

City Of Urbana  
Recycling Update  
Review of Recycling Diversion Rates  
For FY 0203



Public Works Department  
Environmental Management Division  
November 2003

# Diversion Rates

- **Diversion Rate:** Defined as the net weight of recyclables divided by the waste/resources generated. This can be measured overall, ie. citywide or for any given waste generation category. The name is derived from resource management programs – recycling and/or composting – that divert resources that would otherwise be landfilled.
- This report takes a look at:
  - Waste/resource generation rates overall and for specific categories
  - Diversion rates from 2 views:
    - **By resource management type**
      - Recycling, and
      - Composting
    - **By generation category:**
      - Residential,
      - Commercial/Institutional, and
      - Construction & Demolition

# Waste/Resource Generation

- Nationally (USEPA 2000 Report)
  - 232 million tons  
(Residential & Commercial categories only,  
no C&D or Industrial)
  - 4.5 pounds per capita per day (PCD)
- Illinois (IEPA 2001 report)
  - 15.6 million tons (all categories)
  - 6.9 PCD
  - 6.1 PCD in (Region 4 East Central)
- Urbana (1991 County Solid Waste Plan)
  - 38,729 tons (all categories)
  - 5.68 PCD

# Urbana Waste/Resource Generation Categories

<u>Category</u>	<u>PCD</u>	<u>%</u>	<u>TONS/YR.</u>
Residential	2.06	36	14,046
Commercial	1.37	24	9341
Institutional	.41	7	2796
C & D	1.84	32	12,546
<b>Totals</b>	<b>5.68</b>	<b>100</b>	<b>38,729</b>

[C & D is an acronym for Construction & Demolition debris.  
Tons per year are calculated by multiplying the PCD by 365  
days and the population 37,362 and dividing by 2000 pounds]

# Waste/Resource Management Overview

## Total Diversion Rates

US - 30.1%

Illinois – IEPA 25.9%, Counties 35.7%

Urbana – 36.0%

(Recycling & Composting Combined)

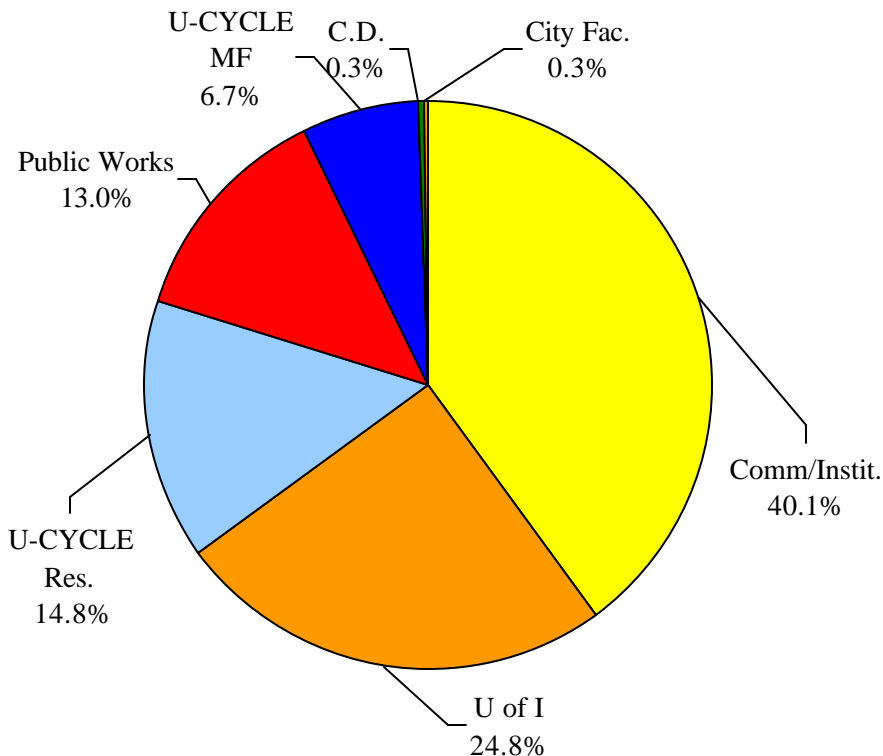
Region	Recycling	Composting	Combustion	Landfill
US	23.0%	7.1%	14.6%	55.3%
Illinois				
IEPA	24.4%	1.5%	0	74.1%
Counties staff	33.6%	2.1%	0	64.3%
Urbana	24.7%	11.3%	0	64.0%

# Diversion by Resource Management Type

# All Recycling Sources

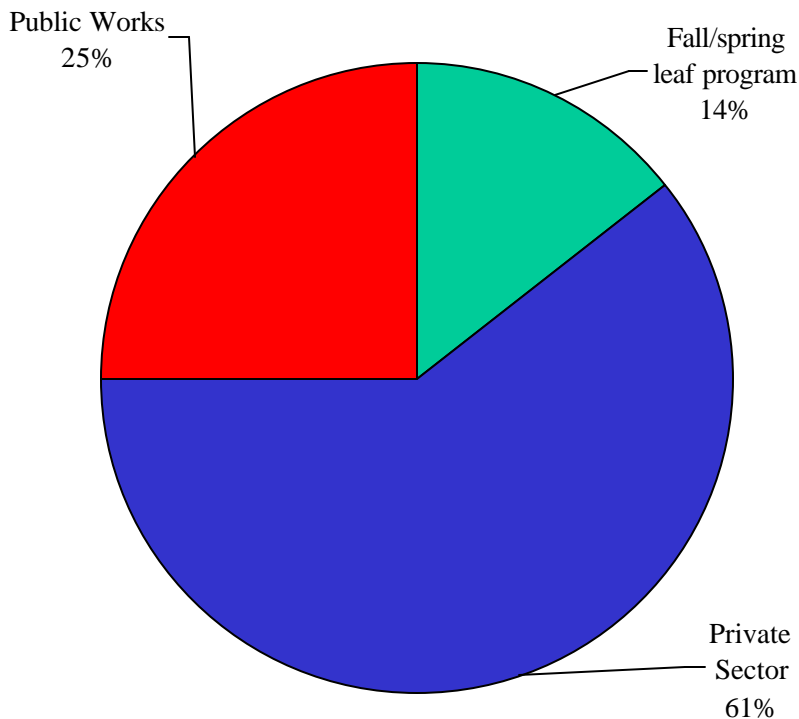
## Diversion Rate – 24.7%

<u>Sources</u>	<u>Tons</u>
Commercial/Institutional	3848
University of Illinois	2377
U-CYCLE, residential	1419
Public Works	1248
U-CYCLE, multifamily	643
C. D. Cleanups	32
City facilities, except PW	29
<b>TOTAL</b>	<b>9596</b>



# All Composting Sources Diversion Rate – 11.3%

<u>Sources</u>	<u>Tons</u>
Fall/spring leaf program	628
Private Sector	2654
Public Works	1096
<b>TOTAL</b>	<b>4378</b>





# Diversion by Generation Category

# Urbana

## Diversion Rates Summary by Generation Category

<i>Category</i>	<i>Generation Tons</i>	<i>Recovery Tons</i>	<i>Diversion Rate</i>
Residential	14,046	6033	42.9%
Commercial/ Institutional	12,137	6730	55.4%
C & D	12,546	1210	9.6%
<b>TOTAL</b>	<b>38,729</b>	<b>13,973</b>	<b>36.0%</b>

# Urbana Residential Detail

## Sector Diversion Rate –42.9%

(6033 tons/14,046 tons)

Source	Recycled Tons	Diversion Rate of Source
U-CYCLE, Residential	1419	10.1
U-CYCLE, Multifamily	643	4.5
C.D. Cleanups	32	0.2
U of I	1188	8.5
<b>Recycling Subtotal</b>	<b>3282 (54.4%)</b>	<b>23.3</b>
Leaf program Fall/spring	629	4.5
Private sector Trees/landscape	2122	15.1
<b>Composting Subtotal</b>	<b>2751 (45.6%)</b>	<b>19.6</b>
<b>TOTALS</b>	<b>6033</b>	<b>42.9%</b>

# Urbana Residential Detail U-CYCLE Programs Only

Source	Waste Generation Tons	Recycled Tons	Diversion Rate
Residential 1-6plex	7032	1419	20.2%
Multifamily 7 units or more	3938	643	16.3%
<b>TOTALS</b>	<b>10,970</b>	<b>2062</b>	<b>18.8%</b>

# Urbana

## Commercial/Institutional Detail

### Sector Diversion Rate – 55.4%

(6730 tons/12,137 tons)

Source	Recycled Tons	Diversion Rate of Source
Private Haulers	3848	31.7
Public Works	39	0.3
City Facilities	29	0.2
U of I	1188	9.8
<b>Recycling Subtotal</b>	<b>5104 (75.8%)</b>	<b>42.0</b>
Public Works	1096	9.0
Private Haulers	530	4.4
<b>Composting Subtotal</b>	<b>1626 (24.2%)</b>	<b>13.4</b>
<b>TOTALS</b>	<b>6730</b>	<b>55.4%</b>

# Urbana

## Construction & Demolition Detail

Sector Diversion Rate - 9.6%

(1210 tons/12,546 tons)

Source	Recycled Tons	Percent of Sector Diversion Rate
Public Works	1210	100

# Summary

**The overall citywide diversion rate is 36.0%.**

This is based upon the best available information. It is believed that the rate is likely higher, since recycling of construction and demolition debris has been calculated from only one source, Public Works. Recycling of concrete and asphalt and other construction related materials is certainly occurring, but identifying sources and quantities has not been thoroughly investigated.