

Illinois Commodity/Waste Generation and Characterization Study

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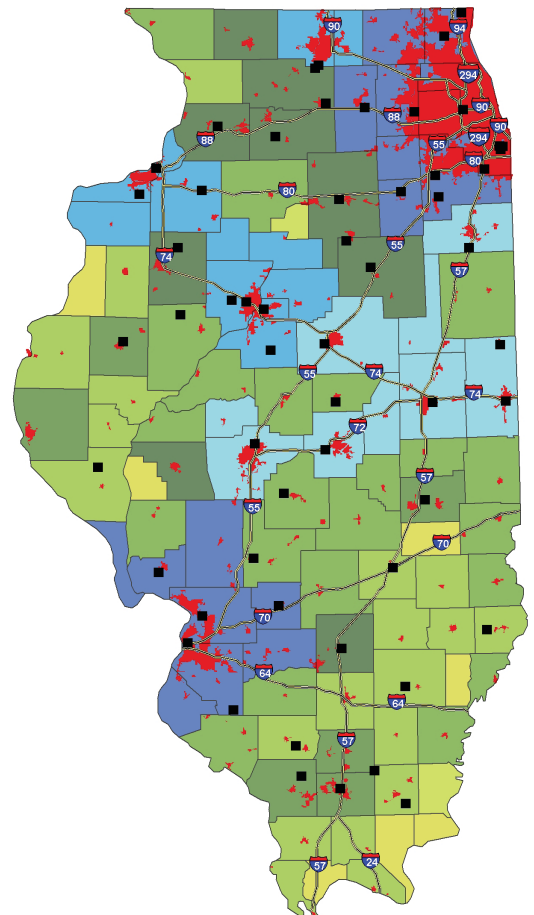
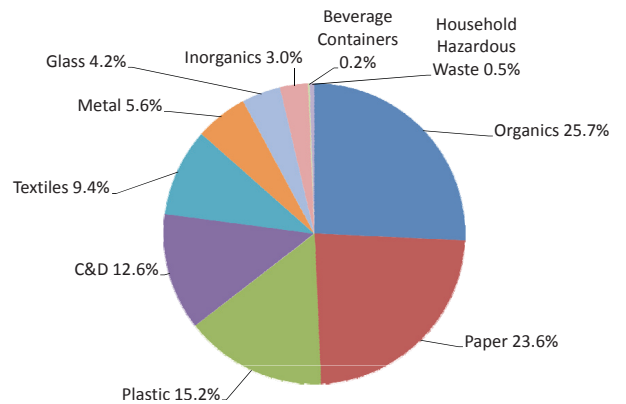
Contracted by:



Prepared by:



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Illinois Commodity/Waste Generation and Characterization Study

Commissioned by:

**Illinois Department of Commerce & Economic
Opportunity**

Contracted by:

Illinois Recycling Association

Prepared by:

CDM

May 22, 2009

Report

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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 a Commodity/Waste Generation and Characterization Study. Camp Dresser & McKee Inc. (CDM) was contracted by IRA to conduct the study. 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 will ban covered electronic devices from being landfilled in Illinois starting January 1, 2012.

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 first statewide report to study this data in Illinois.

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; and
- 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; and
- Comparison of findings to national data.

Planning Model - Development and implementation of a web 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.

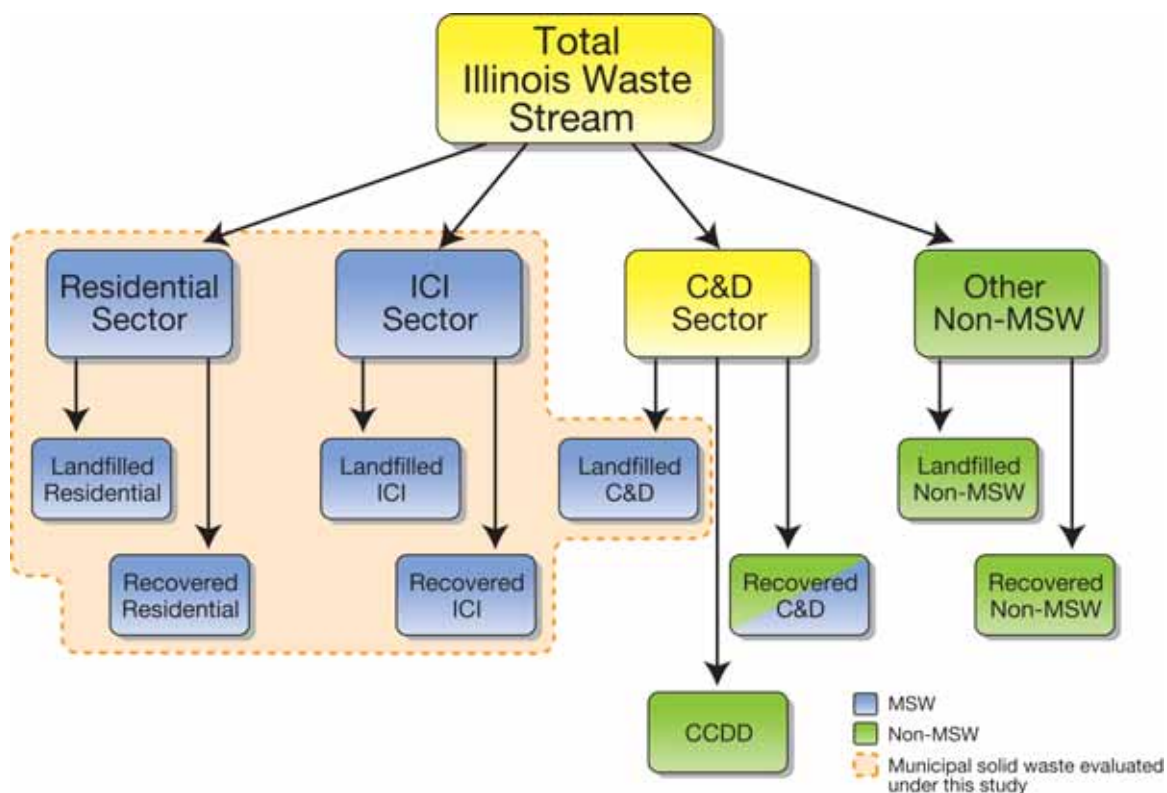
This report will present the results of these tasks and objectives; determine statewide recycling diversion rate estimates and provide recommendations for future consideration.

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). 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

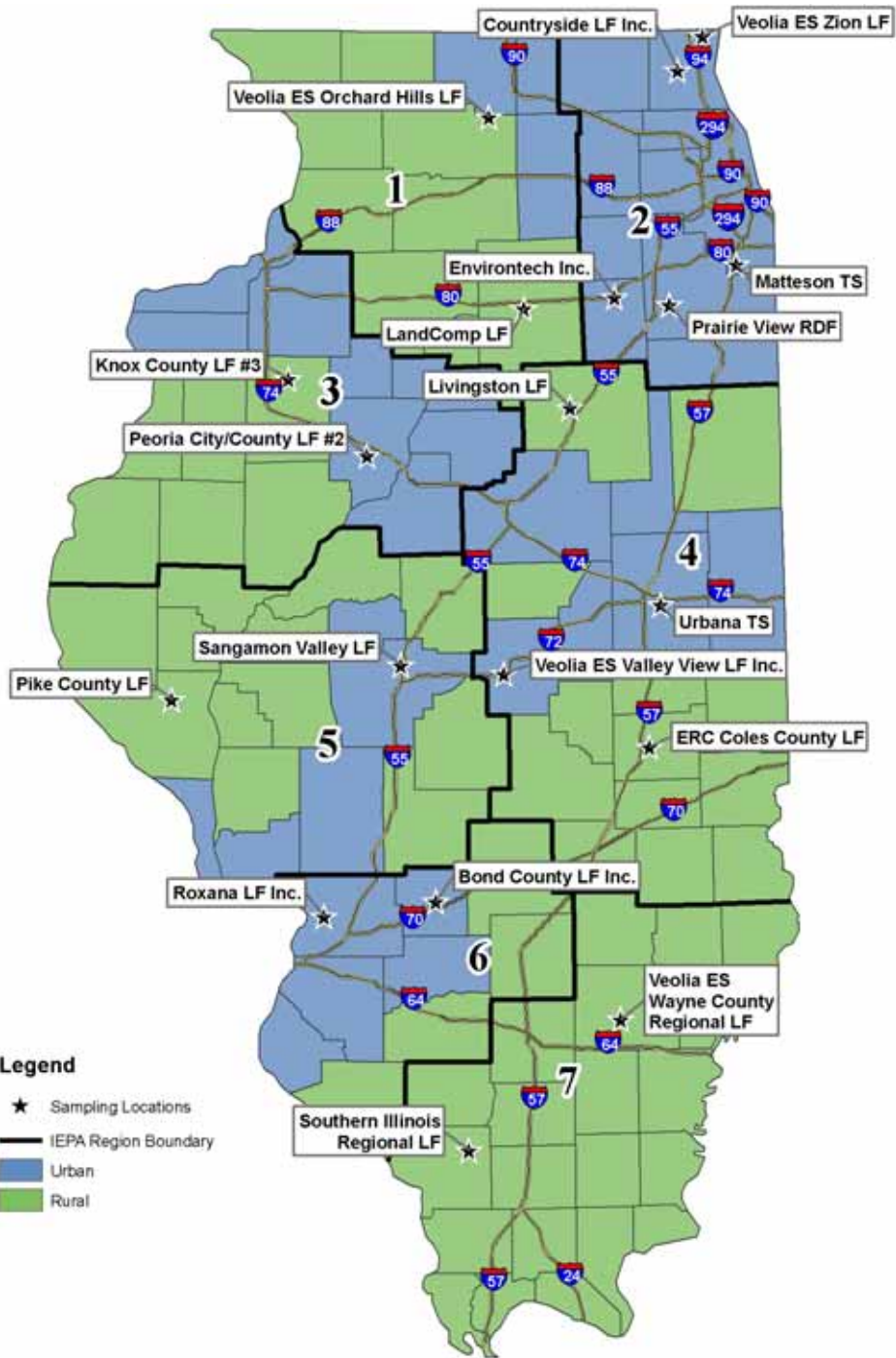
This section develops MSW composition and quantification estimates for the residential, ICI and C&D sectors of MSW originating within the State of Illinois. All of the results in this section are for materials found to be landfilled; landfilled means disposed in landfills or destined for landfills (for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

generation estimates, 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



Legend
★ Sampling Locations
— IEPA Region Boundary
Urban
Rural

Overall, CDM conducted sampling at 19 solid waste facilities located throughout Illinois, 17 landfills and 2 transfer stations (TS), over 20 days between October 2, 2008 and November 14, 2008 (Figure 2). The City of Chicago was not sampled directly during this study; however, samples from a separate waste characterization study conducted by the Chicago Department of Environment (CDOE) were used to develop a comprehensive statewide MSW composition. A total of 315 samples (172 statewide and 143 from Chicago) from the residential and ICI sectors were physically characterized and 150 source separated C&D loads 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. (pounds)	Mean Sample Wt.
	No.	%		
Residential	169	100%	40,103	237.3
<i>Urban-State</i>	45	26.6%	11,364	252.5
<i>Urban-Chicago</i>	93	55.0%	21,189	227.8
<i>Rural-State</i>	31	18.3%	7,550	243.6
ICI	146	100%	38,793	265.7
<i>Urban-State</i>	64	43.8%	15,777	246.5
<i>Urban-Chicago</i>	50	34.2%	15,117	302.3
<i>Rural-State</i>	32	21.9%	7,899	246.8
<i>Total Res./ICI - State</i>	172	54.6%	42,591 (21.3 tons)	247.6
<i>Total Res./ICI - Chicago</i>	143	45.4%	36,307 (18.2 tons)	253.9
Total Res./ICI	315	100%	78,897 (39.5 tons)	250.5
C&D – State	150		705 tons	4.7 tons

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. C&D, Paper, Organics, and Plastic account for over 82% (25.3%, 23.4%, 20.7% and 13% respectively) of landfilled MSW.

Figure 3. Composition of Landfilled MSW by Material Class

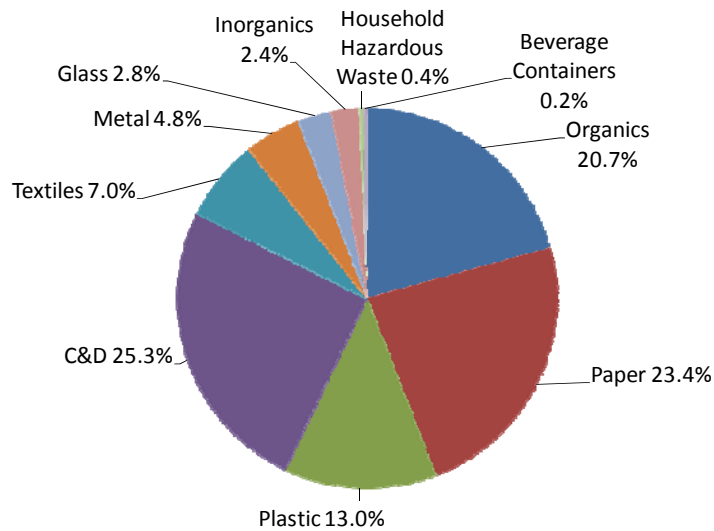


Table 2 lists the top ten material categories that were found in landfilled MSW. These ten individual categories account for over 46% of landfilled MSW. Food Scraps and Uncoated OCC/Kraft account for approximately 22% (12% and 10% respectively) of landfilled MSW.

Table 2. Top Ten individual Material Categories in Landfilled MSW

Component	Waste Composition %	Cum. %
Food Scraps	12.0%	12.0%
Uncoated OCC/Kraft	10.0%	22.0%
Treated Wood	4.0%	25.9%
Other Rigid Plastic Products	3.3%	29.2%
Gypsum Board	3.1%	32.3%
Other Textiles	3.0%	35.3%
Compostable Paper	3.0%	38.3%
Newsprint	2.7%	41.0%
Mixed Paper - Recyclable	2.7%	43.7%
Composition Shingles	2.6%	46.4%
Total	46.4%	

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 86% of the C&D sector consists of material categories that fall within the C&D class of materials (e.g., composite shingles, concrete, wood, etc.) and 14% 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, Paper, Glass, Organic and C&D material 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 Paper (mainly uncoated OCC/Kraft) and 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

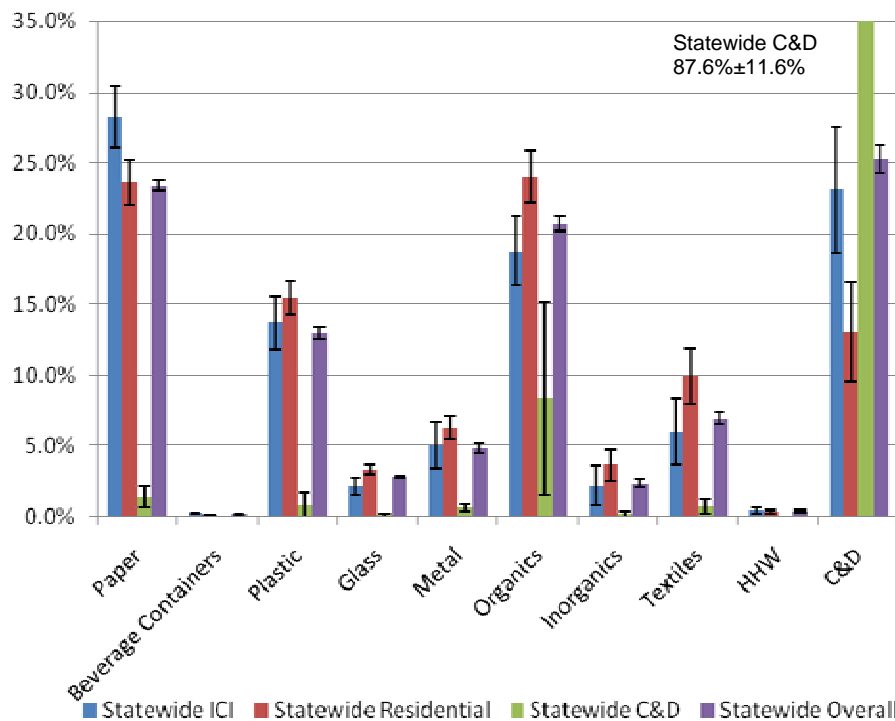


Figure 5 compares the waste composition profiles for the Residential waste sector and its subsectors. When considering the residential MSW waste, the majority of the material classes fall within the 90% confidence interval for the rural and urban sectors, with the exception of the Paper and Textiles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

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 Organics and C&D classes. There is significantly more organics disposed within the rural counties of Illinois and there is significantly more C&D disposed within urban areas of Illinois.

Figure 5. Comparison of Residential MSW Composition

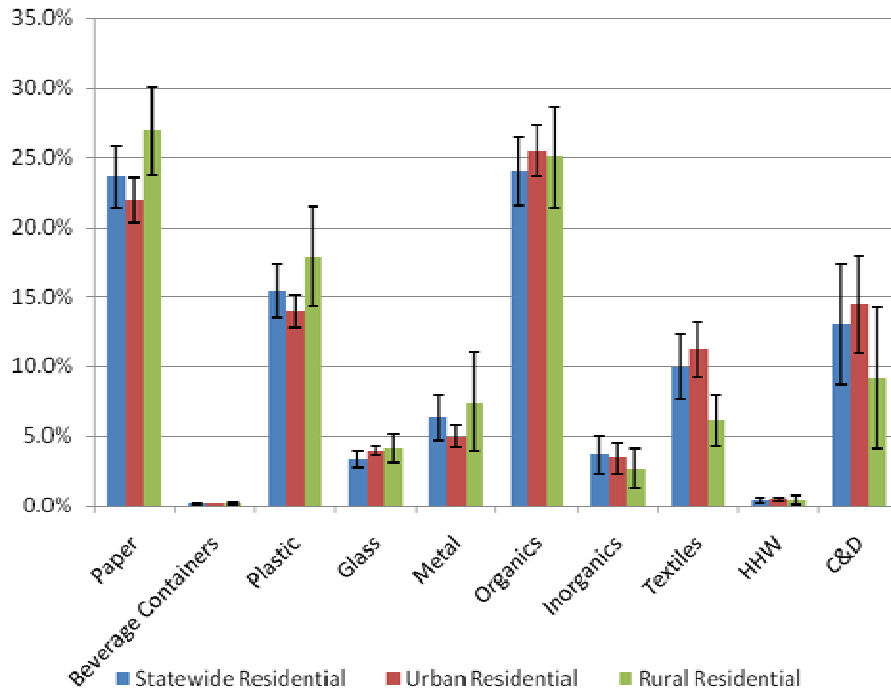
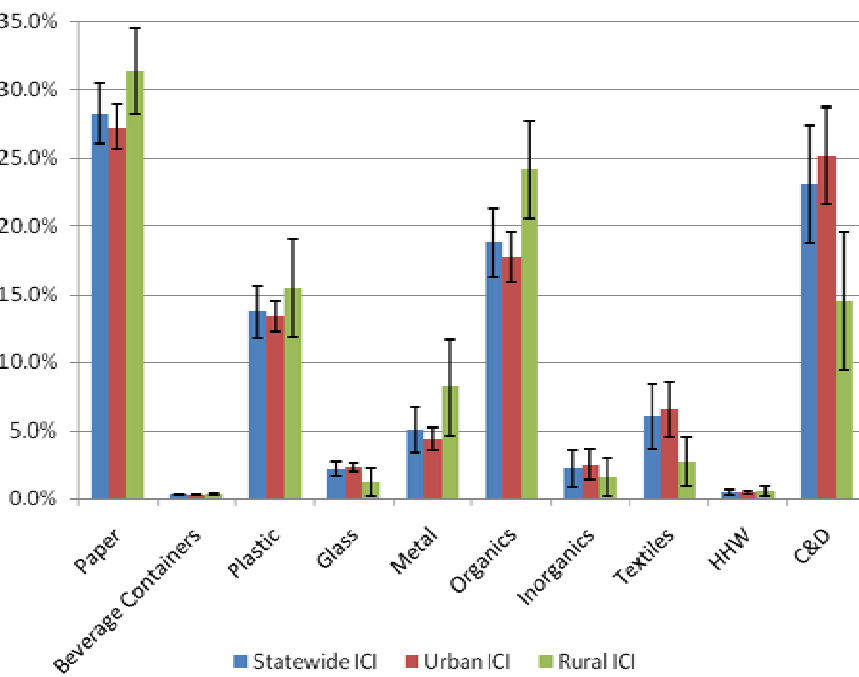


Figure 6. Comparison of ICI MSW Composition



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 2007 national per capita generation rates that were derived from the U.S. EPA report *Municipal Solid Waste in the United States: 2007 Facts and Figures*¹. 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 2007 was 18.9 million tons or 8.06 pounds per person per day. Generation by material class is shown in Figure 7. Paper products comprise the largest portion of MSW generated, at 28.3%. C&D was the second largest fraction, at 22.5%. The third largest category of MSW generation is Organic material, which made up 18.8% of total MSW generation. Plastic products are 11.2% of generation and the remaining categories total 19%. Table 3 depicts the top ten individual material categories and their respective generation in tons.

MSW Generation by IEPA Region is shown in Figure 8. Region 2 generates almost 70% of the total statewide MSW generation. Table 4 compares the percapita MSW generation rates for the seven IEPA Regions.

¹ U. S. Environmental Protection Agency Office of Solid Waste (5306P). November 2008.

EPA530-R-08-010. <http://www.epa.gov/epawaste/nonhaz/municipal/pubs/msw07-rpt.pdf>

Figure 7. Statewide MSW Generation by Material Class

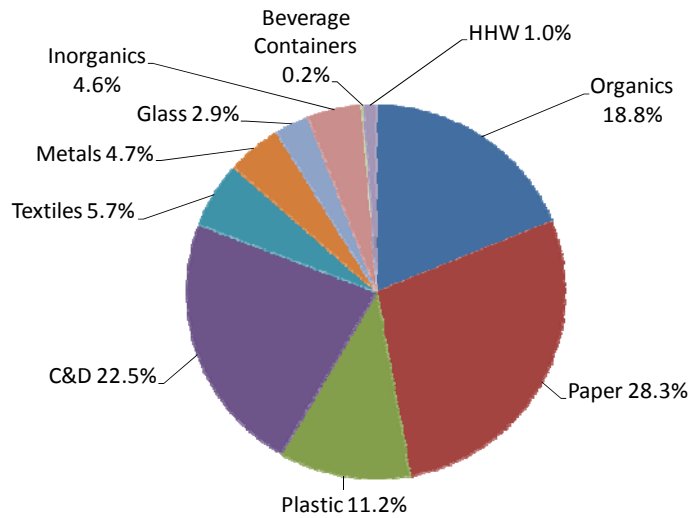
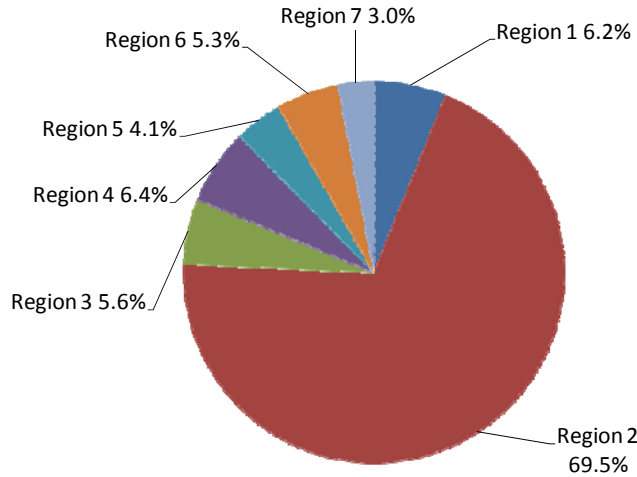


Table 3. Top Ten MSW Generation Individual Material Categories

Category	Waste Composition Tons	Cum. Tons
Uncoated OCC/Kraft	2,436,210	2,436,210
Food Scraps	1,838,100	4,274,310
Newsprint	868,130	5,142,440
Treated Wood	604,760	5,747,200
Other Rigid Plastic Products	586,130	6,333,330
Recyclable Glass Bottles & Jars	520,020	6,853,350
Compostable Paper	474,730	7,328,080
Gypsum Board	472,380	7,800,460
Yard Waste - Compostable	471,250	8,271,710
Other Textiles	463,770	8,735,480
Total	8,735,480	

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	7.6
Two: Chicago Metropolitan	8.3
Three: Peoria/Quad Cities	7.7
Four: East Central Illinois	7.6
Five: West Central Illinois	7.6
Six: Metropolitan East St. Louis	7.6
Seven: Southern Illinois	7.2
Total	8.1

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 – 18.9 million tons, and disposal quantities developed in Section 2 – 15.3 million tons, is the quantity of materials recovered – some 3.6 million tons. Based on this methodology, **the overall Illinois diversion rate is 19.1% by weight.**

Currently there is no mechanism in Illinois that requires the quantity of recovered materials to be reported to a central entity. Therefore, Illinois cannot accurately

determine what the diversion rate in the state actually is. Illinois EPA is required to annually publish the Non-hazardous Solid Waste Management and Landfill Capacity Report, which relies on voluntary reporting by county coordinators. According to the 2007 Report, coordinators report that 23.1 million tons of waste is generated and 9.1 million tons are recycled, yielding a diversion rate of 39.3%. Obviously, there are significant discrepancies between the results of this Study and the Report and the diversion rate could not be validated. There are several factors that could account for this difference:

1. This study focuses on solely Municipal Waste whereas the coordinator's data in the EPA Report focuses on landfilled tonnages which can include industrial process waste, special waste and/or clean construction or demolition debris.
2. The data submitted by coordinators is not current for the year – only one third of the 106 reporting entities submitted current data.
3. Data is submitted without an officially adopted calculation protocol to be used uniformly throughout the state. Therefore, what has been reported by some may not be considered by others, or quantities of some materials may not even appropriate to report altogether, and there is likely “double counting” occurring.

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 2008 commodity values from January 2008 through October 2008 obtained from market data detailed in Section 4.5 for the Midwest region, prior to the temporary collapse of markets that occurred in November. **The direct market value of the landfilled materials shown in Table 4-5 is calculated at over \$600 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)², 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 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 (15.3 million tons) is approximately 2,404,563 MTCO₂E. This is equivalent to the annual greenhouse gas emissions from approximately 440,400 passenger vehicles or the carbon sequestered annually by 16,800 acres of forest preserved from deforestation³.

The total GHG emissions reduced from materials currently recycled (3.6 million tons) is 8,910,029 MTCO₂E, which is equivalent to the annual greenhouse gas emissions from approximately 1,631,900 passenger vehicles or the carbon sequestered annually by 62,300 acres of forest.

Recommendations

CDM recommends the following additional tasks for refinement and expansion of the Illinois Commodity/Waste Generation and Characterization Study:

1. This study focused on the characterization of the statutory definition of Illinois’ municipal solid waste (MSW) stream. As such, several components of the overall Illinois waste stream were not included in this study. However, these materials are often disposed in Illinois landfills and the composition and

² 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/SWMSGHreport.html>
http://www.epa.gov/climatechange/wycd/waste/calculators/Warm_home.html.

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

quantity of these materials should be assessed to provide a complete picture of the Illinois waste stream. This study is a first step in developing a picture of the Illinois waste stream. It provides a clearer picture, but is not comprehensive. If the goal is diversion of waste from landfills then an assessment of other materials landfilled/disposed in Illinois is needed. These materials include the following:

- a. **Clean construction and demolition debris (CCDD)** – This material is often diverted from landfills and either reused, recycled, used as fill, or disposed at permitted CCDD facilities. This material stream likely comprises a large piece of the gap between MSW and total waste generation. By definition CCDD is not a waste when handled according to the Environmental Protection Act. However, this often poses a dilemma in solid waste management planning, in that CCDD can become a waste if it is mixed with MSW. Theoretically, CCDD also becomes a waste when it is landfilled.
- b. **Soil and Alternative Daily Cover** – These materials are accepted at landfills and consume landfill capacity, yet often times these materials are not quantified or included in waste generation estimates. Shredded demolition wood waste is one example of a waste stream that is commonly used for alternative daily cover. Contaminated soil, and occasionally clean soil, is also disposed at landfills.
- c. **Special and Non-special Waste** – Industrial process wastes, hazardous wastes, pollution control wastes, declassified special wastes and other special wastes are not part of the MSW stream. These materials are landfilled and the composition of these materials has not been assessed at the state or regional level. Unlike other waste sectors identified, due to regulations stipulating recordkeeping and reporting of these wastes, analysis of this sector would be less difficult.
- d. **Landscape Waste** –Landscape (yard) waste is banned from being landfilled in Illinois, yet quantities of this material are often found in landfills. As with other waste streams partially or wholly diverted from landfills, characterization at disposal facilities is not the best method for quantification.
- e. **Diverted materials** – For this study, the quantity and composition of diverted materials was estimated based on the difference between generation data and landfilled data. This approach relies too heavily on the waste generation estimates rather than hard data. Having said that, obtaining defensible diversion data is potentially even more difficult, especially when considering source reduction and reuse activities. A study focusing on estimating the quantity and composition of diverted materials, used in conjunction with the results of this study, would assist in finding areas for improving all three of the landfilled, diverted and total

generation estimates. Although the best method to determine the quantity of materials being recovered would be to require annual reporting.

- f. **Illinois Waste Disposed Outside Illinois** – This study was conducted at Illinois landfills and therefore the composition of Illinois waste that was disposed outside of Illinois was not obtained. Having said that, it is not unreasonable to assume that the composition of this waste is similar to that disposed within Illinois.
2. The composition and recovery of materials in the waste stream and its sectors and classes can vary significantly over short time frames based on changes in technology, manufacturing, distribution, regulations, planning efforts, diversion programs, and many other factors. A prime example of this is the inorganics classification which includes electronics devices, televisions, fluorescent lights, etc. and the recently adopted Electronic Products Recycling and Reuse Act. As such, it is recommended that a study similar to the Illinois Commodity/Waste Generation and Characterization Study be conducted periodically, approximately every 5 years.
 3. CDM recommends that the distribution of residential, ICI, C&D wastes be further characterized. The data used for this study was developed using gatehouse surveys from one day at each facility. While this provides a reasonable overall distribution for the state, it does not provide sufficient data for estimating the distribution within the individual counties and Illinois EPA Regions.

Illinois Recycling Association Recommendations

The Illinois Recycling Association (IRA) presents this report to the Illinois DCEO, as an initial step to update the status of recycling and commodities recovery in Illinois. It is reasonable to begin this process by gathering disposal data from solid waste transfer stations and landfills in the state of the current volumes of what has been commonly discarded as waste. However, an entire new industry of recovery and recycling of discards has grown since the passage of the three key solid waste management acts. These advances challenge established definitions of waste and move us closer to waste reduction and recovery goals that were once deemed idealistic.

The Association has worked in cooperation with the State of Illinois to offer educational workshops, seminars, and information links as well as providing a direct connection to a wide variety of recycling services and diversion options for both common and unique discards. In addition, the Illinois Recycling Association is working to compile a comprehensive listing of recycling industries, services, and the government entities responsible for recording recycling data. The association hopes to continue to maintain this database as a resource for those seeking recycling resources within the state.

The recycling industry is in reality a variety of industries, which share a common result. These industries have expanded our body of knowledge, created new manufacturing and recovery technologies, and provided economic growth through creation of jobs and consumer products.

The contracted consultant, Camp Dresser & McKee, provided recommendations that are based upon recognizing gaps and inconsistencies of data while conducting this study. There is unarguably more information to be gathered, a re-assessment of our definition and understanding of waste and recovery is needed, and a re-affirmation of attainable waste reduction and recycling goals with benchmark years should be determined and re-visited on a regular basis.

We offer the following recommendations with consideration of the information presented in this study, as well as recognition and appreciation for the progress that our industries have made, often with the assistance and encouragement from State government and new and revised laws approved thus far. The IRA looks forward to continuing our collaboration with DCEO and others committed to research, study and maintain relevant data that serves the recycling and recovery industries in the State of Illinois.

Convene a Commission for Resource Recovery and Disposal

Adopt legislation to establish a Commission that includes the following mission:

- a. Study and make recommendations regarding the economics of landfilling wastes and recovering commodities, including full environmental costs and benefits, and the extent to which they are reflected in prices and associated fees collected by the state.
- b. Review the extent to which materials with economic value are lost by landfilling and recommend ways to maximize the productive use of discarded materials - including recycling, composting, reuse, and energy recovery.
- c. Study and recommend ways that Illinois can minimize the generation of waste materials and evaluate ways to apply "Zero Waste" as a guiding vision to be accomplished by source reduction, reuse, recycling, and composting.
- d. Study the management of toxic and nontoxic discards and recommend ways to ensure these are managed in a manner that minimizes environmental impacts and potential burdens to future generations.
- e. Study and clarify the role municipalities, residents, businesses, and state government each hold in the use, management, recovery, and disposal of materials and recommend how they can act in concert to attain disposal and recovery goals.
- f. Review and recommend changes to existing laws that govern "solid waste" management, recognizing resource management as unique and distinct from solid waste management; that minimize environmental, economic, and

social costs to the residents and businesses of Illinois; and that reduce GHG's so that Illinois can achieve and maintain a truly integrated and sustainable materials management system.

Update the Illinois Recycling Economic Information Study (REI)

Illinois DCEO commissioned an REI study nearly a decade ago to determine and quantify the economic benefits of recycling activities. The study showed how recycling and reuse significantly contribute to Illinois' economy. The direct economic impact, at that time, included 2,400 businesses that employed over 56,000 with an annual payroll of \$1.8 Billion, and those businesses had annual receipts of \$12.3 Billion. The study further concluded that the total economic value (the broader effect of the recycling and reuse industry) including direct, indirect, and induced economic considerations was \$34.6 Billion.

Recycling and reuse industries create and retain jobs and generate state and local tax revenues.

It is vital to the state's economic development to understand and support the contribution the recycling and reuse industries make in the state's economy. To foster continued development of recycling and reuse industries, not only for environmental but also economic contributions, a thorough understanding of such contributions is an essential component to sustaining the states' economic well being. It is recommended that an REI study be conducted and updated on a regular basis, but at a minimum of every 5 years.

Review and Update Solid Waste Planning/Management Laws

Much has changed in the more than 20 years since the Illinois Solid Waste Planning and Recycling Act of 1988 and the Illinois Solid Waste Management Act of 1986 were developed. Review the provisions of each law to recognize the growth of technology, recovery of what was once considered wastes, and the impacts of all waste and recycling activities on the environment.

Plan and Encourage Future Recovery

Certain materials have been identified as constituting a large percentage of the landfilled MSW stream. Some of these materials are significantly below national recycling rates, although recycling processes and markets exist. Research and encourage diversion programs that expand the needed infrastructure, disposal requirements, demand for end product, and education programs that focus on these materials:

- Food scraps;
- Paper, including uncoated OCC/Kraft, compostable paper, newsprint, mixed paper, high grade office paper, boxboard;
- C & D, treated wood, gypsum board, composition shingles;
- Plastics, including PETE, HDPE, Other rigid plastics; and

- Textiles, including carpet, clothing and other textiles.

Develop a Universal Protocol for Calculating Diversion Rates

This study has shown that diversion rates vary significantly depending on the source of the data. A universal protocol for estimating diversion and recycling rates needs to be developed and annual reporting based upon a common calculation of rates should be required. The protocol should establish the materials that should be identified for diversion/recycling (identified as the numerator of the equation) and the definition of materials included in the quantity of the generated materials (the denominator of the equation).

Toxic/Special Wastes

Toxic and special wastes are not included when developing recycling or diversion programs, and so such materials, which are a part of the MSW stream cannot be targeted for source reduction, diversion or recycling. Initiatives and diversion programs should be maintained and expanded to reduce the quantity and toxicity of wastes from being landfilled, such as for Household Hazardous Waste (HHW). This Study found 64,000 tons of HHW are currently being disposed per year. In terms of impacts, while the quantity is comparatively low, the toxicity of HHW significantly outweighs that of other materials.

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 a Commodity/Waste Generation and Characterization Study. Camp Dresser & McKee Inc. (CDM) was contracted by IRA to conduct the study. 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 EPAAct 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 EPAAct also establishes fees that support DCEO's and IEPA's solid waste management programs.

The EPAAct 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 will ban covered electronic devices from being landfilled in Illinois starting January 1, 2012.

1.1 Purpose

In order to effectively manage resources and waste pursuant with the intent of the SWMA, SWPRA, and EPAAct, 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 EPAAct by local governments or management districts. This is the first statewide report to study this data in Illinois.

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 a web 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 and provide recommendations for future consideration.

1.3 Consulting Team

CDM conducted the above tasks with the assistance of its subconsultants Franklin Associates (Franklin) and Cascadia Consulting Group (Cascadia). CDM has performed numerous solid waste planning and management projects in the State of Illinois and has conducted waste characterization sampling at 58 facilities and sorted more than 2,000 waste samples. Franklin has completed the "Characterization of Municipal Solid Waste in the United States" for the USEPA for the past 22 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.

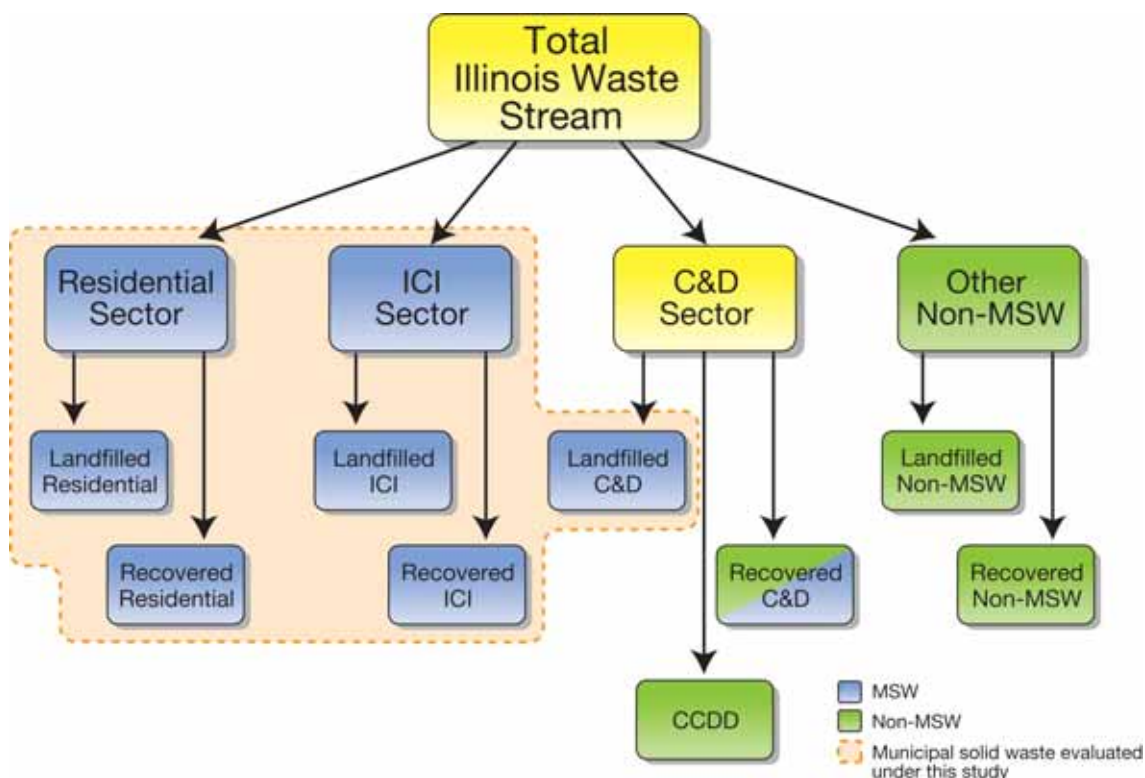
1.4 Defining the Waste Stream

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).¹ 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 3.⁴
2. Rural - waste generated by nonmetropolitan counties as identified by the Census RUC Codes 4 through 9.¹

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

⁴ U.S. Department of Agriculture. Economic Research Center.
<http://www.ers.usda.gov/Data/Population/PopList.asp?ST=IL&LongName=Illinois>

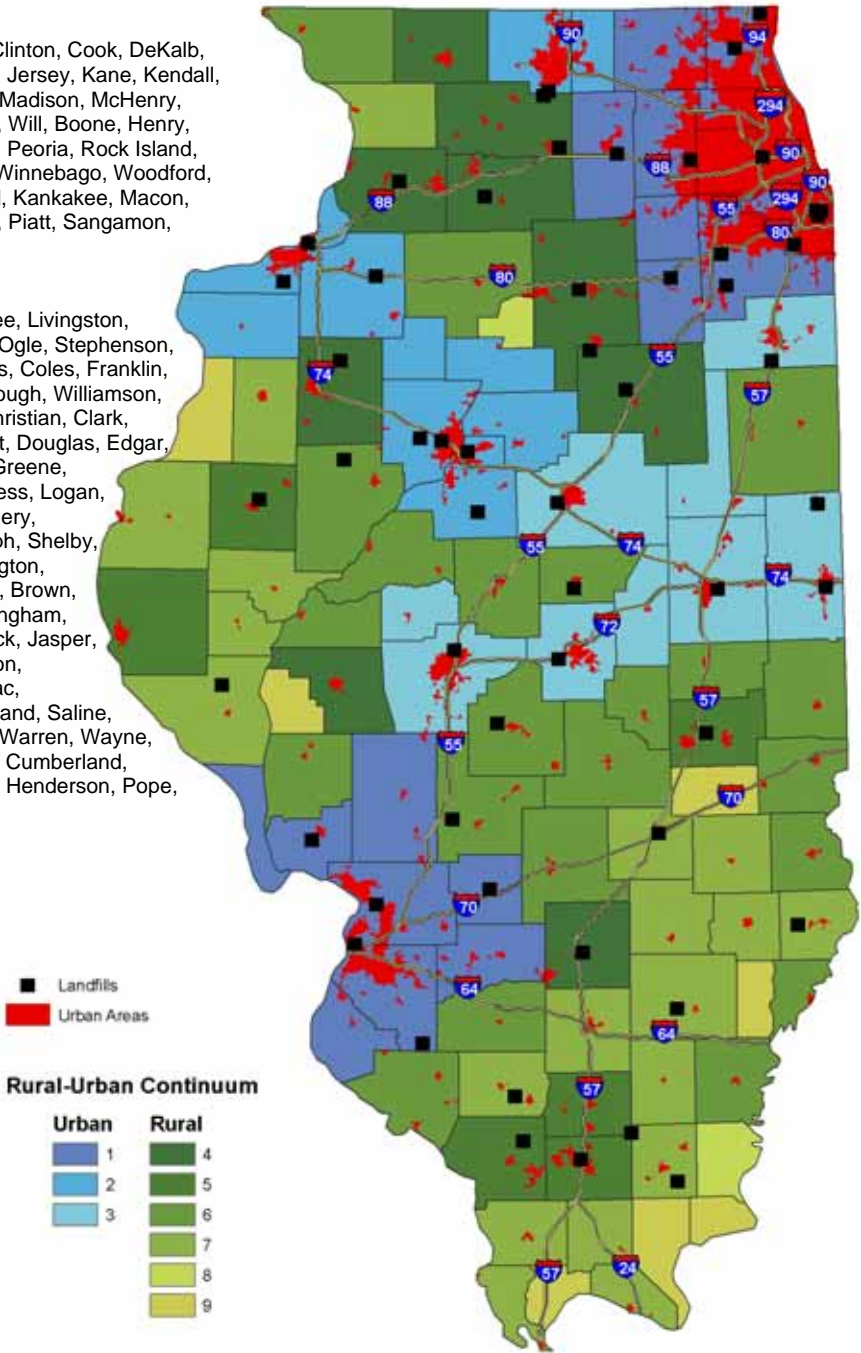
Figure 1-2. Urban and Rural Counties within Illinois

Urban Counties

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

Rural Counties

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



Source:
Landfill locations provided by the Illinois EPA report *Nonhazardous Solid Waste Management and Landfill Capacity in Illinois: 2007*.
Urban Areas and the Rural –Urban county designations provided by U.S. Census Bureau. Population Division. December 27, 2007.

Section 2 MSW Characterization

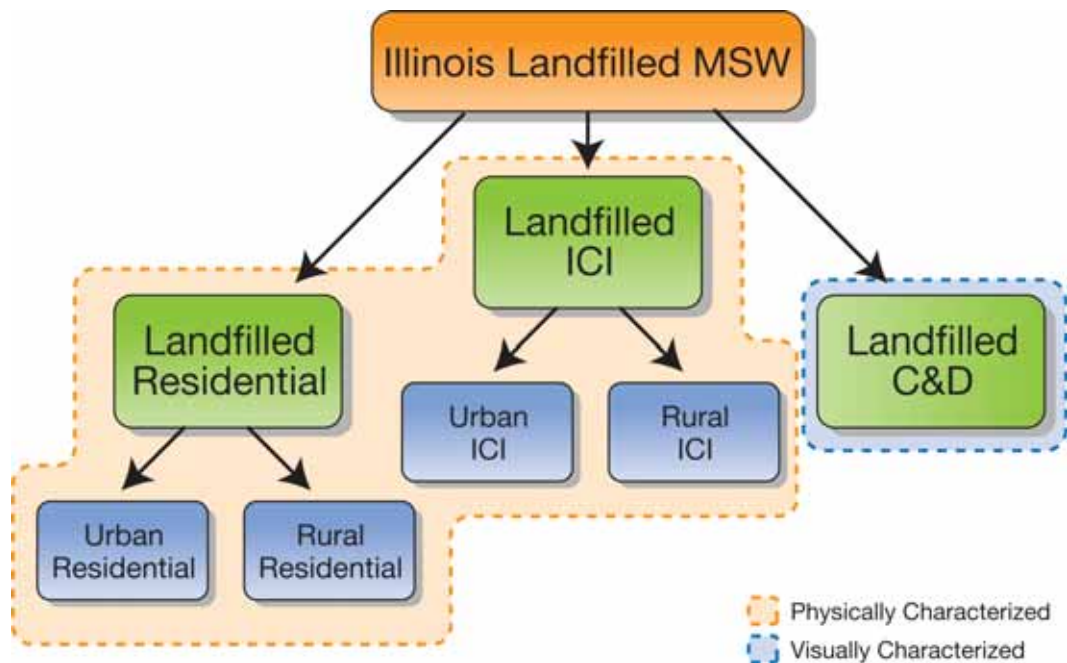
2.1 Purpose

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 conducted sampling at 19 solid waste facilities, 17 landfills and 2 transfer stations (TS), over 20 days between October 2, 2008 and November 14, 2008. A total of 172 waste samples from the Residential and ICI waste sector were hand-sorted and “physically” characterized and 150 samples 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**.

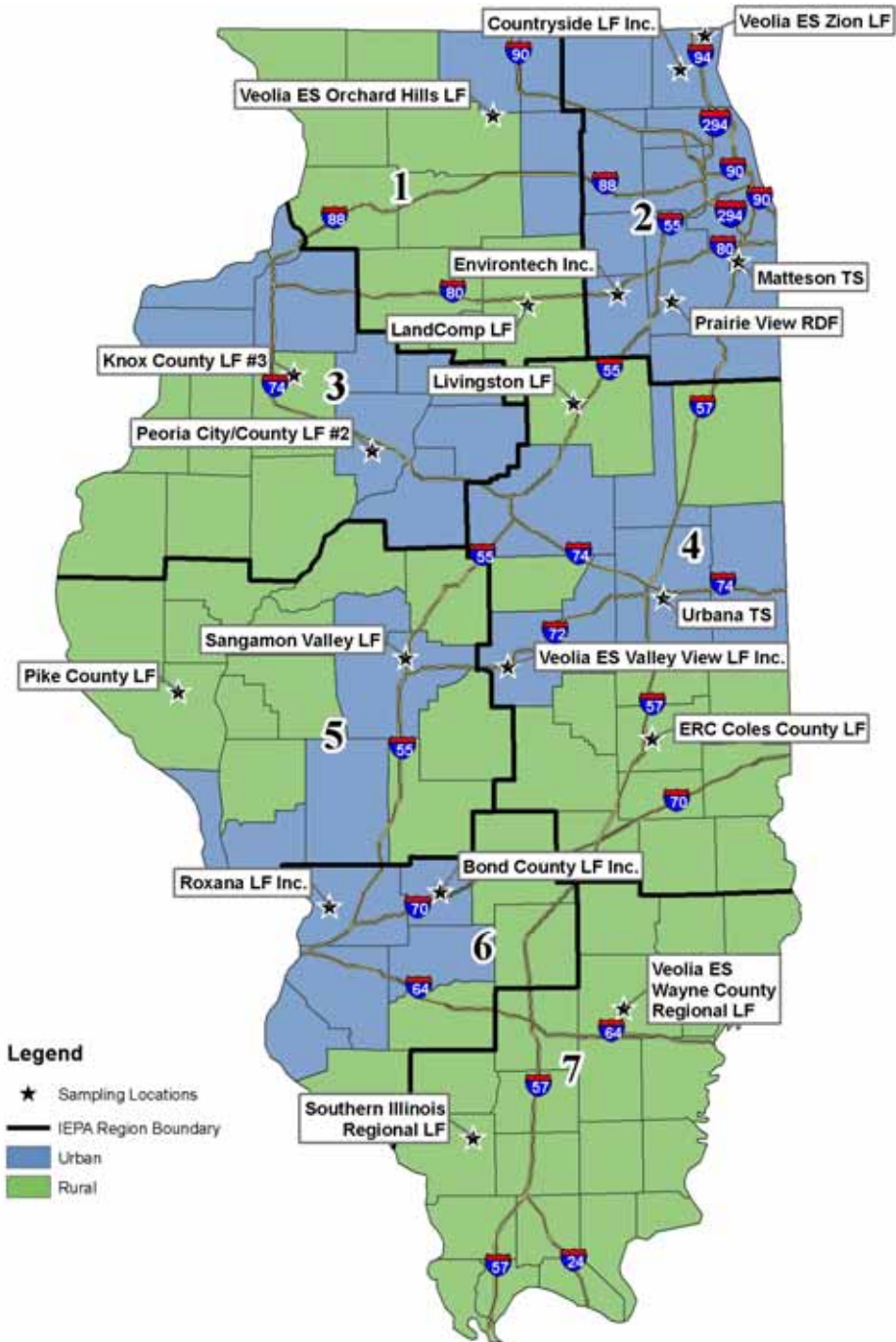
2.2.1 Sample Allocation

To ensure that samples were representative of Illinois' statewide waste stream, sampling was conducted 19 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.

Table 2-1. Sampling Locations

IEPA Region	Landfill/ Transfer Station (TS)	City (County)	Operator	Sampling Date
1	Landcomp	Ottawa(LaSalle)	Allied Waste Services	10/02/2008
	Veolia ES Orchard (Orchard Hills)	Davis Junction (Ogle)	Veolia Environmental Services	11/06/2008
2	Environtech	Morris (Grundy)	Allied Waste Services	10/07/2008
	Matteson TS	Matteson (Cook)	Land and Lakes Co	10/08/2008
	Prairie View	Wilmington (Will County)	Waste Management	10/09/2008
	Veolia ES Zion Landfill	Zion (Lake)	Veolia Environmental Services	11/03/2008 11/04/2008
	Countryside	Grayslake (Lake)	Waste Management	11/05/2008
3	Peoria City/ County	Brimfield (Peoria)	Waste Management	10/15/2008
	Knox County 3	Oneida (Knox)	Knox County Landfill Committee	10/16/2008
4	Livingston	Pontiac (Livingston)	Allied Waste Services	10/14/2008
	ERC Coles County	Charleston (Coles)	Environmental Reclamation Co (Allied)	10/21/2008
	Veolia ES Valley View Landfill Inc.	Decatur (Macon)	Veolia Environmental Services	10/22/2008
	Urbana TS	Urbana (Champaign)	Allied Waste Services	10/23/2008
5	Sangamon Valley	Springfield (Sangamon)	Allied Waste Services	10/20/2008
	Pike County	Baylis (Pike)	Pike County Landfill Inc.	11/14/2008
6	Roxana	Roxana (Madison)	Allied Waste Services	10/27/2008
	Bond County	Greenville (Bond)	Allied Waste Services	10/30/2008
7	So. IL Regional	DeSoto (Jackson)	Southern Illinois Regional Landfill Inc.	10/28/2008
	Veolia ES Wayne County Landfill	Fairfield (Wayne)	Veolia Environmental Services	10/29/2008

Figure 2-2. Sample Location Map



At each sampling location (landfill or transfer station), both physical and visual characterizations 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 315 samples (172 statewide and 143 from Chicago) were physically sorted from the residential and ICI sectors and 150 source separated C&D loads statewide were visually characterized to develop the waste composition profiles provided in this section. The City of Chicago was not sampled directly during this study; however, samples from a separate waste characterization study conducted by the Chicago Department of Environment (CDOE) were used to develop a comprehensive MSW composition. The data available from the Summer/Fall 2008 portion of the CDOE study were used to represent the Chicago area waste stream and incorporated into the Illinois report with permission by CDOE. The Chicago samples were collected and sorted using the same methods as this study.

Table 2-2 summarizes the samples that were used to determine the landfilled MSW composition. A total of 172 waste samples were collected from the residential and commercial waste sectors as part of the Illinois study. Of the 172 samples collected, 96 (56%) were samples of commercial waste, and 76 (44%) were samples of residential waste, of those samples a total of 109 (63%) were samples from urban areas and 63 (37%) were samples from rural areas. A total of 143 samples, 93 (65%) residential and 50 (35%) ICI, were used from the CDOE study. The Chicago samples were also considered as part of the urban MSW sector.

Table 2-2. Number of Samples by Waste Sector

Sampling Group	Sample Count		Total Sample Wt. (pounds)	Mean Sample Wt.
	No.	%		
Residential	169	100%	40,103	237.3
<i>Urban-State</i>	45	26.6%	11,364	252.5
<i>Urban-Chicago</i>	93	55.0%	21,189	227.8
<i>Rural-State</i>	31	18.3%	7,550	243.6
ICI	146	100%	38,793	265.7
<i>Urban-State</i>	64	43.8%	15,777	246.5
<i>Urban-Chicago</i>	50	34.2%	15,117	302.3
<i>Rural-State</i>	32	21.9%	7,899	246.8
<i>Total Res./ICI - State</i>	172	54.6%	42,591 (21.3 tons)	247.6
<i>Total Res./ICI - Chicago</i>	143	45.4%	36,307 (18.2 tons)	253.9
Total Res./ICI	315	100%	78,897 (39.5 tons)	250.5
C&D – State	150		705 tons	4.7 tons

2.2.2 Sampling Plan

CDM contacted the 19 facilities for permission to sample at the facilities identified above and to coordinate with the site managers. CDM requested information for each of the 19 selected disposal facilities to determine the relative mix of waste sectors that are disposed at each facility. From this information, CDM 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 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 Illinois MSW composition of newsprint is between 2.84% and 3.36% (3.1% plus or minus 0.26%).

2.3 MSW Physical Characterization Results

The MSW physical characterization results incorporate the sample results from both this study and the first season of the CDOE waste characterization study. 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). A total of 172 waste samples were selected and hand sorted at 19 locations throughout the State of Illinois between October and November 2008. The samples sizes were within the sample plan goals; however, the number of samples sorted was less than the goal due to several field conditions including limited number of samples available, weather conditions and landfill hours of operation. The average sample weight for the 172 Illinois samples was 248 pounds. A total of 42,600 pounds of MSW was physically sorted and classified during the Illinois study. A total of 143 waste samples were collected from Chicago disposal facilities and hand sorted between August and September 2008 for the first season of the CDOE study. The average sample weight for the 143 Chicago

samples was approximately 254 pounds, with a total of 36,300 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 Chicago (CDOE Study) samples. The number of samples from Chicago accounts for approximately 45% of the total number of samples; however, Chicago's actual percentage of the Illinois population is approximately 22%. Because this is a disproportionate number of samples, the Chicago samples were weighted using the ratio of the Chicago population to the total Illinois population using 2007 Census data.⁵ The landfilled urban MSW composition was calculated by weighting the Chicago samples in a similar manner. The equation used for weighting samples is provided in the sampling plan (**Appendix A**). This equation was also used for calculating the combined residential/ICI composition by using the ratio of residential to ICI MSW determined by the gatehouse surveys (Section 2.5).

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 Plastics classes account for over 64% (25.7%, 23.6% and 15.2% respectively) of the landfilled MSW for this sector.

⁵ U.S. Census Bureau. Population Division. Table 1: Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico: April 1, 2000 to July 1, 2007. INST-EST2007-01. December 27, 2007. Illinois resident population of 12,852,548 in 2007.

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

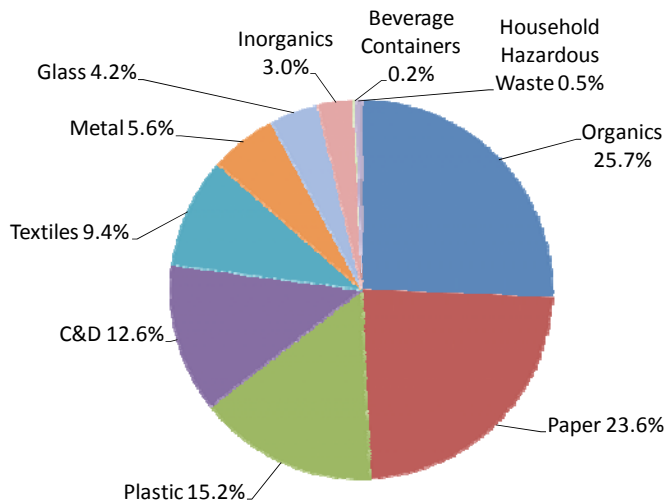


Table 2-3 lists the top ten material categories that were found in the landfilled residential MSW sector. These ten categories account for approximately 50% of landfilled residential MSW. Food scraps, Uncoated OCC/Kraft and Newsprint material categories account for over 24% (14.6%, 5.6% and 4.2% respectively) of landfilled residential MSW.

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

Category	Waste Composition %	Cum. %
Food Scraps	14.6%	14.6%
Uncoated OCC/Kraft	5.6%	20.2%
Newsprint	4.2%	24.4%
Compostable Paper	4.1%	28.5%
Other Rigid Plastic Products	3.9%	32.4%
Mixed Paper - Recyclable	3.8%	36.2%
Other Textiles	3.6%	39.9%
Diapers	3.6%	43.4%
Other Organic	3.3%	46.8%
Treated Wood	3.1%	49.9%
Total	49.9%	

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	+/-
Paper	23.6%	2.20%	Inorganics	3.0%	1.36%
Newsprint	4.2%	0.58%	Televisions	0.0%	0.00%
High Grade Office Paper	0.5%	0.28%	Computer Monitors	0.2%	0.30%
Magazines/Catalogs	1.9%	0.62%	Computer Equipment/Peripherals	0.1%	0.16%
Uncoated OCC/Kraft	5.6%	1.01%	Electronic Equipment	1.2%	0.54%
Boxboard	2.3%	0.33%	White Goods - Refrigerated	0.0%	0.00%
Mixed Paper - Recyclable	3.8%	0.48%	White Goods - Not refrigerated	0.0%	0.00%
Compostable Paper	4.1%	0.46%	Lead-acid Batteries	0.0%	0.01%
Other Paper	1.2%	0.38%	Other Household Batteries	0.1%	0.04%
			Tires	0.2%	0.20%
Beverage Containers	0.2%	0.04%	Household Bulky Items	1.3%	1.25%
Milk & Juice Cartons/Boxes - Coated	0.2%	0.04%	Fluorescent Lights/Ballasts	0.0%	0.00%
Plastic	15.2%	1.92%	Textiles	9.4%	2.36%
#1 PET Bottles/Jars	1.4%	0.20%	Carpet	2.5%	1.61%
#1 Other PET Containers	0.1%	0.05%	Carpet Padding	0.3%	0.25%
#2 HDPE Bottles/Jars - Clear	0.6%	0.09%	Clothing	3.0%	0.67%
#2 HDPE Bottles/Jars - Color	0.7%	0.11%	Other Textiles	3.6%	1.39%
#2 Other HDPE Containers	0.1%	0.06%			
#6 Exp. Polystyrene Packaging	0.8%	0.09%	Household Hazardous Waste	0.5%	0.19%
#3-#7 Other - All	1.1%	0.17%	Latex Paint	0.2%	0.13%
Other Rigid Plastic Products	3.9%	1.27%	Oil Paint	0.0%	0.05%
Grocery & Merchandise Bags	0.9%	0.10%	Plant/Organism/Pest Control/Growth	0.0%	0.00%
Trash Bags	1.2%	0.16%	Used Oil/Filters	0.1%	0.06%
Commercial & Industrial Film	0.4%	0.19%	Other Automotive Fluids	0.0%	0.00%
Other Film	1.6%	0.26%	Mercury-Containing Items	0.0%	0.00%
Other Plastic	2.3%	1.38%	Sharps & Infectious Waste	0.0%	0.00%
			Ash, Sludge, & Industrial Wastes	0.0%	0.00%
Glass	4.2%	0.56%	Sewage Solids	0.0%	0.00%
Recyclable Glass Bottles & Jars	3.9%	0.51%	Other HHW	0.2%	0.11%
Flat Glass	0.2%	0.30%			
Other Glass	0.1%	0.05%	C&D	12.6%	4.36%
			Clean Dimensional Lumber	0.8%	0.40%
Metal	5.6%	1.65%	Clean Engineered Wood	1.3%	0.73%
Aluminum Beverage Containers	0.5%	0.09%	Wood Pallets	0.2%	0.35%
Other Aluminum	0.5%	0.27%	Painted Wood	1.7%	0.77%
HVAC Ducting	0.1%	0.08%	Treated Wood	3.1%	1.58%
Ferrous Containers (Tin Cans)	1.4%	0.22%	Concrete	0.2%	0.09%
Other Ferrous	2.2%	1.44%	Reinforced Concrete	0.0%	0.00%
Other Non-Ferrous	0.3%	0.25%	Asphalt Paving	0.0%	0.00%
Other Metal	0.6%	0.43%	Rock & Other Aggregates	0.2%	0.23%
			Bricks	0.2%	0.21%
Organics	25.7%	2.46%	Gypsum Board	1.7%	1.69%
Yard Waste - Compostable	2.2%	0.38%	Composition Shingles	0.5%	0.45%
Yard Waste - Woody	0.9%	0.64%	Other Roofing	0.2%	0.01%
Food Scraps	14.6%	1.71%	Plastic C&D Materials	0.1%	0.09%
Bottom Fines & Dirt	1.1%	0.39%	Ceramics/Porcelain	1.9%	2.08%
Diapers	3.6%	0.98%	Other C&D	0.7%	0.75%
Other Organic	3.3%	0.98%			
			Total Percentage	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, C&D, and Organics classes account for over 70% (28.2%, 23.1% and 18.8% respectively) of the landfilled MSW for this sector.

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

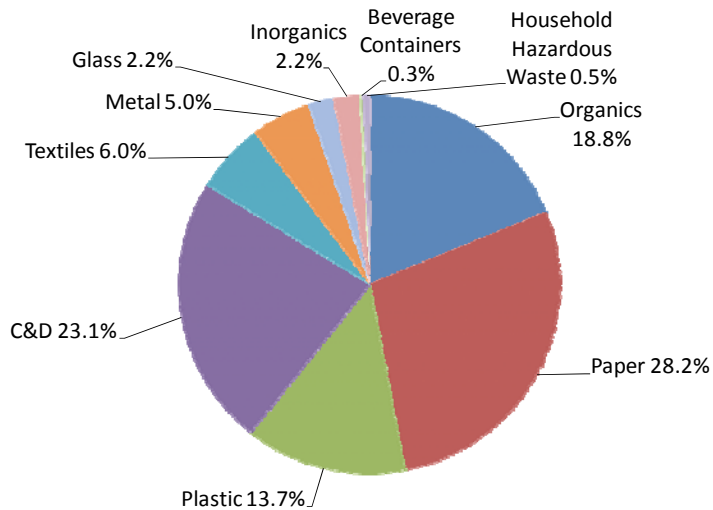


Table 2-5 lists the top ten material categories that were found in the landfilled ICI MSW sector. These ten categories account for over approximately 50% of landfilled ICI MSW. Uncoated OCC/Kraft, Food Scraps, and Gypsum Board material categories account for over 31% (16.1%, 12.2% and 3.5% respectively) of landfilled ICI MSW.

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

Category	Waste Composition %	Cum. %
Uncoated OCC/Kraft	16.1%	16.1%
Food Scraps	12.2%	28.3%
Gypsum Board	3.5%	31.7%
Other Rigid Plastic Products	3.4%	35.1%
Clean Engineered Wood	3.0%	38.1%
Treated Wood	2.9%	41.0%
Commercial & Industrial Film	2.7%	43.7%
Compostable Paper	2.5%	46.2%
Other Organic	2.4%	48.5%
Composition Shingles	1.3%	49.8%
Total	49.8%	

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	+/-
Paper	28.2%	2.93%	Inorganics	2.2%	1.33%
Newsprint	2.0%	0.3%	Televisions	0.0%	0.0%
High Grade Office Paper	1.5%	0.4%	Computer Monitors	0.2%	0.2%
Magazines/Catalogs	1.7%	0.3%	Computer Equipment/Peripherals	0.4%	0.1%
Uncoated OCC/Kraft	16.1%	0.7%	Electronic Equipment	0.7%	0.3%
Boxboard	1.3%	0.3%	White Goods - Refrigerated	0.0%	0.0%
Mixed Paper - Recyclable	2.4%	0.2%	White Goods - Not refrigerated	0.0%	0.1%
Compostable Paper	2.5%	0.3%	Lead-acid Batteries	0.0%	0.0%
Other Paper	0.8%	0.2%	Other Household Batteries	0.0%	0.0%
			Tires	0.3%	0.1%
Beverage Containers	0.3%	0.15%	Household Bulky Items	0.6%	0.3%
Milk & Juice Cartons/Boxes - Coated	0.3%	0.1%	Fluorescent Lights/Ballasts	0.0%	0.0%
Plastic	13.7%	2.11%	Textiles	6.0%	1.40%
#1 PET Bottles/Jars	0.7%	0.1%	Carpet	1.1%	0.3%
#1 Other PET Containers	0.1%	0.0%	Carpet Padding	0.2%	0.2%
#2 HDPE Bottles/Jars - Clear	0.3%	0.1%	Clothing	1.6%	0.2%
#2 HDPE Bottles/Jars - Color	0.6%	0.1%	Other Textiles	3.1%	0.3%
#2 Other HDPE Containers	0.1%	0.1%			
#6 Exp. Polystyrene Packaging	0.9%	0.1%	Household Hazardous Waste	0.5%	0.58%
#3-#7 Other - All	0.6%	0.1%	Latex Paint	0.0%	0.0%
Other Rigid Plastic Products	3.4%	0.3%	Oil Paint	0.0%	0.0%
Grocery & Merchandise Bags	0.3%	0.0%	Plant/Organism/Pest Control/Growth	0.0%	0.0%
Trash Bags	1.2%	0.1%	Used Oil/Filters	0.1%	0.1%
Commercial & Industrial Film	2.7%	0.6%	Other Automotive Fluids	0.0%	0.0%
Other Film	1.2%	0.3%	Mercury-Containing Items	0.0%	0.0%
Other Plastic	1.6%	0.3%	Sharps & Infectious Waste	0.0%	0.0%
			Ash, Sludge, & Industrial Wastes	0.1%	0.1%
Glass	2.2%	0.46%	Sewage Solids	0.0%	0.0%
Recyclable Glass Bottles & Jars	2.0%	0.2%	Other HHW	0.2%	0.2%
Flat Glass	0.1%	0.1%			
Other Glass	0.0%	0.0%	C&D	23.1%	5.50%
			Clean Dimensional Lumber	3.5%	1.27%
Metal	5.0%	1.42%	Clean Engineered Wood	3.0%	1.94%
Aluminum Beverage Containers	0.3%	0.0%	Wood Pallets	1.7%	1.60%
Other Aluminum	0.5%	0.1%	Painted Wood	1.8%	0.88%
HVAC Ducting	0.0%	0.0%	Treated Wood	2.9%	2.31%
Ferrous Containers (Tin Cans)	0.7%	0.1%	Concrete	2.7%	1.30%
Other Ferrous	2.2%	0.4%	Reinforced Concrete	0.1%	0.00%
Other Non-Ferrous	0.2%	0.1%	Asphalt Paving	0.0%	0.00%
Other Metal	1.1%	0.3%	Rock & Other Aggregates	0.3%	0.06%
			Bricks	0.6%	0.79%
Organics	18.8%	3.43%	Gypsum Board	3.5%	2.46%
Yard Waste - Compostable	0.8%	0.2%	Composition Shingles	1.3%	2.83%
Yard Waste - Woody	1.8%	0.2%	Other Roofing	0.0%	0.00%
Food Scraps	12.2%	1.2%	Plastic C&D Materials	0.2%	0.42%
Bottom Fines & Dirt	0.8%	0.1%	Ceramics/Porcelain	0.3%	0.18%
Diapers	0.9%	0.2%	Other C&D	1.3%	1.56%
Other Organic	2.4%	0.7%			
			Total Percentage	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. Paper, Organics, and C&D classes account for approximately 70% (26%, 22.2% and 18% respectively) of the landfilled combined residential/ICI MSW.

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

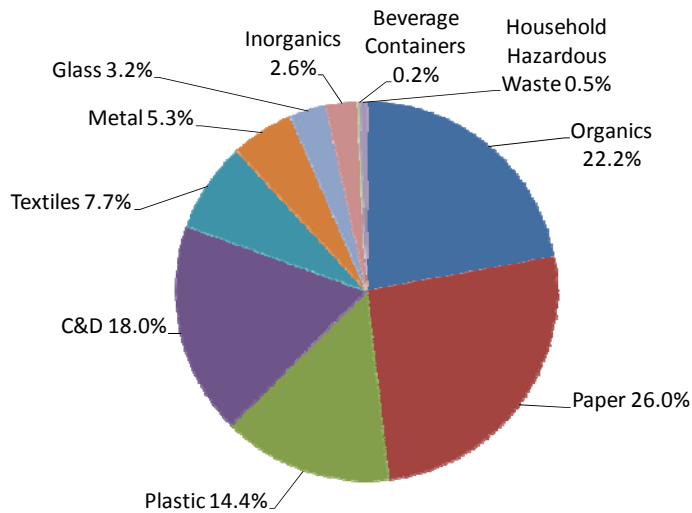


Table 2-7 lists the top ten material categories that were found in the landfilled combined residential/ ICI MSW. These ten categories account for approximately 49% of landfilled combined residential/ICI MSW. Food Scraps, Uncoated OCC/Kraft and Other Rigid Plastic Products material categories account for approximately 28% (13.4%, 11%, and 3.7% respectively) of the landfilled combined residential/ICI MSW.

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

Category	Waste Composition %	Cum. %
Food Scraps	13.4%	13.4%
Uncoated OCC/Kraft	11.0%	24.4%
Other Rigid Plastic Products	3.7%	28.0%
Other Textiles	3.4%	31.4%
Compostable Paper	3.3%	34.7%
Newsprint	3.1%	37.7%
Mixed Paper - Recyclable	3.1%	40.8%
Treated Wood	3.0%	43.8%
Other Organic	2.8%	46.7%
Other Ferrous	2.2%	48.9%
Total	48.9%	

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	+/-
Paper	25.97%	0.43%	Inorganics	2.6%	0.35%
Newsprint	3.06%	0.16%	Televisions	0.0%	0.00%
High Grade Office Paper	1.05%	0.13%	Computer Monitors	0.2%	0.08%
Magazines/Catalogs	1.76%	0.16%	Computer Equipment/Peripherals	0.2%	0.05%
Uncoated OCC/Kraft	10.97%	0.30%	Electronic Equipment	1.0%	0.16%
Boxboard	1.78%	0.11%	White Goods - Refrigerated	0.0%	0.00%
Mixed Paper - Recyclable	3.05%	0.12%	White Goods - Not refrigerated	0.0%	0.01%
Compostable Paper	3.30%	0.14%	Lead-acid Batteries	0.0%	0.00%
Other Paper	0.99%	0.10%	Other Household Batteries	0.0%	0.01%
			Tires	0.2%	0.05%
Beverage Containers	0.24%	0.02%	Household Bulky Items	0.9%	0.31%
Milk & Juice Cartons/Boxes - Coated	0.24%	0.02%	Fluorescent Lights/Ballasts	0.0%	0.00%
Plastic	14.42%	0.50%	Textiles	7.7%	0.58%
#1 PET Bottles/Jars	1.07%	0.05%	Carpet	1.7%	0.39%
#1 Other PET Containers	0.09%	0.01%	Carpet Padding	0.3%	0.08%
#2 HDPE Bottles/Jars - Clear	0.44%	0.03%	Clothing	2.3%	0.16%
#2 HDPE Bottles/Jars - Color	0.64%	0.03%	Other Textiles	3.4%	0.34%
#2 Other HDPE Containers	0.09%	0.02%			
#6 Exp. Polystyrene Packaging	0.85%	0.03%	Household Hazardous Waste	0.5%	0.07%
#3-#7 Other - All	0.86%	0.05%	Latex Paint	0.1%	0.03%
Other Rigid Plastic Products	3.65%	0.31%	Oil Paint	0.0%	0.01%
Grocery & Merchandise Bags	0.59%	0.02%	Plant/Organism/Pest Control/Growth	0.0%	0.00%
Trash Bags	1.21%	0.05%	Used Oil/Filters	0.1%	0.02%
Commercial & Industrial Film	1.58%	0.18%	Other Automotive Fluids	0.0%	0.00%
Other Film	1.42%	0.10%	Mercury-Containing Items	0.0%	0.00%
Other Plastic	1.94%	0.34%	Sharps & Infectious Waste	0.0%	0.01%
			Ash, Sludge, & Industrial Wastes	0.1%	0.04%
Glass	3.15%	0.14%	Sewage Solids	0.0%	0.00%
Recyclable Glass Bottles & Jars	2.93%	0.13%	Other HHW	0.2%	0.05%
Flat Glass	0.16%	0.07%			
Other Glass	0.06%	0.01%	C&D	18.0%	1.17%
			Clean Dimensional Lumber	2.2%	0.16%
Metal	5.33%	0.42%	Clean Engineered Wood	2.1%	0.26%
Aluminum Beverage Containers	0.42%	0.02%	Wood Pallets	1.0%	0.18%
Other Aluminum	0.52%	0.07%	Painted Wood	1.7%	0.20%
HVAC Ducting	0.03%	0.02%	Treated Wood	3.0%	0.44%
Ferrous Containers (Tin Cans)	1.05%	0.06%	Concrete	1.5%	0.14%
Other Ferrous	2.21%	0.36%	Reinforced Concrete	0.0%	0.00%
Other Non-Ferrous	0.24%	0.06%	Asphalt Paving	0.0%	0.00%
Other Metal	0.86%	0.13%	Rock & Other Aggregates	0.3%	0.06%
			Bricks	0.4%	0.09%
Organics	22.16%	0.68%	Gypsum Board	2.6%	0.47%
Yard Waste - Compostable	1.46%	0.11%	Composition Shingles	0.9%	0.31%
Yard Waste - Woody	1.34%	0.16%	Other Roofing	0.1%	0.05%
Food Scraps	13.39%	0.51%	Plastic C&D Materials	0.1%	0.05%
Bottom Fines & Dirt	0.94%	0.10%	Ceramics/Porcelain	1.0%	0.49%
Diapers	2.19%	0.24%	Other C&D	1.0%	0.24%
Other Organic	2.84%	0.30%			
			Total Percentage	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 315 samples, a total of 252 (80%) of the samples were collected from the urban MSW sector (143 (57%) from Chicago), 138 (55%) urban samples were collected from residential MSW and 114 (45%) urban samples were collected from ICI MSW. The samples from Chicago were weighted as described in the methodology sections of this report. The weight that the Chicago samples were given was based on the ratio of the Chicago population to the total Illinois Urban population using 2007 Census data.⁶

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. Organic, Paper, and C&D classes account for approximately 61% (25.5%, 21.9% and 14.5% respectively) of the landfilled MSW for this sector.

⁶ U.S. Census Bureau. Population Division. Table 1: Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico: April 1, 2000 to July 1, 2007. INST-EST2007-01. December 27, 2007. Illinois resident population of 12,852,548 in 2007.

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

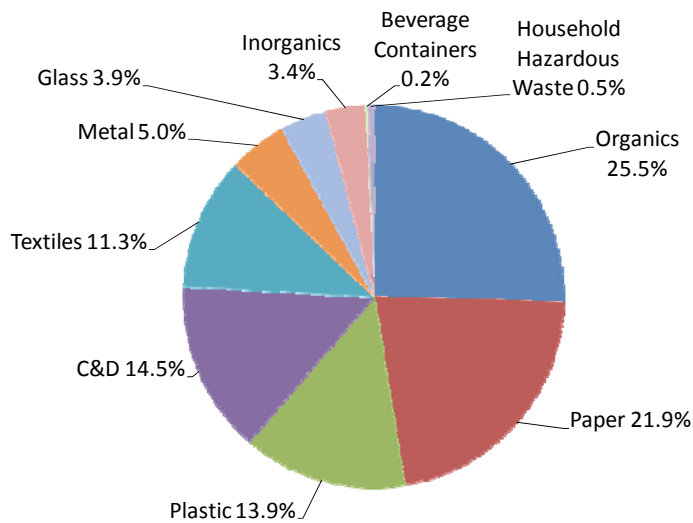


Table 2-9 lists the top ten material categories that were found in the landfilled urban residential MSW subsector. These ten categories account for over 51% of landfilled urban residential MSW. Food scraps, Uncoated OCC/Kraft, and Other Textiles material categories account for approximately 24% (14.5%, 5.2% and 4.5% 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	14.5%	14.5%
Uncoated OCC/Kraft	5.2%	19.7%
Other Textiles	4.5%	24.3%
Treated Wood	4.4%	28.7%
Other Rigid Plastic Products	4.4%	33.1%
Compostable Paper	4.1%	37.2%
Newsprint	4.0%	41.2%
Clothing	3.5%	44.8%
Recyclable Glass Bottles & Jars	3.5%	48.3%
Mixed Paper	3.3%	51.6%
Total	51.6%	

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	+/-
Paper	21.9%	1.61%	Inorganics	3.4%	1.11%
Newsprint	4.0%	0.42%	Televisions	0.0%	0.01%
High Grade Office Paper	0.4%	0.08%	Computer Monitors	0.1%	0.18%
Magazines/Catalogs	1.9%	0.52%	Computer Equipment/Peripherals	0.1%	0.14%
Uncoated OCC/Kraft	5.2%	0.67%	Electronic Equipment	1.1%	0.37%
Boxboard	2.0%	0.20%	White Goods - Refrigerated	0.0%	0.00%
Mixed Paper - Recyclable	3.3%	0.32%	White Goods - Not refrigerated	0.0%	0.00%
Compostable Paper	4.1%	0.35%	Lead-acid Batteries	0.0%	0.01%
Other Paper	1.0%	0.13%	Other Household Batteries	0.0%	0.01%
			Tires	0.1%	0.02%
Beverage Containers	0.2%	0.03%	Household Bulky Items	1.8%	1.11%
Milk & Juice Cartons/Boxes - Coated	0.2%	0.03%	Fluorescent Lights/Ballasts	0.0%	0.00%
Plastic	13.9%	1.15%	Textiles	11.3%	1.97%
#1 PET Bottles/Jars	1.4%	0.14%	Carpet	2.9%	1.36%
#1 Other PET Containers	0.1%	0.03%	Carpet Padding	0.3%	0.19%
#2 HDPE Bottles/Jars - Clear	0.5%	0.04%	Clothing	3.5%	0.55%
#2 HDPE Bottles/Jars - Color	0.6%	0.08%	Other Textiles	4.5%	1.23%
#2 Other HDPE Containers	0.1%	0.05%			
#6 Exp. Polystyrene Packaging	0.8%	0.07%	Household Hazardous Waste	0.5%	0.13%
#3-#7 Other - All	1.0%	0.11%	Latex Paint	0.2%	0.09%
Other Rigid Plastic Products	4.4%	1.09%	Oil Paint	0.0%	0.04%
Grocery & Merchandise Bags	0.8%	0.07%	Plant/Organism/Pest Control/Growth	0.0%	0.00%
Trash Bags	1.0%	0.09%	Used Oil/Filters	0.1%	0.05%
Commercial & Industrial Film	0.4%	0.12%	Other Automotive Fluids	0.0%	0.00%
Other Film	1.3%	0.12%	Mercury-Containing Items	0.0%	0.00%
Other Plastic	1.6%	0.39%	Sharps & Infectious Waste	0.0%	0.00%
			Ash, Sludge, & Industrial Wastes	0.0%	0.00%
Glass	3.9%	0.33%	Sewage Solids	0.0%	0.00%
Recyclable Glass Bottles & Jars	3.5%	0.23%	Other HHW	0.1%	0.04%
Flat Glass	0.3%	0.27%			
Other Glass	0.1%	0.04%	C&D	14.5%	3.52%
			Clean Dimensional Lumber	0.5%	0.13%
Metal	5.0%	0.79%	Clean Engineered Wood	1.2%	0.50%
Aluminum Beverage Containers	0.6%	0.07%	Wood Pallets	0.3%	0.31%
Other Aluminum	0.7%	0.24%	Painted Wood	1.9%	0.63%
HVAC Ducting	0.1%	0.07%	Treated Wood	4.4%	1.35%
Ferrous Containers (Tin Cans)	1.1%	0.13%	Concrete	0.2%	0.04%
Other Ferrous	1.6%	0.68%	Reinforced Concrete	0.0%	0.00%
Other Non-Ferrous	0.4%	0.22%	Asphalt Paving	0.0%	0.00%
Other Metal	0.5%	0.31%	Rock & Other Aggregates	0.1%	0.02%
			Bricks	0.3%	0.19%
Organics	25.5%	1.85%	Gypsum Board	1.0%	0.46%
Yard Waste - Compostable	2.5%	0.34%	Composition Shingles	0.7%	0.41%
Yard Waste - Woody	1.2%	0.57%	Other Roofing	0.3%	0.11%
Food Scraps	14.5%	1.31%	Plastic C&D Materials	0.1%	0.08%
Bottom Fines & Dirt	0.9%	0.20%	Ceramics/Porcelain	2.6%	1.86%
Diapers	3.3%	0.78%	Other C&D	1.0%	0.68%
Other Organic	3.1%	0.56%			
			Total Percentage	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, C&D, and Organics classes account for approximately 80% (27.3%, 25.2% and 17.7% respectively) of the landfilled MSW for this subsector.

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

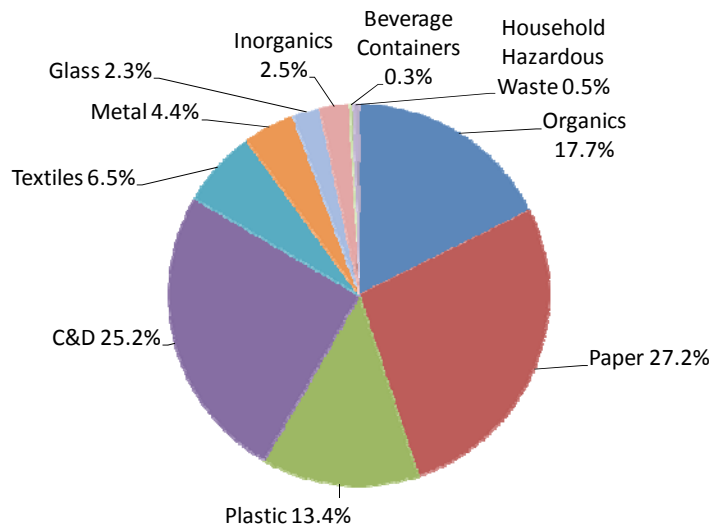


Table 2-11 lists the top ten material categories that were found in the landfilled urban ICI MSW subsector. These ten categories account for over 54% of the landfilled urban ICI MSW. Uncoated OCC/Kraft, Food Scraps, and Clean Dimensional Lumber material categories account for approximately 32% (16.1%, 11.7% 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. %
Uncoated OCC/Kraft	16.1%	16.1%
Food Scraps	11.7%	27.9%
Clean Dimensional Lumber	3.8%	31.6%
Gypsum Board	3.6%	35.3%
Other Rigid Plastic Products	3.6%	38.9%
Clean Engineered Wood	3.5%	42.3%
Other Textiles	3.3%	45.7%
Treated Wood	3.2%	48.9%
Concrete	2.9%	51.8%
Mixed Paper	2.4%	54.2%
Total	54.2%	

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	+/-
Paper	27.2%	1.18%	Inorganics	2.5%	0.62%
Newsprint	1.6%	0.15%	Televisions	0.0%	0.01%
High Grade Office Paper	1.6%	0.51%	Computer Monitors	0.2%	0.16%
Magazines/Catalogs	1.5%	0.14%	Computer Equipment/Peripherals	0.4%	0.14%
Uncoated OCC/Kraft	16.1%	0.62%	Electronic Equipment	0.8%	0.41%
Boxboard	0.8%	0.10%	White Goods - Refrigerated	0.0%	0.00%
Mixed Paper - Recyclable	2.4%	0.20%	White Goods - Not refrigerated	0.1%	0.07%
Compostable Paper	2.2%	0.19%	Lead-acid Batteries	0.0%	0.00%
Other Paper	0.9%	0.24%	Other Household Batteries	0.0%	0.02%
			Tires	0.3%	0.10%
Beverage Containers	0.3%	0.04%	Household Bulky Items	0.7%	0.41%
Milk & Juice Cartons/Boxes - Coated	0.3%	0.04%	Fluorescent Lights/Ballasts	0.0%	0.00%
Plastic	13.4%	0.91%	Textiles	6.5%	0.70%
#1 PET Bottles/Jars	0.7%	0.07%	Carpet	1.3%	0.39%
#1 Other PET Containers	0.1%	0.02%	Carpet Padding	0.3%	0.24%
#2 HDPE Bottles/Jars - Clear	0.3%	0.06%	Clothing	1.6%	0.17%
#2 HDPE Bottles/Jars - Color	0.6%	0.07%	Other Textiles	3.3%	0.30%
#2 Other HDPE Containers	0.1%	0.07%			
#6 Exp. Polystyrene Packaging	0.8%	0.07%	Household Hazardous Waste	0.5%	0.30%
#3-#7 Other - All	0.6%	0.07%	Latex Paint	0.0%	0.03%
Other Rigid Plastic Products	3.6%	0.39%	Oil Paint	0.0%	0.00%
Grocery & Merchandise Bags	0.3%	0.04%	Plant/Organism/Pest Control/Growth	0.0%	0.00%
Trash Bags	1.2%	0.16%	Used Oil/Filters	0.1%	0.02%
Commercial & Industrial Film	2.4%	0.71%	Other Automotive Fluids	0.0%	0.01%
Other Film	0.9%	0.11%	Mercury-Containing Items	0.0%	0.00%
Other Plastic	1.7%	0.43%	Sharps & Infectious Waste	0.1%	0.05%
			Ash, Sludge, & Industrial Wastes	0.1%	0.18%
Glass	2.3%	0.25%	Sewage Solids	0.0%	0.00%
Recyclable Glass Bottles & Jars	2.2%	0.24%	Other HHW	0.2%	0.22%
Flat Glass	0.1%	0.05%			
Other Glass	0.0%	0.01%	C&D	25.2%	2.68%
			Clean Dimensional Lumber	3.8%	0.60%
Metal	4.4%	0.45%	Clean Engineered Wood	3.5%	0.96%
Aluminum Beverage Containers	0.3%	0.03%	Wood Pallets	2.1%	0.81%
Other Aluminum	0.6%	0.17%	Painted Wood	1.8%	0.41%
HVAC Ducting	0.0%	0.01%	Treated Wood	3.2%	1.06%
Ferrous Containers (Tin Cans)	0.8%	0.12%	Concrete	2.9%	0.57%
Other Ferrous	1.8%	0.37%	Reinforced Concrete	0.1%	0.00%
Other Non-Ferrous	0.2%	0.04%	Asphalt Paving	0.0%	0.00%
Other Metal	0.8%	0.11%	Rock & Other Aggregates	0.4%	0.06%
			Bricks	0.7%	0.40%
Organics	17.7%	1.22%	Gypsum Board	3.6%	1.06%
Yard Waste - Compostable	0.7%	0.27%	Composition Shingles	1.6%	1.43%
Yard Waste - Woody	2.0%	0.31%	Other Roofing	0.0%	0.23%
Food Scraps	11.7%	0.97%	Plastic C&D Materials	0.3%	0.21%
Bottom Fines & Dirt	0.8%	0.16%	Ceramics/Porcelain	0.3%	0.10%
Diapers	0.8%	0.17%	Other C&D	1.0%	0.33%
Other Organic	1.7%	0.37%			
			Total Percentage	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. Paper, Organics, and C&D classes account for over 66% (24.7%, 21.5% and 20.0% respectively) of the landfilled MSW for this sector.

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

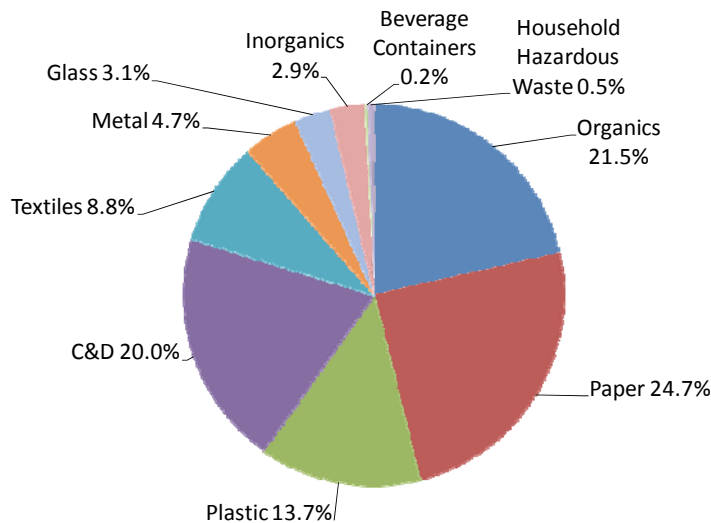


Table 2-13 lists the top ten material categories that were found in the landfilled urban residential/ICI MSW sector. These ten categories account for over 52% of landfilled urban MSW. Food scraps, Uncoated OCC/Kraft, and Other Rigid Plastic Products material categories account for over 28% (13.1%, 10.8% and 4.0% 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	13.1%	13.1%
Uncoated OCC/Kraft	10.8%	23.9%
Other Rigid Plastic Products	4.0%	27.9%
Other Textiles	3.9%	31.8%
Treated Wood	3.8%	35.6%
Compostable Paper	3.1%	38.8%
Mixed Paper	2.9%	41.6%
Recyclable Glass Bottles & Jars	2.8%	44.5%
Newsprint	2.8%	47.3%
Clothing	2.5%	49.8%
Total	49.8%	

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	+/-
Paper	24.7%	0.49%	Inorganics	2.9%	0.31%
Newsprint	2.8%	0.11%	Televisions	0.0%	0.00%
High Grade Office Paper	1.0%	0.14%	Computer Monitors	0.2%	0.06%
Magazines/Catalogs	1.7%	0.13%	Computer Equipment/Peripherals	0.3%	0.05%
Uncoated OCC/Kraft	10.8%	0.23%	Electronic Equipment	1.0%	0.14%
Boxboard	1.4%	0.06%	White Goods - Refrigerated	0.0%	0.00%
Mixed Paper - Recyclable	2.9%	0.09%	White Goods - Not refrigerated	0.0%	0.02%
Compostable Paper	3.1%	0.10%	Lead-acid Batteries	0.0%	0.00%
Other Paper	0.9%	0.07%	Other Household Batteries	0.0%	0.00%
Beverage Containers	0.2%	0.01%	Tires	0.2%	0.03%
Milk & Juice Cartons/Boxes - Coated	0.2%	0.01%	Household Bulky Items	1.3%	0.28%
			Fluorescent Lights/Ballasts	0.0%	0.00%
Plastic	13.7%	0.36%	Textiles	8.8%	0.50%
#1 PET Bottles/Jars	1.0%	0.04%	Carpet	2.1%	0.34%
#1 Other PET Containers	0.1%	0.01%	Carpet Padding	0.3%	0.08%
#2 HDPE Bottles/Jars - Clear	0.4%	0.02%	Clothing	2.5%	0.14%
#2 HDPE Bottles/Jars - Color	0.6%	0.03%	Other Textiles	3.9%	0.30%
#2 Other HDPE Containers	0.1%	0.02%			
#6 Exp. Polystyrene Packaging	0.8%	0.03%	Household Hazardous Waste	0.5%	0.08%
#3-#7 Other - All	0.8%	0.03%	Latex Paint	0.1%	0.02%
Other Rigid Plastic Products	4.0%	0.28%	Oil Paint	0.0%	0.01%
Grocery & Merchandise Bags	0.6%	0.02%	Plant/Organism/Pest Control/Growth	0.0%	0.00%
Trash Bags	1.1%	0.05%	Used Oil/Filters	0.1%	0.01%
Commercial & Industrial Film	1.4%	0.19%	Other Automotive Fluids	0.0%	0.00%
Other Film	1.1%	0.04%	Mercury-Containing Items	0.0%	0.00%
Other Plastic	1.7%	0.15%	Sharps & Infectious Waste	0.0%	0.01%
			Ash, Sludge, & Industrial Wastes	0.1%	0.05%
Glass	3.1%	0.10%	Sewage Solids	0.0%	0.00%
Recyclable Glass Bottles & Jars	2.8%	0.08%	Other HHW	0.2%	0.06%
Flat Glass	0.2%	0.06%			
Other Glass	0.1%	0.01%	C&D	20.0%	1.09%
Metal	4.7%	0.22%	Clean Dimensional Lumber	2.2%	0.16%
Aluminum Beverage Containers	0.4%	0.02%	Clean Engineered Wood	2.4%	0.28%
Other Aluminum	0.6%	0.07%	Wood Pallets	1.2%	0.23%
HVAC Ducting	0.0%	0.02%	Painted Wood	1.8%	0.18%
Ferrous Containers (Tin Cans)	1.0%	0.05%	Treated Wood	3.8%	0.42%
Other Ferrous	1.7%	0.19%	Concrete	1.6%	0.15%
Other Non-Ferrous	0.3%	0.05%	Reinforced Concrete	0.0%	0.00%
Other Metal	0.7%	0.08%	Asphalt Paving	0.0%	0.00%
			Rock & Other Aggregates	0.2%	0.02%
Organics	21.5%	0.54%	Bricks	0.5%	0.12%
Yard Waste - Compostable	1.6%	0.11%	Gypsum Board	2.3%	0.30%
Yard Waste - Woody	1.6%	0.16%	Composition Shingles	1.2%	0.39%
Food Scraps	13.1%	0.40%	Other Roofing	0.1%	0.06%
Bottom Fines & Dirt	0.8%	0.06%	Plastic C&D Materials	0.2%	0.06%
Diapers	2.0%	0.19%	Ceramics/Porcelain	1.4%	0.44%
Other Organic	2.3%	0.16%	Other C&D	1.0%	0.18%
			Total Percentage	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 172 samples collected throughout the state, a total of 63 (37%) samples were collected from the rural MSW sector, 31 (49%) rural samples were collected from the rural residential MSW subsector and 32 (51%) 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. Paper, Organics and Plastics classes account for approximately 70% (26.9%, 25.1% and 17.9% respectively) of the total MSW for this sector.

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

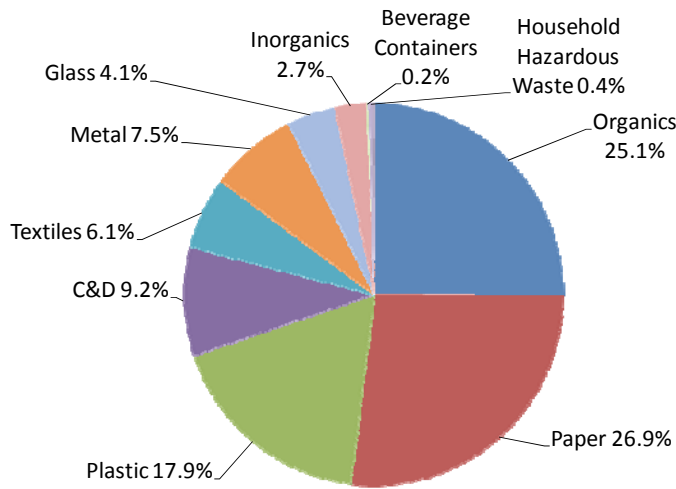


Table 2-15 lists the top ten material categories that were found in the landfilled rural residential MSW subsector. These ten categories account for over 60% of the landfilled rural residential MSW. Food Scraps, Uncoated OCC/Kraft, and Mixed Paper-Recyclable material categories account for approximately 25% (14.3%, 6.4% and 4.7% 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	14.3%	14.3%
Uncoated OCC/Kraft	6.4%	20.7%
Mixed Paper	4.7%	25.4%
Other Organic	4.4%	29.7%
Newsprint	4.3%	34.0%
Compostable Paper	4.2%	38.2%
Diapers	4.1%	42.3%
Other Ferrous	3.7%	46.0%
Other Rigid Plastic Products	3.3%	49.3%
Gypsum Board	3.1%	52.4%
Total	52.4%	

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	+/-
Paper	26.9%	3.16%	Inorganics	2.7%	1.42%
Newsprint	4.3%	0.87%	Televisions	0.0%	0.00%
High Grade Office Paper	0.9%	0.67%	Computer Monitors	0.4%	0.59%
Magazines/Catalogs	1.9%	0.64%	Computer Equipment/Peripherals	0.0%	0.00%
Uncoated OCC/Kraft	6.4%	1.72%	Electronic Equipment	1.5%	0.89%
Boxboard	3.0%	0.58%	White Goods - Refrigerated	0.0%	0.00%
Mixed Paper - Recyclable	4.7%	0.79%	White Goods - Not refrigerated	0.0%	0.00%
Compostable Paper	4.2%	0.62%	Lead-acid Batteries	0.0%	0.00%
Other Paper	1.7%	0.88%	Other Household Batteries	0.2%	0.08%
			Tires	0.3%	0.51%
Beverage Containers	0.2%	0.07%	Household Bulky Items	0.3%	0.39%
Milk & Juice Cartons/Boxes - Coated	0.2%	0.07%	Fluorescent Lights/Ballasts	0.0%	0.01%
Plastic	17.9%	3.59%	Textiles	6.1%	1.84%
#1 PET Bottles/Jars	1.5%	0.32%	Carpet	2.0%	1.48%
#1 Other PET Containers	0.1%	0.09%	Carpet Padding	0.3%	0.31%
#2 HDPE Bottles/Jars - Clear	0.7%	0.18%	Clothing	1.9%	0.59%
#2 HDPE Bottles/Jars - Color	0.7%	0.16%	Other Textiles	1.9%	0.58%
#2 Other HDPE Containers	0.1%	0.08%			
#6 Exp. Polystyrene Packaging	0.8%	0.13%	Household Hazardous Waste	0.4%	0.36%
#3-#7 Other - All	1.4%	0.27%	Latex Paint	0.1%	0.21%
Other Rigid Plastic Products	3.3%	1.03%	Oil Paint	0.0%	0.01%
Grocery & Merchandise Bags	0.8%	0.15%	Plant/Organism/Pest Control/Growth	0.0%	0.00%
Trash Bags	1.6%	0.29%	Used Oil/Filters	0.1%	0.08%
Commercial & Industrial Film	0.4%	0.35%	Other Automotive Fluids	0.0%	0.00%
Other Film	2.4%	0.48%	Mercury-Containing Items	0.0%	0.00%
Other Plastic	4.0%	3.28%	Sharps & Infectious Waste	0.0%	0.00%
			Ash, Sludge, & Industrial Wastes	0.0%	0.00%
Glass	4.1%	1.05%	Sewage Solids	0.0%	0.00%
Recyclable Glass Bottles & Jars	4.0%	1.06%	Other HHW	0.2%	0.27%
Flat Glass	0.0%	0.00%			
Other Glass	0.1%	0.05%	C&D	9.2%	5.04%
			Clean Dimensional Lumber	1.4%	0.92%
Metal	7.5%	3.53%	Clean Engineered Wood	1.4%	1.21%
Aluminum Beverage Containers	0.5%	0.14%	Wood Pallets	0.0%	0.00%
Other Aluminum	0.3%	0.13%	Painted Wood	1.3%	0.85%
HVAC Ducting	0.0%	0.00%	Treated Wood	0.9%	0.81%
Ferrous Containers (Tin Cans)	1.9%	0.39%	Concrete	0.1%	0.22%
Other Ferrous	3.7%	3.06%	Reinforced Concrete	0.0%	0.00%
Other Non-Ferrous	0.1%	0.06%	Asphalt Paving	0.0%	0.00%
Other Metal	0.9%	0.66%	Rock & Other Aggregates	0.4%	0.57%
			Bricks	0.0%	0.00%
Organics	25.1%	3.62%	Gypsum Board	3.1%	4.05%
Yard Waste - Compostable	0.6%	0.39%	Composition Shingles	0.0%	0.02%
Yard Waste - Woody	0.2%	0.17%	Other Roofing	0.0%	0.00%
Food Scraps	14.3%	2.35%	Plastic C&D Materials	0.0%	0.00%
Bottom Fines & Dirt	1.4%	0.82%	Ceramics/Porcelain	0.7%	0.80%
Diapers	4.1%	1.20%	Other C&D	0.0%	0.00%
Other Organic	4.4%	1.94%			
			Total Percentage	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. Paper, Organics, and Plastics classes account for approximately 71% (31.4%, 24.1% and 15.4% respectively) of the landfilled MSW for this subsector.

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

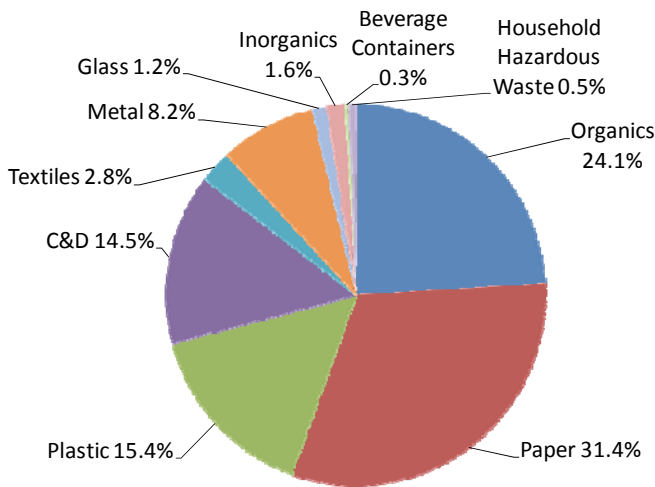


Table 2-17 lists the top ten material categories that were found in the landfilled rural ICI MSW subsector. These ten categories account for over 60% of landfilled rural ICI MSW. Food Scraps, Uncoated OCC/Kraft, and Other Organics material categories account for approximately 34% (14.2%, 13.6% and 6.3% 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	14.2%	14.2%
Uncoated OCC/Kraft	13.6%	27.8%
Other Organic	6.3%	34.1%
Other Ferrous	4.2%	38.3%
Commercial & Industrial Film	4.2%	42.5%
Compostable Paper	4.2%	46.7%
Newsprint	3.9%	50.6%
Boxboard	3.6%	54.1%
Treated Wood	3.2%	57.3%
Other Film	2.7%	60.1%
Total	60.1%	

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	+/-
Paper	31.4%	5.55%	Inorganics	1.6%	1.40%
Newsprint	3.9%	2.32%	Televisions	0.0%	0.00%
High Grade Office Paper	1.3%	0.75%	Computer Monitors	0.5%	0.83%
Magazines/Catalogs	2.0%	1.93%	Computer Equipment/Peripherals	0.1%	0.15%
Uncoated OCC/Kraft	13.6%	4.17%	Electronic Equipment	0.8%	1.02%
Boxboard	3.6%	2.03%	White Goods - Refrigerated	0.0%	0.00%
Mixed Paper - Recyclable	2.1%	0.62%	White Goods - Not refrigerated	0.0%	0.00%
Compostable Paper	4.2%	2.07%	Lead-acid Batteries	0.0%	0.00%
Other Paper	0.8%	0.40%	Other Household Batteries	0.0%	0.01%
			Tires	0.0%	0.00%
Beverage Containers	0.3%	0.40%	Household Bulky Items	0.2%	0.28%
Milk & Juice Cartons/Boxes - Coated	0.3%	0.40%	Fluorescent Lights/Ballasts	0.0%	0.00%
Plastic	15.4%	3.83%	Textiles	2.8%	1.50%
#1 PET Bottles/Jars	0.9%	0.28%	Carpet	0.1%	0.14%
#1 Other PET Containers	0.1%	0.10%	Carpet Padding	0.0%	0.00%
#2 HDPE Bottles/Jars - Clear	0.3%	0.17%	Clothing	1.4%	0.83%
#2 HDPE Bottles/Jars - Color	0.4%	0.25%	Other Textiles	1.3%	0.79%
#2 Other HDPE Containers	0.1%	0.16%			
#6 Exp. Polystyrene Packaging	1.1%	0.49%	Household Hazardous Waste	0.5%	0.53%
#3-#7 Other - All	0.8%	0.63%	Latex Paint	0.0%	0.02%
Other Rigid Plastic Products	2.2%	1.02%	Oil Paint	0.0%	0.00%
Grocery & Merchandise Bags	0.3%	0.13%	Plant/Organism/Pest Control/Growth	0.0%	0.00%
Trash Bags	1.6%	0.56%	Used Oil/Filters	0.3%	0.38%
Commercial & Industrial Film	4.2%	2.66%	Other Automotive Fluids	0.0%	0.00%
Other Film	2.7%	2.17%	Mercury-Containing Items	0.0%	0.01%
Other Plastic	0.8%	0.52%	Sharps & Infectious Waste	0.0%	0.00%
			Ash, Sludge, & Industrial Wastes	0.0%	0.00%
Glass	1.2%	0.61%	Sewage Solids	0.0%	0.00%
Recyclable Glass Bottles & Jars	0.8%	0.39%	Other HHW	0.2%	0.26%
Flat Glass	0.4%	0.51%			
Other Glass	0.0%	0.01%	C&D	14.5%	7.03%
			Clean Dimensional Lumber	1.4%	1.43%
Metal	8.2%	3.25%	Clean Engineered Wood	1.0%	0.90%
Aluminum Beverage Containers	0.4%	0.12%	Wood Pallets	0.2%	0.27%
Other Aluminum	0.2%	0.14%	Painted Wood	1.5%	1.14%
HVAC Ducting	0.0%	0.00%	Treated Wood	3.2%	2.82%
Ferrous Containers (Tin Cans)	0.6%	0.49%	Concrete	1.2%	1.96%
Other Ferrous	4.2%	2.54%	Reinforced Concrete	0.0%	0.00%
Other Non-Ferrous	0.3%	0.42%	Asphalt Paving	0.0%	0.00%
Other Metal	2.3%	2.46%	Rock & Other Aggregates	0.1%	0.11%
			Bricks	0.0%	0.05%
Organics	24.1%	8.13%	Gypsum Board	2.4%	3.90%
Yard Waste - Compostable	1.0%	0.78%	Composition Shingles	0.7%	0.82%
Yard Waste - Woody	0.4%	0.41%	Other Roofing	0.0%	0.00%
Food Scraps	14.2%	7.14%	Plastic C&D Materials	0.1%	0.09%
Bottom Fines & Dirt	0.8%	0.44%	Ceramics/Porcelain	0.1%	0.16%
Diapers	1.4%	1.30%	Other C&D	2.6%	4.18%
Other Organic	6.3%	5.06%			
			Total Percentage	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. Paper, Organics, and Plastics classes account for over 70% (29.2%, 24.6% and 16.6% respectively) of the landfilled MSW for this sector.

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

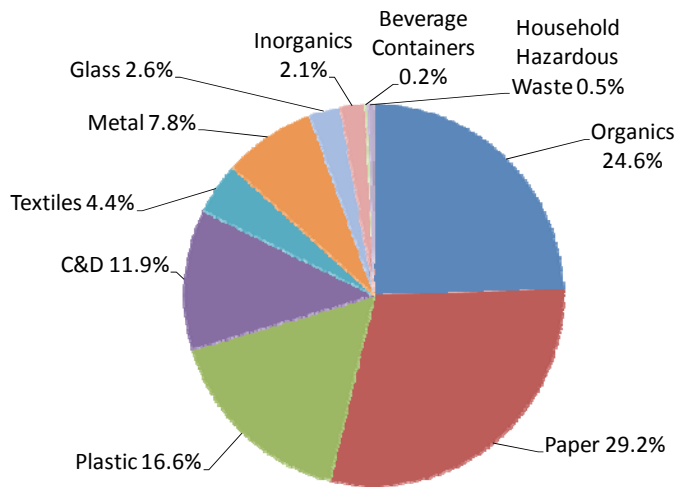


Table 2-19 lists the top ten material categories that were found in the landfilled rural residential/ICI MSW sector. These ten categories account for over 54% of landfilled rural residential/ICI MSW. Food Scraps, Uncoated OCC/Kraft, and Other Organics material categories account for approximately 30% (14.3%, 10.1% and 5.3% 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	14.3%	14.3%
Uncoated OCC/Kraft	10.1%	24.3%
Other Organic	5.3%	29.7%
Compostable Paper	4.2%	33.8%
Newsprint	4.1%	37.9%
Other Ferrous	4.0%	41.9%
Mixed Paper	3.3%	45.2%
Boxboard	3.3%	48.5%
Gypsum Board	2.7%	51.3%
Diapers	2.7%	54.0%
Total	54.0%	

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	+/-
Paper	29.2%	1.65%	Inorganics	2.1%	0.50%
Newsprint	4.1%	0.65%	Televisions	0.0%	0.00%
High Grade Office Paper	1.1%	0.25%	Computer Monitors	0.4%	0.26%
Magazines/Catalogs	2.0%	0.53%	Computer Equipment/Peripherals	0.1%	0.04%
Uncoated OCC/Kraft	10.1%	1.17%	Electronic Equipment	1.1%	0.34%
Boxboard	3.3%	0.55%	White Goods - Refrigerated	0.0%	0.00%
Mixed Paper - Recyclable	3.3%	0.25%	White Goods - Not refrigerated	0.0%	0.00%
Compostable Paper	4.2%	0.57%	Lead-acid Batteries	0.0%	0.00%
Other Paper	1.2%	0.23%	Other Household Batteries	0.1%	0.02%
			Tires	0.1%	0.12%
Beverage Containers	0.2%	0.11%	Household Bulky Items	0.3%	0.12%
Milk & Juice Cartons/Boxes - Coated	0.2%	0.11%	Fluorescent Lights/Ballasts	0.0%	0.00%
Plastic	16.6%	1.32%	Textiles	4.4%	0.59%
#1 PET Bottles/Jars	1.2%	0.11%	Carpet	1.0%	0.35%
#1 Other PET Containers	0.1%	0.03%	Carpet Padding	0.2%	0.07%
#2 HDPE Bottles/Jars - Clear	0.5%	0.06%	Clothing	1.6%	0.26%
#2 HDPE Bottles/Jars - Color	0.6%	0.08%	Other Textiles	1.6%	0.25%
#2 Other HDPE Containers	0.1%	0.05%			
#6 Exp. Polystyrene Packaging	1.0%	0.13%	Household Hazardous Waste	0.5%	0.16%
#3-#7 Other - All	1.1%	0.18%	Latex Paint	0.1%	0.05%
Other Rigid Plastic Products	2.7%	0.36%	Oil Paint	0.0%	0.00%
Grocery & Merchandise Bags	0.5%	0.05%	Plant/Organism/Pest Control/Growth	0.0%	0.00%
Trash Bags	1.6%	0.16%	Used Oil/Filters	0.2%	0.10%
Commercial & Industrial Film	2.4%	0.71%	Other Automotive Fluids	0.0%	0.00%
Other Film	2.6%	0.58%	Mercury-Containing Items	0.0%	0.00%
Other Plastic	2.3%	0.79%	Sharps & Infectious Waste	0.0%	0.00%
			Ash, Sludge, & Industrial Wastes	0.0%	0.00%
Glass	2.6%	0.30%	Sewage Solids	0.0%	0.00%
Recyclable Glass Bottles & Jars	2.4%	0.27%	Other HHW	0.2%	0.09%
Flat Glass	0.2%	0.14%			
Other Glass	0.0%	0.01%	C&D	11.9%	2.21%
			Clean Dimensional Lumber	1.4%	0.44%
Metal	7.8%	1.20%	Clean Engineered Wood	1.2%	0.37%
Aluminum Beverage Containers	0.5%	0.05%	Wood Pallets	0.1%	0.07%
Other Aluminum	0.3%	0.05%	Painted Wood	1.4%	0.36%
HVAC Ducting	0.0%	0.00%	Treated Wood	2.1%	0.77%
Ferrous Containers (Tin Cans)	1.3%	0.16%	Concrete	0.7%	0.52%
Other Ferrous	4.0%	0.99%	Reinforced Concrete	0.0%	0.00%
Other Non-Ferrous	0.2%	0.11%	Asphalt Paving	0.0%	0.00%
Other Metal	1.7%	0.67%	Rock & Other Aggregates	0.2%	0.14%
			Bricks	0.0%	0.01%
Organics	24.6%	2.31%	Gypsum Board	2.7%	1.41%
Yard Waste - Compostable	0.8%	0.23%	Composition Shingles	0.4%	0.22%
Yard Waste - Woody	0.3%	0.12%	Other Roofing	0.0%	0.00%
Food Scraps	14.3%	1.97%	Plastic C&D Materials	0.0%	0.02%
Bottom Fines & Dirt	1.1%	0.23%	Ceramics/Porcelain	0.4%	0.19%
Diapers	2.7%	0.45%	Other C&D	1.3%	1.10%
Other Organic	5.3%	1.41%			
			Total Percentage	100.0%	

2.4 Visual Characterization of C&D Results

A total of 150 source separated C&D loads were visually characterized at the 19 sampling locations. 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. Chicago C&D waste study data was not available at the time of this report; however, samples were collected from the Chicago metropolitan area at the surrounding landfills. 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 for the landfilled C&D waste sector in Illinois.

Figure 2-12. Composition of Landfilled C&D

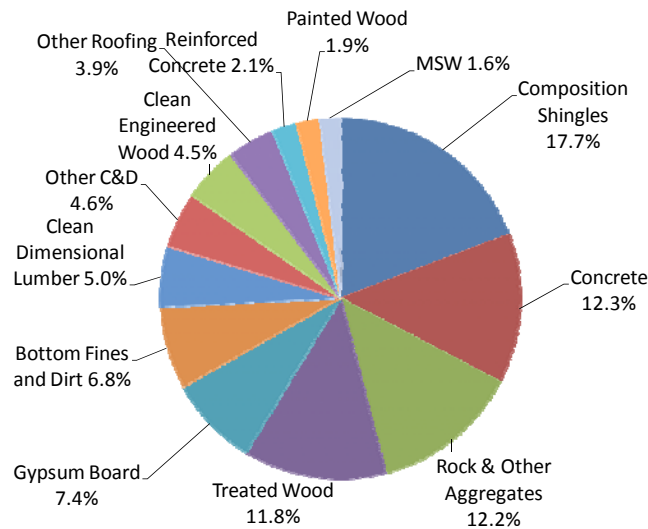


Table 2-21 lists the top ten material categories that were found in the landfilled C&D waste sector. These ten categories account for over 86% of the overall C&D waste stream. Composite Shingles, Concrete, Rock & Other Aggregates, and Treated Wood material categories account for approximately 54% (17.7%, 12.3%, 12.2 and 11.8% respectively) of the landfilled C&D waste.

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

Category	Waste Composition %	Cum. %
Composition Shingles	17.7%	17.7%
Concrete	12.3%	30.0%
Rock & Other Aggregates	12.2%	42.2%
Treated Wood	11.8%	54.0%
Gypsum Board	7.4%	61.4%
Bottom Fines and Dirt	6.8%	68.1%
Clean Dimensional Lumber	5.0%	73.1%
Other C&D	4.6%	77.7%
Clean Engineered Wood	4.5%	82.2%
Other Roofing	3.9%	86.1%
Total	86.1%	

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

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

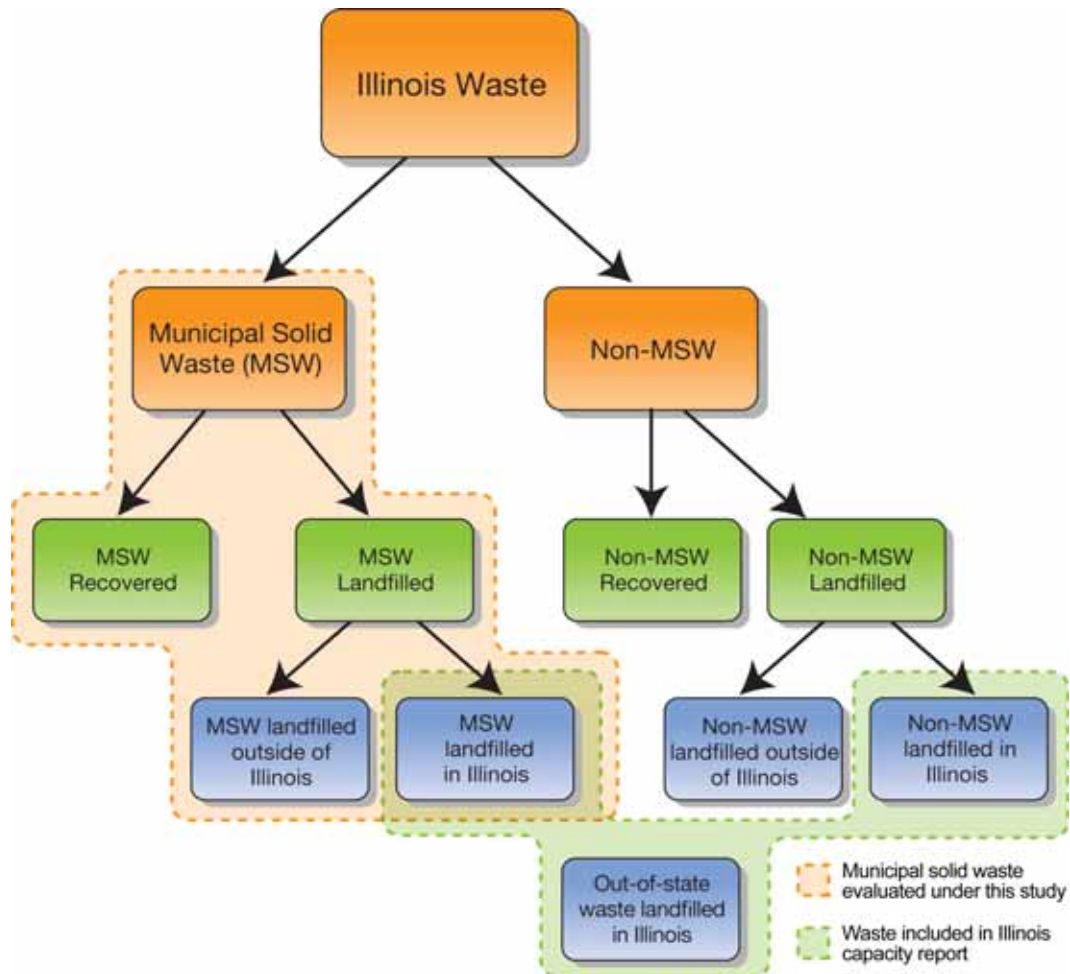
Calculated at a 90% confidence level

	Mean	+/-		Mean	+/-
Paper	1.4%	0.77%	Inorganics	0.2%	0.22%
Newsprint	0.0%	0.00%	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	1.3%	0.76%	Electronic Equipment	0.0%	0.00%
Boxboard	0.0%	0.01%	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%	0.00%	Lead-acid Batteries	0.0%	0.00%
Other Paper	0.1%	0.08%	Other Household Batteries	0.0%	0.00%
			Tires	0.0%	0.02%
Beverage Containers	0.0%	0.00%	Household Bulky Items	0.2%	0.22%
Milk & Juice Cartons/Boxes - Coated	0.0%	0.00%	Fluorescent Lights/Ballasts	0.0%	0.00%
Plastic	0.8%	0.88%	Textiles	0.7%	0.50%
#1 PET Bottles/Jars	0.0%	0.00%	Carpet	0.6%	0.38%
#1 Other PET Containers	0.0%	0.00%	Carpet Padding	0.1%	0.19%
#2 HDPE Bottles/Jars - Clear	0.0%	0.00%	Clothing	0.0%	0.00%
#2 HDPE Bottles/Jars - Color	0.0%	0.00%	Other Textiles	0.0%	0.00%
#2 Other HDPE Containers	0.0%	0.00%			
#6 Exp. Polystyrene Packaging	0.3%	0.50%	Household Hazardous Waste	0.0%	0.00%
#3-#7 Other - All	0.0%	0.01%	Latex Paint	0.0%	0.00%
Other Rigid Plastic Products	0.0%	0.04%	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	0.1%	0.07%	Other Automotive Fluids	0.0%	0.00%
Other Film	0.0%	0.00%	Mercury-Containing Items	0.0%	0.00%
Other Plastic	0.4%	0.58%	Sharps & Infectious Waste	0.0%	0.00%
			Ash, Sludge, & Industrial Wastes	0.0%	0.00%
Glass	0.1%	0.15%	Sewage Solids	0.0%	0.00%
Recyclable Glass Bottles & Jars	0.0%	0.00%	Other HHW	0.0%	0.00%
Flat Glass	0.1%	0.15%			
Other Glass	0.0%	0.00%	C&D	86.0%	11.62%
			Clean Dimensional Lumber	5.0%	2.10%
Metal	0.7%	0.28%	Clean Engineered Wood	4.5%	2.26%
Aluminum Beverage Containers	0.0%	0.00%	Wood Pallets	1.0%	0.50%
Other Aluminum	0.2%	0.12%	Painted Wood	1.9%	1.06%
HVAC Ducting	0.0%	0.00%	Treated Wood	11.8%	6.18%
Ferrous Containers (Tin Cans)	0.0%	0.01%	Concrete	12.3%	6.55%
Other Ferrous	0.4%	0.26%	Reinforced Concrete	2.1%	3.41%
Other Non-Ferrous	0.0%	0.01%	Asphalt Paving	0.4%	0.63%
Other Metal	0.0%	0.02%	Rock & Other Aggregates	12.2%	7.42%
			Bricks	0.8%	0.76%
Organics	8.4%	6.81%	Gypsum Board	7.4%	3.07%
Yard Waste - Compostable	0.3%	0.40%	Composition Shingles	17.7%	5.20%
Yard Waste - Woody	0.1%	0.10%	Other Roofing	3.9%	2.88%
Food Scraps	0.3%	0.43%	Plastic C&D Materials	0.0%	0.03%
Bottom Fines & Dirt	6.8%	6.70%	Ceramics/Porcelain	0.3%	0.44%
Diapers	0.0%	0.00%	Other C&D	4.6%	1.86%
Other Organic	1.0%	1.21%	MSW	1.6%	0.68%
			Total Percentage	100.0%	

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: 2007* (Illinois 2007 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 2007 based on the Illinois 2007 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 2007 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)
<i>Residential Waste</i>	34.6%
<i>ICI Waste</i>	36.5%
<i>C&D Waste</i>	8.3%
<i>Other Non-MSW</i>	16.3%
<i>Out-of- State Waste</i>	4.3%
Total	100.0%

Notes: Based on gatehouse surveys and Illinois 2007 Capacity Report

As shown in Figure 2-13, the Illinois 2007 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 2007 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.

Table 2-24. Illinois Waste Disposed

Disposal Location ^{1,2}	Residential (Tons)	ICI (Tons)	C&D (Tons)	Non-MSW ³ (Tons)	Annual Waste (Tons)
Illinois Waste Disposed Within Illinois					14,676,484
<i>Illinois</i>	5,299,833	5,604,015	1,272,241	2,500,929	14,676,484
Illinois Waste Disposed Outside of Illinois⁴					3,760,266
<i>Indiana</i>					2,250,835
<i>Michigan</i>					247,777
<i>Wisconsin</i>					1,261,654
Total Waste⁴	6,657,705	7,039,821	1,598,203	3,141,693	18,436,750

¹ Illinois quantities calculate using Illinois 2007 Capacity Report landfill quantities and the waste distribution provided in Table 2-23. Does not include the out-of-state waste disposed in Illinois.

² Indiana, Michigan and Wisconsin quantities provided by the state agencies (Indians -IDEM Solid Waste Facility Quarterly Reports Online (2007), Michigan - MDEQ Annual Solid Waste Report January 30, 2009., Wisconsin - WDNR Landfill Tonnage Report, 2007)

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

⁴ 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. C&D, Paper, Organics, and Plastics classes account for over 82% (25.3%, 23.4%, 20.7% and 13% respectively) of landfilled MSW.

Table 2-25. Illinois Landfilled MSW Sector Tonnages

	Residential	ICI	C&D	Illinois MSW		Residential	ICI	C&D	Illinois MSW
	Tons	Tons	Tons	Tons		Tons	Tons	Tons	Tons
Paper*	1,569,800	1,987,600	22,400	3,579,800	Inorganics*	200,300	155,800	3,500	359,600
Newsprint	278,000	140,690	-	418,690	Televisions	930	-	-	930
High Grade Office Paper	36,180	107,930	-	144,110	Computer Monitors	13,550	15,400	-	28,950
Magazines/Catalogs	124,370	117,380	-	241,750	Computer Equipment/Peripherals	6,120	25,450	-	31,570
Uncoated OCC/Kraft	370,240	1,132,710	21,330	1,524,280	Electronic Equipment	80,320	52,510	-	132,830
Boxboard	153,810	90,000	60	243,870	White Goods - Refrigerated	-	-	-	-
Mixed Paper - Recyclable	251,670	166,690	-	418,360	White Goods - Not refrigerated	-	2,690	-	2,690
Compostable Paper	275,690	175,760	-	451,450	Lead-acid Batteries	330	70	-	400
Other Paper	79,820	56,410	980	137,210	Other Household Batteries	4,910	1,540	-	6,450
					Tires	10,450	18,890	290	29,630
Beverage Containers*	11,300	21,100	-	32,400	Household Bulky Items	83,370	38,940	3,190	125,500
Milk & Juice Cartons/Boxes - Coated	11,300	21,070	-	32,400	Fluorescent Lights/Ballasts	320	270	-	590
Plastic*	1,010,600	964,100	14,000	1,988,700	Textiles*	628,300	423,900	11,600	1,063,800
#1 PET Bottles/Jars	96,230	50,390	10	146,630	Carpet	164,700	74,800	9,490	248,990
#1 Other PET Containers	6,480	5,330	-	11,810	Carpet Padding	18,380	16,040	2,140	36,560
#2 HDPE Bottles/Jars - Clear	37,810	23,030	20	60,860	Clothing	202,350	113,510	-	315,860
#2 HDPE Bottles/Jars - Color	43,330	43,840	10	87,180	Other Textiles	242,890	219,510	-	462,400
#2 Other HDPE Containers	5,120	6,750	-	11,870					
#6 Exp. Polystyrene Packaging	53,170	63,400	5,260	121,830	Household Hazardous Waste*	31,900	32,500	-	64,400
#3-#7 Other - All	76,250	42,080	70	118,400	Latex Paint	11,170	620	-	11,790
Other Rigid Plastic Products	261,240	239,040	690	500,970	Oil Paint	1,730	-	-	1,730
Grocery & Merchandise Bags	57,150	23,100	-	80,250	Plant/Organism/Pest Control/Growth	30	90	-	120
Trash Bags	79,730	85,420	70	165,220	Used Oil/Filters	5,030	7,350	-	12,380
Commercial & Industrial Film	29,040	186,690	1,080	216,810	Other Automotive Fluids	880	-	-	880
Other Film	109,150	84,740	20	193,910	Mercury-Containing Items	-	45	-	50
Other Plastic	155,880	110,240	6,340	272,460	Sharps & Infectious Waste	255	2,720	-	2,980
					Ash, Sludge, & Industrial Wastes	170	7,580	-	7,750
Glass*	278,500	153,200	2,000	433,700	Sewage Solids	-	-	-	-
Recyclable Glass Bottles & Jars	258,780	142,390	40	401,210	Other HHW	12,600	14,090	-	26,700
Flat Glass	14,030	8,480	1,980	24,500					
Other Glass	5,670	2,350	-	8,020	C&D*	839,400	1,624,400	1,401,000	3,864,800
					Clean Dimensional Lumber	54,180	246,010	79,420	379,610
Metal*	374,800	355,100	10,600	740,500	Clean Engineered Wood	84,680	208,110	72,490	365,280
Aluminum Beverage Containers	35,590	22,300	20	57,910	Wood Pallets	10,890	122,460	16,460	149,810
Other Aluminum	35,900	35,350	3,750	75,000	Painted Wood	112,880	125,560	31,010	269,450
HVAC Ducting	3,820	390	-	4,200	Treated Wood	208,130	207,470	188,620	604,220
Ferrous Containers (Tin Cans)	91,840	51,570	100	143,510	Concrete	13,560	189,960	196,330	399,850
Other Ferrous	145,580	156,810	6,220	308,610	Reinforced Concrete	-	5,120	33,130	38,250
Other Non-Ferrous	19,750	13,000	250	33,000	Asphalt Paving	-	-	6,120	6,120
Other Metal	42,310	75,670	250	118,230	Rock & Other Aggregates	11,810	24,610	195,240	231,660
					Bricks	11,600	39,670	13,550	64,820
Organics*	1,712,800	1,322,300	133,600	3,168,700	Gypsum Board	110,120	243,210	118,320	471,650
Yard Waste - Compostable	145,800	54,180	4,150	204,130	Composition Shingles	32,070	90,600	282,410	405,080
Yard Waste - Woody	59,770	123,320	1,660	184,750	Other Roofing	16,620	-	62,380	79,000
Food Scraps	974,770	859,110	4,190	1,838,100	Plastic C&D Materials	3,340	14,670	750	18,760
Bottom Fines & Dirt	72,400	56,850	108,140	237,390	Ceramics/Porcelain	125,774	17,710	5,184	148,670
Diapers	237,130	63,290	-	300,420	Other C&D	43,780	89,220	73,270	206,270
Other Organic	222,970	165,540	15,450	403,960	Other MSW	-	-	26,270	26,270
					Total*	6,657,700	7,040,000	1,598,700	15,296,400

* Numbers rounded to nearest 100 Tons

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

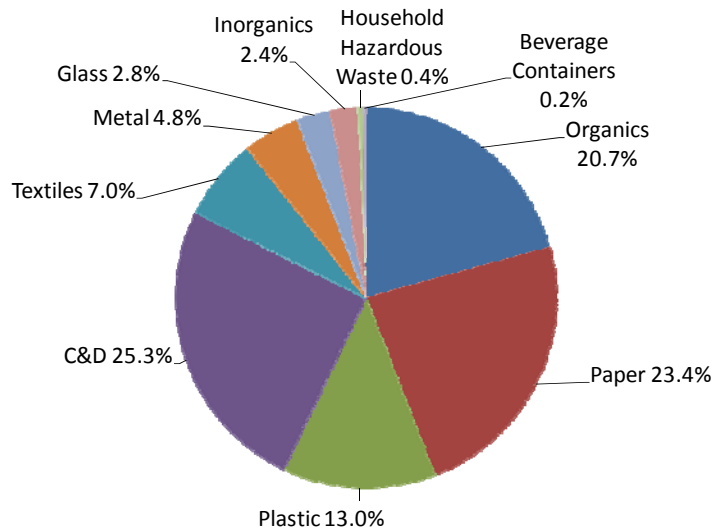


Table 2-26 lists the top ten material categories that were found in landfilled MSW. These ten categories account for over 46% of landfilled MSW. Food Scraps and Uncoated OCC/Kraft account for approximately 22% (12% and 10% respectively) of landfilled MSW.

Table 2-26. Top Ten Individual Material Categories in Landfilled MSW

Component	Waste Composition %	Cum. %
Food Scraps	12.0%	12.0%
Uncoated OCC/Kraft	10.0%	22.0%
Treated Wood	4.0%	25.9%
Other Rigid Plastic Products	3.3%	29.2%
Gypsum Board	3.1%	32.3%
Other Textiles	3.0%	35.3%
Compostable Paper	3.0%	38.3%
Newsprint	2.7%	41.0%
Mixed Paper - Recyclable	2.7%	43.7%
Composition Shingles	2.6%	46.4%
Total	46.4%	

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 and Textiles classes. There is significantly more paper disposed within

the rural counties of Illinois and there are significantly more textiles disposed within urban areas of Illinois.

Figure 2-15. Comparison of Residential MSW Composition

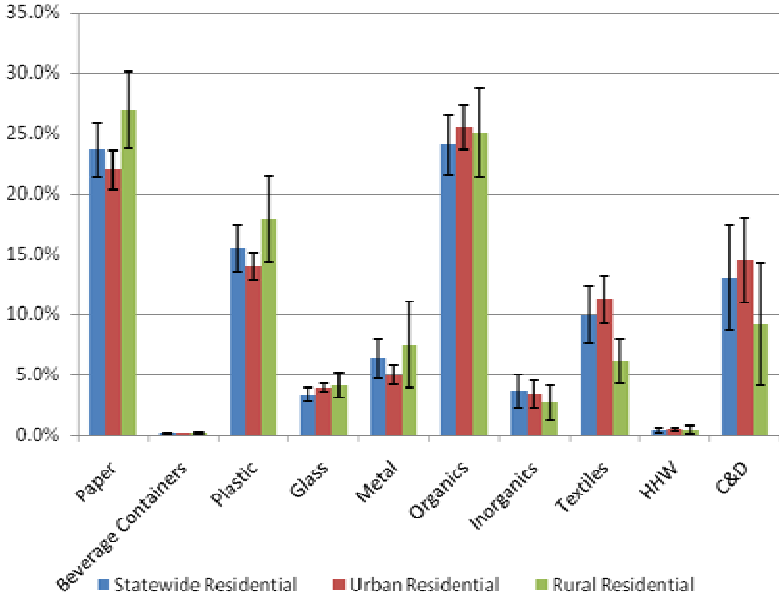
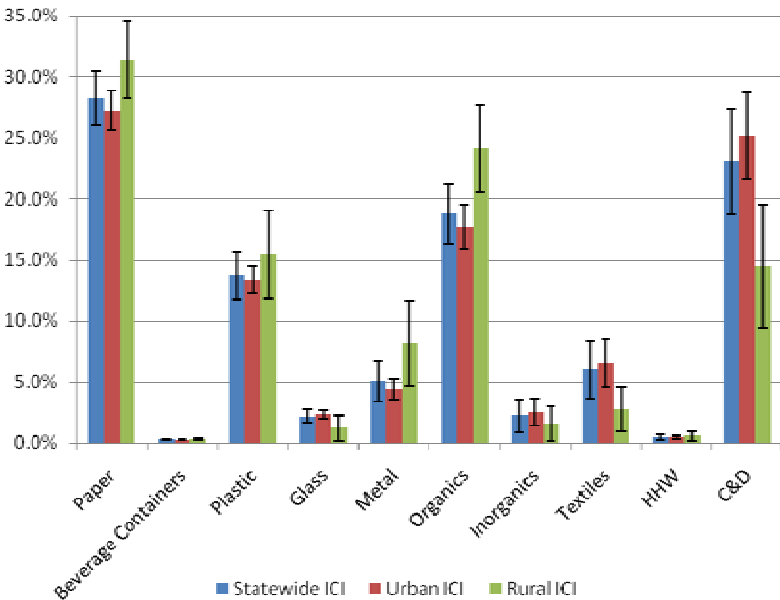


Figure 2-16 compares the waste composition profiles for the ICI waste sector and subsectors. The majority of the material classes fall within the 90% confidence interval for the rural and urban sectors, with the exception of the Organics and C&D classes. There is significantly more Organics disposed within the rural counties of Illinois and there is significantly more C&D disposed within urban areas of Illinois.

Figure 2-16. Comparison of ICI MSW Composition

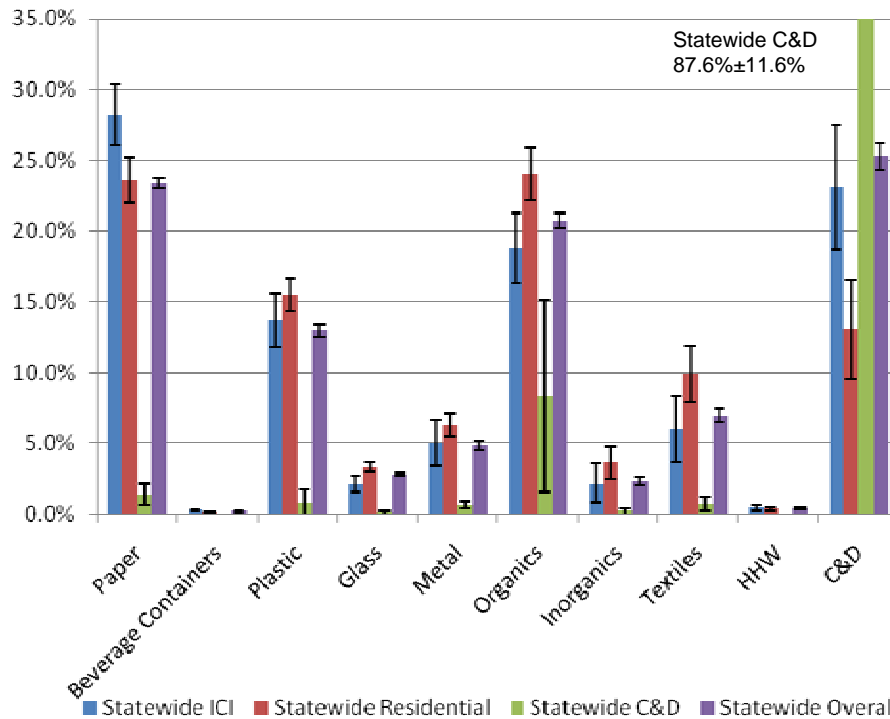


2.7.2 Comparison by Waste Generation Sector

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 86% of the C&D sector consists of material categories that fall within the C&D class of materials (e.g., composite shingles, concrete, wood, etc.) and 14% 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 Paper, Glass, Organics and C&D classes. There is significantly more Paper (mainly uncoated OCC/Kraft) and 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



Note: Figure truncated to emphasize differences in the material classes. The statewide C&D has a C&D class composition of 87.6% ± 11.6%

Table 2-27. Comparison of Waste Sector Composition Profiles

	Residential	ICI	C&D	Rural	Urban		Residential	ICI	C&D	Rural
	Mean %	Mean %	Mean %	Mean %	Mean %		Mean %	Mean %	Mean %	Mean %
Paper	23.6%	26.3%	1.4%	29.2%	24.7%	Inorganics	3.6%	3.3%	0.2%	2.1%
Newsprint	3.9%	2.4%	0.0%	4.1%	2.8%	Televisions	0.0%	0.0%	0.0%	0.0%
High Grade Office Paper	0.5%	2.0%	0.0%	1.1%	1.0%	Computer Monitors	0.3%	0.4%	0.0%	0.4%
Magazines/Catalogs	1.9%	1.1%	0.0%	2.0%	1.7%	Computer Equipment/Peripherals	0.1%	0.2%	0.0%	0.1%
Uncoated OCC/Kraft	5.6%	12.3%	1.3%	10.1%	10.8%	Electronic Equipment	1.5%	1.3%	0.0%	1.1%
Boxboard	2.4%	1.9%	0.0%	3.3%	1.4%	White Goods - Refrigerated	0.0%	0.0%	0.0%	0.0%
Mixed Paper - Recyclable	3.9%	2.2%	0.0%	3.3%	2.9%	White Goods - Not refrigerated	0.0%	0.1%	0.0%	0.0%
Compostable Paper	4.1%	3.2%	0.0%	4.2%	3.1%	Lead-acid Batteries	0.0%	0.0%	0.0%	0.0%
Other Paper	1.3%	1.2%	0.1%	1.2%	0.9%	Other Household Batteries	0.1%	0.0%	0.0%	0.1%
						Tires	0.1%	0.1%	0.0%	0.1%
Beverage Containers	0.2%	0.2%	0.0%	0.2%	0.2%	Household Bulky Items	1.6%	1.1%	0.2%	0.3%
Milk & Juice Cartons/Boxes - Coated	0.2%	0.2%	0.0%	0.2%	0.2%	Fluorescent Lights/Ballasts	0.0%	0.0%	0.0%	0.0%
Plastic	15.5%	14.3%	0.8%	16.6%	13.7%	Textiles	9.9%	4.3%	0.7%	4.4%
#1 PET Bottles/Jars	1.4%	0.8%	0.0%	1.2%	1.0%	Carpet	3.0%	1.2%	0.6%	1.0%
#1 Other PET Containers	0.1%	0.1%	0.0%	0.1%	0.1%	Carpet Padding	0.3%	0.5%	0.1%	0.2%
#2 HDPE Bottles/Jars - Clear	0.5%	0.4%	0.0%	0.5%	0.4%	Clothing	2.8%	1.1%	0.0%	1.6%
#2 HDPE Bottles/Jars - Color	0.6%	0.4%	0.0%	0.6%	0.6%	Other Textiles	3.7%	1.6%	0.0%	1.6%
#2 Other HDPE Containers	0.1%	0.2%	0.0%	0.1%	0.1%					
#6 Exp. Polystyrene Packaging	0.7%	0.8%	0.3%	1.0%	0.8%	Household Hazardous Waste	0.4%	0.8%	0.0%	0.5%
#3-#7 Other - All	1.1%	0.7%	0.0%	1.1%	0.8%	Latex Paint	0.1%	0.0%	0.0%	0.1%
Other Rigid Plastic Products	4.3%	2.8%	0.0%	2.7%	4.0%	Oil Paint	0.0%	0.0%	0.0%	0.0%
Grocery & Merchandise Bags	0.7%	0.3%	0.0%	0.5%	0.6%	Plant/Organism/Pest Control/Growth	0.0%	0.0%	0.0%	0.0%
Trash Bags	1.2%	1.5%	0.0%	1.6%	1.1%	Used Oil/Filters	0.1%	0.1%	0.0%	0.2%
Commercial & Industrial Film	0.4%	3.1%	0.1%	2.4%	1.4%	Other Automotive Fluids	0.0%	0.0%	0.0%	0.0%
Other Film	1.7%	1.7%	0.0%	2.6%	1.1%	Mercury-Containing Items	0.0%	0.0%	0.0%	0.0%
Other Plastic	2.6%	1.4%	0.4%	2.3%	1.7%	Sharps & Infectious Waste	0.0%	0.1%	0.0%	0.0%
						Ash, Sludge, & Industrial Wastes	0.0%	0.2%	0.0%	0.0%
Glass	3.3%	1.5%	0.1%	2.6%	3.1%	Sewage Solids	0.0%	0.0%	0.0%	0.0%
Recyclable Glass Bottles & Jars	3.0%	1.3%	0.0%	2.4%	2.8%	Other HHW	0.1%	0.4%	0.0%	0.2%
Flat Glass	0.2%	0.2%	0.1%	0.2%	0.2%					
Other Glass	0.1%	0.0%	0.0%	0.0%	0.1%	C&D	13.1%	24.0%	86.0%	11.9%
						Clean Dimensional Lumber	0.7%	1.8%	5.0%	1.4%
Metal	6.3%	5.4%	0.7%	7.8%	4.7%	Clean Engineered Wood	1.3%	3.3%	4.5%	1.2%
Aluminum Beverage Containers	0.5%	0.3%	0.0%	0.5%	0.4%	Wood Pallets	0.2%	1.7%	1.0%	0.1%
Other Aluminum	0.6%	0.6%	0.2%	0.3%	0.6%	Painted Wood	1.6%	1.3%	1.9%	1.4%
HVAC Ducting	0.1%	0.0%	0.0%	0.0%	0.0%	Treated Wood	3.8%	5.4%	11.8%	2.1%
Ferrous Containers (Tin Cans)	1.5%	0.8%	0.0%	1.3%	1.0%	Concrete	0.1%	1.8%	12.3%	0.7%
Other Ferrous	2.6%	2.5%	0.4%	4.0%	1.7%	Reinforced Concrete	0.0%	0.0%	2.1%	0.0%
Other Non-Ferrous	0.3%	0.2%	0.0%	0.2%	0.3%	Asphalt Paving	0.0%	0.0%	0.4%	0.0%
Other Metal	0.8%	1.0%	0.0%	1.7%	0.7%	Rock & Other Aggregates	0.1%	0.0%	12.2%	0.2%
						Bricks	0.2%	0.5%	0.8%	0.0%
Organics	24.0%	19.8%	8.4%	24.6%	21.5%	Gypsum Board	1.7%	3.1%	7.4%	2.7%
Yard Waste - Compostable	0.8%	0.7%	0.3%	0.8%	1.6%	Composition Shingles	0.5%	2.6%	17.7%	0.4%
Yard Waste - Woody	0.9%	0.9%	0.1%	0.3%	1.6%	Other Roofing	0.0%	0.0%	3.9%	0.0%
Food Scraps	13.9%	12.2%	0.3%	14.3%	13.1%	Plastic C&D Materials	0.1%	0.3%	0.0%	0.0%
Bottom Fines & Dirt	0.9%	0.8%	6.8%	1.1%	0.8%	Ceramics/Porcelain	2.2%	0.2%	0.3%	0.4%
Diapers	3.6%	1.1%	0.0%	2.7%	2.0%	Other C&D	0.6%	1.9%	4.6%	1.3%
Other Organic	3.9%	4.0%	1.0%	5.3%	2.3%	Other MSW			1.6%	
						Total Percentage	100.0%	100.0%	100.0%	100.0%

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 2007 national per capita generation rates that were derived from the U.S. EPA report *Municipal Solid Waste in the United States: 2007 Facts and Figures*⁷. 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 report *Municipal Solid Waste in the United States: 2007 Facts and Figures*⁸. 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 2007 report 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.

⁷ U. S. Environmental Protection Agency Office of Solid Waste (5306P). November 2008. EPA530-R-08-010. <http://www.epa.gov/epawaste/nonhaz/municipal/pubs/msw07-rpt.pdf>

⁸ U. S. Environmental Protection Agency Office of Solid Waste (5306P). November 2008. EPA530-R-08-010. <http://www.epa.gov/epawaste/nonhaz/municipal/pubs/msw07-rpt.pdf>

Determining the moisture contamination of MSW field samples is a costly undertaking. Only one study⁹ 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 2007 national rates.

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, 2006 Illinois motor vehicle registrations (the latest data available) compared to U.S. registrations shows Illinois had 4.05% of the U.S. registered vehicles in that year. Since Illinois had 4.28% of the U.S. population in 2006, a factor of 0.95 was assumed for lead-acid battery generation in Illinois ($4.05/4.28$). The U.S. average generation rate was then multiplied by this factor to determine the Illinois per capita rate. Using U.S. Census Bureau 2007 Illinois population statistics,¹⁰ 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, wine, and liquor consumption and beer packaging data.¹¹ Beverage Marketing Corporation publishes wine and liquor packaging statistics.¹² 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 or U.S. regional 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.

⁹ Oregon Department of Environmental Quality. *2002 Oregon Solid Waste Characterization and Composition*. Edition 1.2. Appendix C. April 20, 2004.

<http://www.deq.state.or.us/lq/sw/disposal/wastecompositionstudy.htm>

¹⁰ U.S. Census Bureau. Population Division. Table 1: Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico: April 1, 2000 to July 1, 2007. INST-EST2007-01. December 27, 2007. Illinois resident population of 12,852,548 in 2007.

¹¹ The Beer Institute *Brewers Almanac 2007*. April 26, 2007.

¹² Beverage Marketing Corporation. *2005 Beverage Packaging in the U.S.* November 2005.

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. As an additional calibration check, the recovery data from Chicago, Urbana, and McLean County, expressed on a per person basis, were compared to the difference between generation and disposal per capita rates for products where sufficient recovery detail were available.

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 two distinct sectors residential, ICI and C&D as defined in Section 1.

The U.S. EPA report *Characterization of Municipal Solid Waste in the United States: 1998 Update*¹³ and landfilled MSW characterization results (Section 2) were used to determine the distribution between the statewide residential MSW generation and the statewide ICI MSW generation. The EPA report is the latest published generation data available at the level of detail required for this analysis. The residential/ICI generation distribution estimated from the EPA report was compared, on a product-by-product basis, to the landfilled MSW characterization results to check for reasonableness. The percentages of residential and ICI MSW at the point of generation will vary slightly from the 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 landfilled MSW characterization results were used for those product categories not included in the U.S. EPA report. For example, flat glass and HVAC ducting.

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.

¹³ United States Environmental Protection Agency Office of Solid Waste. *Characterization of Municipal Solid Waste in the United States: 1998 Update*. August 1999.

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
		Books	National average adjusted with sampling data
	Compostable Paper and Other Paper - <i>Distribution of U.S. categories based on sampling study results</i>	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 - County level median income	
Beverage Containers	Milk & Juice Cartons/Boxes - Coated	Milk Cartons	USDA Illinois market data adjusted with sampling data
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 - State level median income adjusted with sampling data
		PET Containers & Packaging	National average adjusted with economic indicator - State level median income 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	USDA Illinois market data adjusted with sampling data
		HDPE Other Containers	USDA Illinois market data 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 economic indicator - Illinois food store sales adjusted with sampling data
		Plastic Food Service	National average
		Other Plastics Packaging	National average adjusted with economic indicator - County level median income
	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. regional level market data
	Other Aluminum		See Inorganics section below
	HVAC Ducting		Illinois sampling 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 – Residential - Illinois food store sales, Commercial - County accommodation and food services sales 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
	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	National Average
Fluorescent Lights/Ballasts		Illinois sampling data	

Material Class	Material Category	U.S. Product Category	Data source/ Methodology
TEXTILES	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
Household Hazardous Waste (HHW)	Latex Paint		Illinois sampling data
	Oil Paint		Illinois sampling data
	Plant/Organism/Pest Control/Growth		Illinois sampling data
	Used Oil/Filters	Used Oil and Used Oil Filters	National average adjusted with Illinois motor vehicle registration, salvaged vehicles, and annual miles driven
	Other Automotive Fluids	Transmission Fluid	National average adjusted with Illinois motor vehicle registration, salvaged vehicles, and annual miles driven
	Mercury-Containing Items		Illinois sampling data
	Sharps & Infectious Waste		Illinois sampling data
	Ash, Sludge, & Industrial Wastes		Illinois sampling data
	Sewage Solids		Illinois sampling data
	Other HHW		Illinois sampling data
Construction & Demolition (C&D)	Clean Dimensional Lumber		Illinois sampling data
	Clean Engineered Wood		Illinois sampling 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
	Reinforced Concrete		Illinois sampling data
	Asphalt Paving		Illinois sampling data
	Rock & Other Aggregates		Illinois sampling data
	Bricks		Illinois sampling data
	Gypsum Board		Illinois sampling data
	Composition Shingles		Illinois sampling data
	Other Roofing		Illinois sampling data
	Plastic C&D materials		Illinois sampling data
	Ceramics/Porcelain		Illinois sampling data
Other C&D		Illinois sampling 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 2007. 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 2005 median income was nine percent higher than the U.S. average and 87% of the Illinois population lives in urban areas compared to 79% on the national level.¹⁴

The Illinois total MSW generation rate was determined to be 2,947 pounds per person per year or 8.07 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 19% higher than

¹⁴ U.S. Department of Agriculture. Economic Research Service. http://www.ers.usda.gov/U.S. Census Bureau. Table: GCT-P1 Urban/Rural and Metropolitan/Nonmetropolitan Population: 2000. http://factfinder.census.gov/servlet/GCTGeoSearchByListServlet?_lang=en&_ts=250790240787

the national average (2,088 pounds per person per year in Illinois compared to 1,751 pounds per person per year for the national average).

Paper products make up the largest material category, by weight. Newsprint and Uncoated Old Corrugated Containers (OCC)/Kraft are generated at about 1.5 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.

Individual products generated at a rate of about two times the national rate include trash bags, commercial and industrial film, other film, diapers, carpets, and carpet padding. 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 2007 was 18.9 million tons or 8.06 pounds per person per day (see Table 3-4). Generation by material class is shown in Figure 3-1. Paper products comprise the largest portion of MSW generated, at 28%. C&D was the second largest fraction, at 23%. The third largest category of MSW generation is organic material, which made up 19% of total MSW generation. Plastic products are 11% of generation and the remaining categories total 19%. Table 3-3 depicts the top ten material categories and their respective generation in tons.

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

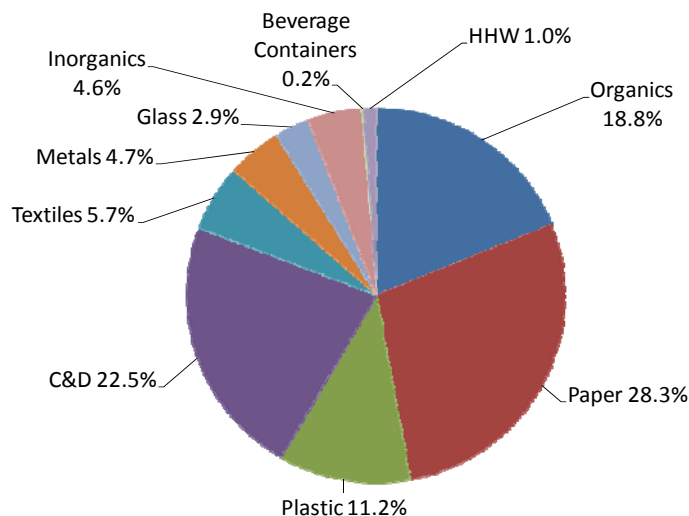


Table 3-2 Statewide Per Capita Municipal Solid Waste (MSW) Generation
(pounds per person per year)

	U.S. Generation* (lb/c/yr)	Illinois Generation (lb/c/yr)		U.S. Generation* (lb/c/yr)	Illinois Generation (lb/c/yr)
Paper			Metal		
Newsprint	91.0	135.1	Other Ferrous	53.2	55.2
High Grade Office Paper	41.6	45.3	Other Non-Ferrous		5.1
Magazines/Catalogs	65.2	65.9	Other Metal	20.7	21.5
Uncoated OCC/Kraft	252.1	379.1			
Boxboard	42.3	40.6	Organics		
Mixed Paper - Recyclable	59.4	71.3	Yard Waste - Compostable	112.8	73.3
Compostable Paper	73.0	73.9	Yard Waste - Woody	103.5	67.3
Other Paper	21.9	22.2	Food Scraps	213.5	286.0
			Bottom Fines & Dirt		20.0
Beverage Containers			Diapers	24.7	46.8
Milk & Juice Cartons/Boxes - Coated	3.8	5.4	Other Organic		60.5
Plastic			Inorganics		
#1 PET Bottles/Jars	20.5	25.6	Televisions	6.3	6.5
#1 Other PET Containers	1.7	2.2	Computer Monitors	4.5	4.6
#2 HDPE Bottles/Jars - Clear	6.8	10.0	Computer Equipment/Peripherals	5.1	5.3
#2 HDPE Bottles/Jars - Color	9.9	14.6	Electronic Equipment	23.4	24.2
#2 Other HDPE Containers	1.4	2.0	White Goods - Refrigerated	7.5	8.6
#6 Exp. Polystyrene Packaging	18.5	19.0	White Goods - Not refrigerated	16.5	19.0
#3-#7 Other - All	18.7	19.3	Lead-acid Batteries	16.8	16.0
Other Rigid Plastic Products	87.9	91.2	Other Household Batteries		1.1
Grocery & Merchandise Bags	8.9	12.7	Tires	32.6	29.0
Trash Bags	9.5	25.8	Household Bulky Items	21.4	22.2
Commercial & Industrial Film	14.8	34.0	Fluorescent Lights/Ballasts		0.1
Other Film	13.3	30.3			
Other Plastic	31.8	43.3	Textiles		
			Carpet	18.6	38.7
Glass			Carpet Padding	2.7	5.7
Recyclable Glass Bottles & Jars	77.4	80.9	Clothing	48.0	52.3
Flat Glass		3.8	Other Textiles		72.2
Other Glass	1.4	1.5			
			Household Hazardous Waste		28.8
Metal					
Aluminum Beverage Containers	14.6	15.7	Construction and Demolition Debris (C&D)		660.9
Other Aluminum	12.5	13.0			
HVAC Ducting		0.7	Total MSW (pounds/person/year)		2,942
Ferrous Containers (Tin Cans)	19.3	27.0	Total MSW (pounds/person/day)		8.06

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

Sources: United States Environmental Protection Agency Office of Solid Waste. *Municipal Solid Waste in the United States: 2007 Facts and Figures*. November 2008. EPA530-R-08-010. <http://www.epa.gov/epawaste/nonhaz/municipal/pubs/msw07-rpt.pdf>
Oregon Department of Environmental Quality. *2002 Oregon Solid Waste Characterization and Composition*. Edition 1.2. Appendix C. April 20, 2004. <http://www.deq.state.or.us/lq/sw/disposal/wastecompositionstudy.htm>

Paper products account for over five million tons of MSW generation. Uncoated OCC/Kraft is by far the largest single component of paper products, at 2.4 million tons. Newsprint is the next largest at about 0.9 million tons.

C&D products are estimated at almost 4.3 million tons. Treated wood is the single largest component of C&D, at 0.6 million tons. Concrete, gypsum board, and composition shingles account for between 0.4 and 0.5 million tons each.

Food scraps is the largest single component of the organic materials category, at 1.8 million tons. Overall yard waste (compostable and woody combined) accounts for another 0.9 million tons of the organic materials category.

Total plastic generation is estimate at 2.1 million tons. Other Rigid Plastic Products accounts for almost 0.6 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.

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

Category	Waste Composition Tons	Cum. Tons
Uncoated OCC/Kraft	2,436,210	2,436,210
Food Scraps	1,838,100	4,274,310
Newsprint	868,130	5,142,440
Treated Wood	604,760	5,747,200
Other Rigid Plastic Products	586,130	6,333,330
Recyclable Glass Bottles & Jars	520,020	6,853,350
Compostable Paper	474,730	7,328,080
Gypsum Board	472,380	7,800,460
Yard Waste - Compostable	471,250	8,271,710
Other Textiles	463,770	8,735,480
Total	8,735,480	

Table 3-4 Statewide MSW Generation

	Total (tons)	Residential (tons)		ICI (tons)			Total (tons)	Residential (tons)	ICI (tons)
Paper	5,354,230	2,153,700	40%	3,200,530	60%	Inorganics			
Newsprint	868,130	737,910		130,220		White Goods - Not refrigerated	121,940	12,190	109,750
High Grade Office Paper	290,910	72,730		218,180		Lead-acid Batteries	102,810	82,250	20,560
Magazines/Catalogs	423,250	275,110		148,140		Other Household Batteries	6,850	5,210	1,640
Uncoated OCC/Kraft	2,436,210	243,620		2,192,590		Tires	186,220	9,310	176,910
Boxboard	260,700	156,420		104,280		Household Bulky Items	142,920	114,340	28,580
Mixed Paper - Recyclable	457,880	297,620		160,260		Fluorescent Lights/Ballasts	590	320	270
Compostable Paper	474,730	284,840		189,890					
Other Paper	142,420	85,450		56,970		Textiles	1,085,650	676,040	62%
						Carpet	248,990	199,190	49,800
Beverage Containers	34,460	12,060	35%	22,400	65%	Carpet Padding	36,560	29,250	7,310
Milk & Juice Cartons/Boxes - Coated	34,460	12,060		22,400		Clothing	336,330	201,800	134,530
						Other Textiles	463,770	245,800	217,970
Plastic	2,120,170	1,239,080	58%	881,090	42%	Household Hazardous Waste	184,790	82,740	45%
#1 PET Bottles/Jars	164,620	131,700		32,920		Latex Paint	12,550	11,920	630
#1 Other PET Containers	13,850	11,080		2,770		Oil Paint	1,730	1,730	0
#2 HDPE Bottles/Jars - Clear	64,400	51,520		12,880		Plant/Organism/Pest Control/Growth	130	30	100
#2 HDPE Bottles/Jars - Color	93,670	74,940		18,730		Used Oil/Filters	117,890	48,330	69,560
#2 Other HDPE Containers	13,170	10,540		2,630		Other Automotive Fluids	14,390	14,390	0
#6 Exp. Polystyrene Packaging	122,320	56,270		66,050		Mercury-Containing Items	50	0	50
#3-#7 Other - All	123,750	99,000		24,750		Sharps & Infectious Waste	2,980	270	2,710
Other Rigid Plastic Products	586,130	304,790		281,340		Ash, Sludge, & Industrial Wastes	8,370	170	8,200
Grocery & Merchandise Bags	81,400	73,260		8,140		Sewage Solids	0	0	0
Trash Bags	166,030	79,690		86,340		Other HHW	26,700	5,900	20,800
Commercial & Industrial Film	218,380	29,480		188,900					
Other Film	194,500	155,600		38,900		MSW Excluding C&D (tons)	14,659,030	7,381,150	50%
Other Plastic	277,950	161,210		116,740		MSW Excluding C&D (pounds/person/day)	6.25	3.15	3.10
						Construction and Demolition Debris (C&D)	4,247,060	1,302,630	31%
Glass	554,150	360,040	65%	194,110	35%	Clean Dimensional Lumber	380,370	68,470	311,900
Recyclable Glass Bottles & Jars	520,020	338,010		182,010		Clean Engineered Wood	365,480	105,990	259,490
Flat Glass	24,500	15,190		9,310		Wood Pallets	380,830	30,470	350,360
Other Glass	9,630	6,840		2,790		Painted Wood	269,500	126,670	142,830
						Treated Wood	604,760	302,380	302,380
Metal	887,890	504,800	57%	383,090	43%	Concrete	401,860	28,130	373,730
Aluminum Beverage Containers	100,800	80,640		20,160		Reinforced Concrete	39,240	0	39,240
Other Aluminum	83,500	41,750		41,750		Asphalt Paving	6,120	0	6,120
HVAC Ducting	4,200	3,820		380		Rock & Other Aggregates	233,140	74,600	158,540
Ferrous Containers (Tin Cans)	173,400	138,720		34,680		Bricks	64,820	14,910	49,910
Other Ferrous	354,890	170,350		184,540		Gypsum Board	472,380	146,440	325,940
Other Non-Ferrous	33,000	19,800		13,200		Composition Shingles	407,870	106,050	301,820
Other Metal	138,100	49,720		88,380		Other Roofing	79,140	79,140	0
						Plastic C&D Materials	18,770	3,570	15,200
Organics	3,560,120	1,970,080	55%	1,590,040	45%	Ceramics/Porcelain	148,670	130,830	17,840
Yard Waste - Compostable	471,250	344,010		127,240		Other C&D	206,830	68,250	138,580
Yard Waste - Woody	432,510	142,730		289,780		Uncoated OCC/Kraft	16,080	1,610	14,470
Food Scraps	1,838,100	919,050		919,050		Bottom Fines & Dirt	109,330	10,930	98,400
Bottom Fines & Dirt	128,760	72,110		56,650		Other Organic	15,600	1,560	14,040
Diapers	300,490	270,440		30,050		Mixed MSW	26,270	2,630	23,640
Other Organic	389,010	221,740		167,270					
						C&D (pounds/person/day)	1.81	0.56	1.26
Inorganics	877,570	382,610	44%	494,960	56%	Total MSW (tons)	18,906,090	8,683,780	46%
Televisions	41,830	39,740		2,090		Total MSW (pounds/person/day)	8.06	3.70	4.36
Computer Monitors	29,450	13,840		15,610					
Computer Equipment/Peripherals	33,760	6,410		27,350					
Electronic Equipment	155,770	93,460		62,310					
White Goods - Refrigerated	55,430	5,540		49,890					

Sources: Total generation - Table 2.2 per capita generation times Illinois 2007 population of 12,852,548.

Residential/ICI - United States Environmental Protection Agency Office of Solid Waste. *Characterization of Municipal Solid Waste in the United States: 1998 Update*. August 1999.

Residential/ICI - Illinois sampling study. Fall 2008.

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 46% of total generation; the ICI portion is 54%. Total MSW generation excluding C&D is shown at 50% from each sector. Major product categories range from 31% of the C&D to 65% of the glass is generated from the residential sector.

Some categories such as mercury-containing items, reinforced concrete, and asphalt paving are generated only in the commercial sector. Oil paint, other automotive fluids, and other roofing are shown to come 100% from the residential 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.

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-seven percent of the state's population lives in urban areas; 13% reside in rural areas. Eighty-eight percent of the statewide MSW generation is from urban areas (16.7 million tons / 18.9 million tons). Table 3-5 shows total MSW generation in urban areas is 8.17 pounds per person per day; MSW generation in rural areas is 7.32 pounds per person per day (see Table 3-6).

Comparing the per capita rates shown in these two tables shows that paper generation is 25% higher in urban areas (855 pounds per capita per year urban/ 683 pounds per capita per year rural). Plastics are 10% higher, organics are 11% higher, and textiles are 24% higher in urban areas.

Table 3-5. Urban MSW Generation

	Urban Generation (lb/c/yr)	Urban Generation (tons)		Urban Generation (lb/c/yr)	Urban Generation (tons)
Paper	855.5	4,783,930	Metal		
Newsprint	143.6	803,150	Other Ferrous	55.2	308,820
High Grade Office Paper	47.0	262,900	Other Non-Ferrous	5.1	28,690
Magazines/Catalogs	65.4	365,640	Other Metal	21.5	120,170
Uncoated OCC/Kraft	391.6	2,189,890			
Boxboard	40.6	226,870	Organics	561.5	3,139,680
Mixed Paper - Recyclable	71.2	398,410	Yard Waste - Compostable	73.3	410,040
Compostable Paper	73.9	413,140	Yard Waste - Woody	67.3	376,350
Other Paper	22.2	123,930	Food Scraps	293.5	1,641,320
			Bottom Fines & Dirt	20.0	112,010
Beverage Containers	5.4	29,970	Diapers	46.8	261,510
Milk & Juice Cartons/Boxes - Coated	5.4	29,970	Other Organic	60.5	338,450
Plastic	334.0	1,867,640	Inorganics	136.6	763,770
#1 PET Bottles/Jars	25.6	143,270	Televisions	6.5	36,430
#1 Other PET Containers	2.2	12,050	Computer Monitors	4.6	25,640
#2 HDPE Bottles/Jars - Clear	10.0	56,060	Computer Equipment/Peripherals	5.3	29,360
#2 HDPE Bottles/Jars - Color	14.6	81,500	Electronic Equipment	24.2	135,570
#2 Other HDPE Containers	2.0	11,400	White Goods - Refrigerated	8.6	48,220
#6 Exp. Polystyrene Packaging	19.5	109,220	White Goods - Not refrigerated	19.0	106,120
#3-#7 Other - All	19.8	110,490	Lead-acid Batteries	16.0	89,460
Other Rigid Plastic Products	91.2	510,030	Other Household Batteries	1.1	5,950
Grocery & Merchandise Bags	13.1	73,240	Tires	29.0	162,070
Trash Bags	25.8	144,460	Household Bulky Items	22.2	124,370
Commercial & Industrial Film	35.1	196,540	Fluorescent Lights/Ballasts	0.1	580
Other Film	30.3	169,230			
Other Plastic	44.7	250,150	Textiles	173.2	968,510
			Carpet	38.7	216,660
Glass	86.2	482,230	Carpet Padding	5.7	31,850
Recyclable Glass Bottles & Jars	80.9	452,500	Clothing	54.1	302,640
Flat Glass	3.8	21,300	Other Textiles	74.6	417,360
Other Glass	1.5	8,430			
			Household Hazardous Waste	28.8	161,010
Metal	138.2	772,650			
Aluminum Beverage Containers	15.7	87,710	Construction and Demolition Debris (C&D)	662.9	3,706,790
Other Aluminum	13.0	72,670			
HVAC Ducting	0.7	3,670			
Ferrous Containers (Tin Cans)	27.0	150,920	Total MSW (tons)		16,676,180
			Total MSW (pounds/person/day)		8.17

Sources: Urban/rural - U.S. Department of Agriculture. Economic Research Center. <http://www.ers.usda.gov/Data/Population/PopList.asp?ST=IL&LongName=Illinois>
2007 population U.S. Census Bureau. 11,183,543

Bond, Boone, Calhoun, Champaign, Clinton, Cook, DeKalb, DuPage, Ford, Grundy, Henry, 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, Winnebago, Woodford Counties.

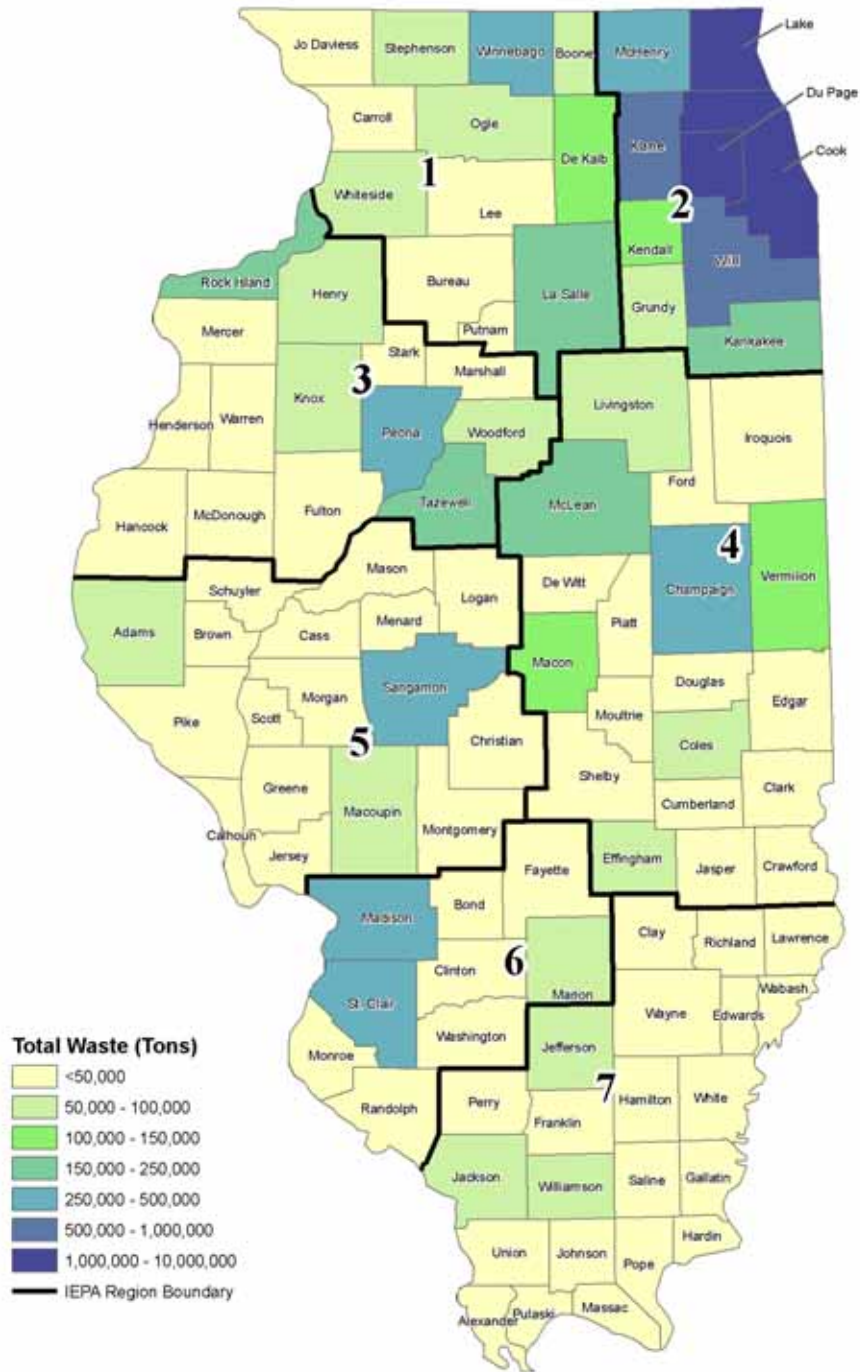
Table 3-6 Rural MSW Generation

	Rural Generation (lb/c/yr)	Rural Generation (tons)		Rural Generation (lb/c/yr)	Rural Generation (tons)
Paper	683.4	570,300	Metal		
Newsprint	77.9	64,980	Other Ferrous	55.2	46,070
High Grade Office Paper	33.6	28,010	Other Non-Ferrous	5.2	4,310
Magazines/Catalogs	69.0	57,610	Other Metal	21.5	17,930
Uncoated OCC/Kraft	295.2	246,320			
Boxboard	40.5	33,830	Organics	503.8	420,440
Mixed Paper - Recyclable	71.3	59,470	Yard Waste - Compostable	73.3	61,200
Compostable Paper	73.8	61,590	Yard Waste - Woody	67.3	56,170
Other Paper	22.2	18,490	Food Scraps	235.8	196,780
			Bottom Fines & Dirt	20.1	16,750
Beverage Containers	5.4	4,490	Diapers	46.7	38,980
Milk & Juice Cartons/Boxes - Coated	5.4	4,490	Other Organic	60.6	50,560
Plastic	302.6	252,530	Inorganics	136.4	113,800
#1 PET Bottles/Jars	25.6	21,350	Televisions	6.5	5,400
#1 Other PET Containers	2.2	1,800	Computer Monitors	4.6	3,810
#2 HDPE Bottles/Jars - Clear	10.0	8,340	Computer Equipment/Peripherals	5.3	4,400
#2 HDPE Bottles/Jars - Color	14.6	12,170	Electronic Equipment	24.2	20,200
#2 Other HDPE Containers	2.1	1,770	White Goods - Refrigerated	8.6	7,210
#6 Exp. Polystyrene Packaging	15.7	13,100	White Goods - Not refrigerated	19.0	15,820
#3-#7 Other - All	15.9	13,260	Lead-acid Batteries	16.0	13,350
Other Rigid Plastic Products	91.2	76,100	Other Household Batteries	1.1	900
Grocery & Merchandise Bags	9.8	8,160	Tires	28.9	24,150
Trash Bags	25.8	21,570	Household Bulky Items	22.2	18,550
Commercial & Industrial Film	26.2	21,840	Fluorescent Lights/Ballasts	<0.1	10
Other Film	30.3	25,270			
Other Plastic	33.3	27,800	Textiles	140.4	117,140
			Carpet	38.7	32,330
Glass	86.2	71,920	Carpet Padding	5.6	4,710
Recyclable Glass Bottles & Jars	80.9	67,520	Clothing	40.4	33,690
Flat Glass	3.8	3,200	Other Textiles	55.6	46,410
Other Glass	1.4	1,200			
			Household Hazardous Waste	28.5	23,780
Metal	138.1	115,240			
Aluminum Beverage Containers	15.7	13,090	Construction and Demolition Debris (C&D)	647.4	540,270
Other Aluminum	13.0	10,830			
HVAC Ducting	0.6	530			
Ferrous Containers (Tin Cans)	26.9	22,480	Total MSW (tons)		2,229,910
			Total MSW (pounds/person/day)		7.32

Sources: Urban/rural - U.S. Department of Agriculture. Economic Research Center. <http://www.ers.usda.gov/Data/Population/PopList.asp?ST=IL&LongName=Illinois>
2007 population U.S. Census Bureau. 1,669,005

Adams, Alexander, Brown, Bureau, Carroll, Cass, Christian, Clark, Clay, Coles, Crawford, Cumberland, DeWitt, Douglas, Edgar, Edwards, Effingham, Fayette, Franklin, Fulton, Gallatin, Greene, Hamilton, Hancock, Hardin, Henderson, Iroquois, Jackson, 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, Williamson Counties.

Figure 3-2. Illinois County Annual MSW Generation

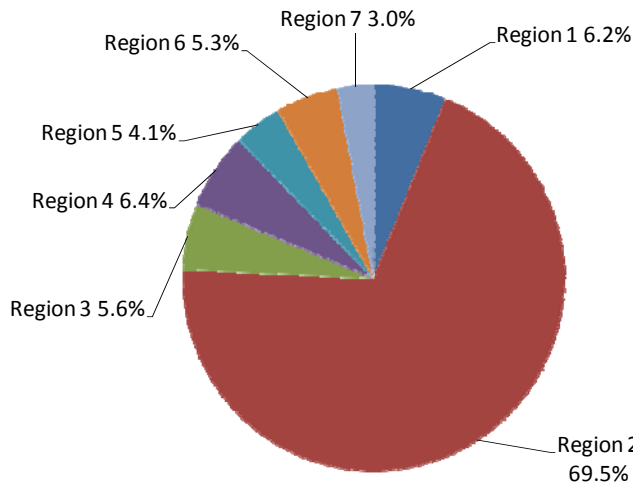


3.3.5 MSW Generation by IEPA Region

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 70%. This region includes over 67% of the state’s population. The remaining regions 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 8.31 pounds per person per day (see Table 3-7 and Figure 3-4). The other regions range from 7.15 to 7.70 pounds per person per day. The statewide per capita rate is 8.06 pounds per person per day.

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

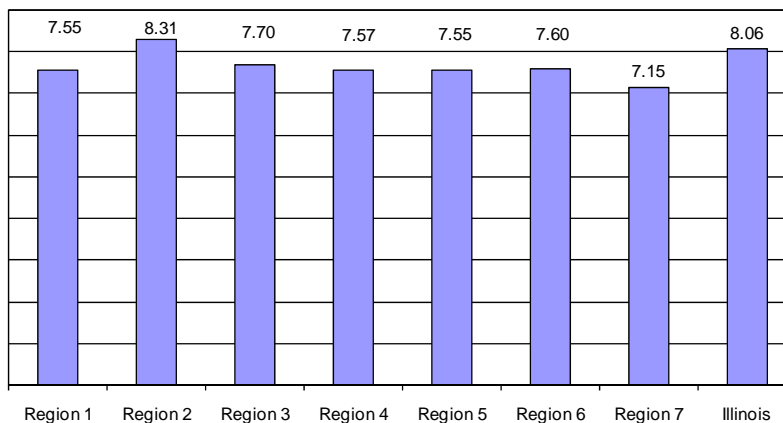


Table 3-7. MSW Generation by IEPA Regions

	Regional Generation (lb/c/yr)	Regional Generation (tons)		Regional Generation (lb/c/yr)	Regional Generation (tons)		Regional Generation (lb/c/yr)	Regional Generation (tons)
Region 1			Region 2			Region 3		
Paper	722.1	304,760	Paper	886.2	3,841,550	Paper	760.8	285,000
Beverage Containers	5.4	2,260	Beverage Containers	5.4	23,240	Beverage Containers	5.4	2,010
Plastic	316.8	133,720	Plastic	339.0	1,469,640	Plastic	312.6	117,110
Glass	86.2	36,380	Glass	86.2	373,860	Glass	86.1	32,270
Metal	138.2	58,310	Metal	138.2	598,950	Metal	138.2	51,770
Organics	511.9	216,060	Organics	568.4	2,463,980	Organics	538.3	201,650
Inorganics	136.4	57,610	Inorganics	136.6	592,120	Inorganics	136.4	51,140
Textiles	155.0	65,420	Textiles	178.5	773,610	Textiles	150.9	56,540
HHW	28.7	12,100	HHW	28.8	124,870	HHW	28.7	10,750
C&D	654.3	276,150	C&D	665.4	2,884,350	C&D	652.5	244,430
Total MSW (tons)		1,162,770	Total MSW (tons)		13,146,170	Total MSW (tons)		1,052,670
Total MSW (pounds/person/day)		7.55	Total MSW (pounds/person/day)		8.31	Total MSW (pounds/person/day)		7.70
Region 4			Region 5			Region 6		
Paper	727.8	319,130	Paper	726.9	202,560	Paper	718.6	260,200
Beverage Containers	5.4	2,350	Beverage Containers	5.3	1,480	Beverage Containers	5.4	1,960
Plastic	310.4	136,100	Plastic	311.2	86,730	Plastic	315.7	114,310
Glass	86.2	37,810	Glass	86.3	24,040	Glass	86.2	31,220
Metal	138.3	60,620	Metal	138.0	38,460	Metal	138.2	50,050
Organics	527.9	231,470	Organics	521.7	145,390	Organics	534.9	193,680
Inorganics	136.5	59,860	Inorganics	136.4	38,020	Inorganics	136.5	49,450
Textiles	148.8	65,240	Textiles	149.2	41,570	Textiles	154.0	55,750
HHW	28.6	12,550	HHW	28.6	7,960	HHW	28.8	10,410
C&D	651.4	285,600	C&D	651.4	181,530	C&D	653.9	236,750
Total MSW (tons)		1,210,730	Total MSW (tons)		767,740	Total MSW (tons)		1,003,780
Total MSW (pounds/person/day)		7.57	Total MSW (pounds/person/day)		7.55	Total MSW (pounds/person/day)		7.60
Region 7						Illinois Total		
Paper	654.4	141,030				Paper	833.2	5,354,230
Beverage Containers	5.4	1,160				Beverage Containers	5.4	34,460
Plastic	290.3	62,560				Plastic	329.9	2,120,170
Glass	86.2	18,570				Glass	86.2	554,150
Metal	137.9	29,730				Metal	138.2	887,890
Organics	500.6	107,890				Organics	554.0	3,560,120
Inorganics	136.3	29,370				Inorganics	136.6	877,570
Textiles	127.7	27,520				Textiles	168.9	1,085,650
HHW	28.5	6,150				HHW	28.8	184,790
C&D	641.5	138,250				C&D	660.9	4,247,060
Total MSW (tons)		562,230				Total MSW (tons)		18,906,090
Total MSW (pounds/person/day)		7.15				Total MSW (pounds/person/day)		8.06

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

2007 population U.S. Census Bureau.

Region 1	844,149	Region 2	8,669,757	Region 3	749,197
Region 4	876,924	Region 5	557,324	Region 6	724,170
Region 7	431,027			Total population	12,852,548

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 Material Recoverability

Table 4-1 summarizes the recoverability (landfill diversion) of the various waste categories of the Illinois waste stream and should be considered a guide and certainly is not absolute. The determination of whether a material may be diverted is based on current recycling practices, technologies, and availability of viable markets – all of which are variable throughout the state. For example, expanded polystyrene packing is potentially recoverable. However, it is extremely difficult to handle in processing, is light weight, requires large storage capability prior to baling, and markets are extremely limited.

Table 4-1. Material Recoverability

		Material Group	Divertibility
PAPER	1	Newsprint	Recoverable
	2	High Grade Office Paper	Recoverable
	3	Magazines/Catalogs	Recoverable
	4	Uncoated OCC/Kraft	Recoverable
	5	Boxboard	Recoverable
	6	Mixed Paper - Recyclable	Recoverable
	7	Compostable Paper	Compostable
	8	Other Paper	Non-recoverable
Beverage Containers	9	Milk and Juice cartons/boxes, coated	Recoverable

		Material Group	Divertibility
PLASTICS	10	#1 PET Bottles/Jars	Recoverable
	11	#1 Other PET Containers & Packaging	Potentially Recoverable
	12	#2 HDPE Bottles/Jars - Clear	Recoverable
	13	#2 HDPE Bottles/Jars - Color	Recoverable
	14	#2 Other HDPE Containers & Packaging	Potentially Recoverable
	15	#6 Expanded Polystyrene Packaging (EPS)	Recoverable
	16	#3-#7 Other - All	Potentially Recoverable
	17	Other Rigid Plastic Products	Potentially Recoverable
	18	Grocery & Merchandise Bags	Recoverable
	19	Trash Bags	Potentially Recoverable
	20	Commercial & Industrial Film	Recoverable
	21	Other Film	Potentially Recoverable
GLASS	22	Remainder/ Composite Plastic	Non-recoverable
	23	Recyclable Glass Bottles and Jars	Recoverable
	24	Flat Glass	Potentially Recoverable
METALS	25	Other Glass	Non-recoverable
	26	Aluminum Beverage Containers	Recoverable
	27	Other Aluminum	Recoverable
	28	HVAC Ducting	Recoverable
	29	Ferrous containers (tin cans)	Recoverable
	30	Other Ferrous	Recoverable
	31	Other Non-Ferrous	Recoverable
ORGANICS	32	Other Metal	Recoverable
	33	Yard Waste - Compostable	Compostable
	34	Yard Waste - Woody	Compostable
	35	Food Scraps	Compostable
	36	Bottom Fines and Dirt	Potentially Recoverable
C&D	37	Diapers	Non-recoverable
	38	Other Organic	Potentially Recoverable
	39	Clean Dimensional Lumber	Recoverable
	40	Clean Engineered Wood	Recoverable
	41	Wood Pallets	Recoverable
	42	Painted Wood	Non-recoverable
	43	Treated Wood	Non-recoverable
	44	Concrete	Recoverable
	45	Reinforced Concrete	Potentially Recoverable
	46	Asphalt Paving	Recoverable
	47	Rock & Other Aggregates	Recoverable
	48	Bricks	Recoverable
	49	Gypsum Board	Recoverable
	50	Composition Shingles	Recoverable
	51	Other Roofing	Potentially Recoverable
	52	Plastic C&D materials	Potentially Recoverable
	53	Ceramics/Porcelain	Potentially Recoverable
	54	Other C&D	Non-recoverable

		Material Group	Divertibility
INORGANICS	55	Televisions	Recoverable
	56	Computer Monitors	Recoverable
	57	Computer Equipment/Peripherals	Recoverable
	58	Electronic Equipment	Recoverable
	59	White Goods - refrigerated	Recoverable
	60	White Goods – not refrigerated	Recoverable
	61	Lead-acid Batteries	Recoverable
	62	Other Household Batteries	Recoverable
	63	Tires	Recoverable
	64	Household Bulky Items	Potentially Recoverable
	65	Fluorescent Lights/Ballasts	Recoverable
HHW	66	Latex Paint	Recoverable
	67	Oil Paint	Potentially Recoverable
	68	Plant/Organism/Pest Control/Growth	Potentially Recoverable
	69	Used Oil/Filters	Recoverable
	70	Other Automotive Fluids	Potentially Recoverable
	71	Mercury-Containing Items	Potentially Recoverable
	72	Sharps & Infectious Waste	Non-recoverable
	73	Ash, Sludge, & Other Ind. Process Wastes	Potentially Recoverable
	74	Sewage Solids	Potentially Recoverable
	75	Other HHW	Non-recoverable
TEXTILES	76	Carpet	Potentially Recoverable
	77	Carpet Padding	Potentially Recoverable
	78	Clothing	Recoverable
	79	Other Textiles	Non-recoverable

4.3 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 – 18.9 million tons, and disposal quantities developed in Section 2 - 15.3 million tons, is the quantity of materials recovered – some 3.6 million tons. Based on this methodology, **the overall Illinois diversion rate is 19.1% by weight.** Table 4-2 summarizes the material diversion/recovery rates and overall Illinois diversion rate estimates.

Currently there is no mechanism in Illinois that requires the quantity of recovered materials to be reported to a central entity. Therefore, Illinois cannot accurately determine what the diversion rate in the state actually is. Illinois EPA is required to annually publish the Non-hazardous Solid Waste Management and Landfill Capacity Report, which relies on voluntary reporting by county coordinators. According to the 2007 Report, coordinators report that 23.1 million tons of waste is generated and 9.1 million tons are recycled, yielding a diversion rate of 39.3%. Obviously, there are significant discrepancies between the results of this Study and the Report and the

diversion rate could not be validated. There are several factors that can account for this difference:

1. This study focuses on solely Municipal Waste whereas the coordinator's data in the EPA Report focuses on landfilled tonnages which can include industrial process waste, special waste and/or clean construction or demolition debris.
2. The data submitted by coordinators is not current for the year – only one third of the 106 reporting entities submitted current data.
3. Data is submitted without an officially adopted calculation protocol to be used uniformly throughout the state. Therefore what has been reported by some may not be considered by others, or quantities of some materials may not even appropriate to report altogether, and there is likely “double counting” occurring.

4.4 Illinois Recovery Rates Compared to National Recovery

The Illinois recovery rates presented in Section 4.3 are compared to national recovery rates in Table 4-3. The national recovery rates are developed for the U.S. EPA report series Municipal Solid Waste in the United States. Results from the latest version of this report¹⁵ are compared to the estimated 2007 Illinois recovery rates. In addition, national electronics recovery is estimated from an EPA electronics management report¹⁶ and national average white goods recovery is from the Steel Recycling Institute website.¹⁷

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 4-3 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.

¹⁵ United States Environmental Protection Agency Office of Solid Waste. *Municipal Solid Waste in the United States: 2007 Facts and Figures*. November 2008. EPA530-R-08-010.
<http://www.epa.gov/epawaste/nonhaz/municipal/pubs/msw07-rpt.pdf>.

¹⁶ United States Environmental Protection Agency Office of Solid Waste. *Electronics Waste Management Approach 1*. July 2008. EPA530-R-08-009

¹⁷ www.recycle-steel.org

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 4-3 shows that in Illinois, recovery of most individual products is below national average. The exceptions are milk and juice cartons/boxes, #3 to #7 plastics, televisions, white goods, and wood pallets.

Table 4-2 Illinois Recovery/Diversion Rates

	Generated	Disposed	Recovery	Recovery		Generated	Disposed	Recovery	Recovery
	Tons	Tons	Tons*	%		Tons	Tons	Tons*	%
Paper	5,370,310	3,579,800	1,790,500	33.3%	Inorganics	877,570	359,600	518,000	59.0%
Newsprint	868,130	418,690	449,400	51.8%	Televisions	41,830	930	40,900	97.8%
High Grade Office Paper	290,910	144,110	146,800	50.5%	Computer Monitors	29,450	28,950	500	1.7%
Magazines/Catalogs	423,250	241,750	181,500	42.9%	Computer Equipment/Peripherals	33,760	31,570	2,200	6.5%
Uncoated OCC/Kraft	2,452,290	1,524,280	928,000	37.8%	Electronic Equipment	155,770	132,830	22,900	14.7%
Boxboard	260,700	243,870	16,800	6.4%	White Goods - Refrigerated	55,430	-	55,430	100.0%
Mixed Paper - Recyclable	457,880	418,360	39,500	8.6%	White Goods - Not refrigerated	121,940	2,690	119,300	97.8%
Compostable Paper	474,730	451,450	23,300	4.9%	Lead-acid Batteries	102,810	400	102,400	99.6%
Other Paper	142,420	137,210	5,200	3.7%	Other Household Batteries	6,850	6,450	400	5.8%
					Tires	186,220	29,630	156,600	84.1%
Beverage Containers	34,460	32,400	2,100	6.1%	Household Bulky Items	142,920	125,500	17,400	12.2%
Milk & Juice Cartons/Boxes - Coated	34,460	32,400	2,100	6.1%	Fluorescent Lights/Ballasts	590	590	-	0.0%
Plastic	2,120,170	1,988,700	131,500	6.2%	Textiles	1,085,650	1,063,800	21,900	2.0%
#1 PET Bottles/Jars	164,620	146,630	18,000	10.9%	Carpet	248,990	248,990	-	0.0%
#1 Other PET Containers	13,850	11,810	2,000	14.4%	Carpet Padding	36,560	36,560	-	0.0%
#2 HDPE Bottles/Jars - Clear	64,400	60,860	3,500	5.4%	Clothing	336,330	315,860	20,500	6.1%
#2 HDPE Bottles/Jars - Color	93,670	87,180	6,500	6.9%	Other Textiles	463,770	462,400	1,400	0.3%
#2 Other HDPE Containers	13,170	11,870	1,300	9.9%					
#6 Exp. Polystyrene Packaging	122,320	121,830	500	0.4%	Household Hazardous Waste	184,790	64,400	120,400	65.2%
#3-#7 Other - All	123,750	118,400	5,400	4.4%	Latex Paint	12,550	11,790	800	6.4%
Other Rigid Plastic Products	586,130	500,970	85,200	14.5%	Oil Paint	1,730	1,730	-	0.0%
Grocery & Merchandise Bags	81,400	80,250	1,200	1.5%	Plant/Organism/Pest Control/Growth	130	120	-	0.0%
Trash Bags	166,030	165,220	800	0.5%	Used Oil/Filters	117,890	12,380	105,500	89.5%
Commercial & Industrial Film	218,380	216,810	1,600	0.7%	Other Automotive Fluids	14,390	880	13,500	93.8%
Other Film	194,500	193,910	600	0.3%	Mercury-Containing Items	50	50	-	0.0%
Other Plastic	277,950	272,460	5,500	2.0%	Sharps & Infectious Waste	2,980	2,980	-	0.0%
					Ash, Sludge, & Industrial Wastes	8,370	7,750	600	7.2%
Glass	554,150	433,700	120,500	21.7%	Sewage Solids	-	-	-	0.0%
Recyclable Glass Bottles & Jars	520,020	401,210	118,800	22.8%	Other HHW	26,700	26,700	-	0.0%
Flat Glass	24,500	24,500	-	0.0%					
Other Glass	9,630	8,020	1,600	16.6%	C&D	4,106,050	3,864,800	241,300	5.9%
					Clean Dimensional Lumber	380,370	379,610	800	0.2%
Metal	887,890	740,500	147,400	16.6%	Clean Engineered Wood	365,480	365,280	200	0.1%
Aluminum Beverage Containers	100,800	57,910	42,900	42.6%	Wood Pallets	380,830	149,810	231,000	60.7%
Other Aluminum	83,500	75,000	8,500	10.2%	Painted Wood	269,500	269,450	100	0.0%
HVAC Ducting	4,200	4,200	-	0.0%	Treated Wood	604,760	604,220	500	0.1%
Ferrous Containers (Tin Cans)	173,400	143,510	29,900	17.2%	Concrete	401,860	399,850	2,000	0.5%
Other Ferrous	354,890	308,610	46,300	13.0%	Reinforced Concrete	39,240	38,250	1,000	2.5%
Other Non-Ferrous	33,000	33,000	-	0.0%	Asphalt Paving	6,120	6,120	-	0.0%
Other Metal	138,100	118,230	19,900	14.4%	Rock & Other Aggregates	233,140	231,660	1,500	0.6%
					Bricks	64,820	64,820	-	0.0%
Organics	3,685,050	3,168,700	516,400	14.0%	Gypsum Board	472,380	471,650	700	0.1%
Yard Waste - Compostable	471,250	204,130	267,100	56.7%	Composition Shingles	407,870	405,080	2,800	0.7%
Yard Waste - Woody	432,510	184,750	247,800	57.3%	Other Roofing	79,140	79,000	100	0.1%
Food Scraps	1,838,100	1,838,100	-	0.0%	Plastic C&D Materials	18,770	18,760	-	0.0%
Bottom Fines & Dirt	238,090	237,390	700	0.3%	Ceramics/Porcelain	148,670	148,670	-	0.0%
Diapers	300,490	300,420	100	0.0%	Other C&D	206,830	206,270	600	0.3%
Other Organic	404,610	403,960	700	0.2%	Other MSW	26,270	26,270	-	0.0%
					Total*	18,906,100	15,296,400	3,610,000	19.1%

* Numbers rounded to nearest 100 Tons

Particularly surprising is Uncoated OCC/Kraft at 38% recovery. Although all paper grades are estimated to be recovered below national average, OCC/Kraft is at almost half the national recovery rate (38%/72%). To check this result, Chicago recovery data supplied by the Chicago Department of Environment and Chicago Department of Streets and Sanitation (DSS) were analyzed. The OCC/Kraft recovery reported by the City on a per person basis compared to the Cook County generation (also on a per person basis) suggested a recovery rate of 28%. A similar analysis of recovery data from McLean County suggested an OCC/Kraft recovery rate of 31%.

The U.S. PET plastic container recycling is shown at 23% for both PET categories in Table 4-3. In reality, some PET containers are recycled at a higher rate than others. In the EPA report, PET soft drink bottles are recovered at 36.6% and other PET containers are recovered at 15.6%. Since the IRA product categories do not follow this same structure, all PET container recovery at the national level was combined into one rate (23%).

The same is true for HDPE containers. On a national level, HDPE milk and water bottles are recovered at 28% of generation; other HDPE containers are recovered at 19%. Table 4-2 shows 21% for all three HDPE categories.

All plastic products are recovered below national average with the exception of #3 - #7 other containers, which are recovered at four percent compared to two percent for the U.S. In Illinois, PET bottles and containers are recovered at a higher rate than HDPE bottles and containers.

Recyclable glass bottles and jars, aluminum beverage containers, and yard waste are all estimated to be recovered at levels that are within 80 to 90% of the U.S. average (i.e., $23\%/28\%=82\%$ for glass bottles).

Televisions are shown at a 98% recovery rate in Illinois (compared to 19% for the U.S.). It is possible that this rate has been inflated by the lack of televisions in the loads sampled during the field sorting conducted in 2008. 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 white goods, lead-acid batteries, and tires are estimated to be similar to U.S. recovery. These products have well established recovery infrastructures that result in high recovery rates.

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 61% or almost three times the U.S. average. The pallet reuse market may be 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.

Table 4-3. Comparison of Illinois Recovery Rates to National Averages

	Illinois Recovery (%)	U.S. Recovery (%)		Illinois Recovery (%)	U.S. Recovery (%)
Paper			Metal		
Newsprint	52%	78%	Aluminum Beverage Containers	43%	49%
High Grade Office Paper	50%	72%	Ferrous Containers (Tin Cans)	17%	64%
Magazines/Catalogs	43%	52%			
Uncoated OCC/Kraft	38%	72%	Organics		
Boxboard	6%	27%	Yard Waste - Compostable	57%	64%
Mixed Paper - Recyclable	9%	36%	Yard Waste - Woody	57%	
Compostable Paper	5%				
Other Paper	4%		Inorganics		
			Televisions	98%	19%
Beverage Containers			Computer Monitors	2%	19%
Milk & Juice Cartons/Boxes - Coated	6%	<1.0%	Computer Equipment/Peripherals	7%	19%
			White Goods - Refrigerated	100%	90%
Plastic			White Goods - Not refrigerated	98%	90%
#1 PET Bottles/Jars	11%	23%	Lead-acid Batteries	100%	99%
#1 Other PET Containers	15%	23%	Tires	84%	87%
#2 HDPE Bottles/Jars - Clear	5%	21%			
#2 HDPE Bottles/Jars - Color	7%	21%	Textiles		
#2 Other HDPE Containers	10%	21%	Carpet	0%	9%
#6 Exp. Polystyrene Packaging	<1%	7%	Carpet Padding	0%	9%
#3-#7 Other - All	4%	2%	Clothing	6%	15%
Commercial & Industrial Film	1%	9%			
			Construction and Demolition Debris (C&D)		
Glass			Wood Pallets	61%	22%
Recyclable Glass Bottles & Jars	23%	28%			

Sources: United States Environmental Protection Agency Office of Solid Waste. *Municipal Solid Waste in the United States: 2007 Facts and Figures*.

U.S. EPA. *Electronics Waste Management Approach 1*. July 2008. EPA530-R-08-009

Steel Recycling Institute. Steel recycling rates. <http://www.recycle-steel.org/rates.html>

4.5 MSW Recovery Rates Compared to Reported Illinois Recovery Rates

The following table summarizes the generation and diversion results from this study compared to the Illinois 2007 Capacity Report. These values vary widely from each other both in the overall totals and on the regional level. There are several factors that could account for these differences. As stated in Section 1, this study focuses on solely the MSW stream; whereas, the Illinois EPA Capacity Reports focuses on the total landfilled tonnages and uses waste generation and recycling rates provided by Counties and the City of Chicago. These quantities and/or rates are calculated without a standard rule or regulation defining what should or should not be included. For example, some entities report quantities in their generation and/or recycling rates such as structural steel, roadway concrete and asphalt, while other entities do not.

Table 4-4. Illinois Regional Per Capita MSW Generation and Recycling Rates

Region	Waste Generated (lb per capita day)		% Waste Recycled	
	2007 IEPA Capacity Report	DCEO Study	2007 IEPA Capacity Report	DCEO Study
One: Northwestern Illinois	5.9	7.6	25.5%	
Two: Chicago Metropolitan	11.4	8.3	42.5%	
Three: Peoria/Quad Cities	7.7	7.7	29.1%	
Four: East Central Illinois	6.0	7.6	25.4%	
Five: West Central Illinois	7.1	7.6	31.3%	
Six: Metropolitan East St. Louis	5.1	7.6	30.6%	
Seven: Southern Illinois	5.1	7.2	15.2%	
Total	9.7	8.1	39.3%	19.1%

4.6 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 2008 commodity values from January 2008 through October 2008,^{18 19}

¹⁸ Recycling Manager Archives, www.amm.com/recman/archives, Cahners Business Information, American Metal Market LLC, a division of Metal Bulletin PLC.

¹⁹ Official Board Markets: The Yellow Sheet, <https://prices.packaging-online.com>.

obtained from market data detailed in Section 4.5 for the Midwest region, prior to the temporary collapse of markets that occurred in November.

Table 4-5 summarizes the market value of the commodities landfilled based on these values. **The direct market value is calculated at over \$600 Million.**

Table 4-5. Market Value of Disposed Materials^{20 21}

	Tons	\$/Ton*	Value
Paper			
Newsprint	418,690	\$ 120.50	\$ 50,452,145
High Grade Office Paper	144,110	\$ 85.00	\$ 12,249,350
Magazines/Catalogs	241,750	\$ 85.00	\$ 20,548,750
Uncoated OCC/Kraft	1,524,280	\$ 100.50	\$ 153,190,140
Boxboard	243,870	\$ 85.00	\$ 20,728,950
Mixed Paper - Recyclable	418,360	\$ 85.00	\$ 35,560,600
Plastic			
#1 PET Bottles/Jars	146,630	\$ 438.00	\$ 64,223,940
#2 HDPE Bottles/Jars - Clear	60,860	\$ 762.00	\$ 46,375,320
#2 HDPE Bottles/Jars - Color	87,180	\$ 502.00	\$ 43,764,360
Glass			
Recyclable Glass Bottles & Jars	401,210	\$ 20.00	\$ 8,024,200
Metal			
Aluminum Beverage Containers	57,910	\$ 1,822.00	\$ 105,512,020
Ferrous Containers (Tin Cans)	143,510	\$ 400.50	\$ 57,475,755
Total	3,888,360	\$	618,105,530

* Market values are based on an annual average of Midwest markets from January 2008 through October 2008.

4.7 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,

²⁰ Recycling Manager Archives, www.amm.com/recman/archives, Cahners Business Information, American Metal Market LLC, a division of Metal Bulletin PLC.

²¹ Official Board Markets: The Yellow Sheet, <https://prices.packaging-online.com>.

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 from Table 4-2 was inputted into the U.S. Environmental Protection Agency (EPA) Waste Reduction Model (WARM)²², 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 (MTCO₂E) 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 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 (15.3 million tons) is approximately 2,404,563 MTCO₂E. This is equivalent to the annual greenhouse gas emissions from approximately 440,400 passenger vehicles or the carbon sequestered annually by 16,800 acres of forest preserved from deforestation²³.

The total GHG emissions reduced from materials currently recycled (3.6 million tons) is 8,910,029 MTCO₂E, which is equivalent to the annual greenhouse gas emissions from approximately 1,631,900 passenger vehicles or the carbon sequestered annually by 62,300 acres of forest.

4.7.1 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 4-6, The WARM recognizes 34 material types whereas there are 79 Illinois material types in this study.

²² 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/SWMSGHreport.html>
http://www.epa.gov/climatechange/wycd/waste/calculators/Warm_home.html.

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

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.

Table 4-6. 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

WARM Material Type	Illinois Material Type
Mixed Metals	Other Aluminum HVAC Ducting Other Ferrous Other Non-Ferrous Other Metal
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

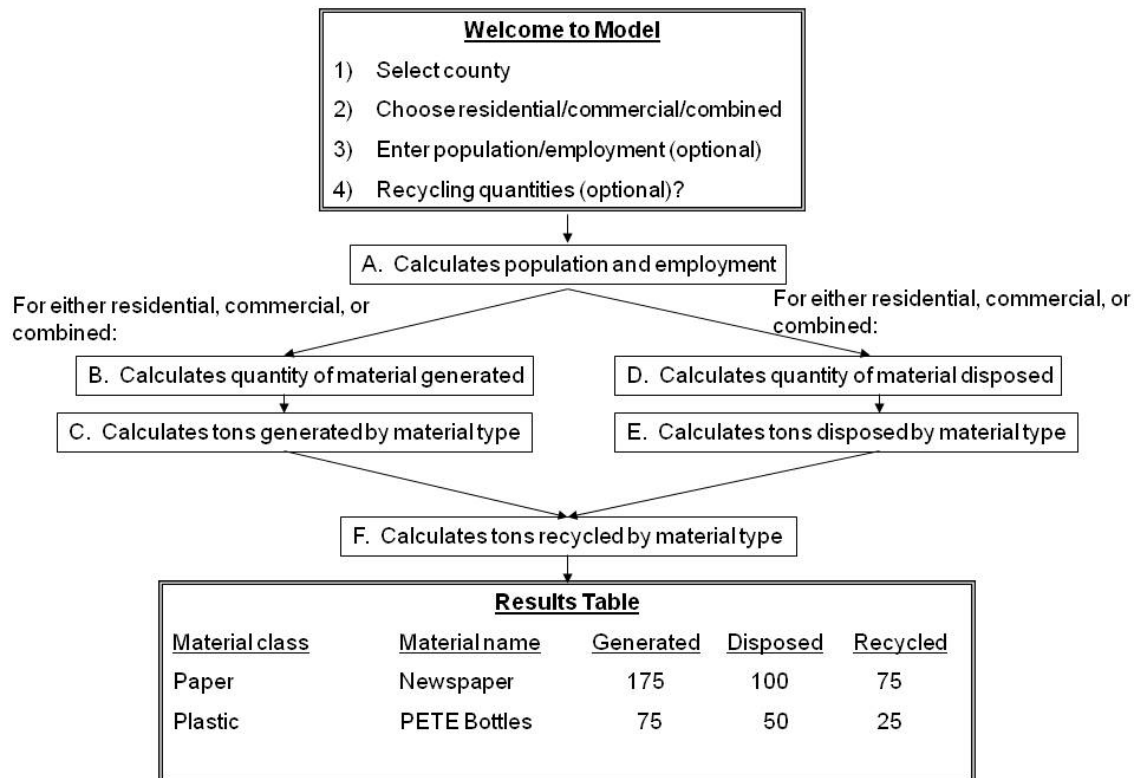
WARM Material Type	Illinois Material Type
Clay Bricks	Bricks
Concrete	Concrete Reinforced concrete
Fly Ash	N/A
Tires	Tires

Section 5 Commodity/Waste Generation and Characterization (CWGC) Planning Guide

5.1 Introduction

Using the results of the waste characterization study, CDM and its subconsultant, Cascadia, developed a simple tool for determining the quantity and composition of waste within areas of Illinois. The Illinois Solid Waste Disposal and Recycling Model provides the user with disposal and recycling estimates for any community within the state. While accessing the model on the internet through a standard web browser, the user identifies certain parameters that describe the community and the waste stream that is to be modeled. The model then presents estimates of the tons disposed and recycled by the community, for each of 36 materials. The user can choose to have the model describe either the Residential or the Industrial/Commercial/Institutional (ICI) waste stream, or describe the combined Residential and ICI waste stream.

Figure 5-1. Model Input and Outputs



Parameters that the user may specify include the county that is to be modeled and the particular waste sector (Residential, ICI, or Combined). The user may further describe the community being modeled by specifying a Residential population and/or a number of employees corresponding to a smaller geographic area within the selected

county. For example, if the user wishes to model the disposal and recycling quantities for the residents of a single town, the user may choose the county in which the town lies and then type in the population of the specific town. Finally, the user may enter the community's actual recycling tonnages, if known, in order to increase the accuracy of the model.

The model stores the user's selections and applies these selections as variables in its calculations. To begin the calculations, the model determines whether the user has entered custom population or employment data. If the user has entered a custom number, the model uses it. If not, the model draws upon built-in population and employment data for the entire county. The model uses county population data from the US Census Bureau's 2007 County Population Estimates. County employment data come from the US Bureau of Labor Statistics 2007 County Quarterly Census of Employment and Wages.

Next, the model calculates the total quantity of material disposed in each sector. It computes this total by applying statewide *per capita* disposal for the selected sector to either the population or the employment figure determined in the previous step of the model. To calculate *per capita* disposal, the model divides statewide Residential disposal by statewide Residential population and statewide ICI disposal by statewide employment. Statewide disposal data for the Residential and ICI sectors come from the Illinois MSW disposal data developed as described in Section 3 of the report. Statewide population and employment data come from the US Census Bureau's 2007 County Population Estimates and the US Bureau of Labor Statistics 2007 County Quarterly Census of Employment and Wages, respectively.

The model then applies a Residential or ICI disposal composition profile to the sector's calculated total quantity disposal to find the tons that the sector disposes by material type. Based on the user's selected county and sector, the model will apply either a "rural" or "urban" disposal profile. The designation of these two types of counties originates from the USDA's Economic Research Center's Rural-Urban Continuum. The four different disposal profiles (rural Residential, urban Residential, rural ICI, and urban ICI) come from the Illinois MSW characterization data developed as described in Section 2 of the report.

To report generation, the model draws upon estimated amounts of each material generated in each county. To develop the generation amounts that appear in the model, Cascadia Consulting Group performed a series of calculations based on the set of county-specific generation estimates from the Illinois MSW generation data (provided in Appendix C of this report). The generation calculations for the Residential and ICI waste streams of each county were performed separately from the model that the user encounters, and they were inserted as a reference table that the working model draws from when it models the waste stream of a particular county or community.

In the calculations, the estimated tons of each material in each county were divided into Residential and ICI tons based on the ratio of the same material's Residential and ICI disposed tons in similar counties (i.e., in either rural or urban counties). At this stage, the Residential and ICI generation estimates for each county still included materials from Construction & Demolition (C&D) activity – a sector which the model does not address. To subtract C&D tons from the overall generation estimates, the estimates of material quantities in statewide C&D segregated loads were apportioned to the interim Residential and ICI estimates in ratios indicated by the relative amounts of Residential and non-Residential C&D waste disposed in the State of California (see *Targeted Statewide Waste Characterization Study: Detailed Characterization of Construction and Demolition Waste*, California Integrated Waste Management Board, June 2006). Quantities of each material estimated to correspond to C&D activities were subtracted from the Illinois generation estimates of Residential and ICI waste. Subtraction of material estimated to come from C&D activity was done on a county-by-county basis in proportion to the relative magnitude of the initial Residential or Commercial generation estimates compared to the statewide estimates.

If the user has not entered custom population or employment data, the model reports the tons generated by material type that are calculated in the process described above. If there are custom numbers to use, the model will scale the generation results according to the ratio of the custom data to the actual county data. County population and employment data come from the US Census Bureau's 2007 County Population Estimates and the US Bureau of Labor Statistics 2007 County Quarterly Census of Employment and Wages, respectively.

Finally, the model calculates recycling for each material by subtracting the modeled disposed tons from the modeled generated tons. Because generation and disposal are calculated independently of one another, in some cases, this may result in a negative amount of tons recycled for a certain material. If this occurs, the model will set disposal equal to generation for that material and report that zero tons of the material are recycled.

If the user has entered custom recycling data, the model will use those tonnages instead of the modeled ones. The model will run the same generation calculation as previously explained and calculate tons disposed as the difference between generation and the recycling quantity entered by the user.

With all of the steps of the calculation process complete, the model presents the user with a table of results that includes the tons of each material that are generated, disposed, and recycled for the selected waste stream(s) in the selected community.

Section 6

Recommendations

This section contains recommendations by CDM and the Illinois Recycling Association. Estimating the quantity and composition of a waste stream relies upon a well-developed and proven approach, successful implementation, and a willingness to understand that educated assumptions and estimates have to be made when comprehensive data is not readily available. CDM is unaware of any waste characterization study conducted within Illinois more comprehensive than this study, and yet there are definite opportunities for further refinement. As such, CDM recommends the following additional tasks for refinement and expansion of the Illinois Commodity/Waste Generation and Characterization Study:

1. This study focused on the characterization of the statutory definition of Illinois' municipal solid waste (MSW) stream. As such, several components of the overall Illinois waste stream were not included in this study. However, these materials are often disposed in Illinois landfills and the composition and quantity of these materials should be assessed to provide a complete picture of the Illinois waste stream. This study is a first step in developing a picture of the Illinois waste stream. It provides a clearer picture, but is not comprehensive. If the goal is diversion of waste from landfills then an assessment of other materials landfilled/disposed in Illinois is needed. These materials include the following:
 - a. **Clean construction and demolition debris (CCDD)** – This material is often diverted from landfills and either reused, recycled, used as fill or disposed at permitted CCDD facilities. This material stream likely comprises a large piece of the gap between MSW and total waste generation. By definition CCDD is not a waste when handled according to the Environmental Protection Act. However, this often poses a dilemma in solid waste management planning, in that CCDD can become a waste if it is mixed with MSW. Theoretically, CCDD also becomes a waste when it is landfilled.
 - b. **Soil and Alternative Daily Cover** – These materials are accepted at landfills and consume landfill capacity, yet often times these materials are not quantified or included in waste generation estimates. Shredded demolition wood waste is one example of a waste stream that is commonly used for alternative daily cover. Contaminated soil, and occasionally clean soil, is also disposed at landfills.
 - c. **Special and Non-special Waste** – Industrial process wastes, hazardous wastes, pollution control wastes, declassified special wastes, and other special wastes are not part of the MSW stream. These materials are landfilled and the composition of these materials has not been assessed at the state or regional level. Unlike other waste sectors identified, due to

- regulations stipulating recordkeeping and reporting of these wastes, analysis of this sector would be less difficult.
- d. **Landscape Waste** –Landscape (yard) waste is banned from being landfilled in Illinois, yet quantities of this material are often found in landfills. As with other waste streams partially or wholly diverted from landfills, characterization at disposal facilities is not the best method for quantification.
 - e. **Diverted materials** – For this study, the quantity and composition of diverted materials was estimated based on the difference between generation data and landfilled data. This approach relies too heavily on the waste generation estimates rather than hard data. Having said that, obtaining defensible diversion data is potentially even more difficult, especially when considering source reduction and reuse activities. A study focusing on estimating the quantity and composition of diverted materials, used in conjunction with the results of this study, would assist in finding areas for improving all three of the landfilled, diverted, and total generation estimates. Although the best method to determine the quantity of materials being recovered would be to require annual reporting.
 - f. **Illinois Waste Disposed Outside Illinois** – This study was conducted at Illinois landfills and therefore the composition of Illinois waste that was disposed outside of Illinois was not obtained. Having said that, it is not unreasonable to assume that the composition of this waste is similar to that disposed within Illinois.
2. The composition and recovery of materials in the waste stream and its sectors and classes can vary significantly over short time frames based on changes in technology, manufacturing, distribution, regulations, planning efforts, diversion programs, and many other factors. A prime example of this is the inorganics classification which includes electronics devices, televisions, fluorescent lights, etc. and the recently adopted Electronic Products Recycling and Reuse Act. As such, it is recommended that a study similar to the Illinois Commodity/Waste Generation and Characterization Study be conducted periodically, approximately every 5 years.
 3. CDM recommends that the distribution of residential, ICI, and C&D wastes be further characterized. The data used for this study was developed using gatehouse surveys from one day at each facility. While this provides a reasonable overall distribution for the state, it does not provide sufficient data for estimating the distribution within the individual counties and Illinois EPA Regions.

6.1 Illinois Recycling Association Recommendations

The Illinois Recycling Association (IRA) presents this report to the Illinois Department of Commerce and Economic Opportunity (DCEO), as an initial step to update the status of recycling and commodities recovery in Illinois. It is reasonable to begin this process by gathering disposal data from solid waste transfer stations and landfills in the state of the current volumes of what has been commonly discarded as waste. However, an entire new industry of recovery and recycling of discards has grown since the passage of the three key solid waste management acts. These advances challenge established definitions of waste and move us closer to waste reduction and recovery goals that were once deemed idealistic.

The Association has worked in cooperation with the State of Illinois to offer educational workshops, seminars, and information links as well as providing a direct connection to a wide variety of recycling services and diversion options for both common and unique discards. In addition, the Illinois Recycling Association is working to compile a comprehensive listing of recycling industries, services, and the government entities responsible for recording recycling data. The association hopes to continue to maintain this database as a resource for those seeking recycling resources within the state.

The recycling industry is in reality a variety of industries, which share a common result. These industries have expanded our body of knowledge, created new manufacturing and recovery technologies, and provided economic growth through creation of jobs and consumer products.

The contracted consultant, Camp Dresser & McKee, provided recommendations that are based upon recognizing gaps and inconsistencies of data while conducting this study. There is unarguably more information to be gathered, a re-assessment of our definition and understanding of waste and recovery is needed, and a re-affirmation of attainable waste reduction and recycling goals with benchmark years should be determined and re-visited on a regular basis.

We offer the following recommendations with consideration of the information presented in this study, as well as recognition and appreciation for the progress that our industries have made, often with the assistance and encouragement from State government and new and revised laws approved thus far. The IRA looks forward to continuing our collaboration with DCEO and others committed to research, study and maintain relevant data that serves the recycling and recovery industries in the State of Illinois.

Convene a Commission for Resource Recovery and Disposal

Adopt legislation to establish a Commission that includes the following mission:

- a. Study and make recommendations regarding the economics of landfilling wastes and recovering commodities, including full environmental costs and

benefits, and the extent to which they are reflected in prices and associated fees collected by the state.

- b. Review the extent to which materials with economic value are lost by landfilling and recommend ways to maximize the productive use of discarded materials - including recycling, composting, reuse, and energy recovery.
- c. Study and recommend ways that Illinois can minimize the generation of waste materials and evaluate ways to apply “Zero Waste” as a guiding vision to be accomplished by source reduction, reuse, recycling, and composting.
- d. Study the management of toxic and nontoxic discards and recommend ways to ensure these are managed in a manner that minimizes environmental impacts and potential burdens to future generations.
- e. Study and clarify the role municipalities, residents, businesses, and state government each hold in the use, management, recovery, and disposal of materials and recommend how they can act in concert to attain disposal and recovery goals.
- f. Review and recommend changes to existing laws that govern "solid waste" management, recognizing resource management as unique and distinct from solid waste management; that minimize environmental, economic, and social costs to the residents and businesses of Illinois; and that reduce GHG's so that Illinois can achieve and maintain a truly integrated and sustainable materials management system.

Update the Illinois Recycling Economic Information Study (REI)

Illinois DCEO commissioned an REI study nearly a decade ago to determine and quantify the economic benefits of recycling activities. The study showed how recycling and reuse significantly contribute to Illinois’ economy. The direct economic impact, at that time, included 2,400 businesses that employed over 56,000 with an annual payroll of \$1.8 Billion, and those businesses had annual receipts of \$12.3 Billion. The study further concluded that the total economic value (the broader effect of the recycling and reuse industry) including direct, indirect and induced economic considerations was \$34.6 Billion.

Recycling and reuse industries create and retain jobs and generate state and local tax revenues.

It is vital to the state’s economic development to understand and support the contribution the recycling and reuse industries make in the state’s economy. To foster continued development of recycling and reuse industries, not only for environmental but also economic contributions, a thorough understanding of such contributions is an essential component to sustaining the states’ economic well being. It is

recommended that an REI study be conducted and updated on a regular basis, but at a minimum of every 5 years.

Review and Update Solid Waste Planning/Management Laws

Much has changed in the more than 20 years since the Illinois Solid Waste Planning and Recycling Act of 1988 and the Illinois Solid Waste Management Act of 1986 were developed. Review the provisions of each law to recognize the growth of technology, recovery of what was once considered wastes and the impacts of all waste and recycling activities on the environment.

Plan and Encourage Future Recovery

Certain materials have been identified as constituting a large percentage of the landfilled MSW stream. Some of these materials are significantly below national recycling rates, although recycling processes and markets exist. Research and encourage diversion programs that expand the needed infrastructure, disposal requirements, demand for end product, and education programs that focus on these materials:

- Food scraps;
- Paper, including uncoated OCC/Kraft, compostable paper, newsprint, mixed paper, high grade office paper, boxboard;
- C & D, treated wood, gypsum board, composition shingles;
- Plastics, including PETE, HDPE, Other rigid plastics, and;
- Textiles, including carpet, clothing and other textiles.

Develop a Universal Protocol for Calculating Diversion Rates

This study has shown that diversion rates vary significantly depending on the source of the data. A universal protocol for estimating diversion and recycling rates needs to be developed and annual reporting based upon a common calculation of rates should be required. The protocol should establish the materials that should be identified for diversion/recycling (identified as the numerator of the equation) and the definition of materials included in the quantity of the generated materials (the denominator of the equation).

Toxic/Special Wastes

Toxic and special wastes are not included when developing recycling or diversion programs, and so such materials, which are a part of the MSW stream cannot be targeted for source reduction, diversion, or recycling. Initiatives and diversion programs should be maintained and expanded to reduce the quantity and toxicity of wastes from being landfilled, such as for Household Hazardous Waste (HHW). This Study found 64,000 tons of HHW are currently being disposed per year. In terms of

impacts, while the quantity is comparatively low, the toxicity of HHW significantly outweighs that of other materials.

Appendix A Sampling Plan

Illinois Commodity / Municipal Solid
Waste Disposal Characterization
Study 2008
Sampling Plan

Commissioned by

**Illinois Department of Commerce & Economic
Opportunity**

Contracted by

Illinois Recycling Association

Prepared by

CDM

September 11, 2008

Work Plan

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Section 1

Overview

1.1 Objective

This document is intended to serve as the sampling plan for the 2008 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 will collect waste samples at 19 disposal facilities over one sampling season. Approximately 20 sampling days during September and October 2008 will be dedicated to hand-sorting and characterizing approximately 100 samples of residential waste, 100 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 Collecting Initial Data from Disposal Sites

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.

1.4 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 19 solid waste facilities. The research team will obtain and hand-sort approximately 200 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	100
ICI	100
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 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 Environmental Protection Agency (IEPA) Regions as shown in Figure 1 and Appendix B. A minimum of 2 sampling days will be spent in each IEPA Region and approximately 10 samples will be collected per day. The samples will be split equally between residential waste and ICI waste. Figure 1 also

shows 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 selection of sampling locations to distribute the sample collection between rural and urban areas of the state as well as the 7 IEPA 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

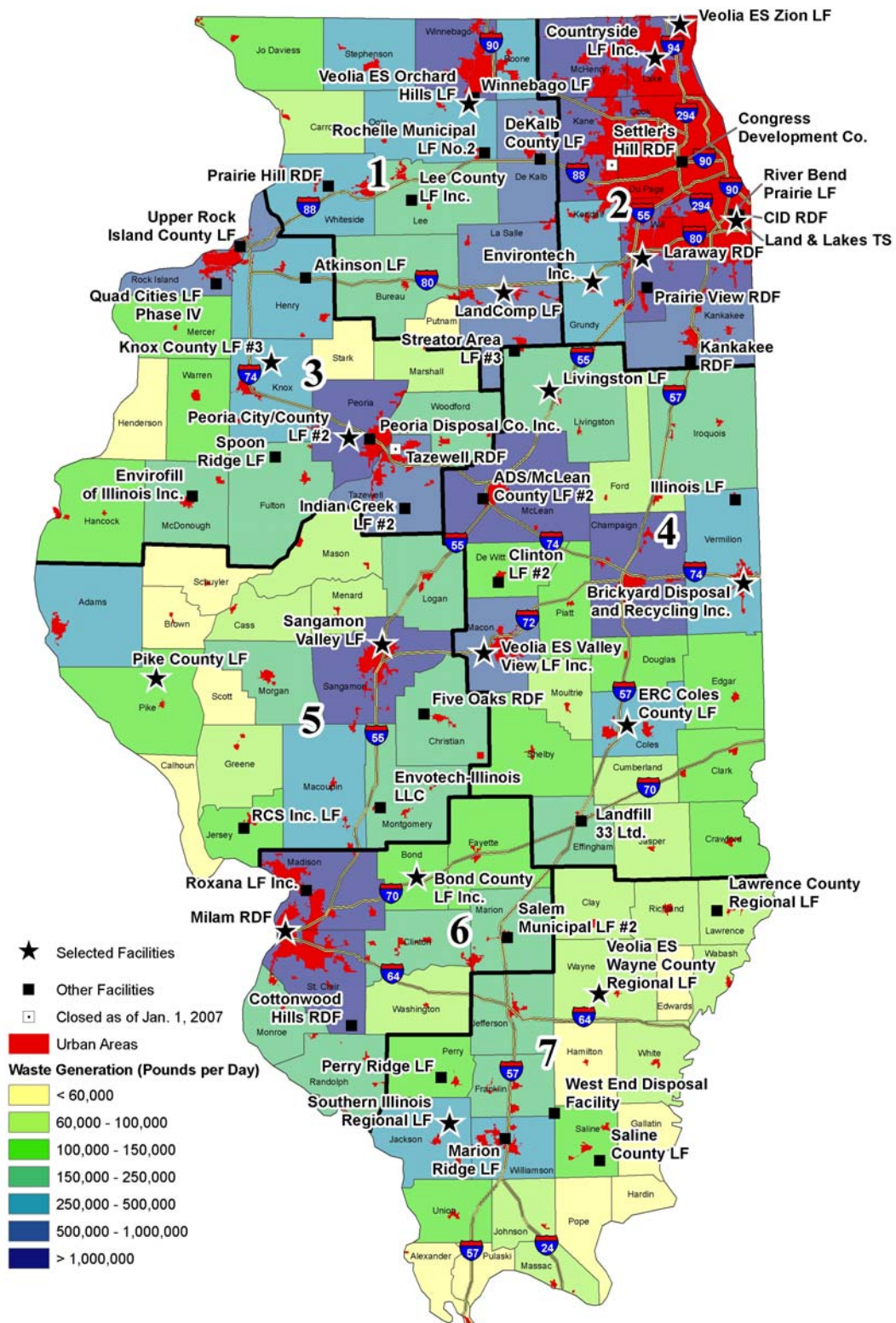
As discussed in Section 2.2, CDM will work with the scalehouse to identify the vehicles that are entering the facility and use that information to apply the vehicle selection procedure to identify and divert vehicles that will be used to provide samples of waste. The first step in this procedure will 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 3rd residential vehicle or every 4th 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.

Figure 1. Waste Generation Rate and Sampling Location Map



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. RES1or 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 ¼-inch screen on the bottom.
- Samples will be sorted until the material particle size ranges from ¼ 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
- Stapler
- Duct tape
- Shovels
- Broom
- Tarps
- Scales
- Sorting tables
- Magnet
- Clipboards
- Hand wipes
- Calculator
- Rain gear
- Safety vests
- First aid kit
- 30-gallon garbage can

- Two-way radio or cell phone 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 3rd 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 *n*th 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
- Stapler
- Duct tape
- Clipboards
- Hand wipes
- Calculator
- Rain gear
- Safety vests
- First aid kit
- Two-way radio or cell phone to 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:

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

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.

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

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

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 2008 Facilities Interview

Study background, including:

- Potentially sorting in September/October (September 24-October 30th) 1 day at the facility.
- Letter of Support provided by the State of Illinois
- We will sort about **10 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 shiffersm@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 ~10 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 shiffersm@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

Facility Information

IEPA Region	Primary (P)/ Secondary(S)	Landfill/ Transfer Station (TS)	Town/County	Operator	Address	Phone Number
1	P	Landcomp	Ottawa/LaSalle	Allied Waste Services	2840 E. 13th Road Ottawa, IL 61350	815-434-1808
	P	Veolia ES Orchard (Orchard Hills)	Davis Junction/Ogle	Veolia Environmental Services	8290 North II Route 251, Davis Junction, il 61020-9706	(815) 874-9000
	S	Lee	Dixon/Lee	Allied Waste Services	1214 South Bataan Road Dixon, il 61021-8308	815-288-4607
	S	Prairie Hill	Morrison/Whiteside	Waste Management	18762 Lincoln Rd. Morrison, IL 61270	815/772-7308
2	P	Countryside	Grayslake/Lake	Waste Management	31725 N. Route 83 Grayslake, IL 60030	847.223.2722
	P	Veolia ES Zion Landfill	Zion/Lake	Veolia Environmental Services	701 GREENBAY ROAD ZION, IL 60099	847-599-5910
	P	River Bend Prairie	Dolton/Cook		1220 East 138th Street Chicago, IL 60827	773-264-8508
	P	Envirotech	Morris/Grundy	Allied Waste Services	1800 N. Ashley Road Morris IL	815-942-1800
	P	Land & Lakes Transfer (TS)	Chicago/Cook		1258-1300 E. 138th St. Chicago	(708) 720-5100
3	P	Knox County 3	Oneida/Knox		996 Knox Road 2150 North, Box Wataga, Illinois 61488	309-375-6045
	P	Peoria City/County	Brimfield/Peoria	Waste Management	11501 Cottonwood Road Brimfield, IL 61517	309/565-7938
	S	Indian Creek 2	Hopedale/Tazewell		2401 W McMullen Rd Hopedale, IL 61747	309.449.6864
	S	Quad Cities Ph.IV	Milan/RockIsland		13606 Knoxville Road Milan, IL 61264	309-787-2303
4	P	Brickyard	Danville/Vermillion	Allied Waste Services	601 E. Brickyard Road, P.O. Box 985 Danville, IL 61834-0985	217-443-3128
	P	Livingston	Pontiac/Livingston	Allied Waste Services	14206 E 2100 North Rd pontiac il 61764	(815) 844-3054
	S	Clinton	Clinton/DeWitt		Mailing: U.S. Route 51 South R.R. #2, Box 216L Clinton, Illinois 61727 Facility: 448 US Highway 51, Clinton, IL, 61747	217-935-8028
	P	ERC Coles County	Charleston/Coles	Environmental Reclamation Co	6351 W. State St Charleston, IL	217-345-7404
	P	Veolia ES Valley View Landfill Inc	Decatur/Macon	Veolia Environmental Services	1363 Bear Road Decatur, IL 62522	217-963-2976
5	S	Envotech Illinois	Litchfield/Montgomery		2782 Landfill Trail, P.O. Box 97 Litchfield, IL 62056	618-656-6912
	P	Sangamon Valley	Springfield/Sangamon	Allied Waste Services	2565 Sandhill Road Springfield, IL 62707	217-528-9256
	S	Five Oaks	Taylorville/Christian	Waste Management	890 E. 1500 North Road Taylorville, IL 62568	217-824-3942 Ext. 115
	P	Pike County	Baylis/Pike		Rural Route 1 Baylis, Illinois 62314	217.833.2732
6	P	Bond County	Greenville/Bond	Allied Waste Services	825 Willard St., R.R. 3 Greenville, IL 62246	618-664-2587
	P	Milam	East St.Louis/St.Clair	Waste Management	601 Madison Road East St. Louis, IL 62201	618-271-6788 Ext. 2122
	S	Roxana	Roxana/Madison	Allied Waste Services	4600 Cahokia Creek Road, P.O. Box 97 Roxana, IL 62084-0097	618-656-6912
	S	Cottonwood Hills	Marissa/St. Clair	Waste Management	10400 Hillstow Rd Marissa, IL 62257	(618) 295-2809
7	P	So. IL Regional	DeSoto/Jackson		1540 Landfill Road DeSoto, IL 62924	618.867.3397 Ext. 111
	S	Perry Ridge	DuQuoin/Perry		6305 Sacred Heart Road DuQuoin, IL 62831	618-357-5599
	P	Veolia ES Wayne County Landfill	Fairfield/Wayne	Veolia Environmental Services	State Route 15 West, RR #1, Box 214 Fairfield, IL 62837	618-842-3395

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

Sample Placard

<h1>RES1</h1>	
<p>DATE: 9/24/2008</p>	<p>LOCATION:</p>
<p>HAULER:</p>	<p>TRUCK #:</p>
<p>VEHICLE TYPE:</p>	

Waste Characterization Form - Hand Sort

IRA Hand Sort - Waste Characterization Form

Waste Stream: Res Com SH	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: front loader / side loader / rear loader / loose drop box / compacted drop box / other: _____		

	Weight 1	Weight 2	Weight 3		Weight 1	Weight 2	Weight 3
PAPER				CONSTRUCTION & DEMOLITION			
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							
#3-#7 Other- All				INORGANICS			
Other Rigid Plastic Products				Televisions			
Grocery & Merchandise Bags				Computer Monitors			
Trash Bags				Computer Equipment/Peripherals			
Commercial & Industrial Film				Electronic Equipment			
Other Film				White Goods - refrigerated			
Remainder/ Composite Plastic				White Goods - not refrigerated			
GLASS				Lead-acid Batteries			
Recyclable Glass Bottles and Jars				Other Household Batteries			
Flat Glass				Tires			
Other Glass				Household Bulky Items			
METAL				Fluorescent Lights/Ballasts			
Aluminum Beverage Containers				HOUSEHOLD HAZARDOUS			
Other Aluminum				Latex Paint			
HVAC Ducting				Oil Paint			
Ferrous containers (tin cans)				Plant/Organism/Pest Control/Growth			
Other Ferrous				Used Oil/Filters			
Other Non-Ferrous				Other Automotive Fluids			
Other Metal				Mercury-Containing Items			
ORGANIC				Sharps & Infectious Waste			
Yard Waste - Compostable				Ash, Sludge, & Other Industrial			
Yard Waste - Woody				Sewage Solids			
Food Scraps				Other HHW			
Bottom Fines and Dirt				TEXTILES			
Diapers				Carpet			
Other Organic				Carpet Padding			
				Clothing			
				Other Textiles			

If found please call 312-346-5000. Reward offered.



DRAFT

C-3

Waste Characterization Form – Visual Characterization

Chicago 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: _____	Percent Full: _____	Load Dump Dimensions: _____ x _____ x _____	
Material Group	% By Volume	% By Volume	Notes
PAPER	Boxboard	<input type="checkbox"/>	
	Compostable Paper		
	High Grade Office Paper		
	Magazines/Catalogs		
	Mixed Paper - Recyclable		
	Newsprint		
	Uncoated OCC/Kraft		
	Other Paper		Subtotal must equal 100%
GLASS	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%
PLASTIC	#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%
METAL	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%
ORGANIC	Yard Waste - Compostable	<input type="checkbox"/>	
	Yard Waste - Woody		
	Food Scraps		
	Bottom Fines and Dirt		
	Diapers		
	Other Organic		Subtotal must equal 100%
C&D MATERIALS	Clean Dimensional Lumber	<input type="checkbox"/>	
	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		Subtotal must equal 100%	
INORGANICS	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%
HHW	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%
TEXTILES	Carpet	<input type="checkbox"/>	
	Carpet Padding		
	Clothing		
	Other Textiles		Subtotal must equal 100%
Total category must equal 100%			
Notes			

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.

Waste Characterization Study Vehicle Selection Form																																										
Site:	<u>34th Street MRRF</u>																																									
Date:	<u>8/28/2008</u>	Goal: <u>15</u> Samples Total																																								
DSS RESIDENTIAL: (Sample IDs RES 1-15) NEED 15 TOTAL																																										
<i>*Must be at least 80% residential waste.</i>																																										
<i>Wards needed today:</i> _____																																										
<p>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.</p>																																										
<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">(1)</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">(4)</td> <td style="text-align: center;">5</td> <td style="text-align: center;">6</td> <td style="text-align: center;">(7)</td> <td style="text-align: center;">8</td> <td style="text-align: center;">9</td> <td style="text-align: center;">(10)</td> </tr> <tr> <td style="text-align: center;">11</td> <td style="text-align: center;">(12)</td> <td style="text-align: center;">13</td> <td style="text-align: center;">14</td> <td style="text-align: center;">(15)</td> <td style="text-align: center;">16</td> <td style="text-align: center;">17</td> <td style="text-align: center;">(18)</td> <td style="text-align: center;">19</td> <td style="text-align: center;">20</td> </tr> <tr> <td style="text-align: center;">(21)</td> <td style="text-align: center;">22</td> <td style="text-align: center;">23</td> <td style="text-align: center;">(24)</td> <td style="text-align: center;">25</td> <td style="text-align: center;">26</td> <td style="text-align: center;">(27)</td> <td style="text-align: center;">28</td> <td style="text-align: center;">29</td> <td style="text-align: center;">(30)</td> </tr> <tr> <td style="text-align: center;">31</td> <td style="text-align: center;">(32)</td> <td style="text-align: center;">33</td> <td style="text-align: center;">34</td> <td style="text-align: center;">(35)</td> <td style="text-align: center;">36</td> <td style="text-align: center;">37</td> <td style="text-align: center;">(38)</td> <td style="text-align: center;">39</td> <td style="text-align: center;">(40)</td> </tr> </table> <p>(expect 40)</p>			(1)	2	3	(4)	5	6	(7)	8	9	(10)	11	(12)	13	14	(15)	16	17	(18)	19	20	(21)	22	23	(24)	25	26	(27)	28	29	(30)	31	(32)	33	34	(35)	36	37	(38)	39	(40)
(1)	2	3	(4)	5	6	(7)	8	9	(10)																																	
11	(12)	13	14	(15)	16	17	(18)	19	20																																	
(21)	22	23	(24)	25	26	(27)	28	29	(30)																																	
31	(32)	33	34	(35)	36	37	(38)	39	(40)																																	

Appendix D

Materials List and Definitions

IRA Proposed Material List

		Material Group	Divertibility	Notes/Examples
P A P E R	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, laser print, letter 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.
	4	Uncoated OCC/Kraft	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.
	5	Boxboard	Recoverable	Includes chipboard not coated with wax, metal, or plastic. Also includes paperboard such as cereal and tissue boxes.
	6	Mixed Paper - Recyclable	Recoverable	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.
	7	Compostable Paper	Compostable	Includes low grade and food contaminated paper which is compostable. Examples include paper towels, paper plates, waxed papers, and tissues.
	8	Other Paper	Non-recoverable	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, sepia, onion skin, foiled lined fast food wrappers, carbon paper, coated OCC, and photographs.
Beverage Containers	9	Milk and Juice cartons/boxes, coated	Recoverable	Includes aseptic packages and polycoated (gable top) cartons.
	10	#1 PET Bottles/Jars	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.
	11	#1 Other PET Containers & Packaging	Potentially Recoverable	Includes PET containers and packaging marked with a #1 and potentially bearing the letters "PETE" or "PET."
	12	#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 hair-care bottles, and other clear empty fluid containers marked with #2 or "HDPE."

IRA Proposed Material List

	Material Group	Divertibility	Notes/Examples
P L A S T I C S	13 #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 #2 Other HDPE Containers & Packaging	Potentially Recoverable	Includes HDPE containers and packaging marked with a #2 and potentially bearing the letters "HDPE."
	15 #6 Expanded Polystyrene Packaging (EPS)	Recoverable	Includes formed or sheet expanded polystyrene (EPS) items marked with a PS 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 #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 spools, 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 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 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 Trash Bags	Non-recoverable	Includes polyethylene film bags that were used to contain garbage such as black or transparent trash bags.
	20 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 A S S	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.
	24	Flat Glass	Potentially Recoverable	Includes clear or tinted glass that is flat, such as glass window panes, doors, table tops, flat automotive 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.
M E T A L S	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.
	29	Ferrous containers (tin 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.
	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 of 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.

IRA Proposed Material List

	Material Group	Divertibility	Notes/Examples
O R G A N I C S	33 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.
	34 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.
	35 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.
	36 Bottom Fines and Dirt	Non-recoverable	Includes fragments that pass through 1/4 inch screen. Examples include mixed residue, sand, soil, clay, and dirt.
	37 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.
	38 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.
	39 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.
	40 Clean Engineered Wood	Recoverable	Includes unpainted, non-treated wood such as sheeted goods like plywood, particleboard, wafer board, oriented strand board, and other residual materials used for sheathing and related construction uses. May contain nails or other trace contaminants.
	41 Wood Pallets	Recoverable	Includes unpainted wood pallets, crates, and packaging made of lumber/engineered wood.
	42 Painted Wood	Non-recoverable	Includes wood that has been painted or stained like handrails or finished furniture. May contain nails or other contaminants.
	43 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).

IRA Proposed Material List

	Material Group	Divertibility	Notes/Examples
C & D	44 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.
	45 Reinforced Concrete	Potentially Recoverable	Includes concrete with a steel internal structure composed of reinforcing bars (re-bar) or metal mesh.
	46 Asphalt Paving	Recoverable	Includes black or brown, tar-like material mixed with aggregate used as a paving material.
	47 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.
	48 Bricks	Potentially Recoverable	Includes bricks and materials made of bricks.
	49 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, gypboard, gyproc, or wallboard.
	50 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.
	51 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 flat/low pitched roofs usually on commercial buildings. Commonly known as built-up roofing.
	52 Plastic C&D materials	Potentially Recoverable	Includes plastics such as piping, siding, drainage, and windows.
	53 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.
54 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.	

IRA Proposed Material List

	Material Group	Divertibility	Notes/Examples
I N O R G A N I C S	55 Televisions	Recoverable	Includes televisions.
	56 Computer Monitors	Recoverable	Includes computer monitors containing a cathode ray tube (CRT), including oscilloscopes. Does not include laptops and LCD monitors.
	57 Computer Equipment/Peripherals	Recoverable	Includes keyboards, printers, modems, etc.
	58 Electronic Equipment	Recoverable	Means large and small electronic goods that have circuitry. Examples include microwaves, stereos, VCRs, DVD players, radios, audio/visual 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.
	59 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.
	60 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.
	61 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.
	62 Other Household Batteries	Non-recoverable	Includes any type of dry cell battery, such as flashlight, small appliance, watch, cell phone, and hearing aid batteries.
	63 Tires	Recoverable	Includes whole tires from automobiles, trucks, motorcycles, bicycles, wagons, and other transport vehicles.
	64 Household Bulky Items	Potentially Recoverable	Includes multi-material furniture items such as couches, chairs, hutches, tables, entertainment centers, fragments of furniture items, and mattresses (fabric coated framed or unframed wire coil bulky item used for sleeping).
	65 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).

IRA Proposed Material List

		Material Group	Divertibility	Notes/Examples
H H W	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 automobile 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.
	72	Sharps & Infectious Waste	Non-recoverable	Includes any prescription medications and sharp objects used for medical procedures such as needles.
	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.
	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 HHW 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 E X T I L E S	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.
	77	Carpet Padding	Potentially Recoverable	Includes plastic, foam, felt, and other materials used under carpet to provide insulation and padding.
	78	Clothing	Potentially Recoverable	Includes items made of thread, yarn, fabric, cloth, clothes, natural and synthetic cloth fibers, and leather clothing goods.
	79	Other Textiles	Non-recoverable	Includes drapes, curtains, bedding, blankets, upholstery, shoes, and other products comprised mostly of textiles and leather.

Appendix E

Health and Safety Plan

Appendix B
MSW Characterization Data

Appendix B
Residential MSW Characterization Data

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

Date	10/30/2008	10/30/2008	10/29/2008	10/29/2008	10/29/2008	11/14/2008	10/2/2008
Sample ID	ORES1	ORES2	NRES1	NRES2	NRES3	SRES4	ARES6
County	FAYETTE	FAYETTE	WAYNE	WAYNE	WAYNE	PIKE	PUTNAM
City	VANDALIA	VANDALIA	FAIRFIELD		FAIRFIELD	PITTSFIELD	STANDARD
RUC Code	6	6	7	7	7	7	8
Vehicle Type	PACKER	PACKER	PACKER	PICK-UP	PICK-UP/ TRAILER	PACKER	PACKER
Paper	81.8	33.5	89.3	55.6	46.3	42.6	84.8
Newsprint	9.4	0.9	5.6	12.3	5.1	5.4	27.8
High Grade Office Paper	0.0	0.0	1.3	0.1	0.9	0.0	0.4
Magazines/Catalogs	2.0	0.3	11.0	6.2	1.6	1.2	11.6
Uncoated OCC/Kraft	54.7	3.8	39.3	5.6	4.5	19.2	14.3
Boxboard	2.8	6.1	8.3	7.3	2.0	2.1	7.7
Mixed Paper - Recyclable	6.7	10.2	11.3	11.2	19.6	2.6	6.9
Compostable Paper	4.6	8.7	11.4	11.1	11.0	9.4	13.4
Other Paper	1.6	3.5	1.1	1.8	1.6	2.7	2.7
Beverage Containers	3.2	0.8	0.2	0.1	0.1	0.0	0.6
Milk and Juice cartons/boxes, coated	3.2	0.8	0.2	0.1	0.1	0.0	0.6
Plastics	23.9	42.6	32.4	30.3	39.1	61.1	61.9
#1 PET Bottles/Jars	1.7	5.9	1.9	3.5	1.7	3.5	5.1
#1 Other PET Containers & Packaging	0.3	0.4	0.7	0.1	0.2	0.5	0.0
#2 HDPE Bottles/Jars - clear	3.8	1.4	0.8	1.3	0.3	0.4	2.8
#2 HDPE Bottles/Jars - color	0.0	1.3	1.1	1.1	0.4	0.6	3.4
#2 Other HDPE Containers & Packaging	0.0	0.8	0.0	0.0	0.6	0.4	0.0
#6 Expanded Polystyrene Packaging (EPS)	3.2	2.4	2.6	5.8	2.8	0.6	1.4
#3-#7 Other - all	2.9	2.3	2.0	1.3	2.2	1.9	4.8
Other Rigid Plastic Products	3.2	5.6	5.0	6.4	10.7	3.4	16.1
Grocery & Merchandise Bags	0.7	3.9	3.0	1.9	0.9	5.1	2.6
Trash Bags	4.4	7.6	3.3	3.9	5.4	0.0	7.4
Commercial & Industrial Film	0.0	0.0	0.0	0.0	2.9	0.8	0.0
Other Film	3.1	6.5	12.0	4.7	2.3	3.0	15.2
Remainder/ Composite Plastic	0.6	4.5	0.0	0.3	8.7	40.9	3.1
Glass	2.5	1.6	3.0	17.0	7.4	5.8	16.2
Recyclable Glass Bottles and Jars	1.2	1.5	3.0	16.9	5.9	5.8	16.2
Flat Glass	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Other Glass	1.3	0.0	0.0	0.1	1.5	0.0	0.0
Metals	5.6	9.6	11.2	18.6	3.2	38.1	16.2
Aluminum Beverage Containers	0.6	1.8	0.7	1.0	0.3	0.8	3.8
Other Aluminum	0.3	0.4	0.1	1.4	1.8	5.4	0.7
HVAC Ducting	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ferrous containers (tin cans)	3.1	3.6	6.9	9.7	1.1	4.1	7.3
Other Ferrous	0.5	3.8	0.0	6.5	0.0	10.5	3.7
Other Non-Ferrous	0.1	0.0	0.0	0.0	0.0	0.0	0.7
Other Metal	1.0	0.0	3.5	0.0	0.0	17.3	0.0
Organics	77.7	76.6	32.8	85.0	38.1	56.3	41.7
Yard Waste - Compostable	0.6	0.0	0.0	0.0	8.3	0.0	0.0
Yard Waste - Woody	0.0	0.0	0.0	0.0	0.0	1.1	0.0
Food Scraps	59.2	51.6	20.7	57.7	6.5	36.0	24.6
Bottom Fines and Dirt	0.0	0.0	0.0	3.1	0.0	7.7	3.0
Diapers	4.0	17.2	7.9	18.9	0.7	1.9	12.9
Other Organic	13.9	7.8	4.2	5.3	22.6	9.6	1.2
C&D	0.6	2.3	31.9	0.0	55.5	58.4	15.2
Clean Dimensional Lumber	0.0	0.0	0.0	0.0	0.0	5.0	0.0
Clean Engineered Wood	0.0	0.0	0.0	0.0	0.0	12.3	0.0
Wood Pallets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Painted Wood	0.2	2.3	5.6	0.0	24.7	30.7	7.4
Treated Wood	0.0	0.0	0.0	0.0	30.0	0.0	0.0
Concrete	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reinforced Concrete	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Asphalt Paving	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rock & Other Aggregates	0.0	0.0	26.3	0.0	0.0	0.0	0.0
Bricks	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gypsum Board	0.0	0.0	0.0	0.0	0.0	10.4	7.8
Composition Shingles	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Roofing	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plastic C&D materials	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ceramics/Porcelain	0.4	0.0	0.0	0.0	0.8	0.0	0.0
Other C&D	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Inorganics	0.0	7.9	0.0	3.2	0.0	0.3	2.6
Televisions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Computer Monitors	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Computer Equipment/Peripherals	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electronic Equipment	0.0	7.2	0.0	3.1	0.0	0.0	2.2
White Goods - refrigerated	0.0	0.0	0.0	0.0	0.0	0.0	0.0
White Goods - not refrigerated	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lead-acid Batteries	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Household Batteries	0.0	0.7	0.0	0.1	0.0	0.3	0.3
Tires	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household Bulky Items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fluorescent Lights/Ballasts	0.0	0.0	0.0	0.0	0.0	0.0	0.1
HHW	0.0	0.0	0.0	7.4	11.9	0.0	0.0
Latex Paint	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oil Paint	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plant/Organism/Pest Control/Growth	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Used Oil/Filters	0.0	0.0	0.0	3.9	0.0	0.0	0.0
Other Automotive Fluids	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mercury-Containing Items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sharps & Infectious Waste	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ash, Sludge, & Other Industrial Processed Wastes	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sewage Solids	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other HHW	0.0	0.0	0.0	3.5	11.9	0.0	0.0
Textiles	5.4	27.6	23.7	3.3	11.7	7.4	16.2
Carpet	0.0	26.8	0.0	0.0	2.0	0.0	0.0
Carpet Padding	0.0	0.0	10.1	0.0	0.0	0.0	0.0
Clothing	1.0	0.0	7.5	0.0	3.4	2.6	4.6
Other Textiles	4.4	0.8	6.1	3.3	6.3	4.8	11.6
Total Weight	200.7	202.5	224.5	220.5	213.3	270.0	255.4

Appendix B
ICI MSW Characterization Data

Appendix B
C&D MSW Characterization Data

Appendix C
Generation Results

Appendix C
Regional Generation Results

Region 1 Municipal Solid Waste (MSW) Generation

	Generation (lb/c/yr)	Total Generation (tons)		Generation (lb/c/yr)	Total Generation (tons)
Paper	722.1	304,760	Metal		
Newsprint	87.2	36,810	Other Ferrous	55.3	23,320
High Grade Office Paper	40.3	17,000	Other Non-Ferrous	5.2	2,180
Magazines/Catalogs	69.4	29,300	Other Metal	21.5	9,070
Uncoated OCC/Kraft	317.3	133,920			
Boxboard	40.5	17,110	Organics	511.9	216,060
Mixed Paper - Recyclable	71.2	30,070	Yard Waste - Compostable	73.3	30,940
Compostable Paper	73.9	31,180	Yard Waste - Woody	67.3	28,400
Other Paper	22.2	9,370	Food Scraps	244.0	102,980
			Bottom Fines & Dirt	20.0	8,460
Beverage Containers	5.4	2,260	Diapers	46.7	19,730
Milk & Juice Cartons/Boxes - Coated	5.4	2,260	Other Organic	60.5	25,550
Plastic	316.8	133,720	Inorganics	136.4	57,610
#1 PET Bottles/Jars	25.6	10,820	Televisions	6.5	2,740
#1 Other PET Containers	2.2	910	Computer Monitors	4.6	1,940
#2 HDPE Bottles/Jars - Clear	10.0	4,240	Computer Equipment/Peripherals	5.2	2,210
#2 HDPE Bottles/Jars - Color	14.6	6,160	Electronic Equipment	24.2	10,220
#2 Other HDPE Containers	2.1	890	White Goods - Refrigerated	8.7	3,660
#6 Exp. Polystyrene Packaging	17.4	7,360	White Goods - Not refrigerated	19.0	8,000
#3-#7 Other - All	17.6	7,420	Lead-acid Batteries	16.0	6,750
Other Rigid Plastic Products	91.2	38,500	Other Household Batteries	1.1	450
Grocery & Merchandise Bags	11.3	4,750	Tires	29.0	12,230
Trash Bags	25.8	10,900	Household Bulky Items	22.2	9,390
Commercial & Industrial Film	30.2	12,750	Fluorescent Lights/Ballasts	<0.1	20
Other Film	30.3	12,770			
Other Plastic	38.5	16,250	Textiles	155.0	65,420
			Carpet	38.8	16,360
Glass	86.2	36,380	Carpet Padding	5.7	2,400
Recyclable Glass Bottles & Jars	80.9	34,160	Clothing	46.5	19,620
Flat Glass	3.8	1,600	Other Textiles	64.1	27,040
Other Glass	1.5	620			
			Household Hazardous Waste	28.7	12,100
Metal	138.2	58,310			
Aluminum Beverage Containers	15.6	6,600	Construction and Demolition Debris (C&D)	654.3	276,150
Other Aluminum	13.0	5,470			
HVAC Ducting	0.7	290			
Ferrous Containers (Tin Cans)	27.0	11,380	Total MSW (tons)		1,162,770
			Total MSW (pounds/person/day)		7.55

2007 population 844,149
Boone, Bureau, Carroll, DeKalb, Jo Daviess, LaSalle, Lee, Ogle, Putnam, Stephenson, Whiteside, Winnebago Counties.
Source: County MSW Generation Appendix Tables (2007 data)

Region 2 Municipal Solid Waste (MSW) Generation

	Generation (lb/c/yr)	Total Generation (tons)		Generation (lb/c/yr)	Total Generation (tons)
Paper	886.2	3,841,550	Metal		
Newsprint	158.8	688,190	Other Ferrous	55.2	239,430
High Grade Office Paper	48.2	208,910	Other Non-Ferrous	5.1	22,220
Magazines/Catalogs	64.6	279,890	Other Metal	21.5	93,160
Uncoated OCC/Kraft	406.8	1,763,460			
Boxboard	40.6	175,870	Organics	568.4	2,463,980
Mixed Paper - Recyclable	71.3	308,870	Yard Waste - Compostable	73.3	317,880
Compostable Paper	73.9	320,280	Yard Waste - Woody	67.3	291,760
Other Paper	22.2	96,080	Food Scraps	300.5	1,302,420
			Bottom Fines & Dirt	20.0	86,830
Beverage Containers	5.4	23,240	Diapers	46.8	202,740
Milk & Juice Cartons/Boxes - Coated	5.4	23,240	Other Organic	60.5	262,350
Plastic	339.0	1,469,640	Inorganics	136.6	592,120
#1 PET Bottles/Jars	25.6	111,060	Televisions	6.5	28,260
#1 Other PET Containers	2.2	9,340	Computer Monitors	4.6	19,890
#2 HDPE Bottles/Jars - Clear	10.0	43,480	Computer Equipment/Peripherals	5.3	22,760
#2 HDPE Bottles/Jars - Color	14.6	63,180	Electronic Equipment	24.2	105,100
#2 Other HDPE Containers	2.0	8,830	White Goods - Refrigerated	8.6	37,360
#6 Exp. Polystyrene Packaging	20.1	87,320	White Goods - Not refrigerated	19.0	82,260
#3-#7 Other - All	20.4	88,360	Lead-acid Batteries	16.0	69,370
Other Rigid Plastic Products	91.2	395,390	Other Household Batteries	1.1	4,590
Grocery & Merchandise Bags	13.6	59,110	Tires	29.0	125,630
Trash Bags	25.8	112,010	Household Bulky Items	22.2	96,410
Commercial & Industrial Film	36.6	158,580	Fluorescent Lights/Ballasts	0.1	490
Other Film	30.3	131,190			
Other Plastic	46.6	201,790	Textiles	178.5	773,610
			Carpet	38.7	167,930
Glass	86.2	373,860	Carpet Padding	5.7	24,730
Recyclable Glass Bottles & Jars	80.9	350,770	Clothing	56.3	244,210
Flat Glass	3.8	16,540	Other Textiles	77.7	336,740
Other Glass	1.5	6,550			
			Household Hazardous Waste	28.8	124,870
Metal	138.2	598,950			
Aluminum Beverage Containers	15.7	67,980	Construction and Demolition Debris (C&D)	665.4	2,884,350
Other Aluminum	13.0	56,320			
HVAC Ducting	0.7	2,840			
Ferrous Containers (Tin Cans)	27.0	117,000	Total MSW (tons)		13,146,170
			Total MSW (pounds/person/day)		8.31

2007 population 8,669,757
 Cook, DuPage, Grundy, Kane, Kankakee, Kendall, Lake, McHenry, Will Counties.
 Source: County MSW Generation Appendix Tables (2007 data)

Region 3 Municipal Solid Waste (MSW) Generation

	Generation (lb/c/yr)	Total Generation (tons)		Generation (lb/c/yr)	Total Generation (tons)
Paper	760.8	285,000	Metal		
Newsprint	91.9	34,440	Other Ferrous	55.2	20,680
High Grade Office Paper	43.7	16,380	Other Non-Ferrous	5.1	1,920
Magazines/Catalogs	69.1	25,870	Other Metal	21.5	8,060
Uncoated OCC/Kraft	348.3	130,490			
Boxboard	40.6	15,190	Organics	538.3	201,650
Mixed Paper - Recyclable	71.2	26,690	Yard Waste - Compostable	73.3	27,460
Compostable Paper	73.8	27,660	Yard Waste - Woody	67.3	25,220
Other Paper	22.1	8,280	Food Scraps	270.3	101,250
			Bottom Fines & Dirt	20.0	7,510
Beverage Containers	5.4	2,010	Diapers	46.8	17,520
Milk & Juice Cartons/Boxes - Coated	5.4	2,010	Other Organic	60.6	22,690
Plastic	312.6	117,110	Inorganics	136.4	51,140
#1 PET Bottles/Jars	25.6	9,590	Televisions	6.5	2,430
#1 Other PET Containers	2.2	810	Computer Monitors	4.6	1,710
#2 HDPE Bottles/Jars - Clear	10.0	3,750	Computer Equipment/Peripherals	5.3	1,970
#2 HDPE Bottles/Jars - Color	14.6	5,470	Electronic Equipment	24.3	9,100
#2 Other HDPE Containers	2.1	770	White Goods - Refrigerated	8.6	3,240
#6 Exp. Polystyrene Packaging	17.0	6,350	White Goods - Not refrigerated	19.0	7,110
#3-#7 Other - All	17.2	6,450	Lead-acid Batteries	16.0	5,980
Other Rigid Plastic Products	91.2	34,160	Other Household Batteries	1.1	410
Grocery & Merchandise Bags	10.8	4,060	Tires	28.9	10,840
Trash Bags	25.8	9,660	Household Bulky Items	22.2	8,320
Commercial & Industrial Film	29.0	10,860	Fluorescent Lights/Ballasts	<0.1	30
Other Film	30.2	11,320			
Other Plastic	37.0	13,860	Textiles	150.9	56,540
			Carpet	38.8	14,540
Glass	86.1	32,270	Carpet Padding	5.7	2,120
Recyclable Glass Bottles & Jars	80.9	30,300	Clothing	44.7	16,760
Flat Glass	3.8	1,410	Other Textiles	61.7	23,120
Other Glass	1.5	560			
			Household Hazardous Waste	28.7	10,750
Metal	138.2	51,770			
Aluminum Beverage Containers	15.8	5,900	Construction and Demolition Debris (C&D)	652.5	244,430
Other Aluminum	13.0	4,870			
HVAC Ducting	0.7	250			
Ferrous Containers (Tin Cans)	26.9	10,090	Total MSW (tons)		1,052,670
			Total MSW (pounds/person/day)		7.70

2007 population 749,197

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

Source: County MSW Generation Appendix Tables (2007 data)

Region 4 Municipal Solid Waste (MSW) Generation

	Generation (lb/c/yr)	Total Generation (tons)		Generation (lb/c/yr)	Total Generation (tons)
Paper	727.8	319,130	Metal		
Newsprint	88.7	38,890	Other Ferrous	55.2	24,220
High Grade Office Paper	40.3	17,650	Other Non-Ferrous	5.2	2,260
Magazines/Catalogs	68.2	29,890	Other Metal	21.5	9,410
Uncoated OCC/Kraft	322.8	141,550			
Boxboard	40.6	17,780	Organics	527.9	231,470
Mixed Paper - Recyclable	71.3	31,250	Yard Waste - Compostable	73.3	32,160
Compostable Paper	73.8	32,380	Yard Waste - Woody	67.3	29,520
Other Paper	22.2	9,740	Food Scraps	259.9	113,970
			Bottom Fines & Dirt	20.0	8,790
Beverage Containers	5.4	2,350	Diapers	46.7	20,490
Milk & Juice Cartons/Boxes - Coated	5.4	2,350	Other Organic	60.5	26,540
Plastic	310.4	136,100	Inorganics	136.5	59,860
#1 PET Bottles/Jars	25.6	11,220	Televisions	6.5	2,830
#1 Other PET Containers	2.2	950	Computer Monitors	4.6	2,010
#2 HDPE Bottles/Jars - Clear	10.0	4,370	Computer Equipment/Peripherals	5.2	2,300
#2 HDPE Bottles/Jars - Color	14.6	6,380	Electronic Equipment	24.2	10,620
#2 Other HDPE Containers	2.0	890	White Goods - Refrigerated	8.6	3,760
#6 Exp. Polystyrene Packaging	16.6	7,290	White Goods - Not refrigerated	19.0	8,330
#3-#7 Other - All	16.8	7,380	Lead-acid Batteries	16.0	7,010
Other Rigid Plastic Products	91.2	39,970	Other Household Batteries	1.1	490
Grocery & Merchandise Bags	10.6	4,640	Tires	29.0	12,720
Trash Bags	25.8	11,310	Household Bulky Items	22.3	9,770
Commercial & Industrial Film	28.5	12,500	Fluorescent Lights/Ballasts	<0.1	20
Other Film	30.3	13,300			
Other Plastic	36.3	15,900	Textiles	148.8	65,240
			Carpet	38.7	16,990
Glass	86.2	37,810	Carpet Padding	5.7	2,480
Recyclable Glass Bottles & Jars	80.9	35,490	Clothing	43.9	19,250
Flat Glass	3.8	1,680	Other Textiles	60.5	26,520
Other Glass	1.5	640			
			Household Hazardous Waste	28.6	12,550
Metal	138.3	60,620			
Aluminum Beverage Containers	15.7	6,880	Construction and Demolition Debris (C&D)	651.4	285,600
Other Aluminum	13.0	5,710			
HVAC Ducting	0.7	300			
Ferrous Containers (Tin Cans)	27.0	11,840	Total MSW (tons)		1,210,730
			Total MSW (pounds/person/day)		7.57

2007 population 876,924

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

Source: County MSW Generation Appendix Tables (2007 data)

Region 5 Municipal Solid Waste (MSW) Generation

	Generation (lb/c/yr)	Total Generation (tons)		Generation (lb/c/yr)	Total Generation (tons)
Paper	726.9	202,560	Metal		
Newsprint	78.4	21,850	Other Ferrous	55.1	15,360
High Grade Office Paper	38.4	10,700	Other Non-Ferrous	5.2	1,440
Magazines/Catalogs	69.7	19,420	Other Metal	21.5	6,000
Uncoated OCC/Kraft	332.5	92,660			
Boxboard	40.6	11,310	Organics	521.7	145,390
Mixed Paper - Recyclable	71.3	19,860	Yard Waste - Compostable	73.4	20,440
Compostable Paper	73.9	20,590	Yard Waste - Woody	67.3	18,760
Other Paper	22.1	6,170	Food Scraps	253.7	70,710
			Bottom Fines & Dirt	20.0	5,570
Beverage Containers	5.3	1,480	Diapers	46.7	13,010
Milk & Juice Cartons/Boxes - Coated	5.3	1,480	Other Organic	60.6	16,900
Plastic	311.2	86,730	Inorganics	136.4	38,020
#1 PET Bottles/Jars	25.6	7,140	Televisions	6.5	1,810
#1 Other PET Containers	2.2	600	Computer Monitors	4.6	1,270
#2 HDPE Bottles/Jars - Clear	10.0	2,800	Computer Equipment/Peripherals	5.3	1,470
#2 HDPE Bottles/Jars - Color	14.6	4,060	Electronic Equipment	24.2	6,730
#2 Other HDPE Containers	2.1	590	White Goods - Refrigerated	8.6	2,410
#6 Exp. Polystyrene Packaging	16.7	4,650	White Goods - Not refrigerated	18.9	5,280
#3-#7 Other - All	16.8	4,680	Lead-acid Batteries	16.0	4,460
Other Rigid Plastic Products	91.3	25,430	Other Household Batteries	1.1	310
Grocery & Merchandise Bags	10.7	2,990	Tires	29.0	8,070
Trash Bags	25.9	7,230	Household Bulky Items	22.2	6,200
Commercial & Industrial Film	28.6	7,970	Fluorescent Lights/Ballasts	<0.1	10
Other Film	30.3	8,430			
Other Plastic	36.5	10,160	Textiles	149.2	41,570
			Carpet	38.8	10,810
Glass	86.3	24,040	Carpet Padding	5.6	1,560
Recyclable Glass Bottles & Jars	80.9	22,550	Clothing	44.0	12,270
Flat Glass	3.8	1,070	Other Textiles	60.8	16,930
Other Glass	1.5	420			
			Household Hazardous Waste	28.6	7,960
Metal	138.0	38,460			
Aluminum Beverage Containers	15.7	4,370	Construction and Demolition Debris (C&D)	651.4	181,530
Other Aluminum	13.0	3,610			
HVAC Ducting	0.6	160			
Ferrous Containers (Tin Cans)	27.0	7,520	Total MSW (tons)		767,740
			Total MSW (pounds/person/day)		7.55

2007 population 557,324

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

Source: County MSW Generation Appendix Tables (2007 data)

Region 6 Municipal Solid Waste (MSW) Generation

	Generation (lb/c/yr)	Total Generation (tons)		Generation (lb/c/yr)	Total Generation (tons)
Paper	718.6	260,200	Metal		
Newsprint	92.1	33,330	Other Ferrous	55.2	19,990
High Grade Office Paper	37.6	13,610	Other Non-Ferrous	5.1	1,860
Magazines/Catalogs	67.9	24,570	Other Metal	21.5	7,780
Uncoated OCC/Kraft	313.3	113,430			
Boxboard	40.6	14,690	Organics	534.9	193,680
Mixed Paper - Recyclable	71.2	25,790	Yard Waste - Compostable	73.3	26,550
Compostable Paper	73.9	26,760	Yard Waste - Woody	67.3	24,370
Other Paper	22.1	8,020	Food Scraps	266.9	96,630
			Bottom Fines & Dirt	20.1	7,270
Beverage Containers	5.4	1,960	Diapers	46.8	16,940
Milk & Juice Cartons/Boxes - Coated	5.4	1,960	Other Organic	60.5	21,920
Plastic	315.7	114,310	Inorganics	136.5	49,450
#1 PET Bottles/Jars	25.6	9,270	Televisions	6.5	2,370
#1 Other PET Containers	2.2	780	Computer Monitors	4.6	1,650
#2 HDPE Bottles/Jars - Clear	10.0	3,620	Computer Equipment/Peripherals	5.3	1,920
#2 HDPE Bottles/Jars - Color	14.6	5,290	Electronic Equipment	24.2	8,780
#2 Other HDPE Containers	2.0	740	White Goods - Refrigerated	8.6	3,120
#6 Exp. Polystyrene Packaging	17.3	6,280	White Goods - Not refrigerated	19.0	6,880
#3-#7 Other - All	17.5	6,350	Lead-acid Batteries	16.0	5,790
Other Rigid Plastic Products	91.2	33,030	Other Household Batteries	1.1	390
Grocery & Merchandise Bags	11.2	4,040	Tires	28.9	10,480
Trash Bags	25.8	9,350	Household Bulky Items	22.2	8,050
Commercial & Industrial Film	29.9	10,820	Fluorescent Lights/Ballasts	<0.1	20
Other Film	30.2	10,950			
Other Plastic	38.1	13,790	Textiles	154.0	55,750
			Carpet	38.7	14,030
Glass	86.2	31,220	Carpet Padding	5.7	2,080
Recyclable Glass Bottles & Jars	80.9	29,300	Clothing	46.0	16,660
Flat Glass	3.8	1,380	Other Textiles	63.5	22,980
Other Glass	1.5	540			
			Household Hazardous Waste	28.8	10,410
Metal	138.2	50,050			
Aluminum Beverage Containers	15.7	5,690	Construction and Demolition Debris (C&D)	653.9	236,750
Other Aluminum	13.0	4,720			
HVAC Ducting	0.7	240			
Ferrous Containers (Tin Cans)	27.0	9,770	Total MSW (tons)		1,003,780
			Total MSW (pounds/person/day)		7.60

2007 population 724,170
 Bond, Clinton, Fayette, Madison, Marion, Monroe, Randolph, St. Clair, Washington Counties.
 Source: County MSW Generation Appendix Tables (2007 data)

Region 7 Municipal Solid Waste (MSW) Generation

	Generation (lb/c/yr)	Total Generation (tons)		Generation (lb/c/yr)	Total Generation (tons)
Paper	654.4	141,030	Metal		
Newsprint	67.8	14,620	Other Ferrous	55.2	11,890
High Grade Office Paper	30.9	6,660	Other Non-Ferrous	5.2	1,120
Magazines/Catalogs	66.4	14,310	Other Metal	21.4	4,620
Uncoated OCC/Kraft	281.7	60,700			
Boxboard	40.6	8,750	Organics	500.6	107,890
Mixed Paper - Recyclable	71.2	15,350	Yard Waste - Compostable	73.4	15,810
Compostable Paper	73.7	15,880	Yard Waste - Woody	67.2	14,490
Other Paper	22.1	4,760	Food Scraps	232.7	50,140
			Bottom Fines & Dirt	20.1	4,330
Beverage Containers	5.4	1,160	Diapers	46.7	10,060
Milk & Juice Cartons/Boxes - Coated	5.4	1,160	Other Organic	60.6	13,060
Plastic	290.3	62,560	Inorganics	136.3	29,370
#1 PET Bottles/Jars	25.6	5,520	Televisions	6.4	1,390
#1 Other PET Containers	2.1	460	Computer Monitors	4.5	980
#2 HDPE Bottles/Jars - Clear	9.9	2,140	Computer Equipment/Peripherals	5.2	1,130
#2 HDPE Bottles/Jars - Color	14.5	3,130	Electronic Equipment	24.2	5,220
#2 Other HDPE Containers	2.1	460	White Goods - Refrigerated	8.7	1,880
#6 Exp. Polystyrene Packaging	14.2	3,070	White Goods - Not refrigerated	18.9	4,080
#3-#7 Other - All	14.4	3,110	Lead-acid Batteries	16.0	3,450
Other Rigid Plastic Products	91.2	19,650	Other Household Batteries	1.0	210
Grocery & Merchandise Bags	8.4	1,810	Tires	29.0	6,250
Trash Bags	25.8	5,570	Household Bulky Items	22.2	4,780
Commercial & Industrial Film	22.7	4,900	Fluorescent Lights/Ballasts		<1
Other Film	30.3	6,540			
Other Plastic	28.8	6,200	Textiles	127.7	27,520
			Carpet	38.7	8,330
Glass	86.2	18,570	Carpet Padding	5.5	1,190
Recyclable Glass Bottles & Jars	81.0	17,450	Clothing	35.1	7,560
Flat Glass	3.8	820	Other Textiles	48.4	10,440
Other Glass	1.4	300			
			Household Hazardous Waste	28.5	6,150
Metal	137.9	29,730			
Aluminum Beverage Containers	15.7	3,380	Construction and Demolition Debris (C&D)	641.5	138,250
Other Aluminum	13.0	2,800			
HVAC Ducting	0.6	120			
Ferrous Containers (Tin Cans)	26.9	5,800	Total MSW (tons)		562,230
			Total MSW (pounds/person/day)		7.15

2007 population 431,027

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 (2007 data)

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)
Paper	861.2	28,870	Metal		
Newsprint	71.0	2,380	Other Ferrous	55.2	1,850
High Grade Office Paper	50.7	1,700	Other Non-Ferrous	5.1	170
Magazines/Catalogs	69.8	2,340	Other Metal	21.5	720
Uncoated OCC/Kraft	461.8	15,480			
Boxboard	40.6	1,360	Organics	521.7	17,490
Mixed Paper - Recyclable	71.3	2,390	Yard Waste - Compostable	73.4	2,460
Compostable Paper	74.0	2,480	Yard Waste - Woody	67.4	2,260
Other Paper	22.1	740	Food Scraps	253.6	8,500
			Bottom Fines & Dirt	20.0	670
Beverage Containers	5.4	180	Diapers	46.8	1,570
Milk & Juice Cartons/Boxes - Coated	5.4	180	Other Organic	60.6	2,030
Plastic	305.2	10,230	Inorganics	136.9	4,590
#1 PET Bottles/Jars	25.7	860	Televisions	6.6	220
#1 Other PET Containers	2.1	70	Computer Monitors	4.5	150
#2 HDPE Bottles/Jars - Clear	10.1	340	Computer Equipment/Peripherals	5.4	180
#2 HDPE Bottles/Jars - Color	14.6	490	Electronic Equipment	24.2	810
#2 Other HDPE Containers	2.1	70	White Goods - Refrigerated	8.7	290
#6 Exp. Polystyrene Packaging	16.1	540	White Goods - Not refrigerated	19.1	640
#3-#7 Other - All	16.1	540	Lead-acid Batteries	16.1	540
Other Rigid Plastic Products	91.3	3,060	Other Household Batteries	1.2	40
Grocery & Merchandise Bags	10.1	340	Tires	28.9	970
Trash Bags	26.0	870	Household Bulky Items	22.4	750
Commercial & Industrial Film	26.8	900	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.1	1,010			
Other Plastic	34.0	1,140	Textiles	142.6	4,780
			Carpet	38.8	1,300
Glass	86.5	2,900	Carpet Padding	5.7	190
Recyclable Glass Bottles & Jars	81.1	2,720	Clothing	41.2	1,380
Flat Glass	3.9	130	Other Textiles	57.0	1,910
Other Glass	1.5	50			
			Household Hazardous Waste	28.9	970
Metal	138.1	4,630			
Aluminum Beverage Containers	15.8	530	Construction and Demolition Debris (C&D)	648.5	21,740
Other Aluminum	13.1	440			
HVAC Ducting	0.6	20			
Ferrous Containers (Tin Cans)	26.8	900	Total MSW (tons)		96,380
			Total MSW (pounds/person/day)		7.88

2007 population

67,046

County generation based on 2007 data.

Alexander County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	482.4	2,040	Metal		
Newsprint	33.1	140	Other Ferrous	54.4	230
High Grade Office Paper	21.3	90	Other Non-Ferrous	4.7	20
Magazines/Catalogs	63.8	270	Other Metal	21.3	90
Uncoated OCC/Kraft	158.4	670			
Boxboard	40.2	170	Organics	458.7	1,940
Mixed Paper - Recyclable	70.9	300	Yard Waste - Compostable	73.3	310
Compostable Paper	73.3	310	Yard Waste - Woody	66.2	280
Other Paper	21.3	90	Food Scraps	191.5	810
			Bottom Fines & Dirt	18.9	80
Beverage Containers	4.7	20	Diapers	47.3	200
Milk & Juice Cartons/Boxes - Coated	4.7	20	Other Organic	61.5	260
Plastic	276.7	1,170	Inorganics	134.8	570
#1 PET Bottles/Jars	26.0	110	Televisions	7.1	30
#1 Other PET Containers	2.4	10	Computer Monitors	4.7	20
#2 HDPE Bottles/Jars - Clear	9.5	40	Computer Equipment/Peripherals	4.7	20
#2 HDPE Bottles/Jars - Color	14.2	60	Electronic Equipment	23.6	100
#2 Other HDPE Containers	2.4	10	White Goods - Refrigerated	9.5	40
#6 Exp. Polystyrene Packaging	11.8	50	White Goods - Not refrigerated	18.9	80
#3-#7 Other - All	11.8	50	Lead-acid Batteries	16.6	70
Other Rigid Plastic Products	92.2	390	Other Household Batteries	0.0	0
Grocery & Merchandise Bags	7.1	30	Tires	28.4	120
Trash Bags	26.0	110	Household Bulky Items	21.3	90
Commercial & Industrial Film	18.9	80	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.7	130			
Other Plastic	23.6	100	Textiles	113.5	480
			Carpet	40.2	170
Glass	87.5	370	Carpet Padding	4.7	20
Recyclable Glass Bottles & Jars	80.4	340	Clothing	28.4	120
Flat Glass	4.7	20	Other Textiles	40.2	170
Other Glass	2.4	10			
			Household Hazardous Waste	30.7	130
Metal	134.8	570			
Aluminum Beverage Containers	16.6	70	Construction and Demolition Debris (C&D)	633.7	2,680
Other Aluminum	11.8	50			
HVAC Ducting	0.0	0	Total MSW (tons)		9,970
Ferrous Containers (Tin Cans)	26.0	110	Total MSW (pounds/person/day)		6.46

2007 population

8,458

County generation based on 2007 data.

Bond County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	587.7	5,320	Metal		
Newsprint	48.6	440	Other Ferrous	55.2	500
High Grade Office Paper	26.5	240	Other Non-Ferrous	5.5	50
Magazines/Catalogs	66.3	600	Other Metal	21.0	190
Uncoated OCC/Kraft	238.6	2,160			
Boxboard	40.9	370	Organics	487.2	4,410
Mixed Paper - Recyclable	70.7	640	Yard Waste - Compostable	72.9	660
Compostable Paper	74.0	670	Yard Waste - Woody	67.4	610
Other Paper	22.1	200	Food Scraps	219.9	1,990
			Bottom Fines & Dirt	19.9	180
Beverage Containers	5.5	50	Diapers	46.4	420
Milk & Juice Cartons/Boxes - Coated	5.5	50	Other Organic	60.8	550
Plastic	309.3	2,800	Inorganics	135.9	1,230
#1 PET Bottles/Jars	25.4	230	Televisions	6.6	60
#1 Other PET Containers	2.2	20	Computer Monitors	4.4	40
#2 HDPE Bottles/Jars - Clear	9.9	90	Computer Equipment/Peripherals	5.5	50
#2 HDPE Bottles/Jars - Color	14.4	130	Electronic Equipment	24.3	220
#2 Other HDPE Containers	2.2	20	White Goods - Refrigerated	8.8	80
#6 Exp. Polystyrene Packaging	17.7	160	White Goods - Not refrigerated	18.8	170
#3-#7 Other - All	17.7	160	Lead-acid Batteries	15.5	140
Other Rigid Plastic Products	91.7	830	Other Household Batteries	1.1	10
Grocery & Merchandise Bags	9.9	90	Tires	28.7	260
Trash Bags	25.4	230	Household Bulky Items	22.1	200
Commercial & Industrial Film	27.6	250	Fluorescent Lights/Ballasts	<0.1	0
Other Film	29.8	270			
Other Plastic	35.4	320	Textiles	145.8	1,320
			Carpet	38.7	350
Glass	85.1	770	Carpet Padding	5.5	50
Recyclable Glass Bottles & Jars	80.6	730	Clothing	43.1	390
Flat Glass	3.3	30	Other Textiles	58.6	530
Other Glass	1.1	10			
			Household Hazardous Waste	28.7	260
Metal	138.1	1,250			
Aluminum Beverage Containers	15.5	140	Construction and Demolition Debris (C&D)	650.7	5,890
Other Aluminum	13.3	120			
HVAC Ducting	1.1	10	Total MSW (tons)		23,300
Ferrous Containers (Tin Cans)	26.5	240	Total MSW (pounds/person/day)		7.05

2007 population 18,103

County generation based on 2007 data.

Boone County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	621.3	16,630	Metal		
Newsprint	81.8	2,190	Other Ferrous	55.3	1,480
High Grade Office Paper	43.3	1,160	Other Non-Ferrous	5.2	140
Magazines/Catalogs	65.0	1,740	Other Metal	21.7	580
Uncoated OCC/Kraft	223.0	5,970			
Boxboard	40.7	1,090	Organics	463.3	12,400
Mixed Paper - Recyclable	71.4	1,910	Yard Waste - Compostable	73.2	1,960
Compostable Paper	74.0	1,980	Yard Waste - Woody	67.3	1,800
Other Paper	22.0	590	Food Scraps	195.4	5,230
			Bottom Fines & Dirt	20.2	540
Beverage Containers	5.2	140	Diapers	46.7	1,250
Milk & Juice Cartons/Boxes - Coated	5.2	140	Other Organic	60.5	1,620
Plastic	337.7	9,040	Inorganics	136.7	3,660
#1 PET Bottles/Jars	25.8	690	Televisions	6.4	170
#1 Other PET Containers	2.2	60	Computer Monitors	4.5	120
#2 HDPE Bottles/Jars - Clear	10.1	270	Computer Equipment/Peripherals	5.2	140
#2 HDPE Bottles/Jars - Color	14.6	390	Electronic Equipment	24.3	650
#2 Other HDPE Containers	1.9	50	White Goods - Refrigerated	8.6	230
#6 Exp. Polystyrene Packaging	20.2	540	White Goods - Not refrigerated	19.1	510
#3-#7 Other - All	20.5	550	Lead-acid Batteries	16.1	430
Other Rigid Plastic Products	91.2	2,440	Other Household Batteries	1.1	30
Grocery & Merchandise Bags	13.1	350	Tires	29.1	780
Trash Bags	25.8	690	Household Bulky Items	22.4	600
Commercial & Industrial Film	36.2	970	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.3	810			
Other Plastic	46.0	1,230	Textiles	176.0	4,710
			Carpet	38.9	1,040
Glass	86.3	2,310	Carpet Padding	5.6	150
Recyclable Glass Bottles & Jars	81.1	2,170	Clothing	55.3	1,480
Flat Glass	3.7	100	Other Textiles	76.2	2,040
Other Glass	1.5	40			
			Household Hazardous Waste	28.8	770
Metal	138.6	3,710	Construction and Demolition Debris (C&D)	663.9	17,770
Aluminum Beverage Containers	15.7	420			
Other Aluminum	13.1	350			
HVAC Ducting	0.7	20			
Ferrous Containers (Tin Cans)	26.9	720	Total MSW (tons)		71,140
			Total MSW (pounds/person/day)		7.28

2007 population 53,531

County generation based on 2007 data.

Brown County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	697.5	2,290	Metal		
Newsprint	45.7	150	Other Ferrous	54.8	180
High Grade Office Paper	39.6	130	Other Non-Ferrous	6.1	20
Magazines/Catalogs	64.0	210	Other Metal	21.3	70
Uncoated OCC/Kraft	344.2	1,130			
Boxboard	39.6	130	Organics	453.9	1,490
Mixed Paper - Recyclable	70.1	230	Yard Waste - Compostable	73.1	240
Compostable Paper	73.1	240	Yard Waste - Woody	67.0	220
Other Paper	21.3	70	Food Scraps	185.8	610
			Bottom Fines & Dirt	21.3	70
Beverage Containers	6.1	20	Diapers	45.7	150
Milk & Juice Cartons/Boxes - Coated	6.1	20	Other Organic	60.9	200
Plastic	307.6	1,010	Inorganics	137.1	450
#1 PET Bottles/Jars	24.4	80	Televisions	6.1	20
#1 Other PET Containers	3.0	10	Computer Monitors	6.1	20
#2 HDPE Bottles/Jars - Clear	9.1	30	Computer Equipment/Peripherals	6.1	20
#2 HDPE Bottles/Jars - Color	15.2	50	Electronic Equipment	24.4	80
#2 Other HDPE Containers	3.0	10	White Goods - Refrigerated	9.1	30
#6 Exp. Polystyrene Packaging	18.3	60	White Goods - Not refrigerated	18.3	60
#3-#7 Other - All	18.3	60	Lead-acid Batteries	15.2	50
Other Rigid Plastic Products	91.4	300	Other Household Batteries	0.0	0
Grocery & Merchandise Bags	9.1	30	Tires	30.5	100
Trash Bags	24.4	80	Household Bulky Items	21.3	70
Commercial & Industrial Film	27.4	90	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.5	100			
Other Plastic	33.5	110	Textiles	143.2	470
			Carpet	36.6	120
Glass	85.3	280	Carpet Padding	6.1	20
Recyclable Glass Bottles & Jars	82.2	270	Clothing	42.6	140
Flat Glass	3.0	10	Other Textiles	57.9	190
Other Glass	0.0	0			
			Household Hazardous Waste	27.4	90
Metal	137.1	450			
Aluminum Beverage Containers	15.2	50	Construction and Demolition Debris (C&D)	651.8	2,140
Other Aluminum	12.2	40			
HVAC Ducting	0.0	0	Total MSW (tons)		8,690
Ferrous Containers (Tin Cans)	27.4	90	Total MSW (pounds/person/day)		7.25

2007 population

6,566

County generation based on 2007 data.

Bureau County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	657.0	11,510	Metal		
Newsprint	61.7	1,080	Other Ferrous	55.4	970
High Grade Office Paper	31.4	550	Other Non-Ferrous	5.1	90
Magazines/Catalogs	70.8	1,240	Other Metal	21.7	380
Uncoated OCC/Kraft	285.4	5,000			
Boxboard	40.5	710	Organics	483.5	8,470
Mixed Paper - Recyclable	71.4	1,250	Yard Waste - Compostable	73.1	1,280
Compostable Paper	73.6	1,290	Yard Waste - Woody	67.4	1,180
Other Paper	22.3	390	Food Scraps	215.8	3,780
			Bottom Fines & Dirt	20.0	350
Beverage Containers	5.1	90	Diapers	46.8	820
Milk & Juice Cartons/Boxes - Coated	5.1	90	Other Organic	60.5	1,060
Plastic	314.0	5,500	Inorganics	135.9	2,380
#1 PET Bottles/Jars	25.7	450	Televisions	6.3	110
#1 Other PET Containers	2.3	40	Computer Monitors	4.6	80
#2 HDPE Bottles/Jars - Clear	10.3	180	Computer Equipment/Peripherals	5.1	90
#2 HDPE Bottles/Jars - Color	14.8	260	Electronic Equipment	24.0	420
#2 Other HDPE Containers	2.3	40	White Goods - Refrigerated	8.6	150
#6 Exp. Polystyrene Packaging	17.1	300	White Goods - Not refrigerated	18.8	330
#3-#7 Other - All	17.1	300	Lead-acid Batteries	16.0	280
Other Rigid Plastic Products	91.3	1,600	Other Household Batteries	1.1	20
Grocery & Merchandise Bags	10.8	190	Tires	29.1	510
Trash Bags	25.7	450	Household Bulky Items	22.3	390
Commercial & Industrial Film	29.1	510	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.3	530			
Other Plastic	37.1	650	Textiles	151.8	2,660
			Carpet	38.8	680
Glass	86.8	1,520	Carpet Padding	5.7	100
Recyclable Glass Bottles & Jars	81.1	1,420	Clothing	45.1	790
Flat Glass	4.0	70	Other Textiles	62.2	1,090
Other Glass	1.7	30			
			Household Hazardous Waste	28.0	490
Metal	138.1	2,420			
Aluminum Beverage Containers	15.4	270	Construction and Demolition Debris (C&D)	654.2	11,460
Other Aluminum	13.1	230			
HVAC Ducting	0.6	10			
Ferrous Containers (Tin Cans)	26.8	470	Total MSW (tons)		46,500
			Total MSW (pounds/person/day)		7.27

2007 population 35,036

County generation based on 2007 data.

Calhoun County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	472.2	1,220	Metal		
Newsprint	50.3	130	Other Ferrous	54.2	140
High Grade Office Paper	19.4	50	Other Non-Ferrous	3.9	10
Magazines/Catalogs	65.8	170	Other Metal	23.2	60
Uncoated OCC/Kraft	131.6	340			
Boxboard	38.7	100	Organics	503.2	1,300
Mixed Paper - Recyclable	69.7	180	Yard Waste - Compostable	73.5	190
Compostable Paper	73.5	190	Yard Waste - Woody	65.8	170
Other Paper	23.2	60	Food Scraps	236.1	610
			Bottom Fines & Dirt	19.4	50
Beverage Containers	3.9	10	Diapers	46.4	120
Milk & Juice Cartons/Boxes - Coated	3.9	10	Other Organic	61.9	160
Plastic	317.4	820	Inorganics	131.6	340
#1 PET Bottles/Jars	27.1	70	Televisions	7.7	20
#1 Other PET Containers	3.9	10	Computer Monitors	3.9	10
#2 HDPE Bottles/Jars - Clear	11.6	30	Computer Equipment/Peripherals	3.9	10
#2 HDPE Bottles/Jars - Color	15.5	40	Electronic Equipment	23.2	60
#2 Other HDPE Containers	3.9	10	White Goods - Refrigerated	7.7	20
#6 Exp. Polystyrene Packaging	15.5	40	White Goods - Not refrigerated	19.4	50
#3-#7 Other - All	15.5	40	Lead-acid Batteries	15.5	40
Other Rigid Plastic Products	92.9	240	Other Household Batteries	0.0	0
Grocery & Merchandise Bags	11.6	30	Tires	27.1	70
Trash Bags	27.1	70	Household Bulky Items	23.2	60
Commercial & Industrial Film	27.1	70	Fluorescent Lights/Ballasts	<0.1	0
Other Film	31.0	80			
Other Plastic	34.8	90	Textiles	143.2	370
			Carpet	38.7	100
Glass	85.2	220	Carpet Padding	3.9	10
Recyclable Glass Bottles & Jars	81.3	210	Clothing	42.6	110
Flat Glass	3.9	10	Other Textiles	58.1	150
Other Glass	0.0	0			
			Household Hazardous Waste	31.0	80
Metal	135.5	350			
Aluminum Beverage Containers	15.5	40	Construction and Demolition Debris (C&D)	646.4	1,670
Other Aluminum	11.6	30			
HVAC Ducting	0.0	0	Total MSW (tons)		6,380
Ferrous Containers (Tin Cans)	27.1	70	Total MSW (pounds/person/day)		6.77

2007 population

5,167

County generation based on 2007 data.

Carroll County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	580.1	4,620	Metal		
Newsprint	71.6	570	Other Ferrous	55.2	440
High Grade Office Paper	22.6	180	Other Non-Ferrous	5.0	40
Magazines/Catalogs	74.1	590	Other Metal	21.3	170
Uncoated OCC/Kraft	203.4	1,620			
Boxboard	40.2	320	Organics	483.4	3,850
Mixed Paper - Recyclable	71.6	570	Yard Waste - Compostable	72.8	580
Compostable Paper	74.1	590	Yard Waste - Woody	67.8	540
Other Paper	22.6	180	Food Scraps	216.0	1,720
			Bottom Fines & Dirt	20.1	160
Beverage Containers	5.0	40	Diapers	46.5	370
Milk & Juice Cartons/Boxes - Coated	5.0	40	Other Organic	60.3	480
Plastic	306.4	2,440	Inorganics	136.9	1,090
#1 PET Bottles/Jars	25.1	200	Televisions	6.3	50
#1 Other PET Containers	2.5	20	Computer Monitors	5.0	40
#2 HDPE Bottles/Jars - Clear	10.0	80	Computer Equipment/Peripherals	5.0	40
#2 HDPE Bottles/Jars - Color	15.1	120	Electronic Equipment	23.9	190
#2 Other HDPE Containers	2.5	20	White Goods - Refrigerated	8.8	70
#6 Exp. Polystyrene Packaging	15.1	120	White Goods - Not refrigerated	18.8	150
#3-#7 Other - All	15.1	120	Lead-acid Batteries	16.3	130
Other Rigid Plastic Products	91.7	730	Other Household Batteries	1.3	10
Grocery & Merchandise Bags	10.0	80	Tires	28.9	230
Trash Bags	26.4	210	Household Bulky Items	22.6	180
Commercial & Industrial Film	27.6	220	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.1	240			
Other Plastic	35.2	280	Textiles	144.4	1,150
			Carpet	38.9	310
Glass	85.4	680	Carpet Padding	5.0	40
Recyclable Glass Bottles & Jars	80.4	640	Clothing	42.7	340
Flat Glass	3.8	30	Other Textiles	57.8	460
Other Glass	1.3	10			
			Household Hazardous Waste	28.9	230
Metal	136.9	1,090	Construction and Demolition Debris (C&D)	650.4	5,180
Aluminum Beverage Containers	15.1	120			
Other Aluminum	12.6	100			
HVAC Ducting	1.3	10	Total MSW (tons)		20,370
Ferrous Containers (Tin Cans)	26.4	210	Total MSW (pounds/person/day)		7.01

2007 population 15,928

County generation based on 2007 data.

Cass County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	684.8	4,700	Metal		
Newsprint	69.9	480	Other Ferrous	55.4	380
High Grade Office Paper	39.3	270	Other Non-Ferrous	5.8	40
Magazines/Catalogs	67.0	460	Other Metal	21.9	150
Uncoated OCC/Kraft	300.1	2,060			
Boxboard	40.8	280	Organics	480.8	3,300
Mixed Paper - Recyclable	71.4	490	Yard Waste - Compostable	72.8	500
Compostable Paper	74.3	510	Yard Waste - Woody	67.0	460
Other Paper	21.9	150	Food Scraps	212.7	1,460
			Bottom Fines & Dirt	20.4	140
Beverage Containers	5.8	40	Diapers	46.6	320
Milk & Juice Cartons/Boxes - Coated	5.8	40	Other Organic	61.2	420
Plastic	304.5	2,090	Inorganics	137.0	940
#1 PET Bottles/Jars	26.2	180	Televisions	5.8	40
#1 Other PET Containers	1.5	10	Computer Monitors	4.4	30
#2 HDPE Bottles/Jars - Clear	10.2	70	Computer Equipment/Peripherals	5.8	40
#2 HDPE Bottles/Jars - Color	14.6	100	Electronic Equipment	24.8	170
#2 Other HDPE Containers	1.5	10	White Goods - Refrigerated	8.7	60
#6 Exp. Polystyrene Packaging	16.0	110	White Goods - Not refrigerated	18.9	130
#3-#7 Other - All	16.0	110	Lead-acid Batteries	16.0	110
Other Rigid Plastic Products	91.8	630	Other Household Batteries	1.5	10
Grocery & Merchandise Bags	10.2	70	Tires	29.1	200
Trash Bags	26.2	180	Household Bulky Items	21.9	150
Commercial & Industrial Film	26.2	180	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.6	210			
Other Plastic	33.5	230	Textiles	142.8	980
			Carpet	39.3	270
Glass	87.4	600	Carpet Padding	5.8	40
Recyclable Glass Bottles & Jars	81.6	560	Clothing	40.8	280
Flat Glass	4.4	30	Other Textiles	56.8	390
Other Glass	1.5	10			
			Household Hazardous Waste	29.1	200
Metal	139.9	960			
Aluminum Beverage Containers	16.0	110	Construction and Demolition Debris (C&D)	651.3	4,470
Other Aluminum	13.1	90			
HVAC Ducting	0.0	0			
Ferrous Containers (Tin Cans)	27.7	190	Total MSW (tons)		18,280
			Total MSW (pounds/person/day)		7.30

2007 population 13,727

County generation based on 2007 data.

Champaign County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	783.6	74,540	Metal		
Newsprint	77.4	7,360	Other Ferrous	55.2	5,250
High Grade Office Paper	40.5	3,850	Other Non-Ferrous	5.2	490
Magazines/Catalogs	66.8	6,350	Other Metal	21.4	2,040
Uncoated OCC/Kraft	391.0	37,200			
Boxboard	40.6	3,860	Organics	555.8	52,870
Mixed Paper - Recyclable	71.3	6,780	Yard Waste - Compostable	73.4	6,980
Compostable Paper	73.9	7,030	Yard Waste - Woody	67.3	6,400
Other Paper	22.2	2,110	Food Scraps	287.7	27,370
			Bottom Fines & Dirt	20.1	1,910
Beverage Containers	5.4	510	Diapers	46.8	4,450
Milk & Juice Cartons/Boxes - Coated	5.4	510	Other Organic	60.5	5,760
Plastic	305.9	29,100	Inorganics	136.8	13,010
#1 PET Bottles/Jars	25.6	2,440	Televisions	6.5	620
#1 Other PET Containers	2.1	200	Computer Monitors	4.6	440
#2 HDPE Bottles/Jars - Clear	10.0	950	Computer Equipment/Peripherals	5.3	500
#2 HDPE Bottles/Jars - Color	14.6	1,390	Electronic Equipment	24.3	2,310
#2 Other HDPE Containers	2.0	190	White Goods - Refrigerated	8.6	820
#6 Exp. Polystyrene Packaging	16.2	1,540	White Goods - Not refrigerated	19.0	1,810
#3-#7 Other - All	16.3	1,550	Lead-acid Batteries	16.0	1,520
Other Rigid Plastic Products	91.2	8,680	Other Household Batteries	1.1	100
Grocery & Merchandise Bags	10.1	960	Tires	29.0	2,760
Trash Bags	25.9	2,460	Household Bulky Items	22.3	2,120
Commercial & Industrial Film	27.1	2,580	Fluorescent Lights/Ballasts	0.1	10
Other Film	30.3	2,880			
Other Plastic	34.5	3,280	Textiles	143.8	13,680
			Carpet	38.8	3,690
Glass	86.2	8,200	Carpet Padding	5.7	540
Recyclable Glass Bottles & Jars	80.9	7,700	Clothing	41.7	3,970
Flat Glass	3.8	360	Other Textiles	57.6	5,480
Other Glass	1.5	140			
			Household Hazardous Waste	28.9	2,750
Metal	138.1	13,140	Construction and Demolition Debris (C&D)	648.9	61,730
Aluminum Beverage Containers	15.7	1,490			
Other Aluminum	13.0	1,240			
HVAC Ducting	0.6	60			
Ferrous Containers (Tin Cans)	27.0	2,570			
			Total MSW (tons)		269,530
			Total MSW (pounds/person/day)		7.76

2007 population 190,260
 County generation based on 2007 data.

Christian County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	787.4	13,600	Metal		
Newsprint	84.0	1,450	Other Ferrous	55.0	950
High Grade Office Paper	41.7	720	Other Non-Ferrous	5.2	90
Magazines/Catalogs	71.2	1,230	Other Metal	21.4	370
Uncoated OCC/Kraft	382.7	6,610			
Boxboard	40.5	700	Organics	485.8	8,390
Mixed Paper - Recyclable	71.2	1,230	Yard Waste - Compostable	73.5	1,270
Compostable Paper	74.1	1,280	Yard Waste - Woody	67.2	1,160
Other Paper	22.0	380	Food Scraps	217.1	3,750
			Bottom Fines & Dirt	20.3	350
Beverage Containers	5.2	90	Diapers	46.9	810
Milk & Juice Cartons/Boxes - Coated	5.2	90	Other Organic	60.8	1,050
Plastic	304.5	5,260	Inorganics	136.6	2,360
#1 PET Bottles/Jars	25.5	440	Televisions	6.4	110
#1 Other PET Containers	2.3	40	Computer Monitors	4.6	80
#2 HDPE Bottles/Jars - Clear	9.8	170	Computer Equipment/Peripherals	5.2	90
#2 HDPE Bottles/Jars - Color	14.5	250	Electronic Equipment	24.3	420
#2 Other HDPE Containers	2.3	40	White Goods - Refrigerated	8.7	150
#6 Exp. Polystyrene Packaging	15.6	270	White Goods - Not refrigerated	19.1	330
#3-#7 Other - All	16.2	280	Lead-acid Batteries	16.2	280
Other Rigid Plastic Products	91.5	1,580	Other Household Batteries	1.2	20
Grocery & Merchandise Bags	9.8	170	Tires	28.9	500
Trash Bags	26.1	450	Household Bulky Items	22.0	380
Commercial & Industrial Film	26.6	460	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.1	520			
Other Plastic	34.2	590	Textiles	141.3	2,440
			Carpet	38.8	670
Glass	86.8	1,500	Carpet Padding	5.8	100
Recyclable Glass Bottles & Jars	81.1	1,400	Clothing	40.5	700
Flat Glass	4.1	70	Other Textiles	56.2	970
Other Glass	1.7	30			
			Household Hazardous Waste	28.4	490
Metal	137.8	2,380			
Aluminum Beverage Containers	15.6	270	Construction and Demolition Debris (C&D)	647.9	11,190
Other Aluminum	12.7	220			
HVAC Ducting	0.6	10			
Ferrous Containers (Tin Cans)	27.2	470	Total MSW (tons)		47,700
			Total MSW (pounds/person/day)		7.57

2007 population 34,543

County generation based on 2007 data.

Clark County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	565.0	4,770	Metal		
Newsprint	47.4	400	Other Ferrous	55.7	470
High Grade Office Paper	26.1	220	Other Non-Ferrous	4.7	40
Magazines/Catalogs	67.5	570	Other Metal	21.3	180
Uncoated OCC/Kraft	216.8	1,830			
Boxboard	40.3	340	Organics	491.6	4,150
Mixed Paper - Recyclable	71.1	600	Yard Waste - Compostable	73.4	620
Compostable Paper	73.4	620	Yard Waste - Woody	67.5	570
Other Paper	22.5	190	Food Scraps	223.9	1,890
			Bottom Fines & Dirt	20.1	170
Beverage Containers	5.9	50	Diapers	46.2	390
Milk & Juice Cartons/Boxes - Coated	5.9	50	Other Organic	60.4	510
Plastic	300.9	2,540	Inorganics	135.0	1,140
#1 PET Bottles/Jars	26.1	220	Televisions	5.9	50
#1 Other PET Containers	2.4	20	Computer Monitors	4.7	40
#2 HDPE Bottles/Jars - Clear	9.5	80	Computer Equipment/Peripherals	4.7	40
#2 HDPE Bottles/Jars - Color	14.2	120	Electronic Equipment	23.7	200
#2 Other HDPE Containers	2.4	20	White Goods - Refrigerated	8.3	70
#6 Exp. Polystyrene Packaging	14.2	120	White Goods - Not refrigerated	19.0	160
#3-#7 Other - All	15.4	130	Lead-acid Batteries	16.6	140
Other Rigid Plastic Products	91.2	770	Other Household Batteries	1.2	10
Grocery & Merchandise Bags	9.5	80	Tires	28.4	240
Trash Bags	26.1	220	Household Bulky Items	22.5	190
Commercial & Industrial Film	26.1	220	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.8	260			
Other Plastic	33.2	280	Textiles	138.6	1,170
			Carpet	37.9	320
Glass	86.5	730	Carpet Padding	5.9	50
Recyclable Glass Bottles & Jars	81.7	690	Clothing	40.3	340
Flat Glass	3.6	30	Other Textiles	54.5	460
Other Glass	1.2	10			
			Household Hazardous Waste	28.4	240
Metal	138.6	1,170			
Aluminum Beverage Containers	15.4	130	Construction and Demolition Debris (C&D)	645.6	5,450
Other Aluminum	13.0	110			
HVAC Ducting	1.2	10			
Ferrous Containers (Tin Cans)	27.2	230	Total MSW (tons)		21,410
			Total MSW (pounds/person/day)		6.95

2007 population 16,884

County generation based on 2007 data.

Clay County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	627.7	4,360	Metal		
Newsprint	23.0	160	Other Ferrous	54.7	380
High Grade Office Paper	38.9	270	Other Non-Ferrous	5.8	40
Magazines/Catalogs	64.8	450	Other Metal	21.6	150
Uncoated OCC/Kraft	295.1	2,050			
Boxboard	40.3	280	Organics	476.5	3,310
Mixed Paper - Recyclable	70.5	490	Yard Waste - Compostable	73.4	510
Compostable Paper	73.4	510	Yard Waste - Woody	67.7	470
Other Paper	21.6	150	Food Scraps	208.7	1,450
			Bottom Fines & Dirt	20.2	140
Beverage Containers	5.8	40	Diapers	46.1	320
Milk & Juice Cartons/Boxes - Coated	5.8	40	Other Organic	60.5	420
Plastic	289.4	2,010	Inorganics	136.8	950
#1 PET Bottles/Jars	25.9	180	Televisions	7.2	50
#1 Other PET Containers	1.4	10	Computer Monitors	4.3	30
#2 HDPE Bottles/Jars - Clear	10.1	70	Computer Equipment/Peripherals	5.8	40
#2 HDPE Bottles/Jars - Color	14.4	100	Electronic Equipment	24.5	170
#2 Other HDPE Containers	1.4	10	White Goods - Refrigerated	8.6	60
#6 Exp. Polystyrene Packaging	14.4	100	White Goods - Not refrigerated	18.7	130
#3-#7 Other - All	14.4	100	Lead-acid Batteries	15.8	110
Other Rigid Plastic Products	90.7	630	Other Household Batteries	1.4	10
Grocery & Merchandise Bags	8.6	60	Tires	28.8	200
Trash Bags	25.9	180	Household Bulky Items	21.6	150
Commercial & Industrial Film	23.0	160	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.2	210			
Other Plastic	28.8	200	Textiles	129.6	900
			Carpet	38.9	270
Glass	86.4	600	Carpet Padding	5.8	40
Recyclable Glass Bottles & Jars	80.6	560	Clothing	36.0	250
Flat Glass	4.3	30	Other Textiles	48.9	340
Other Glass	1.4	10			
			Household Hazardous Waste	28.8	200
Metal	138.2	960			
Aluminum Beverage Containers	15.8	110	Construction and Demolition Debris (C&D)	642.0	4,460
Other Aluminum	13.0	90			
HVAC Ducting	0.0	0	Total MSW (tons)		17,790
Ferrous Containers (Tin Cans)	27.4	190	Total MSW (pounds/person/day)		7.02

2007 population 13,893

County generation based on 2007 data.

Clinton County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	655.1	11,940	Metal		
Newsprint	75.7	1,380	Other Ferrous	55.4	1,010
High Grade Office Paper	43.3	790	Other Non-Ferrous	4.9	90
Magazines/Catalogs	67.5	1,230	Other Metal	21.4	390
Uncoated OCC/Kraft	260.6	4,750			
Boxboard	40.6	740	Organics	486.1	8,860
Mixed Paper - Recyclable	71.3	1,300	Yard Waste - Compostable	73.5	1,340
Compostable Paper	74.1	1,350	Yard Waste - Woody	67.5	1,230
Other Paper	21.9	400	Food Scraps	217.8	3,970
			Bottom Fines & Dirt	20.3	370
Beverage Containers	5.5	100	Diapers	46.6	850
Milk & Juice Cartons/Boxes - Coated	5.5	100	Other Organic	60.4	1,100
Plastic	326.5	5,950	Inorganics	137.2	2,500
#1 PET Bottles/Jars	25.8	470	Televisions	6.6	120
#1 Other PET Containers	2.2	40	Computer Monitors	4.4	80
#2 HDPE Bottles/Jars - Clear	9.9	180	Computer Equipment/Peripherals	5.5	100
#2 HDPE Bottles/Jars - Color	14.8	270	Electronic Equipment	24.1	440
#2 Other HDPE Containers	2.2	40	White Goods - Refrigerated	8.8	160
#6 Exp. Polystyrene Packaging	18.7	340	White Goods - Not refrigerated	19.2	350
#3-#7 Other - All	18.7	340	Lead-acid Batteries	15.9	290
Other Rigid Plastic Products	91.1	1,660	Other Household Batteries	1.1	20
Grocery & Merchandise Bags	12.1	220	Tires	29.1	530
Trash Bags	25.8	470	Household Bulky Items	22.5	410
Commercial & Industrial Film	32.9	600	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.2	550			
Other Plastic	42.2	770	Textiles	165.2	3,010
			Carpet	39.0	710
Glass	86.1	1,570	Carpet Padding	6.0	110
Recyclable Glass Bottles & Jars	80.7	1,470	Clothing	50.5	920
Flat Glass	3.8	70	Other Textiles	69.7	1,270
Other Glass	1.6	30			
			Household Hazardous Waste	28.5	520
Metal	138.3	2,520	Construction and Demolition Debris (C&D)	658.4	12,000
Aluminum Beverage Containers	15.9	290			
Other Aluminum	13.2	240			
HVAC Ducting	0.5	10	Total MSW (tons)		48,970
Ferrous Containers (Tin Cans)	26.9	490	Total MSW (pounds/person/day)		7.36

2007 population 36,450

County generation based on 2007 data.

Coles County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	749.3	19,110	Metal		
Newsprint	81.2	2,070	Other Ferrous	55.3	1,410
High Grade Office Paper	37.2	950	Other Non-Ferrous	5.1	130
Magazines/Catalogs	67.4	1,720	Other Metal	21.6	550
Uncoated OCC/Kraft	355.6	9,070			
Boxboard	40.4	1,030	Organics	534.0	13,620
Mixed Paper - Recyclable	71.4	1,820	Yard Waste - Compostable	73.3	1,870
Compostable Paper	73.7	1,880	Yard Waste - Woody	67.4	1,720
Other Paper	22.3	570	Food Scraps	266.2	6,790
			Bottom Fines & Dirt	20.0	510
Beverage Containers	5.5	140	Diapers	46.7	1,190
Milk & Juice Cartons/Boxes - Coated	5.5	140	Other Organic	60.4	1,540
Plastic	295.6	7,540	Inorganics	136.8	3,490
#1 PET Bottles/Jars	25.5	650	Televisions	6.7	170
#1 Other PET Containers	2.0	50	Computer Monitors	4.7	120
#2 HDPE Bottles/Jars - Clear	10.2	260	Computer Equipment/Peripherals	5.1	130
#2 HDPE Bottles/Jars - Color	14.5	370	Electronic Equipment	24.3	620
#2 Other HDPE Containers	2.0	50	White Goods - Refrigerated	8.6	220
#6 Exp. Polystyrene Packaging	14.5	370	White Goods - Not refrigerated	18.8	480
#3-#7 Other - All	15.3	390	Lead-acid Batteries	16.1	410
Other Rigid Plastic Products	91.4	2,330	Other Household Batteries	1.2	30
Grocery & Merchandise Bags	9.0	230	Tires	29.0	740
Trash Bags	25.9	660	Household Bulky Items	22.3	570
Commercial & Industrial Film	24.3	620	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.2	770			
Other Plastic	31.0	790	Textiles	134.1	3,420
			Carpet	38.8	990
Glass	86.3	2,200	Carpet Padding	5.9	150
Recyclable Glass Bottles & Jars	80.8	2,060	Clothing	37.6	960
Flat Glass	3.9	100	Other Textiles	51.8	1,320
Other Glass	1.6	40			
			Household Hazardous Waste	29.0	740
Metal	138.4	3,530	Construction and Demolition Debris (C&D)	643.0	16,400
Aluminum Beverage Containers	15.7	400			
Other Aluminum	12.9	330	Total MSW (tons)		70,190
HVAC Ducting	0.8	20	Total MSW (pounds/person/day)		7.54
Ferrous Containers (Tin Cans)	27.1	690			

2007 population 51,011

County generation based on 2007 data.

Cook County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	887.1	2,344,210	Metal		
Newsprint	164.7	435,360	Other Ferrous	55.2	145,980
High Grade Office Paper	46.6	123,160	Other Non-Ferrous	5.1	13,530
Magazines/Catalogs	62.8	165,860	Other Metal	21.5	56,800
Uncoated OCC/Kraft	405.1	1,070,520			
Boxboard	40.6	107,210	Organics	582.3	1,538,700
Mixed Paper - Recyclable	71.3	188,290	Yard Waste - Compostable	73.3	193,780
Compostable Paper	73.9	195,240	Yard Waste - Woody	67.3	177,850
Other Paper	22.2	58,570	Food Scraps	314.3	830,640
Beverage Containers	5.4	14,160	Bottom Fines & Dirt	20.0	52,910
Milk & Juice Cartons/Boxes - Coated	5.4	14,160	Diapers	46.8	123,610
			Other Organic	60.5	159,910
Plastic	321.2	848,800	Inorganics	136.6	361,050
#1 PET Bottles/Jars	25.6	67,700	Televisions	6.5	17,250
#1 Other PET Containers	2.2	5,690	Computer Monitors	4.6	12,140
#2 HDPE Bottles/Jars - Clear	10.0	26,510	Computer Equipment/Peripherals	5.2	13,870
#2 HDPE Bottles/Jars - Color	14.6	38,510	Electronic Equipment	24.3	64,090
#2 Other HDPE Containers	2.0	5,370	White Goods - Refrigerated	8.6	22,770
#6 Exp. Polystyrene Packaging	18.0	47,560	White Goods - Not refrigerated	19.0	50,140
#3-#7 Other - All	18.2	48,120	Lead-acid Batteries	16.0	42,290
Other Rigid Plastic Products	91.2	241,030	Other Household Batteries	1.0	2,770
Grocery & Merchandise Bags	11.7	31,000	Tires	29.0	76,600
Trash Bags	25.8	68,300	Household Bulky Items	22.2	58,780
Commercial & Industrial Film	31.5	83,240	Fluorescent Lights/Ballasts	0.1	350
Other Film	30.3	79,970			
Other Plastic	40.0	105,800	Textiles	159.8	422,270
Glass	86.3	227,930	Carpet	38.7	102,360
Recyclable Glass Bottles & Jars	80.9	213,820	Carpet Padding	5.7	15,090
Flat Glass	3.8	10,100	Clothing	48.5	128,140
Other Glass	1.5	4,010	Other Textiles	66.9	176,680
Metal	138.2	365,130	Household Hazardous Waste	28.8	76,190
Aluminum Beverage Containers	15.7	41,430			
Other Aluminum	13.0	34,320	Construction and Demolition Debris (C&D)	656.5	1,734,820
HVAC Ducting	0.7	1,740			
Ferrous Containers (Tin Cans)	27.0	71,330	Total MSW (tons)		7,933,260
			Total MSW (pounds/person/day)		8.22

2007 population 5,285,107

County generation based on 2007 data.

Crawford County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	745.5	7,310	Metal		
Newsprint	159.1	1,560	Other Ferrous	55.1	540
High Grade Office Paper	33.7	330	Other Non-Ferrous	5.1	50
Magazines/Catalogs	69.3	680	Other Metal	21.4	210
Uncoated OCC/Kraft	275.4	2,700			
Boxboard	40.8	400	Organics	475.2	4,660
Mixed Paper - Recyclable	71.4	700	Yard Waste - Compostable	73.4	720
Compostable Paper	73.4	720	Yard Waste - Woody	67.3	660
Other Paper	22.4	220	Food Scraps	207.0	2,030
			Bottom Fines & Dirt	20.4	200
Beverage Containers	5.1	50	Diapers	46.9	460
Milk & Juice Cartons/Boxes - Coated	5.1	50	Other Organic	60.2	590
Plastic	295.8	2,900	Inorganics	135.6	1,330
#1 PET Bottles/Jars	25.5	250	Televisions	6.1	60
#1 Other PET Containers	2.0	20	Computer Monitors	4.1	40
#2 HDPE Bottles/Jars - Clear	10.2	100	Computer Equipment/Peripherals	5.1	50
#2 HDPE Bottles/Jars - Color	14.3	140	Electronic Equipment	24.5	240
#2 Other HDPE Containers	2.0	20	White Goods - Refrigerated	8.2	80
#6 Exp. Polystyrene Packaging	15.3	150	White Goods - Not refrigerated	19.4	190
#3-#7 Other - All	15.3	150	Lead-acid Batteries	16.3	160
Other Rigid Plastic Products	90.8	890	Other Household Batteries	1.0	10
Grocery & Merchandise Bags	9.2	90	Tires	28.6	280
Trash Bags	25.5	250	Household Bulky Items	22.4	220
Commercial & Industrial Film	24.5	240	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.6	300			
Other Plastic	30.6	300	Textiles	133.6	1,310
			Carpet	38.8	380
Glass	86.7	850	Carpet Padding	5.1	50
Recyclable Glass Bottles & Jars	81.6	800	Clothing	37.7	370
Flat Glass	4.1	40	Other Textiles	52.0	510
Other Glass	1.0	10			
			Household Hazardous Waste	27.5	270
Metal	137.7	1,350	Construction and Demolition Debris (C&D)	644.5	6,320
Aluminum Beverage Containers	15.3	150			
Other Aluminum	13.3	130			
HVAC Ducting	1.0	10			
Ferrous Containers (Tin Cans)	26.5	260			
			Total MSW (tons)		26,350
			Total MSW (pounds/person/day)		7.36

2007 population 19,611
 County generation based on 2007 data.

Cumberland County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	492.5	2,670	Metal		
Newsprint	62.7	340	Other Ferrous	55.3	300
High Grade Office Paper	20.3	110	Other Non-Ferrous	5.5	30
Magazines/Catalogs	64.6	350	Other Metal	22.1	120
Uncoated OCC/Kraft	136.5	740			
Boxboard	40.6	220	Organics	453.8	2,460
Mixed Paper - Recyclable	71.9	390	Yard Waste - Compostable	73.8	400
Compostable Paper	73.8	400	Yard Waste - Woody	66.4	360
Other Paper	22.1	120	Food Scraps	186.3	1,010
			Bottom Fines & Dirt	20.3	110
Beverage Containers	5.5	30	Diapers	46.1	250
Milk & Juice Cartons/Boxes - Coated	5.5	30	Other Organic	60.9	330
Plastic	304.4	1,650	Inorganics	138.4	750
#1 PET Bottles/Jars	25.8	140	Televisions	7.4	40
#1 Other PET Containers	1.8	10	Computer Monitors	3.7	20
#2 HDPE Bottles/Jars - Clear	9.2	50	Computer Equipment/Peripherals	5.5	30
#2 HDPE Bottles/Jars - Color	14.8	80	Electronic Equipment	24.0	130
#2 Other HDPE Containers	1.8	10	White Goods - Refrigerated	9.2	50
#6 Exp. Polystyrene Packaging	16.6	90	White Goods - Not refrigerated	18.4	100
#3-#7 Other - All	16.6	90	Lead-acid Batteries	16.6	90
Other Rigid Plastic Products	90.4	490	Other Household Batteries	1.8	10
Grocery & Merchandise Bags	9.2	50	Tires	29.5	160
Trash Bags	25.8	140	Household Bulky Items	22.1	120
Commercial & Industrial Film	27.7	150	Fluorescent Lights/Ballasts	<0.1	0
Other Film	29.5	160			
Other Plastic	35.0	190	Textiles	143.9	780
			Carpet	38.7	210
Glass	86.7	470	Carpet Padding	5.5	30
Recyclable Glass Bottles & Jars	81.2	440	Clothing	42.4	230
Flat Glass	3.7	20	Other Textiles	57.2	310
Other Glass	1.8	10			
			Household Hazardous Waste	27.7	150
Metal	140.2	760			
Aluminum Beverage Containers	16.6	90	Construction and Demolition Debris (C&D)	649.3	3,520
Other Aluminum	12.9	70			
HVAC Ducting	0.0	0	Total MSW (tons)		13,240
Ferrous Containers (Tin Cans)	27.7	150	Total MSW (pounds/person/day)		6.69

2007 population 10,842
 County generation based on 2007 data.

DeKalb County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	590.4	30,620	Metal		
Newsprint	90.0	4,670	Other Ferrous	55.1	2,860
High Grade Office Paper	43.4	2,250	Other Non-Ferrous	5.2	270
Magazines/Catalogs	69.6	3,610	Other Metal	21.4	1,110
Uncoated OCC/Kraft	179.5	9,310			
Boxboard	40.5	2,100	Organics	502.7	26,070
Mixed Paper - Recyclable	71.3	3,700	Yard Waste - Compostable	73.3	3,800
Compostable Paper	73.8	3,830	Yard Waste - Woody	67.3	3,490
Other Paper	22.2	1,150	Food Scraps	234.6	12,170
			Bottom Fines & Dirt	20.1	1,040
Beverage Containers	5.4	280	Diapers	46.9	2,430
Milk & Juice Cartons/Boxes - Coated	5.4	280	Other Organic	60.5	3,140
Plastic	320.5	16,620	Inorganics	136.5	7,080
#1 PET Bottles/Jars	25.6	1,330	Televisions	6.6	340
#1 Other PET Containers	2.1	110	Computer Monitors	4.6	240
#2 HDPE Bottles/Jars - Clear	10.0	520	Computer Equipment/Peripherals	5.2	270
#2 HDPE Bottles/Jars - Color	14.7	760	Electronic Equipment	24.3	1,260
#2 Other HDPE Containers	2.1	110	White Goods - Refrigerated	8.7	450
#6 Exp. Polystyrene Packaging	17.7	920	White Goods - Not refrigerated	18.9	980
#3-#7 Other - All	17.9	930	Lead-acid Batteries	16.0	830
Other Rigid Plastic Products	91.2	4,730	Other Household Batteries	1.2	60
Grocery & Merchandise Bags	11.6	600	Tires	28.9	1,500
Trash Bags	25.8	1,340	Household Bulky Items	22.2	1,150
Commercial & Industrial Film	31.2	1,620	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.3	1,570			
Other Plastic	40.1	2,080	Textiles	158.7	8,230
			Carpet	38.8	2,010
Glass	86.4	4,480	Carpet Padding	5.8	300
Recyclable Glass Bottles & Jars	81.0	4,200	Clothing	48.0	2,490
Flat Glass	3.9	200	Other Textiles	66.1	3,430
Other Glass	1.5	80			
			Household Hazardous Waste	28.7	1,490
Metal	137.9	7,150			
Aluminum Beverage Containers	15.6	810	Construction and Demolition Debris (C&D)	655.9	34,020
Other Aluminum	12.9	670			
HVAC Ducting	0.6	30			
Ferrous Containers (Tin Cans)	27.0	1,400	Total MSW (tons)		136,040
			Total MSW (pounds/person/day)		7.19

2007 population 103,729

County generation based on 2007 data.

DeWitt County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	546.3	4,490	Metal		
Newsprint	96.1	790	Other Ferrous	54.8	450
High Grade Office Paper	25.6	210	Other Non-Ferrous	4.9	40
Magazines/Catalogs	68.1	560	Other Metal	21.9	180
Uncoated OCC/Kraft	148.4	1,220			
Boxboard	40.2	330	Organics	490.4	4,030
Mixed Paper - Recyclable	71.8	590	Yard Waste - Compostable	73.0	600
Compostable Paper	74.2	610	Yard Waste - Woody	66.9	550
Other Paper	21.9	180	Food Scraps	223.9	1,840
			Bottom Fines & Dirt	19.5	160
Beverage Containers	4.9	40	Diapers	46.2	380
Milk & Juice Cartons/Boxes - Coated	4.9	40	Other Organic	60.8	500
Plastic	320.0	2,630	Inorganics	136.3	1,120
#1 PET Bottles/Jars	25.6	210	Televisions	6.1	50
#1 Other PET Containers	2.4	20	Computer Monitors	4.9	40
#2 HDPE Bottles/Jars - Clear	9.7	80	Computer Equipment/Peripherals	4.9	40
#2 HDPE Bottles/Jars - Color	14.6	120	Electronic Equipment	24.3	200
#2 Other HDPE Containers	2.4	20	White Goods - Refrigerated	8.5	70
#6 Exp. Polystyrene Packaging	17.0	140	White Goods - Not refrigerated	19.5	160
#3-#7 Other - All	17.0	140	Lead-acid Batteries	15.8	130
Other Rigid Plastic Products	91.3	750	Other Household Batteries	1.2	10
Grocery & Merchandise Bags	12.2	100	Tires	29.2	240
Trash Bags	25.6	210	Household Bulky Items	21.9	180
Commercial & Industrial Film	31.6	260	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.4	250			
Other Plastic	40.2	330	Textiles	157.0	1,290
			Carpet	38.9	320
Glass	86.4	710	Carpet Padding	4.9	40
Recyclable Glass Bottles & Jars	81.5	670	Clothing	47.5	390
Flat Glass	3.7	30	Other Textiles	65.7	540
Other Glass	1.2	10			
			Household Hazardous Waste	28.0	230
Metal	138.7	1,140	Construction and Demolition Debris (C&D)	653.4	5,370
Aluminum Beverage Containers	15.8	130			
Other Aluminum	13.4	110			
HVAC Ducting	1.2	10			
Ferrous Containers (Tin Cans)	26.8	220			
			Total MSW (tons)		21,050
			Total MSW (pounds/person/day)		7.02

2007 population 16,437

County generation based on 2007 data.

Douglas County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	726.6	7,120	Metal		
Newsprint	71.4	700	Other Ferrous	55.1	540
High Grade Office Paper	37.8	370	Other Non-Ferrous	5.1	50
Magazines/Catalogs	71.4	700	Other Metal	21.4	210
Uncoated OCC/Kraft	337.8	3,310			
Boxboard	40.8	400	Organics	505.2	4,950
Mixed Paper - Recyclable	71.4	700	Yard Waste - Compostable	73.5	720
Compostable Paper	73.5	720	Yard Waste - Woody	67.4	660
Other Paper	22.5	220	Food Scraps	236.8	2,320
			Bottom Fines & Dirt	20.4	200
Beverage Containers	5.1	50	Diapers	46.9	460
Milk & Juice Cartons/Boxes - Coated	5.1	50	Other Organic	60.2	590
Plastic	312.3	3,060	Inorganics	135.7	1,330
#1 PET Bottles/Jars	25.5	250	Televisions	6.1	60
#1 Other PET Containers	2.0	20	Computer Monitors	4.1	40
#2 HDPE Bottles/Jars - Clear	10.2	100	Computer Equipment/Peripherals	5.1	50
#2 HDPE Bottles/Jars - Color	14.3	140	Electronic Equipment	24.5	240
#2 Other HDPE Containers	2.0	20	White Goods - Refrigerated	8.2	80
#6 Exp. Polystyrene Packaging	17.3	170	White Goods - Not refrigerated	19.4	190
#3-#7 Other - All	17.3	170	Lead-acid Batteries	16.3	160
Other Rigid Plastic Products	90.8	890	Other Household Batteries	1.0	10
Grocery & Merchandise Bags	11.2	110	Tires	28.6	280
Trash Bags	25.5	250	Household Bulky Items	22.5	220
Commercial & Industrial Film	28.6	280	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.6	300			
Other Plastic	36.7	360	Textiles	150.0	1,470
			Carpet	38.8	380
Glass	86.7	850	Carpet Padding	5.1	50
Recyclable Glass Bottles & Jars	81.6	800	Clothing	44.9	440
Flat Glass	4.1	40	Other Textiles	61.2	600
Other Glass	1.0	10			
			Household Hazardous Waste	27.6	270
Metal	137.8	1,350			
Aluminum Beverage Containers	15.3	150	Construction and Demolition Debris (C&D)	653.1	6,400
Other Aluminum	13.3	130			
HVAC Ducting	1.0	10	Total MSW (tons)		26,850
Ferrous Containers (Tin Cans)	26.5	260	Total MSW (pounds/person/day)		7.51

2007 population 19,598
 County generation based on 2007 data.

DuPage County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	1,104.8	513,290	Metal		
Newsprint	173.9	80,780	Other Ferrous	55.2	25,660
High Grade Office Paper	67.3	31,270	Other Non-Ferrous	5.1	2,390
Magazines/Catalogs	70.9	32,930	Other Metal	21.5	9,980
Uncoated OCC/Kraft	584.9	271,730			
Boxboard	40.6	18,850	Organics	584.8	271,690
Mixed Paper - Recyclable	71.2	33,100	Yard Waste - Compostable	73.3	34,070
Compostable Paper	73.9	34,330	Yard Waste - Woody	67.3	31,270
Other Paper	22.2	10,300	Food Scraps	316.8	147,200
			Bottom Fines & Dirt	20.0	9,310
Beverage Containers	5.4	2,490	Diapers	46.8	21,720
Milk & Juice Cartons/Boxes - Coated	5.4	2,490	Other Organic	60.5	28,120
Plastic	373.5	173,520	Inorganics	136.5	63,440
#1 PET Bottles/Jars	25.6	11,900	Televisions	6.5	3,020
#1 Other PET Containers	2.2	1,000	Computer Monitors	4.6	2,130
#2 HDPE Bottles/Jars - Clear	10.0	4,660	Computer Equipment/Peripherals	5.3	2,440
#2 HDPE Bottles/Jars - Color	14.6	6,770	Electronic Equipment	24.2	11,260
#2 Other HDPE Containers	2.0	950	White Goods - Refrigerated	8.6	4,010
#6 Exp. Polystyrene Packaging	24.3	11,290	White Goods - Not refrigerated	19.0	8,820
#3-#7 Other - All	24.6	11,430	Lead-acid Batteries	16.0	7,430
Other Rigid Plastic Products	91.2	42,370	Other Household Batteries	1.1	500
Grocery & Merchandise Bags	17.3	8,050	Tires	29.0	13,460
Trash Bags	25.8	12,000	Household Bulky Items	22.2	10,330
Commercial & Industrial Film	46.4	21,570	Fluorescent Lights/Ballasts	0.1	40
Other Film	30.3	14,060			
Other Plastic	59.1	27,470	Textiles	214.6	99,720
			Carpet	38.8	18,010
Glass	86.2	40,060	Carpet Padding	5.7	2,650
Recyclable Glass Bottles & Jars	80.9	37,590	Clothing	71.5	33,230
Flat Glass	3.8	1,770	Other Textiles	98.6	45,830
Other Glass	1.5	700			
			Household Hazardous Waste	28.8	13,370
Metal	138.2	64,200			
Aluminum Beverage Containers	15.7	7,290	Construction and Demolition Debris (C&D)	682.6	317,110
Other Aluminum	13.0	6,040			
HVAC Ducting	0.6	300			
Ferrous Containers (Tin Cans)	27.0	12,540	Total MSW (tons)		1,558,890
			Total MSW (pounds/person/day)		9.19

2007 population 929,192

County generation based on 2007 data.

Edgar County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	630.1	5,960	Metal		
Newsprint	58.1	550	Other Ferrous	55.0	520
High Grade Office Paper	31.7	300	Other Non-Ferrous	5.3	50
Magazines/Catalogs	68.7	650	Other Metal	21.1	200
Uncoated OCC/Kraft	264.3	2,500			
Boxboard	40.2	380	Organics	464.1	4,390
Mixed Paper - Recyclable	70.8	670	Yard Waste - Compostable	72.9	690
Compostable Paper	74.0	700	Yard Waste - Woody	67.7	640
Other Paper	22.2	210	Food Scraps	196.6	1,860
			Bottom Fines & Dirt	20.1	190
Beverage Containers	5.3	50	Diapers	46.5	440
Milk & Juice Cartons/Boxes - Coated	5.3	50	Other Organic	60.3	570
Plastic	299.2	2,830	Inorganics	135.3	1,280
#1 PET Bottles/Jars	25.4	240	Televisions	6.3	60
#1 Other PET Containers	2.1	20	Computer Monitors	4.2	40
#2 HDPE Bottles/Jars - Clear	9.5	90	Computer Equipment/Peripherals	5.3	50
#2 HDPE Bottles/Jars - Color	14.8	140	Electronic Equipment	24.3	230
#2 Other HDPE Containers	2.1	20	White Goods - Refrigerated	8.5	80
#6 Exp. Polystyrene Packaging	15.9	150	White Goods - Not refrigerated	19.0	180
#3-#7 Other - All	15.9	150	Lead-acid Batteries	15.9	150
Other Rigid Plastic Products	90.9	860	Other Household Batteries	1.1	10
Grocery & Merchandise Bags	9.5	90	Tires	28.5	270
Trash Bags	25.4	240	Household Bulky Items	22.2	210
Commercial & Industrial Film	25.4	240	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.7	290			
Other Plastic	31.7	300	Textiles	136.4	1,290
			Carpet	38.1	360
Glass	86.7	820	Carpet Padding	5.3	50
Recyclable Glass Bottles & Jars	81.4	770	Clothing	39.1	370
Flat Glass	4.2	40	Other Textiles	53.9	510
Other Glass	1.1	10			
			Household Hazardous Waste	27.5	260
Metal	138.5	1,310	Construction and Demolition Debris (C&D)	647.0	6,120
Aluminum Beverage Containers	15.9	150			
Other Aluminum	12.7	120			
HVAC Ducting	1.1	10			
Ferrous Containers (Tin Cans)	27.5	260			
			Total MSW (tons)		24,310
			Total MSW (pounds/person/day)		7.04

2007 population 18,919
 County generation based on 2007 data.

Edwards County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	687.8	2,260	Metal		
Newsprint	54.8	180	Other Ferrous	54.8	180
High Grade Office Paper	39.6	130	Other Non-Ferrous	6.1	20
Magazines/Catalogs	67.0	220	Other Metal	21.3	70
Uncoated OCC/Kraft	322.6	1,060			
Boxboard	39.6	130	Organics	453.4	1,490
Mixed Paper - Recyclable	70.0	230	Yard Waste - Compostable	73.0	240
Compostable Paper	73.0	240	Yard Waste - Woody	67.0	220
Other Paper	21.3	70	Food Scraps	185.6	610
			Bottom Fines & Dirt	21.3	70
Beverage Containers	6.1	20	Diapers	45.6	150
Milk & Juice Cartons/Boxes - Coated	6.1	20	Other Organic	60.9	200
Plastic	307.4	1,010	Inorganics	136.9	450
#1 PET Bottles/Jars	24.3	80	Televisions	6.1	20
#1 Other PET Containers	3.0	10	Computer Monitors	6.1	20
#2 HDPE Bottles/Jars - Clear	9.1	30	Computer Equipment/Peripherals	6.1	20
#2 HDPE Bottles/Jars - Color	15.2	50	Electronic Equipment	24.3	80
#2 Other HDPE Containers	3.0	10	White Goods - Refrigerated	9.1	30
#6 Exp. Polystyrene Packaging	18.3	60	White Goods - Not refrigerated	18.3	60
#3-#7 Other - All	18.3	60	Lead-acid Batteries	15.2	50
Other Rigid Plastic Products	91.3	300	Other Household Batteries	0.0	0
Grocery & Merchandise Bags	9.1	30	Tires	30.4	100
Trash Bags	24.3	80	Household Bulky Items	21.3	70
Commercial & Industrial Film	27.4	90	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.4	100			
Other Plastic	33.5	110	Textiles	136.9	450
			Carpet	36.5	120
Glass	85.2	280	Carpet Padding	6.1	20
Recyclable Glass Bottles & Jars	82.2	270	Clothing	39.6	130
Flat Glass	3.0	10	Other Textiles	54.8	180
Other Glass	0.0	0			
			Household Hazardous Waste	27.4	90
Metal	136.9	450			
Aluminum Beverage Containers	15.2	50	Construction and Demolition Debris (C&D)	651.2	2,140
Other Aluminum	12.2	40			
HVAC Ducting	0.0	0	Total MSW (tons)		8,640
Ferrous Containers (Tin Cans)	27.4	90	Total MSW (pounds/person/day)		7.20

2007 population

6,572

County generation based on 2007 data.

Effingham County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	949.6	16,250	Metal		
Newsprint	102.8	1,760	Other Ferrous	55.5	950
High Grade Office Paper	50.3	860	Other Non-Ferrous	5.3	90
Magazines/Catalogs	70.7	1,210	Other Metal	21.6	370
Uncoated OCC/Kraft	518.3	8,870			
Boxboard	40.3	690	Organics	636.4	10,890
Mixed Paper - Recyclable	71.3	1,220	Yard Waste - Compostable	73.0	1,250
Compostable Paper	73.6	1,260	Yard Waste - Woody	67.2	1,150
Other Paper	22.2	380	Food Scraps	368.7	6,310
			Bottom Fines & Dirt	19.9	340
Beverage Containers	5.3	90	Diapers	46.7	800
Milk & Juice Cartons/Boxes - Coated	5.3	90	Other Organic	60.8	1,040
Plastic	311.5	5,330	Inorganics	136.2	2,330
#1 PET Bottles/Jars	25.7	440	Televisions	6.4	110
#1 Other PET Containers	2.3	40	Computer Monitors	4.7	80
#2 HDPE Bottles/Jars - Clear	9.9	170	Computer Equipment/Peripherals	5.3	90
#2 HDPE Bottles/Jars - Color	14.6	250	Electronic Equipment	24.0	410
#2 Other HDPE Containers	2.3	40	White Goods - Refrigerated	8.8	150
#6 Exp. Polystyrene Packaging	16.9	290	White Goods - Not refrigerated	18.7	320
#3-#7 Other - All	16.9	290	Lead-acid Batteries	15.8	270
Other Rigid Plastic Products	91.2	1,560	Other Household Batteries	1.2	20
Grocery & Merchandise Bags	10.5	180	Tires	29.2	500
Trash Bags	25.7	440	Household Bulky Items	22.2	380
Commercial & Industrial Film	28.6	490	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.4	520			
Other Plastic	36.2	620	Textiles	150.2	2,570
			Carpet	39.2	670
Glass	86.5	1,480	Carpet Padding	5.8	100
Recyclable Glass Bottles & Jars	80.6	1,380	Clothing	44.4	760
Flat Glass	4.1	70	Other Textiles	60.8	1,040
Other Glass	1.8	30			
			Household Hazardous Waste	28.0	480
Metal	138.5	2,370			
Aluminum Beverage Containers	15.8	270	Construction and Demolition Debris (C&D)	651.6	11,150
Other Aluminum	12.9	220			
HVAC Ducting	0.6	10			
Ferrous Containers (Tin Cans)	26.9	460	Total MSW (tons)		52,940
			Total MSW (pounds/person/day)		8.48

2007 population 34,225
 County generation based on 2007 data.

Fayette County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	603.7	6,480	Metal		
Newsprint	47.5	510	Other Ferrous	55.0	590
High Grade Office Paper	26.1	280	Other Non-Ferrous	5.6	60
Magazines/Catalogs	66.2	710	Other Metal	21.4	230
Uncoated OCC/Kraft	256.2	2,750			
Boxboard	41.0	440	Organics	482.6	5,180
Mixed Paper - Recyclable	70.8	760	Yard Waste - Compostable	73.6	790
Compostable Paper	73.6	790	Yard Waste - Woody	67.1	720
Other Paper	22.4	240	Food Scraps	214.3	2,300
			Bottom Fines & Dirt	20.5	220
Beverage Containers	5.6	60	Diapers	46.6	500
Milk & Juice Cartons/Boxes - Coated	5.6	60	Other Organic	60.6	650
Plastic	287.0	3,080	Inorganics	136.0	1,460
#1 PET Bottles/Jars	25.2	270	Televisions	6.5	70
#1 Other PET Containers	1.9	20	Computer Monitors	4.7	50
#2 HDPE Bottles/Jars - Clear	10.2	110	Computer Equipment/Peripherals	5.6	60
#2 HDPE Bottles/Jars - Color	14.9	160	Electronic Equipment	24.2	260
#2 Other HDPE Containers	1.9	20	White Goods - Refrigerated	8.4	90
#6 Exp. Polystyrene Packaging	14.0	150	White Goods - Not refrigerated	18.6	200
#3-#7 Other - All	14.0	150	Lead-acid Batteries	15.8	170
Other Rigid Plastic Products	91.3	980	Other Household Batteries	0.9	10
Grocery & Merchandise Bags	8.4	90	Tires	28.9	310
Trash Bags	26.1	280	Household Bulky Items	22.4	240
Commercial & Industrial Film	21.4	230	Fluorescent Lights/Ballasts	<0.1	0
Other Film	29.8	320			
Other Plastic	28.0	300	Textiles	123.9	1,330
			Carpet	39.1	420
Glass	86.6	930	Carpet Padding	5.6	60
Recyclable Glass Bottles & Jars	81.1	870	Clothing	33.5	360
Flat Glass	3.7	40	Other Textiles	45.7	490
Other Glass	1.9	20			
			Household Hazardous Waste	28.0	300
Metal	138.8	1,490	Construction and Demolition Debris (C&D)	640.1	6,870
Aluminum Beverage Containers	15.8	170			
Other Aluminum	13.0	140			
HVAC Ducting	0.9	10			
Ferrous Containers (Tin Cans)	27.0	290	Total MSW (tons)		27,180
			Total MSW (pounds/person/day)		6.94

2007 population 21,466
 County generation based on 2007 data.

Ford County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	683.1	4,840	Metal		
Newsprint	96.0	680	Other Ferrous	55.0	390
High Grade Office Paper	31.1	220	Other Non-Ferrous	5.6	40
Magazines/Catalogs	69.2	490	Other Metal	21.2	150
Uncoated OCC/Kraft	279.5	1,980			
Boxboard	40.9	290	Organics	481.3	3,410
Mixed Paper - Recyclable	70.6	500	Yard Waste - Compostable	73.4	520
Compostable Paper	73.4	520	Yard Waste - Woody	67.7	480
Other Paper	22.6	160	Food Scraps	213.1	1,510
			Bottom Fines & Dirt	19.8	140
Beverage Containers	5.6	40	Diapers	46.6	330
Milk & Juice Cartons/Boxes - Coated	5.6	40	Other Organic	60.7	430
Plastic	307.7	2,180	Inorganics	136.9	970
#1 PET Bottles/Jars	25.4	180	Televisions	7.1	50
#1 Other PET Containers	2.8	20	Computer Monitors	4.2	30
#2 HDPE Bottles/Jars - Clear	9.9	70	Computer Equipment/Peripherals	5.6	40
#2 HDPE Bottles/Jars - Color	14.1	100	Electronic Equipment	24.0	170
#2 Other HDPE Containers	1.4	10	White Goods - Refrigerated	8.5	60
#6 Exp. Polystyrene Packaging	15.5	110	White Goods - Not refrigerated	18.3	130
#3-#7 Other - All	16.9	120	Lead-acid Batteries	15.5	110
Other Rigid Plastic Products	91.7	650	Other Household Batteries	1.4	10
Grocery & Merchandise Bags	9.9	70	Tires	29.6	210
Trash Bags	25.4	180	Household Bulky Items	22.6	160
Commercial & Industrial Film	28.2	200	Fluorescent Lights/Ballasts	<0.1	0
Other Film	29.6	210			
Other Plastic	36.7	260	Textiles	146.8	1,040
			Carpet	38.1	270
Glass	86.1	610	Carpet Padding	5.6	40
Recyclable Glass Bottles & Jars	80.5	570	Clothing	43.8	310
Flat Glass	4.2	30	Other Textiles	59.3	420
Other Glass	1.4	10			
			Household Hazardous Waste	28.2	200
Metal	136.9	970			
Aluminum Beverage Containers	15.5	110	Construction and Demolition Debris (C&D)	652.1	4,620
Other Aluminum	12.7	90			
HVAC Ducting	0.0	0			
Ferrous Containers (Tin Cans)	26.8	190	Total MSW (tons)		18,880
			Total MSW (pounds/person/day)		7.30

2007 population 14,170

County generation based on 2007 data.

Franklin County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	578.9	11,430	Metal		
Newsprint	74.4	1,470	Other Ferrous	55.2	1,090
High Grade Office Paper	20.8	410	Other Non-Ferrous	5.1	100
Magazines/Catalogs	66.3	1,310	Other Metal	21.3	420
Uncoated OCC/Kraft	209.2	4,130			
Boxboard	40.5	800	Organics	484.2	9,560
Mixed Paper - Recyclable	71.4	1,410	Yard Waste - Compostable	73.4	1,450
Compostable Paper	73.9	1,460	Yard Waste - Woody	67.4	1,330
Other Paper	22.3	440	Food Scraps	215.7	4,260
			Bottom Fines & Dirt	20.3	400
Beverage Containers	5.6	110	Diapers	46.6	920
Milk & Juice Cartons/Boxes - Coated	5.6	110	Other Organic	60.8	1,200
Plastic	287.2	5,670	Inorganics	136.2	2,690
#1 PET Bottles/Jars	25.8	510	Televisions	6.6	130
#1 Other PET Containers	2.0	40	Computer Monitors	4.6	90
#2 HDPE Bottles/Jars - Clear	10.1	200	Computer Equipment/Peripherals	5.1	100
#2 HDPE Bottles/Jars - Color	14.7	290	Electronic Equipment	24.3	480
#2 Other HDPE Containers	2.0	40	White Goods - Refrigerated	8.6	170
#6 Exp. Polystyrene Packaging	13.7	270	White Goods - Not refrigerated	18.7	370
#3-#7 Other - All	13.7	270	Lead-acid Batteries	16.2	320
Other Rigid Plastic Products	91.2	1,800	Other Household Batteries	1.0	20
Grocery & Merchandise Bags	8.1	160	Tires	28.9	570
Trash Bags	25.8	510	Household Bulky Items	22.3	440
Commercial & Industrial Film	21.8	430	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.4	600			
Other Plastic	27.9	550	Textiles	125.1	2,470
			Carpet	39.0	770
Glass	86.1	1,700	Carpet Padding	6.1	120
Recyclable Glass Bottles & Jars	80.5	1,590	Clothing	33.4	660
Flat Glass	4.1	80	Other Textiles	46.6	920
Other Glass	1.5	30			
			Household Hazardous Waste	28.9	570
Metal	137.8	2,720			
Aluminum Beverage Containers	15.7	310	Construction and Demolition Debris (C&D)	640.1	12,640
Other Aluminum	13.2	260			
HVAC Ducting	0.5	10			
Ferrous Containers (Tin Cans)	26.8	530	Total MSW (tons)		49,560
			Total MSW (pounds/person/day)		6.88

2007 population 39,491
 County generation based on 2007 data.

Fulton County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	593.9	10,940	Metal		
Newsprint	93.9	1,730	Other Ferrous	55.4	1,020
High Grade Office Paper	21.2	390	Other Non-Ferrous	4.9	90
Magazines/Catalogs	68.9	1,270	Other Metal	21.7	400
Uncoated OCC/Kraft	201.9	3,720			
Boxboard	40.7	750	Organics	478.8	8,820
Mixed Paper - Recyclable	71.1	1,310	Yard Waste - Compostable	73.3	1,350
Compostable Paper	73.8	1,360	Yard Waste - Woody	67.3	1,240
Other Paper	22.3	410	Food Scraps	210.6	3,880
			Bottom Fines & Dirt	20.1	370
Beverage Containers	5.4	100	Diapers	46.7	860
Milk & Juice Cartons/Boxes - Coated	5.4	100	Other Organic	60.8	1,120
Plastic	298.0	5,490	Inorganics	136.3	2,510
#1 PET Bottles/Jars	25.5	470	Televisions	6.5	120
#1 Other PET Containers	2.2	40	Computer Monitors	4.3	80
#2 HDPE Bottles/Jars - Clear	9.8	180	Computer Equipment/Peripherals	5.4	100
#2 HDPE Bottles/Jars - Color	14.7	270	Electronic Equipment	24.4	450
#2 Other HDPE Containers	2.2	40	White Goods - Refrigerated	8.7	160
#6 Exp. Polystyrene Packaging	14.7	270	White Goods - Not refrigerated	19.0	350
#3-#7 Other - All	15.2	280	Lead-acid Batteries	15.7	290
Other Rigid Plastic Products	91.2	1,680	Other Household Batteries	1.1	20
Grocery & Merchandise Bags	9.2	170	Tires	28.8	530
Trash Bags	26.1	480	Household Bulky Items	22.3	410
Commercial & Industrial Film	25.0	460	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.4	560			
Other Plastic	32.0	590	Textiles	136.8	2,520
			Carpet	39.1	720
Glass	85.8	1,580	Carpet Padding	6.0	110
Recyclable Glass Bottles & Jars	80.3	1,480	Clothing	38.5	710
Flat Glass	3.8	70	Other Textiles	53.2	980
Other Glass	1.6	30			
			Household Hazardous Waste	28.8	530
Metal	138.4	2,550			
Aluminum Beverage Containers	15.7	290	Construction and Demolition Debris (C&D)	644.9	11,880
Other Aluminum	13.0	240			
HVAC Ducting	0.5	10			
Ferrous Containers (Tin Cans)	27.1	500	Total MSW (tons)		46,920
			Total MSW (pounds/person/day)		6.98

2007 population 36,843

County generation based on 2007 data.

Gallatin County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	547.7	1,650	Metal		
Newsprint	43.2	130	Other Ferrous	56.4	170
High Grade Office Paper	23.2	70	Other Non-Ferrous	6.6	20
Magazines/Catalogs	66.4	200	Other Metal	19.9	60
Uncoated OCC/Kraft	209.1	630			
Boxboard	39.8	120	Organics	444.8	1,340
Mixed Paper - Recyclable	69.7	210	Yard Waste - Compostable	73.0	220
Compostable Paper	73.0	220	Yard Waste - Woody	66.4	200
Other Paper	23.2	70	Food Scraps	179.3	540
			Bottom Fines & Dirt	19.9	60
Beverage Containers	6.6	20	Diapers	46.5	140
Milk & Juice Cartons/Boxes - Coated	6.6	20	Other Organic	59.8	180
Plastic	285.5	860	Inorganics	139.4	420
#1 PET Bottles/Jars	26.6	80	Televisions	6.6	20
#1 Other PET Containers	3.3	10	Computer Monitors	3.3	10
#2 HDPE Bottles/Jars - Clear	10.0	30	Computer Equipment/Peripherals	6.6	20
#2 HDPE Bottles/Jars - Color	13.3	40	Electronic Equipment	23.2	70
#2 Other HDPE Containers	3.3	10	White Goods - Refrigerated	10.0	30
#6 Exp. Polystyrene Packaging	16.6	50	White Goods - Not refrigerated	19.9	60
#3-#7 Other - All	16.6	50	Lead-acid Batteries	16.6	50
Other Rigid Plastic Products	89.6	270	Other Household Batteries	0.0	0
Grocery & Merchandise Bags	6.6	20	Tires	29.9	90
Trash Bags	26.6	80	Household Bulky Items	23.2	70
Commercial & Industrial Film	19.9	60	Fluorescent Lights/Ballasts	<0.1	0
Other Film	29.9	90			
Other Plastic	23.2	70	Textiles	116.2	350
			Carpet	36.5	110
Glass	83.0	250	Carpet Padding	6.6	20
Recyclable Glass Bottles & Jars	79.7	240	Clothing	29.9	90
Flat Glass	3.3	10	Other Textiles	43.2	130
Other Glass	0.0	0			
			Household Hazardous Waste	29.9	90
Metal	139.4	420			
Aluminum Beverage Containers	16.6	50	Construction and Demolition Debris (C&D)	637.3	1,920
Other Aluminum	13.3	40			
HVAC Ducting	0.0	0			
Ferrous Containers (Tin Cans)	26.6	80	Total MSW (tons)		7,320
			Total MSW (pounds/person/day)		6.66

2007 population

6,025

County generation based on 2007 data.

Greene County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	521.2	3,620	Metal		
Newsprint	74.9	520	Other Ferrous	54.7	380
High Grade Office Paper	21.6	150	Other Non-Ferrous	5.8	40
Magazines/Catalogs	67.7	470	Other Metal	21.6	150
Uncoated OCC/Kraft	151.2	1,050			
Boxboard	40.3	280	Organics	465.1	3,230
Mixed Paper - Recyclable	70.6	490	Yard Waste - Compostable	73.4	510
Compostable Paper	73.4	510	Yard Waste - Woody	67.7	470
Other Paper	21.6	150	Food Scraps	197.3	1,370
			Bottom Fines & Dirt	20.2	140
Beverage Containers	5.8	40	Diapers	46.1	320
Milk & Juice Cartons/Boxes - Coated	5.8	40	Other Organic	60.5	420
Plastic	292.3	2,030	Inorganics	136.8	950
#1 PET Bottles/Jars	25.9	180	Televisions	7.2	50
#1 Other PET Containers	1.4	10	Computer Monitors	4.3	30
#2 HDPE Bottles/Jars - Clear	10.1	70	Computer Equipment/Peripherals	5.8	40
#2 HDPE Bottles/Jars - Color	14.4	100	Electronic Equipment	24.5	170
#2 Other HDPE Containers	1.4	10	White Goods - Refrigerated	8.6	60
#6 Exp. Polystyrene Packaging	14.4	100	White Goods - Not refrigerated	18.7	130
#3-#7 Other - All	14.4	100	Lead-acid Batteries	15.8	110
Other Rigid Plastic Products	90.7	630	Other Household Batteries	1.4	10
Grocery & Merchandise Bags	8.6	60	Tires	28.8	200
Trash Bags	25.9	180	Household Bulky Items	21.6	150
Commercial & Industrial Film	24.5	170	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.2	210			
Other Plastic	30.2	210	Textiles	133.9	930
			Carpet	38.9	270
Glass	86.4	600	Carpet Padding	5.8	40
Recyclable Glass Bottles & Jars	80.6	560	Clothing	37.4	260
Flat Glass	4.3	30	Other Textiles	51.8	360
Other Glass	1.4	10			
			Household Hazardous Waste	28.8	200
Metal	138.2	960			
Aluminum Beverage Containers	15.8	110	Construction and Demolition Debris (C&D)	642.2	4,460
Other Aluminum	13.0	90			
HVAC Ducting	0.0	0	Total MSW (tons)		17,020
Ferrous Containers (Tin Cans)	27.4	190	Total MSW (pounds/person/day)		6.71

2007 population 13,890

County generation based on 2007 data.

Grundy County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	781.9	18,430	Metal		
Newsprint	147.6	3,480	Other Ferrous	55.2	1,300
High Grade Office Paper	43.3	1,020	Other Non-Ferrous	5.1	120
Magazines/Catalogs	71.3	1,680	Other Metal	21.6	510
Uncoated OCC/Kraft	311.8	7,350			
Boxboard	40.7	960	Organics	510.4	12,030
Mixed Paper - Recyclable	71.3	1,680	Yard Waste - Compostable	73.4	1,730
Compostable Paper	73.8	1,740	Yard Waste - Woody	67.5	1,590
Other Paper	22.1	520	Food Scraps	242.2	5,710
			Bottom Fines & Dirt	19.9	470
Beverage Containers	5.5	130	Diapers	46.7	1,100
Milk & Juice Cartons/Boxes - Coated	5.5	130	Other Organic	60.7	1,430
Plastic	345.7	8,150	Inorganics	136.2	3,210
#1 PET Bottles/Jars	25.5	600	Televisions	6.4	150
#1 Other PET Containers	2.1	50	Computer Monitors	4.7	110
#2 HDPE Bottles/Jars - Clear	10.2	240	Computer Equipment/Peripherals	5.1	120
#2 HDPE Bottles/Jars - Color	14.4	340	Electronic Equipment	24.2	570
#2 Other HDPE Containers	2.1	50	White Goods - Refrigerated	8.5	200
#6 Exp. Polystyrene Packaging	20.8	490	White Goods - Not refrigerated	19.1	450
#3-#7 Other - All	21.2	500	Lead-acid Batteries	16.1	380
Other Rigid Plastic Products	91.2	2,150	Other Household Batteries	1.3	30
Grocery & Merchandise Bags	14.4	340	Tires	28.8	680
Trash Bags	25.9	610	Household Bulky Items	22.1	520
Commercial & Industrial Film	38.6	910	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.1	710			
Other Plastic	49.2	1,160	Textiles	185.0	4,360
			Carpet	38.6	910
Glass	86.5	2,040	Carpet Padding	5.9	140
Recyclable Glass Bottles & Jars	81.0	1,910	Clothing	59.0	1,390
Flat Glass	3.8	90	Other Textiles	81.5	1,920
Other Glass	1.7	40			
			Household Hazardous Waste	28.8	680
Metal	138.7	3,270	Construction and Demolition Debris (C&D)	669.4	15,780
Aluminum Beverage Containers	15.7	370			
Other Aluminum	13.2	310			
HVAC Ducting	0.8	20			
Ferrous Containers (Tin Cans)	27.2	640			
			Total MSW (tons)		68,080
			Total MSW (pounds/person/day)		7.91

2007 population 47,144
 County generation based on 2007 data.

Hamilton County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	514.3	2,120	Metal		
Newsprint	41.2	170	Other Ferrous	55.8	230
High Grade Office Paper	21.8	90	Other Non-Ferrous	4.9	20
Magazines/Catalogs	67.9	280	Other Metal	21.8	90
Uncoated OCC/Kraft	177.1	730			
Boxboard	41.2	170	Organics	451.2	1,860
Mixed Paper - Recyclable	70.3	290	Yard Waste - Compostable	72.8	300
Compostable Paper	72.8	300	Yard Waste - Woody	67.9	280
Other Paper	21.8	90	Food Scraps	184.4	760
			Bottom Fines & Dirt	19.4	80
Beverage Containers	4.9	20	Diapers	46.1	190
Milk & Juice Cartons/Boxes - Coated	4.9	20	Other Organic	60.6	250
Plastic	291.1	1,200	Inorganics	138.3	570
#1 PET Bottles/Jars	26.7	110	Televisions	7.3	30
#1 Other PET Containers	2.4	10	Computer Monitors	4.9	20
#2 HDPE Bottles/Jars - Clear	9.7	40	Computer Equipment/Peripherals	4.9	20
#2 HDPE Bottles/Jars - Color	14.6	60	Electronic Equipment	24.3	100
#2 Other HDPE Containers	2.4	10	White Goods - Refrigerated	9.7	40
#6 Exp. Polystyrene Packaging	14.6	60	White Goods - Not refrigerated	19.4	80
#3-#7 Other - All	14.6	60	Lead-acid Batteries	17.0	70
Other Rigid Plastic Products	92.2	380	Other Household Batteries	0.0	0
Grocery & Merchandise Bags	7.3	30	Tires	29.1	120
Trash Bags	26.7	110	Household Bulky Items	21.8	90
Commercial & Industrial Film	21.8	90	Fluorescent Lights/Ballasts	<0.1	0
Other Film	29.1	120			
Other Plastic	29.1	120	Textiles	126.1	520
			Carpet	38.8	160
Glass	87.3	360	Carpet Padding	4.9	20
Recyclable Glass Bottles & Jars	80.0	330	Clothing	34.0	140
Flat Glass	4.9	20	Other Textiles	48.5	200
Other Glass	2.4	10			
			Household Hazardous Waste	31.5	130
Metal	135.8	560			
Aluminum Beverage Containers	14.6	60	Construction and Demolition Debris (C&D)	638.0	2,630
Other Aluminum	12.1	50			
HVAC Ducting	0.0	0			
Ferrous Containers (Tin Cans)	26.7	110	Total MSW (tons)		9,970
			Total MSW (pounds/person/day)		6.63

2007 population 8,245
 County generation based on 2007 data.

Hancock County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	524.4	4,940	Metal		
Newsprint	44.6	420	Other Ferrous	55.2	520
High Grade Office Paper	21.2	200	Other Non-Ferrous	5.3	50
Magazines/Catalogs	72.2	680	Other Metal	21.2	200
Uncoated OCC/Kraft	178.4	1,680			
Boxboard	40.3	380	Organics	486.2	4,580
Mixed Paper - Recyclable	71.1	670	Yard Waste - Compostable	73.3	690
Compostable Paper	74.3	700	Yard Waste - Woody	66.9	630
Other Paper	22.3	210	Food Scraps	218.7	2,060
			Bottom Fines & Dirt	20.2	190
Beverage Containers	5.3	50	Diapers	46.7	440
Milk & Juice Cartons/Boxes - Coated	5.3	50	Other Organic	60.5	570
Plastic	301.5	2,840	Inorganics	135.9	1,280
#1 PET Bottles/Jars	25.5	240	Televisions	6.4	60
#1 Other PET Containers	2.1	20	Computer Monitors	4.2	40
#2 HDPE Bottles/Jars - Clear	9.6	90	Computer Equipment/Peripherals	5.3	50
#2 HDPE Bottles/Jars - Color	14.9	140	Electronic Equipment	24.4	230
#2 Other HDPE Containers	2.1	20	White Goods - Refrigerated	8.5	80
#6 Exp. Polystyrene Packaging	15.9	150	White Goods - Not refrigerated	19.1	180
#3-#7 Other - All	15.9	150	Lead-acid Batteries	15.9	150
Other Rigid Plastic Products	91.3	860	Other Household Batteries	1.1	10
Grocery & Merchandise Bags	9.6	90	Tires	28.7	270
Trash Bags	25.5	240	Household Bulky Items	22.3	210
Commercial & Industrial Film	25.5	240	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.8	290			
Other Plastic	32.9	310	Textiles	139.1	1,310
			Carpet	38.2	360
Glass	86.0	810	Carpet Padding	5.3	50
Recyclable Glass Bottles & Jars	80.7	760	Clothing	40.3	380
Flat Glass	4.2	40	Other Textiles	55.2	520
Other Glass	1.1	10			
			Household Hazardous Waste	27.6	260
Metal	138.0	1,300	Construction and Demolition Debris (C&D)	649.7	6,120
Aluminum Beverage Containers	15.9	150			
Other Aluminum	12.7	120			
HVAC Ducting	1.1	10	Total MSW (tons)		23,490
Ferrous Containers (Tin Cans)	26.5	250	Total MSW (pounds/person/day)		6.83

2007 population 18,839
 County generation based on 2007 data.

Hardin County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	496.9	1,110	Metal		
Newsprint	31.3	70	Other Ferrous	53.7	120
High Grade Office Paper	22.4	50	Other Non-Ferrous	4.5	10
Magazines/Catalogs	62.7	140	Other Metal	22.4	50
Uncoated OCC/Kraft	170.1	380			
Boxboard	40.3	90	Organics	443.2	990
Mixed Paper - Recyclable	71.6	160	Yard Waste - Compostable	71.6	160
Compostable Paper	76.1	170	Yard Waste - Woody	67.1	150
Other Paper	22.4	50	Food Scraps	179.1	400
			Bottom Fines & Dirt	17.9	40
Beverage Containers	4.5	10	Diapers	44.8	100
Milk & Juice Cartons/Boxes - Coated	4.5	10	Other Organic	62.7	140
Plastic	282.0	630	Inorganics	129.8	290
#1 PET Bottles/Jars	26.9	60	Televisions	4.5	10
#1 Other PET Containers	0.0	0	Computer Monitors	4.5	10
#2 HDPE Bottles/Jars - Clear	9.0	20	Computer Equipment/Peripherals	4.5	10
#2 HDPE Bottles/Jars - Color	13.4	30	Electronic Equipment	22.4	50
#2 Other HDPE Containers	0.0	0	White Goods - Refrigerated	9.0	20
#6 Exp. Polystyrene Packaging	13.4	30	White Goods - Not refrigerated	17.9	40
#3-#7 Other - All	13.4	30	Lead-acid Batteries	17.9	40
Other Rigid Plastic Products	89.5	200	Other Household Batteries	0.0	0
Grocery & Merchandise Bags	9.0	20	Tires	26.9	60
Trash Bags	26.9	60	Household Bulky Items	22.4	50
Commercial & Industrial Film	22.4	50	Fluorescent Lights/Ballasts	<0.1	0
Other Film	31.3	70			
Other Plastic	26.9	60	Textiles	125.3	280
			Carpet	35.8	80
Glass	85.0	190	Carpet Padding	4.5	10
Recyclable Glass Bottles & Jars	80.6	180	Clothing	35.8	80
Flat Glass	4.5	10	Other Textiles	49.2	110
Other Glass	0.0	0			
			Household Hazardous Waste	22.4	50
Metal	138.8	310	Construction and Demolition Debris (C&D)	640.1	1,430
Aluminum Beverage Containers	17.9	40			
Other Aluminum	13.4	30			
HVAC Ducting	0.0	0	Total MSW (tons)		5,290
Ferrous Containers (Tin Cans)	26.9	60	Total MSW (pounds/person/day)		6.49

2007 population 4,468

County generation based on 2007 data.

Henderson County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	419.1	1,590	Metal		
Newsprint	36.9	140	Other Ferrous	55.4	210
High Grade Office Paper	21.1	80	Other Non-Ferrous	5.3	20
Magazines/Catalogs	65.9	250	Other Metal	21.1	80
Uncoated OCC/Kraft	89.6	340			
Boxboard	39.5	150	Organics	461.3	1,750
Mixed Paper - Recyclable	71.2	270	Yard Waste - Compostable	73.8	280
Compostable Paper	73.8	280	Yard Waste - Woody	68.5	260
Other Paper	21.1	80	Food Scraps	189.8	720
			Bottom Fines & Dirt	21.1	80
Beverage Containers	5.3	20	Diapers	47.4	180
Milk & Juice Cartons/Boxes - Coated	5.3	20	Other Organic	60.6	230
Plastic	303.2	1,150	Inorganics	131.8	500
#1 PET Bottles/Jars	26.4	100	Televisions	5.3	20
#1 Other PET Containers	2.6	10	Computer Monitors	5.3	20
#2 HDPE Bottles/Jars - Clear	10.5	40	Computer Equipment/Peripherals	5.3	20
#2 HDPE Bottles/Jars - Color	15.8	60	Electronic Equipment	23.7	90
#2 Other HDPE Containers	2.6	10	White Goods - Refrigerated	7.9	30
#6 Exp. Polystyrene Packaging	15.8	60	White Goods - Not refrigerated	18.5	70
#3-#7 Other - All	15.8	60	Lead-acid Batteries	15.8	60
Other Rigid Plastic Products	92.3	350	Other Household Batteries	0.0	0
Grocery & Merchandise Bags	10.5	40	Tires	29.0	110
Trash Bags	26.4	100	Household Bulky Items	21.1	80
Commercial & Industrial Film	23.7	90	Fluorescent Lights/Ballasts	<0.1	0
Other Film	29.0	110			
Other Plastic	31.6	120	Textiles	137.1	520
			Carpet	39.5	150
Glass	87.0	330	Carpet Padding	5.3	20
Recyclable Glass Bottles & Jars	81.7	310	Clothing	39.5	150
Flat Glass	2.6	10	Other Textiles	52.7	200
Other Glass	2.6	10			
			Household Hazardous Waste	29.0	110
Metal	137.1	520			
Aluminum Beverage Containers	15.8	60	Construction and Demolition Debris (C&D)	645.8	2,450
Other Aluminum	13.2	50			
HVAC Ducting	0.0	0			
Ferrous Containers (Tin Cans)	26.4	100	Total MSW (tons)		8,940
			Total MSW (pounds/person/day)		6.46

2007 population 7,587

County generation based on 2007 data.

Henry County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	536.9	13,330	Metal		
Newsprint	55.6	1,380	Other Ferrous	55.2	1,370
High Grade Office Paper	29.0	720	Other Non-Ferrous	5.2	130
Magazines/Catalogs	70.5	1,750	Other Metal	21.3	530
Uncoated OCC/Kraft	174.0	4,320			
Boxboard	40.7	1,010	Organics	482.5	11,980
Mixed Paper - Recyclable	71.3	1,770	Yard Waste - Compostable	73.3	1,820
Compostable Paper	73.7	1,830	Yard Waste - Woody	67.3	1,670
Other Paper	22.2	550	Food Scraps	214.7	5,330
			Bottom Fines & Dirt	20.1	500
Beverage Containers	5.2	130	Diapers	46.7	1,160
Milk & Juice Cartons/Boxes - Coated	5.2	130	Other Organic	60.4	1,500
Plastic	311.8	7,740	Inorganics	136.1	3,380
#1 PET Bottles/Jars	25.8	640	Televisions	6.4	160
#1 Other PET Containers	2.0	50	Computer Monitors	4.4	110
#2 HDPE Bottles/Jars - Clear	10.1	250	Computer Equipment/Peripherals	5.2	130
#2 HDPE Bottles/Jars - Color	14.5	360	Electronic Equipment	24.2	600
#2 Other HDPE Containers	2.0	50	White Goods - Refrigerated	8.5	210
#6 Exp. Polystyrene Packaging	16.5	410	White Goods - Not refrigerated	18.9	470
#3-#7 Other - All	16.9	420	Lead-acid Batteries	16.1	400
Other Rigid Plastic Products	91.0	2,260	Other Household Batteries	1.2	30
Grocery & Merchandise Bags	10.9	270	Tires	29.0	720
Trash Bags	25.8	640	Household Bulky Items	22.2	550
Commercial & Industrial Film	29.0	720	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.2	750			
Other Plastic	37.1	920	Textiles	151.0	3,750
			Carpet	39.1	970
Glass	86.2	2,140	Carpet Padding	5.6	140
Recyclable Glass Bottles & Jars	81.0	2,010	Clothing	44.7	1,110
Flat Glass	3.6	90	Other Textiles	61.6	1,530
Other Glass	1.6	40			
			Household Hazardous Waste	29.0	720
Metal	138.2	3,430			
Aluminum Beverage Containers	15.7	390	Construction and Demolition Debris (C&D)	652.1	16,190
Other Aluminum	12.9	320			
HVAC Ducting	0.8	20			
Ferrous Containers (Tin Cans)	27.0	670	Total MSW (tons)		62,790
			Total MSW (pounds/person/day)		6.93

2007 population 49,654
 County generation based on 2007 data.

Iroquois County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	538.7	8,160	Metal		
Newsprint	99.0	1,500	Other Ferrous	55.5	840
High Grade Office Paper	23.8	360	Other Non-Ferrous	5.3	80
Magazines/Catalogs	70.0	1,060	Other Metal	21.8	330
Uncoated OCC/Kraft	138.0	2,090			
Boxboard	40.3	610	Organics	481.3	7,290
Mixed Paper - Recyclable	71.3	1,080	Yard Waste - Compostable	73.3	1,110
Compostable Paper	73.9	1,120	Yard Waste - Woody	67.3	1,020
Other Paper	22.4	340	Food Scraps	213.2	3,230
			Bottom Fines & Dirt	19.8	300
Beverage Containers	5.3	80	Diapers	46.9	710
Milk & Juice Cartons/Boxes - Coated	5.3	80	Other Organic	60.7	920
Plastic	307.7	4,660	Inorganics	137.3	2,080
#1 PET Bottles/Jars	25.7	390	Televisions	6.6	100
#1 Other PET Containers	2.0	30	Computer Monitors	4.6	70
#2 HDPE Bottles/Jars - Clear	9.9	150	Computer Equipment/Peripherals	5.3	80
#2 HDPE Bottles/Jars - Color	14.5	220	Electronic Equipment	24.4	370
#2 Other HDPE Containers	2.0	30	White Goods - Refrigerated	8.6	130
#6 Exp. Polystyrene Packaging	16.5	250	White Goods - Not refrigerated	19.1	290
#3-#7 Other - All	16.5	250	Lead-acid Batteries	15.8	240
Other Rigid Plastic Products	91.1	1,380	Other Household Batteries	1.3	20
Grocery & Merchandise Bags	10.6	160	Tires	29.0	440
Trash Bags	25.7	390	Household Bulky Items	22.4	340
Commercial & Industrial Film	27.7	420	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.4	460			
Other Plastic	35.0	530	Textiles	145.9	2,210
			Carpet	38.3	580
Glass	85.8	1,300	Carpet Padding	5.9	90
Recyclable Glass Bottles & Jars	80.5	1,220	Clothing	42.9	650
Flat Glass	4.0	60	Other Textiles	58.8	890
Other Glass	1.3	20			
			Household Hazardous Waste	28.4	430
Metal	139.3	2,110	Construction and Demolition Debris (C&D)	650.3	9,850
Aluminum Beverage Containers	15.8	240			
Other Aluminum	13.2	200			
HVAC Ducting	0.7	10			
Ferrous Containers (Tin Cans)	27.1	410	Total MSW (tons)		38,170
			Total MSW (pounds/person/day)		6.90

2007 population

30,294

County generation based on 2007 data.

Jackson County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	718.9	21,150	Metal		
Newsprint	65.6	1,930	Other Ferrous	55.1	1,620
High Grade Office Paper	31.6	930	Other Non-Ferrous	5.1	150
Magazines/Catalogs	66.3	1,950	Other Metal	21.4	630
Uncoated OCC/Kraft	347.7	10,230			
Boxboard	40.4	1,190	Organics	540.8	15,910
Mixed Paper - Recyclable	71.4	2,100	Yard Waste - Compostable	73.4	2,160
Compostable Paper	73.8	2,170	Yard Waste - Woody	67.3	1,980
Other Paper	22.1	650	Food Scraps	272.6	8,020
			Bottom Fines & Dirt	20.1	590
Beverage Containers	5.4	160	Diapers	46.9	1,380
Milk & Juice Cartons/Boxes - Coated	5.4	160	Other Organic	60.5	1,780
Plastic	274.6	8,080	Inorganics	135.6	3,990
#1 PET Bottles/Jars	25.5	750	Televisions	6.5	190
#1 Other PET Containers	2.0	60	Computer Monitors	4.4	130
#2 HDPE Bottles/Jars - Clear	9.9	290	Computer Equipment/Peripherals	5.1	150
#2 HDPE Bottles/Jars - Color	14.6	430	Electronic Equipment	24.1	710
#2 Other HDPE Containers	2.0	60	White Goods - Refrigerated	8.5	250
#6 Exp. Polystyrene Packaging	12.6	370	White Goods - Not refrigerated	19.0	560
#3-#7 Other - All	12.6	370	Lead-acid Batteries	16.0	470
Other Rigid Plastic Products	91.1	2,680	Other Household Batteries	1.0	30
Grocery & Merchandise Bags	6.8	200	Tires	28.9	850
Trash Bags	25.8	760	Household Bulky Items	22.1	650
Commercial & Industrial Film	18.4	540	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.3	890			
Other Plastic	23.1	680	Textiles	111.8	3,290
			Carpet	38.7	1,140
Glass	86.0	2,530	Carpet Padding	5.8	170
Recyclable Glass Bottles & Jars	80.9	2,380	Clothing	28.2	830
Flat Glass	3.7	110	Other Textiles	39.1	1,150
Other Glass	1.4	40			
			Household Hazardous Waste	28.9	850
Metal	137.7	4,050			
Aluminum Beverage Containers	15.6	460	Construction and Demolition Debris (C&D)	633.6	18,640
Other Aluminum	12.9	380			
HVAC Ducting	0.7	20			
Ferrous Containers (Tin Cans)	26.9	790	Total MSW (tons)		78,650
			Total MSW (pounds/person/day)		7.32

2007 population 58,841

County generation based on 2007 data.

Jasper County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	552.2	2,680	Metal		
Newsprint	51.5	250	Other Ferrous	55.6	270
High Grade Office Paper	20.6	100	Other Non-Ferrous	4.1	20
Magazines/Catalogs	65.9	320	Other Metal	20.6	100
Uncoated OCC/Kraft	204.0	990			
Boxboard	41.2	200	Organics	451.2	2,190
Mixed Paper - Recyclable	72.1	350	Yard Waste - Compostable	74.2	360
Compostable Paper	74.2	360	Yard Waste - Woody	68.0	330
Other Paper	22.7	110	Food Scraps	181.3	880
			Bottom Fines & Dirt	20.6	100
Beverage Containers	6.2	30	Diapers	47.4	230
Milk & Juice Cartons/Boxes - Coated	6.2	30	Other Organic	59.8	290
Plastic	307.0	1,490	Inorganics	138.0	670
#1 PET Bottles/Jars	24.7	120	Televisions	6.2	30
#1 Other PET Containers	2.1	10	Computer Monitors	4.1	20
#2 HDPE Bottles/Jars - Clear	10.3	50	Computer Equipment/Peripherals	6.2	30
#2 HDPE Bottles/Jars - Color	14.4	70	Electronic Equipment	24.7	120
#2 Other HDPE Containers	2.1	10	White Goods - Refrigerated	8.2	40
#6 Exp. Polystyrene Packaging	16.5	80	White Goods - Not refrigerated	18.5	90
#3-#7 Other - All	16.5	80	Lead-acid Batteries	16.5	80
Other Rigid Plastic Products	90.7	440	Other Household Batteries	2.1	10
Grocery & Merchandise Bags	10.3	50	Tires	28.8	140
Trash Bags	26.8	130	Household Bulky Items	22.7	110
Commercial & Industrial Film	26.8	130	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.9	150			
Other Plastic	35.0	170	Textiles	146.3	710
			Carpet	39.1	190
Glass	86.5	420	Carpet Padding	6.2	30
Recyclable Glass Bottles & Jars	80.4	390	Clothing	43.3	210
Flat Glass	4.1	20	Other Textiles	57.7	280
Other Glass	2.1	10			
			Household Hazardous Waste	28.8	140
Metal	136.0	660			
Aluminum Beverage Containers	16.5	80	Construction and Demolition Debris (C&D)	649.0	3,150
Other Aluminum	12.4	60			
HVAC Ducting	0.0	0			
Ferrous Containers (Tin Cans)	26.8	130	Total MSW (tons)		12,140
			Total MSW (pounds/person/day)		6.85

2007 population 9,707

County generation based on 2007 data.

Jefferson County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	818.1	16,430	Metal		
Newsprint	76.7	1,540	Other Ferrous	55.3	1,110
High Grade Office Paper	45.8	920	Other Non-Ferrous	5.0	100
Magazines/Catalogs	66.2	1,330	Other Metal	21.4	430
Uncoated OCC/Kraft	421.7	8,470			
Boxboard	40.3	810	Organics	541.7	10,880
Mixed Paper - Recyclable	71.2	1,430	Yard Waste - Compostable	73.2	1,470
Compostable Paper	73.7	1,480	Yard Waste - Woody	67.2	1,350
Other Paper	22.4	450	Food Scraps	273.8	5,500
			Bottom Fines & Dirt	19.9	400
Beverage Containers	5.5	110	Diapers	46.8	940
Milk & Juice Cartons/Boxes - Coated	5.5	110	Other Organic	60.7	1,220
Plastic	302.2	6,070	Inorganics	136.4	2,740
#1 PET Bottles/Jars	25.4	510	Televisions	6.5	130
#1 Other PET Containers	2.0	40	Computer Monitors	4.5	90
#2 HDPE Bottles/Jars - Clear	10.0	200	Computer Equipment/Peripherals	5.5	110
#2 HDPE Bottles/Jars - Color	14.4	290	Electronic Equipment	24.4	490
#2 Other HDPE Containers	2.0	40	White Goods - Refrigerated	8.5	170
#6 Exp. Polystyrene Packaging	15.4	310	White Goods - Not refrigerated	18.9	380
#3-#7 Other - All	15.9	320	Lead-acid Batteries	15.9	320
Other Rigid Plastic Products	91.1	1,830	Other Household Batteries	1.0	20
Grocery & Merchandise Bags	10.0	200	Tires	28.9	580
Trash Bags	25.9	520	Household Bulky Items	22.4	450
Commercial & Industrial Film	26.4	530	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.4	610			
Other Plastic	33.4	670	Textiles	140.9	2,830
			Carpet	38.8	780
Glass	86.6	1,740	Carpet Padding	6.0	120
Recyclable Glass Bottles & Jars	81.2	1,630	Clothing	40.3	810
Flat Glass	4.0	80	Other Textiles	55.8	1,120
Other Glass	1.5	30			
			Household Hazardous Waste	28.9	580
Metal	137.9	2,770			
Aluminum Beverage Containers	15.9	320	Construction and Demolition Debris (C&D)	647.3	13,000
Other Aluminum	12.9	260			
HVAC Ducting	0.5	10			
Ferrous Containers (Tin Cans)	26.9	540	Total MSW (tons)		57,150
			Total MSW (pounds/person/day)		7.80

2007 population 40,168

County generation based on 2007 data.

Jersey County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	609.2	6,840	Metal		
Newsprint	64.1	720	Other Ferrous	55.2	620
High Grade Office Paper	43.6	490	Other Non-Ferrous	5.3	60
Magazines/Catalogs	65.9	740	Other Metal	21.4	240
Uncoated OCC/Kraft	227.1	2,550			
Boxboard	41.0	460	Organics	497.9	5,590
Mixed Paper - Recyclable	71.3	800	Yard Waste - Compostable	73.0	820
Compostable Paper	73.9	830	Yard Waste - Woody	67.7	760
Other Paper	22.3	250	Food Scraps	230.7	2,590
			Bottom Fines & Dirt	19.6	220
Beverage Containers	5.3	60	Diapers	46.3	520
Milk & Juice Cartons/Boxes - Coated	5.3	60	Other Organic	60.6	680
Plastic	318.9	3,580	Inorganics	136.3	1,530
#1 PET Bottles/Jars	25.8	290	Televisions	6.2	70
#1 Other PET Containers	1.8	20	Computer Monitors	4.5	50
#2 HDPE Bottles/Jars - Clear	9.8	110	Computer Equipment/Peripherals	5.3	60
#2 HDPE Bottles/Jars - Color	14.3	160	Electronic Equipment	24.0	270
#2 Other HDPE Containers	1.8	20	White Goods - Refrigerated	8.9	100
#6 Exp. Polystyrene Packaging	17.8	200	White Goods - Not refrigerated	18.7	210
#3-#7 Other - All	17.8	200	Lead-acid Batteries	16.0	180
Other Rigid Plastic Products	90.8	1,020	Other Household Batteries	0.9	10
Grocery & Merchandise Bags	11.6	130	Tires	29.4	330
Trash Bags	25.8	290	Household Bulky Items	22.3	250
Commercial & Industrial Film	31.2	350	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.3	340			
Other Plastic	40.1	450	Textiles	158.5	1,780
			Carpet	39.2	440
Glass	86.4	970	Carpet Padding	5.3	60
Recyclable Glass Bottles & Jars	81.1	910	Clothing	48.1	540
Flat Glass	3.6	40	Other Textiles	65.9	740
Other Glass	1.8	20			
			Household Hazardous Waste	29.4	330
Metal	138.9	1,560	Construction and Demolition Debris (C&D)	656.4	7,370
Aluminum Beverage Containers	16.0	180			
Other Aluminum	13.4	150			
HVAC Ducting	0.9	10	Total MSW (tons)		29,610
Ferrous Containers (Tin Cans)	26.7	300	Total MSW (pounds/person/day)		7.23

2007 population 22,455

County generation based on 2007 data.

Jo Daviess County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	713.8	7,960	Metal		
Newsprint	69.0	770	Other Ferrous	55.6	620
High Grade Office Paper	35.0	390	Other Non-Ferrous	5.4	60
Magazines/Catalogs	75.3	840	Other Metal	21.5	240
Uncoated OCC/Kraft	327.3	3,650			
Boxboard	40.4	450	Organics	682.4	7,610
Mixed Paper - Recyclable	70.8	790	Yard Waste - Compostable	73.5	820
Compostable Paper	73.5	820	Yard Waste - Woody	67.3	750
Other Paper	22.4	250	Food Scraps	414.3	4,620
			Bottom Fines & Dirt	19.7	220
Beverage Containers	5.4	60	Diapers	46.6	520
Milk & Juice Cartons/Boxes - Coated	5.4	60	Other Organic	61.0	680
Plastic	313.8	3,500	Inorganics	136.3	1,520
#1 PET Bottles/Jars	26.0	290	Televisions	6.3	70
#1 Other PET Containers	1.8	20	Computer Monitors	4.5	50
#2 HDPE Bottles/Jars - Clear	9.9	110	Computer Equipment/Peripherals	5.4	60
#2 HDPE Bottles/Jars - Color	14.3	160	Electronic Equipment	24.2	270
#2 Other HDPE Containers	1.8	20	White Goods - Refrigerated	9.0	100
#6 Exp. Polystyrene Packaging	17.0	190	White Goods - Not refrigerated	18.8	210
#3-#7 Other - All	17.0	190	Lead-acid Batteries	16.1	180
Other Rigid Plastic Products	91.5	1,020	Other Household Batteries	0.9	10
Grocery & Merchandise Bags	10.8	120	Tires	28.7	320
Trash Bags	26.0	290	Household Bulky Items	22.4	250
Commercial & Industrial Film	29.6	330	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.5	340			
Other Plastic	37.7	420	Textiles	153.3	1,710
			Carpet	39.5	440
Glass	87.0	970	Carpet Padding	5.4	60
Recyclable Glass Bottles & Jars	81.6	910	Clothing	45.7	510
Flat Glass	3.6	40	Other Textiles	62.8	700
Other Glass	1.8	20			
			Household Hazardous Waste	27.8	310
Metal	138.1	1,540	Construction and Demolition Debris (C&D)	654.6	7,300
Aluminum Beverage Containers	15.2	170			
Other Aluminum	12.6	140			
HVAC Ducting	0.9	10	Total MSW (tons)		32,480
Ferrous Containers (Tin Cans)	26.9	300	Total MSW (pounds/person/day)		7.98

2007 population 22,304
 County generation based on 2007 data.

Johnson County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	456.2	2,980	Metal		
Newsprint	35.2	230	Other Ferrous	55.1	360
High Grade Office Paper	21.4	140	Other Non-Ferrous	4.6	30
Magazines/Catalogs	65.8	430	Other Metal	21.4	140
Uncoated OCC/Kraft	125.5	820			
Boxboard	41.3	270	Organics	466.9	3,050
Mixed Paper - Recyclable	71.9	470	Yard Waste - Compostable	73.5	480
Compostable Paper	73.5	480	Yard Waste - Woody	67.4	440
Other Paper	21.4	140	Food Scraps	197.5	1,290
			Bottom Fines & Dirt	19.9	130
Beverage Containers	6.1	40	Diapers	47.5	310
Milk & Juice Cartons/Boxes - Coated	6.1	40	Other Organic	61.2	400
Plastic	301.6	1,970	Inorganics	136.2	890
#1 PET Bottles/Jars	26.0	170	Televisions	6.1	40
#1 Other PET Containers	1.5	10	Computer Monitors	4.6	30
#2 HDPE Bottles/Jars - Clear	10.7	70	Computer Equipment/Peripherals	4.6	30
#2 HDPE Bottles/Jars - Color	15.3	100	Electronic Equipment	24.5	160
#2 Other HDPE Containers	1.5	10	White Goods - Refrigerated	9.2	60
#6 Exp. Polystyrene Packaging	15.3	100	White Goods - Not refrigerated	18.4	120
#3-#7 Other - All	15.3	100	Lead-acid Batteries	15.3	100
Other Rigid Plastic Products	91.8	600	Other Household Batteries	1.5	10
Grocery & Merchandise Bags	9.2	60	Tires	29.1	190
Trash Bags	26.0	170	Household Bulky Items	23.0	150
Commercial & Industrial Film	26.0	170	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.6	200			
Other Plastic	32.1	210	Textiles	136.2	890
			Carpet	38.3	250
Glass	85.7	560	Carpet Padding	4.6	30
Recyclable Glass Bottles & Jars	81.1	530	Clothing	39.8	260
Flat Glass	3.1	20	Other Textiles	53.6	350
Other Glass	1.5	10			
			Household Hazardous Waste	27.6	180
Metal	136.2	890			
Aluminum Beverage Containers	15.3	100	Construction and Demolition Debris (C&D)	647.5	4,230
Other Aluminum	12.2	80			
HVAC Ducting	0.0	0	Total MSW (tons)		15,680
Ferrous Containers (Tin Cans)	27.6	180	Total MSW (pounds/person/day)		6.58

2007 population 13,065
 County generation based on 2007 data.

Kane County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	819.3	205,240	Metal		
Newsprint	145.7	36,490	Other Ferrous	55.2	13,830
High Grade Office Paper	43.4	10,880	Other Non-Ferrous	5.1	1,290
Magazines/Catalogs	64.1	16,060	Other Metal	21.5	5,380
Uncoated OCC/Kraft	358.2	89,740			
Boxboard	40.6	10,160	Organics	519.0	130,010
Mixed Paper - Recyclable	71.3	17,850	Yard Waste - Compostable	73.3	18,370
Compostable Paper	73.9	18,510	Yard Waste - Woody	67.3	16,860
Other Paper	22.2	5,550	Food Scraps	251.0	62,890
			Bottom Fines & Dirt	20.0	5,020
Beverage Containers	5.3	1,340	Diapers	46.7	11,710
Milk & Juice Cartons/Boxes - Coated	5.3	1,340	Other Organic	60.5	15,160
Plastic	355.0	88,920	Inorganics	136.6	34,210
#1 PET Bottles/Jars	25.6	6,420	Televisions	6.5	1,630
#1 Other PET Containers	2.2	540	Computer Monitors	4.6	1,150
#2 HDPE Bottles/Jars - Clear	10.0	2,510	Computer Equipment/Peripherals	5.3	1,320
#2 HDPE Bottles/Jars - Color	14.6	3,650	Electronic Equipment	24.2	6,070
#2 Other HDPE Containers	2.0	510	White Goods - Refrigerated	8.6	2,160
#6 Exp. Polystyrene Packaging	22.1	5,530	White Goods - Not refrigerated	19.0	4,750
#3-#7 Other - All	22.3	5,590	Lead-acid Batteries	16.0	4,010
Other Rigid Plastic Products	91.2	22,850	Other Household Batteries	1.1	270
Grocery & Merchandise Bags	15.3	3,840	Tires	29.0	7,260
Trash Bags	25.8	6,470	Household Bulky Items	22.2	5,570
Commercial & Industrial Film	41.1	10,300	Fluorescent Lights/Ballasts	0.1	20
Other Film	30.3	7,580			
Other Plastic	52.4	13,130	Textiles	195.2	48,900
			Carpet	38.8	9,710
Glass	86.3	21,610	Carpet Padding	5.7	1,420
Recyclable Glass Bottles & Jars	80.9	20,270	Clothing	63.4	15,880
Flat Glass	3.8	960	Other Textiles	87.4	21,890
Other Glass	1.5	380			
			Household Hazardous Waste	28.8	7,210
Metal	138.2	34,610			
Aluminum Beverage Containers	15.7	3,930	Construction and Demolition Debris (C&D)	673.4	168,690
Other Aluminum	13.0	3,260			
HVAC Ducting	0.6	160			
Ferrous Containers (Tin Cans)	27.0	6,760	Total MSW (tons)		740,740
			Total MSW (pounds/person/day)		8.10

2007 population 501,021
 County generation based on 2007 data.

Kankakee County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	745.9	41,290	Metal		
Newsprint	101.9	5,640	Other Ferrous	55.3	3,060
High Grade Office Paper	34.5	1,910	Other Non-Ferrous	5.1	280
Magazines/Catalogs	67.0	3,710	Other Metal	21.5	1,190
Uncoated OCC/Kraft	334.6	18,520			
Boxboard	40.6	2,250	Organics	514.2	28,460
Mixed Paper - Recyclable	71.2	3,940	Yard Waste - Compostable	73.3	4,060
Compostable Paper	73.9	4,090	Yard Waste - Woody	67.4	3,730
Other Paper	22.2	1,230	Food Scraps	246.1	13,620
			Bottom Fines & Dirt	20.1	1,110
Beverage Containers	5.4	300	Diapers	46.8	2,590
Milk & Juice Cartons/Boxes - Coated	5.4	300	Other Organic	60.5	3,350
Plastic	319.2	17,670	Inorganics	136.6	7,560
#1 PET Bottles/Jars	25.7	1,420	Televisions	6.5	360
#1 Other PET Containers	2.2	120	Computer Monitors	4.5	250
#2 HDPE Bottles/Jars - Clear	9.9	550	Computer Equipment/Peripherals	5.2	290
#2 HDPE Bottles/Jars - Color	14.6	810	Electronic Equipment	24.2	1,340
#2 Other HDPE Containers	2.0	110	White Goods - Refrigerated	8.7	480
#6 Exp. Polystyrene Packaging	17.7	980	White Goods - Not refrigerated	19.0	1,050
#3-#7 Other - All	17.9	990	Lead-acid Batteries	16.1	890
Other Rigid Plastic Products	91.2	5,050	Other Household Batteries	1.1	60
Grocery & Merchandise Bags	11.6	640	Tires	28.9	1,600
Trash Bags	25.8	1,430	Household Bulky Items	22.2	1,230
Commercial & Industrial Film	30.9	1,710	Fluorescent Lights/Ballasts	0.2	10
Other Film	30.4	1,680			
Other Plastic	39.4	2,180	Textiles	157.5	8,720
			Carpet	38.7	2,140
Glass	86.2	4,770	Carpet Padding	5.8	320
Recyclable Glass Bottles & Jars	80.9	4,480	Clothing	47.5	2,630
Flat Glass	3.8	210	Other Textiles	65.6	3,630
Other Glass	1.4	80			
			Household Hazardous Waste	28.7	1,590
Metal	138.2	7,650			
Aluminum Beverage Containers	15.7	870	Construction and Demolition Debris (C&D)	655.4	36,280
Other Aluminum	13.0	720			
HVAC Ducting	0.7	40			
Ferrous Containers (Tin Cans)	26.9	1,490	Total MSW (tons)		154,290
			Total MSW (pounds/person/day)		7.64

2007 population 110,705

County generation based on 2007 data.

Kendall County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	616.2	29,830	Metal		
Newsprint	98.3	4,760	Other Ferrous	55.2	2,670
High Grade Office Paper	43.4	2,100	Other Non-Ferrous	5.2	250
Magazines/Catalogs	65.1	3,150	Other Metal	21.5	1,040
Uncoated OCC/Kraft	201.6	9,760			
Boxboard	40.5	1,960	Organics	462.1	22,370
Mixed Paper - Recyclable	71.3	3,450	Yard Waste - Compostable	73.3	3,550
Compostable Paper	74.0	3,580	Yard Waste - Woody	67.3	3,260
Other Paper	22.1	1,070	Food Scraps	194.2	9,400
			Bottom Fines & Dirt	20.0	970
Beverage Containers	5.4	260	Diapers	46.7	2,260
Milk & Juice Cartons/Boxes - Coated	5.4	260	Other Organic	60.5	2,930
Plastic	378.6	18,330	Inorganics	136.3	6,600
#1 PET Bottles/Jars	25.6	1,240	Televisions	6.6	320
#1 Other PET Containers	2.1	100	Computer Monitors	4.5	220
#2 HDPE Bottles/Jars - Clear	10.1	490	Computer Equipment/Peripherals	5.2	250
#2 HDPE Bottles/Jars - Color	14.7	710	Electronic Equipment	24.2	1,170
#2 Other HDPE Containers	2.1	100	White Goods - Refrigerated	8.7	420
#6 Exp. Polystyrene Packaging	24.8	1,200	White Goods - Not refrigerated	19.0	920
#3-#7 Other - All	25.2	1,220	Lead-acid Batteries	15.9	770
Other Rigid Plastic Products	91.3	4,420	Other Household Batteries	1.0	50
Grocery & Merchandise Bags	17.8	860	Tires	28.9	1,400
Trash Bags	25.8	1,250	Household Bulky Items	22.3	1,080
Commercial & Industrial Film	47.7	2,310	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.4	1,470			
Other Plastic	61.1	2,960	Textiles	219.2	10,610
			Carpet	38.6	1,870
Glass	86.1	4,170	Carpet Padding	5.8	280
Recyclable Glass Bottles & Jars	81.0	3,920	Clothing	73.5	3,560
Flat Glass	3.7	180	Other Textiles	101.2	4,900
Other Glass	1.4	70			
			Household Hazardous Waste	28.5	1,380
Metal	138.2	6,690			
Aluminum Beverage Containers	15.7	760	Construction and Demolition Debris (C&D)	685.4	33,180
Other Aluminum	13.0	630			
HVAC Ducting	0.6	30			
Ferrous Containers (Tin Cans)	27.1	1,310	Total MSW (tons)		133,420
			Total MSW (pounds/person/day)		7.55

2007 population 96,818
 County generation based on 2007 data.

Knox County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	750.2	19,450	Metal		
Newsprint	71.7	1,860	Other Ferrous	55.2	1,430
High Grade Office Paper	35.9	930	Other Non-Ferrous	5.0	130
Magazines/Catalogs	69.8	1,810	Other Metal	21.6	560
Uncoated OCC/Kraft	364.9	9,460			
Boxboard	40.5	1,050	Organics	521.8	13,530
Mixed Paper - Recyclable	71.4	1,850	Yard Waste - Compostable	73.3	1,900
Compostable Paper	74.1	1,920	Yard Waste - Woody	67.5	1,750
Other Paper	22.0	570	Food Scraps	253.8	6,580
			Bottom Fines & Dirt	20.1	520
Beverage Containers	5.4	140	Diapers	46.7	1,210
Milk & Juice Cartons/Boxes - Coated	5.4	140	Other Organic	60.6	1,570
Plastic	295.1	7,650	Inorganics	136.5	3,540
#1 PET Bottles/Jars	25.5	660	Televisions	6.6	170
#1 Other PET Containers	2.3	60	Computer Monitors	4.6	120
#2 HDPE Bottles/Jars - Clear	10.0	260	Computer Equipment/Peripherals	5.4	140
#2 HDPE Bottles/Jars - Color	14.7	380	Electronic Equipment	24.3	630
#2 Other HDPE Containers	1.9	50	White Goods - Refrigerated	8.5	220
#6 Exp. Polystyrene Packaging	15.0	390	White Goods - Not refrigerated	18.9	490
#3-#7 Other - All	15.4	400	Lead-acid Batteries	15.8	410
Other Rigid Plastic Products	91.0	2,360	Other Household Batteries	1.2	30
Grocery & Merchandise Bags	8.9	230	Tires	28.9	750
Trash Bags	25.8	670	Household Bulky Items	22.4	580
Commercial & Industrial Film	23.9	620	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.1	780			
Other Plastic	30.5	790	Textiles	132.7	3,440
			Carpet	39.0	1,010
Glass	86.0	2,230	Carpet Padding	5.8	150
Recyclable Glass Bottles & Jars	80.6	2,090	Clothing	37.0	960
Flat Glass	3.9	100	Other Textiles	50.9	1,320
Other Glass	1.5	40			
			Household Hazardous Waste	28.9	750
Metal	138.5	3,590	Construction and Demolition Debris (C&D)	643.3	16,680
Aluminum Beverage Containers	15.8	410			
Other Aluminum	13.1	340			
HVAC Ducting	0.8	20			
Ferrous Containers (Tin Cans)	27.0	700			
			Total MSW (tons)		71,000
			Total MSW (pounds/person/day)		7.50

2007 population 51,855

County generation based on 2007 data.

Lake County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	918.5	326,170	Metal		
Newsprint	152.9	54,310	Other Ferrous	55.2	19,610
High Grade Office Paper	48.1	17,080	Other Non-Ferrous	5.1	1,820
Magazines/Catalogs	68.7	24,380	Other Metal	21.5	7,630
Uncoated OCC/Kraft	440.9	156,580			
Boxboard	40.6	14,410	Organics	552.0	196,010
Mixed Paper - Recyclable	71.2	25,300	Yard Waste - Compostable	73.3	26,040
Compostable Paper	73.9	26,240	Yard Waste - Woody	67.3	23,900
Other Paper	22.2	7,870	Food Scraps	284.0	100,840
			Bottom Fines & Dirt	20.0	7,120
Beverage Containers	5.4	1,900	Diapers	46.8	16,610
Milk & Juice Cartons/Boxes - Coated	5.4	1,900	Other Organic	60.5	21,500
Plastic	369.2	131,120	Inorganics	136.6	48,500
#1 PET Bottles/Jars	25.6	9,100	Televisions	6.5	2,310
#1 Other PET Containers	2.2	770	Computer Monitors	4.6	1,630
#2 HDPE Bottles/Jars - Clear	10.0	3,560	Computer Equipment/Peripherals	5.3	1,870
#2 HDPE Bottles/Jars - Color	14.6	5,180	Electronic Equipment	24.2	8,610
#2 Other HDPE Containers	2.1	730	White Goods - Refrigerated	8.6	3,060
#6 Exp. Polystyrene Packaging	23.8	8,450	White Goods - Not refrigerated	19.0	6,740
#3-#7 Other - All	24.0	8,540	Lead-acid Batteries	16.0	5,680
Other Rigid Plastic Products	91.2	32,390	Other Household Batteries	1.1	380
Grocery & Merchandise Bags	16.9	5,990	Tires	29.0	10,290
Trash Bags	25.8	9,170	Household Bulky Items	22.2	7,900
Commercial & Industrial Film	45.2	16,050	Fluorescent Lights/Ballasts	0.1	30
Other Film	30.3	10,750			
Other Plastic	57.6	20,440	Textiles	210.0	74,590
			Carpet	38.7	13,760
Glass	86.2	30,620	Carpet Padding	5.7	2,020
Recyclable Glass Bottles & Jars	80.9	28,740	Clothing	69.6	24,720
Flat Glass	3.8	1,350	Other Textiles	96.0	34,090
Other Glass	1.5	530			
			Household Hazardous Waste	28.8	10,220
Metal	138.1	49,050			
Aluminum Beverage Containers	15.7	5,570	Construction and Demolition Debris (C&D)	680.4	241,620
Other Aluminum	13.0	4,610			
HVAC Ducting	0.6	230			
Ferrous Containers (Tin Cans)	27.0	9,580	Total MSW (tons)		1,109,800
			Total MSW (pounds/person/day)		8.56

2007 population 710,241

County generation based on 2007 data.

LaSalle County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	778.0	43,810	Metal		
Newsprint	110.1	6,200	Other Ferrous	55.2	3,110
High Grade Office Paper	36.4	2,050	Other Non-Ferrous	5.2	290
Magazines/Catalogs	71.0	4,000	Other Metal	21.5	1,210
Uncoated OCC/Kraft	352.7	19,860			
Boxboard	40.5	2,280	Organics	522.8	29,440
Mixed Paper - Recyclable	71.2	4,010	Yard Waste - Compostable	73.3	4,130
Compostable Paper	73.9	4,160	Yard Waste - Woody	67.3	3,790
Other Paper	22.2	1,250	Food Scraps	254.8	14,350
			Bottom Fines & Dirt	20.1	1,130
Beverage Containers	5.3	300	Diapers	46.7	2,630
Milk & Juice Cartons/Boxes - Coated	5.3	300	Other Organic	60.6	3,410
Plastic	310.3	17,470	Inorganics	136.7	7,700
#1 PET Bottles/Jars	25.6	1,440	Televisions	6.6	370
#1 Other PET Containers	2.1	120	Computer Monitors	4.6	260
#2 HDPE Bottles/Jars - Clear	9.9	560	Computer Equipment/Peripherals	5.3	300
#2 HDPE Bottles/Jars - Color	14.6	820	Electronic Equipment	24.2	1,360
#2 Other HDPE Containers	2.1	120	White Goods - Refrigerated	8.7	490
#6 Exp. Polystyrene Packaging	16.7	940	White Goods - Not refrigerated	19.0	1,070
#3-#7 Other - All	16.9	950	Lead-acid Batteries	16.0	900
Other Rigid Plastic Products	91.3	5,140	Other Household Batteries	1.1	60
Grocery & Merchandise Bags	10.7	600	Tires	28.9	1,630
Trash Bags	25.8	1,450	Household Bulky Items	22.2	1,250
Commercial & Industrial Film	28.4	1,600	Fluorescent Lights/Ballasts	0.2	10
Other Film	30.2	1,700			
Other Plastic	36.1	2,030	Textiles	148.3	8,350
			Carpet	38.7	2,180
Glass	86.1	4,850	Carpet Padding	5.7	320
Recyclable Glass Bottles & Jars	81.0	4,560	Clothing	43.7	2,460
Flat Glass	3.7	210	Other Textiles	60.2	3,390
Other Glass	1.4	80			
			Household Hazardous Waste	28.8	1,620
Metal	138.2	7,780			
Aluminum Beverage Containers	15.6	880	Construction and Demolition Debris (C&D)	650.7	36,640
Other Aluminum	13.0	730			
HVAC Ducting	0.7	40			
Ferrous Containers (Tin Cans)	27.0	1,520	Total MSW (tons)		157,960
			Total MSW (pounds/person/day)		7.69

2007 population 112,616

County generation based on 2007 data.

Lawrence County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	597.9	4,660	Metal		
Newsprint	94.9	740	Other Ferrous	55.2	430
High Grade Office Paper	23.1	180	Other Non-Ferrous	5.1	40
Magazines/Catalogs	65.4	510	Other Metal	21.8	170
Uncoated OCC/Kraft	205.3	1,600			
Boxboard	41.1	320	Organics	461.9	3,600
Mixed Paper - Recyclable	71.9	560	Yard Waste - Compostable	73.1	570
Compostable Paper	74.4	580	Yard Waste - Woody	66.7	520
Other Paper	21.8	170	Food Scraps	195.0	1,520
			Bottom Fines & Dirt	20.5	160
Beverage Containers	5.1	40	Diapers	46.2	360
Milk & Juice Cartons/Boxes - Coated	5.1	40	Other Organic	60.3	470
Plastic	293.8	2,290	Inorganics	137.3	1,070
#1 PET Bottles/Jars	25.7	200	Televisions	6.4	50
#1 Other PET Containers	2.6	20	Computer Monitors	5.1	40
#2 HDPE Bottles/Jars - Clear	10.3	80	Computer Equipment/Peripherals	5.1	40
#2 HDPE Bottles/Jars - Color	14.1	110	Electronic Equipment	24.4	190
#2 Other HDPE Containers	2.6	20	White Goods - Refrigerated	9.0	70
#6 Exp. Polystyrene Packaging	14.1	110	White Goods - Not refrigerated	19.2	150
#3-#7 Other - All	14.1	110	Lead-acid Batteries	15.4	120
Other Rigid Plastic Products	91.1	710	Other Household Batteries	1.3	10
Grocery & Merchandise Bags	9.0	70	Tires	29.5	230
Trash Bags	25.7	200	Household Bulky Items	21.8	170
Commercial & Industrial Film	23.1	180	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.8	240			
Other Plastic	30.8	240	Textiles	129.6	1,010
			Carpet	38.5	300
Glass	86.0	670	Carpet Padding	5.1	40
Recyclable Glass Bottles & Jars	80.8	630	Clothing	35.9	280
Flat Glass	3.8	30	Other Textiles	50.0	390
Other Glass	1.3	10			
			Household Hazardous Waste	28.2	220
Metal	138.6	1,080			
Aluminum Beverage Containers	15.4	120	Construction and Demolition Debris (C&D)	641.5	5,000
Other Aluminum	12.8	100			
HVAC Ducting	1.3	10			
Ferrous Containers (Tin Cans)	26.9	210	Total MSW (tons)		19,640
			Total MSW (pounds/person/day)		6.90

2007 population 15,588

County generation based on 2007 data.

Lee County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	701.8	12,440	Metal		
Newsprint	90.3	1,600	Other Ferrous	55.3	980
High Grade Office Paper	43.4	770	Other Non-Ferrous	5.1	90
Magazines/Catalogs	72.8	1,290	Other Metal	21.4	380
Uncoated OCC/Kraft	287.7	5,100			
Boxboard	40.6	720	Organics	494.8	8,770
Mixed Paper - Recyclable	71.1	1,260	Yard Waste - Compostable	73.3	1,300
Compostable Paper	73.9	1,310	Yard Waste - Woody	67.1	1,190
Other Paper	22.0	390	Food Scraps	226.8	4,020
			Bottom Fines & Dirt	20.3	360
Beverage Containers	5.6	100	Diapers	46.8	830
Milk & Juice Cartons/Boxes - Coated	5.6	100	Other Organic	60.4	1,070
Plastic	322.1	5,710	Inorganics	136.0	2,410
#1 PET Bottles/Jars	25.4	450	Televisions	6.8	120
#1 Other PET Containers	2.3	40	Computer Monitors	4.5	80
#2 HDPE Bottles/Jars - Clear	10.2	180	Computer Equipment/Peripherals	5.1	90
#2 HDPE Bottles/Jars - Color	14.7	260	Electronic Equipment	24.3	430
#2 Other HDPE Containers	2.3	40	White Goods - Refrigerated	8.5	150
#6 Exp. Polystyrene Packaging	18.1	320	White Goods - Not refrigerated	19.2	340
#3-#7 Other - All	18.1	320	Lead-acid Batteries	15.8	280
Other Rigid Plastic Products	91.4	1,620	Other Household Batteries	1.1	20
Grocery & Merchandise Bags	11.8	210	Tires	28.8	510
Trash Bags	26.0	460	Household Bulky Items	22.0	390
Commercial & Industrial Film	31.6	560	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.5	540			
Other Plastic	40.1	710	Textiles	160.2	2,840
			Carpet	38.9	690
Glass	86.3	1,530	Carpet Padding	5.6	100
Recyclable Glass Bottles & Jars	80.7	1,430	Clothing	48.5	860
Flat Glass	3.9	70	Other Textiles	67.1	1,190
Other Glass	1.7	30			
			Household Hazardous Waste	28.2	500
Metal	138.2	2,450	Construction and Demolition Debris (C&D)	655.6	11,620
Aluminum Beverage Containers	15.8	280			
Other Aluminum	13.0	230			
HVAC Ducting	0.6	10			
Ferrous Containers (Tin Cans)	27.1	480			
			Total MSW (tons)		48,370
			Total MSW (pounds/person/day)		7.48

2007 population 35,450

County generation based on 2007 data.

Livingston County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	729.3	13,950	Metal		
Newsprint	120.2	2,300	Other Ferrous	55.4	1,060
High Grade Office Paper	43.4	830	Other Non-Ferrous	5.2	100
Magazines/Catalogs	69.5	1,330	Other Metal	21.4	410
Uncoated OCC/Kraft	288.6	5,520			
Boxboard	40.8	780	Organics	490.9	9,390
Mixed Paper - Recyclable	71.1	1,360	Yard Waste - Compostable	73.2	1,400
Compostable Paper	73.7	1,410	Yard Waste - Woody	67.4	1,290
Other Paper	22.0	420	Food Scraps	223.2	4,270
			Bottom Fines & Dirt	19.9	380
Beverage Containers	5.2	100	Diapers	46.5	890
Milk & Juice Cartons/Boxes - Coated	5.2	100	Other Organic	60.6	1,160
Plastic	325.2	6,220	Inorganics	135.9	2,600
#1 PET Bottles/Jars	25.6	490	Televisions	6.3	120
#1 Other PET Containers	2.1	40	Computer Monitors	4.7	90
#2 HDPE Bottles/Jars - Clear	9.9	190	Computer Equipment/Peripherals	5.2	100
#2 HDPE Bottles/Jars - Color	14.6	280	Electronic Equipment	24.0	460
#2 Other HDPE Containers	2.1	40	White Goods - Refrigerated	8.4	160
#6 Exp. Polystyrene Packaging	18.3	350	White Goods - Not refrigerated	18.8	360
#3-#7 Other - All	18.8	360	Lead-acid Batteries	16.2	310
Other Rigid Plastic Products	91.0	1,740	Other Household Batteries	1.0	20
Grocery & Merchandise Bags	12.0	230	Tires	28.8	550
Trash Bags	25.6	490	Household Bulky Items	22.5	430
Commercial & Industrial Film	32.9	630	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.3	580			
Other Plastic	41.8	800	Textiles	164.1	3,140
			Carpet	38.7	740
Glass	85.7	1,640	Carpet Padding	5.8	110
Recyclable Glass Bottles & Jars	80.5	1,540	Clothing	50.2	960
Flat Glass	3.7	70	Other Textiles	69.5	1,330
Other Glass	1.6	30			
			Household Hazardous Waste	29.3	560
Metal	138.5	2,650			
Aluminum Beverage Containers	15.7	300	Construction and Demolition Debris (C&D)	659.7	12,620
Other Aluminum	13.1	250			
HVAC Ducting	0.5	10			
Ferrous Containers (Tin Cans)	27.2	520	Total MSW (tons)		52,870
			Total MSW (pounds/person/day)		7.57

2007 population 38,258
 County generation based on 2007 data.

Logan County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	635.5	9,520	Metal		
Newsprint	72.8	1,090	Other Ferrous	55.4	830
High Grade Office Paper	27.4	410	Other Non-Ferrous	5.3	80
Magazines/Catalogs	68.8	1,030	Other Metal	21.4	320
Uncoated OCC/Kraft	258.3	3,870			
Boxboard	40.7	610	Organics	506.6	7,590
Mixed Paper - Recyclable	71.4	1,070	Yard Waste - Compostable	73.4	1,100
Compostable Paper	74.1	1,110	Yard Waste - Woody	67.4	1,010
Other Paper	22.0	330	Food Scraps	238.3	3,570
			Bottom Fines & Dirt	20.0	300
Beverage Containers	5.3	80	Diapers	46.7	700
Milk & Juice Cartons/Boxes - Coated	5.3	80	Other Organic	60.7	910
Plastic	315.1	4,720	Inorganics	136.2	2,040
#1 PET Bottles/Jars	25.4	380	Televisions	6.7	100
#1 Other PET Containers	2.0	30	Computer Monitors	4.7	70
#2 HDPE Bottles/Jars - Clear	10.0	150	Computer Equipment/Peripherals	5.3	80
#2 HDPE Bottles/Jars - Color	14.7	220	Electronic Equipment	24.0	360
#2 Other HDPE Containers	2.0	30	White Goods - Refrigerated	8.7	130
#6 Exp. Polystyrene Packaging	17.4	260	White Goods - Not refrigerated	18.7	280
#3-#7 Other - All	17.4	260	Lead-acid Batteries	16.0	240
Other Rigid Plastic Products	91.4	1,370	Other Household Batteries	1.3	20
Grocery & Merchandise Bags	11.3	170	Tires	28.7	430
Trash Bags	26.0	390	Household Bulky Items	22.0	330
Commercial & Industrial Film	29.4	440	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.0	450			
Other Plastic	38.0	570	Textiles	152.9	2,290
			Carpet	38.7	580
Glass	86.1	1,290	Carpet Padding	6.0	90
Recyclable Glass Bottles & Jars	80.8	1,210	Clothing	45.4	680
Flat Glass	4.0	60	Other Textiles	62.7	940
Other Glass	1.3	20			
			Household Hazardous Waste	28.0	420
Metal	137.5	2,060			
Aluminum Beverage Containers	15.4	230	Construction and Demolition Debris (C&D)	652.2	9,770
Other Aluminum	12.7	190			
HVAC Ducting	0.7	10			
Ferrous Containers (Tin Cans)	26.7	400	Total MSW (tons)		39,780
			Total MSW (pounds/person/day)		7.27

2007 population 29,962

County generation based on 2007 data.

Macon County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	634.2	34,480	Metal		
Newsprint	89.2	4,850	Other Ferrous	55.2	3,000
High Grade Office Paper	45.6	2,480	Other Non-Ferrous	5.2	280
Magazines/Catalogs	69.0	3,750	Other Metal	21.5	1,170
Uncoated OCC/Kraft	222.4	12,090			
Boxboard	40.7	2,210	Organics	531.8	28,910
Mixed Paper - Recyclable	71.2	3,870	Yard Waste - Compostable	73.4	3,990
Compostable Paper	73.9	4,020	Yard Waste - Woody	67.3	3,660
Other Paper	22.3	1,210	Food Scraps	263.8	14,340
			Bottom Fines & Dirt	20.0	1,090
Beverage Containers	5.3	290	Diapers	46.7	2,540
Milk & Juice Cartons/Boxes - Coated	5.3	290	Other Organic	60.5	3,290
Plastic	304.8	16,570	Inorganics	136.7	7,430
#1 PET Bottles/Jars	25.6	1,390	Televisions	6.4	350
#1 Other PET Containers	2.2	120	Computer Monitors	4.6	250
#2 HDPE Bottles/Jars - Clear	9.9	540	Computer Equipment/Peripherals	5.3	290
#2 HDPE Bottles/Jars - Color	14.5	790	Electronic Equipment	24.3	1,320
#2 Other HDPE Containers	2.0	110	White Goods - Refrigerated	8.6	470
#6 Exp. Polystyrene Packaging	16.0	870	White Goods - Not refrigerated	18.9	1,030
#3-#7 Other - All	16.2	880	Lead-acid Batteries	16.0	870
Other Rigid Plastic Products	91.2	4,960	Other Household Batteries	1.1	60
Grocery & Merchandise Bags	9.9	540	Tires	29.1	1,580
Trash Bags	25.8	1,400	Household Bulky Items	22.3	1,210
Commercial & Industrial Film	26.9	1,460	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.3	1,650			
Other Plastic	34.2	1,860	Textiles	142.7	7,760
			Carpet	38.8	2,110
Glass	86.5	4,700	Carpet Padding	5.7	310
Recyclable Glass Bottles & Jars	81.1	4,410	Clothing	41.2	2,240
Flat Glass	3.9	210	Other Textiles	57.0	3,100
Other Glass	1.5	80			
			Household Hazardous Waste	28.9	1,570
Metal	138.3	7,520			
Aluminum Beverage Containers	15.6	850	Construction and Demolition Debris (C&D)	648.6	35,260
Other Aluminum	13.1	710			
HVAC Ducting	0.7	40			
Ferrous Containers (Tin Cans)	27.0	1,470	Total MSW (tons)		144,490
			Total MSW (pounds/person/day)		7.28

2007 population 108,732

County generation based on 2007 data.

Macoupin County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	482.6	11,640	Metal		
Newsprint	69.2	1,670	Other Ferrous	55.1	1,330
High Grade Office Paper	22.8	550	Other Non-Ferrous	5.0	120
Magazines/Catalogs	70.1	1,690	Other Metal	21.6	520
Uncoated OCC/Kraft	112.8	2,720			
Boxboard	40.6	980	Organics	469.8	11,330
Mixed Paper - Recyclable	71.3	1,720	Yard Waste - Compostable	73.4	1,770
Compostable Paper	73.8	1,780	Yard Waste - Woody	67.2	1,620
Other Paper	22.0	530	Food Scraps	201.9	4,870
			Bottom Fines & Dirt	19.9	480
Beverage Containers	5.4	130	Diapers	46.9	1,130
Milk & Juice Cartons/Boxes - Coated	5.4	130	Other Organic	60.5	1,460
Plastic	306.4	7,390	Inorganics	137.2	3,310
#1 PET Bottles/Jars	25.7	620	Televisions	6.6	160
#1 Other PET Containers	2.1	50	Computer Monitors	4.6	110
#2 HDPE Bottles/Jars - Clear	10.0	240	Computer Equipment/Peripherals	5.4	130
#2 HDPE Bottles/Jars - Color	14.5	350	Electronic Equipment	24.0	580
#2 Other HDPE Containers	2.1	50	White Goods - Refrigerated	8.7	210
#6 Exp. Polystyrene Packaging	16.2	390	White Goods - Not refrigerated	19.1	460
#3-#7 Other - All	16.2	390	Lead-acid Batteries	16.2	390
Other Rigid Plastic Products	91.2	2,200	Other Household Batteries	1.2	30
Grocery & Merchandise Bags	10.4	250	Tires	29.0	700
Trash Bags	25.7	620	Household Bulky Items	22.4	540
Commercial & Industrial Film	27.4	660	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.3	730			
Other Plastic	34.8	840	Textiles	145.5	3,510
			Carpet	39.0	940
Glass	86.2	2,080	Carpet Padding	5.8	140
Recyclable Glass Bottles & Jars	80.9	1,950	Clothing	42.3	1,020
Flat Glass	3.7	90	Other Textiles	58.5	1,410
Other Glass	1.7	40			
			Household Hazardous Waste	28.6	690
Metal	138.1	3,330			
Aluminum Beverage Containers	15.8	380	Construction and Demolition Debris (C&D)	649.3	15,660
Other Aluminum	12.9	310			
HVAC Ducting	0.8	20			
Ferrous Containers (Tin Cans)	27.0	650	Total MSW (tons)		59,070
			Total MSW (pounds/person/day)		6.71

2007 population 48,235

County generation based on 2007 data.

Madison County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	748.0	99,990	Metal		
Newsprint	105.6	14,110	Other Ferrous	55.2	7,380
High Grade Office Paper	43.5	5,810	Other Non-Ferrous	5.2	690
Magazines/Catalogs	69.0	9,220	Other Metal	21.5	2,870
Uncoated OCC/Kraft	322.2	43,070			
Boxboard	40.5	5,420	Organics	519.0	69,380
Mixed Paper - Recyclable	71.2	9,520	Yard Waste - Compostable	73.3	9,800
Compostable Paper	73.9	9,880	Yard Waste - Woody	67.3	9,000
Other Paper	22.1	2,960	Food Scraps	251.1	33,560
			Bottom Fines & Dirt	20.0	2,680
Beverage Containers	5.4	720	Diapers	46.8	6,250
Milk & Juice Cartons/Boxes - Coated	5.4	720	Other Organic	60.5	8,090
Plastic	320.0	42,780	Inorganics	136.4	18,240
#1 PET Bottles/Jars	25.6	3,420	Televisions	6.5	870
#1 Other PET Containers	2.2	290	Computer Monitors	4.6	610
#2 HDPE Bottles/Jars - Clear	10.0	1,340	Computer Equipment/Peripherals	5.2	700
#2 HDPE Bottles/Jars - Color	14.6	1,950	Electronic Equipment	24.2	3,240
#2 Other HDPE Containers	2.0	270	White Goods - Refrigerated	8.6	1,150
#6 Exp. Polystyrene Packaging	17.8	2,380	White Goods - Not refrigerated	19.0	2,540
#3-#7 Other - All	18.1	2,420	Lead-acid Batteries	16.0	2,140
Other Rigid Plastic Products	91.2	12,190	Other Household Batteries	1.0	140
Grocery & Merchandise Bags	11.6	1,550	Tires	29.0	3,870
Trash Bags	25.8	3,450	Household Bulky Items	22.2	2,970
Commercial & Industrial Film	31.2	4,170	Fluorescent Lights/Ballasts	<0.1	10
Other Film	30.3	4,050			
Other Plastic	39.6	5,300	Textiles	158.7	21,210
			Carpet	38.8	5,180
Glass	86.3	11,530	Carpet Padding	5.7	760
Recyclable Glass Bottles & Jars	80.9	10,820	Clothing	48.0	6,420
Flat Glass	3.8	510	Other Textiles	66.2	8,850
Other Glass	1.5	200			
			Household Hazardous Waste	28.8	3,850
Metal	138.2	18,480			
Aluminum Beverage Containers	15.7	2,100	Construction and Demolition Debris (C&D)	656.0	87,690
Other Aluminum	13.0	1,740			
HVAC Ducting	0.7	90			
Ferrous Containers (Tin Cans)	27.0	3,610	Total MSW (tons)		373,870
			Total MSW (pounds/person/day)		7.66

2007 population 267,347

County generation based on 2007 data.

Marion County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	702.3	13,900	Metal		
Newsprint	106.6	2,110	Other Ferrous	55.1	1,090
High Grade Office Paper	32.3	640	Other Non-Ferrous	5.1	100
Magazines/Catalogs	71.2	1,410	Other Metal	21.7	430
Uncoated OCC/Kraft	284.4	5,630			
Boxboard	40.4	800	Organics	497.6	9,850
Mixed Paper - Recyclable	71.2	1,410	Yard Waste - Compostable	73.3	1,450
Compostable Paper	73.8	1,460	Yard Waste - Woody	67.2	1,330
Other Paper	22.2	440	Food Scraps	229.4	4,540
			Bottom Fines & Dirt	20.2	400
Beverage Containers	5.6	110	Diapers	47.0	930
Milk & Juice Cartons/Boxes - Coated	5.6	110	Other Organic	60.6	1,200
Plastic	291.0	5,760	Inorganics	136.4	2,700
#1 PET Bottles/Jars	25.8	510	Televisions	6.6	130
#1 Other PET Containers	2.0	40	Computer Monitors	4.5	90
#2 HDPE Bottles/Jars - Clear	10.1	200	Computer Equipment/Peripherals	5.1	100
#2 HDPE Bottles/Jars - Color	14.7	290	Electronic Equipment	24.3	480
#2 Other HDPE Containers	2.0	40	White Goods - Refrigerated	8.6	170
#6 Exp. Polystyrene Packaging	14.1	280	White Goods - Not refrigerated	19.2	380
#3-#7 Other - All	14.1	280	Lead-acid Batteries	16.2	320
Other Rigid Plastic Products	91.4	1,810	Other Household Batteries	1.0	20
Grocery & Merchandise Bags	8.6	170	Tires	28.8	570
Trash Bags	25.8	510	Household Bulky Items	22.2	440
Commercial & Industrial Film	22.7	450	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.3	600			
Other Plastic	29.3	580	Textiles	128.3	2,540
			Carpet	38.9	770
Glass	86.4	1,710	Carpet Padding	6.1	120
Recyclable Glass Bottles & Jars	80.8	1,600	Clothing	34.9	690
Flat Glass	4.0	80	Other Textiles	48.5	960
Other Glass	1.5	30			
			Household Hazardous Waste	28.8	570
Metal	137.9	2,730			
Aluminum Beverage Containers	15.7	310	Construction and Demolition Debris (C&D)	642.1	12,710
Other Aluminum	13.1	260			
HVAC Ducting	0.5	10			
Ferrous Containers (Tin Cans)	26.8	530	Total MSW (tons)		52,580
			Total MSW (pounds/person/day)		7.28

2007 population 39,587

County generation based on 2007 data.

Marshall County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	610.1	3,920	Metal		
Newsprint	80.9	520	Other Ferrous	54.5	350
High Grade Office Paper	43.6	280	Other Non-Ferrous	4.7	30
Magazines/Catalogs	71.6	460	Other Metal	21.8	140
Uncoated OCC/Kraft	207.0	1,330			
Boxboard	40.5	260	Organics	477.8	3,070
Mixed Paper - Recyclable	71.6	460	Yard Waste - Compostable	73.1	470
Compostable Paper	73.1	470	Yard Waste - Woody	66.9	430
Other Paper	21.8	140	Food Scraps	210.1	1,350
			Bottom Fines & Dirt	20.2	130
Beverage Containers	4.7	30	Diapers	46.7	300
Milk & Juice Cartons/Boxes - Coated	4.7	30	Other Organic	60.7	390
Plastic	317.5	2,040	Inorganics	137.0	880
#1 PET Bottles/Jars	24.9	160	Televisions	6.2	40
#1 Other PET Containers	1.6	10	Computer Monitors	4.7	30
#2 HDPE Bottles/Jars - Clear	9.3	60	Computer Equipment/Peripherals	4.7	30
#2 HDPE Bottles/Jars - Color	14.0	90	Electronic Equipment	24.9	160
#2 Other HDPE Containers	1.6	10	White Goods - Refrigerated	9.3	60
#6 Exp. Polystyrene Packaging	17.1	110	White Goods - Not refrigerated	18.7	120
#3-#7 Other - All	18.7	120	Lead-acid Batteries	15.6	100
Other Rigid Plastic Products	91.8	590	Other Household Batteries	1.6	10
Grocery & Merchandise Bags	10.9	70	Tires	29.6	190
Trash Bags	26.5	170	Household Bulky Items	21.8	140
Commercial & Industrial Film	31.1	200	Fluorescent Lights/Ballasts	<0.1	0
Other Film	29.6	190			
Other Plastic	40.5	260	Textiles	158.7	1,020
			Carpet	38.9	250
Glass	85.6	550	Carpet Padding	4.7	30
Recyclable Glass Bottles & Jars	80.9	520	Clothing	48.2	310
Flat Glass	3.1	20	Other Textiles	66.9	430
Other Glass	1.6	10			
			Household Hazardous Waste	28.0	180
Metal	135.4	870			
Aluminum Beverage Containers	15.6	100	Construction and Demolition Debris (C&D)	658.3	4,230
Other Aluminum	12.5	80			
HVAC Ducting	0.0	0			
Ferrous Containers (Tin Cans)	26.5	170	Total MSW (tons)		16,790
			Total MSW (pounds/person/day)		7.16

2007 population 12,851

County generation based on 2007 data.

Mason County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	533.3	4,040	Metal		
Newsprint	63.4	480	Other Ferrous	55.4	420
High Grade Office Paper	21.1	160	Other Non-Ferrous	5.3	40
Magazines/Catalogs	71.3	540	Other Metal	21.1	160
Uncoated OCC/Kraft	169.0	1,280			
Boxboard	40.9	310	Organics	468.6	3,550
Mixed Paper - Recyclable	71.3	540	Yard Waste - Compostable	73.9	560
Compostable Paper	73.9	560	Yard Waste - Woody	67.3	510
Other Paper	22.4	170	Food Scraps	200.6	1,520
			Bottom Fines & Dirt	19.8	150
Beverage Containers	5.3	40	Diapers	46.2	350
Milk & Juice Cartons/Boxes - Coated	5.3	40	Other Organic	60.7	460
Plastic	301.0	2,280	Inorganics	136.0	1,030
#1 PET Bottles/Jars	25.1	190	Televisions	6.6	50
#1 Other PET Containers	2.6	20	Computer Monitors	4.0	30
#2 HDPE Bottles/Jars - Clear	10.6	80	Computer Equipment/Peripherals	5.3	40
#2 HDPE Bottles/Jars - Color	14.5	110	Electronic Equipment	23.8	180
#2 Other HDPE Containers	2.6	20	White Goods - Refrigerated	9.2	70
#6 Exp. Polystyrene Packaging	14.5	110	White Goods - Not refrigerated	18.5	140
#3-#7 Other - All	14.5	110	Lead-acid Batteries	15.8	120
Other Rigid Plastic Products	91.1	690	Other Household Batteries	1.3	10
Grocery & Merchandise Bags	9.2	70	Tires	29.0	220
Trash Bags	26.4	200	Household Bulky Items	22.4	170
Commercial & Industrial Film	26.4	200	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.4	230			
Other Plastic	33.0	250	Textiles	138.6	1,050
			Carpet	38.3	290
Glass	85.8	650	Carpet Padding	5.3	40
Recyclable Glass Bottles & Jars	80.5	610	Clothing	39.6	300
Flat Glass	4.0	30	Other Textiles	55.4	420
Other Glass	1.3	10			
			Household Hazardous Waste	27.7	210
Metal	137.3	1,040	Construction and Demolition Debris (C&D)	646.8	4,900
Aluminum Beverage Containers	15.8	120			
Other Aluminum	13.2	100			
HVAC Ducting	0.0	0	Total MSW (tons)		18,790
Ferrous Containers (Tin Cans)	26.4	200	Total MSW (pounds/person/day)		6.80

2007 population 15,151

County generation based on 2007 data.

Massac County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	630.1	4,760	Metal		
Newsprint	71.5	540	Other Ferrous	55.6	420
High Grade Office Paper	27.8	210	Other Non-Ferrous	5.3	40
Magazines/Catalogs	64.9	490	Other Metal	21.2	160
Uncoated OCC/Kraft	256.8	1,940			
Boxboard	41.0	310	Organics	496.4	3,750
Mixed Paper - Recyclable	71.5	540	Yard Waste - Compostable	72.8	550
Compostable Paper	74.1	560	Yard Waste - Woody	67.5	510
Other Paper	22.5	170	Food Scraps	229.0	1,730
			Bottom Fines & Dirt	19.9	150
Beverage Containers	5.3	40	Diapers	46.3	350
Milk & Juice Cartons/Boxes - Coated	5.3	40	Other Organic	60.9	460
Plastic	289.9	2,190	Inorganics	136.3	1,030
#1 PET Bottles/Jars	25.2	190	Televisions	6.6	50
#1 Other PET Containers	2.6	20	Computer Monitors	4.0	30
#2 HDPE Bottles/Jars - Clear	10.6	80	Computer Equipment/Peripherals	5.3	40
#2 HDPE Bottles/Jars - Color	14.6	110	Electronic Equipment	23.8	180
#2 Other HDPE Containers	2.6	20	White Goods - Refrigerated	9.3	70
#6 Exp. Polystyrene Packaging	13.2	100	White Goods - Not refrigerated	18.5	140
#3-#7 Other - All	13.2	100	Lead-acid Batteries	15.9	120
Other Rigid Plastic Products	91.3	690	Other Household Batteries	1.3	10
Grocery & Merchandise Bags	7.9	60	Tires	29.1	220
Trash Bags	26.5	200	Household Bulky Items	22.5	170
Commercial & Industrial Film	22.5	170	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.4	230			
Other Plastic	29.1	220	Textiles	128.4	970
			Carpet	38.4	290
Glass	86.0	650	Carpet Padding	5.3	40
Recyclable Glass Bottles & Jars	80.7	610	Clothing	35.7	270
Flat Glass	4.0	30	Other Textiles	49.0	370
Other Glass	1.3	10			
			Household Hazardous Waste	27.8	210
Metal	137.7	1,040	Construction and Demolition Debris (C&D)	642.0	4,850
Aluminum Beverage Containers	15.9	120			
Other Aluminum	13.2	100			
HVAC Ducting	0.0	0	Total MSW (tons)		19,490
Ferrous Containers (Tin Cans)	26.5	200	Total MSW (pounds/person/day)		7.07

2007 population 15,109
 County generation based on 2007 data.

McDonough County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	709.6	11,350	Metal		
Newsprint	93.8	1,500	Other Ferrous	55.0	880
High Grade Office Paper	30.0	480	Other Non-Ferrous	5.0	80
Magazines/Catalogs	70.0	1,120	Other Metal	21.3	340
Uncoated OCC/Kraft	308.2	4,930			
Boxboard	40.6	650	Organics	532.0	8,510
Mixed Paper - Recyclable	71.3	1,140	Yard Waste - Compostable	73.1	1,170
Compostable Paper	73.8	1,180	Yard Waste - Woody	67.5	1,080
Other Paper	21.9	350	Food Scraps	263.8	4,220
			Bottom Fines & Dirt	20.0	320
Beverage Containers	5.6	90	Diapers	46.9	750
Milk & Juice Cartons/Boxes - Coated	5.6	90	Other Organic	60.6	970
Plastic	290.1	4,640	Inorganics	136.3	2,180
#1 PET Bottles/Jars	25.6	410	Televisions	6.3	100
#1 Other PET Containers	1.9	30	Computer Monitors	4.4	70
#2 HDPE Bottles/Jars - Clear	10.0	160	Computer Equipment/Peripherals	5.0	80
#2 HDPE Bottles/Jars - Color	14.4	230	Electronic Equipment	24.4	390
#2 Other HDPE Containers	1.9	30	White Goods - Refrigerated	8.8	140
#6 Exp. Polystyrene Packaging	14.4	230	White Goods - Not refrigerated	18.8	300
#3-#7 Other - All	15.0	240	Lead-acid Batteries	16.3	260
Other Rigid Plastic Products	91.3	1,460	Other Household Batteries	1.3	20
Grocery & Merchandise Bags	8.8	140	Tires	28.8	460
Trash Bags	25.6	410	Household Bulky Items	22.5	360
Commercial & Industrial Film	22.5	360	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.0	480			
Other Plastic	28.8	460	Textiles	128.2	2,050
			Carpet	38.8	620
Glass	86.3	1,380	Carpet Padding	6.3	100
Recyclable Glass Bottles & Jars	81.3	1,300	Clothing	35.0	560
Flat Glass	3.8	60	Other Textiles	48.1	770
Other Glass	1.3	20			
			Household Hazardous Waste	28.8	460
Metal	137.5	2,200			
Aluminum Beverage Containers	15.6	250	Construction and Demolition Debris (C&D)	642.7	10,280
Other Aluminum	13.1	210			
HVAC Ducting	0.6	10			
Ferrous Containers (Tin Cans)	26.9	430	Total MSW (tons)		43,140
			Total MSW (pounds/person/day)		7.39

2007 population

31,992

County generation based on 2007 data.

McHenry County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	785.4	124,070	Metal		
Newsprint	154.8	24,450	Other Ferrous	55.2	8,720
High Grade Office Paper	43.4	6,860	Other Non-Ferrous	5.1	810
Magazines/Catalogs	68.8	10,870	Other Metal	21.5	3,390
Uncoated OCC/Kraft	310.5	49,050			
Boxboard	40.6	6,410	Organics	496.2	78,390
Mixed Paper - Recyclable	71.3	11,260	Yard Waste - Compostable	73.3	11,580
Compostable Paper	73.9	11,670	Yard Waste - Woody	67.3	10,630
Other Paper	22.2	3,500	Food Scraps	228.3	36,060
			Bottom Fines & Dirt	20.1	3,170
Beverage Containers	5.4	850	Diapers	46.8	7,390
Milk & Juice Cartons/Boxes - Coated	5.4	850	Other Organic	60.5	9,560
Plastic	374.5	59,160	Inorganics	136.5	21,570
#1 PET Bottles/Jars	25.6	4,050	Televisions	6.5	1,030
#1 Other PET Containers	2.2	340	Computer Monitors	4.6	720
#2 HDPE Bottles/Jars - Clear	10.0	1,580	Computer Equipment/Peripherals	5.3	830
#2 HDPE Bottles/Jars - Color	14.6	2,300	Electronic Equipment	24.2	3,830
#2 Other HDPE Containers	2.0	320	White Goods - Refrigerated	8.6	1,360
#6 Exp. Polystyrene Packaging	24.4	3,850	White Goods - Not refrigerated	19.0	3,000
#3-#7 Other - All	24.8	3,910	Lead-acid Batteries	16.0	2,530
Other Rigid Plastic Products	91.2	14,410	Other Household Batteries	1.1	170
Grocery & Merchandise Bags	17.4	2,750	Tires	29.0	4,580
Trash Bags	25.8	4,080	Household Bulky Items	22.2	3,510
Commercial & Industrial Film	46.7	7,380	Fluorescent Lights/Ballasts	0.1	10
Other Film	30.3	4,780			
Other Plastic	59.6	9,410	Textiles	215.8	34,090
			Carpet	38.7	6,120
Glass	86.2	13,620	Carpet Padding	5.7	900
Recyclable Glass Bottles & Jars	80.9	12,780	Clothing	72.0	11,380
Flat Glass	3.8	600	Other Textiles	99.3	15,690
Other Glass	1.5	240			
			Household Hazardous Waste	28.7	4,540
Metal	138.1	21,810	Construction and Demolition Debris (C&D)	683.0	107,890
Aluminum Beverage Containers	15.7	2,480			
Other Aluminum	13.0	2,050			
HVAC Ducting	0.6	100			
Ferrous Containers (Tin Cans)	27.0	4,260			
			Total MSW (tons)		465,990
			Total MSW (pounds/person/day)		8.08

2007 population 315,943

County generation based on 2007 data.

McLean County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	843.9	69,290	Metal		
Newsprint	102.9	8,450	Other Ferrous	55.2	4,530
High Grade Office Paper	51.6	4,240	Other Non-Ferrous	5.1	420
Magazines/Catalogs	68.7	5,640	Other Metal	21.4	1,760
Uncoated OCC/Kraft	412.8	33,890			
Boxboard	40.6	3,330	Organics	553.2	45,420
Mixed Paper - Recyclable	71.3	5,850	Yard Waste - Compostable	73.3	6,020
Compostable Paper	73.9	6,070	Yard Waste - Woody	67.4	5,530
Other Paper	22.2	1,820	Food Scraps	285.1	23,410
			Bottom Fines & Dirt	20.1	1,650
Beverage Containers	5.4	440	Diapers	46.8	3,840
Milk & Juice Cartons/Boxes - Coated	5.4	440	Other Organic	60.5	4,970
Plastic	329.8	27,080	Inorganics	136.7	11,220
#1 PET Bottles/Jars	25.6	2,100	Televisions	6.5	530
#1 Other PET Containers	2.2	180	Computer Monitors	4.6	380
#2 HDPE Bottles/Jars - Clear	10.0	820	Computer Equipment/Peripherals	5.2	430
#2 HDPE Bottles/Jars - Color	14.6	1,200	Electronic Equipment	24.2	1,990
#2 Other HDPE Containers	2.1	170	White Goods - Refrigerated	8.6	710
#6 Exp. Polystyrene Packaging	19.0	1,560	White Goods - Not refrigerated	19.0	1,560
#3-#7 Other - All	19.1	1,570	Lead-acid Batteries	16.0	1,310
Other Rigid Plastic Products	91.2	7,490	Other Household Batteries	1.1	90
Grocery & Merchandise Bags	12.7	1,040	Tires	29.0	2,380
Trash Bags	25.8	2,120	Household Bulky Items	22.3	1,830
Commercial & Industrial Film	34.0	2,790	Fluorescent Lights/Ballasts	0.1	10
Other Film	30.3	2,490			
Other Plastic	43.2	3,550	Textiles	169.1	13,880
			Carpet	38.7	3,180
Glass	86.1	7,070	Carpet Padding	5.7	470
Recyclable Glass Bottles & Jars	80.9	6,640	Clothing	52.4	4,300
Flat Glass	3.8	310	Other Textiles	72.2	5,930
Other Glass	1.5	120			
			Household Hazardous Waste	28.7	2,360
Metal	138.1	11,340	Construction and Demolition Debris (C&D)	661.1	54,280
Aluminum Beverage Containers	15.7	1,290			
Other Aluminum	13.0	1,070			
HVAC Ducting	0.6	50			
Ferrous Containers (Tin Cans)	27.0	2,220	Total MSW (tons)		242,380
			Total MSW (pounds/person/day)		8.09

2007 population 164,209

County generation based on 2007 data.

Menard County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	531.0	3,310	Metal		
Newsprint	73.8	460	Other Ferrous	54.5	340
High Grade Office Paper	43.3	270	Other Non-Ferrous	4.8	30
Magazines/Catalogs	70.6	440	Other Metal	20.9	130
Uncoated OCC/Kraft	136.4	850			
Boxboard	40.1	250	Organics	462.1	2,880
Mixed Paper - Recyclable	70.6	440	Yard Waste - Compostable	73.8	460
Compostable Paper	73.8	460	Yard Waste - Woody	67.4	420
Other Paper	22.5	140	Food Scraps	194.1	1,210
			Bottom Fines & Dirt	19.3	120
Beverage Containers	4.8	30	Diapers	46.5	290
Milk & Juice Cartons/Boxes - Coated	4.8	30	Other Organic	61.0	380
Plastic	332.1	2,070	Inorganics	136.4	850
#1 PET Bottles/Jars	25.7	160	Televisions	6.4	40
#1 Other PET Containers	1.6	10	Computer Monitors	4.8	30
#2 HDPE Bottles/Jars - Clear	9.6	60	Computer Equipment/Peripherals	4.8	30
#2 HDPE Bottles/Jars - Color	14.4	90	Electronic Equipment	24.1	150
#2 Other HDPE Containers	1.6	10	White Goods - Refrigerated	8.0	50
#6 Exp. Polystyrene Packaging	19.3	120	White Goods - Not refrigerated	19.3	120
#3-#7 Other - All	19.3	120	Lead-acid Batteries	16.0	100
Other Rigid Plastic Products	91.4	570	Other Household Batteries	1.6	10
Grocery & Merchandise Bags	12.8	80	Tires	28.9	180
Trash Bags	25.7	160	Household Bulky Items	22.5	140
Commercial & Industrial Film	35.3	220	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.5	190			
Other Plastic	44.9	280	Textiles	170.1	1,060
			Carpet	38.5	240
Glass	85.0	530	Carpet Padding	4.8	30
Recyclable Glass Bottles & Jars	80.2	500	Clothing	52.9	330
Flat Glass	3.2	20	Other Textiles	73.8	460
Other Glass	1.6	10			
			Household Hazardous Waste	27.3	170
Metal	136.4	850			
Aluminum Beverage Containers	16.0	100	Construction and Demolition Debris (C&D)	667.4	4,160
Other Aluminum	12.8	80			
HVAC Ducting	0.0	0			
Ferrous Containers (Tin Cans)	27.3	170	Total MSW (tons)		15,910
			Total MSW (pounds/person/day)		6.99

2007 population 12,466
 County generation based on 2007 data.

Mercer County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	482.7	3,980	Metal		
Newsprint	23.0	190	Other Ferrous	55.8	460
High Grade Office Paper	43.7	360	Other Non-Ferrous	4.9	40
Magazines/Catalogs	69.1	570	Other Metal	21.8	180
Uncoated OCC/Kraft	139.5	1,150			
Boxboard	40.0	330	Organics	458.5	3,780
Mixed Paper - Recyclable	71.6	590	Yard Waste - Compostable	72.8	600
Compostable Paper	74.0	610	Yard Waste - Woody	66.7	550
Other Paper	21.8	180	Food Scraps	190.4	1,570
			Bottom Fines & Dirt	20.6	170
Beverage Containers	4.9	40	Diapers	47.3	390
Milk & Juice Cartons/Boxes - Coated	4.9	40	Other Organic	60.6	500
Plastic	319.0	2,630	Inorganics	135.8	1,120
#1 PET Bottles/Jars	25.5	210	Televisions	6.1	50
#1 Other PET Containers	2.4	20	Computer Monitors	4.9	40
#2 HDPE Bottles/Jars - Clear	9.7	80	Computer Equipment/Peripherals	4.9	40
#2 HDPE Bottles/Jars - Color	14.6	120	Electronic Equipment	24.3	200
#2 Other HDPE Containers	2.4	20	White Goods - Refrigerated	8.5	70
#6 Exp. Polystyrene Packaging	17.0	140	White Goods - Not refrigerated	19.4	160
#3-#7 Other - All	17.0	140	Lead-acid Batteries	15.8	130
Other Rigid Plastic Products	91.0	750	Other Household Batteries	1.2	10
Grocery & Merchandise Bags	12.1	100	Tires	29.1	240
Trash Bags	25.5	210	Household Bulky Items	21.8	180
Commercial & Industrial Film	31.5	260	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.3	250			
Other Plastic	40.0	330	Textiles	158.9	1,310
			Carpet	38.8	320
Glass	86.1	710	Carpet Padding	4.9	40
Recyclable Glass Bottles & Jars	81.3	670	Clothing	48.5	400
Flat Glass	3.6	30	Other Textiles	66.7	550
Other Glass	1.2	10			
			Household Hazardous Waste	27.9	230
Metal	139.5	1,150			
Aluminum Beverage Containers	15.8	130	Construction and Demolition Debris (C&D)	657.4	5,420
Other Aluminum	13.3	110			
HVAC Ducting	1.2	10			
Ferrous Containers (Tin Cans)	26.7	220	Total MSW (tons)		20,370
			Total MSW (pounds/person/day)		6.77

2007 population 16,490
 County generation based on 2007 data.

Monroe County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	679.6	11,000	Metal		
Newsprint	89.0	1,440	Other Ferrous	55.0	890
High Grade Office Paper	43.2	700	Other Non-Ferrous	4.9	80
Magazines/Catalogs	70.4	1,140	Other Metal	21.6	350
Uncoated OCC/Kraft	268.8	4,350			
Boxboard	40.8	660	Organics	483.8	7,830
Mixed Paper - Recyclable	71.0	1,150	Yard Waste - Compostable	73.5	1,190
Compostable Paper	74.1	1,200	Yard Waste - Woody	67.3	1,090
Other Paper	22.2	360	Food Scraps	215.6	3,490
			Bottom Fines & Dirt	19.8	320
Beverage Containers	5.6	90	Diapers	47.0	760
Milk & Juice Cartons/Boxes - Coated	5.6	90	Other Organic	60.5	980
Plastic	354.0	5,730	Inorganics	137.2	2,220
#1 PET Bottles/Jars	25.3	410	Televisions	6.8	110
#1 Other PET Containers	1.9	30	Computer Monitors	4.3	70
#2 HDPE Bottles/Jars - Clear	9.9	160	Computer Equipment/Peripherals	5.6	90
#2 HDPE Bottles/Jars - Color	14.8	240	Electronic Equipment	24.1	390
#2 Other HDPE Containers	1.9	30	White Goods - Refrigerated	8.6	140
#6 Exp. Polystyrene Packaging	22.2	360	White Goods - Not refrigerated	19.2	310
#3-#7 Other - All	22.2	360	Lead-acid Batteries	16.1	260
Other Rigid Plastic Products	91.4	1,480	Other Household Batteries	1.2	20
Grocery & Merchandise Bags	15.4	250	Tires	29.0	470
Trash Bags	25.9	420	Household Bulky Items	22.2	360
Commercial & Industrial Film	40.8	660	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.3	490			
Other Plastic	51.9	840	Textiles	194.0	3,140
			Carpet	38.3	620
Glass	85.9	1,390	Carpet Padding	6.2	100
Recyclable Glass Bottles & Jars	80.9	1,310	Clothing	63.0	1,020
Flat Glass	3.7	60	Other Textiles	86.5	1,400
Other Glass	1.2	20			
			Household Hazardous Waste	29.0	470
Metal	137.8	2,230			
Aluminum Beverage Containers	15.4	250	Construction and Demolition Debris (C&D)	673.4	10,900
Other Aluminum	13.0	210			
HVAC Ducting	0.6	10			
Ferrous Containers (Tin Cans)	27.2	440	Total MSW (tons)		45,000
			Total MSW (pounds/person/day)		7.62

2007 population 32,372

County generation based on 2007 data.

Montgomery County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	639.4	9,530	Metal		
Newsprint	53.0	790	Other Ferrous	55.0	820
High Grade Office Paper	28.8	430	Other Non-Ferrous	5.4	80
Magazines/Catalogs	70.4	1,050	Other Metal	21.5	320
Uncoated OCC/Kraft	279.8	4,170			
Boxboard	40.3	600	Organics	501.2	7,470
Mixed Paper - Recyclable	71.1	1,060	Yard Waste - Compostable	73.1	1,090
Compostable Paper	73.8	1,100	Yard Waste - Woody	67.1	1,000
Other Paper	22.1	330	Food Scraps	233.5	3,480
			Bottom Fines & Dirt	20.1	300
Beverage Containers	5.4	80	Diapers	47.0	700
Milk & Juice Cartons/Boxes - Coated	5.4	80	Other Organic	60.4	900
Plastic	295.2	4,400	Inorganics	136.9	2,040
#1 PET Bottles/Jars	25.5	380	Televisions	6.7	100
#1 Other PET Containers	2.0	30	Computer Monitors	4.7	70
#2 HDPE Bottles/Jars - Clear	10.1	150	Computer Equipment/Peripherals	5.4	80
#2 HDPE Bottles/Jars - Color	14.8	220	Electronic Equipment	24.2	360
#2 Other HDPE Containers	2.0	30	White Goods - Refrigerated	8.7	130
#6 Exp. Polystyrene Packaging	14.8	220	White Goods - Not refrigerated	18.8	280
#3-#7 Other - All	14.8	220	Lead-acid Batteries	16.1	240
Other Rigid Plastic Products	91.2	1,360	Other Household Batteries	1.3	20
Grocery & Merchandise Bags	8.7	130	Tires	28.8	430
Trash Bags	26.2	390	Household Bulky Items	22.1	330
Commercial & Industrial Film	24.2	360	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.2	450			
Other Plastic	30.9	460	Textiles	132.2	1,970
			Carpet	38.9	580
Glass	85.9	1,280	Carpet Padding	5.4	80
Recyclable Glass Bottles & Jars	80.5	1,200	Clothing	36.9	550
Flat Glass	4.0	60	Other Textiles	51.0	760
Other Glass	1.3	20			
			Household Hazardous Waste	28.2	420
Metal	137.5	2,050			
Aluminum Beverage Containers	15.4	230	Construction and Demolition Debris (C&D)	642.7	9,580
Other Aluminum	12.7	190			
HVAC Ducting	0.7	10			
Ferrous Containers (Tin Cans)	26.8	400	Total MSW (tons)		38,820
			Total MSW (pounds/person/day)		7.14

2007 population 29,810

County generation based on 2007 data.

Morgan County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	787.6	13,890	Metal		
Newsprint	91.3	1,610	Other Ferrous	55.0	970
High Grade Office Paper	42.0	740	Other Non-Ferrous	5.1	90
Magazines/Catalogs	69.7	1,230	Other Metal	21.5	380
Uncoated OCC/Kraft	376.5	6,640			
Boxboard	40.8	720	Organics	538.7	9,500
Mixed Paper - Recyclable	71.4	1,260	Yard Waste - Compostable	73.1	1,290
Compostable Paper	73.7	1,300	Yard Waste - Woody	67.5	1,190
Other Paper	22.1	390	Food Scraps	271.0	4,780
			Bottom Fines & Dirt	19.8	350
Beverage Containers	5.1	90	Diapers	46.5	820
Milk & Juice Cartons/Boxes - Coated	5.1	90	Other Organic	60.7	1,070
Plastic	305.1	5,380	Inorganics	135.5	2,390
#1 PET Bottles/Jars	25.5	450	Televisions	6.2	110
#1 Other PET Containers	2.3	40	Computer Monitors	4.5	80
#2 HDPE Bottles/Jars - Clear	10.2	180	Computer Equipment/Peripherals	5.1	90
#2 HDPE Bottles/Jars - Color	14.7	260	Electronic Equipment	24.4	430
#2 Other HDPE Containers	2.3	40	White Goods - Refrigerated	8.5	150
#6 Exp. Polystyrene Packaging	15.9	280	White Goods - Not refrigerated	18.7	330
#3-#7 Other - All	15.9	280	Lead-acid Batteries	15.9	280
Other Rigid Plastic Products	91.3	1,610	Other Household Batteries	1.1	20
Grocery & Merchandise Bags	10.2	180	Tires	28.9	510
Trash Bags	26.1	460	Household Bulky Items	22.1	390
Commercial & Industrial Film	26.7	470	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.1	530			
Other Plastic	34.0	600	Textiles	142.9	2,520
			Carpet	39.1	690
Glass	86.2	1,520	Carpet Padding	5.7	100
Recyclable Glass Bottles & Jars	80.5	1,420	Clothing	41.4	730
Flat Glass	4.0	70	Other Textiles	56.7	1,000
Other Glass	1.7	30			
			Household Hazardous Waste	27.8	490
Metal	138.4	2,440	Construction and Demolition Debris (C&D)	648.1	11,430
Aluminum Beverage Containers	15.9	280			
Other Aluminum	13.0	230			
HVAC Ducting	0.6	10			
Ferrous Containers (Tin Cans)	27.2	480			
			Total MSW (tons)		49,650
			Total MSW (pounds/person/day)		7.71

2007 population 35,272
 County generation based on 2007 data.

Moultrie County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	610.2	4,370	Metal		
Newsprint	61.4	440	Other Ferrous	55.9	400
High Grade Office Paper	29.3	210	Other Non-Ferrous	5.6	40
Magazines/Catalogs	67.0	480	Other Metal	20.9	150
Uncoated OCC/Kraft	244.3	1,750			
Boxboard	40.5	290	Organics	451.0	3,230
Mixed Paper - Recyclable	71.2	510	Yard Waste - Compostable	74.0	530
Compostable Paper	74.0	530	Yard Waste - Woody	67.0	480
Other Paper	22.3	160	Food Scraps	184.3	1,320
			Bottom Fines & Dirt	19.5	140
Beverage Containers	5.6	40	Diapers	46.1	330
Milk & Juice Cartons/Boxes - Coated	5.6	40	Other Organic	60.0	430
Plastic	307.2	2,200	Inorganics	136.8	980
#1 PET Bottles/Jars	25.1	180	Televisions	7.0	50
#1 Other PET Containers	2.8	20	Computer Monitors	4.2	30
#2 HDPE Bottles/Jars - Clear	9.8	70	Computer Equipment/Peripherals	5.6	40
#2 HDPE Bottles/Jars - Color	14.0	100	Electronic Equipment	23.7	170
#2 Other HDPE Containers	1.4	10	White Goods - Refrigerated	8.4	60
#6 Exp. Polystyrene Packaging	15.4	110	White Goods - Not refrigerated	19.5	140
#3-#7 Other - All	16.8	120	Lead-acid Batteries	15.4	110
Other Rigid Plastic Products	90.8	650	Other Household Batteries	1.4	10
Grocery & Merchandise Bags	9.8	70	Tires	29.3	210
Trash Bags	26.5	190	Household Bulky Items	22.3	160
Commercial & Industrial Film	27.9	200	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.7	220			
Other Plastic	36.3	260	Textiles	148.0	1,060
			Carpet	39.1	280
Glass	86.6	620	Carpet Padding	5.6	40
Recyclable Glass Bottles & Jars	81.0	580	Clothing	43.3	310
Flat Glass	4.2	30	Other Textiles	60.0	430
Other Glass	1.4	10			
			Household Hazardous Waste	27.9	200
Metal	136.8	980			
Aluminum Beverage Containers	15.4	110	Construction and Demolition Debris (C&D)	650.7	4,660
Other Aluminum	12.6	90			
HVAC Ducting	0.0	0			
Ferrous Containers (Tin Cans)	26.5	190	Total MSW (tons)		18,340
			Total MSW (pounds/person/day)		7.02

2007 population 14,324
 County generation based on 2007 data.

Ogle County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	634.8	17,460	Metal		
Newsprint	65.4	1,800	Other Ferrous	55.3	1,520
High Grade Office Paper	43.3	1,190	Other Non-Ferrous	5.1	140
Magazines/Catalogs	72.3	1,990	Other Metal	21.5	590
Uncoated OCC/Kraft	245.8	6,760			
Boxboard	40.7	1,120	Organics	481.4	13,240
Mixed Paper - Recyclable	71.3	1,960	Yard Waste - Compostable	73.4	2,020
Compostable Paper	73.8	2,030	Yard Waste - Woody	67.3	1,850
Other Paper	22.2	610	Food Scraps	213.0	5,860
			Bottom Fines & Dirt	20.0	550
Beverage Containers	5.5	150	Diapers	46.9	1,290
Milk & Juice Cartons/Boxes - Coated	5.5	150	Other Organic	60.7	1,670
Plastic	329.4	9,060	Inorganics	136.7	3,760
#1 PET Bottles/Jars	25.4	700	Televisions	6.5	180
#1 Other PET Containers	2.2	60	Computer Monitors	4.7	130
#2 HDPE Bottles/Jars - Clear	10.2	280	Computer Equipment/Peripherals	5.1	140
#2 HDPE Bottles/Jars - Color	14.5	400	Electronic Equipment	24.4	670
#2 Other HDPE Containers	2.2	60	White Goods - Refrigerated	8.7	240
#6 Exp. Polystyrene Packaging	18.9	520	White Goods - Not refrigerated	18.9	520
#3-#7 Other - All	19.3	530	Lead-acid Batteries	16.0	440
Other Rigid Plastic Products	91.3	2,510	Other Household Batteries	1.1	30
Grocery & Merchandise Bags	12.7	350	Tires	29.1	800
Trash Bags	25.8	710	Household Bulky Items	22.2	610
Commercial & Industrial Film	33.8	930	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.2	830			
Other Plastic	42.9	1,180	Textiles	168.3	4,630
			Carpet	38.9	1,070
Glass	85.8	2,360	Carpet Padding	5.8	160
Recyclable Glass Bottles & Jars	80.7	2,220	Clothing	52.0	1,430
Flat Glass	3.6	100	Other Textiles	71.6	1,970
Other Glass	1.5	40			
			Household Hazardous Waste	28.4	780
Metal	138.2	3,800			
Aluminum Beverage Containers	15.6	430	Construction and Demolition Debris (C&D)	661.0	18,180
Other Aluminum	13.1	360			
HVAC Ducting	0.7	20			
Ferrous Containers (Tin Cans)	26.9	740	Total MSW (tons)		73,420
			Total MSW (pounds/person/day)		7.31

2007 population

55,011

County generation based on 2007 data.

Peoria County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	985.4	90,160	Metal		
Newsprint	76.5	7,000	Other Ferrous	55.2	5,050
High Grade Office Paper	62.5	5,720	Other Non-Ferrous	5.1	470
Magazines/Catalogs	68.6	6,280	Other Metal	21.5	1,970
Uncoated OCC/Kraft	569.9	52,140			
Boxboard	40.5	3,710	Organics	555.8	50,850
Mixed Paper - Recyclable	71.3	6,520	Yard Waste - Compostable	73.3	6,710
Compostable Paper	73.9	6,760	Yard Waste - Woody	67.3	6,160
Other Paper	22.2	2,030	Food Scraps	287.8	26,330
			Bottom Fines & Dirt	20.0	1,830
Beverage Containers	5.4	490	Diapers	46.8	4,280
Milk & Juice Cartons/Boxes - Coated	5.4	490	Other Organic	60.5	5,540
Plastic	314.8	28,800	Inorganics	136.5	12,500
#1 PET Bottles/Jars	25.6	2,340	Televisions	6.6	600
#1 Other PET Containers	2.2	200	Computer Monitors	4.6	420
#2 HDPE Bottles/Jars - Clear	10.1	920	Computer Equipment/Peripherals	5.2	480
#2 HDPE Bottles/Jars - Color	14.5	1,330	Electronic Equipment	24.3	2,220
#2 Other HDPE Containers	2.1	190	White Goods - Refrigerated	8.6	790
#6 Exp. Polystyrene Packaging	17.3	1,580	White Goods - Not refrigerated	19.0	1,740
#3-#7 Other - All	17.4	1,590	Lead-acid Batteries	16.0	1,460
Other Rigid Plastic Products	91.3	8,350	Other Household Batteries	1.1	100
Grocery & Merchandise Bags	11.0	1,010	Tires	29.0	2,650
Trash Bags	25.8	2,360	Household Bulky Items	22.2	2,030
Commercial & Industrial Film	29.6	2,710	Fluorescent Lights/Ballasts	<0.1	10
Other Film	30.3	2,770			
Other Plastic	37.7	3,450	Textiles	152.9	13,990
			Carpet	38.8	3,550
Glass	86.3	7,900	Carpet Padding	5.7	520
Recyclable Glass Bottles & Jars	81.0	7,410	Clothing	45.6	4,170
Flat Glass	3.8	350	Other Textiles	62.8	5,750
Other Glass	1.5	140			
			Household Hazardous Waste	28.6	2,620
Metal	138.3	12,650	Construction and Demolition Debris (C&D)	653.5	59,790
Aluminum Beverage Containers	15.7	1,440			
Other Aluminum	13.0	1,190			
HVAC Ducting	0.7	60			
Ferrous Containers (Tin Cans)	27.0	2,470			
			Total MSW (tons)		279,750
			Total MSW (pounds/person/day)		8.38

2007 population 182,993

County generation based on 2007 data.

Perry County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	508.1	5,740	Metal		
Newsprint	81.4	920	Other Ferrous	54.9	620
High Grade Office Paper	23.0	260	Other Non-Ferrous	5.3	60
Magazines/Catalogs	63.7	720	Other Metal	21.2	240
Uncoated OCC/Kraft	131.9	1,490			
Boxboard	40.7	460	Organics	467.3	5,280
Mixed Paper - Recyclable	71.7	810	Yard Waste - Compostable	73.5	830
Compostable Paper	73.5	830	Yard Waste - Woody	67.3	760
Other Paper	22.1	250	Food Scraps	199.2	2,250
			Bottom Fines & Dirt	20.4	230
Beverage Containers	5.3	60	Diapers	46.9	530
Milk & Juice Cartons/Boxes - Coated	5.3	60	Other Organic	60.2	680
Plastic	292.1	3,300	Inorganics	135.4	1,530
#1 PET Bottles/Jars	25.7	290	Televisions	6.2	70
#1 Other PET Containers	1.8	20	Computer Monitors	4.4	50
#2 HDPE Bottles/Jars - Clear	9.7	110	Computer Equipment/Peripherals	5.3	60
#2 HDPE Bottles/Jars - Color	14.2	160	Electronic Equipment	23.9	270
#2 Other HDPE Containers	1.8	20	White Goods - Refrigerated	8.9	100
#6 Exp. Polystyrene Packaging	14.2	160	White Goods - Not refrigerated	18.6	210
#3-#7 Other - All	15.0	170	Lead-acid Batteries	15.9	180
Other Rigid Plastic Products	91.2	1,030	Other Household Batteries	0.9	10
Grocery & Merchandise Bags	8.9	100	Tires	29.2	330
Trash Bags	25.7	290	Household Bulky Items	22.1	250
Commercial & Industrial Film	23.9	270	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.1	340			
Other Plastic	30.1	340	Textiles	132.8	1,500
			Carpet	38.9	440
Glass	86.7	980	Carpet Padding	5.3	60
Recyclable Glass Bottles & Jars	81.4	920	Clothing	37.2	420
Flat Glass	3.5	40	Other Textiles	51.3	580
Other Glass	1.8	20			
			Household Hazardous Waste	29.2	330
Metal	138.1	1,560	Construction and Demolition Debris (C&D)	642.6	7,260
Aluminum Beverage Containers	15.9	180			
Other Aluminum	13.3	150			
HVAC Ducting	0.9	10			
Ferrous Containers (Tin Cans)	26.6	300			
			Total MSW (tons)		27,540
			Total MSW (pounds/person/day)		6.68

2007 population 22,596

County generation based on 2007 data.

Platt County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	544.5	4,490	Metal		
Newsprint	114.0	940	Other Ferrous	55.8	460
High Grade Office Paper	43.7	360	Other Non-Ferrous	4.9	40
Magazines/Catalogs	70.3	580	Other Metal	21.8	180
Uncoated OCC/Kraft	109.1	900			
Boxboard	40.0	330	Organics	465.7	3,840
Mixed Paper - Recyclable	71.5	590	Yard Waste - Compostable	72.8	600
Compostable Paper	74.0	610	Yard Waste - Woody	67.9	560
Other Paper	21.8	180	Food Scraps	196.4	1,620
			Bottom Fines & Dirt	20.6	170
Beverage Containers	4.9	40	Diapers	47.3	390
Milk & Juice Cartons/Boxes - Coated	4.9	40	Other Organic	60.6	500
Plastic	321.3	2,650	Inorganics	135.8	1,120
#1 PET Bottles/Jars	25.5	210	Televisions	6.1	50
#1 Other PET Containers	2.4	20	Computer Monitors	4.9	40
#2 HDPE Bottles/Jars - Clear	9.7	80	Computer Equipment/Peripherals	4.9	40
#2 HDPE Bottles/Jars - Color	14.6	120	Electronic Equipment	24.3	200
#2 Other HDPE Containers	2.4	20	White Goods - Refrigerated	8.5	70
#6 Exp. Polystyrene Packaging	17.0	140	White Goods - Not refrigerated	19.4	160
#3-#7 Other - All	17.0	140	Lead-acid Batteries	15.8	130
Other Rigid Plastic Products	90.9	750	Other Household Batteries	1.2	10
Grocery & Merchandise Bags	12.1	100	Tires	29.1	240
Trash Bags	25.5	210	Household Bulky Items	21.8	180
Commercial & Industrial Film	32.7	270	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.3	250			
Other Plastic	41.2	340	Textiles	162.5	1,340
			Carpet	38.8	320
Glass	86.1	710	Carpet Padding	4.9	40
Recyclable Glass Bottles & Jars	81.2	670	Clothing	49.7	410
Flat Glass	3.6	30	Other Textiles	69.1	570
Other Glass	1.2	10			
			Household Hazardous Waste	27.9	230
Metal	139.5	1,150			
Aluminum Beverage Containers	15.8	130	Construction and Demolition Debris (C&D)	659.7	5,440
Other Aluminum	13.3	110			
HVAC Ducting	1.2	10	Total MSW (tons)		21,010
Ferrous Containers (Tin Cans)	26.7	220	Total MSW (pounds/person/day)		6.98

2007 population 16,493

County generation based on 2007 data.

Pike County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	554.3	4,630	Metal		
Newsprint	55.1	460	Other Ferrous	55.1	460
High Grade Office Paper	20.4	170	Other Non-Ferrous	4.8	40
Magazines/Catalogs	68.2	570	Other Metal	21.5	180
Uncoated OCC/Kraft	201.1	1,680			
Boxboard	40.7	340	Organics	483.6	4,040
Mixed Paper - Recyclable	71.8	600	Yard Waste - Compostable	73.0	610
Compostable Paper	74.2	620	Yard Waste - Woody	67.0	560
Other Paper	22.7	190	Food Scraps	215.5	1,800
			Bottom Fines & Dirt	20.4	170
Beverage Containers	4.8	40	Diapers	46.7	390
Milk & Juice Cartons/Boxes - Coated	4.8	40	Other Organic	61.1	510
Plastic	296.9	2,480	Inorganics	135.3	1,130
#1 PET Bottles/Jars	25.1	210	Televisions	6.0	50
#1 Other PET Containers	2.4	20	Computer Monitors	4.8	40
#2 HDPE Bottles/Jars - Clear	9.6	80	Computer Equipment/Peripherals	4.8	40
#2 HDPE Bottles/Jars - Color	14.4	120	Electronic Equipment	23.9	200
#2 Other HDPE Containers	2.4	20	White Goods - Refrigerated	8.4	70
#6 Exp. Polystyrene Packaging	14.4	120	White Goods - Not refrigerated	19.2	160
#3-#7 Other - All	14.4	120	Lead-acid Batteries	15.6	130
Other Rigid Plastic Products	91.0	760	Other Household Batteries	1.2	10
Grocery & Merchandise Bags	9.6	80	Tires	28.7	240
Trash Bags	26.3	220	Household Bulky Items	22.7	190
Commercial & Industrial Film	25.1	210	Fluorescent Lights/Ballasts	<0.1	0
Other Film	29.9	250			
Other Plastic	32.3	270	Textiles	134.1	1,120
			Carpet	38.3	320
Glass	85.0	710	Carpet Padding	4.8	40
Recyclable Glass Bottles & Jars	80.2	670	Clothing	38.3	320
Flat Glass	3.6	30	Other Textiles	52.7	440
Other Glass	1.2	10			
			Household Hazardous Waste	27.5	230
Metal	138.9	1,160			
Aluminum Beverage Containers	15.6	130	Construction and Demolition Debris (C&D)	641.6	5,360
Other Aluminum	13.2	110			
HVAC Ducting	1.2	10			
Ferrous Containers (Tin Cans)	27.5	230	Total MSW (tons)		20,900
			Total MSW (pounds/person/day)		6.85

2007 population 16,707

County generation based on 2007 data.

Pope County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	430.4	900	Metal		
Newsprint	43.0	90	Other Ferrous	57.4	120
High Grade Office Paper	19.1	40	Other Non-Ferrous	4.8	10
Magazines/Catalogs	62.2	130	Other Metal	19.1	40
Uncoated OCC/Kraft	100.4	210			
Boxboard	38.3	80	Organics	444.8	930
Mixed Paper - Recyclable	71.7	150	Yard Waste - Compostable	71.7	150
Compostable Paper	71.7	150	Yard Waste - Woody	67.0	140
Other Paper	23.9	50	Food Scraps	176.9	370
			Bottom Fines & Dirt	19.1	40
Beverage Containers	4.8	10	Diapers	47.8	100
Milk & Juice Cartons/Boxes - Coated	4.8	10	Other Organic	62.2	130
Plastic	282.2	590	Inorganics	133.9	280
#1 PET Bottles/Jars	23.9	50	Televisions	4.8	10
#1 Other PET Containers	0.0	0	Computer Monitors	4.8	10
#2 HDPE Bottles/Jars - Clear	9.6	20	Computer Equipment/Peripherals	4.8	10
#2 HDPE Bottles/Jars - Color	14.3	30	Electronic Equipment	23.9	50
#2 Other HDPE Containers	0.0	0	White Goods - Refrigerated	9.6	20
#6 Exp. Polystyrene Packaging	14.3	30	White Goods - Not refrigerated	19.1	40
#3-#7 Other - All	14.3	30	Lead-acid Batteries	14.3	30
Other Rigid Plastic Products	90.9	190	Other Household Batteries	0.0	0
Grocery & Merchandise Bags	9.6	20	Tires	28.7	60
Trash Bags	23.9	50	Household Bulky Items	23.9	50
Commercial & Industrial Film	23.9	50	Fluorescent Lights/Ballasts	<0.1	0
Other Film	28.7	60			
Other Plastic	28.7	60	Textiles	124.3	260
			Carpet	38.3	80
Glass	86.1	180	Carpet Padding	4.8	10
Recyclable Glass Bottles & Jars	81.3	170	Clothing	33.5	70
Flat Glass	4.8	10	Other Textiles	47.8	100
Other Glass	0.0	0			
			Household Hazardous Waste	23.9	50
Metal	138.7	290	Construction and Demolition Debris (C&D)	650.4	1,360
Aluminum Beverage Containers	14.3	30			
Other Aluminum	14.3	30			
HVAC Ducting	0.0	0	Total MSW (tons)		4,850
Ferrous Containers (Tin Cans)	28.7	60	Total MSW (pounds/person/day)		6.35

2007 population

4,182

County generation based on 2007 data.

Pulaski County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	449.9	1,460	Metal		
Newsprint	21.6	70	Other Ferrous	55.5	180
High Grade Office Paper	21.6	70	Other Non-Ferrous	6.2	20
Magazines/Catalogs	64.7	210	Other Metal	21.6	70
Uncoated OCC/Kraft	135.6	440			
Boxboard	40.1	130	Organics	453.0	1,470
Mixed Paper - Recyclable	70.9	230	Yard Waste - Compostable	74.0	240
Compostable Paper	74.0	240	Yard Waste - Woody	67.8	220
Other Paper	21.6	70	Food Scraps	181.8	590
			Bottom Fines & Dirt	21.6	70
Beverage Containers	6.2	20	Diapers	46.2	150
Milk & Juice Cartons/Boxes - Coated	6.2	20	Other Organic	61.6	200
Plastic	280.4	910	Inorganics	132.5	430
#1 PET Bottles/Jars	24.7	80	Televisions	6.2	20
#1 Other PET Containers	3.1	10	Computer Monitors	3.1	10
#2 HDPE Bottles/Jars - Clear	9.2	30	Computer Equipment/Peripherals	6.2	20
#2 HDPE Bottles/Jars - Color	15.4	50	Electronic Equipment	24.7	80
#2 Other HDPE Containers	3.1	10	White Goods - Refrigerated	9.2	30
#6 Exp. Polystyrene Packaging	15.4	50	White Goods - Not refrigerated	18.5	60
#3-#7 Other - All	15.4	50	Lead-acid Batteries	15.4	50
Other Rigid Plastic Products	92.4	300	Other Household Batteries	0.0	0
Grocery & Merchandise Bags	6.2	20	Tires	27.7	90
Trash Bags	24.7	80	Household Bulky Items	21.6	70
Commercial & Industrial Film	18.5	60	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.8	100			
Other Plastic	21.6	70	Textiles	110.9	360
			Carpet	37.0	120
Glass	86.3	280	Carpet Padding	6.2	20
Recyclable Glass Bottles & Jars	83.2	270	Clothing	27.7	90
Flat Glass	3.1	10	Other Textiles	40.1	130
Other Glass	0.0	0			
			Household Hazardous Waste	27.7	90
Metal	138.7	450	Construction and Demolition Debris (C&D)	634.8	2,060
Aluminum Beverage Containers	15.4	50			
Other Aluminum	12.3	40			
HVAC Ducting	0.0	0	Total MSW (tons)		7,530
Ferrous Containers (Tin Cans)	27.7	90	Total MSW (pounds/person/day)		6.36

2007 population 6,490
 County generation based on 2007 data.

Putnam County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	558.7	1,680	Metal		
Newsprint	76.5	230	Other Ferrous	56.5	170
High Grade Office Paper	23.3	70	Other Non-Ferrous	6.7	20
Magazines/Catalogs	69.8	210	Other Metal	20.0	60
Uncoated OCC/Kraft	182.9	550			
Boxboard	39.9	120	Organics	452.3	1,360
Mixed Paper - Recyclable	69.8	210	Yard Waste - Compostable	73.2	220
Compostable Paper	73.2	220	Yard Waste - Woody	66.5	200
Other Paper	23.3	70	Food Scraps	186.2	560
			Bottom Fines & Dirt	20.0	60
Beverage Containers	6.7	20	Diapers	46.6	140
Milk & Juice Cartons/Boxes - Coated	6.7	20	Other Organic	59.9	180
Plastic	332.6	1,000	Inorganics	139.7	420
#1 PET Bottles/Jars	26.6	80	Televisions	6.7	20
#1 Other PET Containers	3.3	10	Computer Monitors	3.3	10
#2 HDPE Bottles/Jars - Clear	10.0	30	Computer Equipment/Peripherals	6.7	20
#2 HDPE Bottles/Jars - Color	13.3	40	Electronic Equipment	23.3	70
#2 Other HDPE Containers	3.3	10	White Goods - Refrigerated	10.0	30
#6 Exp. Polystyrene Packaging	20.0	60	White Goods - Not refrigerated	20.0	60
#3-#7 Other - All	20.0	60	Lead-acid Batteries	16.6	50
Other Rigid Plastic Products	89.8	270	Other Household Batteries	0.0	0
Grocery & Merchandise Bags	13.3	40	Tires	29.9	90
Trash Bags	26.6	80	Household Bulky Items	23.3	70
Commercial & Industrial Film	33.3	100	Fluorescent Lights/Ballasts	<0.1	0
Other Film	29.9	90			
Other Plastic	43.2	130	Textiles	163.0	490
			Carpet	36.6	110
Glass	83.1	250	Carpet Padding	6.7	20
Recyclable Glass Bottles & Jars	79.8	240	Clothing	49.9	150
Flat Glass	3.3	10	Other Textiles	69.8	210
Other Glass	0.0	0			
			Household Hazardous Waste	29.9	90
Metal	139.7	420			
Aluminum Beverage Containers	16.6	50	Construction and Demolition Debris (C&D)	661.8	1,990
Other Aluminum	13.3	40			
HVAC Ducting	0.0	0			
Ferrous Containers (Tin Cans)	26.6	80	Total MSW (tons)		7,720
			Total MSW (pounds/person/day)		7.03

2007 population

6,014

County generation based on 2007 data.

Randolph County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	691.7	11,330	Metal		
Newsprint	70.8	1,160	Other Ferrous	54.9	900
High Grade Office Paper	34.2	560	Other Non-Ferrous	4.9	80
Magazines/Catalogs	69.6	1,140	Other Metal	21.4	350
Uncoated OCC/Kraft	309.5	5,070			
Boxboard	40.3	660	Organics	487.2	7,980
Mixed Paper - Recyclable	71.4	1,170	Yard Waste - Compostable	73.3	1,200
Compostable Paper	73.9	1,210	Yard Waste - Woody	67.2	1,100
Other Paper	22.0	360	Food Scraps	219.2	3,590
			Bottom Fines & Dirt	20.1	330
Beverage Containers	5.5	90	Diapers	47.0	770
Milk & Juice Cartons/Boxes - Coated	5.5	90	Other Organic	60.4	990
Plastic	306.5	5,020	Inorganics	136.8	2,240
#1 PET Bottles/Jars	25.6	420	Televisions	6.7	110
#1 Other PET Containers	2.4	40	Computer Monitors	4.9	80
#2 HDPE Bottles/Jars - Clear	9.8	160	Computer Equipment/Peripherals	5.5	90
#2 HDPE Bottles/Jars - Color	14.7	240	Electronic Equipment	24.4	400
#2 Other HDPE Containers	1.8	30	White Goods - Refrigerated	8.5	140
#6 Exp. Polystyrene Packaging	16.5	270	White Goods - Not refrigerated	18.9	310
#3-#7 Other - All	16.5	270	Lead-acid Batteries	15.9	260
Other Rigid Plastic Products	91.0	1,490	Other Household Batteries	1.2	20
Grocery & Merchandise Bags	10.4	170	Tires	28.7	470
Trash Bags	25.6	420	Household Bulky Items	22.0	360
Commercial & Industrial Film	26.9	440	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.5	500			
Other Plastic	34.8	570	Textiles	143.5	2,350
			Carpet	38.5	630
Glass	85.5	1,400	Carpet Padding	6.1	100
Recyclable Glass Bottles & Jars	80.6	1,320	Clothing	41.5	680
Flat Glass	3.7	60	Other Textiles	57.4	940
Other Glass	1.2	20			
			Household Hazardous Waste	28.7	470
Metal	137.4	2,250			
Aluminum Beverage Containers	15.9	260	Construction and Demolition Debris (C&D)	649.0	10,630
Other Aluminum	12.8	210			
HVAC Ducting	0.6	10			
Ferrous Containers (Tin Cans)	26.9	440	Total MSW (tons)		43,760
			Total MSW (pounds/person/day)		7.32

2007 population 32,760

County generation based on 2007 data.

Richland County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	761.6	5,920	Metal		
Newsprint	64.3	500	Other Ferrous	55.3	430
High Grade Office Paper	39.9	310	Other Non-Ferrous	5.1	40
Magazines/Catalogs	70.8	550	Other Metal	21.9	170
Uncoated OCC/Kraft	379.5	2,950			
Boxboard	41.2	320	Organics	513.3	3,990
Mixed Paper - Recyclable	70.8	550	Yard Waste - Compostable	73.3	570
Compostable Paper	73.3	570	Yard Waste - Woody	66.9	520
Other Paper	21.9	170	Food Scraps	245.7	1,910
			Bottom Fines & Dirt	20.6	160
Beverage Containers	5.1	40	Diapers	46.3	360
Milk & Juice Cartons/Boxes - Coated	5.1	40	Other Organic	60.5	470
Plastic	292.0	2,270	Inorganics	137.7	1,070
#1 PET Bottles/Jars	25.7	200	Televisions	6.4	50
#1 Other PET Containers	2.6	20	Computer Monitors	5.1	40
#2 HDPE Bottles/Jars - Clear	10.3	80	Computer Equipment/Peripherals	5.1	40
#2 HDPE Bottles/Jars - Color	14.2	110	Electronic Equipment	24.4	190
#2 Other HDPE Containers	2.6	20	White Goods - Refrigerated	9.0	70
#6 Exp. Polystyrene Packaging	14.2	110	White Goods - Not refrigerated	19.3	150
#3-#7 Other - All	14.2	110	Lead-acid Batteries	15.4	120
Other Rigid Plastic Products	91.3	710	Other Household Batteries	1.3	10
Grocery & Merchandise Bags	9.0	70	Tires	29.6	230
Trash Bags	25.7	200	Household Bulky Items	21.9	170
Commercial & Industrial Film	23.2	180	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.9	240			
Other Plastic	28.3	220	Textiles	128.7	1,000
			Carpet	38.6	300
Glass	86.2	670	Carpet Padding	5.1	40
Recyclable Glass Bottles & Jars	81.0	630	Clothing	36.0	280
Flat Glass	3.9	30	Other Textiles	48.9	380
Other Glass	1.3	10			
			Household Hazardous Waste	28.3	220
Metal	138.9	1,080	Construction and Demolition Debris (C&D)	642.0	4,990
Aluminum Beverage Containers	15.4	120			
Other Aluminum	12.9	100			
HVAC Ducting	1.3	10	Total MSW (tons)		21,250
Ferrous Containers (Tin Cans)	27.0	210	Total MSW (pounds/person/day)		7.49

2007 population 15,546

County generation based on 2007 data.

Rock Island County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	879.4	64,780	Metal		
Newsprint	163.9	12,070	Other Ferrous	55.3	4,070
High Grade Office Paper	43.2	3,180	Other Non-Ferrous	5.2	380
Magazines/Catalogs	68.4	5,040	Other Metal	21.4	1,580
Uncoated OCC/Kraft	396.1	29,180			
Boxboard	40.6	2,990	Organics	531.7	39,170
Mixed Paper - Recyclable	71.3	5,250	Yard Waste - Compostable	73.3	5,400
Compostable Paper	73.8	5,440	Yard Waste - Woody	67.3	4,960
Other Paper	22.1	1,630	Food Scraps	263.8	19,430
			Bottom Fines & Dirt	20.1	1,480
Beverage Containers	5.4	400	Diapers	46.7	3,440
Milk & Juice Cartons/Boxes - Coated	5.4	400	Other Organic	60.5	4,460
Plastic	309.2	22,780	Inorganics	136.7	10,080
#1 PET Bottles/Jars	25.7	1,890	Televisions	6.5	480
#1 Other PET Containers	2.2	160	Computer Monitors	4.6	340
#2 HDPE Bottles/Jars - Clear	10.0	740	Computer Equipment/Peripherals	5.3	390
#2 HDPE Bottles/Jars - Color	14.5	1,070	Electronic Equipment	24.3	1,790
#2 Other HDPE Containers	2.0	150	White Goods - Refrigerated	8.7	640
#6 Exp. Polystyrene Packaging	16.6	1,220	White Goods - Not refrigerated	19.0	1,400
#3-#7 Other - All	16.7	1,230	Lead-acid Batteries	16.0	1,180
Other Rigid Plastic Products	91.2	6,720	Other Household Batteries	1.1	80
Grocery & Merchandise Bags	10.5	770	Tires	28.9	2,130
Trash Bags	25.8	1,900	Household Bulky Items	22.3	1,640
Commercial & Industrial Film	28.1	2,070	Fluorescent Lights/Ballasts	<0.1	10
Other Film	30.3	2,230			
Other Plastic	35.7	2,630	Textiles	147.2	10,840
			Carpet	38.8	2,860
Glass	86.2	6,350	Carpet Padding	5.6	410
Recyclable Glass Bottles & Jars	80.9	5,960	Clothing	43.2	3,180
Flat Glass	3.8	280	Other Textiles	59.6	4,390
Other Glass	1.5	110			
			Household Hazardous Waste	28.6	2,110
Metal	138.3	10,190	Construction and Demolition Debris (C&D)	650.2	47,900
Aluminum Beverage Containers	15.7	1,160			
Other Aluminum	13.0	960			
HVAC Ducting	0.7	50			
Ferrous Containers (Tin Cans)	27.0	1,990	Total MSW (tons)		214,600
			Total MSW (pounds/person/day)		7.98

2007 population 147,329

County generation based on 2007 data.

Saline County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	710.3	9,270	Metal		
Newsprint	95.8	1,250	Other Ferrous	55.2	720
High Grade Office Paper	30.6	400	Other Non-Ferrous	5.4	70
Magazines/Catalogs	67.4	880	Other Metal	21.5	280
Uncoated OCC/Kraft	308.8	4,030			
Boxboard	40.6	530	Organics	496.5	6,480
Mixed Paper - Recyclable	71.3	930	Yard Waste - Compostable	73.6	960
Compostable Paper	73.6	960	Yard Waste - Woody	67.4	880
Other Paper	22.2	290	Food Scraps	228.3	2,980
			Bottom Fines & Dirt	19.9	260
Beverage Containers	5.4	70	Diapers	46.7	610
Milk & Juice Cartons/Boxes - Coated	5.4	70	Other Organic	60.5	790
Plastic	285.8	3,730	Inorganics	136.4	1,780
#1 PET Bottles/Jars	25.3	330	Televisions	6.1	80
#1 Other PET Containers	2.3	30	Computer Monitors	4.6	60
#2 HDPE Bottles/Jars - Clear	10.0	130	Computer Equipment/Peripherals	5.4	70
#2 HDPE Bottles/Jars - Color	14.6	190	Electronic Equipment	24.5	320
#2 Other HDPE Containers	2.3	30	White Goods - Refrigerated	8.4	110
#6 Exp. Polystyrene Packaging	13.8	180	White Goods - Not refrigerated	19.2	250
#3-#7 Other - All	13.8	180	Lead-acid Batteries	16.1	210
Other Rigid Plastic Products	91.2	1,190	Other Household Batteries	0.8	10
Grocery & Merchandise Bags	7.7	100	Tires	29.1	380
Trash Bags	26.1	340	Household Bulky Items	22.2	290
Commercial & Industrial Film	21.5	280	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.6	400			
Other Plastic	26.8	350	Textiles	122.6	1,600
			Carpet	39.1	510
Glass	86.6	1,130	Carpet Padding	5.4	70
Recyclable Glass Bottles & Jars	81.2	1,060	Clothing	32.9	430
Flat Glass	3.8	50	Other Textiles	45.2	590
Other Glass	1.5	20			
			Household Hazardous Waste	29.1	380
Metal	137.9	1,800			
Aluminum Beverage Containers	15.3	200	Construction and Demolition Debris (C&D)	637.5	8,320
Other Aluminum	13.0	170			
HVAC Ducting	0.8	10			
Ferrous Containers (Tin Cans)	26.8	350	Total MSW (tons)		34,560
			Total MSW (pounds/person/day)		7.25

2007 population 26,102

County generation based on 2007 data.

Sangamon County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	841.3	81,660	Metal		
Newsprint	93.8	9,100	Other Ferrous	55.2	5,360
High Grade Office Paper	44.7	4,340	Other Non-Ferrous	5.2	500
Magazines/Catalogs	70.5	6,840	Other Metal	21.5	2,090
Uncoated OCC/Kraft	424.5	41,200			
Boxboard	40.6	3,940	Organics	570.9	55,410
Mixed Paper - Recyclable	71.3	6,920	Yard Waste - Compostable	73.4	7,120
Compostable Paper	73.9	7,170	Yard Waste - Woody	67.3	6,530
Other Paper	22.2	2,150	Food Scraps	302.9	29,400
			Bottom Fines & Dirt	20.0	1,940
Beverage Containers	5.4	520	Diapers	46.8	4,540
Milk & Juice Cartons/Boxes - Coated	5.4	520	Other Organic	60.6	5,880
Plastic	320.0	31,060	Inorganics	136.3	13,240
#1 PET Bottles/Jars	25.7	2,490	Televisions	6.5	630
#1 Other PET Containers	2.2	210	Computer Monitors	4.5	440
#2 HDPE Bottles/Jars - Clear	10.0	970	Computer Equipment/Peripherals	5.3	510
#2 HDPE Bottles/Jars - Color	14.5	1,410	Electronic Equipment	24.2	2,350
#2 Other HDPE Containers	2.1	200	White Goods - Refrigerated	8.7	840
#6 Exp. Polystyrene Packaging	17.8	1,730	White Goods - Not refrigerated	19.0	1,840
#3-#7 Other - All	18.0	1,750	Lead-acid Batteries	16.0	1,550
Other Rigid Plastic Products	91.2	8,850	Other Household Batteries	1.0	100
Grocery & Merchandise Bags	11.6	1,130	Tires	29.0	2,810
Trash Bags	25.9	2,510	Household Bulky Items	22.3	2,160
Commercial & Industrial Film	31.1	3,020	Fluorescent Lights/Ballasts	<0.1	10
Other Film	30.3	2,940			
Other Plastic	39.7	3,850	Textiles	158.7	15,400
			Carpet	38.7	3,760
Glass	86.3	8,380	Carpet Padding	5.7	550
Recyclable Glass Bottles & Jars	81.0	7,860	Clothing	48.0	4,660
Flat Glass	3.8	370	Other Textiles	66.2	6,430
Other Glass	1.5	150			
			Household Hazardous Waste	28.8	2,800
Metal	138.2	13,410	Construction and Demolition Debris (C&D)	655.8	63,650
Aluminum Beverage Containers	15.7	1,520			
Other Aluminum	13.0	1,260			
HVAC Ducting	0.6	60			
Ferrous Containers (Tin Cans)	27.0	2,620	Total MSW (tons)		285,530
			Total MSW (pounds/person/day)		8.06

2007 population 194,122

County generation based on 2007 data.

Schuyler County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	546.5	1,910	Metal		
Newsprint	40.1	140	Other Ferrous	54.4	190
High Grade Office Paper	20.0	70	Other Non-Ferrous	5.7	20
Magazines/Catalogs	68.7	240	Other Metal	22.9	80
Uncoated OCC/Kraft	208.9	730			
Boxboard	40.1	140	Organics	472.1	1,650
Mixed Paper - Recyclable	71.5	250	Yard Waste - Compostable	74.4	260
Compostable Paper	74.4	260	Yard Waste - Woody	68.7	240
Other Paper	22.9	80	Food Scraps	203.1	710
			Bottom Fines & Dirt	20.0	70
Beverage Containers	5.7	20	Diapers	45.8	160
Milk & Juice Cartons/Boxes - Coated	5.7	20	Other Organic	60.1	210
Plastic	314.7	1,100	Inorganics	137.3	480
#1 PET Bottles/Jars	25.8	90	Televisions	5.7	20
#1 Other PET Containers	2.9	10	Computer Monitors	5.7	20
#2 HDPE Bottles/Jars - Clear	11.4	40	Computer Equipment/Peripherals	5.7	20
#2 HDPE Bottles/Jars - Color	14.3	50	Electronic Equipment	22.9	80
#2 Other HDPE Containers	2.9	10	White Goods - Refrigerated	8.6	30
#6 Exp. Polystyrene Packaging	17.2	60	White Goods - Not refrigerated	20.0	70
#3-#7 Other - All	17.2	60	Lead-acid Batteries	17.2	60
Other Rigid Plastic Products	91.6	320	Other Household Batteries	0.0	0
Grocery & Merchandise Bags	11.4	40	Tires	28.6	100
Trash Bags	25.8	90	Household Bulky Items	22.9	80
Commercial & Industrial Film	28.6	100	Fluorescent Lights/Ballasts	<0.1	0
Other Film	31.5	110			
Other Plastic	34.3	120	Textiles	145.9	510
			Carpet	40.1	140
Glass	85.8	300	Carpet Padding	5.7	20
Recyclable Glass Bottles & Jars	80.1	280	Clothing	42.9	150
Flat Glass	2.9	10	Other Textiles	57.2	200
Other Glass	2.9	10			
			Household Hazardous Waste	25.8	90
Metal	137.3	480			
Aluminum Beverage Containers	14.3	50	Construction and Demolition Debris (C&D)	652.4	2,280
Other Aluminum	14.3	50			
HVAC Ducting	0.0	0			
Ferrous Containers (Tin Cans)	25.8	90	Total MSW (tons)		8,820
			Total MSW (pounds/person/day)		6.91

2007 population 6,990
 County generation based on 2007 data.

Scott County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	494.7	1,290	Metal		
Newsprint	84.4	220	Other Ferrous	53.7	140
High Grade Office Paper	19.2	50	Other Non-Ferrous	3.8	10
Magazines/Catalogs	65.2	170	Other Metal	23.0	60
Uncoated OCC/Kraft	115.1	300			
Boxboard	42.2	110	Organics	452.5	1,180
Mixed Paper - Recyclable	72.9	190	Yard Waste - Compostable	72.9	190
Compostable Paper	72.9	190	Yard Waste - Woody	69.0	180
Other Paper	23.0	60	Food Scraps	184.1	480
			Bottom Fines & Dirt	19.2	50
Beverage Containers	3.8	10	Diapers	46.0	120
Milk & Juice Cartons/Boxes - Coated	3.8	10	Other Organic	61.4	160
Plastic	318.3	830	Inorganics	134.2	350
#1 PET Bottles/Jars	26.8	70	Televisions	7.7	20
#1 Other PET Containers	3.8	10	Computer Monitors	3.8	10
#2 HDPE Bottles/Jars - Clear	11.5	30	Computer Equipment/Peripherals	3.8	10
#2 HDPE Bottles/Jars - Color	15.3	40	Electronic Equipment	23.0	60
#2 Other HDPE Containers	3.8	10	White Goods - Refrigerated	7.7	20
#6 Exp. Polystyrene Packaging	15.3	40	White Goods - Not refrigerated	19.2	50
#3-#7 Other - All	15.3	40	Lead-acid Batteries	15.3	40
Other Rigid Plastic Products	92.0	240	Other Household Batteries	0.0	0
Grocery & Merchandise Bags	11.5	30	Tires	30.7	80
Trash Bags	26.8	70	Household Bulky Items	23.0	60
Commercial & Industrial Film	26.8	70	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.7	80			
Other Plastic	38.4	100	Textiles	149.6	390
			Carpet	38.4	100
Glass	88.2	230	Carpet Padding	3.8	10
Recyclable Glass Bottles & Jars	84.4	220	Clothing	46.0	120
Flat Glass	3.8	10	Other Textiles	61.4	160
Other Glass	0.0	0			
			Household Hazardous Waste	30.7	80
Metal	134.2	350			
Aluminum Beverage Containers	15.3	40	Construction and Demolition Debris (C&D)	652.0	1,700
Other Aluminum	11.5	30			
HVAC Ducting	0.0	0			
Ferrous Containers (Tin Cans)	26.8	70	Total MSW (tons)		6,410
			Total MSW (pounds/person/day)		6.74

2007 population

5,215

County generation based on 2007 data.

Shelby County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	564.4	6,140	Metal		
Newsprint	84.6	920	Other Ferrous	55.1	600
High Grade Office Paper	22.1	240	Other Non-Ferrous	5.5	60
Magazines/Catalogs	65.3	710	Other Metal	21.1	230
Uncoated OCC/Kraft	184.8	2,010			
Boxboard	40.4	440	Organics	488.1	5,310
Mixed Paper - Recyclable	71.7	780	Yard Waste - Compostable	73.5	800
Compostable Paper	73.5	800	Yard Waste - Woody	67.1	730
Other Paper	22.1	240	Food Scraps	219.7	2,390
			Bottom Fines & Dirt	20.2	220
Beverage Containers	5.5	60	Diapers	46.9	510
Milk & Juice Cartons/Boxes - Coated	5.5	60	Other Organic	60.7	660
Plastic	316.2	3,440	Inorganics	136.0	1,480
#1 PET Bottles/Jars	25.7	280	Televisions	6.4	70
#1 Other PET Containers	1.8	20	Computer Monitors	4.6	50
#2 HDPE Bottles/Jars - Clear	10.1	110	Computer Equipment/Peripherals	5.5	60
#2 HDPE Bottles/Jars - Color	14.7	160	Electronic Equipment	23.9	260
#2 Other HDPE Containers	1.8	20	White Goods - Refrigerated	8.3	90
#6 Exp. Polystyrene Packaging	17.5	190	White Goods - Not refrigerated	19.3	210
#3-#7 Other - All	17.5	190	Lead-acid Batteries	15.6	170
Other Rigid Plastic Products	91.0	990	Other Household Batteries	0.9	10
Grocery & Merchandise Bags	11.0	120	Tires	29.4	320
Trash Bags	25.7	280	Household Bulky Items	22.1	240
Commercial & Industrial Film	30.3	330	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.3	330			
Other Plastic	38.6	420	Textiles	156.3	1,700
			Carpet	39.5	430
Glass	86.4	940	Carpet Padding	5.5	60
Recyclable Glass Bottles & Jars	80.9	880	Clothing	46.9	510
Flat Glass	3.7	40	Other Textiles	64.3	700
Other Glass	1.8	20			
			Household Hazardous Waste	28.5	310
Metal	137.9	1,500			
Aluminum Beverage Containers	15.6	170	Construction and Demolition Debris (C&D)	653.5	7,110
Other Aluminum	12.9	140			
HVAC Ducting	0.9	10			
Ferrous Containers (Tin Cans)	26.7	290	Total MSW (tons)		27,990
			Total MSW (pounds/person/day)		7.05

2007 population 21,759

County generation based on 2007 data.

St. Clair County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	727.2	95,020	Metal		
Newsprint	90.1	11,770	Other Ferrous	55.3	7,220
High Grade Office Paper	32.7	4,270	Other Non-Ferrous	5.1	670
Magazines/Catalogs	65.9	8,610	Other Metal	21.5	2,810
Uncoated OCC/Kraft	330.7	43,210			
Boxboard	40.6	5,300	Organics	586.0	76,570
Mixed Paper - Recyclable	71.3	9,310	Yard Waste - Compostable	73.3	9,580
Compostable Paper	73.9	9,650	Yard Waste - Woody	67.3	8,790
Other Paper	22.2	2,900	Food Scraps	318.1	41,560
			Bottom Fines & Dirt	20.1	2,620
Beverage Containers	5.4	700	Diapers	46.8	6,110
Milk & Juice Cartons/Boxes - Coated	5.4	700	Other Organic	60.5	7,910
Plastic	312.5	40,830	Inorganics	136.6	17,860
#1 PET Bottles/Jars	25.6	3,350	Televisions	6.5	850
#1 Other PET Containers	2.1	280	Computer Monitors	4.6	600
#2 HDPE Bottles/Jars - Clear	10.0	1,310	Computer Equipment/Peripherals	5.3	690
#2 HDPE Bottles/Jars - Color	14.5	1,900	Electronic Equipment	24.3	3,170
#2 Other HDPE Containers	2.1	270	White Goods - Refrigerated	8.6	1,130
#6 Exp. Polystyrene Packaging	16.9	2,210	White Goods - Not refrigerated	19.0	2,480
#3-#7 Other - All	17.1	2,240	Lead-acid Batteries	16.0	2,090
Other Rigid Plastic Products	91.2	11,920	Other Household Batteries	1.1	140
Grocery & Merchandise Bags	10.8	1,410	Tires	29.0	3,790
Trash Bags	25.9	3,380	Household Bulky Items	22.3	2,910
Commercial & Industrial Film	29.0	3,790	Fluorescent Lights/Ballasts	<0.1	10
Other Film	30.2	3,950			
Other Plastic	36.9	4,820	Textiles	150.6	19,680
			Carpet	38.7	5,060
Glass	86.3	11,280	Carpet Padding	5.7	740
Recyclable Glass Bottles & Jars	81.0	10,580	Clothing	44.6	5,830
Flat Glass	3.8	500	Other Textiles	61.6	8,050
Other Glass	1.5	200			
			Household Hazardous Waste	28.8	3,760
Metal	138.3	18,070			
Aluminum Beverage Containers	15.7	2,050	Construction and Demolition Debris (C&D)	652.2	85,210
Other Aluminum	13.0	1,700			
HVAC Ducting	0.7	90			
Ferrous Containers (Tin Cans)	27.0	3,530	Total MSW (tons)		368,980
			Total MSW (pounds/person/day)		7.74

2007 population 261,316

County generation based on 2007 data.

Stark County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	504.0	1,560	Metal		
Newsprint	58.1	180	Other Ferrous	54.9	170
High Grade Office Paper	19.4	60	Other Non-Ferrous	6.5	20
Magazines/Catalogs	71.1	220	Other Metal	22.6	70
Uncoated OCC/Kraft	145.4	450			
Boxboard	42.0	130	Organics	442.6	1,370
Mixed Paper - Recyclable	71.1	220	Yard Waste - Compostable	74.3	230
Compostable Paper	74.3	230	Yard Waste - Woody	67.8	210
Other Paper	22.6	70	Food Scraps	174.4	540
			Bottom Fines & Dirt	19.4	60
Beverage Containers	6.5	20	Diapers	45.2	140
Milk & Juice Cartons/Boxes - Coated	6.5	20	Other Organic	61.4	190
Plastic	319.8	990	Inorganics	138.9	430
#1 PET Bottles/Jars	25.8	80	Televisions	6.5	20
#1 Other PET Containers	3.2	10	Computer Monitors	3.2	10
#2 HDPE Bottles/Jars - Clear	9.7	30	Computer Equipment/Peripherals	6.5	20
#2 HDPE Bottles/Jars - Color	16.2	50	Electronic Equipment	25.8	80
#2 Other HDPE Containers	3.2	10	White Goods - Refrigerated	9.7	30
#6 Exp. Polystyrene Packaging	19.4	60	White Goods - Not refrigerated	19.4	60
#3-#7 Other - All	19.4	60	Lead-acid Batteries	16.2	50
Other Rigid Plastic Products	90.5	280	Other Household Batteries	0.0	0
Grocery & Merchandise Bags	9.7	30	Tires	29.1	90
Trash Bags	25.8	80	Household Bulky Items	22.6	70
Commercial & Industrial Film	29.1	90	Fluorescent Lights/Ballasts	<0.1	0
Other Film	29.1	90			
Other Plastic	38.8	120	Textiles	155.1	480
			Carpet	38.8	120
Glass	84.0	260	Carpet Padding	6.5	20
Recyclable Glass Bottles & Jars	80.8	250	Clothing	45.2	140
Flat Glass	3.2	10	Other Textiles	64.6	200
Other Glass	0.0	0			
			Household Hazardous Waste	29.1	90
Metal	138.9	430			
Aluminum Beverage Containers	16.2	50	Construction and Demolition Debris (C&D)	652.6	2,020
Other Aluminum	12.9	40			
HVAC Ducting	0.0	0			
Ferrous Containers (Tin Cans)	25.8	80	Total MSW (tons)		7,650
			Total MSW (pounds/person/day)		6.77

2007 population

6,191

County generation based on 2007 data.

Stephenson County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	727.0	16,930	Metal		
Newsprint	83.7	1,950	Other Ferrous	55.4	1,290
High Grade Office Paper	38.2	890	Other Non-Ferrous	5.2	120
Magazines/Catalogs	73.0	1,700	Other Metal	21.5	500
Uncoated OCC/Kraft	324.2	7,550			
Boxboard	40.4	940	Organics	491.7	11,450
Mixed Paper - Recyclable	71.3	1,660	Yard Waste - Compostable	73.4	1,710
Compostable Paper	73.9	1,720	Yard Waste - Woody	67.4	1,570
Other Paper	22.3	520	Food Scraps	223.3	5,200
			Bottom Fines & Dirt	20.2	470
Beverage Containers	5.2	120	Diapers	46.8	1,090
Milk & Juice Cartons/Boxes - Coated	5.2	120	Other Organic	60.6	1,410
Plastic	314.3	7,320	Inorganics	135.7	3,160
#1 PET Bottles/Jars	25.8	600	Televisions	6.4	150
#1 Other PET Containers	2.1	50	Computer Monitors	4.7	110
#2 HDPE Bottles/Jars - Clear	9.9	230	Computer Equipment/Peripherals	5.2	120
#2 HDPE Bottles/Jars - Color	14.6	340	Electronic Equipment	24.0	560
#2 Other HDPE Containers	2.1	50	White Goods - Refrigerated	8.6	200
#6 Exp. Polystyrene Packaging	17.2	400	White Goods - Not refrigerated	18.9	440
#3-#7 Other - All	17.2	400	Lead-acid Batteries	15.9	370
Other Rigid Plastic Products	91.0	2,120	Other Household Batteries	0.9	20
Grocery & Merchandise Bags	11.2	260	Tires	28.8	670
Trash Bags	25.8	600	Household Bulky Items	22.3	520
Commercial & Industrial Film	29.6	690	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.1	700			
Other Plastic	37.8	880	Textiles	152.4	3,550
			Carpet	38.6	900
Glass	86.3	2,010	Carpet Padding	5.6	130
Recyclable Glass Bottles & Jars	81.2	1,890	Clothing	45.5	1,060
Flat Glass	3.9	90	Other Textiles	62.7	1,460
Other Glass	1.3	30			
			Household Hazardous Waste	29.2	680
Metal	138.7	3,230			
Aluminum Beverage Containers	15.9	370	Construction and Demolition Debris (C&D)	653.6	15,220
Other Aluminum	12.9	300			
HVAC Ducting	0.9	20			
Ferrous Containers (Tin Cans)	27.1	630	Total MSW (tons)		63,670
			Total MSW (pounds/person/day)		7.49

2007 population

46,573

County generation based on 2007 data.

Tazewell County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	632.4	41,470	Metal		
Newsprint	84.6	5,550	Other Ferrous	55.2	3,620
High Grade Office Paper	43.5	2,850	Other Non-Ferrous	5.2	340
Magazines/Catalogs	69.8	4,580	Other Metal	21.5	1,410
Uncoated OCC/Kraft	226.8	14,870			
Boxboard	40.6	2,660	Organics	624.0	40,920
Mixed Paper - Recyclable	71.2	4,670	Yard Waste - Compostable	73.3	4,810
Compostable Paper	73.8	4,840	Yard Waste - Woody	67.2	4,410
Other Paper	22.1	1,450	Food Scraps	356.1	23,350
			Bottom Fines & Dirt	20.0	1,310
Beverage Containers	5.3	350	Diapers	46.8	3,070
Milk & Juice Cartons/Boxes - Coated	5.3	350	Other Organic	60.5	3,970
Plastic	323.1	21,190	Inorganics	136.6	8,960
#1 PET Bottles/Jars	25.6	1,680	Televisions	6.6	430
#1 Other PET Containers	2.1	140	Computer Monitors	4.6	300
#2 HDPE Bottles/Jars - Clear	10.1	660	Computer Equipment/Peripherals	5.2	340
#2 HDPE Bottles/Jars - Color	14.6	960	Electronic Equipment	24.2	1,590
#2 Other HDPE Containers	2.0	130	White Goods - Refrigerated	8.7	570
#6 Exp. Polystyrene Packaging	18.1	1,190	White Goods - Not refrigerated	18.9	1,240
#3-#7 Other - All	18.5	1,210	Lead-acid Batteries	16.0	1,050
Other Rigid Plastic Products	91.2	5,980	Other Household Batteries	1.1	70
Grocery & Merchandise Bags	12.0	790	Tires	29.0	1,900
Trash Bags	25.8	1,690	Household Bulky Items	22.3	1,460
Commercial & Industrial Film	32.0	2,100	Fluorescent Lights/Ballasts	0.2	10
Other Film	30.2	1,980			
Other Plastic	40.9	2,680	Textiles	161.9	10,620
			Carpet	38.7	2,540
Glass	86.3	5,660	Carpet Padding	5.6	370
Recyclable Glass Bottles & Jars	81.0	5,310	Clothing	49.4	3,240
Flat Glass	3.8	250	Other Textiles	68.2	4,470
Other Glass	1.5	100			
			Household Hazardous Waste	28.8	1,890
Metal	138.2	9,060			
Aluminum Beverage Containers	15.7	1,030	Construction and Demolition Debris (C&D)	657.5	43,120
Other Aluminum	13.0	850			
HVAC Ducting	0.6	40			
Ferrous Containers (Tin Cans)	27.0	1,770	Total MSW (tons)		183,240
			Total MSW (pounds/person/day)		7.66

2007 population 131,154
 County generation based on 2007 data.

Union County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	462.3	4,220	Metal		
Newsprint	44.9	410	Other Ferrous	54.8	500
High Grade Office Paper	20.8	190	Other Non-Ferrous	5.5	50
Magazines/Catalogs	65.7	600	Other Metal	21.9	200
Uncoated OCC/Kraft	123.8	1,130			
Boxboard	40.5	370	Organics	471.1	4,300
Mixed Paper - Recyclable	71.2	650	Yard Waste - Compostable	73.4	670
Compostable Paper	73.4	670	Yard Waste - Woody	66.8	610
Other Paper	21.9	200	Food Scraps	203.8	1,860
			Bottom Fines & Dirt	19.7	180
Beverage Containers	5.5	50	Diapers	47.1	430
Milk & Juice Cartons/Boxes - Coated	5.5	50	Other Organic	60.3	550
Plastic	293.6	2,680	Inorganics	135.8	1,240
#1 PET Bottles/Jars	25.2	230	Televisions	6.6	60
#1 Other PET Containers	2.2	20	Computer Monitors	4.4	40
#2 HDPE Bottles/Jars - Clear	9.9	90	Computer Equipment/Peripherals	5.5	50
#2 HDPE Bottles/Jars - Color	14.2	130	Electronic Equipment	24.1	220
#2 Other HDPE Containers	2.2	20	White Goods - Refrigerated	8.8	80
#6 Exp. Polystyrene Packaging	15.3	140	White Goods - Not refrigerated	18.6	170
#3-#7 Other - All	15.3	140	Lead-acid Batteries	16.4	150
Other Rigid Plastic Products	90.9	830	Other Household Batteries	1.1	10
Grocery & Merchandise Bags	8.8	80	Tires	28.5	260
Trash Bags	26.3	240	Household Bulky Items	21.9	200
Commercial & Industrial Film	23.0	210	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.7	280			
Other Plastic	29.6	270	Textiles	129.3	1,180
			Carpet	38.3	350
Glass	85.4	780	Carpet Padding	5.5	50
Recyclable Glass Bottles & Jars	81.1	740	Clothing	36.2	330
Flat Glass	3.3	30	Other Textiles	49.3	450
Other Glass	1.1	10			
			Household Hazardous Waste	28.5	260
Metal	139.1	1,270			
Aluminum Beverage Containers	15.3	140	Construction and Demolition Debris (C&D)	641.9	5,860
Other Aluminum	13.1	120			
HVAC Ducting	1.1	10			
Ferrous Containers (Tin Cans)	27.4	250	Total MSW (tons)		21,840
			Total MSW (pounds/person/day)		6.55

2007 population 18,257

County generation based on 2007 data.

Vermilion County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	702.3	28,510	Metal		
Newsprint	74.6	3,030	Other Ferrous	55.2	2,240
High Grade Office Paper	34.7	1,410	Other Non-Ferrous	5.2	210
Magazines/Catalogs	67.5	2,740	Other Metal	21.4	870
Uncoated OCC/Kraft	317.5	12,890			
Boxboard	40.6	1,650	Organics	504.0	20,460
Mixed Paper - Recyclable	71.2	2,890	Yard Waste - Compostable	73.4	2,980
Compostable Paper	73.9	3,000	Yard Waste - Woody	67.2	2,730
Other Paper	22.2	900	Food Scraps	236.0	9,580
			Bottom Fines & Dirt	20.0	810
Beverage Containers	5.4	220	Diapers	46.8	1,900
Milk & Juice Cartons/Boxes - Coated	5.4	220	Other Organic	60.6	2,460
Plastic	296.3	12,030	Inorganics	136.2	5,530
#1 PET Bottles/Jars	25.6	1,040	Televisions	6.4	260
#1 Other PET Containers	2.2	90	Computer Monitors	4.7	190
#2 HDPE Bottles/Jars - Clear	10.1	410	Computer Equipment/Peripherals	5.2	210
#2 HDPE Bottles/Jars - Color	14.5	590	Electronic Equipment	24.1	980
#2 Other HDPE Containers	2.0	80	White Goods - Refrigerated	8.6	350
#6 Exp. Polystyrene Packaging	15.0	610	White Goods - Not refrigerated	19.0	770
#3-#7 Other - All	15.0	610	Lead-acid Batteries	16.0	650
Other Rigid Plastic Products	91.1	3,700	Other Household Batteries	1.0	40
Grocery & Merchandise Bags	9.1	370	Tires	29.1	1,180
Trash Bags	25.9	1,050	Household Bulky Items	22.2	900
Commercial & Industrial Film	24.4	990	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.3	1,230			
Other Plastic	31.0	1,260	Textiles	133.5	5,420
			Carpet	38.7	1,570
Glass	86.0	3,490	Carpet Padding	5.7	230
Recyclable Glass Bottles & Jars	80.8	3,280	Clothing	37.4	1,520
Flat Glass	3.7	150	Other Textiles	51.7	2,100
Other Glass	1.5	60			
			Household Hazardous Waste	28.6	1,160
Metal	138.4	5,620			
Aluminum Beverage Containers	15.8	640	Construction and Demolition Debris (C&D)	644.2	26,150
Other Aluminum	13.1	530			
HVAC Ducting	0.7	30			
Ferrous Containers (Tin Cans)	27.1	1,100	Total MSW (tons)		108,590
			Total MSW (pounds/person/day)		7.33

2007 population

81,191

County generation based on 2007 data.

Wabash County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	702.0	4,270	Metal		
Newsprint	116.7	710	Other Ferrous	55.9	340
High Grade Office Paper	27.9	170	Other Non-Ferrous	4.9	30
Magazines/Catalogs	67.4	410	Other Metal	21.4	130
Uncoated OCC/Kraft	282.8	1,720			
Boxboard	41.1	250	Organics	488.3	2,970
Mixed Paper - Recyclable	70.7	430	Yard Waste - Compostable	74.0	450
Compostable Paper	74.0	450	Yard Waste - Woody	67.4	410
Other Paper	21.4	130	Food Scraps	220.3	1,340
			Bottom Fines & Dirt	19.7	120
Beverage Containers	4.9	30	Diapers	46.0	280
Milk & Juice Cartons/Boxes - Coated	4.9	30	Other Organic	60.8	370
Plastic	302.5	1,840	Inorganics	139.7	850
#1 PET Bottles/Jars	26.3	160	Televisions	6.6	40
#1 Other PET Containers	1.6	10	Computer Monitors	4.9	30
#2 HDPE Bottles/Jars - Clear	9.9	60	Computer Equipment/Peripherals	4.9	30
#2 HDPE Bottles/Jars - Color	14.8	90	Electronic Equipment	24.7	150
#2 Other HDPE Containers	1.6	10	White Goods - Refrigerated	8.2	50
#6 Exp. Polystyrene Packaging	16.4	100	White Goods - Not refrigerated	19.7	120
#3-#7 Other - All	16.4	100	Lead-acid Batteries	16.4	100
Other Rigid Plastic Products	90.4	550	Other Household Batteries	1.6	10
Grocery & Merchandise Bags	9.9	60	Tires	29.6	180
Trash Bags	26.3	160	Household Bulky Items	23.0	140
Commercial & Industrial Film	26.3	160	Fluorescent Lights/Ballasts	<0.1	0
Other Film	29.6	180			
Other Plastic	32.9	200	Textiles	138.1	840
			Carpet	39.5	240
Glass	87.1	530	Carpet Padding	4.9	30
Recyclable Glass Bottles & Jars	82.2	500	Clothing	39.5	240
Flat Glass	3.3	20	Other Textiles	54.3	330
Other Glass	1.6	10			
			Household Hazardous Waste	27.9	170
Metal	138.1	840			
Aluminum Beverage Containers	16.4	100	Construction and Demolition Debris (C&D)	647.8	3,940
Other Aluminum	13.2	80			
HVAC Ducting	0.0	0	Total MSW (tons)		16,280
Ferrous Containers (Tin Cans)	26.3	160	Total MSW (pounds/person/day)		7.33

2007 population 12,165
 County generation based on 2007 data.

Warren County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	660.8	5,750	Metal		
Newsprint	47.1	410	Other Ferrous	55.2	480
High Grade Office Paper	34.5	300	Other Non-Ferrous	4.6	40
Magazines/Catalogs	67.8	590	Other Metal	21.8	190
Uncoated OCC/Kraft	304.6	2,650			
Boxboard	40.2	350	Organics	499.9	4,350
Mixed Paper - Recyclable	71.3	620	Yard Waste - Compostable	73.6	640
Compostable Paper	73.6	640	Yard Waste - Woody	67.8	590
Other Paper	21.8	190	Food Scraps	231.0	2,010
			Bottom Fines & Dirt	19.5	170
Beverage Containers	5.7	50	Diapers	47.1	410
Milk & Juice Cartons/Boxes - Coated	5.7	50	Other Organic	60.9	530
Plastic	301.1	2,620	Inorganics	137.9	1,200
#1 PET Bottles/Jars	25.3	220	Televisions	6.9	60
#1 Other PET Containers	2.3	20	Computer Monitors	4.6	40
#2 HDPE Bottles/Jars - Clear	10.3	90	Computer Equipment/Peripherals	5.7	50
#2 HDPE Bottles/Jars - Color	14.9	130	Electronic Equipment	24.1	210
#2 Other HDPE Containers	2.3	20	White Goods - Refrigerated	9.2	80
#6 Exp. Polystyrene Packaging	16.1	140	White Goods - Not refrigerated	19.5	170
#3-#7 Other - All	17.2	150	Lead-acid Batteries	16.1	140
Other Rigid Plastic Products	90.8	790	Other Household Batteries	1.1	10
Grocery & Merchandise Bags	9.2	80	Tires	28.7	250
Trash Bags	25.3	220	Household Bulky Items	21.8	190
Commercial & Industrial Film	25.3	220	Fluorescent Lights/Ballasts	<0.1	0
Other Film	29.9	260			
Other Plastic	32.2	280	Textiles	136.8	1,190
			Carpet	37.9	330
Glass	85.0	740	Carpet Padding	5.7	50
Recyclable Glass Bottles & Jars	80.5	700	Clothing	39.1	340
Flat Glass	3.4	30	Other Textiles	54.0	470
Other Glass	1.1	10			
			Household Hazardous Waste	28.7	250
Metal	137.9	1,200			
Aluminum Beverage Containers	16.1	140	Construction and Demolition Debris (C&D)	647.1	5,630
Other Aluminum	12.6	110			
HVAC Ducting	1.1	10			
Ferrous Containers (Tin Cans)	26.4	230	Total MSW (tons)		22,980
			Total MSW (pounds/person/day)		7.24

2007 population 17,402
 County generation based on 2007 data.

Washington County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	706.9	5,220	Metal		
Newsprint	55.5	410	Other Ferrous	55.5	410
High Grade Office Paper	43.3	320	Other Non-Ferrous	5.4	40
Magazines/Catalogs	69.1	510	Other Metal	21.7	160
Uncoated OCC/Kraft	330.4	2,440			
Boxboard	40.6	300	Organics	490.2	3,620
Mixed Paper - Recyclable	71.8	530	Yard Waste - Compostable	73.1	540
Compostable Paper	74.5	550	Yard Waste - Woody	67.7	500
Other Paper	21.7	160	Food Scraps	220.7	1,630
			Bottom Fines & Dirt	20.3	150
Beverage Containers	5.4	40	Diapers	47.4	350
Milk & Juice Cartons/Boxes - Coated	5.4	40	Other Organic	60.9	450
Plastic	319.6	2,360	Inorganics	135.4	1,000
#1 PET Bottles/Jars	25.7	190	Televisions	6.8	50
#1 Other PET Containers	2.7	20	Computer Monitors	4.1	30
#2 HDPE Bottles/Jars - Clear	9.5	70	Computer Equipment/Peripherals	5.4	40
#2 HDPE Bottles/Jars - Color	14.9	110	Electronic Equipment	24.4	180
#2 Other HDPE Containers	2.7	20	White Goods - Refrigerated	8.1	60
#6 Exp. Polystyrene Packaging	17.6	130	White Goods - Not refrigerated	19.0	140
#3-#7 Other - All	17.6	130	Lead-acid Batteries	16.3	120
Other Rigid Plastic Products	90.7	670	Other Household Batteries	1.4	10
Grocery & Merchandise Bags	12.2	90	Tires	28.4	210
Trash Bags	25.7	190	Household Bulky Items	21.7	160
Commercial & Industrial Film	31.1	230	Fluorescent Lights/Ballasts	<0.1	0
Other Film	29.8	220			
Other Plastic	39.3	290	Textiles	158.4	1,170
			Carpet	39.3	290
Glass	86.7	640	Carpet Padding	5.4	40
Recyclable Glass Bottles & Jars	81.3	600	Clothing	47.4	350
Flat Glass	4.1	30	Other Textiles	66.4	490
Other Glass	1.4	10			
			Household Hazardous Waste	28.4	210
Metal	139.5	1,030	Construction and Demolition Debris (C&D)	656.8	4,850
Aluminum Beverage Containers	16.3	120			
Other Aluminum	13.5	100			
HVAC Ducting	0.0	0	Total MSW (tons)		20,140
Ferrous Containers (Tin Cans)	27.1	200	Total MSW (pounds/person/day)		7.47

2007 population 14,769
 County generation based on 2007 data.

Wayne County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	556.5	4,610	Metal		
Newsprint	42.3	350	Other Ferrous	55.5	460
High Grade Office Paper	22.9	190	Other Non-Ferrous	4.8	40
Magazines/Catalogs	67.6	560	Other Metal	21.7	180
Uncoated OCC/Kraft	216.1	1,790			
Boxboard	41.0	340	Organics	466.0	3,860
Mixed Paper - Recyclable	71.2	590	Yard Waste - Compostable	73.6	610
Compostable Paper	73.6	610	Yard Waste - Woody	67.6	560
Other Paper	21.7	180	Food Scraps	196.8	1,630
			Bottom Fines & Dirt	20.5	170
Beverage Containers	4.8	40	Diapers	47.1	390
Milk & Juice Cartons/Boxes - Coated	4.8	40	Other Organic	60.4	500
Plastic	289.7	2,400	Inorganics	135.2	1,120
#1 PET Bottles/Jars	25.4	210	Televisions	6.0	50
#1 Other PET Containers	2.4	20	Computer Monitors	4.8	40
#2 HDPE Bottles/Jars - Clear	9.7	80	Computer Equipment/Peripherals	4.8	40
#2 HDPE Bottles/Jars - Color	14.5	120	Electronic Equipment	24.1	200
#2 Other HDPE Containers	2.4	20	White Goods - Refrigerated	8.5	70
#6 Exp. Polystyrene Packaging	13.3	110	White Goods - Not refrigerated	19.3	160
#3-#7 Other - All	13.3	110	Lead-acid Batteries	15.7	130
Other Rigid Plastic Products	91.7	760	Other Household Batteries	1.2	10
Grocery & Merchandise Bags	8.5	70	Tires	29.0	240
Trash Bags	25.4	210	Household Bulky Items	21.7	180
Commercial & Industrial Film	22.9	190	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.2	250			
Other Plastic	30.2	250	Textiles	129.2	1,070
			Carpet	38.6	320
Glass	85.7	710	Carpet Padding	4.8	40
Recyclable Glass Bottles & Jars	80.9	670	Clothing	36.2	300
Flat Glass	3.6	30	Other Textiles	49.5	410
Other Glass	1.2	10			
			Household Hazardous Waste	27.8	230
Metal	138.8	1,150	Construction and Demolition Debris (C&D)	642.2	5,320
Aluminum Beverage Containers	15.7	130			
Other Aluminum	13.3	110			
HVAC Ducting	1.2	10			
Ferrous Containers (Tin Cans)	26.6	220			
			Total MSW (tons)		20,510
			Total MSW (pounds/person/day)		6.78

2007 population 16,568
 County generation based on 2007 data.

White County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	652.2	4,780	Metal		
Newsprint	91.4	670	Other Ferrous	54.6	400
High Grade Office Paper	27.3	200	Other Non-Ferrous	5.5	40
Magazines/Catalogs	71.0	520	Other Metal	21.8	160
Uncoated OCC/Kraft	255.2	1,870			
Boxboard	40.9	300	Organics	474.9	3,480
Mixed Paper - Recyclable	71.0	520	Yard Waste - Compostable	73.7	540
Compostable Paper	73.7	540	Yard Waste - Woody	66.9	490
Other Paper	21.8	160	Food Scraps	207.4	1,520
			Bottom Fines & Dirt	20.5	150
Beverage Containers	5.5	40	Diapers	46.4	340
Milk & Juice Cartons/Boxes - Coated	5.5	40	Other Organic	60.0	440
Plastic	292.0	2,140	Inorganics	136.5	1,000
#1 PET Bottles/Jars	25.9	190	Televisions	6.8	50
#1 Other PET Containers	2.7	20	Computer Monitors	4.1	30
#2 HDPE Bottles/Jars - Clear	9.6	70	Computer Equipment/Peripherals	5.5	40
#2 HDPE Bottles/Jars - Color	15.0	110	Electronic Equipment	24.6	180
#2 Other HDPE Containers	2.7	20	White Goods - Refrigerated	8.2	60
#6 Exp. Polystyrene Packaging	13.6	100	White Goods - Not refrigerated	19.1	140
#3-#7 Other - All	13.6	100	Lead-acid Batteries	16.4	120
Other Rigid Plastic Products	91.4	670	Other Household Batteries	1.4	10
Grocery & Merchandise Bags	8.2	60	Tires	28.7	210
Trash Bags	25.9	190	Household Bulky Items	21.8	160
Commercial & Industrial Film	23.2	170	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.0	220			
Other Plastic	30.0	220	Textiles	131.0	960
			Carpet	38.2	280
Glass	86.0	630	Carpet Padding	5.5	40
Recyclable Glass Bottles & Jars	80.5	590	Clothing	36.8	270
Flat Glass	4.1	30	Other Textiles	50.5	370
Other Glass	1.4	10			
			Household Hazardous Waste	27.3	200
Metal	137.8	1,010			
Aluminum Beverage Containers	15.0	110	Construction and Demolition Debris (C&D)	644.1	4,720
Other Aluminum	13.6	100			
HVAC Ducting	0.0	0			
Ferrous Containers (Tin Cans)	27.3	200	Total MSW (tons)		18,960
			Total MSW (pounds/person/day)		7.09

2007 population 14,657

County generation based on 2007 data.

Whiteside County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	710.8	21,040	Metal		
Newsprint	86.5	2,560	Other Ferrous	55.1	1,630
High Grade Office Paper	33.4	990	Other Non-Ferrous	5.1	150
Magazines/Catalogs	69.9	2,070	Other Metal	21.6	640
Uncoated OCC/Kraft	312.8	9,260			
Boxboard	40.5	1,200	Organics	498.3	14,750
Mixed Paper - Recyclable	71.3	2,110	Yard Waste - Compostable	73.3	2,170
Compostable Paper	74.0	2,190	Yard Waste - Woody	67.2	1,990
Other Paper	22.3	660	Food Scraps	230.8	6,830
			Bottom Fines & Dirt	19.9	590
Beverage Containers	5.4	160	Diapers	46.6	1,380
Milk & Juice Cartons/Boxes - Coated	5.4	160	Other Organic	60.5	1,790
Plastic	306.1	9,060	Inorganics	136.8	4,050
#1 PET Bottles/Jars	25.7	760	Televisions	6.4	190
#1 Other PET Containers	2.0	60	Computer Monitors	4.7	140
#2 HDPE Bottles/Jars - Clear	10.1	300	Computer Equipment/Peripherals	5.4	160
#2 HDPE Bottles/Jars - Color	14.5	430	Electronic Equipment	24.3	720
#2 Other HDPE Containers	2.0	60	White Goods - Refrigerated	8.8	260
#6 Exp. Polystyrene Packaging	16.2	480	White Goods - Not refrigerated	18.9	560
#3-#7 Other - All	16.2	480	Lead-acid Batteries	15.9	470
Other Rigid Plastic Products	91.2	2,700	Other Household Batteries	1.0	30
Grocery & Merchandise Bags	10.1	300	Tires	29.1	860
Trash Bags	25.7	760	Household Bulky Items	22.3	660
Commercial & Industrial Film	27.0	800	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.4	900			
Other Plastic	34.8	1,030	Textiles	143.6	4,250
			Carpet	38.5	1,140
Glass	85.8	2,540	Carpet Padding	5.7	170
Recyclable Glass Bottles & Jars	80.7	2,390	Clothing	41.9	1,240
Flat Glass	3.7	110	Other Textiles	57.4	1,700
Other Glass	1.4	40			
			Household Hazardous Waste	28.7	850
Metal	137.8	4,080			
Aluminum Beverage Containers	15.5	460	Construction and Demolition Debris (C&D)	648.3	19,190
Other Aluminum	12.8	380			
HVAC Ducting	0.7	20			
Ferrous Containers (Tin Cans)	27.0	800	Total MSW (tons)		79,970
			Total MSW (pounds/person/day)		7.40

2007 population

59,198

County generation based on 2007 data.

Will County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	709.7	239,020	Metal		
Newsprint	127.4	42,920	Other Ferrous	55.2	18,600
High Grade Office Paper	43.4	14,630	Other Non-Ferrous	5.1	1,730
Magazines/Catalogs	63.1	21,250	Other Metal	21.5	7,240
Uncoated OCC/Kraft	267.8	90,210			
Boxboard	40.6	13,660	Organics	553.2	186,320
Mixed Paper - Recyclable	71.3	24,000	Yard Waste - Compostable	73.3	24,700
Compostable Paper	73.9	24,880	Yard Waste - Woody	67.3	22,670
Other Paper	22.2	7,470	Food Scraps	285.2	96,060
			Bottom Fines & Dirt	20.0	6,750
Beverage Containers	5.4	1,810	Diapers	46.8	15,750
Milk & Juice Cartons/Boxes - Coated	5.4	1,810	Other Organic	60.5	20,390
Plastic	368.1	123,970	Inorganics	136.5	45,980
#1 PET Bottles/Jars	25.6	8,630	Televisions	6.5	2,190
#1 Other PET Containers	2.2	730	Computer Monitors	4.6	1,540
#2 HDPE Bottles/Jars - Clear	10.0	3,380	Computer Equipment/Peripherals	5.3	1,770
#2 HDPE Bottles/Jars - Color	14.6	4,910	Electronic Equipment	24.2	8,160
#2 Other HDPE Containers	2.0	690	White Goods - Refrigerated	8.6	2,900
#6 Exp. Polystyrene Packaging	23.7	7,970	White Goods - Not refrigerated	19.0	6,390
#3-#7 Other - All	23.9	8,060	Lead-acid Batteries	16.0	5,390
Other Rigid Plastic Products	91.2	30,720	Other Household Batteries	1.1	360
Grocery & Merchandise Bags	16.7	5,640	Tires	29.0	9,760
Trash Bags	25.8	8,700	Household Bulky Items	22.2	7,490
Commercial & Industrial Film	44.9	15,110	Fluorescent Lights/Ballasts	0.1	30
Other Film	30.3	10,190			
Other Plastic	57.1	19,240	Textiles	208.9	70,350
			Carpet	38.7	13,050
Glass	86.2	29,040	Carpet Padding	5.7	1,910
Recyclable Glass Bottles & Jars	80.9	27,260	Clothing	69.1	23,280
Flat Glass	3.8	1,280	Other Textiles	95.3	32,110
Other Glass	1.5	500			
			Household Hazardous Waste	28.8	9,690
Metal	138.2	46,540			
Aluminum Beverage Containers	15.7	5,280	Construction and Demolition Debris (C&D)	679.9	228,980
Other Aluminum	13.0	4,380			
HVAC Ducting	0.7	220			
Ferrous Containers (Tin Cans)	27.0	9,090	Total MSW (tons)		981,700
			Total MSW (pounds/person/day)		7.99

2007 population 673,586

County generation based on 2007 data.

Williamson County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	771.9	24,910	Metal		
Newsprint	72.8	2,350	Other Ferrous	55.2	1,780
High Grade Office Paper	41.5	1,340	Other Non-Ferrous	5.3	170
Magazines/Catalogs	66.6	2,150	Other Metal	21.4	690
Uncoated OCC/Kraft	383.0	12,360			
Boxboard	40.6	1,310	Organics	540.7	17,450
Mixed Paper - Recyclable	71.3	2,300	Yard Waste - Compostable	73.4	2,370
Compostable Paper	73.8	2,380	Yard Waste - Woody	67.2	2,170
Other Paper	22.3	720	Food Scraps	272.7	8,800
			Bottom Fines & Dirt	20.1	650
Beverage Containers	5.3	170	Diapers	46.8	1,510
Milk & Juice Cartons/Boxes - Coated	5.3	170	Other Organic	60.4	1,950
Plastic	295.9	9,550	Inorganics	136.7	4,410
#1 PET Bottles/Jars	25.7	830	Televisions	6.5	210
#1 Other PET Containers	2.2	70	Computer Monitors	4.6	150
#2 HDPE Bottles/Jars - Clear	9.9	320	Computer Equipment/Peripherals	5.3	170
#2 HDPE Bottles/Jars - Color	14.6	470	Electronic Equipment	24.2	780
#2 Other HDPE Containers	2.2	70	White Goods - Refrigerated	8.7	280
#6 Exp. Polystyrene Packaging	14.9	480	White Goods - Not refrigerated	18.9	610
#3-#7 Other - All	15.5	500	Lead-acid Batteries	16.1	520
Other Rigid Plastic Products	91.1	2,940	Other Household Batteries	0.9	30
Grocery & Merchandise Bags	9.0	290	Tires	29.1	940
Trash Bags	25.7	830	Household Bulky Items	22.3	720
Commercial & Industrial Film	24.2	780	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.4	980			
Other Plastic	30.7	990	Textiles	133.6	4,310
			Carpet	38.7	1,250
Glass	86.1	2,780	Carpet Padding	5.6	180
Recyclable Glass Bottles & Jars	80.9	2,610	Clothing	37.5	1,210
Flat Glass	3.7	120	Other Textiles	51.8	1,670
Other Glass	1.5	50			
			Household Hazardous Waste	28.5	920
Metal	138.2	4,460			
Aluminum Beverage Containers	15.8	510	Construction and Demolition Debris (C&D)	644.6	20,800
Other Aluminum	13.0	420			
HVAC Ducting	0.6	20			
Ferrous Containers (Tin Cans)	27.0	870	Total MSW (tons)		89,760
			Total MSW (pounds/person/day)		7.62

2007 population

64,541

County generation based on 2007 data.

Winnebago County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	803.7	120,060	Metal		
Newsprint	88.3	13,190	Other Ferrous	55.2	8,250
High Grade Office Paper	43.6	6,510	Other Non-Ferrous	5.2	770
Magazines/Catalogs	67.1	10,020	Other Metal	21.5	3,210
Uncoated OCC/Kraft	396.9	59,290			
Boxboard	40.6	6,060	Organics	526.5	78,650
Mixed Paper - Recyclable	71.2	10,640	Yard Waste - Compostable	73.3	10,950
Compostable Paper	73.9	11,040	Yard Waste - Woody	67.3	10,050
Other Paper	22.2	3,310	Food Scraps	258.7	38,640
			Bottom Fines & Dirt	20.0	2,990
Beverage Containers	5.4	800	Diapers	46.7	6,980
Milk & Juice Cartons/Boxes - Coated	5.4	800	Other Organic	60.5	9,040
Plastic	314.6	47,000	Inorganics	136.4	20,380
#1 PET Bottles/Jars	25.6	3,830	Televisions	6.5	970
#1 Other PET Containers	2.1	320	Computer Monitors	4.6	680
#2 HDPE Bottles/Jars - Clear	10.0	1,500	Computer Equipment/Peripherals	5.2	780
#2 HDPE Bottles/Jars - Color	14.6	2,180	Electronic Equipment	24.2	3,620
#2 Other HDPE Containers	2.1	310	White Goods - Refrigerated	8.6	1,290
#6 Exp. Polystyrene Packaging	17.2	2,570	White Goods - Not refrigerated	18.9	2,830
#3-#7 Other - All	17.3	2,590	Lead-acid Batteries	16.0	2,390
Other Rigid Plastic Products	91.2	13,620	Other Household Batteries	1.1	160
Grocery & Merchandise Bags	11.0	1,650	Tires	29.0	4,330
Trash Bags	25.8	3,860	Household Bulky Items	22.2	3,320
Commercial & Industrial Film	29.6	4,420	Fluorescent Lights/Ballasts	0.1	10
Other Film	30.3	4,520			
Other Plastic	37.7	5,630	Textiles	153.0	22,850
			Carpet	38.8	5,790
Glass	86.2	12,880	Carpet Padding	5.7	850
Recyclable Glass Bottles & Jars	80.9	12,090	Clothing	45.6	6,810
Flat Glass	3.8	570	Other Textiles	62.9	9,400
Other Glass	1.5	220			
			Household Hazardous Waste	28.7	4,290
Metal	138.2	20,640			
Aluminum Beverage Containers	15.7	2,340	Construction and Demolition Debris (C&D)	653.2	97,580
Other Aluminum	13.0	1,940			
HVAC Ducting	0.7	100			
Ferrous Containers (Tin Cans)	27.0	4,030	Total MSW (tons)		425,130
			Total MSW (pounds/person/day)		7.80

2007 population

298,759

County generation based on 2007 data.

Woodford County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)		County Generation (lb/c/yr)	Total Generation (tons)
Paper	619.7	11,780	Metal		
Newsprint	78.4	1,490	Other Ferrous	55.2	1,050
High Grade Office Paper	43.7	830	Other Non-Ferrous	5.3	100
Magazines/Catalogs	65.8	1,250	Other Metal	21.6	410
Uncoated OCC/Kraft	224.6	4,270			
Boxboard	40.5	770	Organics	471.9	8,970
Mixed Paper - Recyclable	71.0	1,350	Yard Waste - Compostable	73.1	1,390
Compostable Paper	73.7	1,400	Yard Waste - Woody	67.3	1,280
Other Paper	22.1	420	Food Scraps	204.1	3,880
			Bottom Fines & Dirt	20.0	380
Beverage Containers	5.3	100	Diapers	46.8	890
Milk & Juice Cartons/Boxes - Coated	5.3	100	Other Organic	60.5	1,150
Plastic	344.6	6,550	Inorganics	135.7	2,580
#1 PET Bottles/Jars	25.8	490	Televisions	6.3	120
#1 Other PET Containers	2.1	40	Computer Monitors	4.7	90
#2 HDPE Bottles/Jars - Clear	10.0	190	Computer Equipment/Peripherals	5.3	100
#2 HDPE Bottles/Jars - Color	14.7	280	Electronic Equipment	24.2	460
#2 Other HDPE Containers	2.1	40	White Goods - Refrigerated	8.4	160
#6 Exp. Polystyrene Packaging	21.0	400	White Goods - Not refrigerated	18.9	360
#3-#7 Other - All	21.0	400	Lead-acid Batteries	15.8	300
Other Rigid Plastic Products	91.0	1,730	Other Household Batteries	1.1	20
Grocery & Merchandise Bags	14.2	270	Tires	28.9	550
Trash Bags	25.8	490	Household Bulky Items	22.1	420
Commercial & Industrial Film	37.9	720	Fluorescent Lights/Ballasts	<0.1	0
Other Film	30.5	580			
Other Plastic	48.4	920	Textiles	184.1	3,500
			Carpet	38.9	740
Glass	85.8	1,630	Carpet Padding	5.8	110
Recyclable Glass Bottles & Jars	80.5	1,530	Clothing	58.4	1,110
Flat Glass	3.7	70	Other Textiles	81.0	1,540
Other Glass	1.6	30			
			Household Hazardous Waste	28.9	550
Metal	138.4	2,630			
Aluminum Beverage Containers	15.8	300	Construction and Demolition Debris (C&D)	669.2	12,720
Other Aluminum	13.2	250			
HVAC Ducting	0.5	10			
Ferrous Containers (Tin Cans)	26.8	510	Total MSW (tons)		51,010
			Total MSW (pounds/person/day)		7.35

2007 population 38,017

County generation based on 2007 data.

Appendix D
Photographic Log

FIELD PHOTOGRAPH LOG
ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #1

Date of Photograph: 10/02/08



Photograph Description: Sample AICI2 at Landcomp Landfill.

Photograph #2

Date of Photograph: 10/02/08



Photograph Description: Sample ARES1 at Landcomp Landfill.

FIELD PHOTOGRAPH LOG
ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #3

Date of Photograph: 10/02/08



Photograph Description: Sample ARES5 at Landcomp Landfill.

Photograph #4

Date of Photograph: 10/08/08



Photograph Description: Visual Characterization of C&D at Land and lakes Co. Matteson Transfer Station.

FIELD PHOTOGRAPH LOG
ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #5

Date of Photograph: 10/08/08



Photograph Description: Sample CICI1 at Land and Lakes Co. Matteson Transfer Station.

Photograph #6

Date of Photograph: 10/08/08

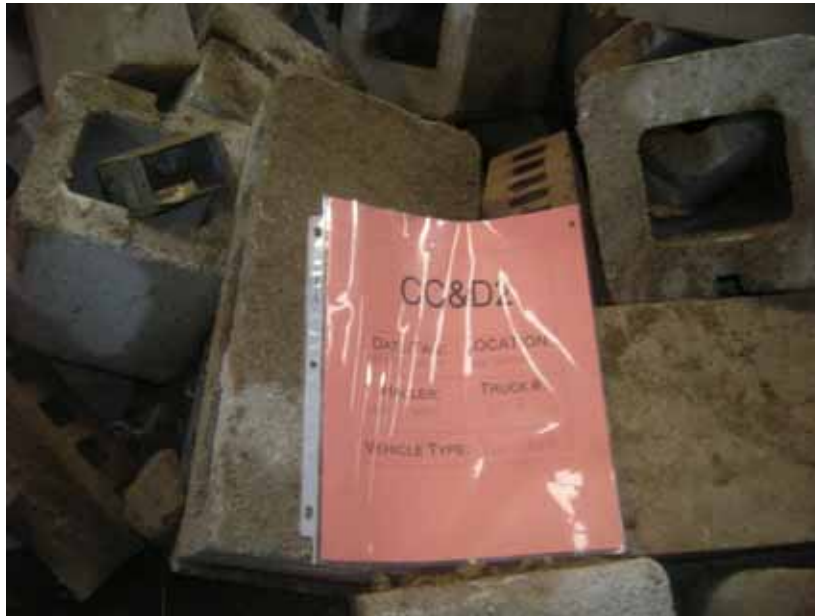


Photograph Description: Land and Lakes Co. Matteson Transfer Station C&D.

FIELD PHOTOGRAPH LOG
ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #7

Date of Photograph: 10/08/08



Photograph Description: Sample CC&D2 at Land and Lakes Co. Matteson Transfer Station

Photograph #8

Date of Photograph: 10/09/08



Photograph Description: Sample DICI1 at Prairie View Landfill.

FIELD PHOTOGRAPH LOG
ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #9

Date of Photograph: 10/9/08



Photograph Description: Sample DC&D5 at Prairie View Landfill.

Photograph #10

Date of Photograph: 10/14/08



Photograph Description: C&D load at Livingston Landfill.

FIELD PHOTOGRAPH LOG
ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #11

Date of Photograph: 10/14/08



Photograph Description: Sample EIC14 at Livingston Landfill.

Photograph #12

Date of Photograph: 10/15/08

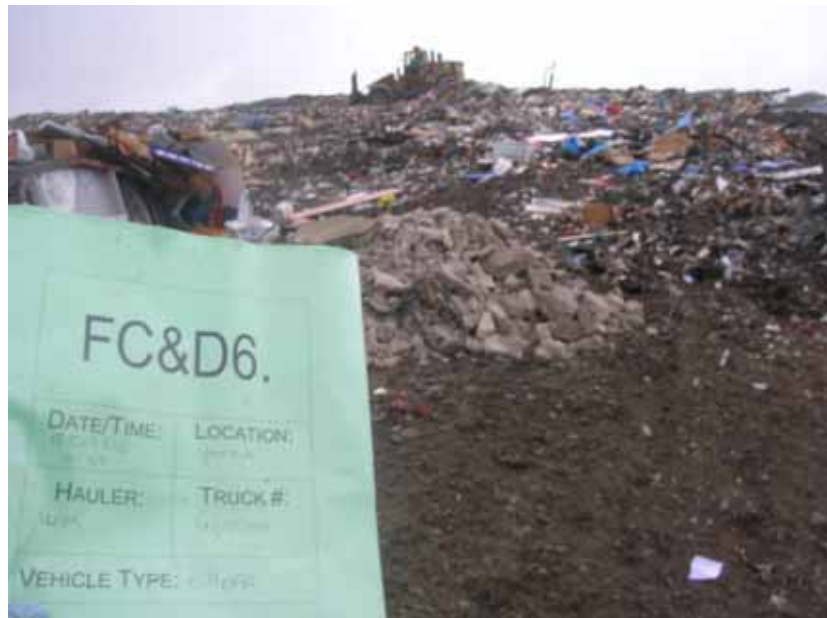


Photograph Description: Sample FICI2 at Peoria City/County Landfill.

FIELD PHOTOGRAPH LOG
ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #13

Date of Photograph: 10/15/08



Photograph Description: Sample FC&D6 at Peoria City/County Landfill.

Photograph #14

Date of Photograph: 10/16/08



Photograph Description: Sample GRES3 at Knox County 3 Landfill.

FIELD PHOTOGRAPH LOG
ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #15

Date of Photograph: 10/20/08



Photograph Description: Physical Characterization Sampling at Sangamon Valley Landfill.

Photograph #16

Date of Photograph: 10/20/08



Photograph Description: ICI load at Sangamon Valley Landfill.

FIELD PHOTOGRAPH LOG

ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #17

Date of Photograph: 10/20/08



Photograph Description: Physical Characterization Sampling at Sangamon Valley Landfill.

Photograph #18

Date of Photograph: 10/20/08



Photograph Description: Sample HIC11 at Sangamon Valley landfill.

FIELD PHOTOGRAPH LOG
ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #19

Date of Photograph: 10/20/08



Photograph Description: Visual Characterization at Sangamon Valley Landfill.

Photograph #20

Date of Photograph: 10/20/08



Photograph Description: Field sampling crew at Sangamon Valley Landfill.

FIELD PHOTOGRAPH LOG
ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #21

Date of Photograph: 10/20/08



Photograph Description: Field sampling crew at Sangamon Valley Landfill.

Photograph #22

Date of Photograph: 10/20/08



Photograph Description: Field sampling crew at Sangamon Valley Landfill.

FIELD PHOTOGRAPH LOG
ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #23

Date of Photograph: 10/21/08



Photograph Description: Sample IICI1 at ERC Coles County Landfill.

Photograph #24

Date of Photograph: 10/21/08



Photograph Description: Sample IC&D1 at ERC Coles County Landfill.

FIELD PHOTOGRAPH LOG

ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #25

Date of Photograph: 10/21/08



Photograph Description: Sample IC&D3 at ERC Coles County Landfill.

Photograph #26

Date of Photograph: 10/21/08



Photograph Description: Sample IC&D7 at ERC Coles County Landfill.

FIELD PHOTOGRAPH LOG
ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #27

Date of Photograph: 10/22/08



Photograph Description: Veolia ES Valley View Landfill Inc.

Photograph #28

Date of Photograph: 10/22/08



Photograph Description: Sample JC&D2 at Veolia ES Valley View Landfill Inc.

FIELD PHOTOGRAPH LOG
ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #29

Date of Photograph: 10/22/08



Photograph Description: Sample JRES5 at Veolia ES Valley View Landfill Inc.

Photograph #30

Date of Photograph: 10/23/08



Photograph Description: Sample KC&D1 at Urbana Transfer Station.

FIELD PHOTOGRAPH LOG
ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #31

Date of Photograph: 10/23/08



Photograph Description: Sample KRES4 at Urbana Transfer Station.

Photograph #32

Date of Photograph: 10/27/08



Photograph Description: Sample LICI3 at Roxana

FIELD PHOTOGRAPH LOG
ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #33

Date of Photograph: 10/27/08



Photograph Description: Sample LC&D6 at Roxana

Photograph #34

Date of Photograph: 10/27/08



Photograph Description: Sample LC&D7 at Roxana

FIELD PHOTOGRAPH LOG

ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #35

Date of Photograph: 10/28/08



Photograph Description: Sample MC&D1 at Southern IL Regional

Photograph #36

Date of Photograph: 10/28/08



Photograph Description: Sample MC&D4 at Southern IL Regional.

FIELD PHOTOGRAPH LOG
ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #37

Date of Photograph: 10/29/08



Photograph Description: Sample NC&D1 at Veolia ES Wayne County Landfill

Photograph #38

Date of Photograph: 10/29/08



Photograph Description: Sample NRES3 at Veolia ES Wayne County Landfill

FIELD PHOTOGRAPH LOG
ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #39

Date of Photograph: 10/30/08



Photograph Description: Sample OC&D1 at Bond County

Photograph #40

Date of Photograph: 10/30/08



Photograph Description: Sample OC&D2 at Bond County

FIELD PHOTOGRAPH LOG
ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #41

Date of Photograph: 11/03/08



Photograph Description: Sample PICI2 at Veolia ES Zion Landfill

Photograph #42

Date of Photograph: 11/03/08



Photograph Description: Veolia ES Zion Landfill

FIELD PHOTOGRAPH LOG
ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #43

Date of Photograph: 11/04/08



Photograph Description: Sample PIC112 at Veolia ES Zion Landfill

Photograph #44

Date of Photograph: 11/04/08



Photograph Description: Veolia ES Zion Landfill C&D load

FIELD PHOTOGRAPH LOG
ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #45

Date of Photograph: 11/04/08



Photograph Description: Sample PC&D14 at Veolia ES Zion Landfill

Photograph #46

Date of Photograph: 11/04/08



Photograph Description: Veolia ES Zion Landfill C&D load with Roofing materials

FIELD PHOTOGRAPH LOG
ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #47

Date of Photograph: 11/05/08



Photograph Description: Sample QICI1 at Countryside

Photograph #48

Date of Photograph: 11/05/08



Photograph Description: Sample QC&D2 at Countryside

FIELD PHOTOGRAPH LOG
ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #49

Date of Photograph: 11/05/08



Photograph Description: C&D Visual Characterization at Countryside

Photograph #50

Date of Photograph: 11/05/08



Photograph Description: Visual Characterization at Countryside

FIELD PHOTOGRAPH LOG
ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #51

Date of Photograph: 11/06/08



Photograph Description: Sample RIC11 at Veolia ES Orchard (Orchard Hills)

Photograph #52

Date of Photograph: 11/06/08



Photograph Description: C&D load at Veolia ES Orchard (Orchard Hills)

FIELD PHOTOGRAPH LOG
ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY

Photograph #53

Date of Photograph: 11/14/08



Photograph Description: C&D load with Concrete at Pike County Landfill.

Photograph #54

Date of Photograph: 11/03/08 – 11/04/08



Photograph Description: C&D load at Pike County Landfill.