2,080
Milk & Juice Cartons/Boxes - Coated	4.5	250	Other Organic	42.1	2,360
<b>Plastic</b>	<b>300.2</b>	<b>16,840</b>	<b>Inorganics</b>	<b>175.2</b>	<b>9,830</b>
#1 PET Bottles/Jars	17.5	980	Televisions	5.0	280
#1 Other PET Containers	4.8	270	Computer Monitors	3.2	180
#2 HDPE Bottles/Jars - Clear	8.7	490	Computer Equipment/Peripherals	7.1	400
#2 HDPE Bottles/Jars - Color	8.2	460	Electronic Equipment	14.4	810
#2 Other HDPE Containers	0.5	30	White Goods - Refrigerated	10.3	580
#6 Exp. Polystyrene Packaging	18.4	1,030	White Goods - Not refrigerated	23.2	1,300
#3-#7 Other - All	13.0	730	Lead-acid Batteries	18.2	1,020
Other Rigid Plastic Products	57.9	3,250	Other Household Batteries	4.3	240
Grocery & Merchandise Bags	12.3	690	Tires	25.9	1,450
Trash Bags	33.5	1,880	Household Bulky Items	63.1	3,540
Commercial & Industrial Film	34.6	1,940	Fluorescent Lights/Ballasts	0.5	30
Other Film	58.8	3,300			
Other Plastic	31.9	1,790	<b>Textiles</b>	<b>106.3</b>	<b>5,960</b>
			Carpet	24.4	1,370
<b>Glass</b>	<b>85.9</b>	<b>4,820</b>	Carpet Padding	6.6	370
Recyclable Glass Bottles & Jars	68.1	3,820	Clothing	47.6	2,670
Flat Glass	10.0	560	Other Textiles	27.6	1,550
Other Glass	7.8	440			
			<b>Household Hazardous Waste</b>	<b>26.7</b>	<b>1,500</b>
<b>Metal</b>	<b>123.0</b>	<b>6,900</b>			
Aluminum Beverage Containers	15.3	860	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>470.1</b>	<b>26,370</b>
Other Aluminum	8.7	490			
Ferrous Containers (Tin Cans)	22.8	1,280	<b>Total MSW (tons)</b>		<b>143,810</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.02</b>

2014 population

112,183

## Lawrence County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>509.6</b>	<b>4,300</b>	<b>Metal</b>		
Newsprint	42.7	360	Other Ferrous	51.0	430
High Grade Office Paper	29.6	250	Other Non-Ferrous	9.5	80
Magazines/Catalogs	29.6	250	Other Metal	15.4	130
Uncoated OCC/Kraft	214.5	1,810			
Boxboard	54.5	460	<b>Organics</b>	<b>541.6</b>	<b>4,570</b>
Mixed Paper - Recyclable	53.3	450	Yard Waste - Compostable	117.3	990
Compostable Paper	73.5	620	Yard Waste - Woody	23.7	200
Other Paper	11.9	100	Food Scraps	277.3	2,340
			Bottom Fines & Dirt	45.0	380
<b>Beverage Containers</b>	<b>3.6</b>	<b>30</b>	Diapers	36.7	310
Milk & Juice Cartons/Boxes - Coated	3.6	30	Other Organic	41.5	350
<b>Plastic</b>	<b>280.9</b>	<b>2,370</b>	<b>Inorganics</b>	<b>175.4</b>	<b>1,480</b>
#1 PET Bottles/Jars	15.4	130	Televisions	4.7	40
#1 Other PET Containers	4.7	40	Computer Monitors	3.6	30
#2 HDPE Bottles/Jars - Clear	8.3	70	Computer Equipment/Peripherals	7.1	60
#2 HDPE Bottles/Jars - Color	7.1	60	Electronic Equipment	14.2	120
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	10.7	90
#6 Exp. Polystyrene Packaging	17.8	150	White Goods - Not refrigerated	23.7	200
#3-#7 Other - All	14.2	120	Lead-acid Batteries	17.8	150
Other Rigid Plastic Products	58.1	490	Other Household Batteries	4.7	40
Grocery & Merchandise Bags	9.5	80	Tires	26.1	220
Trash Bags	33.2	280	Household Bulky Items	62.8	530
Commercial & Industrial Film	27.3	230	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	59.3	500			
Other Plastic	26.1	220	<b>Textiles</b>	<b>92.4</b>	<b>780</b>
			Carpet	24.9	210
<b>Glass</b>	<b>86.5</b>	<b>730</b>	Carpet Padding	7.1	60
Recyclable Glass Bottles & Jars	68.7	580	Clothing	37.9	320
Flat Glass	9.5	80	Other Textiles	22.5	190
Other Glass	8.3	70			
			<b>Household Hazardous Waste</b>	<b>27.3</b>	<b>230</b>
<b>Metal</b>	<b>122.1</b>	<b>1,030</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>459.9</b>	<b>3,880</b>
Aluminum Beverage Containers	15.4	130			
Other Aluminum	8.3	70			
Ferrous Containers (Tin Cans)	22.5	190	<b>Total MSW (tons)</b>		<b>19,400</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.30</b>

2014 population

16,875

Lee County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>610.9</b>	<b>11,000</b>	<b>Metal</b>		
Newsprint	60.0	1,080	Other Ferrous	51.1	920
High Grade Office Paper	40.5	730	Other Non-Ferrous	8.9	160
Magazines/Catalogs	33.3	600	Other Metal	16.1	290
Uncoated OCC/Kraft	283.8	5,110			
Boxboard	54.4	980	<b>Organics</b>	<b>572.0</b>	<b>10,300</b>
Mixed Paper - Recyclable	53.3	960	Yard Waste - Compostable	117.2	2,110
Compostable Paper	73.3	1,320	Yard Waste - Woody	23.3	420
Other Paper	12.2	220	Food Scraps	307.1	5,530
			Bottom Fines & Dirt	45.0	810
<b>Beverage Containers</b>	<b>5.0</b>	<b>90</b>	Diapers	37.2	670
Milk & Juice Cartons/Boxes - Coated	5.0	90	Other Organic	42.2	760
<b>Plastic</b>	<b>307.1</b>	<b>5,530</b>	<b>Inorganics</b>	<b>176.0</b>	<b>3,170</b>
#1 PET Bottles/Jars	20.0	360	Televisions	5.0	90
#1 Other PET Containers	5.6	100	Computer Monitors	3.3	60
#2 HDPE Bottles/Jars - Clear	10.0	180	Computer Equipment/Peripherals	7.2	130
#2 HDPE Bottles/Jars - Color	9.4	170	Electronic Equipment	14.4	260
#2 Other HDPE Containers	0.6	10	White Goods - Refrigerated	10.6	190
#6 Exp. Polystyrene Packaging	18.3	330	White Goods - Not refrigerated	23.3	420
#3-#7 Other - All	12.8	230	Lead-acid Batteries	18.3	330
Other Rigid Plastic Products	57.8	1,040	Other Household Batteries	4.4	80
Grocery & Merchandise Bags	12.8	230	Tires	25.5	460
Trash Bags	33.3	600	Household Bulky Items	63.3	1,140
Commercial & Industrial Film	35.0	630	Fluorescent Lights/Ballasts	0.6	10
Other Film	58.9	1,060			
Other Plastic	32.8	590	<b>Textiles</b>	<b>107.7</b>	<b>1,940</b>
			Carpet	24.4	440
<b>Glass</b>	<b>86.1</b>	<b>1,550</b>	Carpet Padding	6.7	120
Recyclable Glass Bottles & Jars	68.3	1,230	Clothing	48.3	870
Flat Glass	10.0	180	Other Textiles	28.3	510
Other Glass	7.8	140			
			<b>Household Hazardous Waste</b>	<b>27.2</b>	<b>490</b>
<b>Metal</b>	<b>123.3</b>	<b>2,220</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>470.4</b>	<b>8,470</b>
Aluminum Beverage Containers	15.5	280			
Other Aluminum	8.9	160			
Ferrous Containers (Tin Cans)	22.8	410	<b>Total MSW (tons)</b>		<b>44,760</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.81</b>

## Livingston County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>637.3</b>	<b>12,350</b>	<b>Metal</b>		
Newsprint	87.2	1,690	Other Ferrous	51.1	990
High Grade Office Paper	50.6	980	Other Non-Ferrous	9.3	180
Magazines/Catalogs	31.0	600	Other Metal	16.0	310
Uncoated OCC/Kraft	275.0	5,330			
Boxboard	54.7	1,060	<b>Organics</b>	<b>566.6</b>	<b>10,980</b>
Mixed Paper - Recyclable	53.2	1,030	Yard Waste - Compostable	117.7	2,280
Compostable Paper	73.3	1,420	Yard Waste - Woody	23.2	450
Other Paper	12.4	240	Food Scraps	301.4	5,840
			Bottom Fines & Dirt	45.4	880
<b>Beverage Containers</b>	<b>5.2</b>	<b>100</b>	Diapers	37.2	720
Milk & Juice Cartons/Boxes - Coated	5.2	100	Other Organic	41.8	810
<b>Plastic</b>	<b>314.8</b>	<b>6,100</b>	<b>Inorganics</b>	<b>174.9</b>	<b>3,390</b>
#1 PET Bottles/Jars	19.6	380	Televisions	5.2	100
#1 Other PET Containers	5.7	110	Computer Monitors	3.1	60
#2 HDPE Bottles/Jars - Clear	9.8	190	Computer Equipment/Peripherals	7.2	140
#2 HDPE Bottles/Jars - Color	9.3	180	Electronic Equipment	14.4	280
#2 Other HDPE Containers	0.5	10	White Goods - Refrigerated	10.3	200
#6 Exp. Polystyrene Packaging	18.6	360	White Goods - Not refrigerated	23.2	450
#3-#7 Other - All	13.4	260	Lead-acid Batteries	18.1	350
Other Rigid Plastic Products	57.8	1,120	Other Household Batteries	4.1	80
Grocery & Merchandise Bags	13.9	270	Tires	25.8	500
Trash Bags	33.5	650	Household Bulky Items	63.0	1,220
Commercial & Industrial Film	38.7	750	Fluorescent Lights/Ballasts	0.5	10
Other Film	58.8	1,140			
Other Plastic	35.1	680	<b>Textiles</b>	<b>115.1</b>	<b>2,230</b>
			Carpet	24.3	470
<b>Glass</b>	<b>85.7</b>	<b>1,660</b>	Carpet Padding	6.7	130
Recyclable Glass Bottles & Jars	68.1	1,320	Clothing	53.2	1,030
Flat Glass	9.8	190	Other Textiles	31.0	600
Other Glass	7.7	150			
			<b>Household Hazardous Waste</b>	<b>26.3</b>	<b>510</b>
<b>Metal</b>	<b>123.3</b>	<b>2,390</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>475.8</b>	<b>9,220</b>
Aluminum Beverage Containers	15.5	300			
Other Aluminum	8.8	170			
Ferrous Containers (Tin Cans)	22.7	440	<b>Total MSW (tons)</b>		<b>48,930</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.92</b>

2014 population

38,757

## Logan County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>557.0</b>	<b>8,360</b>	<b>Metal</b>		
Newsprint	41.3	620	Other Ferrous	51.3	770
High Grade Office Paper	32.6	490	Other Non-Ferrous	9.3	140
Magazines/Catalogs	32.0	480	Other Metal	16.0	240
Uncoated OCC/Kraft	257.2	3,860			
Boxboard	54.6	820	<b>Organics</b>	<b>559.0</b>	<b>8,390</b>
Mixed Paper - Recyclable	53.3	800	Yard Waste - Compostable	117.3	1,760
Compostable Paper	73.3	1,100	Yard Waste - Woody	23.3	350
Other Paper	12.7	190	Food Scraps	293.8	4,410
			Bottom Fines & Dirt	45.3	680
<b>Beverage Containers</b>	<b>4.7</b>	<b>70</b>	Diapers	37.3	560
Milk & Juice Cartons/Boxes - Coated	4.7	70	Other Organic	42.0	630
<b>Plastic</b>	<b>296.5</b>	<b>4,450</b>	<b>Inorganics</b>	<b>177.2</b>	<b>2,660</b>
#1 PET Bottles/Jars	17.3	260	Televisions	5.3	80
#1 Other PET Containers	4.7	70	Computer Monitors	3.3	50
#2 HDPE Bottles/Jars - Clear	8.7	130	Computer Equipment/Peripherals	7.3	110
#2 HDPE Bottles/Jars - Color	8.0	120	Electronic Equipment	14.7	220
#2 Other HDPE Containers	0.7	10	White Goods - Refrigerated	10.7	160
#6 Exp. Polystyrene Packaging	18.7	280	White Goods - Not refrigerated	23.3	350
#3-#7 Other - All	12.7	190	Lead-acid Batteries	18.0	270
Other Rigid Plastic Products	58.0	870	Other Household Batteries	4.7	70
Grocery & Merchandise Bags	12.0	180	Tires	26.0	390
Trash Bags	33.3	500	Household Bulky Items	63.3	950
Commercial & Industrial Film	33.3	500	Fluorescent Lights/Ballasts	0.7	10
Other Film	58.6	880			
Other Plastic	30.6	460	<b>Textiles</b>	<b>103.3</b>	<b>1,550</b>
			Carpet	24.7	370
<b>Glass</b>	<b>86.6</b>	<b>1,300</b>	Carpet Padding	6.7	100
Recyclable Glass Bottles & Jars	68.6	1,030	Clothing	45.3	680
Flat Glass	10.0	150	Other Textiles	26.6	400
Other Glass	8.0	120			
			<b>Household Hazardous Waste</b>	<b>26.6</b>	<b>400</b>
<b>Metal</b>	<b>123.3</b>	<b>1,850</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>468.4</b>	<b>7,030</b>
Aluminum Beverage Containers	15.3	230			
Other Aluminum	8.7	130			
Ferrous Containers (Tin Cans)	22.7	340	<b>Total MSW (tons)</b>		<b>36,060</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.58</b>

2014 population

30,020

Macon County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>563.7</b>	<b>31,060</b>	<b>Metal</b>		
Newsprint	64.8	3,570	Other Ferrous	51.2	2,820
High Grade Office Paper	48.5	2,670	Other Non-Ferrous	9.1	500
Magazines/Catalogs	30.9	1,700	Other Metal	16.0	880
Uncoated OCC/Kraft	226.5	12,480			
Boxboard	54.6	3,010	<b>Organics</b>	<b>577.0</b>	<b>31,790</b>
Mixed Paper - Recyclable	53.2	2,930	Yard Waste - Compostable	117.4	6,470
Compostable Paper	73.0	4,020	Yard Waste - Woody	23.2	1,280
Other Paper	12.3	680	Food Scraps	312.0	17,190
			Bottom Fines & Dirt	45.2	2,490
<b>Beverage Containers</b>	<b>5.1</b>	<b>280</b>	Diapers	37.0	2,040
Milk & Juice Cartons/Boxes - Coated	5.1	280	Other Organic	42.1	2,320
<b>Plastic</b>	<b>298.9</b>	<b>16,470</b>	<b>Inorganics</b>	<b>175.1</b>	<b>9,650</b>
#1 PET Bottles/Jars	20.1	1,110	Televisions	5.1	280
#1 Other PET Containers	5.6	310	Computer Monitors	3.1	170
#2 HDPE Bottles/Jars - Clear	10.2	560	Computer Equipment/Peripherals	7.1	390
#2 HDPE Bottles/Jars - Color	9.4	520	Electronic Equipment	14.5	800
#2 Other HDPE Containers	0.7	40	White Goods - Refrigerated	10.3	570
#6 Exp. Polystyrene Packaging	18.3	1,010	White Goods - Not refrigerated	23.1	1,270
#3-#7 Other - All	13.1	720	Lead-acid Batteries	18.2	1,000
Other Rigid Plastic Products	57.9	3,190	Other Household Batteries	4.4	240
Grocery & Merchandise Bags	11.1	610	Tires	25.8	1,420
Trash Bags	33.6	1,850	Household Bulky Items	63.2	3,480
Commercial & Industrial Film	31.2	1,720	Fluorescent Lights/Ballasts	0.5	30
Other Film	58.8	3,240			
Other Plastic	28.9	1,590	<b>Textiles</b>	<b>99.3</b>	<b>5,470</b>
			Carpet	24.5	1,350
<b>Glass</b>	<b>85.9</b>	<b>4,730</b>	Carpet Padding	6.5	360
Recyclable Glass Bottles & Jars	68.1	3,750	Clothing	43.2	2,380
Flat Glass	10.0	550	Other Textiles	25.0	1,380
Other Glass	7.8	430			
			<b>Household Hazardous Waste</b>	<b>26.9</b>	<b>1,480</b>
<b>Metal</b>	<b>123.2</b>	<b>6,790</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>594.4</b>	<b>32,750</b>
Aluminum Beverage Containers	15.4	850			
Other Aluminum	8.7	480			
Ferrous Containers (Tin Cans)	22.9	1,260	<b>Total MSW (tons)</b>		<b>140,470</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.99</b>

## Macoupin County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>410.1</b>	<b>9,740</b>	<b>Metal</b>		
Newsprint	51.8	1,230	Other Ferrous	51.4	1,220
High Grade Office Paper	24.0	570	Other Non-Ferrous	9.3	220
Magazines/Catalogs	32.4	770	Other Metal	16.0	380
Uncoated OCC/Kraft	108.6	2,580			
Boxboard	54.7	1,300	<b>Organics</b>	<b>567.5</b>	<b>13,480</b>
Mixed Paper - Recyclable	53.0	1,260	Yard Waste - Compostable	117.5	2,790
Compostable Paper	73.3	1,740	Yard Waste - Woody	23.2	550
Other Paper	12.2	290	Food Scraps	302.7	7,190
			Bottom Fines & Dirt	45.0	1,070
<b>Beverage Containers</b>	<b>5.1</b>	<b>120</b>	Diapers	37.1	880
Milk & Juice Cartons/Boxes - Coated	5.1	120	Other Organic	42.1	1,000
<b>Plastic</b>	<b>303.1</b>	<b>7,200</b>	<b>Inorganics</b>	<b>175.1</b>	<b>4,160</b>
#1 PET Bottles/Jars	19.4	460	Televisions	5.1	120
#1 Other PET Containers	5.5	130	Computer Monitors	3.4	80
#2 HDPE Bottles/Jars - Clear	9.7	230	Computer Equipment/Peripherals	7.2	170
#2 HDPE Bottles/Jars - Color	9.3	220	Electronic Equipment	14.3	340
#2 Other HDPE Containers	0.8	20	White Goods - Refrigerated	10.5	250
#6 Exp. Polystyrene Packaging	18.1	430	White Goods - Not refrigerated	23.2	550
#3-#7 Other - All	12.6	300	Lead-acid Batteries	18.1	430
Other Rigid Plastic Products	58.1	1,380	Other Household Batteries	4.2	100
Grocery & Merchandise Bags	12.2	290	Tires	25.7	610
Trash Bags	33.7	800	Household Bulky Items	63.2	1,500
Commercial & Industrial Film	33.7	800	Fluorescent Lights/Ballasts	0.4	10
Other Film	58.9	1,400			
Other Plastic	31.2	740	<b>Textiles</b>	<b>104.8</b>	<b>2,490</b>
			Carpet	24.4	580
<b>Glass</b>	<b>85.9</b>	<b>2,040</b>	Carpet Padding	6.7	160
Recyclable Glass Bottles & Jars	68.2	1,620	Clothing	46.7	1,110
Flat Glass	10.1	240	Other Textiles	26.9	640
Other Glass	7.6	180			
			<b>Household Hazardous Waste</b>	<b>26.5</b>	<b>630</b>
<b>Metal</b>	<b>123.8</b>	<b>2,940</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>599.1</b>	<b>14,230</b>
Aluminum Beverage Containers	15.6	370			
Other Aluminum	8.8	210			
Ferrous Containers (Tin Cans)	22.7	540	<b>Total MSW (tons)</b>		<b>57,030</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.58</b>

2014 population

47,503

## Madison County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>673.0</b>	<b>89,950</b>	<b>Metal</b>		
Newsprint	70.6	9,440	Other Ferrous	51.3	6,850
High Grade Office Paper	50.4	6,730	Other Non-Ferrous	9.1	1,210
Magazines/Catalogs	31.5	4,210	Other Metal	15.9	2,120
Uncoated OCC/Kraft	327.3	43,740			
Boxboard	54.5	7,290	<b>Organics</b>	<b>582.6</b>	<b>77,870</b>
Mixed Paper - Recyclable	53.3	7,120	Yard Waste - Compostable	117.4	15,690
Compostable Paper	73.0	9,760	Yard Waste - Woody	23.2	3,100
Other Paper	12.4	1,660	Food Scraps	317.7	42,460
			Bottom Fines & Dirt	45.3	6,050
<b>Beverage Containers</b>	<b>5.2</b>	<b>700</b>	Diapers	37.0	4,950
Milk & Juice Cartons/Boxes - Coated	5.2	700	Other Organic	42.0	5,620
<b>Plastic</b>	<b>311.4</b>	<b>41,620</b>	<b>Inorganics</b>	<b>175.2</b>	<b>23,410</b>
#1 PET Bottles/Jars	20.6	2,760	Televisions	5.0	670
#1 Other PET Containers	5.8	770	Computer Monitors	3.1	420
#2 HDPE Bottles/Jars - Clear	10.5	1,400	Computer Equipment/Peripherals	7.1	950
#2 HDPE Bottles/Jars - Color	9.7	1,290	Electronic Equipment	14.4	1,930
#2 Other HDPE Containers	0.7	90	White Goods - Refrigerated	10.4	1,390
#6 Exp. Polystyrene Packaging	18.3	2,450	White Goods - Not refrigerated	23.1	3,090
#3-#7 Other - All	13.0	1,740	Lead-acid Batteries	18.3	2,440
Other Rigid Plastic Products	58.0	7,750	Other Household Batteries	4.3	580
Grocery & Merchandise Bags	12.9	1,730	Tires	25.8	3,450
Trash Bags	33.5	4,480	Household Bulky Items	63.1	8,430
Commercial & Industrial Film	36.3	4,850	Fluorescent Lights/Ballasts	0.4	60
Other Film	58.8	7,860			
Other Plastic	33.3	4,450	<b>Textiles</b>	<b>110.1</b>	<b>14,710</b>
			Carpet	24.5	3,270
<b>Glass</b>	<b>86.0</b>	<b>11,490</b>	Carpet Padding	6.6	880
Recyclable Glass Bottles & Jars	68.2	9,110	Clothing	50.1	6,690
Flat Glass	10.0	1,340	Other Textiles	29.0	3,870
Other Glass	7.8	1,040			
			<b>Household Hazardous Waste</b>	<b>26.9</b>	<b>3,590</b>
<b>Metal</b>	<b>123.1</b>	<b>16,450</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>603.3</b>	<b>80,630</b>
Aluminum Beverage Containers	15.4	2,060			
Other Aluminum	8.7	1,160			
Ferrous Containers (Tin Cans)	22.8	3,050	<b>Total MSW (tons)</b>		<b>360,420</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.39</b>

2014 population

267,313

Marion County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>595.2</b>	<b>11,640</b>	<b>Metal</b>		
Newsprint	50.6	990	Other Ferrous	51.1	1,000
High Grade Office Paper	36.3	710	Other Non-Ferrous	9.2	180
Magazines/Catalogs	33.8	660	Other Metal	15.9	310
Uncoated OCC/Kraft	281.3	5,500			
Boxboard	54.7	1,070	<b>Organics</b>	<b>552.3</b>	<b>10,800</b>
Mixed Paper - Recyclable	53.2	1,040	Yard Waste - Compostable	117.6	2,300
Compostable Paper	73.1	1,430	Yard Waste - Woody	23.0	450
Other Paper	12.3	240	Food Scraps	287.9	5,630
			Bottom Fines & Dirt	45.0	880
<b>Beverage Containers</b>	<b>4.1</b>	<b>80</b>	Diapers	36.8	720
Milk & Juice Cartons/Boxes - Coated	4.1	80	Other Organic	41.9	820
<b>Plastic</b>	<b>284.8</b>	<b>5,570</b>	<b>Inorganics</b>	<b>174.4</b>	<b>3,410</b>
#1 PET Bottles/Jars	16.9	330	Televisions	5.1	100
#1 Other PET Containers	4.6	90	Computer Monitors	3.1	60
#2 HDPE Bottles/Jars - Clear	8.2	160	Computer Equipment/Peripherals	7.2	140
#2 HDPE Bottles/Jars - Color	7.7	150	Electronic Equipment	14.3	280
#2 Other HDPE Containers	0.5	10	White Goods - Refrigerated	10.2	200
#6 Exp. Polystyrene Packaging	18.4	360	White Goods - Not refrigerated	23.0	450
#3-#7 Other - All	13.3	260	Lead-acid Batteries	18.4	360
Other Rigid Plastic Products	57.8	1,130	Other Household Batteries	4.1	80
Grocery & Merchandise Bags	10.2	200	Tires	25.6	500
Trash Bags	33.2	650	Household Bulky Items	62.9	1,230
Commercial & Industrial Film	28.6	560	Fluorescent Lights/Ballasts	0.5	10
Other Film	58.8	1,150			
Other Plastic	26.6	520	<b>Textiles</b>	<b>94.1</b>	<b>1,840</b>
			Carpet	24.5	480
<b>Glass</b>	<b>85.9</b>	<b>1,680</b>	Carpet Padding	6.6	130
Recyclable Glass Bottles & Jars	68.0	1,330	Clothing	39.9	780
Flat Glass	10.2	200	Other Textiles	23.0	450
Other Glass	7.7	150			
			<b>Household Hazardous Waste</b>	<b>26.6</b>	<b>520</b>
<b>Metal</b>	<b>123.2</b>	<b>2,410</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>459.7</b>	<b>8,990</b>
Aluminum Beverage Containers	15.3	300			
Other Aluminum	8.7	170			
Ferrous Containers (Tin Cans)	23.0	450	<b>Total MSW (tons)</b>		<b>46,940</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.58</b>

2014 population

39,110

## Marshall County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>521.6</b>	<b>3,260</b>	<b>Metal</b>		
Newsprint	52.8	330	Other Ferrous	51.2	320
High Grade Office Paper	49.6	310	Other Non-Ferrous	9.6	60
Magazines/Catalogs	33.6	210	Other Metal	16.0	100
Uncoated OCC/Kraft	192.0	1,200			
Boxboard	54.4	340	<b>Organics</b>	<b>579.2</b>	<b>3,620</b>
Mixed Paper - Recyclable	52.8	330	Yard Waste - Compostable	116.8	730
Compostable Paper	73.6	460	Yard Waste - Woody	24.0	150
Other Paper	12.8	80	Food Scraps	315.2	1,970
			Bottom Fines & Dirt	44.8	280
<b>Beverage Containers</b>	<b>4.8</b>	<b>30</b>	Diapers	36.8	230
Milk & Juice Cartons/Boxes - Coated	4.8	30	Other Organic	41.6	260
<b>Plastic</b>	<b>316.8</b>	<b>1,980</b>	<b>Inorganics</b>	<b>171.2</b>	<b>1,070</b>
#1 PET Bottles/Jars	22.4	140	Televisions	4.8	30
#1 Other PET Containers	6.4	40	Computer Monitors	3.2	20
#2 HDPE Bottles/Jars - Clear	11.2	70	Computer Equipment/Peripherals	6.4	40
#2 HDPE Bottles/Jars - Color	9.6	60	Electronic Equipment	14.4	90
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	9.6	60
#6 Exp. Polystyrene Packaging	19.2	120	White Goods - Not refrigerated	22.4	140
#3-#7 Other - All	12.8	80	Lead-acid Batteries	17.6	110
Other Rigid Plastic Products	57.6	360	Other Household Batteries	4.8	30
Grocery & Merchandise Bags	12.8	80	Tires	25.6	160
Trash Bags	33.6	210	Household Bulky Items	62.4	390
Commercial & Industrial Film	36.8	230	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	59.2	370			
Other Plastic	35.2	220	<b>Textiles</b>	<b>110.4</b>	<b>690</b>
			Carpet	24.0	150
<b>Glass</b>	<b>84.8</b>	<b>530</b>	Carpet Padding	6.4	40
Recyclable Glass Bottles & Jars	67.2	420	Clothing	51.2	320
Flat Glass	9.6	60	Other Textiles	28.8	180
Other Glass	8.0	50			
			<b>Household Hazardous Waste</b>	<b>25.6</b>	<b>160</b>
<b>Metal</b>	<b>123.2</b>	<b>770</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>603.2</b>	<b>3,770</b>
Aluminum Beverage Containers	16.0	100			
Other Aluminum	8.0	50			
Ferrous Containers (Tin Cans)	22.4	140	<b>Total MSW (tons)</b>		<b>15,880</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.96</b>

2014 population

12,500

## Mason County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>471.1</b>	<b>3,400</b>	<b>Metal</b>		
Newsprint	47.1	340	Other Ferrous	51.3	370
High Grade Office Paper	23.6	170	Other Non-Ferrous	9.7	70
Magazines/Catalogs	33.3	240	Other Metal	15.2	110
Uncoated OCC/Kraft	174.6	1,260			
Boxboard	54.0	390	<b>Organics</b>	<b>576.5</b>	<b>4,160</b>
Mixed Paper - Recyclable	52.7	380	Yard Waste - Compostable	117.8	850
Compostable Paper	73.4	530	Yard Waste - Woody	23.6	170
Other Paper	12.5	90	Food Scraps	310.4	2,240
			Bottom Fines & Dirt	45.7	330
<b>Beverage Containers</b>	<b>5.5</b>	<b>40</b>	Diapers	37.4	270
Milk & Juice Cartons/Boxes - Coated	5.5	40	Other Organic	41.6	300
<b>Plastic</b>	<b>299.3</b>	<b>2,160</b>	<b>Inorganics</b>	<b>174.6</b>	<b>1,260</b>
#1 PET Bottles/Jars	20.8	150	Televisions	5.5	40
#1 Other PET Containers	5.5	40	Computer Monitors	2.8	20
#2 HDPE Bottles/Jars - Clear	11.1	80	Computer Equipment/Peripherals	6.9	50
#2 HDPE Bottles/Jars - Color	9.7	70	Electronic Equipment	13.9	100
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	9.7	70
#6 Exp. Polystyrene Packaging	18.0	130	White Goods - Not refrigerated	23.6	170
#3-#7 Other - All	12.5	90	Lead-acid Batteries	18.0	130
Other Rigid Plastic Products	58.2	420	Other Household Batteries	4.2	30
Grocery & Merchandise Bags	11.1	80	Tires	26.3	190
Trash Bags	33.3	240	Household Bulky Items	63.7	460
Commercial & Industrial Film	31.9	230	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	58.2	420			
Other Plastic	29.1	210	<b>Textiles</b>	<b>99.8</b>	<b>720</b>
			Carpet	24.9	180
<b>Glass</b>	<b>87.3</b>	<b>630</b>	Carpet Padding	6.9	50
Recyclable Glass Bottles & Jars	69.3	500	Clothing	43.0	310
Flat Glass	9.7	70	Other Textiles	24.9	180
Other Glass	8.3	60			
			<b>Household Hazardous Waste</b>	<b>24.9</b>	<b>180</b>
<b>Metal</b>	<b>121.9</b>	<b>880</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>464.2</b>	<b>3,350</b>
Aluminum Beverage Containers	15.2	110			
Other Aluminum	8.3	60			
Ferrous Containers (Tin Cans)	22.2	160	<b>Total MSW (tons)</b>		<b>16,780</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.37</b>

2014 population

14,433

## Massac County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>450.1</b>	<b>3,480</b>	<b>Metal</b>		
Newsprint	24.6	190	Other Ferrous	51.7	400
High Grade Office Paper	24.6	190	Other Non-Ferrous	9.1	70
Magazines/Catalogs	29.7	230	Other Metal	15.5	120
Uncoated OCC/Kraft	178.5	1,380			
Boxboard	54.3	420	<b>Organics</b>	<b>562.6</b>	<b>4,350</b>
Mixed Paper - Recyclable	53.0	410	Yard Waste - Compostable	117.7	910
Compostable Paper	72.4	560	Yard Waste - Woody	23.3	180
Other Paper	12.9	100	Food Scraps	297.5	2,300
			Bottom Fines & Dirt	45.3	350
<b>Beverage Containers</b>	<b>5.2</b>	<b>40</b>	Diapers	37.5	290
Milk & Juice Cartons/Boxes - Coated	5.2	40	Other Organic	41.4	320
<b>Plastic</b>	<b>288.4</b>	<b>2,230</b>	<b>Inorganics</b>	<b>173.3</b>	<b>1,340</b>
#1 PET Bottles/Jars	18.1	140	Televisions	5.2	40
#1 Other PET Containers	5.2	40	Computer Monitors	2.6	20
#2 HDPE Bottles/Jars - Clear	9.1	70	Computer Equipment/Peripherals	6.5	50
#2 HDPE Bottles/Jars - Color	9.1	70	Electronic Equipment	14.2	110
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	10.3	80
#6 Exp. Polystyrene Packaging	18.1	140	White Goods - Not refrigerated	23.3	180
#3-#7 Other - All	12.9	100	Lead-acid Batteries	18.1	140
Other Rigid Plastic Products	58.2	450	Other Household Batteries	3.9	30
Grocery & Merchandise Bags	10.3	80	Tires	25.9	200
Trash Bags	33.6	260	Household Bulky Items	63.4	490
Commercial & Industrial Film	28.5	220	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	58.2	450			
Other Plastic	27.2	210	<b>Textiles</b>	<b>93.1</b>	<b>720</b>
			Carpet	24.6	190
<b>Glass</b>	<b>86.7</b>	<b>670</b>	Carpet Padding	6.5	50
Recyclable Glass Bottles & Jars	68.6	530	Clothing	38.8	300
Flat Glass	10.3	80	Other Textiles	23.3	180
Other Glass	7.8	60			
			<b>Household Hazardous Waste</b>	<b>27.2</b>	<b>210</b>
<b>Metal</b>	<b>124.2</b>	<b>960</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>459.2</b>	<b>3,550</b>
Aluminum Beverage Containers	15.5	120			
Other Aluminum	9.1	70			
Ferrous Containers (Tin Cans)	23.3	180	<b>Total MSW (tons)</b>		<b>17,550</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.22</b>

2014 population

15,463

McDonough County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>593.2</b>	<b>9,540</b>	<b>Metal</b>		
Newsprint	76.5	1,230	Other Ferrous	51.0	820
High Grade Office Paper	39.2	630	Other Non-Ferrous	9.3	150
Magazines/Catalogs	31.1	500	Other Metal	16.2	260
Uncoated OCC/Kraft	253.1	4,070			
Boxboard	54.7	880	<b>Organics</b>	<b>550.9</b>	<b>8,860</b>
Mixed Paper - Recyclable	53.5	860	Yard Waste - Compostable	117.5	1,890
Compostable Paper	72.7	1,170	Yard Waste - Woody	23.0	370
Other Paper	12.4	200	Food Scraps	285.4	4,590
			Bottom Fines & Dirt	45.4	730
<b>Beverage Containers</b>	<b>3.7</b>	<b>60</b>	Diapers	37.3	600
Milk & Juice Cartons/Boxes - Coated	3.7	60	Other Organic	42.3	680
<b>Plastic</b>	<b>282.9</b>	<b>4,550</b>	<b>Inorganics</b>	<b>174.7</b>	<b>2,810</b>
#1 PET Bottles/Jars	15.5	250	Televisions	5.0	80
#1 Other PET Containers	4.4	70	Computer Monitors	3.1	50
#2 HDPE Bottles/Jars - Clear	8.1	130	Computer Equipment/Peripherals	6.8	110
#2 HDPE Bottles/Jars - Color	7.5	120	Electronic Equipment	14.3	230
#2 Other HDPE Containers	0.6	10	White Goods - Refrigerated	10.6	170
#6 Exp. Polystyrene Packaging	18.0	290	White Goods - Not refrigerated	23.0	370
#3-#7 Other - All	13.7	220	Lead-acid Batteries	18.0	290
Other Rigid Plastic Products	57.8	930	Other Household Batteries	4.4	70
Grocery & Merchandise Bags	9.9	160	Tires	26.1	420
Trash Bags	33.6	540	Household Bulky Items	62.8	1,010
Commercial & Industrial Film	28.6	460	Fluorescent Lights/Ballasts	0.6	10
Other Film	59.1	950			
Other Plastic	26.1	420	<b>Textiles</b>	<b>92.6</b>	<b>1,490</b>
			Carpet	24.2	390
<b>Glass</b>	<b>85.8</b>	<b>1,380</b>	Carpet Padding	6.8	110
Recyclable Glass Bottles & Jars	67.8	1,090	Clothing	39.2	630
Flat Glass	9.9	160	Other Textiles	22.4	360
Other Glass	8.1	130			
			<b>Household Hazardous Waste</b>	<b>26.7</b>	<b>430</b>
<b>Metal</b>	<b>123.7</b>	<b>1,990</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>460.1</b>	<b>7,400</b>
Aluminum Beverage Containers	15.5	250			
Other Aluminum	8.7	140			
Ferrous Containers (Tin Cans)	23.0	370	<b>Total MSW (tons)</b>		<b>38,510</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.56</b>

## McHenry County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>676.5</b>	<b>104,990</b>	<b>Metal</b>		
Newsprint	114.1	17,710	Other Ferrous	51.2	7,950
High Grade Office Paper	50.3	7,810	Other Non-Ferrous	9.1	1,410
Magazines/Catalogs	32.8	5,090	Other Metal	15.9	2,470
Uncoated OCC/Kraft	286.0	44,390			
Boxboard	54.6	8,470	<b>Organics</b>	<b>620.6</b>	<b>96,310</b>
Mixed Paper - Recyclable	53.2	8,260	Yard Waste - Compostable	117.4	18,220
Compostable Paper	73.1	11,340	Yard Waste - Woody	23.2	3,600
Other Paper	12.4	1,920	Food Scraps	355.7	55,200
			Bottom Fines & Dirt	45.2	7,020
<b>Beverage Containers</b>	<b>6.4</b>	<b>1,000</b>	Diapers	37.0	5,750
Milk & Juice Cartons/Boxes - Coated	6.4	1,000	Other Organic	42.0	6,520
<b>Plastic</b>	<b>354.5</b>	<b>55,010</b>	<b>Inorganics</b>	<b>175.1</b>	<b>27,180</b>
#1 PET Bottles/Jars	25.5	3,960	Televisions	5.0	780
#1 Other PET Containers	7.2	1,110	Computer Monitors	3.2	490
#2 HDPE Bottles/Jars - Clear	12.9	2,000	Computer Equipment/Peripherals	7.1	1,100
#2 HDPE Bottles/Jars - Color	11.9	1,850	Electronic Equipment	14.4	2,240
#2 Other HDPE Containers	0.8	130	White Goods - Refrigerated	10.4	1,610
#6 Exp. Polystyrene Packaging	18.4	2,850	White Goods - Not refrigerated	23.1	3,590
#3-#7 Other - All	13.0	2,020	Lead-acid Batteries	18.2	2,830
Other Rigid Plastic Products	58.0	9,000	Other Household Batteries	4.3	670
Grocery & Merchandise Bags	17.3	2,680	Tires	25.8	4,010
Trash Bags	33.5	5,200	Household Bulky Items	63.1	9,790
Commercial & Industrial Film	48.5	7,530	Fluorescent Lights/Ballasts	0.5	70
Other Film	58.8	9,120			
Other Plastic	48.7	7,560	<b>Textiles</b>	<b>136.7</b>	<b>21,220</b>
			Carpet	24.5	3,800
<b>Glass</b>	<b>86.0</b>	<b>13,350</b>	Carpet Padding	6.6	1,030
Recyclable Glass Bottles & Jars	68.2	10,580	Clothing	66.9	10,380
Flat Glass	10.1	1,560	Other Textiles	38.7	6,010
Other Glass	7.8	1,210			
			<b>Household Hazardous Waste</b>	<b>26.9</b>	<b>4,170</b>
<b>Metal</b>	<b>123.1</b>	<b>19,110</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>706.1</b>	<b>109,590</b>
Aluminum Beverage Containers	15.4	2,390			
Other Aluminum	8.7	1,350			
Ferrous Containers (Tin Cans)	22.8	3,540	<b>Total MSW (tons)</b>		<b>451,930</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.98</b>

## McLean County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>768.3</b>	<b>66,780</b>	<b>Metal</b>		
Newsprint	70.0	6,080	Other Ferrous	51.2	4,450
High Grade Office Paper	53.2	4,620	Other Non-Ferrous	9.1	790
Magazines/Catalogs	30.7	2,670	Other Metal	15.9	1,380
Uncoated OCC/Kraft	421.2	36,610			
Boxboard	54.5	4,740	<b>Organics</b>	<b>603.2</b>	<b>52,430</b>
Mixed Paper - Recyclable	53.3	4,630	Yard Waste - Compostable	117.4	10,200
Compostable Paper	73.1	6,350	Yard Waste - Woody	23.2	2,020
Other Paper	12.4	1,080	Food Scraps	338.4	29,410
			Bottom Fines & Dirt	45.2	3,930
<b>Beverage Containers</b>	<b>5.9</b>	<b>510</b>	Diapers	37.0	3,220
Milk & Juice Cartons/Boxes - Coated	5.9	510	Other Organic	42.0	3,650
<b>Plastic</b>	<b>332.4</b>	<b>28,890</b>	<b>Inorganics</b>	<b>175.3</b>	<b>15,240</b>
#1 PET Bottles/Jars	23.4	2,030	Televisions	5.1	440
#1 Other PET Containers	6.6	570	Computer Monitors	3.2	280
#2 HDPE Bottles/Jars - Clear	11.9	1,030	Computer Equipment/Peripherals	7.1	620
#2 HDPE Bottles/Jars - Color	10.9	950	Electronic Equipment	14.5	1,260
#2 Other HDPE Containers	0.8	70	White Goods - Refrigerated	10.4	900
#6 Exp. Polystyrene Packaging	18.4	1,600	White Goods - Not refrigerated	23.1	2,010
#3-#7 Other - All	13.0	1,130	Lead-acid Batteries	18.3	1,590
Other Rigid Plastic Products	58.0	5,040	Other Household Batteries	4.4	380
Grocery & Merchandise Bags	15.4	1,340	Tires	25.8	2,240
Trash Bags	33.5	2,910	Household Bulky Items	63.0	5,480
Commercial & Industrial Film	43.5	3,780	Fluorescent Lights/Ballasts	0.5	40
Other Film	58.8	5,110			
Other Plastic	38.3	3,330	<b>Textiles</b>	<b>125.9</b>	<b>10,940</b>
			Carpet	24.5	2,130
<b>Glass</b>	<b>85.9</b>	<b>7,470</b>	Carpet Padding	6.7	580
Recyclable Glass Bottles & Jars	68.1	5,920	Clothing	59.9	5,210
Flat Glass	10.0	870	Other Textiles	34.7	3,020
Other Glass	7.8	680			
			<b>Household Hazardous Waste</b>	<b>26.9</b>	<b>2,340</b>
<b>Metal</b>	<b>123.1</b>	<b>10,700</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>615.5</b>	<b>53,500</b>
Aluminum Beverage Containers	15.4	1,340			
Other Aluminum	8.7	760			
Ferrous Containers (Tin Cans)	22.8	1,980	<b>Total MSW (tons)</b>		<b>248,800</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.84</b>

2014 population

173,831

Menard County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>449.7</b>	<b>2,870</b>	<b>Metal</b>		
Newsprint	59.5	380	Other Ferrous	51.7	330
High Grade Office Paper	50.1	320	Other Non-Ferrous	9.4	60
Magazines/Catalogs	31.3	200	Other Metal	15.7	100
Uncoated OCC/Kraft	114.4	730			
Boxboard	54.8	350	<b>Organics</b>	<b>600.1</b>	<b>3,830</b>
Mixed Paper - Recyclable	53.3	340	Yard Waste - Compostable	117.5	750
Compostable Paper	73.6	470	Yard Waste - Woody	23.5	150
Other Paper	12.5	80	Food Scraps	333.7	2,130
			Bottom Fines & Dirt	45.4	290
<b>Beverage Containers</b>	<b>6.3</b>	<b>40</b>	Diapers	37.6	240
Milk & Juice Cartons/Boxes - Coated	6.3	40	Other Organic	42.3	270
<b>Plastic</b>	<b>335.3</b>	<b>2,140</b>	<b>Inorganics</b>	<b>175.5</b>	<b>1,120</b>
#1 PET Bottles/Jars	23.5	150	Televisions	4.7	30
#1 Other PET Containers	6.3	40	Computer Monitors	3.1	20
#2 HDPE Bottles/Jars - Clear	12.5	80	Computer Equipment/Peripherals	7.8	50
#2 HDPE Bottles/Jars - Color	11.0	70	Electronic Equipment	14.1	90
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	11.0	70
#6 Exp. Polystyrene Packaging	18.8	120	White Goods - Not refrigerated	23.5	150
#3-#7 Other - All	14.1	90	Lead-acid Batteries	18.8	120
Other Rigid Plastic Products	58.0	370	Other Household Batteries	4.7	30
Grocery & Merchandise Bags	15.7	100	Tires	25.1	160
Trash Bags	32.9	210	Household Bulky Items	62.7	400
Commercial & Industrial Film	43.9	280	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	59.5	380			
Other Plastic	39.2	250	<b>Textiles</b>	<b>125.3</b>	<b>800</b>
			Carpet	25.1	160
<b>Glass</b>	<b>84.6</b>	<b>540</b>	Carpet Padding	6.3	40
Recyclable Glass Bottles & Jars	67.4	430	Clothing	59.5	380
Flat Glass	9.4	60	Other Textiles	34.5	220
Other Glass	7.8	50			
			<b>Household Hazardous Waste</b>	<b>25.1</b>	<b>160</b>
<b>Metal</b>	<b>125.3</b>	<b>800</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>617.3</b>	<b>3,940</b>
Aluminum Beverage Containers	15.7	100			
Other Aluminum	9.4	60			
Ferrous Containers (Tin Cans)	23.5	150	<b>Total MSW (tons)</b>		<b>16,240</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.97</b>

2014 population

12,765

Mercer County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>428.3</b>	<b>3,550</b>	<b>Metal</b>		
Newsprint	14.5	120	Other Ferrous	50.7	420
High Grade Office Paper	50.7	420	Other Non-Ferrous	9.7	80
Magazines/Catalogs	31.4	260	Other Metal	15.7	130
Uncoated OCC/Kraft	138.8	1,150			
Boxboard	54.3	450	<b>Organics</b>	<b>581.6</b>	<b>4,820</b>
Mixed Paper - Recyclable	53.1	440	Yard Waste - Compostable	117.0	970
Compostable Paper	73.6	610	Yard Waste - Woody	22.9	190
Other Paper	12.1	100	Food Scraps	317.3	2,630
			Bottom Fines & Dirt	44.6	370
<b>Beverage Containers</b>	<b>6.0</b>	<b>50</b>	Diapers	37.4	310
Milk & Juice Cartons/Boxes - Coated	6.0	50	Other Organic	42.2	350
<b>Plastic</b>	<b>316.1</b>	<b>2,620</b>	<b>Inorganics</b>	<b>175.0</b>	<b>1,450</b>
#1 PET Bottles/Jars	21.7	180	Televisions	4.8	40
#1 Other PET Containers	6.0	50	Computer Monitors	3.6	30
#2 HDPE Bottles/Jars - Clear	10.9	90	Computer Equipment/Peripherals	7.2	60
#2 HDPE Bottles/Jars - Color	9.7	80	Electronic Equipment	14.5	120
#2 Other HDPE Containers	1.2	10	White Goods - Refrigerated	10.9	90
#6 Exp. Polystyrene Packaging	18.1	150	White Goods - Not refrigerated	22.9	190
#3-#7 Other - All	14.5	120	Lead-acid Batteries	18.1	150
Other Rigid Plastic Products	57.9	480	Other Household Batteries	4.8	40
Grocery & Merchandise Bags	13.3	110	Tires	25.3	210
Trash Bags	33.8	280	Household Bulky Items	62.7	520
Commercial & Industrial Film	36.2	300	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	59.1	490			
Other Plastic	33.8	280	<b>Textiles</b>	<b>109.8</b>	<b>910</b>
			Carpet	24.1	200
<b>Glass</b>	<b>85.7</b>	<b>710</b>	Carpet Padding	6.0	50
Recyclable Glass Bottles & Jars	68.8	570	Clothing	50.7	420
Flat Glass	9.7	80	Other Textiles	29.0	240
Other Glass	7.2	60			
			<b>Household Hazardous Waste</b>	<b>25.3</b>	<b>210</b>
<b>Metal</b>	<b>123.1</b>	<b>1,020</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>605.7</b>	<b>5,020</b>
Aluminum Beverage Containers	15.7	130			
Other Aluminum	8.4	70			
Ferrous Containers (Tin Cans)	22.9	190	<b>Total MSW (tons)</b>		<b>20,360</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.73</b>

2014 population

16,576

## Monroe County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>564.3</b>	<b>9,470</b>	<b>Metal</b>		
Newsprint	58.4	980	Other Ferrous	51.2	860
High Grade Office Paper	50.1	840	Other Non-Ferrous	8.9	150
Magazines/Catalogs	33.4	560	Other Metal	16.1	270
Uncoated OCC/Kraft	228.8	3,840			
Boxboard	54.8	920	<b>Organics</b>	<b>615.0</b>	<b>10,320</b>
Mixed Paper - Recyclable	53.0	890	Yard Waste - Compostable	117.4	1,970
Compostable Paper	73.3	1,230	Yard Waste - Woody	23.2	390
Other Paper	12.5	210	Food Scraps	349.8	5,870
			Bottom Fines & Dirt	45.3	760
<b>Beverage Containers</b>	<b>6.6</b>	<b>110</b>	Diapers	36.9	620
Milk & Juice Cartons/Boxes - Coated	6.6	110	Other Organic	42.3	710
<b>Plastic</b>	<b>348.0</b>	<b>5,840</b>	<b>Inorganics</b>	<b>174.6</b>	<b>2,930</b>
#1 PET Bottles/Jars	25.0	420	Televisions	4.8	80
#1 Other PET Containers	7.2	120	Computer Monitors	3.0	50
#2 HDPE Bottles/Jars - Clear	12.5	210	Computer Equipment/Peripherals	7.2	120
#2 HDPE Bottles/Jars - Color	11.9	200	Electronic Equipment	14.3	240
#2 Other HDPE Containers	0.6	10	White Goods - Refrigerated	10.1	170
#6 Exp. Polystyrene Packaging	17.9	300	White Goods - Not refrigerated	23.2	390
#3-#7 Other - All	13.1	220	Lead-acid Batteries	18.5	310
Other Rigid Plastic Products	57.8	970	Other Household Batteries	4.2	70
Grocery & Merchandise Bags	16.7	280	Tires	25.6	430
Trash Bags	33.4	560	Household Bulky Items	63.2	1,060
Commercial & Industrial Film	46.5	780	Fluorescent Lights/Ballasts	0.6	10
Other Film	59.0	990			
Other Plastic	46.5	780	<b>Textiles</b>	<b>132.9</b>	<b>2,230</b>
			Carpet	24.4	410
<b>Glass</b>	<b>86.4</b>	<b>1,450</b>	Carpet Padding	6.6	110
Recyclable Glass Bottles & Jars	68.5	1,150	Clothing	64.4	1,080
Flat Glass	10.1	170	Other Textiles	37.5	630
Other Glass	7.7	130			
			<b>Household Hazardous Waste</b>	<b>26.8</b>	<b>450</b>
<b>Metal</b>	<b>123.4</b>	<b>2,070</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>621.6</b>	<b>10,430</b>
Aluminum Beverage Containers	15.5	260			
Other Aluminum	8.9	150			
Ferrous Containers (Tin Cans)	22.6	380	<b>Total MSW (tons)</b>		<b>45,300</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.40</b>

## Montgomery County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>591.5</b>	<b>8,880</b>	<b>Metal</b>		
Newsprint	69.3	1,040	Other Ferrous	51.3	770
High Grade Office Paper	32.0	480	Other Non-Ferrous	9.3	140
Magazines/Catalogs	32.6	490	Other Metal	16.0	240
Uncoated OCC/Kraft	263.8	3,960			
Boxboard	54.6	820	<b>Organics</b>	<b>564.2</b>	<b>8,470</b>
Mixed Paper - Recyclable	53.3	800	Yard Waste - Compostable	117.2	1,760
Compostable Paper	73.3	1,100	Yard Waste - Woody	23.3	350
Other Paper	12.7	190	Food Scraps	299.1	4,490
			Bottom Fines & Dirt	45.3	680
<b>Beverage Containers</b>	<b>4.7</b>	<b>70</b>	Diapers	37.3	560
Milk & Juice Cartons/Boxes - Coated	4.7	70	Other Organic	42.0	630
<b>Plastic</b>	<b>295.7</b>	<b>4,440</b>	<b>Inorganics</b>	<b>177.2</b>	<b>2,660</b>
#1 PET Bottles/Jars	19.3	290	Televisions	5.3	80
#1 Other PET Containers	5.3	80	Computer Monitors	3.3	50
#2 HDPE Bottles/Jars - Clear	9.3	140	Computer Equipment/Peripherals	7.3	110
#2 HDPE Bottles/Jars - Color	8.7	130	Electronic Equipment	14.7	220
#2 Other HDPE Containers	0.7	10	White Goods - Refrigerated	10.7	160
#6 Exp. Polystyrene Packaging	18.6	280	White Goods - Not refrigerated	23.3	350
#3-#7 Other - All	12.7	190	Lead-acid Batteries	18.0	270
Other Rigid Plastic Products	57.9	870	Other Household Batteries	4.7	70
Grocery & Merchandise Bags	11.3	170	Tires	26.0	390
Trash Bags	33.3	500	Household Bulky Items	63.3	950
Commercial & Industrial Film	31.3	470	Fluorescent Lights/Ballasts	0.7	10
Other Film	58.6	880			
Other Plastic	28.6	430	<b>Textiles</b>	<b>99.9</b>	<b>1,500</b>
			Carpet	24.6	370
<b>Glass</b>	<b>86.6</b>	<b>1,300</b>	Carpet Padding	6.7	100
Recyclable Glass Bottles & Jars	68.6	1,030	Clothing	43.3	650
Flat Glass	10.0	150	Other Textiles	25.3	380
Other Glass	8.0	120			
			<b>Household Hazardous Waste</b>	<b>26.6</b>	<b>400</b>
<b>Metal</b>	<b>123.2</b>	<b>1,850</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>465.6</b>	<b>6,990</b>
Aluminum Beverage Containers	15.3	230			
Other Aluminum	8.7	130			
Ferrous Containers (Tin Cans)	22.6	340	<b>Total MSW (tons)</b>		<b>36,560</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.67</b>

2014 population

30,027

## Morgan County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>705.6</b>	<b>12,270</b>	<b>Metal</b>		
Newsprint	65.0	1,130	Other Ferrous	51.2	890
High Grade Office Paper	45.4	790	Other Non-Ferrous	9.2	160
Magazines/Catalogs	32.8	570	Other Metal	16.1	280
Uncoated OCC/Kraft	368.6	6,410			
Boxboard	54.6	950	<b>Organics</b>	<b>560.1</b>	<b>9,740</b>
Mixed Paper - Recyclable	53.5	930	Yard Waste - Compostable	117.3	2,040
Compostable Paper	73.0	1,270	Yard Waste - Woody	23.0	400
Other Paper	12.7	220	Food Scraps	295.6	5,140
			Bottom Fines & Dirt	45.4	790
<b>Beverage Containers</b>	<b>4.6</b>	<b>80</b>	Diapers	36.8	640
Milk & Juice Cartons/Boxes - Coated	4.6	80	Other Organic	42.0	730
<b>Plastic</b>	<b>297.3</b>	<b>5,170</b>	<b>Inorganics</b>	<b>176.0</b>	<b>3,060</b>
#1 PET Bottles/Jars	17.8	310	Televisions	5.2	90
#1 Other PET Containers	5.2	90	Computer Monitors	3.5	60
#2 HDPE Bottles/Jars - Clear	9.2	160	Computer Equipment/Peripherals	6.9	120
#2 HDPE Bottles/Jars - Color	8.6	150	Electronic Equipment	14.4	250
#2 Other HDPE Containers	0.6	10	White Goods - Refrigerated	10.4	180
#6 Exp. Polystyrene Packaging	17.8	310	White Goods - Not refrigerated	23.0	400
#3-#7 Other - All	13.2	230	Lead-acid Batteries	18.4	320
Other Rigid Plastic Products	58.1	1,010	Other Household Batteries	4.6	80
Grocery & Merchandise Bags	11.5	200	Tires	25.9	450
Trash Bags	33.4	580	Household Bulky Items	63.3	1,100
Commercial & Industrial Film	32.8	570	Fluorescent Lights/Ballasts	0.6	10
Other Film	58.7	1,020			
Other Plastic	30.5	530	<b>Textiles</b>	<b>103.5</b>	<b>1,800</b>
			Carpet	24.7	430
<b>Glass</b>	<b>85.7</b>	<b>1,490</b>	Carpet Padding	6.9	120
Recyclable Glass Bottles & Jars	67.9	1,180	Clothing	45.4	790
Flat Glass	9.8	170	Other Textiles	26.5	460
Other Glass	8.1	140			
			<b>Household Hazardous Waste</b>	<b>27.0</b>	<b>470</b>
<b>Metal</b>	<b>123.6</b>	<b>2,150</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>467.5</b>	<b>8,130</b>
Aluminum Beverage Containers	15.5	270			
Other Aluminum	8.6	150			
Ferrous Containers (Tin Cans)	23.0	400	<b>Total MSW (tons)</b>		<b>44,360</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.99</b>

2014 population

34,780

## Moultrie County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>516.2</b>	<b>3,890</b>	<b>Metal</b>		
Newsprint	38.5	290	Other Ferrous	51.8	390
High Grade Office Paper	34.5	260	Other Non-Ferrous	9.3	70
Magazines/Catalogs	30.5	230	Other Metal	15.9	120
Uncoated OCC/Kraft	220.3	1,660			
Boxboard	54.4	410	<b>Organics</b>	<b>569.3</b>	<b>4,290</b>
Mixed Paper - Recyclable	53.1	400	Yard Waste - Compostable	116.8	880
Compostable Paper	73.0	550	Yard Waste - Woody	23.9	180
Other Paper	11.9	90	Food Scraps	303.9	2,290
			Bottom Fines & Dirt	45.1	340
<b>Beverage Containers</b>	<b>5.3</b>	<b>40</b>	Diapers	37.2	280
Milk & Juice Cartons/Boxes - Coated	5.3	40	Other Organic	42.5	320
<b>Plastic</b>	<b>307.9</b>	<b>2,320</b>	<b>Inorganics</b>	<b>173.8</b>	<b>1,310</b>
#1 PET Bottles/Jars	19.9	150	Televisions	5.3	40
#1 Other PET Containers	5.3	40	Computer Monitors	2.7	20
#2 HDPE Bottles/Jars - Clear	9.3	70	Computer Equipment/Peripherals	6.6	50
#2 HDPE Bottles/Jars - Color	9.3	70	Electronic Equipment	14.6	110
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	10.6	80
#6 Exp. Polystyrene Packaging	18.6	140	White Goods - Not refrigerated	22.6	170
#3-#7 Other - All	13.3	100	Lead-acid Batteries	18.6	140
Other Rigid Plastic Products	58.4	440	Other Household Batteries	4.0	30
Grocery & Merchandise Bags	13.3	100	Tires	25.2	190
Trash Bags	33.2	250	Household Bulky Items	63.7	480
Commercial & Industrial Film	35.8	270	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	58.4	440			
Other Plastic	33.2	250	<b>Textiles</b>	<b>107.5</b>	<b>810</b>
			Carpet	23.9	180
<b>Glass</b>	<b>86.3</b>	<b>650</b>	Carpet Padding	6.6	50
Recyclable Glass Bottles & Jars	67.7	510	Clothing	49.1	370
Flat Glass	10.6	80	Other Textiles	27.9	210
Other Glass	8.0	60			
			<b>Household Hazardous Waste</b>	<b>23.9</b>	<b>180</b>
<b>Metal</b>	<b>124.7</b>	<b>940</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>472.4</b>	<b>3,560</b>
Aluminum Beverage Containers	15.9	120			
Other Aluminum	9.3	70			
Ferrous Containers (Tin Cans)	22.6	170	<b>Total MSW (tons)</b>		<b>17,990</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.54</b>

2014 population

15,071

## Ogle County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>566.6</b>	<b>15,220</b>	<b>Metal</b>		
Newsprint	51.7	1,390	Other Ferrous	51.4	1,380
High Grade Office Paper	50.3	1,350	Other Non-Ferrous	8.9	240
Magazines/Catalogs	31.6	850	Other Metal	16.0	430
Uncoated OCC/Kraft	239.7	6,440			
Boxboard	54.7	1,470	<b>Organics</b>	<b>584.8</b>	<b>15,710</b>
Mixed Paper - Recyclable	53.2	1,430	Yard Waste - Compostable	117.3	3,150
Compostable Paper	73.0	1,960	Yard Waste - Woody	23.1	620
Other Paper	12.3	330	Food Scraps	320.2	8,600
			Bottom Fines & Dirt	45.0	1,210
<b>Beverage Containers</b>	<b>5.6</b>	<b>150</b>	Diapers	37.2	1,000
Milk & Juice Cartons/Boxes - Coated	5.6	150	Other Organic	42.1	1,130
<b>Plastic</b>	<b>315.3</b>	<b>8,470</b>	<b>Inorganics</b>	<b>175.3</b>	<b>4,710</b>
#1 PET Bottles/Jars	21.6	580	Televisions	5.2	140
#1 Other PET Containers	6.0	160	Computer Monitors	3.4	90
#2 HDPE Bottles/Jars - Clear	10.8	290	Computer Equipment/Peripherals	7.1	190
#2 HDPE Bottles/Jars - Color	10.1	270	Electronic Equipment	14.5	390
#2 Other HDPE Containers	0.7	20	White Goods - Refrigerated	10.4	280
#6 Exp. Polystyrene Packaging	18.6	500	White Goods - Not refrigerated	23.1	620
#3-#7 Other - All	13.4	360	Lead-acid Batteries	18.2	490
Other Rigid Plastic Products	58.1	1,560	Other Household Batteries	4.5	120
Grocery & Merchandise Bags	13.0	350	Tires	25.7	690
Trash Bags	33.5	900	Household Bulky Items	62.9	1,690
Commercial & Industrial Film	36.9	990	Fluorescent Lights/Ballasts	0.4	10
Other Film	58.8	1,580			
Other Plastic	33.9	910	<b>Textiles</b>	<b>111.7</b>	<b>3,000</b>
			Carpet	24.6	660
<b>Glass</b>	<b>86.0</b>	<b>2,310</b>	Carpet Padding	6.7	180
Recyclable Glass Bottles & Jars	68.1	1,830	Clothing	51.0	1,370
Flat Glass	10.1	270	Other Textiles	29.4	790
Other Glass	7.8	210			
			<b>Household Hazardous Waste</b>	<b>26.8</b>	<b>720</b>
<b>Metal</b>	<b>122.9</b>	<b>3,300</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>473.5</b>	<b>12,720</b>
Aluminum Beverage Containers	15.3	410			
Other Aluminum	8.6	230			
Ferrous Containers (Tin Cans)	22.7	610	<b>Total MSW (tons)</b>		<b>66,310</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.76</b>

2014 population

53,724

## Peoria County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>842.3</b>	<b>79,700</b>	<b>Metal</b>		
Newsprint	50.6	4,790	Other Ferrous	51.3	4,850
High Grade Office Paper	58.8	5,560	Other Non-Ferrous	9.1	860
Magazines/Catalogs	31.1	2,940	Other Metal	15.9	1,500
Uncoated OCC/Kraft	508.7	48,130			
Boxboard	54.5	5,160	<b>Organics</b>	<b>595.5</b>	<b>56,340</b>
Mixed Paper - Recyclable	53.3	5,040	Yard Waste - Compostable	117.4	11,110
Compostable Paper	73.0	6,910	Yard Waste - Woody	23.3	2,200
Other Paper	12.4	1,170	Food Scraps	330.4	31,260
			Bottom Fines & Dirt	45.2	4,280
<b>Beverage Containers</b>	<b>5.7</b>	<b>540</b>	Diapers	37.1	3,510
Milk & Juice Cartons/Boxes - Coated	5.7	540	Other Organic	42.1	3,980
<b>Plastic</b>	<b>308.7</b>	<b>29,210</b>	<b>Inorganics</b>	<b>175.2</b>	<b>16,580</b>
#1 PET Bottles/Jars	22.6	2,140	Televisions	5.1	480
#1 Other PET Containers	6.3	600	Computer Monitors	3.2	300
#2 HDPE Bottles/Jars - Clear	11.4	1,080	Computer Equipment/Peripherals	7.1	670
#2 HDPE Bottles/Jars - Color	10.6	1,000	Electronic Equipment	14.5	1,370
#2 Other HDPE Containers	0.7	70	White Goods - Refrigerated	10.4	980
#6 Exp. Polystyrene Packaging	18.4	1,740	White Goods - Not refrigerated	23.1	2,190
#3-#7 Other - All	13.0	1,230	Lead-acid Batteries	18.3	1,730
Other Rigid Plastic Products	58.0	5,490	Other Household Batteries	4.3	410
Grocery & Merchandise Bags	11.7	1,110	Tires	25.8	2,440
Trash Bags	33.5	3,170	Household Bulky Items	63.1	5,970
Commercial & Industrial Film	33.1	3,130	Fluorescent Lights/Ballasts	0.4	40
Other Film	58.8	5,560			
Other Plastic	30.5	2,890	<b>Textiles</b>	<b>103.0</b>	<b>9,750</b>
			Carpet	24.4	2,310
<b>Glass</b>	<b>86.0</b>	<b>8,140</b>	Carpet Padding	6.7	630
Recyclable Glass Bottles & Jars	68.2	6,450	Clothing	45.6	4,310
Flat Glass	10.0	950	Other Textiles	26.4	2,500
Other Glass	7.8	740			
			<b>Household Hazardous Waste</b>	<b>26.8</b>	<b>2,540</b>
<b>Metal</b>	<b>123.1</b>	<b>11,650</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>597.8</b>	<b>56,560</b>
Aluminum Beverage Containers	15.4	1,460			
Other Aluminum	8.7	820			
Ferrous Containers (Tin Cans)	22.8	2,160	<b>Total MSW (tons)</b>		<b>271,010</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.85</b>

2014 population

189,234

## Perry County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>411.7</b>	<b>4,580</b>	<b>Metal</b>		
Newsprint	64.7	720	Other Ferrous	51.2	570
High Grade Office Paper	24.3	270	Other Non-Ferrous	9.0	100
Magazines/Catalogs	27.9	310	Other Metal	16.2	180
Uncoated OCC/Kraft	101.6	1,130			
Boxboard	54.8	610	<b>Organics</b>	<b>549.3</b>	<b>6,110</b>
Mixed Paper - Recyclable	53.0	590	Yard Waste - Compostable	117.8	1,310
Compostable Paper	72.8	810	Yard Waste - Woody	23.4	260
Other Paper	12.6	140	Food Scraps	284.1	3,160
			Bottom Fines & Dirt	44.9	500
<b>Beverage Containers</b>	<b>4.5</b>	<b>50</b>	Diapers	36.9	410
Milk & Juice Cartons/Boxes - Coated	4.5	50	Other Organic	42.3	470
<b>Plastic</b>	<b>282.3</b>	<b>3,140</b>	<b>Inorganics</b>	<b>177.1</b>	<b>1,970</b>
#1 PET Bottles/Jars	16.2	180	Televisions	5.4	60
#1 Other PET Containers	4.5	50	Computer Monitors	3.6	40
#2 HDPE Bottles/Jars - Clear	8.1	90	Computer Equipment/Peripherals	7.2	80
#2 HDPE Bottles/Jars - Color	7.2	80	Electronic Equipment	14.4	160
#2 Other HDPE Containers	0.9	10	White Goods - Refrigerated	10.8	120
#6 Exp. Polystyrene Packaging	18.9	210	White Goods - Not refrigerated	23.4	260
#3-#7 Other - All	12.6	140	Lead-acid Batteries	18.0	200
Other Rigid Plastic Products	57.5	640	Other Household Batteries	4.5	50
Grocery & Merchandise Bags	9.9	110	Tires	26.1	290
Trash Bags	33.3	370	Household Bulky Items	62.9	700
Commercial & Industrial Film	28.8	320	Fluorescent Lights/Ballasts	0.9	10
Other Film	58.4	650			
Other Plastic	26.1	290	<b>Textiles</b>	<b>93.5</b>	<b>1,040</b>
			Carpet	24.3	270
<b>Glass</b>	<b>85.4</b>	<b>950</b>	Carpet Padding	6.3	70
Recyclable Glass Bottles & Jars	67.4	750	Clothing	39.6	440
Flat Glass	9.9	110	Other Textiles	23.4	260
Other Glass	8.1	90			
			<b>Household Hazardous Waste</b>	<b>27.9</b>	<b>310</b>
<b>Metal</b>	<b>123.2</b>	<b>1,370</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>459.4</b>	<b>5,110</b>
Aluminum Beverage Containers	15.3	170			
Other Aluminum	9.0	100			
Ferrous Containers (Tin Cans)	22.5	250	<b>Total MSW (tons)</b>		<b>24,630</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.07</b>

## Piatt County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>435.9</b>	<b>3,680</b>	<b>Metal</b>		
Newsprint	65.2	550	Other Ferrous	50.9	430
High Grade Office Paper	49.8	420	Other Non-Ferrous	9.5	80
Magazines/Catalogs	32.0	270	Other Metal	15.4	130
Uncoated OCC/Kraft	95.9	810			
Boxboard	54.5	460	<b>Organics</b>	<b>599.4</b>	<b>5,060</b>
Mixed Paper - Recyclable	53.3	450	Yard Waste - Compostable	117.3	990
Compostable Paper	73.4	620	Yard Waste - Woody	23.7	200
Other Paper	11.8	100	Food Scraps	335.2	2,830
			Bottom Fines & Dirt	45.0	380
<b>Beverage Containers</b>	<b>5.9</b>	<b>50</b>	Diapers	36.7	310
Milk & Juice Cartons/Boxes - Coated	5.9	50	Other Organic	41.5	350
<b>Plastic</b>	<b>340.0</b>	<b>2,870</b>	<b>Inorganics</b>	<b>175.3</b>	<b>1,480</b>
#1 PET Bottles/Jars	23.7	200	Televisions	4.7	40
#1 Other PET Containers	7.1	60	Computer Monitors	3.6	30
#2 HDPE Bottles/Jars - Clear	11.8	100	Computer Equipment/Peripherals	7.1	60
#2 HDPE Bottles/Jars - Color	11.8	100	Electronic Equipment	14.2	120
#2 Other HDPE Containers	1.2	10	White Goods - Refrigerated	10.7	90
#6 Exp. Polystyrene Packaging	17.8	150	White Goods - Not refrigerated	23.7	200
#3-#7 Other - All	14.2	120	Lead-acid Batteries	17.8	150
Other Rigid Plastic Products	58.0	490	Other Household Batteries	4.7	40
Grocery & Merchandise Bags	15.4	130	Tires	26.1	220
Trash Bags	33.2	280	Household Bulky Items	62.8	530
Commercial & Industrial Film	45.0	380	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	59.2	500			
Other Plastic	41.5	350	<b>Textiles</b>	<b>129.1</b>	<b>1,090</b>
			Carpet	24.9	210
<b>Glass</b>	<b>86.5</b>	<b>730</b>	Carpet Padding	7.1	60
Recyclable Glass Bottles & Jars	68.7	580	Clothing	61.6	520
Flat Glass	9.5	80	Other Textiles	35.5	300
Other Glass	8.3	70			
			<b>Household Hazardous Waste</b>	<b>27.2</b>	<b>230</b>
<b>Metal</b>	<b>122.0</b>	<b>1,030</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>617.2</b>	<b>5,210</b>
Aluminum Beverage Containers	15.4	130			
Other Aluminum	8.3	70			
Ferrous Containers (Tin Cans)	22.5	190	<b>Total MSW (tons)</b>		<b>21,430</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.95</b>

2014 population

16,884

## Pike County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>525.2</b>	<b>4,270</b>	<b>Metal</b>		
Newsprint	39.4	320	Other Ferrous	51.7	420
High Grade Office Paper	28.3	230	Other Non-Ferrous	8.6	70
Magazines/Catalogs	30.7	250	Other Metal	16.0	130
Uncoated OCC/Kraft	234.9	1,910			
Boxboard	54.1	440	<b>Organics</b>	<b>552.2</b>	<b>4,490</b>
Mixed Paper - Recyclable	52.9	430	Yard Waste - Compostable	116.8	950
Compostable Paper	72.6	590	Yard Waste - Woody	23.4	190
Other Paper	12.3	100	Food Scraps	287.8	2,340
			Bottom Fines & Dirt	45.5	370
<b>Beverage Containers</b>	<b>4.9</b>	<b>40</b>	Diapers	36.9	300
Milk & Juice Cartons/Boxes - Coated	4.9	40	Other Organic	41.8	340
<b>Plastic</b>	<b>284.1</b>	<b>2,310</b>	<b>Inorganics</b>	<b>175.9</b>	<b>1,430</b>
#1 PET Bottles/Jars	17.2	140	Televisions	4.9	40
#1 Other PET Containers	4.9	40	Computer Monitors	3.7	30
#2 HDPE Bottles/Jars - Clear	8.6	70	Computer Equipment/Peripherals	7.4	60
#2 HDPE Bottles/Jars - Color	8.6	70	Electronic Equipment	14.8	120
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	9.8	80
#6 Exp. Polystyrene Packaging	18.4	150	White Goods - Not refrigerated	23.4	190
#3-#7 Other - All	12.3	100	Lead-acid Batteries	18.4	150
Other Rigid Plastic Products	57.8	470	Other Household Batteries	4.9	40
Grocery & Merchandise Bags	9.8	80	Tires	25.8	210
Trash Bags	33.2	270	Household Bulky Items	62.7	510
Commercial & Industrial Film	28.3	230	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	59.0	480			
Other Plastic	25.8	210	<b>Textiles</b>	<b>91.0</b>	<b>740</b>
			Carpet	24.6	200
<b>Glass</b>	<b>84.9</b>	<b>690</b>	Carpet Padding	6.1	50
Recyclable Glass Bottles & Jars	67.6	550	Clothing	38.1	310
Flat Glass	9.8	80	Other Textiles	22.1	180
Other Glass	7.4	60			
			<b>Household Hazardous Waste</b>	<b>25.8</b>	<b>210</b>
<b>Metal</b>	<b>124.2</b>	<b>1,010</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>456.3</b>	<b>3,710</b>
Aluminum Beverage Containers	16.0	130			
Other Aluminum	8.6	70			
Ferrous Containers (Tin Cans)	23.4	190	<b>Total MSW (tons)</b>		<b>18,900</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.37</b>

2014 population

16,261

## Pope County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>357.6</b>	<b>780</b>	<b>Metal</b>		
Newsprint	13.8	30	Other Ferrous	50.4	110
High Grade Office Paper	22.9	50	Other Non-Ferrous	9.2	20
Magazines/Catalogs	27.5	60	Other Metal	13.8	30
Uncoated OCC/Kraft	96.3	210			
Boxboard	55.0	120	<b>Organics</b>	<b>559.2</b>	<b>1,220</b>
Mixed Paper - Recyclable	55.0	120	Yard Waste - Compostable	119.2	260
Compostable Paper	73.3	160	Yard Waste - Woody	22.9	50
Other Paper	13.8	30	Food Scraps	293.4	640
			Bottom Fines & Dirt	45.8	100
<b>Beverage Containers</b>	<b>4.6</b>	<b>10</b>	Diapers	36.7	80
Milk & Juice Cartons/Boxes - Coated	4.6	10	Other Organic	41.3	90
<b>Plastic</b>	<b>279.6</b>	<b>610</b>	<b>Inorganics</b>	<b>178.8</b>	<b>390</b>
#1 PET Bottles/Jars	18.3	40	Televisions	4.6	10
#1 Other PET Containers	4.6	10	Computer Monitors	4.6	10
#2 HDPE Bottles/Jars - Clear	9.2	20	Computer Equipment/Peripherals	9.2	20
#2 HDPE Bottles/Jars - Color	9.2	20	Electronic Equipment	13.8	30
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	9.2	20
#6 Exp. Polystyrene Packaging	18.3	40	White Goods - Not refrigerated	22.9	50
#3-#7 Other - All	9.2	20	Lead-acid Batteries	18.3	40
Other Rigid Plastic Products	59.6	130	Other Household Batteries	4.6	10
Grocery & Merchandise Bags	9.2	20	Tires	27.5	60
Trash Bags	32.1	70	Household Bulky Items	64.2	140
Commercial & Industrial Film	27.5	60	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	59.6	130			
Other Plastic	22.9	50	<b>Textiles</b>	<b>87.1</b>	<b>190</b>
			Carpet	22.9	50
<b>Glass</b>	<b>91.7</b>	<b>200</b>	Carpet Padding	4.6	10
Recyclable Glass Bottles & Jars	73.3	160	Clothing	36.7	80
Flat Glass	9.2	20	Other Textiles	22.9	50
Other Glass	9.2	20			
			<b>Household Hazardous Waste</b>	<b>27.5</b>	<b>60</b>
<b>Metal</b>	<b>119.2</b>	<b>260</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>453.8</b>	<b>990</b>
Aluminum Beverage Containers	13.8	30			
Other Aluminum	9.2	20			
Ferrous Containers (Tin Cans)	22.9	50	<b>Total MSW (tons)</b>		<b>4,710</b>
			<b>Total MSW (pounds/person/day)</b>		<b>5.92</b>

## Pulaski County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>414.7</b>	<b>1,260</b>	<b>Metal</b>		
Newsprint	19.7	60	Other Ferrous	52.7	160
High Grade Office Paper	26.3	80	Other Non-Ferrous	9.9	30
Magazines/Catalogs	29.6	90	Other Metal	16.5	50
Uncoated OCC/Kraft	144.8	440			
Boxboard	55.9	170	<b>Organics</b>	<b>562.8</b>	<b>1,710</b>
Mixed Paper - Recyclable	52.7	160	Yard Waste - Compostable	118.5	360
Compostable Paper	72.4	220	Yard Waste - Woody	23.0	70
Other Paper	13.2	40	Food Scraps	296.2	900
			Bottom Fines & Dirt	46.1	140
<b>Beverage Containers</b>	<b>3.3</b>	<b>10</b>	Diapers	36.2	110
Milk & Juice Cartons/Boxes - Coated	3.3	10	Other Organic	42.8	130
<b>Plastic</b>	<b>276.5</b>	<b>840</b>	<b>Inorganics</b>	<b>174.4</b>	<b>530</b>
#1 PET Bottles/Jars	19.7	60	Televisions	6.6	20
#1 Other PET Containers	6.6	20	Computer Monitors	3.3	10
#2 HDPE Bottles/Jars - Clear	9.9	30	Computer Equipment/Peripherals	6.6	20
#2 HDPE Bottles/Jars - Color	9.9	30	Electronic Equipment	13.2	40
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	9.9	30
#6 Exp. Polystyrene Packaging	16.5	50	White Goods - Not refrigerated	23.0	70
#3-#7 Other - All	13.2	40	Lead-acid Batteries	19.7	60
Other Rigid Plastic Products	59.2	180	Other Household Batteries	3.3	10
Grocery & Merchandise Bags	6.6	20	Tires	26.3	80
Trash Bags	32.9	100	Household Bulky Items	62.5	190
Commercial & Industrial Film	23.0	70	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	59.2	180			
Other Plastic	19.7	60	<b>Textiles</b>	<b>75.7</b>	<b>230</b>
			Carpet	23.0	70
<b>Glass</b>	<b>85.6</b>	<b>260</b>	Carpet Padding	6.6	20
Recyclable Glass Bottles & Jars	69.1	210	Clothing	29.6	90
Flat Glass	9.9	30	Other Textiles	16.5	50
Other Glass	6.6	20			
			<b>Household Hazardous Waste</b>	<b>26.3</b>	<b>80</b>
<b>Metal</b>	<b>128.4</b>	<b>390</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>450.9</b>	<b>1,370</b>
Aluminum Beverage Containers	16.5	50			
Other Aluminum	9.9	30			
Ferrous Containers (Tin Cans)	23.0	70	<b>Total MSW (tons)</b>		<b>6,680</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.02</b>

2014 population

6,077

## Putnam County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>529.2</b>	<b>1,570</b>	<b>Metal</b>		
Newsprint	53.9	160	Other Ferrous	50.6	150
High Grade Office Paper	30.3	90	Other Non-Ferrous	10.1	30
Magazines/Catalogs	33.7	100	Other Metal	16.9	50
Uncoated OCC/Kraft	215.7	640			
Boxboard	53.9	160	<b>Organics</b>	<b>583.1</b>	<b>1,730</b>
Mixed Paper - Recyclable	53.9	160	Yard Waste - Compostable	118.0	350
Compostable Paper	74.1	220	Yard Waste - Woody	23.6	70
Other Paper	13.5	40	Food Scraps	320.2	950
			Bottom Fines & Dirt	43.8	130
<b>Beverage Containers</b>	<b>6.7</b>	<b>20</b>	Diapers	37.1	110
Milk & Juice Cartons/Boxes - Coated	6.7	20	Other Organic	40.4	120
<b>Plastic</b>	<b>320.2</b>	<b>950</b>	<b>Inorganics</b>	<b>171.9</b>	<b>510</b>
#1 PET Bottles/Jars	23.6	70	Televisions	3.4	10
#1 Other PET Containers	6.7	20	Computer Monitors	3.4	10
#2 HDPE Bottles/Jars - Clear	10.1	30	Computer Equipment/Peripherals	6.7	20
#2 HDPE Bottles/Jars - Color	10.1	30	Electronic Equipment	13.5	40
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	10.1	30
#6 Exp. Polystyrene Packaging	16.9	50	White Goods - Not refrigerated	23.6	70
#3-#7 Other - All	13.5	40	Lead-acid Batteries	16.9	50
Other Rigid Plastic Products	57.3	170	Other Household Batteries	3.4	10
Grocery & Merchandise Bags	13.5	40	Tires	27.0	80
Trash Bags	33.7	100	Household Bulky Items	64.0	190
Commercial & Industrial Film	40.4	120	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	57.3	170			
Other Plastic	37.1	110	<b>Textiles</b>	<b>121.3</b>	<b>360</b>
			Carpet	23.6	70
<b>Glass</b>	<b>84.3</b>	<b>250</b>	Carpet Padding	6.7	20
Recyclable Glass Bottles & Jars	67.4	200	Clothing	57.3	170
Flat Glass	10.1	30	Other Textiles	33.7	100
Other Glass	6.7	20			
			<b>Household Hazardous Waste</b>	<b>27.0</b>	<b>80</b>
<b>Metal</b>	<b>128.1</b>	<b>380</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>475.2</b>	<b>1,410</b>
Aluminum Beverage Containers	16.9	50			
Other Aluminum	10.1	30			
Ferrous Containers (Tin Cans)	23.6	70	<b>Total MSW (tons)</b>		<b>7,260</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.70</b>

2014 population

5,934

## Randolph County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>580.6</b>	<b>9,570</b>	<b>Metal</b>		
Newsprint	46.7	770	Other Ferrous	51.0	840
High Grade Office Paper	40.7	670	Other Non-Ferrous	9.1	150
Magazines/Catalogs	31.5	520	Other Metal	15.8	260
Uncoated OCC/Kraft	268.8	4,430			
Boxboard	54.6	900	<b>Organics</b>	<b>561.2</b>	<b>9,250</b>
Mixed Paper - Recyclable	53.4	880	Yard Waste - Compostable	117.7	1,940
Compostable Paper	72.8	1,200	Yard Waste - Woody	23.1	380
Other Paper	12.1	200	Food Scraps	296.1	4,880
			Bottom Fines & Dirt	45.5	750
<b>Beverage Containers</b>	<b>4.9</b>	<b>80</b>	Diapers	37.0	610
Milk & Juice Cartons/Boxes - Coated	4.9	80	Other Organic	41.9	690
<b>Plastic</b>	<b>297.9</b>	<b>4,910</b>	<b>Inorganics</b>	<b>175.3</b>	<b>2,890</b>
#1 PET Bottles/Jars	18.2	300	Televisions	4.9	80
#1 Other PET Containers	4.9	80	Computer Monitors	3.0	50
#2 HDPE Bottles/Jars - Clear	9.1	150	Computer Equipment/Peripherals	7.3	120
#2 HDPE Bottles/Jars - Color	8.5	140	Electronic Equipment	14.6	240
#2 Other HDPE Containers	0.6	10	White Goods - Refrigerated	10.3	170
#6 Exp. Polystyrene Packaging	18.2	300	White Goods - Not refrigerated	23.1	380
#3-#7 Other - All	13.3	220	Lead-acid Batteries	18.2	300
Other Rigid Plastic Products	58.2	960	Other Household Batteries	4.2	70
Grocery & Merchandise Bags	11.5	190	Tires	26.1	430
Trash Bags	33.4	550	Household Bulky Items	63.1	1,040
Commercial & Industrial Film	32.8	540	Fluorescent Lights/Ballasts	0.6	10
Other Film	58.9	970			
Other Plastic	30.3	500	<b>Textiles</b>	<b>101.9</b>	<b>1,680</b>
			Carpet	24.3	400
<b>Glass</b>	<b>86.2</b>	<b>1,420</b>	Carpet Padding	6.7	110
Recyclable Glass Bottles & Jars	68.0	1,120	Clothing	44.9	740
Flat Glass	10.3	170	Other Textiles	26.1	430
Other Glass	7.9	130			
			<b>Household Hazardous Waste</b>	<b>26.7</b>	<b>440</b>
<b>Metal</b>	<b>122.6</b>	<b>2,020</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>467.2</b>	<b>7,700</b>
Aluminum Beverage Containers	15.2	250			
Other Aluminum	8.5	140			
Ferrous Containers (Tin Cans)	23.1	380	<b>Total MSW (tons)</b>		<b>39,960</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.64</b>

2014 population

32,964

## Richland County Municipal Solid Waste (MSW) Generation

	<b>County Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>		<b>County Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>
<b>Paper</b>	<b>652.5</b>	<b>5,270</b>	<b>Metal</b>		
Newsprint	39.6	320	Other Ferrous	50.8	410
High Grade Office Paper	40.9	330	Other Non-Ferrous	8.7	70
Magazines/Catalogs	32.2	260	Other Metal	16.1	130
Uncoated OCC/Kraft	346.7	2,800			
Boxboard	54.5	440	<b>Organics</b>	<b>567.1</b>	<b>4,580</b>
Mixed Paper - Recyclable	53.2	430	Yard Waste - Compostable	117.6	950
Compostable Paper	73.1	590	Yard Waste - Woody	23.5	190
Other Paper	12.4	100	Food Scraps	300.9	2,430
			Bottom Fines & Dirt	45.8	370
<b>Beverage Containers</b>	<b>5.0</b>	<b>40</b>	Diapers	37.1	300
Milk & Juice Cartons/Boxes - Coated	5.0	40	Other Organic	42.1	340
<b>Plastic</b>	<b>291.0</b>	<b>2,350</b>	<b>Inorganics</b>	<b>175.8</b>	<b>1,420</b>
#1 PET Bottles/Jars	19.8	160	Televisions	5.0	40
#1 Other PET Containers	5.0	40	Computer Monitors	3.7	30
#2 HDPE Bottles/Jars - Clear	9.9	80	Computer Equipment/Peripherals	7.4	60
#2 HDPE Bottles/Jars - Color	8.7	70	Electronic Equipment	14.9	120
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	9.9	80
#6 Exp. Polystyrene Packaging	18.6	150	White Goods - Not refrigerated	23.5	190
#3-#7 Other - All	12.4	100	Lead-acid Batteries	18.6	150
Other Rigid Plastic Products	58.2	470	Other Household Batteries	3.7	30
Grocery & Merchandise Bags	9.9	80	Tires	26.0	210
Trash Bags	33.4	270	Household Bulky Items	63.1	510
Commercial & Industrial Film	29.7	240	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	58.2	470			
Other Plastic	27.2	220	<b>Textiles</b>	<b>94.1</b>	<b>760</b>
			Carpet	24.8	200
<b>Glass</b>	<b>85.4</b>	<b>690</b>	Carpet Padding	6.2	50
Recyclable Glass Bottles & Jars	68.1	550	Clothing	39.6	320
Flat Glass	9.9	80	Other Textiles	23.5	190
Other Glass	7.4	60			
			<b>Household Hazardous Waste</b>	<b>26.0</b>	<b>210</b>
<b>Metal</b>	<b>121.3</b>	<b>980</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>460.6</b>	<b>3,720</b>
Aluminum Beverage Containers	14.9	120			
Other Aluminum	8.7	70			
Ferrous Containers (Tin Cans)	22.3	180	<b>Total MSW (tons)</b>		<b>20,020</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.79</b>

## Rock Island County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>831.5</b>	<b>61,320</b>	<b>Metal</b>		
Newsprint	111.2	8,200	Other Ferrous	51.3	3,780
High Grade Office Paper	55.1	4,060	Other Non-Ferrous	9.1	670
Magazines/Catalogs	30.9	2,280	Other Metal	15.9	1,170
Uncoated OCC/Kraft	441.0	32,520			
Boxboard	54.6	4,030	<b>Organics</b>	<b>575.7</b>	<b>42,460</b>
Mixed Paper - Recyclable	53.3	3,930	Yard Waste - Compostable	117.4	8,660
Compostable Paper	73.1	5,390	Yard Waste - Woody	23.2	1,710
Other Paper	12.3	910	Food Scraps	310.8	22,920
			Bottom Fines & Dirt	45.3	3,340
<b>Beverage Containers</b>	<b>5.0</b>	<b>370</b>	Diapers	37.0	2,730
Milk & Juice Cartons/Boxes - Coated	5.0	370	Other Organic	42.0	3,100
<b>Plastic</b>	<b>306.6</b>	<b>22,610</b>	<b>Inorganics</b>	<b>175.1</b>	<b>12,910</b>
#1 PET Bottles/Jars	19.9	1,470	Televisions	5.0	370
#1 Other PET Containers	5.6	410	Computer Monitors	3.1	230
#2 HDPE Bottles/Jars - Clear	10.0	740	Computer Equipment/Peripherals	7.1	520
#2 HDPE Bottles/Jars - Color	9.4	690	Electronic Equipment	14.5	1,070
#2 Other HDPE Containers	0.7	50	White Goods - Refrigerated	10.4	770
#6 Exp. Polystyrene Packaging	18.4	1,360	White Goods - Not refrigerated	23.2	1,710
#3-#7 Other - All	13.0	960	Lead-acid Batteries	18.2	1,340
Other Rigid Plastic Products	58.0	4,280	Other Household Batteries	4.3	320
Grocery & Merchandise Bags	12.3	910	Tires	25.8	1,900
Trash Bags	33.5	2,470	Household Bulky Items	63.1	4,650
Commercial & Industrial Film	34.8	2,570	Fluorescent Lights/Ballasts	0.4	30
Other Film	58.7	4,330			
Other Plastic	32.1	2,370	<b>Textiles</b>	<b>107.0</b>	<b>7,890</b>
			Carpet	24.4	1,800
<b>Glass</b>	<b>86.0</b>	<b>6,340</b>	Carpet Padding	6.6	490
Recyclable Glass Bottles & Jars	68.2	5,030	Clothing	48.1	3,550
Flat Glass	10.0	740	Other Textiles	27.8	2,050
Other Glass	7.7	570			
			<b>Household Hazardous Waste</b>	<b>26.7</b>	<b>1,970</b>
<b>Metal</b>	<b>123.0</b>	<b>9,070</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>600.8</b>	<b>44,310</b>
Aluminum Beverage Containers	15.3	1,130			
Other Aluminum	8.7	640			
Ferrous Containers (Tin Cans)	22.8	1,680	<b>Total MSW (tons)</b>		<b>209,250</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.77</b>

2014 population

147,499

## Saline County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>646.3</b>	<b>8,090</b>	<b>Metal</b>		
Newsprint	73.5	920	Other Ferrous	51.1	640
High Grade Office Paper	37.6	470	Other Non-Ferrous	8.8	110
Magazines/Catalogs	30.4	380	Other Metal	16.0	200
Uncoated OCC/Kraft	311.6	3,900			
Boxboard	54.3	680	<b>Organics</b>	<b>550.5</b>	<b>6,890</b>
Mixed Paper - Recyclable	53.5	670	Yard Waste - Compostable	117.4	1,470
Compostable Paper	72.7	910	Yard Waste - Woody	23.2	290
Other Paper	12.8	160	Food Scraps	285.2	3,570
			Bottom Fines & Dirt	45.5	570
<b>Beverage Containers</b>	<b>4.0</b>	<b>50</b>	Diapers	36.8	460
Milk & Juice Cartons/Boxes - Coated	4.0	50	Other Organic	42.3	530
<b>Plastic</b>	<b>281.2</b>	<b>3,520</b>	<b>Inorganics</b>	<b>175.0</b>	<b>2,190</b>
#1 PET Bottles/Jars	16.8	210	Televisions	4.8	60
#1 Other PET Containers	4.8	60	Computer Monitors	3.2	40
#2 HDPE Bottles/Jars - Clear	8.8	110	Computer Equipment/Peripherals	7.2	90
#2 HDPE Bottles/Jars - Color	8.0	100	Electronic Equipment	14.4	180
#2 Other HDPE Containers	0.8	10	White Goods - Refrigerated	10.4	130
#6 Exp. Polystyrene Packaging	18.4	230	White Goods - Not refrigerated	23.2	290
#3-#7 Other - All	12.8	160	Lead-acid Batteries	18.4	230
Other Rigid Plastic Products	58.3	730	Other Household Batteries	4.0	50
Grocery & Merchandise Bags	9.6	120	Tires	25.6	320
Trash Bags	33.6	420	Household Bulky Items	63.1	790
Commercial & Industrial Film	26.4	330	Fluorescent Lights/Ballasts	0.8	10
Other Film	59.1	740			
Other Plastic	24.0	300	<b>Textiles</b>	<b>89.5</b>	<b>1,120</b>
			Carpet	24.8	310
<b>Glass</b>	<b>87.1</b>	<b>1,090</b>	Carpet Padding	6.4	80
Recyclable Glass Bottles & Jars	68.7	860	Clothing	36.8	460
Flat Glass	10.4	130	Other Textiles	21.6	270
Other Glass	8.0	100			
			<b>Household Hazardous Waste</b>	<b>26.4</b>	<b>330</b>
<b>Metal</b>	<b>123.0</b>	<b>1,540</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>457.8</b>	<b>5,730</b>
Aluminum Beverage Containers	15.2	190			
Other Aluminum	8.8	110			
Ferrous Containers (Tin Cans)	23.2	290	<b>Total MSW (tons)</b>		<b>30,550</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.69</b>

2014 population

25,033

## Sangamon County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>788.6</b>	<b>78,490</b>	<b>Metal</b>		
Newsprint	75.3	7,490	Other Ferrous	51.2	5,100
High Grade Office Paper	68.6	6,830	Other Non-Ferrous	9.0	900
Magazines/Catalogs	32.4	3,220	Other Metal	15.9	1,580
Uncoated OCC/Kraft	419.2	41,720			
Boxboard	54.6	5,430	<b>Organics</b>	<b>599.9</b>	<b>59,710</b>
Mixed Paper - Recyclable	53.3	5,300	Yard Waste - Compostable	117.5	11,690
Compostable Paper	73.0	7,270	Yard Waste - Woody	23.2	2,310
Other Paper	12.4	1,230	Food Scraps	335.0	33,340
			Bottom Fines & Dirt	45.2	4,500
<b>Beverage Containers</b>	<b>5.8</b>	<b>580</b>	Diapers	37.1	3,690
Milk & Juice Cartons/Boxes - Coated	5.8	580	Other Organic	42.0	4,180
<b>Plastic</b>	<b>322.8</b>	<b>32,130</b>	<b>Inorganics</b>	<b>175.3</b>	<b>17,450</b>
#1 PET Bottles/Jars	23.2	2,310	Televisions	5.0	500
#1 Other PET Containers	6.5	650	Computer Monitors	3.2	320
#2 HDPE Bottles/Jars - Clear	11.8	1,170	Computer Equipment/Peripherals	7.1	710
#2 HDPE Bottles/Jars - Color	10.9	1,080	Electronic Equipment	14.5	1,440
#2 Other HDPE Containers	0.8	80	White Goods - Refrigerated	10.3	1,030
#6 Exp. Polystyrene Packaging	18.4	1,830	White Goods - Not refrigerated	23.1	2,300
#3-#7 Other - All	13.0	1,290	Lead-acid Batteries	18.3	1,820
Other Rigid Plastic Products	58.0	5,770	Other Household Batteries	4.3	430
Grocery & Merchandise Bags	13.8	1,370	Tires	25.8	2,570
Trash Bags	33.5	3,330	Household Bulky Items	63.1	6,280
Commercial & Industrial Film	38.8	3,860	Fluorescent Lights/Ballasts	0.5	50
Other Film	58.8	5,850			
Other Plastic	35.6	3,540	<b>Textiles</b>	<b>115.5</b>	<b>11,500</b>
			Carpet	24.4	2,430
<b>Glass</b>	<b>85.9</b>	<b>8,550</b>	Carpet Padding	6.6	660
Recyclable Glass Bottles & Jars	68.1	6,780	Clothing	53.6	5,330
Flat Glass	10.0	1,000	Other Textiles	30.9	3,080
Other Glass	7.7	770			
			<b>Household Hazardous Waste</b>	<b>26.9</b>	<b>2,680</b>
<b>Metal</b>	<b>123.1</b>	<b>12,250</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>607.6</b>	<b>60,470</b>
Aluminum Beverage Containers	15.4	1,530			
Other Aluminum	8.7	870			
Ferrous Containers (Tin Cans)	22.8	2,270	<b>Total MSW (tons)</b>		<b>283,810</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.81</b>

2014 population

199,056

## Schuyler County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>487.2</b>	<b>1,820</b>	<b>Metal</b>		
Newsprint	32.1	120	Other Ferrous	50.9	190
High Grade Office Paper	29.4	110	Other Non-Ferrous	8.0	30
Magazines/Catalogs	29.4	110	Other Metal	16.1	60
Uncoated OCC/Kraft	203.5	760			
Boxboard	53.5	200	<b>Organics</b>	<b>562.2</b>	<b>2,100</b>
Mixed Paper - Recyclable	53.5	200	Yard Waste - Compostable	117.8	440
Compostable Paper	72.3	270	Yard Waste - Woody	24.1	90
Other Paper	13.4	50	Food Scraps	294.5	1,100
			Bottom Fines & Dirt	45.5	170
<b>Beverage Containers</b>	<b>5.4</b>	<b>20</b>	Diapers	37.5	140
Milk & Juice Cartons/Boxes - Coated	5.4	20	Other Organic	42.8	160
<b>Plastic</b>	<b>302.5</b>	<b>1,130</b>	<b>Inorganics</b>	<b>179.4</b>	<b>670</b>
#1 PET Bottles/Jars	18.7	70	Televisions	5.4	20
#1 Other PET Containers	5.4	20	Computer Monitors	2.7	10
#2 HDPE Bottles/Jars - Clear	10.7	40	Computer Equipment/Peripherals	8.0	30
#2 HDPE Bottles/Jars - Color	8.0	30	Electronic Equipment	13.4	50
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	10.7	40
#6 Exp. Polystyrene Packaging	18.7	70	White Goods - Not refrigerated	24.1	90
#3-#7 Other - All	13.4	50	Lead-acid Batteries	18.7	70
Other Rigid Plastic Products	58.9	220	Other Household Batteries	5.4	20
Grocery & Merchandise Bags	10.7	40	Tires	26.8	100
Trash Bags	34.8	130	Household Bulky Items	64.2	240
Commercial & Industrial Film	32.1	120	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	58.9	220			
Other Plastic	32.1	120	<b>Textiles</b>	<b>101.7</b>	<b>380</b>
			Carpet	24.1	90
<b>Glass</b>	<b>85.7</b>	<b>320</b>	Carpet Padding	5.4	20
Recyclable Glass Bottles & Jars	66.9	250	Clothing	45.5	170
Flat Glass	10.7	40	Other Textiles	26.8	100
Other Glass	8.0	30			
			<b>Household Hazardous Waste</b>	<b>26.8</b>	<b>100</b>
<b>Metal</b>	<b>123.1</b>	<b>460</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>465.8</b>	<b>1,740</b>
Aluminum Beverage Containers	16.1	60			
Other Aluminum	8.0	30			
Ferrous Containers (Tin Cans)	24.1	90	<b>Total MSW (tons)</b>		<b>8,740</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.41</b>

2014 population

7,471

## Scott County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>425.4</b>	<b>1,130</b>	<b>Metal</b>		
Newsprint	52.7	140	Other Ferrous	52.7	140
High Grade Office Paper	22.6	60	Other Non-Ferrous	7.5	20
Magazines/Catalogs	30.1	80	Other Metal	15.1	40
Uncoated OCC/Kraft	131.8	350			
Boxboard	52.7	140	<b>Organics</b>	<b>579.7</b>	<b>1,540</b>
Mixed Paper - Recyclable	52.7	140	Yard Waste - Compostable	116.7	310
Compostable Paper	71.5	190	Yard Waste - Woody	22.6	60
Other Paper	11.3	30	Food Scraps	316.2	840
			Bottom Fines & Dirt	45.2	120
<b>Beverage Containers</b>	<b>7.5</b>	<b>20</b>	Diapers	37.6	100
Milk & Juice Cartons/Boxes - Coated	7.5	20	Other Organic	41.4	110
<b>Plastic</b>	<b>312.4</b>	<b>830</b>	<b>Inorganics</b>	<b>176.9</b>	<b>470</b>
#1 PET Bottles/Jars	22.6	60	Televisions	3.8	10
#1 Other PET Containers	7.5	20	Computer Monitors	3.8	10
#2 HDPE Bottles/Jars - Clear	11.3	30	Computer Equipment/Peripherals	7.5	20
#2 HDPE Bottles/Jars - Color	11.3	30	Electronic Equipment	15.1	40
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	11.3	30
#6 Exp. Polystyrene Packaging	18.8	50	White Goods - Not refrigerated	22.6	60
#3-#7 Other - All	11.3	30	Lead-acid Batteries	18.8	50
Other Rigid Plastic Products	56.5	150	Other Household Batteries	3.8	10
Grocery & Merchandise Bags	11.3	30	Tires	26.4	70
Trash Bags	33.9	90	Household Bulky Items	64.0	170
Commercial & Industrial Film	33.9	90	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	60.2	160			
Other Plastic	33.9	90	<b>Textiles</b>	<b>101.6</b>	<b>270</b>
			Carpet	22.6	60
<b>Glass</b>	<b>86.6</b>	<b>230</b>	Carpet Padding	7.5	20
Recyclable Glass Bottles & Jars	67.8	180	Clothing	45.2	120
Flat Glass	11.3	30	Other Textiles	26.4	70
Other Glass	7.5	20			
			<b>Household Hazardous Waste</b>	<b>26.4</b>	<b>70</b>
<b>Metal</b>	<b>120.5</b>	<b>320</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>466.8</b>	<b>1,240</b>
Aluminum Beverage Containers	15.1	40			
Other Aluminum	7.5	20			
Ferrous Containers (Tin Cans)	22.6	60	<b>Total MSW (tons)</b>		<b>6,120</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.31</b>

2014 population

5,313

## Shelby County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>457.9</b>	<b>5,130</b>	<b>Metal</b>		
Newsprint	35.7	400	Other Ferrous	50.9	570
High Grade Office Paper	24.1	270	Other Non-Ferrous	8.9	100
Magazines/Catalogs	29.5	330	Other Metal	16.1	180
Uncoated OCC/Kraft	175.0	1,960			
Boxboard	54.4	610	<b>Organics</b>	<b>568.6</b>	<b>6,370</b>
Mixed Paper - Recyclable	53.6	600	Yard Waste - Compostable	117.8	1,320
Compostable Paper	73.2	820	Yard Waste - Woody	23.2	260
Other Paper	12.5	140	Food Scraps	302.6	3,390
			Bottom Fines & Dirt	45.5	510
<b>Beverage Containers</b>	<b>5.4</b>	<b>60</b>	Diapers	37.5	420
Milk & Juice Cartons/Boxes - Coated	5.4	60	Other Organic	42.0	470
<b>Plastic</b>	<b>302.6</b>	<b>3,390</b>	<b>Inorganics</b>	<b>176.7</b>	<b>1,980</b>
#1 PET Bottles/Jars	19.6	220	Televisions	5.4	60
#1 Other PET Containers	5.4	60	Computer Monitors	3.6	40
#2 HDPE Bottles/Jars - Clear	9.8	110	Computer Equipment/Peripherals	7.1	80
#2 HDPE Bottles/Jars - Color	8.9	100	Electronic Equipment	14.3	160
#2 Other HDPE Containers	0.9	10	White Goods - Refrigerated	10.7	120
#6 Exp. Polystyrene Packaging	18.7	210	White Goods - Not refrigerated	23.2	260
#3-#7 Other - All	12.5	140	Lead-acid Batteries	17.9	200
Other Rigid Plastic Products	58.0	650	Other Household Batteries	4.5	50
Grocery & Merchandise Bags	11.6	130	Tires	25.9	290
Trash Bags	33.9	380	Household Bulky Items	63.4	710
Commercial & Industrial Film	33.0	370	Fluorescent Lights/Ballasts	0.9	10
Other Film	58.9	660			
Other Plastic	31.2	350	<b>Textiles</b>	<b>102.7</b>	<b>1,150</b>
			Carpet	24.1	270
<b>Glass</b>	<b>85.7</b>	<b>960</b>	Carpet Padding	6.2	70
Recyclable Glass Bottles & Jars	67.8	760	Clothing	45.5	510
Flat Glass	9.8	110	Other Textiles	26.8	300
Other Glass	8.0	90			
			<b>Household Hazardous Waste</b>	<b>27.7</b>	<b>310</b>
<b>Metal</b>	<b>123.2</b>	<b>1,380</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>466.8</b>	<b>5,230</b>
Aluminum Beverage Containers	15.2	170			
Other Aluminum	8.9	100			
Ferrous Containers (Tin Cans)	23.2	260	<b>Total MSW (tons)</b>		<b>25,960</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.35</b>

2014 population

22,406

St. Clair County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>636.4</b>	<b>85,140</b>	<b>Metal</b>		
Newsprint	55.3	7,400	Other Ferrous	51.2	6,850
High Grade Office Paper	37.6	5,030	Other Non-Ferrous	9.0	1,210
Magazines/Catalogs	29.7	3,970	Other Metal	15.9	2,130
Uncoated OCC/Kraft	320.6	42,890			
Boxboard	54.6	7,300	<b>Organics</b>	<b>579.2</b>	<b>77,490</b>
Mixed Paper - Recyclable	53.2	7,120	Yard Waste - Compostable	117.4	15,710
Compostable Paper	73.0	9,770	Yard Waste - Woody	23.2	3,110
Other Paper	12.4	1,660	Food Scraps	314.2	42,040
			Bottom Fines & Dirt	45.2	6,050
<b>Beverage Containers</b>	<b>5.0</b>	<b>670</b>	Diapers	37.1	4,960
Milk & Juice Cartons/Boxes - Coated	5.0	670	Other Organic	42.0	5,620
<b>Plastic</b>	<b>301.7</b>	<b>40,360</b>	<b>Inorganics</b>	<b>175.1</b>	<b>23,420</b>
#1 PET Bottles/Jars	19.9	2,660	Televisions	5.0	670
#1 Other PET Containers	5.6	750	Computer Monitors	3.1	420
#2 HDPE Bottles/Jars - Clear	10.1	1,350	Computer Equipment/Peripherals	7.1	950
#2 HDPE Bottles/Jars - Color	9.3	1,240	Electronic Equipment	14.4	1,930
#2 Other HDPE Containers	0.7	90	White Goods - Refrigerated	10.4	1,390
#6 Exp. Polystyrene Packaging	18.3	2,450	White Goods - Not refrigerated	23.1	3,090
#3-#7 Other - All	13.0	1,740	Lead-acid Batteries	18.2	2,440
Other Rigid Plastic Products	58.0	7,760	Other Household Batteries	4.3	580
Grocery & Merchandise Bags	11.7	1,560	Tires	25.8	3,450
Trash Bags	33.5	4,480	Household Bulky Items	63.1	8,440
Commercial & Industrial Film	32.7	4,380	Fluorescent Lights/Ballasts	0.4	60
Other Film	58.8	7,860			
Other Plastic	30.2	4,040	<b>Textiles</b>	<b>102.3</b>	<b>13,680</b>
			Carpet	24.4	3,270
<b>Glass</b>	<b>86.0</b>	<b>11,500</b>	Carpet Padding	6.7	890
Recyclable Glass Bottles & Jars	68.2	9,120	Clothing	45.1	6,030
Flat Glass	10.0	1,340	Other Textiles	26.1	3,490
Other Glass	7.8	1,040			
			<b>Household Hazardous Waste</b>	<b>26.8</b>	<b>3,590</b>
<b>Metal</b>	<b>123.0</b>	<b>16,460</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>597.2</b>	<b>79,900</b>
Aluminum Beverage Containers	15.4	2,060			
Other Aluminum	8.7	1,160			
Ferrous Containers (Tin Cans)	22.8	3,050	<b>Total MSW (tons)</b>		<b>352,210</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.21</b>

2014 population

267,569

## Stark County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>472.3</b>	<b>1,410</b>	<b>Metal</b>		
Newsprint	36.8	110	Other Ferrous	50.2	150
High Grade Office Paper	23.4	70	Other Non-Ferrous	10.0	30
Magazines/Catalogs	30.1	90	Other Metal	16.7	50
Uncoated OCC/Kraft	187.6	560			
Boxboard	53.6	160	<b>Organics</b>	<b>576.1</b>	<b>1,720</b>
Mixed Paper - Recyclable	53.6	160	Yard Waste - Compostable	117.2	350
Compostable Paper	73.7	220	Yard Waste - Woody	23.4	70
Other Paper	13.4	40	Food Scraps	308.2	920
			Bottom Fines & Dirt	46.9	140
<b>Beverage Containers</b>	<b>6.7</b>	<b>20</b>	Diapers	36.8	110
Milk & Juice Cartons/Boxes - Coated	6.7	20	Other Organic	43.5	130
<b>Plastic</b>	<b>308.2</b>	<b>920</b>	<b>Inorganics</b>	<b>174.2</b>	<b>520</b>
#1 PET Bottles/Jars	20.1	60	Televisions	6.7	20
#1 Other PET Containers	6.7	20	Computer Monitors	3.3	10
#2 HDPE Bottles/Jars - Clear	10.0	30	Computer Equipment/Peripherals	6.7	20
#2 HDPE Bottles/Jars - Color	10.0	30	Electronic Equipment	13.4	40
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	10.0	30
#6 Exp. Polystyrene Packaging	16.7	50	White Goods - Not refrigerated	23.4	70
#3-#7 Other - All	13.4	40	Lead-acid Batteries	16.7	50
Other Rigid Plastic Products	56.9	170	Other Household Batteries	3.3	10
Grocery & Merchandise Bags	13.4	40	Tires	26.8	80
Trash Bags	33.5	100	Household Bulky Items	63.6	190
Commercial & Industrial Film	33.5	100	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	60.3	180			
Other Plastic	33.5	100	<b>Textiles</b>	<b>103.8</b>	<b>310</b>
			Carpet	23.4	70
<b>Glass</b>	<b>87.1</b>	<b>260</b>	Carpet Padding	6.7	20
Recyclable Glass Bottles & Jars	70.3	210	Clothing	46.9	140
Flat Glass	10.0	30	Other Textiles	26.8	80
Other Glass	6.7	20			
			<b>Household Hazardous Waste</b>	<b>26.8</b>	<b>80</b>
<b>Metal</b>	<b>127.3</b>	<b>380</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>596.2</b>	<b>1,780</b>
Aluminum Beverage Containers	16.7	50			
Other Aluminum	10.0	30			
Ferrous Containers (Tin Cans)	23.4	70	<b>Total MSW (tons)</b>		<b>7,400</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.79</b>

2014 population

5,971

Stephenson County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>624.0</b>	<b>14,700</b>	<b>Metal</b>		
Newsprint	62.4	1,470	Other Ferrous	51.4	1,210
High Grade Office Paper	39.9	940	Other Non-Ferrous	8.9	210
Magazines/Catalogs	34.0	800	Other Metal	15.7	370
Uncoated OCC/Kraft	294.6	6,940			
Boxboard	54.8	1,290	<b>Organics</b>	<b>565.8</b>	<b>13,330</b>
Mixed Paper - Recyclable	53.1	1,250	Yard Waste - Compostable	117.6	2,770
Compostable Paper	73.0	1,720	Yard Waste - Woody	23.3	550
Other Paper	12.3	290	Food Scraps	300.5	7,080
			Bottom Fines & Dirt	45.4	1,070
<b>Beverage Containers</b>	<b>4.7</b>	<b>110</b>	Diapers	36.9	870
Milk & Juice Cartons/Boxes - Coated	4.7	110	Other Organic	42.0	990
<b>Plastic</b>	<b>295.4</b>	<b>6,960</b>	<b>Inorganics</b>	<b>174.9</b>	<b>4,120</b>
#1 PET Bottles/Jars	18.3	430	Televisions	5.1	120
#1 Other PET Containers	5.1	120	Computer Monitors	3.0	70
#2 HDPE Bottles/Jars - Clear	9.3	220	Computer Equipment/Peripherals	7.2	170
#2 HDPE Bottles/Jars - Color	8.5	200	Electronic Equipment	14.4	340
#2 Other HDPE Containers	0.4	10	White Goods - Refrigerated	10.2	240
#6 Exp. Polystyrene Packaging	18.3	430	White Goods - Not refrigerated	22.9	540
#3-#7 Other - All	12.7	300	Lead-acid Batteries	18.3	430
Other Rigid Plastic Products	58.2	1,370	Other Household Batteries	4.2	100
Grocery & Merchandise Bags	11.5	270	Tires	25.9	610
Trash Bags	33.5	790	Household Bulky Items	63.2	1,490
Commercial & Industrial Film	31.8	750	Fluorescent Lights/Ballasts	0.4	10
Other Film	58.6	1,380			
Other Plastic	29.3	690	<b>Textiles</b>	<b>101.0</b>	<b>2,380</b>
			Carpet	24.6	580
<b>Glass</b>	<b>86.2</b>	<b>2,030</b>	Carpet Padding	6.8	160
Recyclable Glass Bottles & Jars	68.3	1,610	Clothing	44.1	1,040
Flat Glass	10.2	240	Other Textiles	25.5	600
Other Glass	7.6	180			
			<b>Household Hazardous Waste</b>	<b>26.7</b>	<b>630</b>
<b>Metal</b>	<b>123.1</b>	<b>2,900</b>			
Aluminum Beverage Containers	15.3	360	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>465.6</b>	<b>10,970</b>
Other Aluminum	8.9	210			
Ferrous Containers (Tin Cans)	22.9	540	<b>Total MSW (tons)</b>		<b>58,130</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.76</b>

2014 population

47,118

## Tazewell County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>572.4</b>	<b>39,090</b>	<b>Metal</b>		
Newsprint	61.2	4,180	Other Ferrous	51.2	3,500
High Grade Office Paper	50.4	3,440	Other Non-Ferrous	9.1	620
Magazines/Catalogs	31.9	2,180	Other Metal	16.0	1,090
Uncoated OCC/Kraft	235.4	16,080			
Boxboard	54.6	3,730	<b>Organics</b>	<b>586.1</b>	<b>40,030</b>
Mixed Paper - Recyclable	53.3	3,640	Yard Waste - Compostable	117.4	8,020
Compostable Paper	73.1	4,990	Yard Waste - Woody	23.3	1,590
Other Paper	12.4	850	Food Scraps	321.1	21,930
			Bottom Fines & Dirt	45.2	3,090
<b>Beverage Containers</b>	<b>5.4</b>	<b>370</b>	Diapers	37.0	2,530
Milk & Juice Cartons/Boxes - Coated	5.4	370	Other Organic	42.0	2,870
<b>Plastic</b>	<b>327.0</b>	<b>22,330</b>	<b>Inorganics</b>	<b>175.3</b>	<b>11,970</b>
#1 PET Bottles/Jars	21.4	1,460	Televisions	5.0	340
#1 Other PET Containers	6.0	410	Computer Monitors	3.2	220
#2 HDPE Bottles/Jars - Clear	10.8	740	Computer Equipment/Peripherals	7.0	480
#2 HDPE Bottles/Jars - Color	10.0	680	Electronic Equipment	14.5	990
#2 Other HDPE Containers	0.7	50	White Goods - Refrigerated	10.4	710
#6 Exp. Polystyrene Packaging	18.4	1,260	White Goods - Not refrigerated	23.1	1,580
#3-#7 Other - All	12.9	880	Lead-acid Batteries	18.3	1,250
Other Rigid Plastic Products	58.0	3,960	Other Household Batteries	4.4	300
Grocery & Merchandise Bags	15.1	1,030	Tires	25.8	1,760
Trash Bags	33.5	2,290	Household Bulky Items	63.1	4,310
Commercial & Industrial Film	42.5	2,900	Fluorescent Lights/Ballasts	0.4	30
Other Film	58.7	4,010			
Other Plastic	38.9	2,660	<b>Textiles</b>	<b>123.3</b>	<b>8,420</b>
			Carpet	24.5	1,670
<b>Glass</b>	<b>85.9</b>	<b>5,870</b>	Carpet Padding	6.6	450
Recyclable Glass Bottles & Jars	68.1	4,650	Clothing	58.4	3,990
Flat Glass	10.1	690	Other Textiles	33.8	2,310
Other Glass	7.8	530			
			<b>Household Hazardous Waste</b>	<b>26.9</b>	<b>1,840</b>
<b>Metal</b>	<b>123.1</b>	<b>8,410</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>613.6</b>	<b>41,910</b>
Aluminum Beverage Containers	15.4	1,050			
Other Aluminum	8.6	590			
Ferrous Containers (Tin Cans)	22.8	1,560	<b>Total MSW (tons)</b>		<b>180,240</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.23</b>

2014 population

136,594

## Union County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>426.8</b>	<b>3,840</b>	<b>Metal</b>		
Newsprint	51.1	460	Other Ferrous	51.1	460
High Grade Office Paper	30.0	270	Other Non-Ferrous	8.9	80
Magazines/Catalogs	31.1	280	Other Metal	15.6	140
Uncoated OCC/Kraft	121.1	1,090			
Boxboard	54.5	490	<b>Organics</b>	<b>559.0</b>	<b>5,030</b>
Mixed Paper - Recyclable	53.3	480	Yard Waste - Compostable	117.8	1,060
Compostable Paper	73.3	660	Yard Waste - Woody	23.3	210
Other Paper	12.2	110	Food Scraps	293.4	2,640
			Bottom Fines & Dirt	45.6	410
<b>Beverage Containers</b>	<b>4.4</b>	<b>40</b>	Diapers	36.7	330
Milk & Juice Cartons/Boxes - Coated	4.4	40	Other Organic	42.2	380
<b>Plastic</b>	<b>287.8</b>	<b>2,590</b>	<b>Inorganics</b>	<b>174.5</b>	<b>1,570</b>
#1 PET Bottles/Jars	17.8	160	Televisions	5.6	50
#1 Other PET Containers	5.6	50	Computer Monitors	3.3	30
#2 HDPE Bottles/Jars - Clear	8.9	80	Computer Equipment/Peripherals	6.7	60
#2 HDPE Bottles/Jars - Color	8.9	80	Electronic Equipment	14.4	130
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	10.0	90
#6 Exp. Polystyrene Packaging	17.8	160	White Goods - Not refrigerated	23.3	210
#3-#7 Other - All	13.3	120	Lead-acid Batteries	17.8	160
Other Rigid Plastic Products	57.8	520	Other Household Batteries	4.4	40
Grocery & Merchandise Bags	10.0	90	Tires	25.6	230
Trash Bags	33.3	300	Household Bulky Items	63.3	570
Commercial & Industrial Film	28.9	260	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	58.9	530			
Other Plastic	26.7	240	<b>Textiles</b>	<b>94.5</b>	<b>850</b>
			Carpet	24.4	220
<b>Glass</b>	<b>86.7</b>	<b>780</b>	Carpet Padding	6.7	60
Recyclable Glass Bottles & Jars	68.9	620	Clothing	40.0	360
Flat Glass	10.0	90	Other Textiles	23.3	210
Other Glass	7.8	70			
			<b>Household Hazardous Waste</b>	<b>27.8</b>	<b>250</b>
<b>Metal</b>	<b>123.4</b>	<b>1,110</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>461.2</b>	<b>4,150</b>
Aluminum Beverage Containers	15.6	140			
Other Aluminum	8.9	80			
Ferrous Containers (Tin Cans)	23.3	210	<b>Total MSW (tons)</b>		<b>20,210</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.15</b>

2014 population

17,996

## Vermilion County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>601.7</b>	<b>24,410</b>	<b>Metal</b>		
Newsprint	58.2	2,360	Other Ferrous	51.3	2,080
High Grade Office Paper	37.2	1,510	Other Non-Ferrous	9.1	370
Magazines/Catalogs	29.8	1,210	Other Metal	15.8	640
Uncoated OCC/Kraft	283.5	11,500			
Boxboard	54.5	2,210	<b>Organics</b>	<b>555.1</b>	<b>22,520</b>
Mixed Paper - Recyclable	53.2	2,160	Yard Waste - Compostable	117.3	4,760
Compostable Paper	73.0	2,960	Yard Waste - Woody	23.2	940
Other Paper	12.3	500	Food Scraps	290.1	11,770
			Bottom Fines & Dirt	45.4	1,840
<b>Beverage Containers</b>	<b>4.2</b>	<b>170</b>	Diapers	37.0	1,500
Milk & Juice Cartons/Boxes - Coated	4.2	170	Other Organic	42.1	1,710
<b>Plastic</b>	<b>284.9</b>	<b>11,560</b>	<b>Inorganics</b>	<b>175.5</b>	<b>7,120</b>
#1 PET Bottles/Jars	17.0	690	Televisions	4.9	200
#1 Other PET Containers	4.7	190	Computer Monitors	3.2	130
#2 HDPE Bottles/Jars - Clear	8.6	350	Computer Equipment/Peripherals	7.1	290
#2 HDPE Bottles/Jars - Color	7.9	320	Electronic Equipment	14.5	590
#2 Other HDPE Containers	0.5	20	White Goods - Refrigerated	10.4	420
#6 Exp. Polystyrene Packaging	18.5	750	White Goods - Not refrigerated	23.2	940
#3-#7 Other - All	13.1	530	Lead-acid Batteries	18.2	740
Other Rigid Plastic Products	57.9	2,350	Other Household Batteries	4.4	180
Grocery & Merchandise Bags	10.1	410	Tires	25.9	1,050
Trash Bags	33.5	1,360	Household Bulky Items	63.1	2,560
Commercial & Industrial Film	28.3	1,150	Fluorescent Lights/Ballasts	0.5	20
Other Film	58.7	2,380			
Other Plastic	26.1	1,060	<b>Textiles</b>	<b>92.9</b>	<b>3,770</b>
			Carpet	24.4	990
<b>Glass</b>	<b>86.3</b>	<b>3,500</b>	Carpet Padding	6.7	270
Recyclable Glass Bottles & Jars	68.3	2,770	Clothing	39.2	1,590
Flat Glass	10.1	410	Other Textiles	22.7	920
Other Glass	7.9	320			
			<b>Household Hazardous Waste</b>	<b>26.6</b>	<b>1,080</b>
<b>Metal</b>	<b>123.0</b>	<b>4,990</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>589.8</b>	<b>23,930</b>
Aluminum Beverage Containers	15.3	620			
Other Aluminum	8.6	350			
Ferrous Containers (Tin Cans)	22.9	930	<b>Total MSW (tons)</b>		<b>103,050</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.96</b>

## Wabash County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>546.4</b>	<b>3,150</b>	<b>Metal</b>		
Newsprint	78.1	450	Other Ferrous	52.0	300
High Grade Office Paper	31.2	180	Other Non-Ferrous	8.7	50
Magazines/Catalogs	33.0	190	Other Metal	15.6	90
Uncoated OCC/Kraft	211.6	1,220			
Boxboard	53.8	310	<b>Organics</b>	<b>572.4</b>	<b>3,300</b>
Mixed Paper - Recyclable	53.8	310	Yard Waste - Compostable	117.9	680
Compostable Paper	72.8	420	Yard Waste - Woody	22.5	130
Other Paper	12.1	70	Food Scraps	308.7	1,780
			Bottom Fines & Dirt	45.1	260
<b>Beverage Containers</b>	<b>5.2</b>	<b>30</b>	Diapers	36.4	210
Milk & Juice Cartons/Boxes - Coated	5.2	30	Other Organic	41.6	240
<b>Plastic</b>	<b>300.1</b>	<b>1,730</b>	<b>Inorganics</b>	<b>173.4</b>	<b>1,000</b>
#1 PET Bottles/Jars	20.8	120	Televisions	5.2	30
#1 Other PET Containers	5.2	30	Computer Monitors	3.5	20
#2 HDPE Bottles/Jars - Clear	10.4	60	Computer Equipment/Peripherals	6.9	40
#2 HDPE Bottles/Jars - Color	8.7	50	Electronic Equipment	13.9	80
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	10.4	60
#6 Exp. Polystyrene Packaging	17.3	100	White Goods - Not refrigerated	22.5	130
#3-#7 Other - All	13.9	80	Lead-acid Batteries	19.1	110
Other Rigid Plastic Products	57.2	330	Other Household Batteries	3.5	20
Grocery & Merchandise Bags	12.1	70	Tires	26.0	150
Trash Bags	33.0	190	Household Bulky Items	62.4	360
Commercial & Industrial Film	33.0	190	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	59.0	340			
Other Plastic	29.5	170	<b>Textiles</b>	<b>102.3</b>	<b>590</b>
			Carpet	24.3	140
<b>Glass</b>	<b>85.0</b>	<b>490</b>	Carpet Padding	6.9	40
Recyclable Glass Bottles & Jars	67.6	390	Clothing	45.1	260
Flat Glass	10.4	60	Other Textiles	26.0	150
Other Glass	6.9	40			
			<b>Household Hazardous Waste</b>	<b>26.0</b>	<b>150</b>
<b>Metal</b>	<b>123.1</b>	<b>710</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>464.8</b>	<b>2,680</b>
Aluminum Beverage Containers	15.6	90			
Other Aluminum	8.7	50			
Ferrous Containers (Tin Cans)	22.5	130	<b>Total MSW (tons)</b>		<b>13,830</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.57</b>

2014 population

11,531

## Warren County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>589.3</b>	<b>5,250</b>	<b>Metal</b>		
Newsprint	43.8	390	Other Ferrous	51.6	460
High Grade Office Paper	39.3	350	Other Non-Ferrous	9.0	80
Magazines/Catalogs	30.3	270	Other Metal	15.7	140
Uncoated OCC/Kraft	282.9	2,520			
Boxboard	55.0	490	<b>Organics</b>	<b>553.4</b>	<b>4,930</b>
Mixed Paper - Recyclable	52.8	470	Yard Waste - Compostable	117.9	1,050
Compostable Paper	73.0	650	Yard Waste - Woody	23.6	210
Other Paper	12.3	110	Food Scraps	288.5	2,570
			Bottom Fines & Dirt	44.9	400
<b>Beverage Containers</b>	<b>4.5</b>	<b>40</b>	Diapers	37.0	330
Milk & Juice Cartons/Boxes - Coated	4.5	40	Other Organic	41.5	370
<b>Plastic</b>	<b>289.6</b>	<b>2,580</b>	<b>Inorganics</b>	<b>174.0</b>	<b>1,550</b>
#1 PET Bottles/Jars	16.8	150	Televisions	4.5	40
#1 Other PET Containers	4.5	40	Computer Monitors	3.4	30
#2 HDPE Bottles/Jars - Clear	9.0	80	Computer Equipment/Peripherals	6.7	60
#2 HDPE Bottles/Jars - Color	7.9	70	Electronic Equipment	14.6	130
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	10.1	90
#6 Exp. Polystyrene Packaging	18.0	160	White Goods - Not refrigerated	23.6	210
#3-#7 Other - All	13.5	120	Lead-acid Batteries	18.0	160
Other Rigid Plastic Products	58.4	520	Other Household Batteries	4.5	40
Grocery & Merchandise Bags	11.2	100	Tires	25.8	230
Trash Bags	33.7	300	Household Bulky Items	62.9	560
Commercial & Industrial Film	30.3	270	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	58.4	520			
Other Plastic	28.1	250	<b>Textiles</b>	<b>96.5</b>	<b>860</b>
			Carpet	24.7	220
<b>Glass</b>	<b>87.6</b>	<b>780</b>	Carpet Padding	6.7	60
Recyclable Glass Bottles & Jars	69.6	620	Clothing	41.5	370
Flat Glass	10.1	90	Other Textiles	23.6	210
Other Glass	7.9	70			
			<b>Household Hazardous Waste</b>	<b>26.9</b>	<b>240</b>
<b>Metal</b>	<b>123.5</b>	<b>1,100</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>462.5</b>	<b>4,120</b>
Aluminum Beverage Containers	15.7	140			
Other Aluminum	9.0	80			
Ferrous Containers (Tin Cans)	22.5	200	<b>Total MSW (tons)</b>		<b>21,450</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.60</b>

2014 population

17,817

## Washington County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>644.9</b>	<b>4,700</b>	<b>Metal</b>		
Newsprint	26.1	190	Other Ferrous	50.8	370
High Grade Office Paper	50.8	370	Other Non-Ferrous	9.6	70
Magazines/Catalogs	31.6	230	Other Metal	16.5	120
Uncoated OCC/Kraft	343.0	2,500			
Boxboard	54.9	400	<b>Organics</b>	<b>583.2</b>	<b>4,250</b>
Mixed Paper - Recyclable	53.5	390	Yard Waste - Compostable	118.0	860
Compostable Paper	72.7	530	Yard Waste - Woody	23.3	170
Other Paper	12.3	90	Food Scraps	317.0	2,310
			Bottom Fines & Dirt	45.3	330
<b>Beverage Containers</b>	<b>5.5</b>	<b>40</b>	Diapers	37.0	270
Milk & Juice Cartons/Boxes - Coated	5.5	40	Other Organic	42.5	310
<b>Plastic</b>	<b>318.3</b>	<b>2,320</b>	<b>Inorganics</b>	<b>175.6</b>	<b>1,280</b>
#1 PET Bottles/Jars	22.0	160	Televisions	5.5	40
#1 Other PET Containers	6.9	50	Computer Monitors	2.7	20
#2 HDPE Bottles/Jars - Clear	11.0	80	Computer Equipment/Peripherals	6.9	50
#2 HDPE Bottles/Jars - Color	11.0	80	Electronic Equipment	15.1	110
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	11.0	80
#6 Exp. Polystyrene Packaging	19.2	140	White Goods - Not refrigerated	23.3	170
#3-#7 Other - All	12.3	90	Lead-acid Batteries	17.8	130
Other Rigid Plastic Products	57.6	420	Other Household Batteries	4.1	30
Grocery & Merchandise Bags	13.7	100	Tires	26.1	190
Trash Bags	32.9	240	Household Bulky Items	63.1	460
Commercial & Industrial Film	38.4	280	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	59.0	430			
Other Plastic	34.3	250	<b>Textiles</b>	<b>113.9</b>	<b>830</b>
			Carpet	24.7	180
<b>Glass</b>	<b>86.4</b>	<b>630</b>	Carpet Padding	6.9	50
Recyclable Glass Bottles & Jars	68.6	500	Clothing	52.1	380
Flat Glass	9.6	70	Other Textiles	30.2	220
Other Glass	8.2	60			
			<b>Household Hazardous Waste</b>	<b>24.7</b>	<b>180</b>
<b>Metal</b>	<b>123.5</b>	<b>900</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>473.4</b>	<b>3,450</b>
Aluminum Beverage Containers	15.1	110			
Other Aluminum	8.2	60			
Ferrous Containers (Tin Cans)	23.3	170	<b>Total MSW (tons)</b>		<b>18,580</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.98</b>

2014 population

14,576

## Wayne County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>508.3</b>	<b>4,230</b>	<b>Metal</b>		
Newsprint	26.4	220	Other Ferrous	51.7	430
High Grade Office Paper	27.6	230	Other Non-Ferrous	9.6	80
Magazines/Catalogs	30.0	250	Other Metal	15.6	130
Uncoated OCC/Kraft	231.9	1,930			
Boxboard	54.1	450	<b>Organics</b>	<b>558.8</b>	<b>4,650</b>
Mixed Paper - Recyclable	52.9	440	Yard Waste - Compostable	117.8	980
Compostable Paper	73.3	610	Yard Waste - Woody	22.8	190
Other Paper	12.0	100	Food Scraps	293.2	2,440
			Bottom Fines & Dirt	45.7	380
<b>Beverage Containers</b>	<b>4.8</b>	<b>40</b>	Diapers	37.3	310
Milk & Juice Cartons/Boxes - Coated	4.8	40	Other Organic	42.1	350
<b>Plastic</b>	<b>293.2</b>	<b>2,440</b>	<b>Inorganics</b>	<b>174.2</b>	<b>1,450</b>
#1 PET Bottles/Jars	18.0	150	Televisions	4.8	40
#1 Other PET Containers	4.8	40	Computer Monitors	3.6	30
#2 HDPE Bottles/Jars - Clear	9.6	80	Computer Equipment/Peripherals	7.2	60
#2 HDPE Bottles/Jars - Color	8.4	70	Electronic Equipment	14.4	120
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	10.8	90
#6 Exp. Polystyrene Packaging	18.0	150	White Goods - Not refrigerated	22.8	190
#3-#7 Other - All	14.4	120	Lead-acid Batteries	18.0	150
Other Rigid Plastic Products	57.7	480	Other Household Batteries	4.8	40
Grocery & Merchandise Bags	10.8	90	Tires	25.2	210
Trash Bags	33.6	280	Household Bulky Items	62.5	520
Commercial & Industrial Film	30.0	250	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	58.9	490			
Other Plastic	28.8	240	<b>Textiles</b>	<b>97.3</b>	<b>810</b>
			Carpet	24.0	200
<b>Glass</b>	<b>85.3</b>	<b>710</b>	Carpet Padding	7.2	60
Recyclable Glass Bottles & Jars	68.5	570	Clothing	42.1	350
Flat Glass	9.6	80	Other Textiles	24.0	200
Other Glass	7.2	60			
			<b>Household Hazardous Waste</b>	<b>25.2</b>	<b>210</b>
<b>Metal</b>	<b>123.8</b>	<b>1,030</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>463.8</b>	<b>3,860</b>
Aluminum Beverage Containers	15.6	130			
Other Aluminum	8.4	70			
Ferrous Containers (Tin Cans)	22.8	190	<b>Total MSW (tons)</b>		<b>19,430</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.40</b>

2014 population

16,644

## White County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>617.0</b>	<b>4,500</b>	<b>Metal</b>		
Newsprint	72.7	530	Other Ferrous	50.7	370
High Grade Office Paper	32.9	240	Other Non-Ferrous	9.6	70
Magazines/Catalogs	34.3	250	Other Metal	16.5	120
Uncoated OCC/Kraft	283.8	2,070			
Boxboard	54.8	400	<b>Organics</b>	<b>567.6</b>	<b>4,140</b>
Mixed Paper - Recyclable	53.5	390	Yard Waste - Compostable	117.9	860
Compostable Paper	72.7	530	Yard Waste - Woody	23.3	170
Other Paper	12.3	90	Food Scraps	301.6	2,200
			Bottom Fines & Dirt	45.2	330
<b>Beverage Containers</b>	<b>5.5</b>	<b>40</b>	Diapers	37.0	270
Milk & Juice Cartons/Boxes - Coated	5.5	40	Other Organic	42.5	310
<b>Plastic</b>	<b>294.8</b>	<b>2,150</b>	<b>Inorganics</b>	<b>175.5</b>	<b>1,280</b>
#1 PET Bottles/Jars	19.2	140	Televisions	5.5	40
#1 Other PET Containers	5.5	40	Computer Monitors	2.7	20
#2 HDPE Bottles/Jars - Clear	9.6	70	Computer Equipment/Peripherals	6.9	50
#2 HDPE Bottles/Jars - Color	9.6	70	Electronic Equipment	15.1	110
#2 Other HDPE Containers	<1	<5	White Goods - Refrigerated	11.0	80
#6 Exp. Polystyrene Packaging	19.2	140	White Goods - Not refrigerated	23.3	170
#3-#7 Other - All	12.3	90	Lead-acid Batteries	17.8	130
Other Rigid Plastic Products	57.6	420	Other Household Batteries	4.1	30
Grocery & Merchandise Bags	11.0	80	Tires	26.1	190
Trash Bags	32.9	240	Household Bulky Items	63.1	460
Commercial & Industrial Film	30.2	220	Fluorescent Lights/Ballasts	<0.1	<1
Other Film	59.0	430			
Other Plastic	28.8	210	<b>Textiles</b>	<b>97.3</b>	<b>710</b>
			Carpet	24.7	180
<b>Glass</b>	<b>86.4</b>	<b>630</b>	Carpet Padding	6.9	50
Recyclable Glass Bottles & Jars	68.6	500	Clothing	41.1	300
Flat Glass	9.6	70	Other Textiles	24.7	180
Other Glass	8.2	60			
			<b>Household Hazardous Waste</b>	<b>24.7</b>	<b>180</b>
<b>Metal</b>	<b>123.4</b>	<b>900</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>460.7</b>	<b>3,360</b>
Aluminum Beverage Containers	15.1	110			
Other Aluminum	8.2	60			
Ferrous Containers (Tin Cans)	23.3	170	<b>Total MSW (tons)</b>		<b>17,890</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.72</b>

2014 population

14,587

## Whiteside County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>584.8</b>	<b>16,910</b>	<b>Metal</b>		
Newsprint	28.4	820	Other Ferrous	51.2	1,480
High Grade Office Paper	38.7	1,120	Other Non-Ferrous	9.0	260
Magazines/Catalogs	32.2	930	Other Metal	15.9	460
Uncoated OCC/Kraft	292.2	8,450			
Boxboard	54.6	1,580	<b>Organics</b>	<b>570.2</b>	<b>16,490</b>
Mixed Paper - Recyclable	53.3	1,540	Yard Waste - Compostable	117.6	3,400
Compostable Paper	73.0	2,110	Yard Waste - Woody	23.2	670
Other Paper	12.4	360	Food Scraps	305.0	8,820
			Bottom Fines & Dirt	45.3	1,310
<b>Beverage Containers</b>	<b>4.8</b>	<b>140</b>	Diapers	37.0	1,070
Milk & Juice Cartons/Boxes - Coated	4.8	140	Other Organic	42.2	1,220
<b>Plastic</b>	<b>299.1</b>	<b>8,650</b>	<b>Inorganics</b>	<b>175.7</b>	<b>5,080</b>
#1 PET Bottles/Jars	19.4	560	Televisions	5.2	150
#1 Other PET Containers	5.5	160	Computer Monitors	3.1	90
#2 HDPE Bottles/Jars - Clear	9.7	280	Computer Equipment/Peripherals	7.3	210
#2 HDPE Bottles/Jars - Color	9.0	260	Electronic Equipment	14.5	420
#2 Other HDPE Containers	0.7	20	White Goods - Refrigerated	10.4	300
#6 Exp. Polystyrene Packaging	18.3	530	White Goods - Not refrigerated	23.2	670
#3-#7 Other - All	13.1	380	Lead-acid Batteries	18.3	530
Other Rigid Plastic Products	58.1	1,680	Other Household Batteries	4.5	130
Grocery & Merchandise Bags	11.4	330	Tires	25.9	750
Trash Bags	33.5	970	Household Bulky Items	62.9	1,820
Commercial & Industrial Film	31.8	920	Fluorescent Lights/Ballasts	0.3	10
Other Film	58.8	1,700			
Other Plastic	29.7	860	<b>Textiles</b>	<b>101.0</b>	<b>2,920</b>
			Carpet	24.6	710
<b>Glass</b>	<b>85.8</b>	<b>2,480</b>	Carpet Padding	6.6	190
Recyclable Glass Bottles & Jars	68.1	1,970	Clothing	44.3	1,280
Flat Glass	10.0	290	Other Textiles	25.6	740
Other Glass	7.6	220			
			<b>Household Hazardous Waste</b>	<b>27.7</b>	<b>800</b>
<b>Metal</b>	<b>122.8</b>	<b>3,550</b>			
Aluminum Beverage Containers	15.2	440	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>465.5</b>	<b>13,460</b>
Other Aluminum	8.6	250			
Ferrous Containers (Tin Cans)	22.8	660	<b>Total MSW (tons)</b>		<b>70,480</b>
			<b>Total MSW (pounds/person/day)</b>		<b>6.68</b>

2014 population

57,835

## Will County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>646.7</b>	<b>221,500</b>	<b>Metal</b>		
Newsprint	77.7	26,600	Other Ferrous	51.2	17,550
High Grade Office Paper	50.3	17,240	Other Non-Ferrous	9.1	3,100
Magazines/Catalogs	28.6	9,780	Other Metal	15.9	5,440
Uncoated OCC/Kraft	296.9	101,680			
Boxboard	54.6	18,690	<b>Organics</b>	<b>614.8</b>	<b>210,580</b>
Mixed Paper - Recyclable	53.3	18,240	Yard Waste - Compostable	117.4	40,210
Compostable Paper	73.1	25,020	Yard Waste - Woody	23.2	7,950
Other Paper	12.4	4,250	Food Scraps	349.9	119,840
			Bottom Fines & Dirt	45.2	15,490
<b>Beverage Containers</b>	<b>6.2</b>	<b>2,120</b>	Diapers	37.1	12,690
Milk & Juice Cartons/Boxes - Coated	6.2	2,120	Other Organic	42.0	14,400
<b>Plastic</b>	<b>339.6</b>	<b>116,320</b>	<b>Inorganics</b>	<b>175.2</b>	<b>60,000</b>
#1 PET Bottles/Jars	24.6	8,410	Televisions	5.0	1,720
#1 Other PET Containers	6.9	2,360	Computer Monitors	3.2	1,090
#2 HDPE Bottles/Jars - Clear	12.4	4,250	Computer Equipment/Peripherals	7.1	2,430
#2 HDPE Bottles/Jars - Color	11.5	3,930	Electronic Equipment	14.5	4,950
#2 Other HDPE Containers	0.8	280	White Goods - Refrigerated	10.4	3,550
#6 Exp. Polystyrene Packaging	18.4	6,290	White Goods - Not refrigerated	23.1	7,920
#3-#7 Other - All	13.1	4,470	Lead-acid Batteries	18.2	6,250
Other Rigid Plastic Products	58.0	19,850	Other Household Batteries	4.3	1,480
Grocery & Merchandise Bags	15.5	5,310	Tires	25.8	8,840
Trash Bags	33.5	11,470	Household Bulky Items	63.1	21,610
Commercial & Industrial Film	43.1	14,770	Fluorescent Lights/Ballasts	0.5	160
Other Film	58.8	20,130			
Other Plastic	43.2	14,800	<b>Textiles</b>	<b>125.0</b>	<b>42,820</b>
			Carpet	24.5	8,380
<b>Glass</b>	<b>86.0</b>	<b>29,440</b>	Carpet Padding	6.6	2,270
Recyclable Glass Bottles & Jars	68.1	23,340	Clothing	59.5	20,370
Flat Glass	10.0	3,440	Other Textiles	34.5	11,800
Other Glass	7.8	2,660			
			<b>Household Hazardous Waste</b>	<b>26.9</b>	<b>9,210</b>
<b>Metal</b>	<b>123.1</b>	<b>42,160</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>614.9</b>	<b>210,590</b>
Aluminum Beverage Containers	15.4	5,270			
Other Aluminum	8.7	2,980			
Ferrous Containers (Tin Cans)	22.8	7,820	<b>Total MSW (tons)</b>		<b>944,740</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.56</b>

2014 population

685,000

## Williamson County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>645.8</b>	<b>21,890</b>	<b>Metal</b>		
Newsprint	51.6	1,750	Other Ferrous	51.3	1,740
High Grade Office Paper	42.2	1,430	Other Non-Ferrous	9.1	310
Magazines/Catalogs	29.5	1,000	Other Metal	15.9	540
Uncoated OCC/Kraft	329.2	11,160			
Boxboard	54.6	1,850	<b>Organics</b>	<b>562.0</b>	<b>19,050</b>
Mixed Paper - Recyclable	53.1	1,800	Yard Waste - Compostable	117.4	3,980
Compostable Paper	73.2	2,480	Yard Waste - Woody	23.3	790
Other Paper	12.4	420	Food Scraps	297.1	10,070
			Bottom Fines & Dirt	45.1	1,530
<b>Beverage Containers</b>	<b>4.4</b>	<b>150</b>	Diapers	37.2	1,260
Milk & Juice Cartons/Boxes - Coated	4.4	150	Other Organic	41.9	1,420
<b>Plastic</b>	<b>288.5</b>	<b>9,780</b>	<b>Inorganics</b>	<b>175.2</b>	<b>5,940</b>
#1 PET Bottles/Jars	18.0	610	Televisions	5.0	170
#1 Other PET Containers	5.0	170	Computer Monitors	3.2	110
#2 HDPE Bottles/Jars - Clear	9.1	310	Computer Equipment/Peripherals	7.1	240
#2 HDPE Bottles/Jars - Color	8.3	280	Electronic Equipment	14.5	490
#2 Other HDPE Containers	0.6	20	White Goods - Refrigerated	10.3	350
#6 Exp. Polystyrene Packaging	18.6	630	White Goods - Not refrigerated	23.0	780
#3-#7 Other - All	13.0	440	Lead-acid Batteries	18.3	620
Other Rigid Plastic Products	58.1	1,970	Other Household Batteries	4.4	150
Grocery & Merchandise Bags	10.3	350	Tires	25.7	870
Trash Bags	33.6	1,140	Household Bulky Items	63.1	2,140
Commercial & Industrial Film	28.6	970	Fluorescent Lights/Ballasts	0.6	20
Other Film	58.7	1,990			
Other Plastic	26.6	900	<b>Textiles</b>	<b>93.5</b>	<b>3,170</b>
			Carpet	24.5	830
<b>Glass</b>	<b>85.8</b>	<b>2,910</b>	Carpet Padding	6.5	220
Recyclable Glass Bottles & Jars	68.1	2,310	Clothing	39.5	1,340
Flat Glass	10.0	340	Other Textiles	23.0	780
Other Glass	7.7	260			
			<b>Household Hazardous Waste</b>	<b>26.8</b>	<b>910</b>
<b>Metal</b>	<b>123.0</b>	<b>4,170</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>591.2</b>	<b>20,040</b>
Aluminum Beverage Containers	15.3	520			
Other Aluminum	8.6	290			
Ferrous Containers (Tin Cans)	22.7	770	<b>Total MSW (tons)</b>		<b>88,010</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.11</b>

2014 population

67,796

## Winnebago County Municipal Solid Waste (MSW) Generation

	<b>County Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>		<b>County Generation (lb/c/yr)</b>	<b>Total Generation (tons)</b>
<b>Paper</b>	<b>726.8</b>	<b>106,320</b>	<b>Metal</b>		
Newsprint	65.9	9,640	Other Ferrous	51.2	7,490
High Grade Office Paper	46.6	6,810	Other Non-Ferrous	9.0	1,320
Magazines/Catalogs	30.5	4,460	Other Metal	15.9	2,330
Uncoated OCC/Kraft	390.6	57,140			
Boxboard	54.5	7,980	<b>Organics</b>	<b>573.5</b>	<b>83,900</b>
Mixed Paper - Recyclable	53.2	7,790	Yard Waste - Compostable	117.4	17,180
Compostable Paper	73.1	10,690	Yard Waste - Woody	23.2	3,400
Other Paper	12.4	1,810	Food Scraps	308.5	45,130
			Bottom Fines & Dirt	45.3	6,620
<b>Beverage Containers</b>	<b>4.9</b>	<b>710</b>	Diapers	37.0	5,420
Milk & Juice Cartons/Boxes - Coated	4.9	710	Other Organic	42.0	6,150
<b>Plastic</b>	<b>304.6</b>	<b>44,560</b>	<b>Inorganics</b>	<b>175.2</b>	<b>25,630</b>
#1 PET Bottles/Jars	19.3	2,830	Televisions	5.1	740
#1 Other PET Containers	5.4	790	Computer Monitors	3.1	460
#2 HDPE Bottles/Jars - Clear	9.8	1,430	Computer Equipment/Peripherals	7.1	1,040
#2 HDPE Bottles/Jars - Color	9.0	1,320	Electronic Equipment	14.4	2,110
#2 Other HDPE Containers	0.6	90	White Goods - Refrigerated	10.4	1,520
#6 Exp. Polystyrene Packaging	18.4	2,690	White Goods - Not refrigerated	23.1	3,380
#3-#7 Other - All	13.1	1,910	Lead-acid Batteries	18.3	2,670
Other Rigid Plastic Products	58.0	8,480	Other Household Batteries	4.3	630
Grocery & Merchandise Bags	12.3	1,800	Tires	25.8	3,780
Trash Bags	33.5	4,900	Household Bulky Items	63.1	9,230
Commercial & Industrial Film	34.5	5,050	Fluorescent Lights/Ballasts	0.5	70
Other Film	58.8	8,600			
Other Plastic	31.9	4,670	<b>Textiles</b>	<b>106.2</b>	<b>15,540</b>
			Carpet	24.5	3,580
<b>Glass</b>	<b>85.9</b>	<b>12,570</b>	Carpet Padding	6.6	970
Recyclable Glass Bottles & Jars	68.1	9,960	Clothing	47.6	6,960
Flat Glass	10.0	1,470	Other Textiles	27.5	4,030
Other Glass	7.8	1,140			
			<b>Household Hazardous Waste</b>	<b>26.9</b>	<b>3,940</b>
<b>Metal</b>	<b>123.0</b>	<b>18,000</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>600.2</b>	<b>87,800</b>
Aluminum Beverage Containers	15.4	2,250			
Other Aluminum	8.7	1,270			
Ferrous Containers (Tin Cans)	22.8	3,340	<b>Total MSW (tons)</b>		<b>398,970</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.47</b>

2014 population

292,588

## Woodford County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
<b>Paper</b>	<b>546.2</b>	<b>10,790</b>	<b>Metal</b>		
Newsprint	50.6	1,000	Other Ferrous	51.1	1,010
High Grade Office Paper	50.1	990	Other Non-Ferrous	9.1	180
Magazines/Catalogs	29.9	590	Other Metal	15.7	310
Uncoated OCC/Kraft	222.2	4,390			
Boxboard	54.7	1,080	<b>Organics</b>	<b>611.0</b>	<b>12,070</b>
Mixed Paper - Recyclable	53.2	1,050	Yard Waste - Compostable	117.4	2,320
Compostable Paper	72.9	1,440	Yard Waste - Woody	23.3	460
Other Paper	12.7	250	Food Scraps	346.3	6,840
			Bottom Fines & Dirt	45.1	890
<b>Beverage Containers</b>	<b>6.6</b>	<b>130</b>	Diapers	37.0	730
Milk & Juice Cartons/Boxes - Coated	6.6	130	Other Organic	42.0	830
<b>Plastic</b>	<b>342.2</b>	<b>6,760</b>	<b>Inorganics</b>	<b>175.7</b>	<b>3,470</b>
#1 PET Bottles/Jars	25.3	500	Televisions	5.1	100
#1 Other PET Containers	7.1	140	Computer Monitors	3.0	60
#2 HDPE Bottles/Jars - Clear	12.7	250	Computer Equipment/Peripherals	7.1	140
#2 HDPE Bottles/Jars - Color	11.6	230	Electronic Equipment	14.7	290
#2 Other HDPE Containers	1.0	20	White Goods - Refrigerated	10.1	200
#6 Exp. Polystyrene Packaging	18.7	370	White Goods - Not refrigerated	23.3	460
#3-#7 Other - All	13.2	260	Lead-acid Batteries	18.2	360
Other Rigid Plastic Products	58.2	1,150	Other Household Batteries	4.6	90
Grocery & Merchandise Bags	15.7	310	Tires	25.8	510
Trash Bags	33.4	660	Household Bulky Items	63.3	1,250
Commercial & Industrial Film	43.0	850	Fluorescent Lights/Ballasts	0.5	10
Other Film	58.7	1,160			
Other Plastic	43.5	860	<b>Textiles</b>	<b>124.5</b>	<b>2,460</b>
			Carpet	24.3	480
<b>Glass</b>	<b>85.6</b>	<b>1,690</b>	Carpet Padding	6.6	130
Recyclable Glass Bottles & Jars	67.8	1,340	Clothing	59.2	1,170
Flat Glass	10.1	200	Other Textiles	34.4	680
Other Glass	7.6	150			
			<b>Household Hazardous Waste</b>	<b>26.8</b>	<b>530</b>
<b>Metal</b>	<b>122.5</b>	<b>2,420</b>	<b>Construction and Demolition Debris (C&amp;D)</b>	<b>616.1</b>	<b>12,170</b>
Aluminum Beverage Containers	15.2	300			
Other Aluminum	8.6	170			
Ferrous Containers (Tin Cans)	22.8	450	<b>Total MSW (tons)</b>		<b>52,490</b>
			<b>Total MSW (pounds/person/day)</b>		<b>7.28</b>

2014 population

39,508

## Appendix D

### Photographic Log



**CDM  
Smith** PHOTOGRAPHIC LOG

		<b>Project:</b> Illinois Commodity/Municipal Solid Waste Disposal Characterization Study, Fall 2014	<b>Project No.</b> 67680-105176
<b>Photo No.</b> <b>1</b>	<b>Date:</b> 09/10/2014		
<b>Direction:</b>			
<b>Description:</b>			
	Third residential sample sorted at the first (A) facility.		
<b>Photo No.</b> <b>2</b>	<b>Date:</b> 09/12/2014		
<b>Direction:</b>			
<b>Description:</b>			
	Second residential sample sorted at the third (C) facility.		
<b>Photo No.</b> <b>3</b>	<b>Date:</b> 09/16/2014		
<b>Direction:</b>			
<b>Description:</b>			
	Fourth ICI sample sorted at the fourth (D) facility.		



## PHOTOGRAPHIC LOG

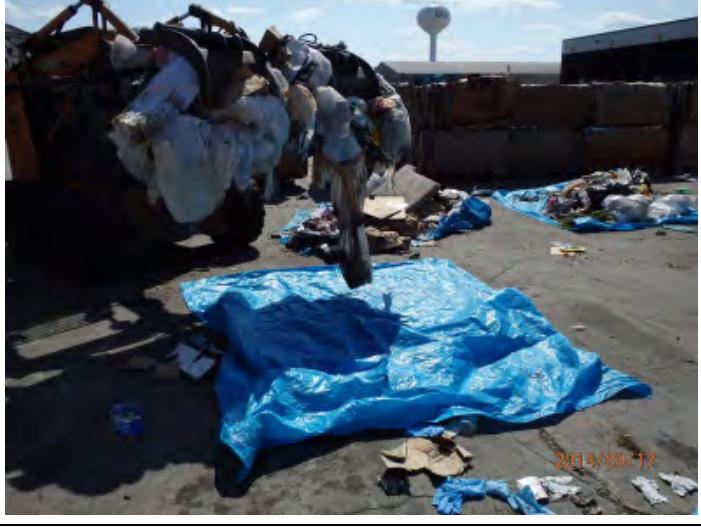
		<b>Project:</b> Illinois Commodity/Municipal Solid Waste Disposal Characterization Study, Fall 2014	<b>Project No.</b> 67680-105176
<b>Photo No.</b> <b>4</b>	<b>Date:</b> 09/17/2014		
<b>Direction:</b>			
<b>Description:</b>  First residential sample sorted at the fifth facility.			

<b>Photo No.</b> <b>5</b>	<b>Date:</b> 09/11/2014		
<b>Direction:</b>			
<b>Description:</b>  Sixth ICI sample sorted at the second facility.			

<b>Photo No.</b> <b>6</b>	<b>Date:</b> 09/17/2014		
<b>Direction:</b>			
<b>Description:</b>  Second ICI sample sorted at the fifth facility.			



## PHOTOGRAPHIC LOG

		<b>Project:</b> Illinois Commodity/Municipal Solid Waste Disposal Characterization Study, Fall 2014	<b>Project No.</b> 67680-105176
<b>Photo No.</b> <b>7</b>	<b>Date:</b> 09/17/2014		
<b>Direction:</b>		 2014/09/17	
<b>Description:</b>  Sample delivery via front end loader on to tarp near sort station.			
<b>Photo No.</b> <b>8</b>	<b>Date:</b> 09/10/2014		
<b>Direction:</b>		 2014/09/10	
<b>Description:</b>  Sort staff working through sample. All wastes larger than ¼ inch size are sorted into material containers for weight recording.			
<b>Photo No.</b> <b>9</b>	<b>Date:</b> 10/28/2014		
<b>Direction:</b>		 2014/10/28	
<b>Description:</b>  Sort staff working through sample.			

**CDM  
Smith** PHOTOGRAPHIC LOG

		<b>Project:</b> Illinois Commodity/Municipal Solid Waste Disposal Characterization Study, Fall 2014	<b>Project No.</b> 67680-105176
<b>Photo No.</b> <b>10</b>	<b>Date:</b> 09/12/2014		
<b>Direction:</b>			 A photograph showing several workers wearing blue gloves and yellow protective suits. They are working on a long metal conveyor belt that has a metal screen mesh on top. The belt is covered in various types of waste, including food scraps and plastic. One worker is reaching forward to pick up a piece of debris. A red sign with the words "LET'S DO IT" is visible in the background. A timestamp "2014/09/12" is in the bottom right corner of the photo.
<b>Description:</b>			
<b>Photo No.</b> <b>11</b>	<b>Date:</b> 09/25/2014		
<b>Direction:</b>			 A photograph showing three different containers for sorting materials. In the foreground, there is a large black bucket filled with clear plastic bottles. Behind it, there are two blue bins. One blue bin contains white plastic bags and another contains various plastic containers and packaging. A timestamp "2014/09/25" is in the bottom right corner of the photo.
<b>Description:</b>			
<b>Photo No.</b> <b>12</b>	<b>Date:</b> 09/10/2014		
<b>Direction:</b>			 A photograph of a large black bucket containing a variety of food scraps. There are bones, green vegetables, and other organic waste materials. A timestamp "2014/09/10" is in the bottom right corner of the photo.
<b>Description:</b>			

		<b>Project:</b> Illinois Commodity/Municipal Solid Waste Disposal Characterization Study, Fall 2014	<b>Project No.</b> 67680-105176
<b>Photo No.</b> <b>13</b>	<b>Date:</b> 09/10/2014		
<b>Direction:</b>		 2014/09/10	
<b>Description:</b>	Material sort container – clean lumber		

<b>Photo No.</b> <b>14</b>	<b>Date:</b> 09/10/2014	
<b>Direction:</b>		 2014/09/10
<b>Description:</b>	Material sort container – painted wood.	

<b>Photo No.</b> <b>15</b>	<b>Date:</b> 09/16/2014	
<b>Direction:</b>		 2014/09/16
<b>Description:</b>	Material sort container – cardboard/kraft paper.	



## PHOTOGRAPHIC LOG

		<b>Project:</b> Illinois Commodity/Municipal Solid Waste Disposal Characterization Study, Fall 2014	<b>Project No.</b> 67680-105176
<b>Photo No.</b> <b>16</b>	<b>Date:</b> 09/10/2014		
<b>Direction:</b>		 2014/09/16	
<b>Description:</b>  Material sort container – grocery and merchandise bags.			

<b>Photo No.</b> <b>17</b>	<b>Date:</b> 09/26/2014	
<b>Direction:</b>		 2014/09/26
<b>Description:</b>  Third Residential sample sorted at the ninth facility.		

<b>Photo No.</b> <b>18</b>	<b>Date:</b> 10/03/2014	
<b>Direction:</b>		 2014/10/03
<b>Description:</b>  Eighth C&D sample characterized at the twelfth facility.		



## PHOTOGRAPHIC LOG

		<b>Project:</b> Illinois Commodity/Municipal Solid Waste Disposal Characterization Study, Fall 2014	<b>Project No.</b> 67680-105176
<b>Photo No.</b> <b>19</b>	<b>Date:</b> 10/07/2014		
<b>Direction:</b>			
<b>Description:</b>  Second Residential sample sorted at the thirteenth facility.			

<b>Photo No.</b> <b>20</b>	<b>Date:</b> 10/16/2014		
<b>Direction:</b>			
<b>Description:</b>  Sorting table is tipped on to a tarp to collect the Bottom Fines and Dirt material category from the sample.			

<b>Photo No.</b> <b>21</b>	<b>Date:</b> 10/16/2014		
<b>Direction:</b>			
<b>Description:</b>  Once the entire sample is sorted, bins of material categories are weighed and recorded. All work activities are completed wearing proper PPE.			