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COOK COUNTY
SOLID WASTE MANAGEMENT PLAN
2011 UPDATE

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Prepared by:
The Delta Institute
www.delta-institute.org

Original 20-year Solid Waste Plan - 1990
First Update - 2000
Second Update - 2011

COOK COUNTY SOLID WASTE MANAGEMENT PLAN
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TABLE OF CONTENTS

List of Tables

List of Figures

Disclaimer

Cook County is not responsible for the formulation of any of the data presented in this Plan Update. The data is a collection of various existing data sources, and through the above tables, have been represented to relate to the current Plan Update.

Executive Summary

The original Cook County Solid Waste Management Plan was prepared in 1991/92 as required by the Illinois Solid Waste Planning and Recycling Act. It was adopted by the Cook County Board in 1996 and subsequently approved by IEPA. The first five-year update was submitted to IEPA in 2000. This is the second update, and each update serves to summarize current waste management conditions, provide contemporary waste management options, report the status of existing recommendations, and propose new recommendations.

Suburban Cook County encompasses 126 municipalities, as well as unincorporated areas, with a combined 2010 population of just under 2.5 million. The City of Chicago is considered as a separate entity and is not included in this plan. While the population in suburban Cook County has remained constant since 2000, the waste generation rate has followed national trends and has increased. The per capita waste generation rate has increased from an average of 6.7 pounds per capita per day to over 8 pounds per capita per day in the two subareas that have the most reliable data. At the same time landfill and conversion (Waste-to-Energy) capacity has declined in Cook County resulting in increased reliance on transfer stations and disposal at more remote landfills.

For purposes of waste management planning and implementation, most suburban Cook County municipalities belong to one of three sub-county solid waste associations: South Suburban Mayors and Managers Association (SSMMA) and its affiliate South Suburban Solid Waste Agency (SSSWA), West Cook County Solid Waste Agency (WCCSWA), and Solid Waste Agency of Northern Cook County (SWANCC). These agencies are responsible for planning and implementing within the service areas but also contribute information to the county's plan and program implementation. Chapter 4 includes updated summaries for the three sub-county agencies. Despite delegation, only one of three has its own solid waste management plan and one has been inactive.

Waste Management Methods: Current and Prospective

New legislative changes in the last decade have been important in driving demand for specific waste management services and are explained in Chapter 1.

Based on current reporting activity, a critical need exists for more accurate and complete data on waste generation quantities, recycling rates, and end-user costs to arrive at meaningful conclusions regarding solid waste conditions in Cook County. Plans made in 2000 for a county-wide database and an advisory committee to share information and best practices have not been implemented.

Despite information gaps, evidence shows that waste generation has grown due to a slight increase in population and a larger increase in per capita generation rates in most parts of Cook County while recycling rates have declined among SSMMA and WCCSWA communities. Recycling rates in all but SWANCC communities still fall short of the state goal of 25%. Collar counties are setting stepped recycling goals such as 30% by 2015 to 45% by 2020 (Will County) and 45% by 2014 to 60% in 2020 (Lake County). Other regions nationwide are setting even more ambitious goals, such as 70%

diversion by 2015 in New York City, 75% diversion by 2013 and zero waste by 2025 in Los Angeles, and 30% waste reduction by 2020 to 80% waste reduction by 2050 in the State of Massachusetts. Public awareness and demand for recycling and proper disposal of Household Hazardous Waste and e-waste in particular continue to increase countywide.

Local landfill capacity has diminished, and the only Waste-to-Energy facility has yet to be reopened. As a result, the number of transfer stations in suburban Cook County has increased significantly since 2000 from 26 to 37. Although there is a nationwide trend to construct larger, more remote, regional landfills for solid waste disposal, continuing to ship waste to more remote locations has significant economic and environmental impacts such as higher transportation costs and air pollution related to fuel usage. Since they play a key role in waste management, transfer stations have excellent opportunities to implement more sustainable practices such as using alternatively-fueled vehicles, serving as recycling or reuse centers for more materials, and ideally transporting less waste to remote disposal sites.

Chapter 3 summarizes various waste management options from around the region and nation that Cook County could consider implementing to improve these existing conditions. Zero waste is a new guiding principle that has emerged in the last 10 years. The City of Chicago embraces it strongly. New legislation in the last decade is also driving the need for expanded reduction, reuse and recycling.

Recycling and source reduction programs have been broadly accepted by the public. In addition to the “3 R’s”, waste-to-energy conversion has potential to manage large volumes of the county’s waste. With more research, the next decade could provide breakthroughs in demonstrating economic feasibility and the county would be wise to follow the City of Chicago in further monitoring and assessing the feasibility of conversion options.

Achievement of Previous Goals and Objectives

Although there has been some progress in the last decade, there have also been some setbacks, such as a decline in recycling rates in parts of Cook County, closing of landfills and the Robbins waste-to-energy facility in 2001 and stalled progress in further developing a database, advisory committee or resources for sharing information. This Plan Update also did not include any new waste data collection or cost surveys from municipalities, facilities, or haulers, so there is also a lack of current information to fully assess current conditions. A summary of the implementation status of specific recommendations is provided in the table in Chapter 6.

Key Goals and Priorities for the Next Five Years

The key recommendations are summarized in Chapter 6. As in the 2000 Plan Update, the role of county and local governments in waste management has shifted from the provision of services and facilities to policy formulation, public education and information, monitoring, regulation, oversight, coordination, support, technical assistance and finance.

The county can and should continue to implement ways to improve information and coordination on solid waste management in suburban Cook County. It may also be ready to take on additional enforcement responsibilities. There is a critical need for a comprehensive cost-benefit analysis that documents the current range of hauling and landfill tipping fees and that analyzes the ultimate cost of recycling and disposal for the end-user in Cook County. Recycling and disposal costs have been reported anecdotally by local waste agencies, but fees charged by landfills, transfer stations, and haulers vary between contracts and greatly affect the economic incentives for or against recycling versus disposal.

Given the continued decline in local landfill capacity, a true paradigm shift is needed to focus next on the 3Rs (source reduction, reuse, and recycling) before conversion and landfilling. The county should focus on following a “zero-waste” philosophy by setting a visionary goal of 100% diversion. This goal can be implemented using a tiered approach by first setting a baseline goal of a 25% recycling rate for each sub-county region, and later setting a higher stretch goal in the range of 50-70%.

New partnerships need to be formed around source reduction, reuse and recycling to make these more robust, coordinated and effective. Public education is an effective and financially viable means to informing large numbers of residents about waste diversion opportunities and should be a key priority for the county.

Although there are no plans for new transfer stations or disposal facilities in unincorporated Cook County, the county should still ensure it has siting standards and guidelines for new facilities in unincorporated areas in addition to application and notice procedures that were adopted in 2000. Finally, better data and information on existing conditions and programs is needed to inform more specific strategies and the next plan update.

Some recommendations can be implemented more easily than others. For more detailed explanations, origins, and examples regarding each recommendation, see Chapter 6. Here recommendations are grouped based on short-term and long-term timeframes.

Short-Term Recommendations (requiring relatively low investment that can be implemented in less than 12 months)

- Continue to procure end-product compost, reusable, recyclable or compostable products for operation of all county facilities or projects. (R10)
- Use a tiered approach to improve overall recycling rate for Cook County: a) Follow the "zero-waste" philosophy with a vision of a 100% diversion rate; b) Set a stretch goal in the range of 50%-70% based on improved data expected to be available in the next year; c) Set a 25% recycling rate for each sub-county region as a baseline goal. (R6)

- Conduct a comprehensive cost-benefit analysis of recycling and disposal in Cook County to show economic incentives for diversion initiatives. Develop a subsequent implementation plan that identifies best practices, incentives or resources for recycling programs. (R8)
- Establish active outreach and public educational programs on source reduction and recycling initiatives (R12)
- Encourage stronger procurement practices by the county to promote reused and reusable goods and reduce packaging/lifecycle costs. (R1)
- Encourage source reduction by businesses, institutions, and municipalities. (R2)
- Consider draft strategies developed by Department of Environmental Control to encourage deconstruction, salvage and reuse of construction and debris (C&D) materials. (R3)
- Encourage the reuse of commercial/industrial materials and support the research and development of new markets for problem materials such as gypsum. (R4)
- Develop additional strategies for supporting recycling and related businesses and job growth in related sectors. (R16)
- Evaluate current local food waste composting practices. (R17)
- Establish permanent Household Hazardous Waste (HHW) and e-waste drop-off facilities along with regular collection events. (R22)
- Continue to educate the public about proper storage, handling and disposal of HHW and provide information on materials that are banned from landfills. (R23)
- Consider executing delegation agreement with sub-county agencies that have their own current solid waste plan. (R27)
- Appoint members and convene Advisory Committee for overall coordination and networking opportunities. (R29)
- Consider seeking delegated authority and grant agreement from IEPA to transfer enforcement authority for solid waste management facilities to the Cook County Department of Environmental Control. (R30)
- Conduct outreach to unaffiliated or unincorporated areas to encourage them to become affiliated with a waste agency or join with other municipalities/townships to improve their bargaining for disposal services. (R31)

- Revisit potential funding sources for implementation of county waste management activities. (R32)
- Aggressively pursue grants from state and private organizations and foundations. (R33)

Long-Term Recommendations (requiring moderate to high investment that can be implemented in the next 2-5 years) include:

- Promote landscape waste reduction and land-applied “backyard” composting among households. (R5)
- Collect current baseline data from municipalities and townships on recycling programs and recovery rates. (R7)
- Serve as model by offering recycling services at all county facilities. (R9)
- Encourage an increase recycling in multifamily buildings. (R13)
- Identify strategies to increase commercial/industrial recycling. (R14)
- Encourage commercial/industrial recycling in contracts or in licensing provisions for haulers. (R15)
- Monitor and evaluate evolving technologies. (R18)
- Consider adding siting standards or guidelines for new facilities in unincorporated areas in addition to IEPA siting criteria. (R19)
- Consider setting a goal for percentage of waste transported out-of-county to reduce dependence on remote disposal sites and reduce transportation costs and climate impacts. (R20)
- Explore the feasibility to prepare zoning requirements and/or development guidelines that would promote the inclusion of appropriate waste management and recycling facilities or features in all new multifamily, commercial and institutional developments. (R21)
- Explore funding for revenue sources for county hazardous waste management activities. (R24)
- Evaluate the potential for cooperation with the Cook County Sheriff’s Office regarding special police training for regulating illegal dumping. (R25)

- Encourage better data collection practices and establish standard reporting requirements between all reporting entities. (R26)
- Improve coordination and monitoring of solid waste activities for unaffiliated municipalities and unincorporated areas. (R28)

1.0 LEGISLATIVE UPDATE

1.1 Primary Laws Governing Solid Waste Management in Illinois:

- **The Solid Waste Management Act (SWMA).**[i] Adopted in 1986, SWMA established the following waste management hierarchy in descending order of preference:
    - Volume reduction at the source of generation
    - Recycling and reuse
    - Combustion with energy recovery
    - Combustion for volume reduction
    - Disposal in landfill facilities
- **The Solid Waste Planning & Recycling Act (SWPRA).**[ii] Adopted in 1988, SWPRA requires all Illinois counties as well as the City of Chicago to develop and implement solid waste management plans that emphasize source reduction, recycling and reuse and are designed to recycle 25% of the municipal waste generated in their jurisdiction. Plans must be updated and reviewed every 5 years to ensure compliance with the purpose and provisions of this Act.
- **The Illinois Environmental Protection Act (or EPAct).**[iii] Establishes requirements for permits for landfills and transfer stations, establishes fees that support DCEO's and IEPA's solid waste management programs, and prohibits a variety of items from being disposed of in landfills, including:
    - Landscape waste (P.A. 85-1430)
    - Lead-acid batteries
    - Whole waste tires
    - "White goods" (appliances)
    - Used motor oil
    - Electronic devices (effective 01/01/2012; P.A. 95-059)

1.2 New Legislation Since Last Plan Update

- **The Electronic Products Recycling and Reuse Act** (P.A. 95-059; 415 ILCS 150/) Signed into law in September 2008, advances a producer responsibility model for managing end-of-life electronics and will ban covered electronic devices from being landfilled in Illinois starting Jan. 1, 2012. Illinois is one of 22 states that have comprehensive e-waste laws (as of May 2009). The first phase of the law, which went into effect in early 2010, requires manufacturers/retailers to register with IEPA and provide information on their product's proper disposal. The second phase of the law will go into effect in 2012, banning electronic waste from Illinois landfills. Two years were given to educate the public about the ban.
- **Illinois Composting Bill (S.B. 99)** Passed in June 2009, the bill allows for the composting of food waste on a commercial scale without triggering requirements for more heavily-regulated landfills, transfer stations or other pollution control facilities. The bill amends the Illinois Environmental Protection Act (415 ILCS 5/).
- **Construction & Demolition Debris Legislation** Public Act 96-1416, effective July 30, 2010 amends the Illinois Environmental Protection Act regarding the management of Clean Construction and Demolition Debris (CCDD). The new law creates a state tipping fee for CCDD disposal and provides additional standards for materials being accepted at CCDD facilities and soil-only fill sites.

1.3 Proposed Legislation

- **Cook County Demolition Debris Recycling Ordinance** Pending before the Environmental Control Committee (Substitute Item #296492), the ordinance establishes a new requirement requiring all non-exempt demolition projects to divert 60% or more of the demolition debris generated by a project, requiring a recycling permit prior to demolition of buildings and post demolition report, and establishing a permit fee designated for deposit in the Cook County Environmental Management Fund to support recycling and reuse programs. This ordinance is modeled after a similar ordinance adopted by the City of Chicago in 2005 (Chicago Municipal Code Sec. 11-1905). Based on the Cook County Deconstruction Strategy Report, this ordinance may be revised to include deconstruction requirements.

2.0 CONDITIONS AND NEEDS UPDATE

Cook County's waste management practices have been influenced by numerous factors over the past decade. Population growth has leveled off in suburban Cook County over the last 10 years while per capita waste generation has increased.[iv] Since 2000, recycling has declined in all reporting areas. The decline in landfill and incineration capacity in Cook County and the Northeast Illinois region has resulted in substantial growth in the number of transfer stations in Cook County over the last decade. Along with improved data collection, solutions to manage the county's growing waste stream lie in increased recycling and reuse. There are major opportunities in the industries of C&D, paper, and organics as well as in acknowledging known waste management trends, such as the recent landfill ban on e-waste.

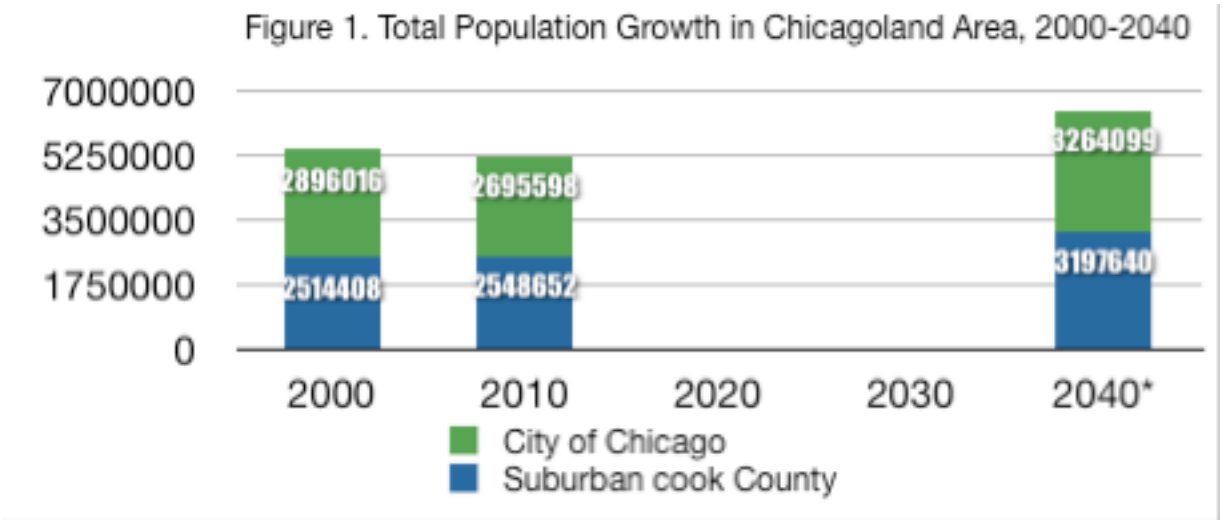
A 2008 survey of local government green practices found that many municipalities in Cook County are interested in learning more about waste reduction and recycling, especially managing hazardous, electronic and construction and demolition waste, along with composting yard waste and conducting waste audits.[v] The survey confirmed there is substantial room for improvement in coordinating information and sharing best practices among solid waste agencies.

2.1 Population Trends and Forecast

Since 2000, the population of suburban Cook County increased by 0.7% and is currently 2,499,077 according to the 2010 census, less than projected. Not all areas experienced growth. While Elgin (which straddles Cook and Kane counties) grew 14.5% to 108,188 and Glenview grew 7%, other larger cities (Cicero, Schaumburg, Arlington Heights and Des Plaines) declined.

Most of the 126 municipalities in Cook County belong to one of three sub-county solid waste agencies. Population change by agency is summarized in Appendix B. Suburban Cook County population forecasts are shown in the following graph. Actual population for 2010 was lower than forecasted, calling into question the 2040 projection.

Figure 1. Total Population Growth in Chicagoland Area, 2000-2040



Source: 2010 Census Data and forecasts from CMAP * *projected*

The most recent population forecast for Cook County by the Northeast Illinois Planning Commission (NIPC) in 2003 was for an estimated average population increase of 2.6% every 10 years, but actual growth was only 0.7% in the last decade.[vi]

2.2 Municipal Solid Waste Definition and Waste Generation Trends

This plan update focuses on Municipal Solid Waste (or MSW). In order to assess needs for MSW facilities and programs, it is important to understand what it includes and what is under the management and control of government agencies in suburban Cook County.

Illinois law defines Municipal Solid Waste as "garbage, general household, institutional and commercial waste, landscape waste and construction or demolition debris" (415 ILCS 5/3.290) but does not include "clean construction or demolition debris (CCDD) that is separated or processed and returned to the economic mainstream as raw materials or used as fill material (415 ILCS 5/3.160).

As a result, this plan update is structured around these four major categories of the waste stream: 1) typical household and office waste, 2) construction and demolition (C&D) material, 3) electronic waste, and 4) landscape waste and food waste.

Although the population has remained stable, solid waste generation in Cook County has increased over the past decade. The 2000 Plan estimated a waste generation rate of 6.7 pounds per capita per day (pcd). The most current data available from the 2009 Illinois EPA Landfill Capacity Report indicate that portions of Cook County with active waste management agencies have per capita waste generation rates similar to the statewide average rate of 8.08 pounds per day (8.0 pcd reported by SWANCC; 7.7 pcd reported by WCCSWA). Waste generation data for portions of Cook County that do not have active waste management authorities varied substantially. Large reporting variations over the years and errors in recent IEPA Landfill Capacity Reports illustrate that better data collection is needed.

Table 1. Waste Generation Rates in Suburban Cook County

reporting area	1998	2008	2009
South Suburban (SSMMA)	1.9	4.1	2.7
Northern Cook (SWANCC)	8.0	8.0	8.0
West Cook (WCCSWA)	6.4	8.4	7.7
unaffiliated Cook municipalities	6.0	38.0	38.0
unincorporated Cook areas [1]	NA	NA	NA
statewide average	NA	8.08 [2]	NA

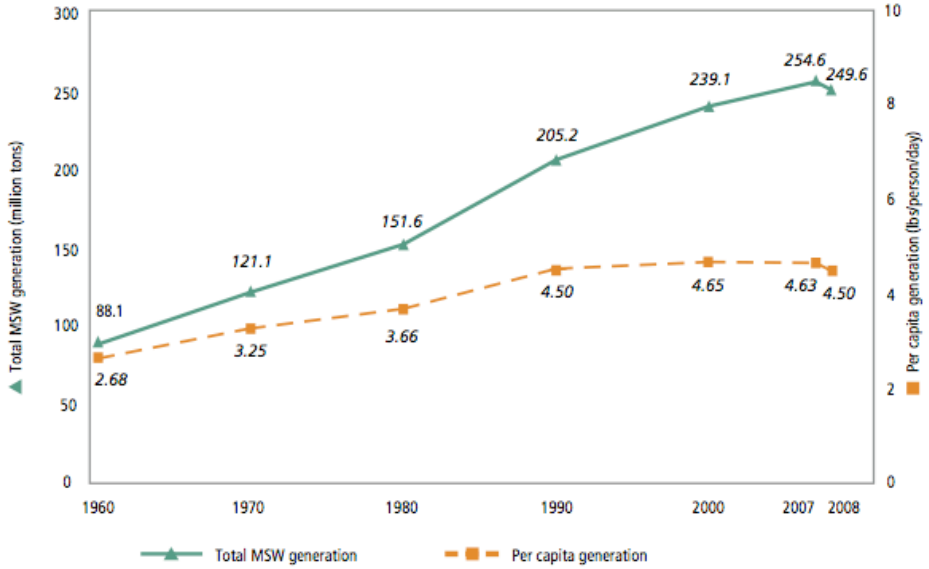
Units are in pounds per capita per day (pcd)

Source: IEPA Landfill Capacity Reports 1998, 2008 and 2009

[1] IEPA - unincorporated Cook County did not submit annual survey.
[2] *IRA+DCEO Illinois Commodity / Waste Generation and Characterization Study, 2009*

The graph below from a 2008 U.S. EPA report shows national generation rates increasing steadily since 1960 but declining slightly in 2008 due to the economic downturn.[vii]

Figure 2. U.S. MSW Generation Rates, 1960 to 2008



Source: "Municipal Solid Waste Generation, Recycling, and Disposal in the United States: Facts and Figures." USEPA 2008.

A 2009 Illinois Commodity/Waste Generation and Characterization Study commissioned by the Illinois Recycling Association and the Illinois Department of Commerce and Economic Opportunity (DCEO) confirms the statewide average per capita waste generation rate at 8.3 pounds per day and predicts that this rate will remain steady in the future.

Despite the broad definition of MSW, which includes garbage, general household, institutional and commercial waste, landscape waste and construction or demolition debris, most solid waste agencies only manage, control and collect data on residential waste collection programs. They do not manage or collect data for multifamily residential buildings, commercial office or retail centers, or industrial or institutional waste generators. Collection service for commercial, industrial and institutional buildings is typically contracted independently by individual building owners, so there is no standardized enforcement or reporting of waste collection data for these buildings. Therefore, the data reported to the Illinois EPA for the annual landfill capacity report (the primary data source for this update) is incomplete and does not represent an accurate depiction of solid waste collection and recycling or diversion in suburban Cook County.

It generally represents only residential waste collection and recycling that is controlled by solid waste agencies or municipalities.

In addition, the methods some municipalities used to calculate residential waste amounts varied greatly. Some calculated the residential waste amounts by adding the amounts of each material collected. In some cases, these materials included C&D debris and landscape waste, which are typically collected by commercial contractors. The amounts for some materials were also left blank, which could mean that the hauler did not pick up this material or the reporting coordinator was unable to obtain the information from the hauler. Data that were collected from haulers is not independently verified by IEPA.

Due to these data flaws, Cook County may want to pursue additional data collection from reporting waste agencies and establish standard reporting requirements to obtain a more complete understanding of existing conditions to more effectively target waste management strategies. Cook County may also need additional technical assistance to improve the collection data for the area managed by the recently reactivated South Suburban Solid Waste Agency and suburban areas not affiliated with any of the three sub-county waste agencies.

2.3 Waste Recycling Rates

National estimates of MSW recycling rates show a marked increase in rates from 1990 to 2007 but a slight decline in 2008 (See Figure 2). According to the EPA report, yearly production of waste has grown due to population increases, but per capita generation remains steady, due somewhat to “lean manufacturing” initiatives, where companies use less material for product and package designs. Steady per capita waste generation is also partially due to higher recycling rates from greater public awareness about recycling benefits. However, as mentioned in Section 2.2, the waste generation rate has held steady mostly due to the poor economy. People are buying less, using less, and have less waste to dispose.

The 2000 Plan Update stated that recycling programs have been implemented throughout the county and more than 25% of the waste stream was being recycled or composted. There are no current data to confirm that this is still true in all of suburban Cook County. The only available sources for recycling rates for suburban Cook County are the solid waste agencies themselves. According to their own reports to the Illinois EPA for the most current (2009) Landfill Capacity Report, only Northern Cook (managed by SWANCC) currently exceeds the state goal of 25% recycling.

While 1998 recycling rates were steady for all reporting sub-areas, recent years have shown substantial variation among reporting sub-areas, and recycling as reported by waste agencies has generally declined.

Table 2. Recycling Rates for Cook County, State of Illinois, and U.S.

		tons of waste generated	tons of waste recycled	recycling rate
SSMMA	1998	281,809	59,313	21%
	2008	482,019	66,496	13.8%
	2009	324,531	67,865	20.9%
SWANCC	1998	1,038,607	289,273	28%
	2008	1,120,392	492,000	44%
	2009	1,120,392	515,380	46%
WCCSWA	1998	603,856	161,178	27%
	2008	870,000	92,000	10.6%
	2009	800,000	88,000	11.0%
Cook reporting waste agencies	1998	1,924,272	509,764	26.5%
	2008	2,472,411	650,496	26.3%
	2009	2,244,923	671,245	29.9%
City of Chicago	1998	NA	NA	29%
	2008	8,155,086	4,468,955	54.8%
	2009	6,470,116	2,988,418	46.2%
unaffiliated Cook municipalities	1998	678,900	175,400	26%
	2008	4,301,393	1,230,000	28.6%
	2009	4,301,393	1,230,000	28.6%
State of IL [1]		**18,906,100**	**3,610,000**	**19.1%**
US [2]		**249,610,000**	**82,870,000**	**33.2%**

Main Source: 1998, 2008 & 2009 IEPA Landfill Capacity Reports (uncertain whether recycled material is included in waste generated). IEPA: unincorporated Cook County did not submit annual survey

[1] Illinois Recycling Association 2009 Report

[2] Does not include C&D waste

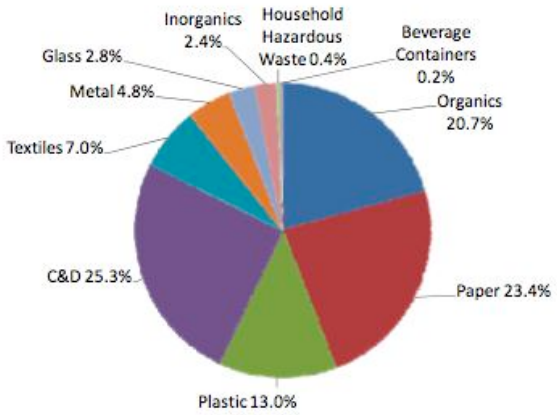
2.4 Waste Stream Composition

The 2009 study commissioned by the Illinois Recycling Association (IRA) and the Illinois Department of Commerce and Economic Opportunity found construction and demolition debris (C&D), paper, and organics were the top three categories of landfilled waste statewide and in Cook County. See Appendix F for data on Cook County.

While select municipalities or waste agencies have conducted isolated waste characterization studies, a comprehensive study analyzing the composition and proportions of materials in the waste stream has not been done for suburban Cook County as a whole. The 2009 Illinois Recycling Association statewide study included sampling for waste locations in Cook County and serves as the only source of waste characterization analysis for Cook County.

The 2000 Plan Update used national averages to define the waste stream composition, which did not include construction and demolition debris. By contrast, this plan update recommends a greater focus on Construction & Demolition (C & D) debris, which was identified as the single largest source of landfilled waste in Cook County in the 2009 study.

Figure 3: Composition of Landfilled MSW by Material Class in Cook County in 2007



Source: Illinois Department of Commerce and Economic Opportunity and Illinois Recycling Association. Illinois Commodity/Waste Generation and Characterization Study. May 22, 2009.

Although the composition of waste differed somewhat in the City of Chicago where paper and organics were a bigger share of landfilled waste, for the state and Cook County, paper, C&D, and organics comprise the largest portions of the MSW stream. The biggest opportunities to reduce waste are in C&D and organics, where there are still relatively few well-developed markets for reused or recycled materials. Given their large presence in the waste stream, it is logical to give management of these materials more attention.

2.5 Existing Source Reduction or Waste Prevention Programs

Rather than mandates or ordinances, most source reduction initiatives are in the form of educational resources, governmental initiatives, membership opportunities, or grant programs through national organizations such as the USEPA, the Illinois Department of Commerce and Economic Opportunity, and the Illinois Recycling Association.[viii] Some municipalities create action plans that include waste prevention or support landfill bans of non-biodegradable materials.[ix] While waste agencies often provide public information through newsletters or websites regarding source reduction, most residents and businesses implement source reduction initiatives independently after researching the benefits of more sustainable lifestyles and workplaces. Cook County does not currently have active initiatives that support source reduction but is considering offering waste audits to selected businesses through grant-funding.

Cook County does not publish educational material on its website nor host waste reduction programs. The City of Chicago hired consultants to develop zero waste strategies in 2003 and further refine them in 2007, but they were never officially published. The Chicago Climate Action Plan includes a general action plan to reduce waste. Municipalities with strong recycling programs distribute information regarding source reduction for homeowners or businesses through their public works departments or haulers. A handful are considering bans on certain non-biodegradable materials. For example, Highland Park is considering a ban on styrofoam containers.[x]

Waste agencies such as WCCSWA and SWANCC primarily use their websites, newsletters, and local newspapers to distribute educational materials regarding source reduction. Most haulers are encouraged in their contracts with waste agencies or municipalities to distribute brochures to residential and business clients on reducing waste in their home or office. Some waste management companies also offer waste audits, integrated waste management and prevention strategies, and recycling services to their clients, such as Waste Management's Green Team.

In some cases, progressive-minded businesses may implement source reduction programs without outside incentives. They generally do so because it can allow their company to operate more efficiently. State sustainability awards may also provide an incentive for companies or organizations to implement a variety of sustainable initiatives.[xi] As another example, most grocery stores now sell reusable grocery bags at modest cost.

Lean manufacturing (see also Section 3.1.4), a form of manufacturing that features a more efficient use of resources and less waste, is being promoted by local associations such as the Illinois Manufacturing Extension Center.[xii] Similarly, retail businesses such as WalMart are requiring suppliers to meet sustainability standards that include less packaging and waste prevention.

2.6 Existing Reuse & Recycling Conditions

This section updates information from the 2000 Plan on residential and multifamily or commercial recycling programs and programs that promote the reuse or recycling of specific categories of waste (e.g. household, electronic, or food scraps). It also highlights initiatives to promote reuse before recycling, as it offers potential advantages, such as consuming less energy to process materials. Recycling is defined as activities in which materials that are no longer useful to the generator are collected, sorted, processed, and converted into raw materials and used in the production of new products.[xiii] Recycling is one of the more popular waste management topics among the public and is the most common method of landfill diversion for municipal solid waste.

The 2000 Plan Update reported that the recycling rate in suburban Cook County averaged approximately 26% (not including landscape waste). Table 2 shows that only SWANCC currently exceeds the state recycling goal of 25%. South suburban Cook County and west Cook County are both well below that goal.

It is evident that there are substantial gaps and inconsistencies in data collection methods for Cook County that supply the IEPA Landfill Capacity Reports. For instance:

- While the definition of MSW includes residential and commercial waste, only some municipalities report both, some report only residential waste as their total MSW, and some may or may not include C&D debris with their total reported MSW.
- The amount of recyclables is not reported by all municipalities or they use estimates that haulers derive from typical operations.
- Recycling amounts were based on the assumption that for the top three recyclable material categories, the amount collected was equal to the amount recycled.[xiv]
- Some municipalities used estimates of waste stream categories to derive diversion estimates while others did not categorize their waste stream at all.
- "Tons recycled" is not clearly distinguished from "tons diverted". Some methods consider the processing of items like landscape waste as recycling, while others consider this diversion. C&D material is another category of waste that might be "diverted" from the landfill rather than recycled.
- Reporting for IEPA surveys may be inconsistent with reporting for waste agency hauler surveys.[xv]
- Outdated MSW or recycling amounts are reported for current IEPA surveys. MSW generation amounts may be reported for one year while recycling amounts are reported for a different year.

These data gaps may explain the wide range in recycling rates between waste agencies and regional entities. SWANCC's recycling rate is 46% while WCCSWA's is 11%, for example. While these rates might be accurate, there is no definitive method of confirming the data.

Despite these gaps, suburban Cook County's existing recycling initiatives and increasing population growth show that continual improvement is necessary. In this update (See Chapter 6 for all recommendations), Cook County should set a recycling goal of bringing all reporting sub-areas in Cook County up to the state goal of 25%.

Existing recycling operations described in the following sections reveal several opportunities to improve recycling rates. More awareness in residential, commercial, and industrial sectors, support for recycling markets and the framework for the industry, and policy regulations can help promote recycling over other forms of disposal.

2.6.1 Typical Municipal Solid Waste (MSW)

Typical household or office waste includes paper, aluminum, plastics, textiles, and sometimes even appliances. While construction and demolition material, electronic waste, and landscape and food waste may end up in the MSW stream, they are discussed separately in Sections 2.6.2, 2.6.3, and 2.6.4, respectively.

Both SWANCC and WCCSWA have hosted popular paper shredding events for their local residents and businesses, bringing a mobile shredder to a location for a few hours and offering shredding service for free.

Reuse of textiles, defined as carpet, carpet padding, clothing, or other fabrics, occurs in Cook County through thrift store, consignment, or online retail operations.[xvi] Recycling of textiles is not clearly documented in Cook County, but there are a number of carpet manufacturers that recycle carpet fibers and have take-back programs for customers.

White goods, or large household appliances, while not typically accepted by haulers operating in Cook County, can be picked up by haulers for an extra charge. However, many residents are aware that white goods are valuable to metal scrap dealers and will be picked up unofficially.

Finally, many materials may be considered hazardous household waste, but end up in the typical MSW stream. These materials include light bulbs, batteries, and medical waste and are discussed in Section 2.7.

2.6.2 Construction and Demolition (C&D) Material

C&D debris—the debris generated during the construction, renovation, and demolition of buildings, roads and bridges—makes up 25%-40% of the national solid waste stream, and is the largest single category of landfilled waste in Cook County.[xvii]

The reuse of C&D materials does not require processing them to another physical state. Instead, materials are kept in their original state and often used for their original purpose. While C&D reuse has increased both nationwide and within suburban Cook County, it is not well monitored. In Cook County, it takes the form of salvage by demolition or deconstruction contractors and subsequent resale of salvaged materials in for-profit, non-profit, or online retail centers.

Contractors often salvage valuable architectural artifacts, metals, and some specialized materials during demolition. For instance, bricks which are in high demand in the Chicagoland region, are frequently salvaged and resold by retailers like Colonial Brick Co. in Chicago and Vintage Brick Salvage in Rockford. Demolition auctions also open homes slated for demolition to the public and allow participants to remove the materials they want to purchase with their own tools. Deconstruction contractors consider a broader range of materials to be salvageable as well, such as dimensional lumber, cabinets, plumbing fixtures and countertops.[xviii]

Once salvaged, materials are resold on the market. Suburban Cook County is home to two non-profit used building material retail centers: Habitat for Humanity's ReStore in Chicago Heights and the Evanston Rebuilding Center, which opened in late 2010. Since customers may travel to other counties for building materials and supply for these stores may come from neighboring counties, these additional reuse centers are also likely to serve suburban Cook County: Chicago's Rebuilding Exchange, Habitat for Humanity's ReStore in Chicago, and the Habitat for Humanity ReStores in the nearby

Will County, DuPage County, and northwest Indiana. For-profit building material salvage retail centers include Murco in suburban Cook County, and Architectural Salvage, Urban Remains, and Salvage One in Chicago.

C&D reuse is being promoted primarily through the green building industry, and during tougher economic times, homeowners are discovering cheaper alternatives for renovation projects. The aforementioned retail centers have established an initial infrastructure for developing more initiatives. In addition, Cook County is supporting a U.S. Department of Energy Efficiency and Conservation (USDOEEC) funded deconstruction pilot program to collect data on the volume and types of materials that can be salvaged from homes slated for fast-track demolition and to begin training contractors in new deconstruction skills.

By contrast, C&D recycling initiatives are more established than reuse initiatives in Cook County. Building materials such as concrete, roofing, wood scraps, drywall can be processed, or recycled, into various materials.

Cook County is considering proposing an ordinance modeled after the City of Chicago's ordinance, which took effect in 2006 and established a 50% recycling requirement starting in January 2007. The ordinance would establish a 60% recycling requirement and fewer exceptions. It would require a) residential projects with four or more units, b) commercial projects above 4,000 square feet, and c) projects requiring a certificate of occupancy to recycle 50% or more of its C&D debris. The City of Chicago's C&D ordinance applies to a) residential projects with four or more units, b) commercial projects above 4,000 square feet, and c) projects requiring a certificate of occupancy to recycle 50% or more of its C&D debris. But with actual recycling rates already above 75% after the first three years, the city is considering revising its ordinance to ramp up the recycling rate or narrow the range of buildings that are excluded. A few other suburban municipalities, such as Northbrook, IL, have their own C&D recycling ordinances.

To facilitate C&D recycling, a few directories are available that list local C&D debris recyclers, including directories available through the City of Chicago Department of Environment's website or the Illinois Earth 911 website.

Material recovery facilities (MRFs) located in suburban Cook County that accept C&D debris can range from small metal scrap yards to large facilities. There are 11 recycling facilities registered with the IEPA, and they accept various forms of C&D debris. Ten transfer stations are located in suburban Cook County, and some of them also accept different types of C&D debris. Some facilities may limit their C&D intake to only certain materials like wood waste. However, most C&D facilities accept Clean Construction and Demolition Debris (CCDD), non-hazardous, non-contaminated solid wastes from construction projects.[xix] While the name suggests a wide range of materials, CCDD refers to uncontaminated concrete that can be processed into aggregate and used for daily landfill cover. Of the MRFs and transfer stations that accept C&D debris, it is not clear if this is typical C&D debris or simply CCDD processed for daily cover. Whether

processing CCDD as daily landfill cover should count as recycling is controversial. The new IEPA public law, effective July 30, 2010, imposed stricter registration requirements on CCDD operators.

2.6.3 Electronic Waste

In 2007, the State of Illinois disposed of 94,000 tons of e-waste. The Electronic Products Recycling and Reuse Act (P.A. 95-059; 415 ILCS 150/), was signed into state law in September 2008.[xx] It currently requires product manufacturers to register with the IEPA and assume responsibility for recycling. The first phase of Illinois law, which went into effect in early 2010, makes manufacturers and retailers responsible for the disposal of their product. They must register with IEPA and provide consumers with information on their product's proper disposal. The second phase of the law will go into effect in 2012, banning electronic waste from Illinois landfills, allowing two years to educate the public about the ban. The law also provided authority for new state Responsible Recycling (R2)[xxi] certification of recyclers. As a result, certification of e-waste businesses becomes increasingly important as more consumers raise concerns about what happens to e-waste once it is collected.

Of the Cook County IEPA-registered facilities that collect electronic waste, an estimated 1,759 tons were collected in 2010, but it is not noted whether they were recycled or reused.[xxii] Moreover, this does not guarantee that all of it was generated within Cook County. Some could have been collected from nearby counties or states.

In suburban Cook County, it is more common to find facilities that recycle or process than reuse or refurbish electronic waste. In Cook County, of 29 facilities that accepted e-waste, 5 processed, 8 refurbished, 2 were brokers, and 2 were resellers. For a list of IEPA registered e-waste collectors in Cook County, see Appendix G. E-waste collectors often have contracts with specific electronics manufacturers. For example, PC Rebuilders and Recyclers collects e-waste only from IBM. Establishments outside Cook County likely collect much of the county's waste. For example, Vintage Tech and Sims Recycling Solutions are located just outside Cook County, in Romeoville and West Chicago, respectively, and have contracts within the county. The county is currently considering contracting one company to manage e-waste from its county facilities, unaffiliated municipalities, and unincorporated areas.

Nationally, another 42 facilities will accept electronic waste from Illinois residents and either collect, process, refurbish, or resell these items. Major retailers and manufacturers also accept e-waste, including Best Buy, CompUSA, Dell Computers, Staples, Hewlett-Packard, IBM, Motorola, Verizon Wireless, Sony Electronics, Apple Computers, and Target. Cellular phone manufacturers also offer take-back programs for their products.

Schools and nonprofits, such as Free Geek Chicago, accept donations of old computers and refurbish them for use in schools or community programs. While e-waste initiatives used to receive state funding, support ceased as soon as the law went into effect January 2010.

Waste agencies and municipalities occasionally host neighborhood e-waste collection events or manage drop-off sites. For example, both SWANCC and WCCSWA have hosted annual e-recycling events. WCCSWA also has an agreement with an e-waste collection company as a part of the Regional Disposal Project (RDP). The agency pays a minimal fee and the company is contracted to provide recycling or refurbishing services to municipalities under the RDP. The municipalities can tailor their own participation in the program to suit their needs. For example, Schiller Park residents can drop off their electronics at the village hall for free recycling through this partnership with WCCSWA.

However, during collection events and at drop-off sites, it is hard for participants to know whether the e-waste will be processed by a responsible party and whether the e-waste will be refurbished versus recycled.

E-waste reuse and recycling are promoted by waste agencies and municipalities along with other waste management information through websites and newsletters. Residents also become aware of e-waste management options through widespread retailer take-back programs.

2.6.4 Landscape Waste and Food Waste

Organic waste remains the third largest category of landfilled waste in Cook County despite a ban on yard waste from Illinois landfills since 1988.[xxiii] A 2009 report commissioned by the Illinois Recycling Association estimates that a large amount of compostable yard waste, woody yard waste and food scraps are generated annually in the state of Illinois.[xxiv] Over 2 million tons are generated annually in IEPA Region 2. In Cook County, generation of landscape waste and/or food waste is not regularly recorded. Using the estimated 2009 Illinois Recycling Association's Illinois generation rate and population data from current IEPA Landfill Capacity Reports, 202 pounds of landscape waste and 185 pounds of food scrap are generated each year per household in suburban Cook County. Composting facilities report amounts of landscape waste accepted annually to the IEPA, and occasionally waste agencies record only residential landscape waste. Food scrap is even more difficult to track in Cook County. Haulers do not report these amounts unless requested by their clients.

Reuse of landscape waste and food scraps occurs in Cook County on a relatively small scale in three basic forms. First, landscape waste is directly applied to the land for soil amendment, allowing it to compost without any mechanical intervention (not allowed on a commercial scale). Second, unprocessed, discarded food is donated to food banks, such as the Greater Chicago Food Depository's Food Rescue Program or to farmers for animal feed. Third, food scraps may be used for industrial uses such as converting oil into fuel.[xxv] *Recycling* includes the processing of landscape or food waste to another material, such as compost. Commercial-scale composting is being managed in Cook County by large waste management companies such as Land and Lakes.

Landscape waste collection can be privately or municipally managed in suburban Cook County and is handled differently by each municipality. It may be picked up by private haulers or municipal public works departments either with other recyclables or completely separate from other MSW through events like "street sweeps."[xxvi] Some municipalities have specific guidelines, bags or pricing mechanisms for landscape waste collection.

In Cook County, the processing of food scrap and landscape waste is often handled at different facilities, although a change in state law in 2009 (S.B. 99) allows the composting of food scraps at composting facilities rather than landfills. Composting facilities that take food scrap often take some landscape waste to balance the high-nitrogen material for optimal nutrient balance in the finished product.[xxvii] However, landscape waste is usually composted on its own, not along with food scrap composting, because of less odor and lower costs for equipment.

The IEPA 2009 Landfill Capacity Report states that 60% of the State's landscape waste is composted at 19 compost facilities in IEPA Region 2. Three of those facilities are located in Cook County (tonnage accepted in 2009): [xxviii]

i. Harbor View Compost Facility, Chicago. 14,539 tons
ii. Land and Lakes #1 & #2, Chicago. 34,532 tons
iii. Hazel Crest Composting, Hazel Crest. 1,915 tons

These three facilities accounted for only 50,986 tons of the 292,658 accepted by all 19 facilities, which implies most landscape waste is transported and managed out-of-county. Although Cook County probably generated the most waste among Region 2 counties, its facilities accepted only around 20% of the total.

One facility in Chicago - Land and Lakes' Harbor View Facility - also processes food scraps. This facility received a permit in December 2009 to process food waste as well as landscape waste.[xxix] Composting facilities in suburban Cook County only process landscape waste. Several other companies are considering facilities in Chicago but permits have not been issued. Some composting facilities are located in northern Illinois, but none are processing food waste yet, and a large scale windrow facility is planned for Central Illinois. Independent Recycling's facility in Chicago is slated to accept food waste in the near future.

The amounts of landscape waste generated and collected have likely risen steadily given general population trends. But in Cook County, data collection methods are inconsistent or not reported. While composting facilities annually report the amounts received, they do not track where landscape waste or food scrap originates. One facility can accept waste from a variety of municipalities and counties. While these amounts give a broad sense of how much landscape waste and food waste is being managed, they cannot document how much is generated by specific geographic locations. Moreover, haulers do not track these amounts unless requested by their clients, and waste agencies and municipalities do not typically monitor landscape waste quantities.

Ultimately, the data collected cannot be used to draw any major conclusions. For example, WCCSWA reported collecting 16,025 tons of residential landscape waste in 2005 and SSMMA reported collecting 388,792 tons in 2008. When the populations for WCCSWA and SSMMA only differ by 1.5% relative to the total population of suburban Cook County, it does not seem realistic that SSMMA is generating/collecting 25 times more landscape waste than WCCSWA.[xxx] Given these significant ranges in landscape waste generation amounts, past data flaws in landscape waste reporting, and that food scrap collection and management are not recorded in Cook County, it is clear better data collection for landscape waste and food scrap is necessary as composting becomes more popular among the public.[xxxi]

The cost to compost varies considerably depending on the location, technology, quality of waste stream and existing site, conditions, and business details. SWANCC charges a gate rate of $58.50 per ton of landscape waste for commercial entities at its Glenview Transfer Station. A study of landscape waste composting facilities showed an average processing cost of $25 per ton, within a range of $8 to $72 per ton. Compost processors generally charge a tipping fee. Companies try to determine a technology package that costs less than local landfill tipping fees, which average about $45/ton.

Compost can sell for $80-$100 per ton. The value of compost can range from $20-$120/ cubic yard (weight varies) depending on market specifications of end use. A bag sold at a retail garden center typically costs about $5 for a 40-pound bag, but revenue from the sale of compost is less important than tipping fees that are competitive with landfill alternatives.

Cook County is considering hiring an out-of-state private company to provide composting services. But to date, besides general purchasing activity for construction projects, Cook County has not directly promoted landscape waste composting. One intra-county program involves composting, as Cook County has provided composting grant money to the Chicago Botanic Gardens to establish an urban gardening program for the Sheriff's Office Boot Camp. Otherwise, the amount of compost used by county operations is not documented.

Some solid waste agencies and municipalities provide general information for homeowners on small-scale composting. Neither has organized or funded landscape or food scrap collection events or initiatives.

Most haulers operating in suburban Cook County do not accept food waste as recyclables, given the operational complexities involving food scrap transport (See Chapter 3). Individual Walmart stores have contracted with a few Chicago waste haulers to compost their food waste.

Landscape waste composting, while well-established, is not rigorously recorded in Cook County**,** and food scrap composting is starting to emerge with great potential for expansion. At present, local government can encourage better data collection for landscape waste and more research and development for food scrap management.

With this information, it can better facilitate the siting of new compost facilities to accommodate the expansion of this waste management sector.

2.6.5 Residential Recycling

Single family residential recycling is monitored better than multifamily residential, commercial or industrial recycling. Among the municipalities in suburban Cook County that are affiliated with a waste agency, approximately 80% have a recycling program.[xxxii] It is unknown how many unaffiliated municipalities or townships have recycling programs.

All recycling services are voluntary programs for municipalities in Cook County. These programs collect the most common recyclables -- paper, cardboard, glass, plastic and aluminum. Yard waste (See Section 2.6.4) may be collected by the same hauler along with recyclables or by a different service (private hauler or municipal service). In their contract with their hauler, municipalities specify which recyclables are picked up. Municipalities often add the cost of garbage removal or recycling services to residents' water or sewer bills. Curbside collection programs use "toters," or large garbage bins, that range in common sizes from 32 to 96 gallons. Several municipalities utilize drop-off centers, where residents can bring materials to designated locations.

Of the 35 communities in northern Cook County, 23 are SWANCC members. All 23 have curbside recycling services. According to the 2009 IEPA Landfill Capacity Report, SWANCC members recycled 515,380 tons of municipal waste. SWANCC is encouraging more members to incorporate larger 65-gallon containers into curbside programs to increase recycling volumes.

All of WCCSWA's 36 municipal communities provide curbside recycling and landscape waste collection to their residents, except one - Forest View.[xxxiii] Fifteen of the 36 members are involved in the Regional Disposal Project. There are no drop-off centers. Many municipalities use single-stream recycling which doesn't require individuals to source-separate their recyclables before taking it to the curb, and some municipalities have Pay-As-You-Throw (PAYT) programs.[xxxiv] Some of these municipalities have seen diversion rates of more than 35%. The Village of Oak Park uses a modified PAYT system, utilizing two sizes of refuse carts. Again, many municipalities give households large toter carts to encourage more recycling. Pilot programs to introduce new materials like wood or scrap metal have been unsuccessful because these materials are minimal in the residential waste stream.

Of SSMMA's 42 member communities, 19 have curbside recycling programs. Eight have no recycling programs, seven have drop off centers, three use blue-bag systems, and five are unknown. Drop off centers can be various facilities, including grocery stores and libraries. Details about most south suburban recycling programs are unknown since SSMMA does not publish a current agency-wide annual report or waste management plan.

In suburban Cook County, recycling is promoted not through Cook County, but through its municipalities, waste agencies or both. Many northern and western suburbs use their municipal websites, newsletters, local TV stations, email lists, social networking sites, or contract their haulers to publish information for residents and businesses regarding recycling and other waste management techniques (such as composting). In addition, WCCSWA publishes "General Recycling Guidelines" in its Solid Waste Plan, and SWANCC administers various initiatives, including tours of its Glenview Transfer Station, public workshops and presentations and educational materials for children.

Recycling of residential municipal solid waste continues to be a popular waste management strategy that will only grow in demand. Instituting recycling programs for those municipalities that currently lack one would naturally increase recycling rates but giving residents more convenient options to recycle is essential to increasing participation in recycling.

However, while these initiatives are necessary and the public education efforts by waste agencies and municipalities are commendable, a meaningful increase in recycling rates throughout Cook County will depend on haulers and municipalities' relationships/contracts with haulers to offer these recycling options in an efficient and more widespread manner. Without enforcing the accuracy of county-wide data collection, it is difficult to gain a comprehensive grasp or draw meaningful conclusions on how waste is being recycled, how much waste is being recycled, and which recycling initiatives are most effective.

2.6.6 Multifamily Recycling

Depending on the municipality, multifamily buildings can be treated as residences, commercial, or both, depending on their size. For example, multifamily buildings with four units or less can be serviced under residential hauler contracts while buildings with five units or more are considered commercial contracts, and each building can choose its own private hauler. Some municipalities consider all multifamily buildings commercial contracts.

In the past, some communities in western Cook County adopted recycling requirements for multifamily buildings with some success.[xxxv] Since the last update, however, a handful of municipalities, such as Oak Park, have recycling requirements by ordinance. All waste agencies agree that requiring recycling for multifamily buildings is a logical step to increase recycling rates.

2.6.7 Commercial, Industrial and Institutional Recycling

Although ordinances requiring commercial recycling have been adopted in the City of Chicago and other parts of the region (such as Kane County) in the last decade, mandatory commercial recycling has not been widely accepted in suburban Cook County. In the late 1990s, the Solid Waste Agency of Northern Cook County (SWANCC) sponsored four commercial recycling pilot programs in Park Ridge, Arlington Heights, Wilmette and Evanston. While the pilot phase was extremely successful (it offered free recycling service to merchants for a year) few merchants

opted to continue service beyond the pilot phase. SWANCC has encouraged its member municipalities to consider commercial waste franchise programs, or group contracts for refuse and recycling services, as a way to achieve economies of scale. The Village of Skokie established a successful commercial waste franchise in 1998 that was estimated to save Skokie businesses over $1 million over the 5-year contract. Since the last Plan Update, however, there are no known ordinances requiring commercial establishments to implement recycling programs or programs involving waste collection franchising have been adopted. Recycling at institutions, such as hospitals, prisons, and colleges is largely undocumented.

Again, waste agencies and municipalities in Cook County use public education as their primary method to encourage commercial recycling. SWANCC has numerous programs that promote recycling and waste reduction at schools, which are geared toward youth education, and encourages businesses to refer to established resources, such as the IRA's Toolkit for the Workplace. However, direct and widespread initiatives to increase commercial recycling do not exist in Cook County.

2.6.8 Cook County Facility Recycling

According to the 2000 Solid Waste Plan, in 1998, all Cook County-operated facilities had recycling programs and more than 700 tons of materials were recovered. Currently, all Cook County facilities (hospitals, correctional centers, etc) claim to be recycling to some degree, but amounts are not documented. To show the public that the county is serious about its commitment to improving recycling rates throughout the region, it is important for the county to set an example by implementing and documenting its recycling activity at its own facilities.

2.6.9 Material Recovery Facilities

Material recovery facilities (MRFs) are integral parts of the recycling process, which receive and sort materials and prepare them for market, and process materials such as metals, plastic or wood, depending on the technology and capacity of the facility. Estimated capacity of all the facilities in 2000 was about 3,000 tons per day, but current capacities are unknown and not published by the IEPA.

According to the last plan update in 2000, there were five material recovery facilities in Cook County and four of those were in Chicago. There also were two in Kane County, two in Will County, and one in DuPage County. The list was created from interviews with various solid waste coordinators at regional solid waste agencies. Most were privately-owned and some also operated as transfer stations. A current list of MRFs ("clean" or "dirty") is not reported by regional agencies.[xxxvi]

2.7 Household Hazardous Waste (HHW)

Household hazardous wastes, or HHW, are defined as "leftover household products that contain corrosive, toxic, ignitable, or reactive ingredients," and include paints, cleaners, oils, batteries, and pesticides.[xxxvii] Improper disposal can pose dangers to human health

and pollute the environment, and HHW is often disposed of unregulated along with typical MSW.

Common methods of properly disposing of HHW currently include permanent drop off sites and collection events. In 2000, there was no permanent collection site in suburban Cook County, and the IEPA used to co-sponsor collection events with local governments, but funding in recent years has been limited. The public frequently requested information regarding proper disposal of HHW or inquired about HHW management services.

These conditions have remained somewhat the same since 2000. Since facilities must be certified to aggregate and handle HHW and high costs are associated with the management of hazardous wastes, offering public collection events at reasonable fees without grant assistance is difficult. Up until state funding became unavailable, WCCSWA hosted biannual HHW Collection Events co-sponsored with IEPA. During these events, HHW items would be collected in drums. WCCSWA's curbside pick up of HHW also ceased due to lack of funding. At present, no funding is available for Cook County to host such collection events.

In addition, there is no permanent drop-off facility in suburban Cook County; the only options residents have to manage HHW are regional drop-off centers. The four listed on the IEPA website are located in Naperville, Rockford, Lake County, and the City of Chicago.[xxxviii] Organizations and local government agencies can still apply through the IEPA to host a HHW collection event, but funding varies greatly from year to year.

Unfortunately many potentially hazardous materials are still disposed of along with typical MSW or illegally, such as CFLs, batteries, paints, medical waste, and even banned materials like tires. However, there have been some innovative initiatives within Cook County that attempt to curb these bad practices. For instance:

- SWANCC offers latex paint recycling using a public drop-off location in partnership with Earth Paints Collection Systems.
- WCCSWA hosts a paint collection event called the Paint Exchange twice a year with a drop-off period and pick-up period.
- Waste agencies have hosted buy-back or take-back programs for gas-powered lawn mowers (WCCSWA), tire collection events (WCCSWA), and thermometer collection events (SWANCC).
- All but one of SWANCC's 23 member communities have drop off locations for CFLs and 4-foot tubes. Some retailers, such as IKEA, Home Depot, and Ace Hardware accept CFL bulbs for recycling.[xxxix]
- Batteries are also collected by retailers such as Walgreens, Best Buy, Home Depot, and Radio Shack, and the City of Chicago offers drop-off locations for batteries at all Chicago Public Libraries.

- Cook County also hosts a Medication Take-Back Program, a series of collection events in various municipalities that collects leftover or unused medications and prescription drugs from residents.
- IEPA directs visitors to the website, call2recycle (http://www.call2recycle.org/) to find their nearest drop-off location for many of these household hazardous wastes.

Given the dangers of HHW and public demand for information on how to responsibly dispose of these hazardous wastes, a continuing need exists to support and expand programs.

2.8 Role of Transfer Stations

There is a nationwide trend to construct larger, more remote, regional landfills for solid waste disposal. As a result, transfer stations are increasing in number and popularity.

In 2000, only one incinerator and three landfills operated in Cook County. Since 2000, landfill capacity has declined, and the number of transfer stations in suburban Cook County increased from 26 to 37 in 2009. In 2000, 75%, or 3 million tons of municipal solid waste from suburban Cook County passed through transfer stations, and about 2.8 million tons was passed through in 2009.

Of the 10 transfer stations in Cook County that accepted the most material in 2009, six of them were located in Chicago. Amounts accepted at these transfer stations in 2009 ranged from 244,000 to 547,000 tons. As an example of one facility, the Glenview Transfer Station (SWANCC's main facility) underwent major renovation in 2005, turning it from a baling operation to top-load operation which allows it to handle three times as much refuse. Its current capacity is 4,800 tons per 24-hours period. The Glenview Transfer Station also handles some landscape waste that is transported to various compost facilities. In 2009, it handled 21,765 tons of landscape waste.

Typical transfer station fees in 2000 were $40-$50 per ton. Fees have stayed about the same since, with a range of $40-$60 per ton and $20-$40 per ton for construction and demolition material.[xl]

Twenty-three of the 35 communities in northern Cook County are members of SWANCC and are contracted to transport their waste to the Glenview Transfer Station. Fifteen of the 34 WCCSWA member communities and Brookfield Zoo participate in its Regional Disposal Project (RDP), which is a joint contract for long-term solid waste transfer and disposal capacity. Both member communities act as cooperatives that allow municipalities to contract independent haulers, but the waste must be delivered to specified transfer stations. A similar agreement is being discussed by SSMMA.

Since they play a key role in waste management, transfer stations have excellent opportunities to implement more sustainable practices such as using alternatively-fueled

vehicles, serving as recycling or reuse centers for more materials, and ideally transporting less waste to remote disposal sites.

2.9 Waste-to-Energy Conversion Technologies

Waste-to-energy technologies can take several forms, including incineration, plasma arc gasification, and anaerobic digestion (See Section 3.5). None of these technologies, except an incinerator in Robbins (closed in 2000) have yet been successful in Cook County.

The 2000 Plan Update included discussion of waste-to-energy incineration (p. 51). At the time, the Robbins Waste-to-Energy facility was operating with throughput capacity of 1,600 tons per day of municipal solid waste, which included over 100 tons of other recovered materials such as aluminum, ferrous metal, glass and compost. The facility closed in 2000 after economic feasibility was damaged by a 1996 change in the Retail Rate Act, reducing annual revenue by tens of millions. Robbins Community Power LLC has obtained IEPA permits and is seeking financing to reopen the facility. The company expects to burn approximately 1200 tons per day of clean wood waste as its fuel generating roughly 350,000 MW of net electricity per year which will be distributed and sold.

A proposal last year by Forelight LLC for an arc plasma facility in Blue Island appears to have stalled when necessary state legislation relating to bonding authority failed to pass.[xli] It is likely that new proposals will emerge over the next five to 10 years. Continued monitoring of conversion technologies is necessary.

The City of Chicago commissioned a recent study of waste-to-energy options. Similarly Cook County may benefit by investing in research and development and pilot programs to ensure the viability of emerging conversion technologies. This is essential given air pollution is a common public concern regarding technologies like incineration. For example, according to the 2000 Plan Update, one of WCCSWA's Citizen Advisory Committees advised against waste-to-energy as a recommended disposal strategy.

All in all, conversion technologies are still a less-preferred method of waste management compared to reduction, reuse and recycling.

2.10 Landfill Disposal

According to the 2000 Plan Update, the portion of Cook County MSW that goes to landfills was 50-55%, and landfills were located in Cook County, collar counties, and nearby states. Since then, reported recycling rates have dropped. Given the inconsistencies in data collection (See Section 2.6), rates at which MSW is landfilled from Cook County are likely underestimates. At the same time, landfill capacity in Cook County and the Northeast Illinois region (IEPA Region 2) has continued to diminish, and large portions of MSW from Cook County continues to be transported to out-of-state landfills.

The 2009 IEPA Landfill Capacity Report states that 825,926 tons of waste was received at the only Cook County facility in Dolton—only 10% of the total amount of waste received at all landfills in IEPA Region 2.[xlii] Moreover, landfills do not differentiate how much of their volume is from the commercial, industrial, or residential sectors, making it difficult to gather accurate waste generation and collection data.

Of the 45 active landfills in the state of Illinois, six are in IEPA Region 2 (Cook, Lake, Grundy, and Will counties). The three most active landfills in the region are in Will County (Prairie View RDF) and Lake County (Veolia ES Zion Landfill and Countryside Landfill in Grayslake). Only one landfill is left in Cook County, River Bend Prairie Landfill in Dolton, after two recently closed (CID Recycling and Disposal Facility in Calumet City and the Congress Landfill in Hillside).

Landfills accept all MSW that is not diverted through reuse or recycling, so all landfills in Region 2 have leachate monitoring stations.[xliii] The number of stations depends on the capacity of the facility. Some have methane gas management systems. The River Bend Prairie Landfill in Dolton utilizes bioreactor technology, which enhances methane production, and leachate recirculation, which increases compaction.

Typical landfill fees in Region 2 were $30-$40/ton from the 2000 plan and were predicted to increase. They currently range from $23.50/ton to $51.35/ton, but competition from landfills outside the region has kept fees from rising further. Neighboring states with lower landfill tipping fees attract many waste haulers operating in Region 2. The 2000 Plan Update reported that haulers were transporting waste to landfills 90 or more miles away in downstate Livingston County (near Pontiac) or to landfills in other states. A Wisconsin landfill near the Illinois border (Pheasant Run) has recently reported tipping fees $2-$4/ton cheaper than in Lake County, Illinois. Waste from suburban Cook County has also been exported to facilities in Newton and White counties in Indiana. Michigan landfill tipping fees are about $5/ton cheaper on average than Illinois.[xliv]

Since the last landfill in Dolton is expected to close in 2013 and no new landfills are planned in Cook County, the county is not heavily investing in technologies for landfill facilities. Instead, it relies on its transfer stations (see Section 2.8) to collect and transport waste out of the county. No matter how waste may end up in landfills, it is important to recognize that shipping waste to more remote locations has significant economic and environmental impacts such as higher transportation costs and air pollution related to fuel usage.

2.11 Costs and Financing Arrangements

Compared to traditional MSW disposal, recycling has become more affordable for residents, businesses and municipalities in the past decade. Waste collection and recycling collection costs in suburban Cook County vary among municipalities. Recycling collection costs depend on the collection method used, such as pay-as-you-

throw (PAYT) or single-stream. While many recycling services are provided through waste agencies, other municipalities must contract haulers independently or utilize their own public works departments. Up to 39% of suburban Cook County municipalities may only have waste collection services without recycling services.[xlv]

There are a variety of ways by which disposal and recycling services are financed. In some cases, residents are charged for these services through their municipal water or utility bill. Otherwise, waste agencies subsidize recycling costs by generating revenue primarily through fees from member communities. Lower disposal and recycling rates are often secured if municipalities enter into these types of joint purchasing agreements. With better technology and more users, recycling costs are competitive with costs of traditional disposal and therefore more financially feasible for municipalities to offer as a service to their residents and businesses (see Section 3.7 for options to finance recycling).

In 2000, the cost of recycling (which includes collection, processing and resale) ranged from $100-$200/ton/household, or about $15/month. The annual cost for recycling in suburban Cook County was $300-$450 million. These costs were covered through privatized, tax-funded municipal services and user fees. Comparative costs for disposal were not reported.

Since 2000, recycling costs have decreased as technology has gotten better and investment has increased. According to the Department of Environmental Control, now costs are more on par with landfilling costs (which currently average $40-50 per ton), subject to market swings in the value of some recyclables such as paper and metal that trade as commodities. Residential recycling rates are typically around $4.36 per household per month in northern Cook County. Rates are lower in west Cook County, averaging $1.50-$2.00/household/month among WCCSWA members. Compared to recycling, regular trash pickup is about $13/household/month.[xlvi]

Although these recycling and disposal costs have been reported anecdotally by local waste agencies, there is still a lack of a comprehensive cost benefit analysis for suburban Cook County. Each contractual agreement between haulers, municipalities, and waste agencies can offer a different rate for recycling and disposal. Moreover, tipping fees at landfills and transfer stations also vary among contracts between facilities and haulers. All of these costs have an impact on the ultimate cost to the end-user. These costs are key in driving the economic incentives for or against recycling versus disposal. Cook County should consider conducting this type of cost-benefit analysis to make the economic case for recycling.

3.0 WASTE MANAGEMENT OPTIONS

Since the last plan update in 2000, the goal of achieving "zero waste" through prevention or source reduction strategies as the primary means for managing household, commercial, institutional, and industrial waste has become more accepted. Given the decline in local landfill capacity, a zero waste philosophy and shift in focus to emphasize the "3 Rs" (reduce, reuse and recycle) first is timely and appropriate. Zero waste is sometimes expressed as a goal but is more often a guiding principle or philosophy that establishes more sustainable preferences for managing waste. The figure below illustrates the paradigm shift that places a higher priority on reduction and recycling.

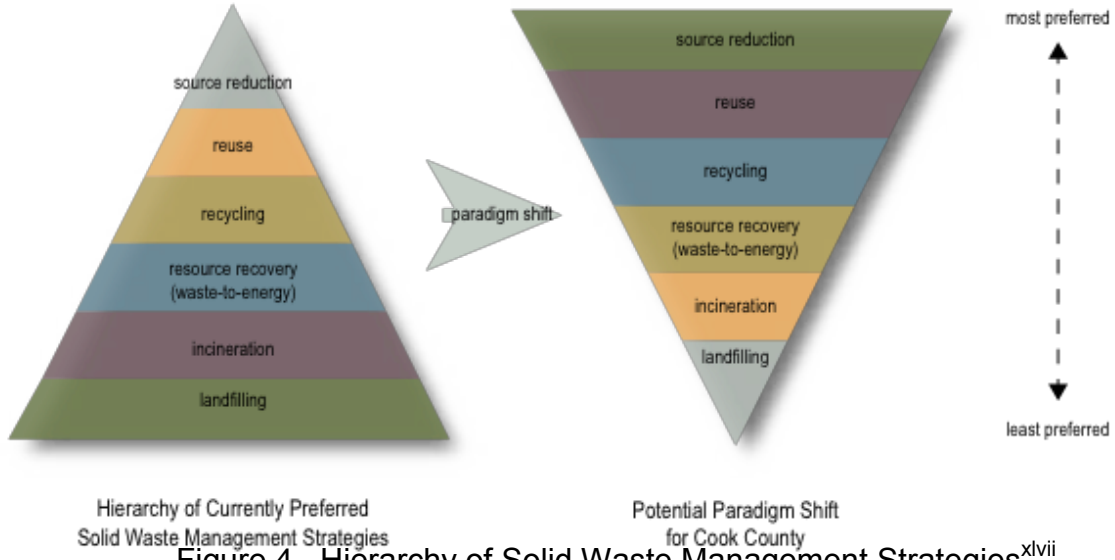


Figure 4. Hierarchy of Solid Waste Management Strategies[xlvii]

The City of Chicago announced its Zero Waste Strategy in late 2007 and included general strategies for the city to lead by example (with blue cart recycling and composting pilot programs), teach and help interested citizens, provide incentives and infrastructure and in some cases, mandate participation. Key needs included organic waste (food & yard waste) infrastructure and Waste-to-Energy research. Seven schools in suburban Oak Park have also been working with nonprofit Seven Generations Ahead to implement a Zero Waste Schools program where "waste ambassadors" at each school sort food waste, recycling and trash. One school reduced its landfill waste by 79% in 2009.

3.1 Source Reduction

Source reduction or waste prevention is the practice of designing, manufacturing, purchasing, or using materials (such as products and packaging) in ways that reduce the amount or toxicity of trash created. One method of source reduction is reuse (See Section 3.2) because it delays or avoids that item's entry in the waste collection and

disposal system. Cook County can facilitate source reduction by supporting the following key initiatives.

3.1.1. Buy Products with Reduced Packaging

Two-thirds of the municipal solid waste stream, which doesn't include construction and demolition (C&D) debris, is estimated to be packaging and disposables. Five effective source reduction strategies, according to a 1996 report by the U.S. EPA, include:

i. Redesigning product or package material to reduce the amount of waste
ii. Designing packaging that reduces damage to product
iii. Reducing the amount of packaging by modifying the practices of processors and consumers
iv. Reusing packaging
v. Managing organic waste on-site

Government purchasing policies could include goals of reducing packaging.

3.1.2. Promote Producer Responsibility and Ban Landfilling of Reusable or Non-Biodegradable Materials

Making manufacturers responsible for the proper disposal of their products will encourage them to reduce the amount of waste their products create. For example, electronic products are currently designed to become obsolete after 2-5 years. Manufacturers should be encouraged to design their products and products' accessories (chargers, adapters, memory cards) to last longer and be more versatile. They should also be designed to be easily repaired, using small replacement parts rather than having to replace the whole product. In addition, large manufacturers should not only be responsible for their products' meeting certain recycling requirements, but also be responsible for products' end-of-life. If manufacturers take on this cost, they are likely to design and manage the waste process more efficiently. Passage of the Illinois Electronic Products Recycling and Reuse Act in September 2008 was a significant step in advancing a producer responsibility model for managing end-of-life electronics in Illinois.[xlviii] The law will also ban most electronic waste from landfills starting in January 2012.

3.1.3. Recognize Smarter Product & Building Design

The amount C&D waste can be reduced using strategies in the design and development of buildings, construction materials, and their assembly. These strategies include:

- Improved packaging of building materials to reduce the amount of damaged products.
- Modular fabrication, installation and construction techniques to reduce the amount of excess building materials.
- Incorporating life cycle costs of building materials into the cost of a construction project.

Government and nonprofit organizations can support smarter building and product design by recognizing and publicizing innovative projects and organizations that

implement these strategies. For example, the LEED Rating System awards points to buildings that recover and reuse building materials in its design and construction.[xlix]

3.1.4. Promote Reduction Through Waste Audits

"Lean manufacturing" is an approach to reducing the operating costs of a business by making the manufacturing process more efficient. This includes minimizing the amount of resources used and the amount of waste generated. Initially derived from Toyota's Production System, this management philosophy has become an emerging new business model for many companies. The U.S. EPA defines "lean" as a business model and collection of methods that help eliminate waste while delivering quality products on time and at least cost.

Waste audits allow companies to see how much material they truly use and discard during operations and how they could change their practices to become more efficient and save financially.

3.2 Reuse and Recycling

Reusing a material suggests that materials remain in their original state and have not gone through processing, or that it is being used for the same purpose as originally intended. It is an extremely effective means of waste diversion from landfills because no energy or extra costs are invested in the processing of materials, and they do not lose their value as a result. While material reuse operations are beginning to emerge, reuse is primarily practiced among individuals at a non-commercial scale.

When recycling was first introduced in the 1970s it was a costly process due to the lack of widespread infrastructure, equipment, labor, and technology. Now, it is much more cost effective and commonplace. In some parts of the country where disposal fees are high, recycling is a more economical waste management option. The Illinois Solid Waste Planning and Recycling Act set a recycling requirement of 25% for all counties in 1988.[l] In 2008, U.S. EPA set an even more ambitious national recycling goal of 35%. The last update to this Cook County Solid Waste Management Plan did not set any recycling goal but noted that the county was exceeding the state 25% goal at that time. Current recycling rates are now below 25% in most parts of suburban Cook County (see Section 2.3).

3.2.1 Typical Municipal Solid Waste (MSW)

Common categories of municipal solid waste that are accepted through curbside collection programs include paper, plastics, glass, metals and landscape waste (see Section 3.2.4). These materials are typically recycled rather than reused. Paper, plastics, glass, and metals are broken down and reformed to create the same material. These materials are the ones most commonly collected by haulers across the country. However, several jurisdictions have various reuse or recycling initiatives or incentives, such as glass bottle take-back programs at grocery stores or bans on plastic bags.[li]

Textiles include fibrous materials found in clothing, carpeting, furniture, footwear, sheets, and towels. Textiles can be made of various blends of cotton and synthetic plastics. If cleaning equipment is not on site, soiled textiles are often disposed of instead of reused or recycled. It is common to reuse textiles through resale, and recycling occasionally occurs through fiber reclamation. Textiles are sorted into colors so no re-dying is necessary, they are shredded into fibers, cleaned, and spun in order to be ready for weaving or knitting. Sometimes fibers are used for mattress production or other fill materials. Several carpet manufacturers also feature recycled carpet products.

White goods, or large household appliances, are not typically accepted by haulers. These materials are often thrown out with typical MSW and picked up by an unofficial network of scrappers, since they are most valuable to metal scrap dealers.

Some waste is banned from landfills but still often thrown out with household waste. In fact, they may be considered household hazardous waste. If collected, some of these materials can also be recycled, and they are discussed in Section 3.3.

Government and nonprofit solid waste agencies and associations can promote recycling of materials through public curbside recycling programs, ordinances requiring recycling or procurement policies that require private haulers to provide recycling. Most also provide public information and education on recycling. In a few rare cases, government agencies also provide drop-off centers for banned or hazardous waste (see Section 3.3), or sponsor collection events.

3.2.2 Construction and Demolition Material

Construction and demolition debris includes materials such as concrete, asphalt, gypsum board, lumber, roofing, and tiles from the construction, renovation, and demolition of buildings, roads and bridges. Almost one-third of the municipal solid waste stream is made up of C&D debris, and only 20-30% is currently being recovered.

The reuse of C&D materials does not involve processing of materials to another state. Instead, materials are kept in their original state, often used for its original purpose. For example, used lumber may be re-planed into hardwood flooring. The reuse of existing buildings is the most genuine form of C&D reuse. Reusing the original elements of a building through retrofit or rehabilitation can save resources, transportation costs, and the need to produce new materials for construction.

Demolition contractors, and a growing sector of deconstruction contractors, salvage reusable building materials and send them to resale centers. While demolition contractors salvage the materials that are valuable on the current market, such as metals, concrete, and architectural artifacts, deconstruction considers materials beyond this first level of salvage valuable as well. Deconstruction can refer to the full disassembly and salvage of a building or it can be used alongside traditional demolition techniques to salvage only a portion of the building's materials. Some resale centers support educational research or job training programs in deconstruction or offer consultancy or deconstruction contracting services.

Demolition might be necessary as the last process after the salvage of a building. Even these demolition materials can be reused on site as fill or earthwork. These types of on-site reuse opportunities should always be considered.

Buildings designed to last can be reused for generations rather than demolished or repaired after only a few decades. Also, designing buildings for eventual disassembly can allow for easier salvage of materials. These techniques can be used by designers and builders to support the reuse of C&D materials.

By contrast, recycling of C&D material is a well-established industry. Concrete and asphalt are commonly crushed and used for road construction and infrastructure projects. Wood waste can be reprocessed into mulch or other wood-based construction materials, such as oriented strand board or medium density fiberboard (MDF). Roofing shingles and drywall have various industrial uses after they've been processed.

Many cities have C&D recycling requirements for construction projects. For example, the City of Chicago has a 50% recycling requirement for projects of a certain size. However, these recycling requirements are easily met by demolition contractors through counting materials like concrete toward their recycling rate. Concrete foundations often account for 80% of the weight of a building. Instead, other cities such as Boulder, Colorado, require the submission of a waste management plan, a meeting with a registered deconstruction contractor, and distinguish between materials slated for recycling and reuse in addition to a recycling requirement. Seattle is an example of a municipality that offers an expedited permit process or waived permit fees for projects utilizing deconstruction and building material reuse.

Cook County and its municipalities can implement similar ordinances and permitting procedures, as recommended in Chapter 6.

3.2.3 Electronic Waste

Electronic waste ("e-waste" or "e-scrap") is refuse created by discarded electronic devices, including computer equipment, televisions, photocopiers, facsimile machines, telephones, cellular phones and other audio and visual equipment. It includes the components as well as substances involved in their manufacture or use. It does not include household appliances.[lii] In 2005, the U.S. EPA estimated that 1.9-2.2 million tons of electronics became obsolete, 1.5-1.8 million tons were disposed and only 345,000-379,000 tons were recycled.

During the *reuse, or* salvage of electronic waste, most of the components of the product remain intact and the parts are reused similarly to their original form or function. In this case, a *refurbisher* is involved. A refurbishing facility accepts non-functioning or damaged electronic devices and repairs them to a functioning state for subsequent reuse. *Recycling*, or shredding of e-waste manipulates the product into pieces small enough to recover only the more valuable materials, such as precious metals, which can then be melted down and recycled. In this case, a *processor* is involved.

Processing facilities manually dismantle and/or mechanically de-manufacture the items to recover commodities.

Resellers, collectors, or brokers, on the other hand, ship or trade products elsewhere—including overseas—where the items are salvaged or shredded. These intermediate parties do not perform any processing or refurbishing but instead provide drop-off or collection points, transportation to another party, or cosmetic cleaning of functioning devices.

Refurbishment or salvage should be the preferred method for managing e-waste, as opposed to the shredding or recycling of products, and especially instead of reselling products for export out-of-state or overseas. Nationwide, consumers can currently participate in take-back programs, whereby large retailers like Staples and Target serve as drop-off locations for old electronics. However, the fate of those electronics, whether they will be reused or recycled, is often not explained to consumers. Retailers, local government and nonprofit organizations can help inform consumers on local reuse opportunities for end-of-life electronics and create awareness about how e-waste is managed when it is collected by haulers, through collection drives, or at drop-off centers. Cook County can make e-waste collection more accessible by supporting the establishment of more permanent drop-off centers.

3.2.4 Landscape Waste and Food Waste

Landscape waste consists of grass, leaves, trees, brush and trimmings. Food waste, also known as food scraps, is any food substance, raw or cooked, which is discarded, or intended or required to be discarded and the organic residues generated by the handling, storage, sale, preparation, cooking, and serving of foods. Yard waste and food scrap are discussed jointly in this plan update because they are both “recycled” through the process of composting.

The U.S. EPA estimates that 32.9 million tons of landscape waste (or “yard trimmings”) were generated in 2008. U.S. EPA estimates that 31.8 million tons of food scraps make its way into the municipal solid waste stream annually, meaning 25% of food prepared is thrown away. An estimated 90% of food waste is generated at homes and 10% at businesses.

Many states ban landscape waste from landfills, and as a result haulers often collect landscape waste separately from regular trash or treat it as a recyclable material.[liii] Food waste, on the other hand, is still thrown out with common household waste.

The *reuse* of landscape waste and food waste includes its a) direct application to the land and allowing it to decompose without any mechanical intervention, b) the donation to food banks or to farmers as animal feed, or c) conversion to other industrial uses.[liv] Direct land application of landscape waste (more than 20 tons per acre) and food scrap (more than 35 cubic yards) is not legal many states at a commercial scale. However, small-scale reuse, or backyard “let-it-lie” application, is permitted.

According to the following diagram, reuse should be prioritized whenever possible over recycling.

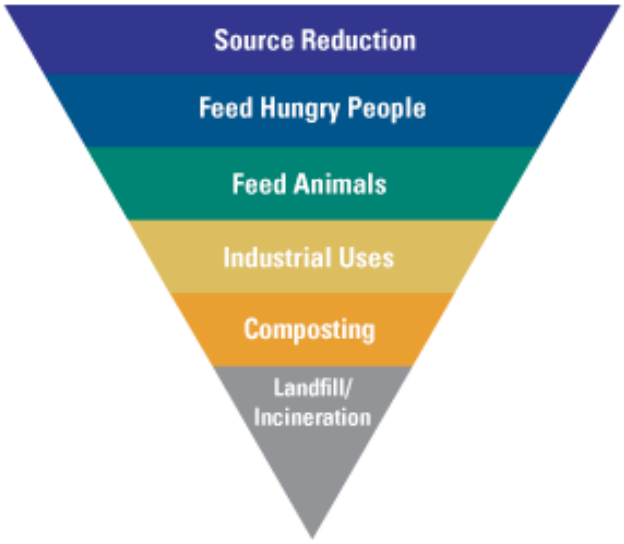


Figure 5. U.S. EPA Food Waste Hierarchy

The recycling of landscape waste and food waste refers to its processing through composting. Composting is the controlled decomposition of organic matter by microorganisms into a humus-like product. Techniques such as windrow composting, static piles and in-vessel systems generate energy and heat and destroy weeds, plants and human pathogens.[lv] While composting landscape waste is a well-established industry, composting food waste presents additional challenges. Odors from food decomposition pose more hauling and facility siting problems than landscape waste. Additionally, food scrap composting facilities often require heavier industrial zoning than landscape composting facilities, which can often be categorized under lighter agricultural zoning.

Government, composting facilities, and nonprofit organizations should encourage more research both for acceptable variations of directly applying food or landscape waste to land and for best practices involving the hauling and siting of odor-inducing food composting facilities.

Several cities have innovative food scrap collection programs and treat it as a recyclable material. For example, Cambridge, Massachusetts allows residents to drop off food scraps at recycling centers. Haulers in Santa Barbara, CA offer food scrap collection for business at an extra cost by providing yellow “toter” carts to clients that request services. El Cerrito, CA allows residents to put food scraps out with their landscape waste, and San Francisco has a mandatory recycling and composting ordinance where residents can anonymously report non-compliance online.

These practices can be explored for Cook County. Furthermore, as grocery stores, restaurants, and cafeterias are encouraged and educated about the benefits of composting, demand will increase, and composting infrastructure will develop to allow for wide-scale processing.

3.2.5 Residential Curbside Collection

Curbside collection is the most popular method of collecting recyclable materials. Local governments use one of three main options: source separation, commingling, or co-collection.

Source separation requires residents to separate materials by type (i.e. newspapers, glass, cans, etc.), and each material is collected in its own container. These containers are collected at the curb by collection crews, which often have compartmentalized collection vehicles. Special fleets are required, but subsequent processing is minimal.

Commingling requires only one (single stream recycling) or two containers for the collection of recyclable materials. Recyclables are separated from regular waste and they are collected by vehicles in one or two compartments. Depending on how much separation is done during the commingling collection process, further separation may be required at a material recovery facility (MRF).

Co-collection does not require special collection vehicles. Instead, recyclables and waste are collected in the same vehicle, but are separated by colored bags. Further separation of the bags and recyclable materials is required at the MRF. Chicago's Blue Bag program has been widely criticized as an ineffective co-collection program, questioning the actual recycling results.

Apart from these curbside collection methods, drop-off centers are a simple and low-cost method of providing access to recycling or disposal of hazardous or banned materials. Participants bring materials to designated locations, which can be staffed or unstaffed. Participants are informed of locations and accepted items through websites, local government newsletters, or other promotional campaigns. Cook County can encourage municipalities without recycling programs to implement these types of curbside collection methods.

3.2.6 Multifamily Recycling

Multifamily housing is categorized differently by each municipality. Sometimes multifamily buildings are considered residential buildings, and other times, they are considered commercial buildings depending on the size. If considered commercial, the building must contract a private hauler to pick up its waste and recyclables. Because of this variable, not all multifamily buildings offer recycling to its residents. Many cities and counties do not have multifamily recycling, including suburban Cook County. At minimum, drop-off centers should be provided to residents of buildings for recycling access.

3.2.7 Commercial, Industrial and Institutional Recycling

Commercial buildings are not often required to recycle by ordinance, including in Cook County. Some local municipalities, including the City of Chicago, have such recycling requirements for commercial buildings. Given more than half of municipal solid waste is source from the commercial sector and that a more homogenous waste stream allows for more effective recycling rates, requiring recycling programs of all commercial establishments is a simple way to increase recycling participation and to have significant environmental impacts. Municipalities and local governments can also encourage commercial recycling by requiring recycling as part of the hauler licensing process.

As recycling initiatives are being explored for commercial, industrial, and institutional programs, the county might also explore ways to encourage better overall waste management by these sectors. Although this update focuses on municipal solid waste, there are opportunities for the county to impact, for example, industrial waste management, the proper disposal of banned materials like tires, or research and development for new markets for problem materials like gypsum.

3.2.8 Material Recovery Facilities

Material Recovery Facilities (MRFs) receive commingled recyclables from residential and commercial sources. Materials are sorted and sometimes crushed or shredded. Then they are prepared for market through baling. Facilities often house large conveyer belts to move materials along a sorting and processing line. Sorting often involves mechanical separation techniques, including magnets, optical sorting mechanisms, and sometimes hand-sorting.

Mixed Waste Recycling (or “dirty MRFs”) separate and recover recyclables after they have already been mixed with the regular waste stream. Recovery requires both manual and mechanical sorting. Proponents claim that 90% of the waste stream can be diverted in this way, avoiding the hassle of source separation before collection.

3.3 Household Hazardous Waste (HHW)

According to the U.S. EPA, hazardous waste is defined as “leftover household products that contain corrosive, toxic, ignitable, or reactive ingredients.”[lvi] They can be liquids, solids, gases, or sludges, and include leftover paints, pesticides, cleaning products, motor oil, and batteries. Additionally, some medications and their byproducts have hazardous characteristics, such as being ignitable, corrosive, reactive, or toxic, and can pollute groundwater and surface waters.[lvii]

Collecting hazardous waste from households can be expensive and pose unique challenges. When aggregated, facilities or events must have a permit to collect HHW.

Across the country, enforcing the proper disposal of HHW is an ongoing problem that raises public concern and needs ample attention. HHW is often disposed of along with typical MSW. Reassuringly, at least many hazardous wastes can be recycled effectively

and safely if collected properly. For example, batteries and light bulbs can be reprocessed by private recyclers. Take-back programs for tires, light bulbs, and other potentially hazardous materials like pharmaceuticals, batteries, paints, and pesticides are becoming more common nationwide.

In Cook County, there are more phone calls and information requests from the general public regarding proper disposal of HHW than any other type of waste. For this reason, local government should support the establishment of more permanent drop-off sites and actively seek funding to finance the proper disposal of HHW at a larger scale.

3.4 Waste Transfer Stations

With a limited number of landfills in Cook County, a large portion of waste in the county is hauled to transfer stations before being permanently disposed. Hauling companies transport waste from homes, businesses, and construction sites to a transfer station, where it is temporarily stored or sorted, before making its way to on-site or off-site recycling facilities or landfills.

The technology of a transfer station is similar nationwide and consists of receiving municipal solid waste that is dumped onto a concrete tipping floor. A front end or bucket loader transfers the waste from the tipping floor to large transfer trailers that average 19-22 tons and hold 80-100 cubic yards of material. These transfer trailers then haul the waste to a more remote disposal site and can accommodate three to four collection vehicle loads. Depending on the service area, transfer stations can range from 10,000-80,000 square feet and can handle approximately 500-5,000 tons per day.[lviii]

Transfer stations may have numerous contracts with hauling companies or waste agencies, which are required to bring waste through their facility. By having collection vehicles travel shorter distances to transfer stations rather than longer distances to landfills, the waste hauling process is more efficient.

Transfer stations, which may already feature conveyor systems and storage capacity, can serve as critical points of intervention for material recovery. These intermediary sites could serve multiple functions before waste is hauled to landfills, especially given the number and locations of current transfer stations. Transfer stations which already accept recyclable materials can expand their operations, and transfer stations that do not currently accept recyclable materials can introduce this equipment into their facility. Moreover, transfer stations can act as collection sites for specific materials, such as C&D waste or HHW, and also utlilize alternatively-fueled vehicles for an even more efficient waste-hauling process.

3.5 Waste-to-Energy Conversion Technologies

Waste-to-Energy technologies can take several forms, including incineration, gasification, plasma arc gasification, and anaerobic digestion. Conversion technologies

are a less-preferred method of waste management to reduction, reuse, and recycling because large amounts of energy are being invested to break down waste.

Incineration is a thermal conversion system by which waste, usually wood waste, is burned for energy, usually electricity. While industry experts argue that incineration is a highly efficient and low-polluting process, extensive emissions controls are still required for incinerators.

Plasma arc gasification is a thermal conversion system by which an electric arc gasifier is used to create high temperatures (above 10,000 °F / 5,540 °C or the surface temperature of the sun) and electrical energy. These are then used to break down waste received at the facility into two primary components—elemental gas and solid slag. This process essentially reduces the net amount of waste to be disposed and also generates some electricity.

Anaerobic digestion is a type of biochemical conversion system in which microorganisms break down biodegradable material, using mixed waste to recover methane gas. This gas can then be collected and used for energy production.

Biofuels are a wide range of fuels (solids, liquids, and gases) developed through conversion technologies from biomass, which is biological material such as plant matter or biodegradable wastes. Biofuels are generated mainly through thermal conversion (e.g. incineration, gasification) or biochemical conversion systems (e.g. anaerobic digestion, fermentation). This technology has not been used widely in the United States and remains an expensive alternative to other conversion technologies.

These conversion technologies often require a large amount of feedstock in order for the facility to be sustainable. It should also be noted that incineration acts as a form of disposal, not conversion. In other words, waste is incinerated, but not converted into electricity. This is a less-preferred method of waste management than conversion technologies.

While conversion technologies and use of biofuels are popular in Europe, more pilot programs and research and development is needed in the U.S. to ensure the viability of these systems.

3.6 Landfilling

The last update of this plan included extensive information on strategies for better management of landfills. However, given that there is only one active landfill remaining in Cook County, these strategies have limited importance and have been omitted.

There are no plans or proposals for new landfills in Cook County at this time. The county has, however, updated its Environmental Control Ordinance (added a new Chapter XII) to provide for siting procedures for new pollution control facilities.

Although there are currently no plans for new facilities, emerging waste-to-energy technologies should continue to be monitored along with the need for siting standards or guidelines to supplement state IEPA standards for new pollution control facilities.

3.7 Costs and Financing Arrangements

With costs becoming more economical, recycling alongside traditional disposal is a financially reasonable service that suburban Cook County municipalities can offer their residents. Moreover, public and commercial demand for recycling has increased in the past ten years. As resources become scarcer and technology develops, markets and demand for MRFs will only grow.

Given the existing options for financing disposal and recycling services, the county should investigate financing mechanisms to expand efficient disposal and recycling to all of the unincorporated areas and unaffiliated municipalities. For example, Algonquin's innovative pricing program finances its free curbside recycling services by charging $1.95 per bin per week for municipal solid waste pickup. Licensing and levying surcharges for haulers that operate in Cook County was a recommendation that was never implemented from the 2000 Plan Update and can generate revenue for the county. Applicants seeking to site new waste management facilities could be required to enter into a host agreement with the municipality, waste agency, or county. Levies on materials like plastic bags, refillable glass bottle programs, or container deposit programs can also generate revenue for municipalities or businesses. The county should also stay informed about and take advantage of grants related to community and economic development that can facilitate the industries related to reuse, composting, and research and development for conversion technologies and new markets for problem materials (see Section 2.11 for current costs of recycling versus disposal).

Most importantly, the county should conduct a comprehensive cost-benefit analysis that documents the current range of hauling and landfill tipping fees and that analyzes the ultimate cost of recycling and disposal for the end-user in Cook County. Recycling and disposal costs have been reported anecdotally by local waste agencies, but fees charged by landfills, transfer stations, and haulers vary between contracts and greatly affect the economic incentives for or against recycling versus disposal.

4.0 SUB-COUNTY AREA SUMMARIES
* The following data is primarily from the 2009 IEPA Landfill Capacity Report

4.1 South Suburban Mayors and Managers Association

The South Suburban Mayors and Managers Association (SSMMA) represents 38 south suburban municipalities. The SSMMA manages the waste for the affiliated municipalities. Park Forest, Steger, Sauk Village, University Park and Tinley Park are located partially in Cook County and partially in Will County.

SSMMA is in the process of writing an updated Solid Waste Management Plan. The last Solid Waste Management Plan was published by SSMMA in 1992.

Population: 650,000

Waste Generation: 324,531 tons or 2.7 pcd

Recycling: 67,865 tons or 20.9%

Residential Collection

Eight municipalities do not have any recycling program. The others have either curbside collection, drop off locations, or blue bag programs. (*Source: SSMMA Waste Hauler Survey)*

There continues to be little recycling at multifamily housing units.

Most affiliated municipalities which offer recycling programs contract private haulers to collect recyclables. Haulers include Groen (Allied), Waste Management, Skyline, Homewood Disposal, Tri State Disposal, and Land & Lakes Disposal. Municipalities of Burnham and Lansing provide collection services through their respective Public Works Departments. (*Source: SSMMA Waste Hauler Survey)*

Commercial Collection

Commercial waste collection and recycling are conducted by private haulers and are not recorded by municipalities.

Transfer Stations

There are 9 transfer stations operating within municipalities affiliated with SSMMA.

Disposal Facilities/Landfills Utilized

The only remaining landfill in Cook County is operated in Dolton (River Bend Prairie Landfill), which is an SSMMA-affiliated municipality. This landfill, however, is expected to close by 2013. This facility is also houses the composting operations. Most of the residential waste generated in the SSMMA area goes through transfer stations to this remaining landfill and also to the Livingston County Landfill (Pontiac, IL), Allied Landfill (Newton County, IN), and Liberty Landfill (Monticello, IN).[lix]

Model Initiatives
SSMMA previously ran a police force to enforce the proper disposal of hazardous wastes.

Problem and Issues
Illegal dumping has been a continuing problem.

There are still a number of south suburban municipalities that do not provide recycling opportunities for residents.

There is a lack of permanent drop-off centers and/or collection events for household hazardous wastes.

Planned Systems and Facilities
A former incinerator in Robbins, IL is planned to be converted by Robbins Community Power into a biomass facility which will burn wood waste.

Contact Information
Bud Fleming, Deputy Executive Director
South Suburban Mayors and Managers Association
1904 West 174th Street
East Hazel Crest, IL 60429
Phone: 708-922-4677
Email: bud.fleming@ssmma.org

4.2 West Cook County Solid Waste Agency

The West Cook County Solid Waste Agency represents 34 municipalities. WCCSWA also represents non-municipal entities, such as the Brookfield Zoo and Leyden Township.

Fifteen of the 36 member communities and the Brookfield Zoo are involved in the Regional Disposal Project, which is aimed at providing guaranteed and cost-effective waste disposal capacity for its member municipalities. Based on an RFQ/RFP process, the agency procures a private hauler to provide residential waste disposal capacity by way of one or more transfer stations for a pre-determined period of time (usually 10 years).

The three major haulers in the area are Groot, Allied, and Waste Management.

(WCCSWA published its own *Solid Waste Management Plan 10-Year Update, March 21, 2007)*

Population: 566,948

Waste Generation: 800,000 tons or 7.7 pcd

Recycling: 88,000 tons or 11%

Residential Collection
All affiliated municipalities provide curbside recycling and landscape waste collection to their residents, with the exception of Forest View. There are no drop-off centers. WCCSWA has sponsored a number of special events to collect and divert materials that are not typically collected by municipal recycling programs (e.g., household hazardous waste, electronics).

Many municipalities utilize single stream recycling programs and the Village of Oak Park is using a modified pay-as-you-throw system. Haulers are beginning to offer larger totters (64-gallon recycling carts) to incentivize residential recycling by homeowners. A handful of municipalities, such as Oak Park, have recycling requirements by ordinance.

Commercial Collection
Commercial waste collection and recycling are conducted by private haulers and are not recorded by municipalities. Despite incomplete reporting data, WCCSWA conducts an Annual Hauler Survey and calculated Commercial Waste Generated in 2005 to be 572,246 tons and a 6.4% diversion rate. *(Source: WCCSWA Solid Waste Management Plan 10-Year Update, March 21, 2007)*

The West Central Municipal Conference with WCCSWA offers participating municipalities and organizations bulk discounts for solid waste goods and services like recycled paper, landscape waste bags, or disposal of electronics and batteries through its Joint Purchasing Program. WCCSWA's 2000 Solid Waste Plan recommended the agency conduct waste reviews for small businesses, but they were not done due to funding constraints.

Transfer Stations
There are 10 transfer stations operating within municipalities affiliated with the WCCSWA.

Disposal Facilities/Landfills Utilized
There are no landfills operating in the western suburbs of Cook County. Most of the residential waste generated in the WCCSWA area goes through transfer stations to the Livingston County Landfill and the Orchard Hills Landfill in Ogle County.

Model Initiatives
In a unique program called the Regional Disposal Project (RDP), the Agency contracts for transfer and disposal capacity. This voluntary program, which has secured the participation of a significant number of WCCSWA communities, provides for reduced disposal costs, price-stabilized disposal costs, and reduced environmental liability.

WCCSWA is seeking to offer e-waste collection services to its affiliate municipalities. Each municipality can tailor their own participation in the program to suit their needs.

Problem and Issues
There is a lack of permanent drop-off centers and/or collection events for household hazardous wastes.

Planned Systems and Facilities
There are no major facilities planned within municipalities affiliated with the WCCSWA.

Contact Information
Jim Caporusso, Environmental Coordinator
West Cook County Solid Waste Agency
2000 Fifth Avenue, Building N
River Grove, IL 60171
Phone: 708-453-9100 x254
Email: jcaporusso@westcook.org

Karen Rozmus, Waste Reduction Coordinator
Village of Oak Park
Public Works Service Center
121-131 South Oak Park Blvd
Oak Park, IL 60302
Phone: 708-358-5707
Email: rozmus@vil.oak-park.il.us

4.3 Solid Waste Agency of Northern Cook County

The Solid Waste Agency of Northern Cook County represents 23 municipalities. SWANCC last published a Solid Waste Management Plan in 1991, and publishes an annual report (this plan update references SWANCC's Annual Report FY2009).

Population: 770,281

Waste Generation: 1,120,392 tons or 8.0 pcd

Recycling: 515,380 tons or 46%

Residential Collection: 89,786 tons of material collected from curbside recycling programs. *(Source: SWANCC Annual Report FY2009)*

Evanston, Glencoe, Rolling Meadows, and Winnetka have municipal collection services. All other municipalities contract with approximately six private haulers.

Haulers are beginning to offer larger totters (65-gallon recycling carts) to incentivize residential recycling by homeowners.

Commercial Collection
Commercial waste collection and recycling are conducted by private haulers and are not recorded by municipalities.

Transfer Stations
There are 10 transfer stations operating within municipalities affiliated with SWANCC.

Disposal Facilities/Landfills Utilized
There are no landfills operating in the northern suburbs of Cook County. Most of the residential waste generated in the SWANCC area goes through transfer stations to the Winnebago Landfill near Rockford, IL.

Model Initiatives
SWANCC has numerous public awareness programs that have been formatted for both print and digital publication on its website. These include resources for teachers and school children, e-newsletters for residents, and social networking tools.

During SWANCC's Reuse-a-Shoe Program (a partnership with Nike) shoes are not only recycled, but they are also donated to a local not-for-profit organization.

As its fastest growing program, SWANCC also manages an ongoing prescription drug take-back program at permanent facilities for 22 of its 23 member communities. SWANCC encourages more sustainable permanent collection sites and tries to avoid one-time events.

Problem and Issues
There is a lack of permanent drop-off centers and/or collection events for household hazardous wastes.

Planned Systems and Facilities
There are no major facilities planned within municipalities affiliated with SWANCC.

Contact Information
Steve Schilling, P.E., Acting Executive Director
Solid Waste Agency of Northern Cook County
2700 Patriot Blvd., Suite 110
Glenview, IL 60026
Phone: 847-724-9205 x205
Email: steven@swancc.org

Mary Allen, Recycling and Education Director
Solid Waste Agency of Northern Cook County
2700 Patriot Blvd., Suite 110
Glenview, IL 60026
Phone: 847-724-9205 x204
Email: mary@swancc.org

5.0 RESOURCES FOR SOLID WASTE MANAGEMENT

5.1 Federal Agencies

5.1.1 United States Environmental Protection Agency (USEPA), Region 5

Land and Chemicals Division/Materials Management Branch
77 West Jackson Boulevard
Chicago, IL 60604
312-886-3584
Website: www.epa.gov/region5

U.S. EPA Region 5 regulates air, water, and land resources in the six midwestern states of Illinois, Indiana, Minnesota, Michigan, Ohio, and Wisconsin. The Federal Resource Conservation and Recovery Act directs U.S. EPA to develop programs that regulate solid waste land disposal facilities and increase resource conservation and recovery of all waste materials.

Technical Assistance
General Solid Waste: Contact Susan Mooney, Chief, Municipal & Industrial Materials Section, at 312-886-3585.

Municipal Solid Waste Recycling, Event/Venue Recycling, and Pay-as-You-Throw (PAYT): Contact Jacob Hassan at 312-866-6864.

Construction and Demolition (C&D) Materials: Contact Julie Gevrenov at 312-886-6832.

Management of Disaster Debris: Contact Rebecca Geyer at 312-353-8314 and view Region 5's resource website:
http://www.epa.gov/reg5rcra/wptdiv/solidwaste/debris/disaster_debris_resources.html

Prevention of Illegal Dumping: An EPA guide book is available at
http://www.epa.gov/reg5rcra/wptdiv/illegal_dumping/index.html

Scrap Tires: The EPA Scrap Tire Clean Up Guidebook is available at
http://www.epa.gov/reg5rcra/wptdiv/solidwaste/tires/guidance/

Additional EPA Region 5 contacts can be located using the "Experts List" search engine at http://www.epa.gov/cgi-bin/r5experts.cgi

Financial Assistance
Solid Waste Management Assistance Program: Region 5 periodically provides grant funding through a competitive announcement. See
http://www.epa.gov/reg5rcra/wptdiv/solidwaste/funding.htm

Additional EPA funding opportunities are periodically listed at
http://www.epa.gov/region5/business/index.htm#financial (opportunities specific to

Region 5) and http://www.epa.gov/epahome/grants.htm. All federal funding opportunities are posted to http://www.grants.gov.

5.1.2 United States Department of Agriculture (USDA) Water and Environmental Programs

2118 West Park Court, Suite A
Champaign, IL 61821
217-524-9170
Website: http://www.usda.gov/rus/water/programs.htm

The USDA provides loans, grants and loan guarantees for drinking water, sanitary sewer, solid waste and storm drainage facilities in rural areas and cities and towns of 10,000 or less. Public bodies, nonprofit organizations and recognized Indian tribes may qualify for assistance. WEP also makes grants to nonprofit organizations to provide technical assistance and training to assist rural communities with their water, wastewater, and solid waste problems.

Financial Assistance
The USDA Solid Waste Management Grant Program provides funding to reduce or eliminate pollution of water resources in rural areas and improve planning and management of solid waste in rural areas. See http://www.usda.gov/rus/water/SWMG.htm for more information.

5.2 State Agencies

5.2.1 Illinois Environmental Protection Agency (IEPA)

IEPA Headquarters
1021 North Grand Avenue East
P.O. Box 19726
Springfield, IL 62794
217-782-3397
Website: http://www.epa.state.il.us/

Division of Land Pollution Control:
The Division of Land Pollution Control ensures that hazardous and non-hazardous wastes are managed in an eco-friendly manner prioritizing the recycling and recovery of materials through various incentives and disincentives.

Contact: Doug Clay, Division Manager
Phone: 217-785-8604
Email: Doug.Clay@illinois.gov

Waste Reduction and Compliance Section:
The Solid Waste Management Section: assists local governments in planning and implementing local solid waste enforcement efforts; issues permits to special waste haulers; provides special waste manifests to generators; administers household hazardous waste collection programs with local governments; develops the annual Illinois landfill capacity report; processes, compiles and summarizes annual waste reports; oversees financial assurance instruments for waste management facilities; and tracks violations by the regulated community. The division is primarily in charge of implementing regulatory programs (i.e., RCRA, Solid Waste, UIC, Used Tires) of the Bureau of Land.

Contact: Ellen Robinson, Project Manager
Phone: 217-782-9288
Email: ellen.robinson@illinois.gov

Solid Waste Unit:
The Solid Waste Unit is responsible for the permitting process of non-hazardous solid wastes and clean construction or demolition debris (CCDD) fill operations.

Contact: Chris Liebman, Manager
Phone: 217-524-3294
Email: chris.liebman@illinois.gov

Office of Brownfield Assistance:
The Office of Brownfield Assistance oversees the Brownfields grant and loan programs and also offers technical support to communities and local municipalities in issues of brownfield clean-up and redevelopment, and explains regulatory programs and requirements. The grant and loan programs involve the Municipal Brownfields Redevelopment Grant Program, which provides funding to local municipalities to investigate and clean up brownfields in their locality, and the Illinois Brownfields

Redevelopment Loan Program provides low-interest loans to municipalities and the private sector for the cleanup of brownfields sites.

Contact: Steve Colantino, Manager
Phone: 217-785-3497
Email: steve.colantino@illinois.gov

Household Hazardous Waste Collection Program**:**
The program is coordinated by the Waste Reduction Unit of the Land Bureau of IL EPA one day each year in fall and spring. Household hazardous waste collections, funded by statewide fees on land-filled nonhazardous solid wastes, are free for the public. The agency also encourages communities or organizations to co-sponsor household hazardous waste collection events, and in cases where the applicant is not a unit of the local government, a special letter is required reflecting endorsement of appropriate government units.

Contact: Waste Reduction Unit at 217-785-8604.

Used Tire Program**:**
The Used Tire Unit offers a Used Tire Program. The program has two components, viz., the "regulatory" component dealing with compliance issues and the "cleanup" component dealing with removal of tires through forced or consensual approaches. The program no longer conducts countywide used tire collections, but still conducts special-request waste tire collection throughout the state of Illinois under their Consensual Removal Program.

Contact: Used Tire Program at 217-785-8604

Office of Pollution Prevention:
With the vision of reducing or minimizing pollution at its source instead of "end of pipe" approaches, the Office of Pollution Prevention encourages the efficient use of energy, water and materials and offers technical assistance and educational outreach to industries, institutions and local governments.

Contact: Illinois EPA - Office of Pollution Prevention, #34
1021 N. Grand Avenue East,
PO Box 19276
Springfield, IL 62794-9276

General information: Phone: 217-782-8700
Manager: Kevin Greene: Phone 217-785-0833

5.2.2 Illinois Department of Commerce and Economic Opportunity:

James R. Thompson Center
100 West Randolph
Chicago, IL 60601

312-814-7179
Website: http://www.commerce.state.il.us/dceo/

Recycling and Grant Programs:

Illinois Recycling Grants Program (IRGP):
This program provides technical assistance and matching grants to local governments, communities, businesses, and not-for-profit organizations to fund recycling of traditional materials such as fiber, plastic, metal and glass. The legislator responsibility for electronic recycling is under the Illinois EPA, Bureau of Land.

Contact: David Ross
Phone: 217-782-7887
Email: David.Ross@illinois.gov

Electronic Recycling
Sam Al-Basha
217-785-2765
Sam.Al-Basha@illinois.gov

Recycling Expansion and Modernization Program (REM)**:**
The program awards grants to Illinois organizations and businesses to accomplish recycling market expansion and waste reduction goals, while demonstrating public economic benefits. The REM Program diverts materials from the solid waste stream, thereby conserving our natural resources, while boosting the performance of Illinois businesses and organizations, to sustain and expand the Illinois economy. The REM Program is an opportunity that is good for business and good for the environment.

Contact: Mike Motor
Phone: 217-524-5859
Email: Michael.motor@illinois.gov

Food Scrap Composting Revitalization & Advancement Program (F-SCRAP):
This program provides financial support for projects that will divert food scraps from Illinois landfills and also advance the state's food scrap composting infrastructure.

Contact: David E. Smith
Phone: 217-785-2006
Email: David.E.Smith@illinois.gov

Educational Institutions Programs

Zero Waste Schools Program:
Provides grant support and educational and training assistance to K-12 Iliinois schools on reducing wastes, recycling and composting practices.

Contact: Brett Ivers
Phone: 217-785-2013
E-mail: Brett.Ivers@illinois.gov

Illinois College Assistance Program for Recycling (I-CAP):
The program provides grants to state funded/supported colleges and universities in Illinois in developing and implementing a waste reduction plan that is mandated by Section 20/3.1 of the Illinois Solid Waste Management Act.
Questions concerning this program should be directed to:

David E. Smith, Manager
Illinois College Assistance Program for Recycling (I-CAP)
Department of Commerce and Economic Opportunity
620 East Adams – CIPS 5
Springfield, Illinois 62701-1615
Phone: 217- 785-2006
Fax: 217-785-2618
E-mail: David.E.Smith@Illinois.gov

5.3 Other Organizations

5.3.1 Illinois Counties Solid Waste Management Association (ILCSWMA):

The ILCSWMA is a not-for-profit professional association that works as a platform for the exchange of knowledge and information and offers networking opportunities for local solid-waste management professionals and other interested people. Communication is maintained through quarterly meetings and workshops arranged by the association and also by their release of Illinois solid waste news and legislative updates. The association deals with all areas of local government solid waste involvement, viz., refuse collection and disposal, recycling and waste prevention, solid waste enforcement, and solid waste education and information.

ILCSWMA's member organizations include counties (solid waste agencies, health departments, planning departments, county Boards, State's Attorneys), municipalities (elected officials, solid waste coordinators, public works departments) and townships. Other affiliates include state agencies and organizations, consulting and engineering firms, colleges and universities, private companies, community groups and "Keep Illinois Beautiful" affiliates.

Contact: Bart Hagston or Dave Hartke
Illinois Counties Solid Waste Management Association
PO Box 17461
Urbana, IL 61803
Email: info@ilcswma.org

5.3.2 Solid Waste Association of North America

Contact: Karen Rozmus, Village of Oak Park, Current Board President
131 South Oak Park Blvd.
Oak Park, IL 60302
Phone: 708-445-3384
Email: rozmus@vil.oak-park.il.us

5.3.3 Illinois Recycling Association

Contact: Mike Mitchell, Executive Director
PO Box 3717
Oak Park, IL 60303
Phone: 708-358-0050
Email: executivedirector@illinoisrecycles.org

5.3.4 Illinois Sustainable Technology Center (formerly the Waste Management and Research Center)

Contact: Manohar R. Kulkarni, Director
1 Hazelwood Drive
Champaign, IL 61820

Phone: 217-333-8569
Email: mkulkarni@istc.illinois.edu

5.3.5 Illinois Manufacturing Extension Center

Contact: 1501 West Bradley Avenue
Peoria, IL 61625
Phone: 888-806-4632
Email: info@imec.org

5.3.6 Construction Materials Recycling Association (CMRA)

Contact: Bill Turley, National Director
PO Box 122
Eola, IL 60519
Phone: 630-585-7530
Email: turley@cdrecycling.org

ENDNOTES

[i] Illinois General Assembly. "415 ILCS 20/1" Solid Waste Management Act. (http://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=1588&ChapterID=360)
[ii] Illinois General Assembly. "415 ILCS 15/1." Solid Waste Planning and Recycling Act. (http://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=1587&ChapterID=36)
[iii] Illinois General Assembly. "415 ILCS 5/" The Illinois Environmental Protection Act. (http://www.ipcb.state.il.us/SLR/TheEnvironmentalProtectionAct.asp)
[iv] U.S. Census Bureau. 2010. State and CountyQuick Facts for Cook County, Illinois. (http://quickfacts.census.gov/qfd/states/17/17031.html)
[v] Chicao Metropolitan Agency for Planning (CMAP). March, 2008. Green Practices for Local Governments, p. 9. (http://www.cmap.illinois.gov/green-practices)
[vi] In 2007, NIPC merged with the Chicago Area Transportation Study (CATS) to form the Chicago Metropolitan Agency for Planning.
[vii] United States Environmental Protection Agency (U.S. EPA). 2008. Municipal Solid Waste Generation, Recycling, and Disposal in the United States: Facts and Figures 2008. (http://www.epa.gov/osw/nonhaz/municipal/pubs/msw2008rpt.pdf)
[viii] Grant programs include the U.S. EPA Product Stewardship Program, USEPA WasteWise Program, the Illinois Department of Commerce and Economic Opportunity's (IDCEO) Illinois Recycling Grants Program, and the IDCEO's Recycling Expansion and Modernization Program.
[ix] e.g. the Chicago Climate Action Plan. 2008. (http://www.chicagoclimateaction.org/filebin/pdf/finalreport/CCAPREPORTFINALv2.pdf)
[x] Kwak, Soyoung. December 4, 2010. "Highland Park Looks to Ban Styrofoam," Chicagoist. (http://chicagoist.com/2010/12/04/highland_park_looks_to_ban_styrofoa.php)
[xi] Illinois Department of Commerce and Economic Opportunity sponsors annual Excellence in Recycling Awards
[xii] Illinois Manufacturing Extension Center. (www.imec.org)
[xiii] U.S. EPA. Setting the Standard for RecyclingMeasurement. (http://www.epa.gov/osw/conserve/tools/recmeas/docs/article1.htm)
[xiv] IEPA Reporting forms from SSMMA and SWANCC. Aluminum, glass, paper, plastic were included in both waste agencies' recycling rates. 2) C&D, tires, paints, metals (including white goods and e-waste) were included in only one waste agency's recycling rate.
[xv] WCCSWA conducted its own hauler surveys in which they reported a "diversion rate" of 21.2% in 2005, compared to the IEPA "recycling" rate of 31.1% in 2005.
[xvi] Illinois Department of Commerce and Economic Opportunity (IDCEO) and the Illinois Recycling Association (IRA). May 22, 2009. Illinois Commodity/Waste Generation and Characterization Study. (http://www2.illinois.gov/green/Documents/Waste%20Study.pdf)
[xvii] Whole Building Design Guide. "Construction Waste: General Principles and Commitments. National Institute of Building Sciences. (http://www.wbdg.org/references/mou_cw.php)
[xviii] Deconstruction is the selective and systematic disassembling of buildings that would otherwise be demolished to generate materials suitable for reuse in the construction or rehabilitation of other structures. Definition retrieved from "Building Deconstruction and Material Reuse in Washington, D.C." December, 1999. Urban and Economic Development Division, U.S. EPA. (http://www.recyclingsecrets.com/epa-deconstruction-report.htm"
[xix] Clean construction or demolition debris (CCDD) is defined by the Illinois Environmental Protection Agency (IEPA) as "uncontaminated broken concrete without protruding metal bars, bricks, rock, stone, or reclaimed asphalt pavement generated from construction or demolition activities." (http://www.epa.state.il.us/land/ccdd/index.html).
[xx] As of April 2011, 23 states have comprehensive E-Waste laws, one has a consumer fee law, five have proposed laws, and 19 have none. Electronics Takeback Coalition. (http://www.electronicstakeback.com/promote-good-laws/state-legislation/)
[xxi] Certification standard for electronics recyclers accredited by the US EPA.
[xxii] 221 tons of computers, 343 tons of monitors, 164 tons of printers, 922 tons of televisions, and 109 tons of eligible electronic devices (i.e. mp3s, DVDs, iPods, etc). IEPA. Registered Collectors, Recyclers, and

Refurbishers of Electronic Waste. (http://www.epa.state.il.us/land/electronic-waste-recycling/recycler-list.html)
[xxiii] IDCEO and IRA. Illinois Commodity/Waste Generation and Characterization Study. May 22, 2009. p.12.
[xxiv] IDCEO and IRA. Illinois Commodity/Waste Generation and Characterization Study. May 22, 2009.
[xxv] U.S. EPA. "Generators of Food Waste." (http://www.epa.gov/osw/conserve/materials/organics/food/fd-gener.htm)
[xxvi] Residents rake leaves to the curb and wait for a "street sweep" as an alternative to bagging leaves, such as in Skokie.
[xxvii] Independent Recycling
[xxviii] According to waste agency representatives, Dolton's River Bend Prairie Landfill also has composting operations, but this Land and Lakes facility is not listed in the IEPA Landfill Capacity Report.
[xxix] Land and Lakes. (http://www.land-and-lakes.com/landscape.html)
[xxx] Populations derived from census: SSMMA 595,775; SWANCC 762,252; WCCSWA 556,241; unaffiliated 732,971. U.S. Census Bureau. 2010. (http://www2.illinois.gov/census/Documents/2010%20Data/2000%202010_IL%20Places%20by%20County.pdf)
[xxxi] 2000 Plan Update noted that since the reported 170,000 tons of landscape waste collected in suburban Cook County seemed low, 300,000 tons were simply added to the total.
[xxxii] 23/23 of SWANCC members, 36/36 of WCCSWA members, 19/38 of SSMMA members
[xxxiii] WCCSWA Solid Waste Plan: WCCSWA has 41 members total, including two townships, two colleges and Brookfield Zoo
[xxxiv] A fixed volume of waste is picked up each month and residents purchase stickers for each additional bag of waste.
[xxxv] 2000 Plan Update: In 1997, 15 communities of WCCSWA adopted recycling requirements for MF buildings and had a 65% recycling rate.
[xxxvi] "Dirty" MRFs collect a combined stream of recyclables and municipal solid waste. "Clean" material recovery facilities do not require permits. IDCEO and IRA. Illinois Commodity/Waste Generation and Characterization Study. May 22, 2009. p.2.
[xxxvii] U.S. EPA. "Household Hazardous Waste." (http://www.epa.gov/osw/conserve/materials/hhw.htm)
[xxxviii] City of Chicago Facility: Goose Island Household Chemicals and Computer Recycling Facility
[xxxix] Environment Illinois. "CFL Recycling." (http://www.environmentillinois.org/eehq/cfl/recycling)
[xl] Illinois Environmental Protection Agency. Landfill Capacity Report: 2008-2009. (http://www.epa.state.il.us/land/landfill-capacity/)
[xli] Illinois General Assembly. "House Bill 4664." Intergovernmental Renewable Energy Act. (http://www.ilga.gov/legislation/BillStatus.asp?DocTypeID=HB&DocNum=4664&GAID=10&SessionID=76&LegID=48803)
[xlii] Region 2: 7,745,317 tons received at 6 landfills / 17,171,862 tons generated = 45%; some must be transported out of state if less than 25% is being recycled. Illinois Environmental Protection Agency. April 11, 2011. Nonhazardous Solid Waste Management and Landfill Capacity in Illinois: 2009. (http://www.epa.state.il.us/land/landfill-capacity/2009/report.pdf)
[xliii] Leachate is liquid that has dissolved or entrained environmentally harmful substances which may then enter the environment, and is caused by precipitation percolating through waste deposited in a landfill.
[xliv] Wisconsin State Legislature. May 19, 2009. "State Solid Waste Tipping Fees Overview." Joint Committee on Finance. (http://legis.wisconsin.gov/lfb/2009-11Budget/Budget%20Papers/590.pdf)
[xlv] 61% of municipalities (77 of 126) have curbside recycling services. All of SWANCC's members (23), all of WCCSWA's members (36) and (18) of SSMMA's 38 members have curbside recycling programs according to the respective waste agency representatives.
[xlvi] Steve Schilling of SWANNC and Jim Caporusso of WCCSWA provided cost estimates for recycling and disposal. Please note that a full disposal and recycling survey was not conducted.
[xlvii] Created based on variation of hierarchies from Fairfax County, VA and City of Seattle, WA Zero Waste Presentation.
[xlviii] Illinois General Assembly. Senate Bill 2313: Illinois' Electronic Recycling and Reuse Act. (http://www.illinoisrecycles.org/pdffiles/ExecutiveSummary5-6-08.pdf)

[xlix] U.S. Green Building Council rating system for sustainably-designed buildings: LEED, or Leadership in Energy and Environmental Design. (http://www.usgbc.org/DisplayPage.aspx?CategoryID=19)
[l] Illinois General Assembly. "415 ILCS 15/1." Solid Waste Planning and Recycling Act. (http://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=1587&ChapterID=36)
[li] Cities with plastic bag bans or levies include San Francisco, San Jose, Hong Kong, Dublin, and Melbourne. Countries include China, Ireland, Israel, Italy, and several in Africa (South Africa, Kenya, Somalia, Rwanda, and Eritrea).
[lii] IL Department of Commerce and Economic Opportunity. "Electronics Recycling: Economic Opportunities and Environmental Impacts." (http://www.commerce.state.il.us/NR/rdonlyres/8DD41FE3-A7ED-4447-87C0-DD05815F2747/0/EwasteFactSheet.pdf)
[liii] Exact numbers are not known as data from EPA is outdated (1998).
[liv] Waste oil from food preparation may be converted to fuel.
[lv] Miller, Chaz. April 1, 2001. "Profiles in Garbage: Yard Waste." Waste360.com. (http://waste360.com/mag/waste_profiles_garbage_yard)
[lvi] U.S. EPA. "Household Hazardous Waste." (http://www.epa.gov/osw/conserve/materials/hhw.htm)
[lvii] U.S. EPA. "Proposed Universal Waste Rule for Pharmaceuticals." (http://www.epa.gov/osw/hazard/wastetypes/universal/pharm-rule.htm)
[lviii] Dempsey, John. September 1, 2004. "To Build or Not to Build." Waste360.com. (http://waste360.com/mag/waste_build_not_build)
[lix] 2000 Cook County Solid Waste Management Plan.

ACKNOWLEDGEMENTS

Plan Update Team
Deborah Stone, Director, Cook County Department of Environmental Control
Kevin Givens, Deputy Director, Cook County Department of Environmental Control
Ray Akers, Former Solid Waste Coordinator, Cook County Department of Environmental Control

Chief Editor: Chris Slattery, Delta Institute
Assistant: Carlyn So, Delta Institute
Proofreading and Copy Editing: Deborah Popely and Grady Chambers, Delta Institute

Special thanks to all that contributed to the update:

Waste Agency Representatives
Steve Shilling, P.E., Acting Executive Director, Solid Waste Agency of Northern Cook County
Mary Allen, Recycling and Education Director, Solid Waste Agency of Northern Cook County
Jim Caporusso, Environmental Coordinator, West Cook County Solid Waste Agency
Karen Rozmus, West Cook County Solid Waste Agency and Waste Reduction Coordinator, Village of Oak Park
Bud Fleming, Deputy Executive Director, South Suburban Mayors and Managers Association

Other Contributors
Libby Allen, Independent Recycling
Sam Al-Basha, IEPA
Dave Bennink, RE-USE Consulting
Paul Brzozowski, Skokie Streets and Sanitation
Julie Gevrenov, USEPA
Jim McNelly, Renewable Carbon Management, MN
Mike Miller, Executive Director, Illinois Recycling Association
Sheila Miller, South Suburban Mayors and Managers Association
Susan Mooney, USEPA
Jori Pascarella, Intercon Solutions
Ed Repa, National Solid Wastes Management Association, NSWMA
Ellen Robinson, IEPA
Derek Rompot, IEPA
David Ross, IEPA
Sarah Wochos, Environmental Law and Policy Center
Kim Worthington, Department of Environment, City of Chicago

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"Construction Waste: General Principles and Commitments." National Institute of Building Sciences. Retrieved from http://www.wbdg.org/references/mou_cw.php.

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APPENDIX A

ILLINOIS EPA
MUNICIPAL WASTE RECYCLING SURVEY
[ANNUAL SAMPLE FORM]

Illinois
Environmental
Protection Agency

Bureau of Land
1021 North Grand Avenue East
Box 19276
Springfield, IL 62794-9276

LOCAL RECYCLING COORDINATORS AND CONTACT PERSONS

Re: Municipal Wastes Generated and Recycled in Calendar Year 2007

Attached please find the Illinois Environmental Protection Agency's 2007 voluntary recycling survey. The recycling data you provide for 2007 will be included in the Nonhazardous Solid Waste Management and Landfill Capacity in Illinois: 2007, 21st annual report**.** Thank you in advance for your timely submittal of this survey by **April 1, 2008**.

We are asking for your assistance in providing information about the recycling activities in your area. The following two page survey requests information for:

1. Municipal waste generation on a per capita basis and total tonnage basis.
2. The total amount of municipal waste recycled in tons, and as a percentage of municipal waste generated.
3. Population of the area.

Please provide the most current information in the space provided. If no newer data is provided to us by your area, we will publish the most current data available.

State Law: "The Solid Waste Planning and Recycling Act" defines municipal waste and recycling; therefore, these definitions should be used when completing the survey. On the second page of the survey is a list of materials encompassed in the definition of municipal waste to assist in your calculation of the recycling rate (Section IV). The updated list of materials that can be included in the recycling rate is based on those found in the final report prepared by the Illinois Counties Solid Waste Management Association (ILCSWMA) Recycling Measurement Working Group dated July 1997 and updated in April 2003 (by Illinois EPA)**.** This publication is available on ILCSWMA's web site (www.ilcswma.org) under "Document" and "Recycling Measurements" report. All materials collected for recycling should eventually be processed and returned to the economic mainstream in the form of raw materials or products, and follow the state's legal definition for recycling.

Thank you for your help in tallying recycling data for Illinois.

If you have any questions about this form or suggestions, please contact Ellen Robinson at 217-782-9288, fax 217-782-9290 or e-mail ellen.robinson@illinois.gov.

Note: *We request that this voluntary survey be returned to Ellen Robinson at the Illinois EPA by fax at 217-782-9290 or by mail, on or before* ***April 1, 2008.***

Information will be published in the Illinois EPA's Nonhazardous Solid Waste Management and Landfill Capacity in Illinois: 2007, 21st annual report. If you have any questions, contact Ellen Robinson at 217-782-9288 or e-mail ellen.robinson@illinois.gov.

ILLINOIS EPA MUNICIPAL WASTE RECYCLING SURVEY

I. General Information

Please provide the most recent data available.

Current Information:

County: _____

IEPA Region: _____

Contact: _____

Title: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Phone: _____

Fax: _____

E-mail: _____

II. Municipal Waste (MW) Generation Information

Updated Information:[1]

_____ 1. Population

_____ 2. MW generation rate, pcd

_____ 3. Total MW generated, tons[2]

For (3.), either (a) multiply (the population (1.) by the MW generation rate (2.)x 365 days) and divide by 2000 lbs/ton or (b) total each category of municipal waste derived from your report.

_____ 4. Time frame for above information

[1] The updated information was obtained from the following source(s) (e.g., plan update, surveys, reporting forms):

_____

_____

[2] Indicate which method (a) or (b) was used to obtain total MW generated: _____

III. Recycling Information

Updated Information:[1]

_____ 5. Total MW recycled, tons

_____ 6. % of total MW recycled

For (6.),divide the total tons of MW recycled (5.) by the total MW generated (3.) and multiply this number by 100.

_____ 7. Time frame for above information

[1] The updated information was obtained from the following source(s) (e.g., plan update, surveys, reporting forms):

_____

IV. Indicate Which Materials Are Being Included in the Calculation of the Recycling Rate:

Aluminum	Glass	Paper (including OCC, paperboard, newspaper, magazines, junk mail...)
Batteries, Household	Landscape Waste	Plastics
Batteries, Lead Acid	Metals (including white goods and computers)	Tires (that are not incinerated)
Commingled Recyclables	Paint, Latex (that is recycled, not fuel-blended)	Other Recyclables (please list) _____ _____
Construction/Demo. Debris		_____

If you have questions related to the inclusion of specific materials, refer to the ILCSWMA Recycling Measurements Working Group Final Report which details what can and cannot be included in the definitions of municipal waste and recycling.

V. Reporting Ordinances

If your jurisdiction has enacted, or will enact, any (mandatory) reporting ordinances, please mark the appropriate boxes

Residential Ordinances, effective: _____

Commercial Ordinance, effective: _____

Developing Residential Ordinance: _____

Developing Commercial Ordinance _____

VI. Comments

_____

_____

_____

_____

APPENDIX B

COOK COUNTY MUNICIPALITIES: WASTE AGENCY AFFILIATION AND POPULATION DATA

Geography	waste agency	2000 Total population: Total	2010 populations	population change 2000-2010
***not entirely in Cook County**				
Alsip	unaffiliated	19862	19,277	-585
Arlington Heights	SWANCC	76098	75,101	-997
Barrington*	SWANCC	10018	10,327	309
Barrington Hills	unaffiliated	4162	4,209	47
Bartlett*	unaffiliated	36840	41,208	4368
Bedford Park	unaffiliated	562	580	18
Bellwood	WCCSWA	20535	19,071	-1464
Bensenville*	unaffiliated	20507	18,352	-2155
Berkeley	WCCSWA	5245	5,209	-36
Berwyn	WCCSWA	54016	56,657	2641
Blue Island	SSMMA	23341	23,706	365
Bridgeview	unaffiliated	15368	16,446	1078
Broadview	WCCSWA	8301	7,932	-369
Brookfield	WCCSWA	19007	18,978	-29
Buffalo Grove*	SWANCC	42591	41,496	-1095
Burbank	unaffiliated	27825	28,925	1100
Burnham	SSMMA	4170	4,206	36
Burr Ridge*	unaffiliated	10328	10,559	231
Calumet City	SSMMA	38992	37,042	-1950
Calumet Park	SSMMA	8569	7,835	-734
Chicago	separate entity	2895964	2,695,598	-200366
Chicago Heights	SSMMA	33045	30,276	-2769
Chicago Ridge	unaffiliated	13878	14,305	427
Cicero	WCCSWA	85616	83,891	-1725
Country Club Hills	SSMMA	16202	16,541	339
Countryside	WCCSWA	5975	5,895	-80
Crestwood	unaffiliated	11219	10,950	-269
Des Plaines	unaffiliated	58695	58,364	-331
Dixmoor	SSMMA	4110	3,644	-466
Dolton	SSMMA	25740	23,153	-2587
East Dundee*	unaffiliated	2893	2,860	-33
East Hazel Crest	SSMMA	1611	1,543	-68
Elgin*	unaffiliated	93895	108,188	14293
Elk Grove Village	SWANCC	34758	33,127	-1631
Elmwood Park	WCCSWA	25405	24,883	-522
Evanston	SWANCC	74239	74,486	247
Evergreen Park	unaffiliated	20821	19,852	-969
Flossmoor	SSMMA	9295	9,464	169

Geography	waste agency	2000 Total population: Total	2010 populations	population change 2000-2010
Ford Heights	SSMMA	3499	2,763	-736
Forest Park	WCCSWA	15688	14,167	-1521
Forest View	WCCSWA	796	698	-98
Franklin Park	WCCSWA	602	18,333	17731
Glencoe	SWANCC	8827	8,723	-104
Glenview	SWANCC	41679	44,692	3013
Glenwood	SSMMA	9035	8,969	-66
Golf	unaffiliated	452	500	48
Hanover Park*	unaffiliated	38366	37,973	-393
Harvey	SSMMA	30106	25,282	-4824
Harwood Heights	WCCSWA	8226	8,612	386
Hazel Crest	SSMMA	14728	14,100	-628
Hickory Hills	unaffiliated	13935	14,049	114
Hillside	WCCSWA	8256	8,157	-99
Hinsdale*	unaffiliated	17482	16,816	-666
Hodgkins	WCCSWA	2158	1,897	-261
Hoffman Estates	SWANCC	50352	51,895	1543
Hometown	unaffiliated	4467	4,349	-118
Homewood	SSMMA	19493	19,323	-170
Indian Head Park	WCCSWA	3824	3,809	-15
Inverness	SWANCC	6374	7,399	1025
Justice	unaffiliated	12090	12,926	836
Kenilworth	SWANCC	2494	2,513	19
La Grange	WCCSWA	15724	15,550	-174
La Grange Park	WCCSWA	13239	13,579	340
Lansing	SSMMA	28161	28,331	170
Lemont	unaffiliated	13177	16,000	2823
Lincolnwood	SWANCC	12359	12,590	231
Lynwood	SSMMA	7342	9,007	1665
Lyons	WCCSWA	10135	10,729	594
Markham	SSMMA	12654	12,508	-146
Matteson	SSMMA	12883	19,009	6126
Maywood	WCCSWA	26987	24,090	-2897
McCook	WCCSWA	227	228	1
Melrose Park	WCCSWA	23209	25,411	2202
Merrionette Park	unaffiliated	1999	1,900	-99
Midlothian	SSMMA	14222	14,819	597
Morton Grove	SWANCC	22452	23,270	818
Mount Prospect	SWANCC	56706	54,167	-2539
Niles	SWANCC	30144	29,803	-341

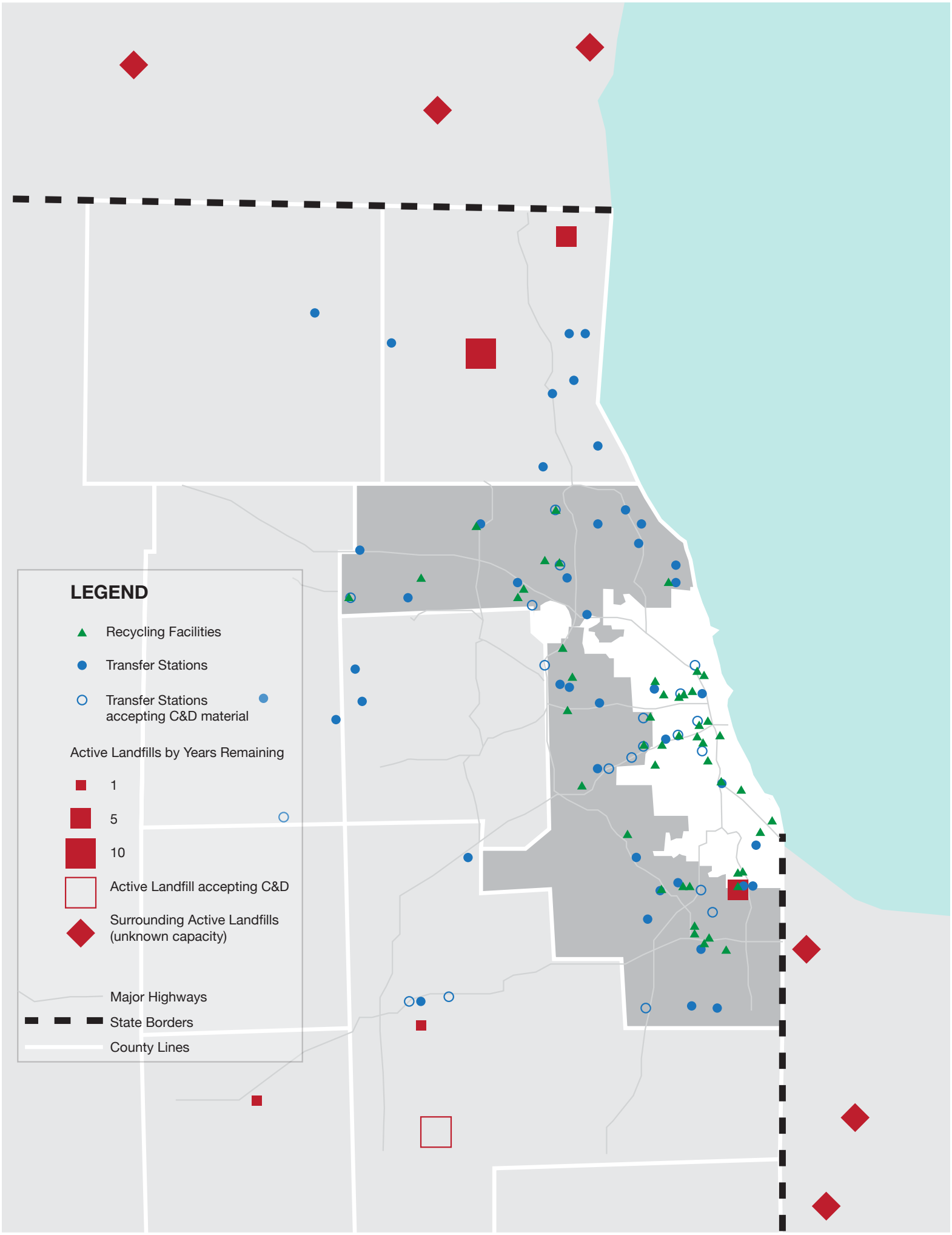
Geography	waste agency	2000 Total population: Total	2010 populations	population change 2000-2010
Norridge	WCCSWA	14690	14,572	-118
North Riverside	WCCSWA	6733	12,323	5590
Northbrook	unaffiliated	33425	6,672	-26753
Northfield	unaffiliated	5487	33,170	27683
Northlake	WCCSWA	11810	5,420	-6390
Oak Brook*	unaffiliated	8453	7,883	-570
Oak Forest	SSMMA	27955	27,962	7
Oak Lawn	unaffiliated	55391	56,690	1299
Oak Park	WCCSWA	52524	51,878	-646
Olympia Fields	SSMMA	4724	4,988	264
Orland Hills	SSMMA	6860	7,149	289
Orland Park	SSMMA	51103	56,767	5664
Palatine	SWANCC	65156	68,557	3401
Palos Heights	SSMMA	11320	12,515	1195
Palos Hills	unaffiliated	17755	17,484	-271
Palos Park	unaffiliated	4524	4,847	323
Park Forest*	SSMMA	23278	21,975	-1303
Park Ridge	SWANCC	37735	37,480	-255
Phoenix	SSMMA	2145	1,964	-181
Posen	SSMMA	4651	5,987	1336
Prospect Heights	SWANCC	17541	16,256	-1285
Richton Park	SSMMA	12407	13,646	1239
River Forest	WCCSWA	11635	11,172	-463
River Grove	WCCSWA	10616	10,227	-389
Riverdale	SSMMA	15002	13,549	-1453
Riverside	WCCSWA	9120	8,875	-245
Robbins	SSMMA	6553	5,337	-1216
Rolling Meadows	SWANCC	24618	24,099	-519
Roselle*	unaffiliated	23280	22,763	-517
Rosemont	WCCSWA	4171	4,202	31
Sauk Village*	SSMMA	10417	10,506	89
Schaumburg*	unaffiliated	74511	74,227	-284
Schiller Park	WCCSWA	11784	11,793	9
Skokie	SWANCC	63320	64,784	1464
South Barrington	SWANCC	3729	4,565	836
South Chicago Heights	SSMMA	3975	4,139	164
South Holland	SSMMA	22278	22,030	-248
Steger *	SSMMA	9656	9,570	-86
Stickney	WCCSWA	6148	6,786	638
Stone Park	WCCSWA	5108	4,946	-162

Geography	waste agency	2000 Total population: Total	2010 populations	population change 2000-2010
Streamwood	unaffiliated	36732	39,858	3126
Summit	WCCSWA	10635	11,054	419
Thornton	SSMMA	2603	2,338	-265
Tinley Park*	SSMMA	48327	56,703	8376
University Park*	SSMMA	6631	7,129	498
Westchester	WCCSWA	16664	16,718	54
Western Springs	WCCSWA	12621	12,975	354
Wheeling	SWANCC	34411	37,648	3237
Willow Springs	WCCSWA	4941	5,524	583
Wilmette	SWANCC	27684	27,087	-597
Winnetka	SWANCC	12388	12,187	-201
Worth	unaffiliated	11153	10,789	-364
24 unaffiliated w/ waste agency, % unaffiliated =	**Unincorporated Cook-pop in households**	**7,250**	**13,751**	6,501.28
18.5%	**TOTAL SUBURBAN COOK COUNTY**	**2601911**	**2660990**	**59079**

APPENDIX C

REGIONAL FACILITIES MAP

Source: Yochai Eisenberg, *Market Analysis of Construction and Demolition Material Reuse in the Chicago Region*, 2009


LEGEND
Recycling Facilities
Transfer Stations
Transfer Stations accepting C&D material
Active Landfills by Years Remaining
1
5
10
Active Landfill accepting C&D
Surrounding Active Landfills (unknown capacity)
Major Highways
State Borders
County Lines

APPENDIX D

REGIONAL LANDFILL FACILITIES AND COMPOST FACILITIES

Active Landfills in Region 2
Source: 2008 IEPA Landfill Capacity Report

		County	Municipality	waste accepted	tip fee	years remaining	
1	**CID RDF**	Cook	Calumet City	nonhaz special, haz, inert	varies	< 1	methane collection GTE for one of two plants
2	**Countryside Landfill**	Lake	Grayslake	municipal, nonhaz special	$49.85/ton	9	methane collection GTE
3	**Environtech Inc**	Grundy	Morris	municipal, nonhaz special	#35/ton	5	methane collection GTE
4	**Laraway RDF**	Will	Elwood	nonhaz special, chemical, inert, asbestos, liquids	$23.50/cu yd	2	no methane collection system
5	**Prairie View RDF**	Will	wilmington	municipal, nonhaz special, C&D	$33/ton	19	flare, proposed GTE
6	**River Bend Priaire Landfill**	Cook	Dolton	municipal, nonhaz special, liquids	$11.50/cu yd	4	methane collection GTE
7	**Veolia**	Lake	Zion	municipal, nonhaz special	$45/ton	5	methane collection GTE

Regional Composting Facilities
Source: 2008 IEPA Landfill Capacity Report

	NAME OF FACILITY	MUNICIPALITY	WASTE ACCEPTED	TONS IN 2008
1	Recycling Systems Inc. 1	Chicago	MSW, LW, C&D	583,913
2	Waste Management/Bluff City TS 1	Elgin	MSW, recyclables, C&D	268,815
3	West Cook Transfer Station	Forest View	MSW, C&D recycling	252,000
4	Waste Mgt.-Northwest/W	Wheeling	MSW, LW, recyclables, C&D	251,087
5	Loop Transfer-Laflin	Chicago	MSW, C&D, commercial	247,993
6	Medill Mat'l. Rec. & Recy.	Chicago	MSW, recyclables, C&D recycling	190,121
7	Riverdale Recycling Inc.	Riverdale	MSW, recyclables, C&D, tires	183,261
8	Liberty Waste	McCook	MSW, LW, recyclables, C&D	81,378
9	SRS North Lot	Chicago	C&D	47,337
10	Northlake Transfer Station 2	Northlake	MSW, LW, recyclables, C&D	561
11	Des Plaines Trans. Stn.	Des Plaines	LW, CCDD from muni	545
12	Ravenswood Disposal Service Transfer Station	Chicago	C&D	0
13	Kucera Disposal Company	Cicero	MSW, recyclables, C&D	0
14	Groot Industries/Chicago TS	Elk Grove Village	MSW, C&D	0
15	Harvey Transfer Station	Harvey	C&D, LW	0
16	Prairie Lakes Recycling and Transfer 3	Matteson	LW, C&D, recyclables	0

APPENDIX E

REGIONAL TRANSFER STATIONS

Transfer Stations, Waste Handled
Source: 2008 IEPA Landfill Capacity Report

	name of facility	opened/ opening 2006-2009	municipality	county	tons in 2008	waste accepted (PIMW = potentially infectious medical waste)	owner	operator	tip fee for customers
1	**34th Street Mat'l. Rec. & Recy.**		Chicago	Cook	131,332	MSW, recyclables	City of Chicago	Allied	NA
2	**American Wood Recycling TS**		Hoffman Estates	Cook	11,036	LW	American Wood Recycl	American Wood Recyc	$38/ton
3	**Apollo Disposal Service TS**		Momence	Kankakee	106,000	MSW, recyclables	Allied	Allied	$52.50/ton
4	**ARC Disposal & Recycling**		Mt. Prospect	Cook	326,227	MSW, industrial, commercial	ARC	ARC	$51/ton
5	**Aspen Valley LSW TS 2**	“new”	Park City	Lake	0	LW	Weaver’s Family	Aspen Valley	NA
6	**AW/Groen Waste Services**		Crestwood	Cook	252,478	MSW, LW, recyclables	Allied	Allied	
7	**Best Lawns TS Streamwood**		Streamwood	Cook	0	LW	Best Lawns	Best Lawns	NA
8	**C & L LSW Trans. Stn.**		Chicago Heights	Cook	0	LW	C&L LLC	Skyline Disposal	NA
9	**Calumet Transfer Station**		Chicago	Cook	289,481	MSW, commercial	Liberty Waste, Allied su	Liberty Waste, Allied subsidiary	
10	**CID Transfer Station**		Chicago	Cook	40,886	MSW	Waste Management	Waste Management	NA
11	**Citiwaste Transfer Station**		Joliet	Will	28,202	CCDD, LW, recyclables	Citiwaste	Citiwaste	NA
12	**City Waste Transfer**		Chicago	Cook	18,294	MSW, recyclables, commercial	American Disposal, Allie	American Disposal, All	NA
13	**Cloverleaf Farms Transfer**		Elgin	Cook	0	LW	Midwest Compost	Midwest Compost	NA
14	**Des Plaines Trans. Stn.**		Des Plaines	Cook	545	LW, CCDD from muni	City of Des Plaines	City of Des Plaines	NA
15	**DuKane Transfer Facility 1 & a**		West Chicago	DuPage	0	MSW, LW, recyclables	Groot	Groot	NA
16	**DuPage Yard Waste TS**		West Chicago	DuPage	0	LW	Midwest Compost	Midwest Compost	NA
17	**Eco Materials Waukegan LSW TS a**		Waukegan	Lake	0	LW	Thelen Sand and Grave	Eco Materials	NA
18	**Glenview Transfer Station**		Glenview	Cook	296,022	MSW, LW	SWANCC	Groot	NA
19	**Greenwood Development**	“new”	Maywood	Cook	0	LW	Greenwood	Greenwood	NA
20	**Greenwood Transfer Facility 1**		Maywood	Cook	0	MSW	Roy Strom	Greenwood	NA
21	**Groot Industries/Chicago TS**		Elk Grove Village	Cook	0	MSW, C&D	Groot	Groot	NA
22	**Groot Industries/McCook TS**		McCook	Cook	187,800	MSW, LW, recyclables	Groot	Groot	NA
23	**Harvey Transfer Station**		Harvey	Cook	0	C&D, LW	J&L	Contractors Recycling	NA
24	**Highland Park LSW TS**		Highland Park	Lake	50	LW	City of Highland Park	City of Highland Park	NA
25	**Hooker Street TS**		Chicago	Cook	285,485	MSW	Waste Management	Waste Management	$44/ton
26	**JKS Ventures Inc.**		Melrose Park	Cook	10,000	LW	Chicago Title Land Trus	JKS Ventures	NA
27	**Lake Forest Transfer Facility**		Lake Forest	Lake	22,470	LW from Lake Forest	City of Lake Forest	DK Organics	NA
28	**Liberty Waste**		McCook	Cook	81,378	MSW, LW, recyclables, C&D	Liberty Waste, Allied su	Liberty Waste, Allied s	NA
29	**Loop Transfer - 64th Street**		Chicago	Cook	287,650	MSW, commercial, recyclables	Allied	Loop Transfer	NA
30	**Loop Transfer-Laflin**		Chicago	Cook	247,993	MSW, C&D, commercial	Allied	Loop Transfer	NA
31	**Medill Mat'l. Rec. & Recy.**		Chicago	Cook	190,121	MSW, recyclables, C&D recycling	City of Chicago	Allied	NA
32	**Meyer Material/MDC LSW TS**		McHenry	McHenry	5,000	LW	Meyer Material	Marengo Disposal	NA
33	**Midtown Transfer**		Chicago	Cook	89,100	MSW, commercial	BFI, Allied Subsidiary	BFI, Allied Subsidiary	NA
34	**Northlake Transfer Station 2**	“new”	Northlake	Cook	561	MSW, LW, recyclables, C&D	Northlake Transfer, Allie	Northlake Transfer, All	NA
35	**Northwest Mat'l. Rec. & Recy.**		Chicago	Cook	301,360	MSW, LW, recyclables	City of Chicago	Allied	NA
36	**Oak Development LLC 1 & b**	“new”	Lake Bluff	Lake	84,464	LW	Oak Development	DK Organics	NA
37	**Oak Forest Public Works**		Oak Forest	Cook	924	LW	City of Oak Forest	City of Oak Forest	NA
38	**Planet Recovery Transfer Station**		Chicago	Cook	374,902	MSW, recyclables, commercial	Allied	Allied	NA
39	**Recycling Systems Inc. 1**	“new”	Chicago	Cook	583,913	MSW, LW, C&D	RSI	RSI	$55/ton
40	**Riverdale Recycling Inc. a**		Riverdale	Cook	183,261	MSW, recyclables, C&D, tires	Tri State Disposal	Tri State Disposal	$55/ton
41	**Robbins Recycling & Transfer 1**	“new”	Robbins	Cook	72	MSW, nonhaz special waste	Village of Robbins	Allied	NA
42	**Shred-All Recycling Systems TS**		Chicago	Cook	238,443	MSW, recyclables, commercial, tires	American Disposal, Allie	Shred All, Allied subsic	NA
43	**SRS North Lot**		Chicago	Cook	47,337	C&D	ELK Corporation	Shred All, Allied subsic	NA
44	**Veolia ES SW MW LLC/E**		Evanston	Cook	164,972	MSW	Veolia	Veolia	$65/ton
45	**Veolia ES SW MW LLC/MP**		Melrose Park	Cook	500,000	MSW	Veolia	Veolia	NA
46	**Veolia ES SW MW LLC/N**		Northbrook	Cook	119,466	MSW, recyclables	Veolia	Veolia	NA

	name of facility	opened/ opening 2006-2009	municipality	county	tons in 2008	waste accepted (PIMW = potentially infectious medical waste)	owner	operator	tip fee for customers
47	**Veolia ES SW MW LLC/RM**		Rolling Meadows	Cook	168,442	MSW	City of Rolling Meadow	Veolia	$55/ton
48	**Waste Management/Bluff City TS 1**	“new”	Elgin	Cook	268,815	MSW, recyclables, C&D	Waste Management	Waste Management	$52.50/ton
49	**Waste Management/E**		Elburn	Kane	165,054	MSW, non special waste	Waste Management	Waste Management	$52.50/ton
50	**Waste Management/J**		Joliet	Will	322,000	MSW, C&D	Waste Management	Waste Management	$65/ton
51	**Waste Management/Rockdale**		Rockdale	Will	53,479	MSW, LW, recyclables	Waste Management	Waste Management	NA
52	**Waste Mgt.-Metro/S**		Stickney	Cook	247,993	MSW, PIMW	Waste Management	Waste Management	NA
53	**Waste Mgt.-Northwest/W**		Wheeling	Cook	251,087	MSW, LW, recyclables, C&D	Waste Management	Waste Management	NA
54	**Waste Mgt.-So. Suburbs/Rec. Am./A**		Alsip	Cook	120,037	MSW	Waste Management	Waste Management	NA
55	**West Cook Transfer Station**		Forest View	Cook	252,000	MSW, C&D recycling	Town and Country Tran	Heartland Recycling	$50/ton
56	**Winnetka Municipal LSW Trans.**		Winnetka	Cook	3,540	LW	Village of Winnetka	Village of Winnetka	NA
57	**Zion Municipal Trans. Stn.**		Zion	Lake	1,564	LW	City of Zion	City of Zion	NA
58	**Homewood**		East Hazel Crest	Cook	0	MSW, LW	Star Investments	Homewood Scavenger	NA
59	**James Park LSW TS 1**	“new”	not on list			LW	City of Evanston	City of Evanston	NA
60	**Kucera Disposal Company**		Cicero	Cook	0	MSW, recyclables, C&D	Frank Kucera	Frank Kucera	NA
61	**Land & Lakes/Wheeling LSW Transfer Station**		Deerfield	Lake	0	LW	Prairie Rec Developmer	Land and Lakes	$17-$19/ cu yd
62	**Land & Lakes/Willow Ranch LSW Transfer Station**		Romeoville	Will	0	LW	JMC Operations	Land and Lakes	$15/cu yd
63	**Mariani Landscape Transfer 1**	“new”	not on list						
64	**Montgomery Landscape Waste Collection Site**		Montgomery	Kane	0	LW	Village of Montgomery	Village of Montgomery	NA
65	**Mr. K’s Garden and Material Center Transfer Station**		Park Ridge	Cook	0	LW	Mr. K’s	Mr. K’s	NA
66	**Perricone Nursery LSW TS 1**	“new”	not on list			LW	Albany Bank and Trust	Perricone Brothers Lar	NA
67	**Prairie Lakes Recycling and Transfer 3**	“new”	Matteson	Cook	0	LW, C&D, recyclables	Matteson Investments	Land and Lakes	NA
68	**Ravenswood Disposal Service Transfer Station**		Chicago	Cook	0	C&D	Ravenswood Disposal	Ravenswood Disposal	NA
69	**River Bend Prairie Recycling and Transfer Facility**		Chicago	Cook	0	MSW, LW, recyclables, non special bulk v	Marina Developments	Land and Lakes	NA
70	**Star Disposal Service LSW Transfer Station**		Park Forest	Cook	0	LW	Star Investments	Homewood Scavenger	NA
71	**Star Disposal Service Transfer Station**		Park Forest	Cook	0	MSW	Star Investments	Homewood Scavenger	NA
72	**United Disposal of Bradley Transfer Station**		Bradley	Kankakee	0	MSW, recyclables	Municipal Trust and Sa	United Disposal of Bra	NA
73	**Veolia ES SW MW LLC.Batavia TS**		Batavia	Kane	0	MSW, LW, recyclables	Veolia	Veolia	NA
74	**Wilmette Village Yard**		Wilmette	Cook	0	LW	Village of Wilmette	Village of Wilmette	NA

APPENDIX F

COOK COUNTY MUNICIPAL SOLID WASTE GENERATION DATA

SOURCE: *ILLINOIS COMMODITY/WASTE GENERATION AND CHARACTERIZATION STUDY*, ILLINOIS RECYCLING ASSOCIATION, 2009

Cook County Municipal Solid Waste (MSW) Generation

	County Generation (lb/c/yr)	Total Generation (tons)
Paper	***887.1***	***2,344,210***
Newsprint	164.7	435,360
High Grade Office Paper	46.6	123,160
Magazines/Catalogs	62.8	165,860
Uncoated OCC/Kraft	405.1	1,070,520
Boxboard	40.6	107,210
Mixed Paper - Recyclable	71.3	188,290
Compostable Paper	73.9	195,240
Other Paper	22.2	58,570
Beverage Containers	***5.4***	***14,160***
Milk & Juice Cartons/Boxes - Coated	5.4	14,160
Plastic	***321.2***	***848,800***
#1 PET Bottles/Jars	25.6	67,700
#1 Other PET Containers	2.2	5,690
#2 HDPE Bottles/Jars - Clear	10.0	26,510
#2 HDPE Bottles/Jars - Color	14.6	38,510
#2 Other HDPE Containers	2.0	5,370
#6 Exp. Polystyrene Packaging	18.0	47,560
#3-#7 Other - All	18.2	48,120
Other Rigid Plastic Products	91.2	241,030
Grocery & Merchandise Bags	11.7	31,000
Trash Bags	25.8	68,300
Commercial & Industrial Film	31.5	83,240
Other Film	30.3	79,970
Other Plastic	40.0	105,800
Glass	***86.3***	***227,930***
Recyclable Glass Bottles & Jars	80.9	213,820
Flat Glass	3.8	10,100
Other Glass	1.5	4,010
Metal	***138.2***	***365,130***
Aluminum Beverage Containers	15.7	41,430
Other Aluminum	13.0	34,320
HVAC Ducting	0.7	1,740
Ferrous Containers (Tin Cans)	27.0	71,330

	County Generation (lb/c/yr)	Total Generation (tons)
Metal		
Other Ferrous	55.2	145,980
Other Non-Ferrous	5.1	13,530
Other Metal	21.5	56,800
Organics	***582.3***	***1,538,700***
Yard Waste - Compostable	73.3	193,780
Yard Waste - Woody	67.3	177,850
Food Scraps	314.3	830,640
Bottom Fines & Dirt	20.0	52,910
Diapers	46.8	123,610
Other Organic	60.5	159,910
Inorganics	***136.6***	***361,050***
Televisions	6.5	17,250
Computer Monitors	4.6	12,140
Computer Equipment/Peripherals	5.2	13,870
Electronic Equipment	24.3	64,090
White Goods - Refrigerated	8.6	22,770
White Goods - Not refrigerated	19.0	50,140
Lead-acid Batteries	16.0	42,290
Other Household Batteries	1.0	2,770
Tires	29.0	76,600
Household Bulky Items	22.2	58,780
Fluorescent Lights/Ballasts	0.1	350
Textiles	***159.8***	***422,270***
Carpet	38.7	102,360
Carpet Padding	5.7	15,090
Clothing	48.5	128,140
Other Textiles	66.9	176,680
Household Hazardous Waste	***28.8***	***76,190***
Construction and Demolition Debris (C&D)	***656.5***	***1,734,820***
Total MSW (tons)		***7,933,260***
Total MSW (pounds/person/day)		***8.22***

2007 population 5,285,107

County generation based on 2007 data.

APPENDIX G

REGIONAL RECYCLING LINKS AND RESOURCES

EcoPoint Illinois (Statewide Recycling Database launched June 2011)
Search Engine available through www.illinoisrecycles.org

Earth 911 Online Searchable Database
http://earth911.com

Household Hazardous Waste Drop-off sites
Three permanent locations operated by IEPA Bureau of Land:
Gurnee
Rockford
Naperville

City of Chicago Department of Environment
Construction & Demolition Debris Recyclers in the Chicagoland Area
(document follows)

IEPA E-Waste Collection Sites
(document follows)

CONSTRUCTION & DEMOLITION DEBRIS RECYCLERS IN THE CHICAGOLAND AREA

WILL ACCEPT SORTED MATERIALS ONLY

North

Architectural Artifacts
4325 N. Ravenswood Ave., Chicago
(773) 348-0622
Material: Architectural Antiques

Crush-Crete, Inc.
600 S. Lombard St., Addison
(630) 627-1713
Material: Clean concrete

Curran Contracting
941 Skokie Highway, Lake Bluff
(847) 689-1181
Material: Asphalt

Delta Demolition
1230 N. Kostner Ave., Chicago
(773) 252-6370
Material: Bricks

Jan's Antiques
225 N. Racine Ave., Chicago
(312) 563-0275
Material: Architectural Antiques

Midwest Aggregates
28435 Rte. 173, Antioch
(847) 395-2595
Material: Asphalt & Concrete (no dirt)

Murco Recycling Enterprises
347 N. Kensington, La Grange
(708) 352-4111
Material: Cabinets, working appliances, flooring & bathroom items in good condition.

Orange Crush LLC
231 S. Wheeling Rd., Wheeling
(847) 537-7900
Material: Asphalt & Concrete

Orange Crush Recycling
3219 Oakton St, Skokie
(847) 677-7780
Material: Asphalt, Concrete, Dirt

Renovation Source
3512 N. Southport Ave., Chicago
(773) 327-1250
Material: Decorative Material

Vulcan Materials
841 Skokie Highway, Lake Bluff
(630) 261-8787
Material: Concrete

Waste Management of Illinois
1500 N. Hooker St., Chicago
(800) 796-9696
Material: Glass, Plastic & Cardboard

Windy City Recycling
2035 Indian Boundary Drive, Melrose Park
(708) 345-9344
Material: Concrete

South

Adams Brick Company
2671 E 100th St., Chicago
(773) 221-4223
Material: Bricks

Central Blacktop
6160 S. East Ave., Hodgkins
(708) 482-9660
Material: Asphalt

CID RDF (Waste Management)
138th & Calumet Expressway, Calumet City
(773) 646-3099
Material: Asphalt, Concrete, Bricks, Wood

Colonial Brick Company
2222 S. Halsted Ave., Chicago
(312) 733-2600
Material: Bricks

Gallagher Asphalt
18100 S. Indiana Ave., Thornton
(708) 877-7160
Material: Asphalt

Homewood/Nu Way/Star Disposal
1501 W. 175th St., Hazel Crest
(708) 798-1004
Material: Asphalt & Concrete

K-Five Construction
16222 Western Ave., Markham
(708) 331-1775
Material: Asphalt & Concrete

K-Five Construction
13769 Main St., Lemont
(630) 257-7779
Material: Asphalt & Concrete

K-Five Construction
12401 S. Cottage Grove Ave., Chicago
(773) 264-0189
Material: Asphalt & Concrete

Lindahl Bros. Inc.
3301 S. California, Chicago
(773) 622-4500
Material: Clean Concrete

Reliable Materials
3741 S. Pulaski Rd., Chicago
(630) 497-8700
Material: Concrete, Asphalt

Vulcan Materials
Rte. 66 & 55th St., McCook
(630) 261-8787
Material: Concrete

Vulcan
3920 S. Loomis, Chicago
(773) 890-2360
Material: Concrete Cardboard, Metal

Waste Management
3800 S. Laramie Ave., Cicero
(708) 656-5350
Material: Asphalt, Concrete, Bricks, Wood, Cardboard, Metal

WILL ACCEPT MIXED MATERIALS

North

BFI
5050 W. Lake St., Melrose Park
(708) 345-7050
Material: Asphalt, Bricks, Concrete

CornerStone Material Recovery
4172 Bull Valley Rd. McHenry
(815) 344-8777
Material: Wood, Cardboard, Metal, Concrete, Brick, Aluminum, Asphalt, Yard waste, Drywall

Disposal Management
420 Cutters Mill Ln., Schaumburg
(847) 884-7676
Material: Brick, Concrete, Wood, Cardboard, Steel, Drywall

JKS Ventures Inc. (D&P Construction)
3800 W. Lake St., Melrose Park
(708) 338-3534
Material: Wood, Concrete, Bricks, Drywall, Dirt, Cardboard, Landscape material, Metal

Planet (Allied)
1750 W. Carroll Ave., Chicago
(312) 226-0092
Material: Bricks, Concrete, Asphalt

Ravenswood Disposal
200 N. Talman Ave., Chicago
(773) 638-7676
Material: Concrete, Wood, Bricks, Drywall, Sand

South

Allied Waste/ Liberty Waste/McCook
5100 S. Lawndale Ave., McCook
(708) 728-0331
Material: Concrete, Wood, Bricks

Brackenbox
2300 W 167th St. Markham
(773) 298-9161
Material: Bricks, Concrete, Drywall, Sand, Soil, Wood

Heartland Recycling
6201 W. Canal Bank Rd. Forest View
(708) 458-9800
Material: Wood, Bricks, Dirt, Concrete, Landscape material

Kucera Disposal Co.
1800 S. Laramie, Cicero
(708) 652-0025
Material: Metal, Wood, Concrete

Liberty Waste (Allied)
2040 E 106th St., Chicago
(773) 646-1260
Material: Concrete, Wood, Bricks

Loop Transfer (Allied)
2401 S. Laflin St., Chicago
(312) 226-1226
Material: Concrete, Wood, Bricks

Loop Transfer South (Allied)
16 W. 64th St., Chicago
(773) 994-6031
Material: Bricks, Concrete, Asphalt

Recycling Systems Inc.
3152 S. California Ave., Chicago
(773) 579-1999
Material: Bricks, Concrete, Asphalt, Wood, Drywall, all C&D Materials.

Shred-All (Allied)
1231 W. 42nd St., Chicago
(773) 523-5404
Material: Bricks, Concrete, Asphalt

Note: This list is not all-inclusive; additional recyclers may be available. If you know of a recycler that should be included, please e-mail DOE at environment@cityofchicago.org.

The City of Chicago does not officially endorse these facilities and is not legally liable for the quality or price of their services.

REGISTERED RESIDENTIAL E-WASTE COLLECTION SITES IN COOK COUNTY
Source: IEPA

	City	Collection Site Address	Managing Collector	Collector Address*	Collector Phone No.
1	Glenview	1200 N. Milwaukee Ave.	Abt Electronics		847-774-5425
2	Berwyn	6221 W. Roosevelt Road	AE Computers, Ltd.		708-775-7500
3	Alsip	3837 W. 127th St.	American Scrap Metal Services, Inc.		708-239-0101
4	Tinley Park	7550 W. 183rd St.	Assistive Technology Exchange Network/UCP		708-444-8460, x231
5	Chicago	5000 W. Roosevelt Road	B-Best		708-366-7398
6	Addison	105 W. Laura Dr.	Chicago Battery Recycling		630-333-1072
7	Chicago	1150 N. North Branch	City of Chicago	33 N. LaSalle St., Chicago	312-742-4806
8	Chicago	9901 S. Torrence	Everlights, Inc.		773-734-9873
9	Chicago Heights	2611 East End Avenue	Gaby Iron and Metal Company		708-755-1930
10	Arlington Heights	2300 Hamilton Road	Genesis Electronics Recycling, Inc.	236 E. Kerry Brook Lane	888-788-4363
11	Glenview	515 Zenith Drive	Genesis Electronics Recycling, Inc.	236 E. Kerry Brook Lane	888-788-4363
12	Mt. Prospect	1136 S. Elmhurst Avenue	Genesis Electronics Recycling, Inc.	236 E. Kerry Brook Lane	888-788-4363
13	Lansing	3679 Ridge Road	Goodwill Industries of Michiana, Inc.	1805 Western Avenue	574-472-7320
14	Arlington Heights	1551 N. Dryden Avenue	Goodwill Retail Services	6055 N. 91st St., Milwaukee	414-489-2448
15	Chicago	1201 W. Washington Blvd.	Goodwill Retail Services	6055 N. 91st St., Milwaukee	414-489-2448
16	North Riverside	1900 Harlem Avenue	Goodwill Retail Services	6055 N. 91st St., Milwaukee	414-489-2448
17	Orland Park	7400 W. 159th St.	Goodwill Retail Services	6055 N. 91st St., Milwaukee	414-489-2448
18	Chicago Heights	1001-59 Washington Ave.	Intercon Solutions		708-756-9838
19	Des Plaines	1274 Rand Road	Maine Scrap Metal LLC		847-824-3175
20	Elk Grove Village	2700 Carl Blvd.	Micomp		630-860-4607, x101
21	Rolling Meadows	5201 Tollview Drive	Panasonic Corporation of North America		888-769-0149
22	Chicago	3053 N. Knox Ave.	PC Rebuilders & Recyclers, LLC		773-545-7575
23	Chicago	11235 S. Cottage Grove	Recycle Tech Solutions		773-821-9700, ext.303
24	Chicago	11600 S. Burley St.	Regency Technologies, Inc.	6111 Cochran Rd., Solon OH	440-287-7438
25	Chicago	1509 W. Cortland	Sims Recycling Solutions, Inc.	1600 Harvester Road, West	630-231-6060 x209
26	Chicago	3151 S. California	Sims Recycling Solutions, Inc.	1600 Harvester Road, West	630-231-6060 x209
27	Chicago	2500 S. Paulina	Sims Recycling Solutions, Inc.	1600 Harvester Road, West	630-231-6060 x209

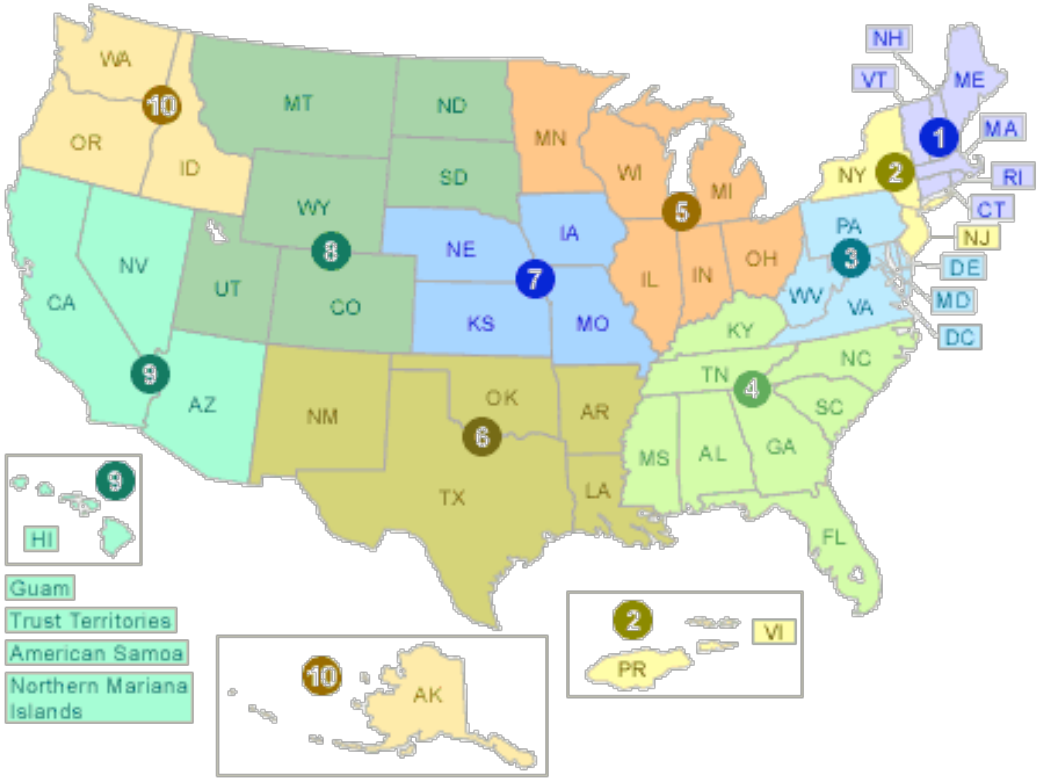
REGISTERED RESIDENTIAL E-WASTE COLLECTION SITES IN COOK COUNTY
Source: IEPA

	City	Collection Site Address	Managing Collector	Collector Address*	Collector Phone No.
28	Franklin Park	3700 N. Runge Ave.	Sims Recycling Solutions, Inc.	1600 Harvester Road, West	630-231-6060 x209
29	Glenview	1333 Shermer Road	Solid Waste Agency of Northern Cook County	2700 Patriot Blvd, Suite 110	847-724-9205 x9
30	Hoffman Estates	1900 Hassell Road	Solid Waste Agency of Northern Cook County	2700 Patriot Blvd, Suite 110	847-724-9205 x9
31	Morton Grove	7850 Nagle Avenue	Solid Waste Agency of Northern Cook County	2700 Patriot Blvd, Suite 110	847-724-9205 x9
32	Winnetka	1390 Willow Road	Solid Waste Agency of Northern Cook County	2700 Patriot Blvd, Suite 110	847-724-9205 x9
33	Alsip	12841 S. Pulaski Rd.	Universal Scrap Metals, Inc.	2500 W. Fulton St., Chicago	312-666-0011
34	Chicago	2500 W. Fulton St.	Universal Scrap Metals, Inc.		312-666-0011
35	Northbrook	1227 Cedar Lane	Village of Northbrook	1225 Cedar Lane, Northbrook	847-509-5365
36	Oak Lawn	5532 W. 98th Street	Village of Oak Lawn	9446 S. Raymond Avenue	708-499-7806
37	Arlington Heights	516 S. Mitchell Ave.	Waste Not Re-Sourcing		847-275-4940
38	Schaumburg	30 Amboy Lane	Waste Not Re-Sourcing		847-275-4940
39	River Grove	Triton College Pkg. Lot	West Cook County Solid Waste Agency	2000 Fifth Avenue, Bldg. N,	708-453-9100
40	Chicago	13707 S. Jeffrey	WM South Chicago MRF	3730 E. 48th Avenue, Denver,	800-796-9696
41	Bensenville	1107 Ellis Avenue	Xerox	800 Phillips Road; Webster,	630-496-7606

APPENDIX H

USEPA and IEPA Regional Offices

USEPA Regions 1-10



IEPA Regions 1-7