



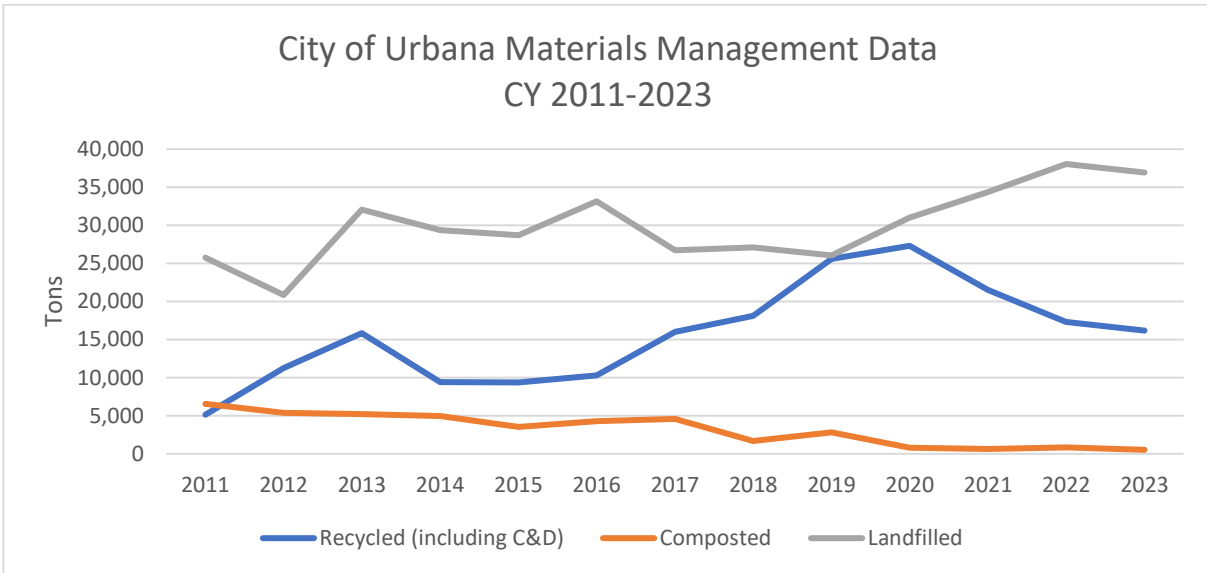
# ANNUAL REPORT

CY 2023

# URBANA MATERIALS MANAGEMENT CY 2023

## Diversion Rate

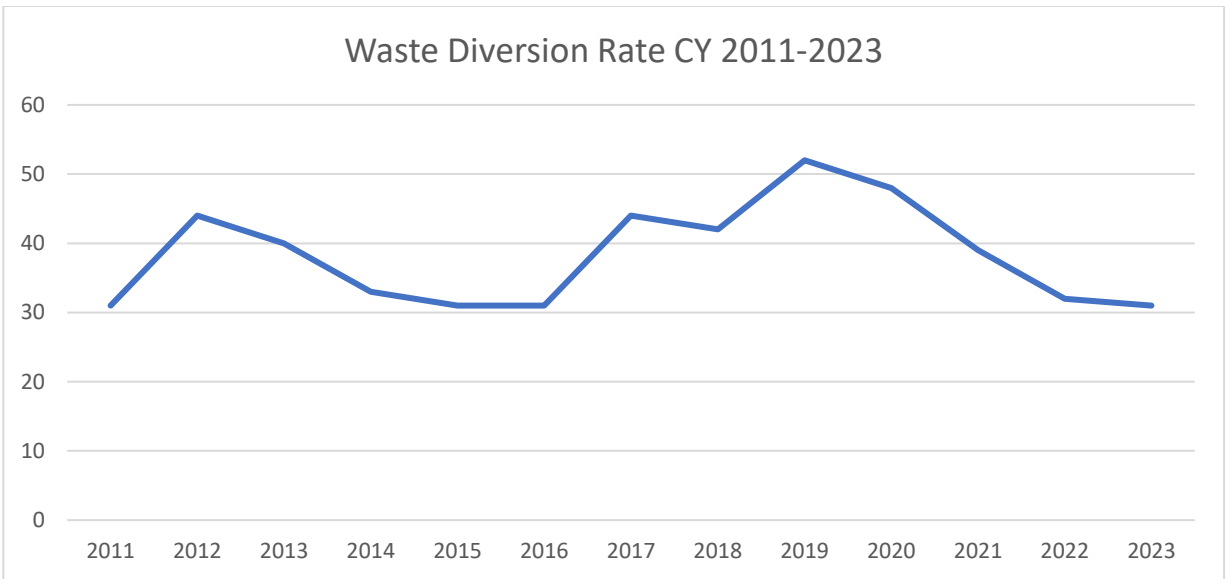
In 2023, there was a total of 53,603 tons of materials *generated* in Urbana. This includes garbage, recycled construction & demolition (C&D) debris, commodity recycling from households, and landscape materials composted. Data was compiled using the totals that haulers provide the City of Urbana, along with data from divisions within the Urbana Public Works department. Of the total materials generated, 36,913 tons were landfilled as garbage; 16,166 tons were recycled, including C&D; and 524 tons of landscape materials were composted. Urbana’s waste diversion rate in 2023 was 31%. Below is a look at recycled, composted, and landfilled tonnages since 2011.



The City of Urbana began tracking data in 2011 when licensed garbage haulers in Urbana were required to provide the quantity of garbage, recycling (including C&D) and landscape debris collected on an annual basis.

The waste diversion rate for the past 13 calendar years averaged 38%. The chart below shows the diversion rates (%) per year. Over the years there has been fluctuations in amount of waste generated, recycled, and composted. Most hauler data is an estimate, and other projects around the city determine rates of disposal or recycling.

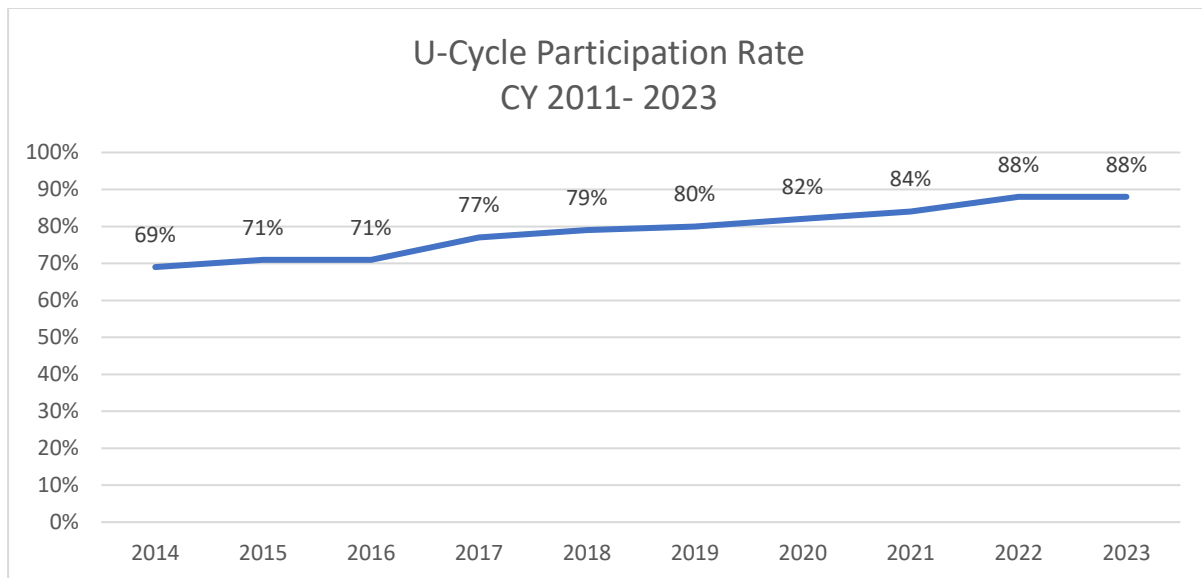
# URBANA MATERIALS MANAGEMENT CY 2023



## Participation Rate: Curbside U-Cycle Program

The participation rate in the curbside U-Cycle program has been tracked since 2014. In 2014, the participation rate was 69%. In 2023, the curbside U-Cycle participation rate stayed consistent to calendar year 2022, at 88%. Participation rate is calculated by dividing the total number of single-family through four-plex households in Urbana by the number of households that have requested a U-Cart or recycling bin (historically). Participation rate assumes those households with recycling receptacles are setting out recycling semi-frequently (averaging twice per month).

# URBANA MATERIALS MANAGEMENT CY 2023



## **Environmental Impacts**

In 2023, the curbside and multifamily U-Cycle programs recycled a combined 3,892 tons of commingled recycling, averaging 324 tons of recyclables collected and processed per month, an all-time high!

The positive environmental impacts of recycling were assessed using an environmental footprint calculator provided by Montgomery County, Maryland. For our purposes we are only including U-Cycle recycling totals for paper, and commingled materials which includes plastics, glass, and metals. Here are the results.

By recycling 5.7 million pounds of paper and 2 million pounds of plastics, glass and metals in the U-Cycle programs in 2023:

- 15,250 trees were saved.
- 183,000 gallons of oil was conserved.
- 1.7 million kWh of electricity was saved; and
- 4.6 million gallons of water was conserved.

# URBANA MATERIALS MANAGEMENT CY 2023



## Economic Impacts

In 2023, the average annual household garbage collection cost in Urbana was \$26.83/month or \$321.96 annually. The average recycling collection cost in Urbana was \$3.25/month or \$39/annually.

### Curbside Garbage Landfilled

- Curbside housing units 8,547
- Curbside Solid Waste Landfilled/Year (Est.) = 16,740 tons  
(Curbside households account for 44% of Urbana's housing)

# URBANA MATERIALS MANAGEMENT CY 2023

## Curbside Households Garbage Cumulative Cost (Based on annual hauler prices, not tipping fees)

- Estimated at \$2,751,792 per year.  
(8,547 HH x \$321.96/annual (avg.) = \$2,751,792)
- Cost per ton = \$164/ton  
((\$2,751,792 / 16,740 tons = \$164/ton)
- Cost per pound = \$0.08/lb.  
(\$164/ton / 2000 = \$0.08/lb.)

## Multifamily Garbage Landfilled

- Multifamily Housing Units = 9,180
- Multifamily Solid Waste Landfilled/Year (Est.) = 21,306 tons  
(Multifamily households account for 56% of Urbana's housing)

## Multifamily Households Garbage Cumulative Cost (Based on hauler prices, not tipping fees)

- Estimated at \$1,137,953 per year  
(9,180 units x \$10.33\*/unit/month (avg.)) x 12 months = \$1,137,953 per year
- Cost per ton = \$53/ton  
(\$1,137,953/21,306 tons = \$53/ton)
- Cost per pound = \$0.03/lb.  
(\$53 per ton / 2000 = \$0.03/lb.)

\* [Multifamily Waste Study – Hennepin County, MN](#)

# URBANA MATERIALS MANAGEMENT CY 2023

## Curbside Recycling Costs

- Annual contractual cost in CY 2023 = \$154,044
- Tons of curbside recyclables collected in CY 2023 = 2,338 tons
- Cost per ton = \$66/ton  
( $\$154,044 / 2,338 \text{ tons} = \$66/\text{ton}$ )
- Cost per pound = \$0.03/lb.  
( $\$66/2000 = \$0.03/\text{lb.}$ )

## Multifamily Recycling Costs

- Annual contractual cost in CY 2023 = \$190,000
- Tons of multifamily recyclables collected in CY 2023 = 1,554 tons
- Cost per ton = \$122/ton  
( $\$190,000 / 1,554 \text{ tons} = \$122/\text{ton}$ )
- Cost per pound = \$0.06/lb.  
( $\$122/2000 = \$0.06/\text{lb.}$ )

## **Conclusion**

Materials recycled (including C&D) have steadily increased since CY 2011, a positive sign that recycling outreach and promotion are making an impact. Materials landfilled have remained consistent the past three calendar years.

Urbana's diversion rate in CY 2023 was 31%. The average diversion rate since CY 2011 was 38%. Additionally, curbside recycling participation rate has remained steady the past two calendar years.

# URBANA MATERIALS MANAGEMENT CY 2023

Curbside garbage disposal costs per pound are higher than multifamily disposal costs due to bulk collection savings at multifamily properties. Multifamily recycling costs per pound are higher than curbside recycling costs due to lower tonnages collected, and higher contamination rates.

The U-Cycle programs (combined curbside + multifamily) had the highest recycling rate to date in CY 2023 with 3,892 tons of recyclables collected! Continued education and outreach efforts in the U-Cycle properties is necessary to maintain consistency and improvements in recycling rates moving forward.