



City of Seattle 2025 Residential Garbage and Recycling Streams Composition Study

EXECUTIVE SUMMARY

September 2026

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Executive Summary

The City of Seattle (the City) has been conducting ongoing waste composition studies since 1988 to better understand the make-up of Seattle's solid waste streams and to assess the City's recycling potential. The results of these studies are used to monitor progress toward the City's solid waste goals and meet contractual obligations.

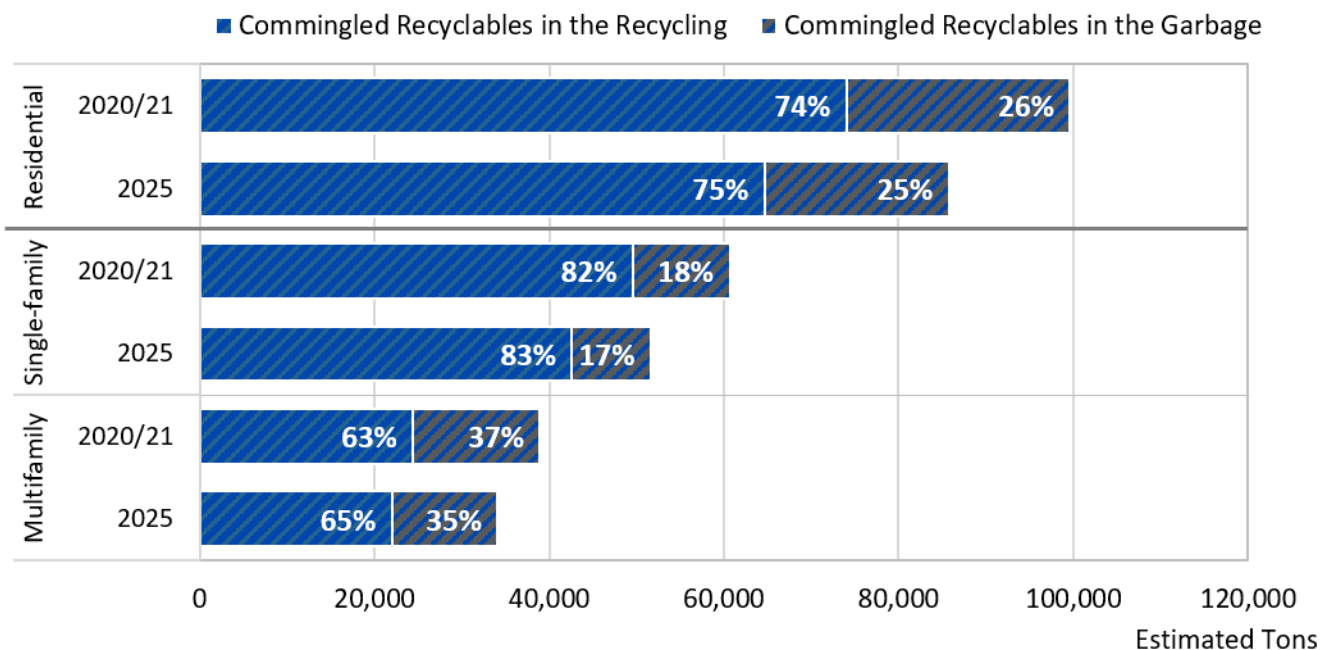
Cascadia Consulting Group (Cascadia) conducted this study in conjunction with Seattle Public Utilities (SPU) in 2025. The study includes residential garbage and recycling streams collected curbside by City-contracted haulers. Cascadia collected residential garbage and commingled recycling samples, including both single-family and multifamily sectors, over three sampling events in 2025 and applied the composition results to 2025 collection tons reported to SPU by franchised haulers. This study also draws comparisons with past residential garbage and recycling composition study results.

Commingled Recyclables Capture Rate Findings

Figure 1 shows the **Commingled Recyclables** tonnage and capture rates estimated by the 2020/21 study and 2025 study findings. Capture rate represents the proportion of **Commingled Recyclable** material (i.e., materials accepted for recycling in the City's residential recycling program) that residents successfully sorted in the recycling stream out of the total amount of **Commingled Recyclable** material generated.

- The residential capture rate of **Commingled Recyclables** increased from 74 percent in 2020/21 to 75 percent in 2025.
 - This means that Seattle residents in 2025 successfully sorted 75 percent of their **Commingled Recyclable** material into the recycling stream, while 25 percent was missorted into the garbage stream.
 - The **Commingled Recyclable** capture rates increased for both the single-family and multifamily sectors.
 - The single-family **Commingled Recyclable** capture rate increased from 82 percent in 2020/21 to 83 percent in 2025.
 - The capture rate of multifamily **Commingled Recyclable** materials in the recycling stream increased from 63 percent in 2020/21 to 65 percent in 2025.
- **Commingled Recyclable** materials in both the residential garbage and recycling streams decreased from 99,620 tons in 2020/21 to 85,750 tons in 2025.
 - The total tons of **Commingled Recyclable** materials decreased for both the single-family and multifamily sectors, from 60,668 tons in 2020/21 to 51,627 tons in 2025 for single-family and from 38,952 tons in 2020/21 to 34,123 tons in 2025 for multifamily.

Figure 1. 2020/21 – 2025 Capture Rates by Sector

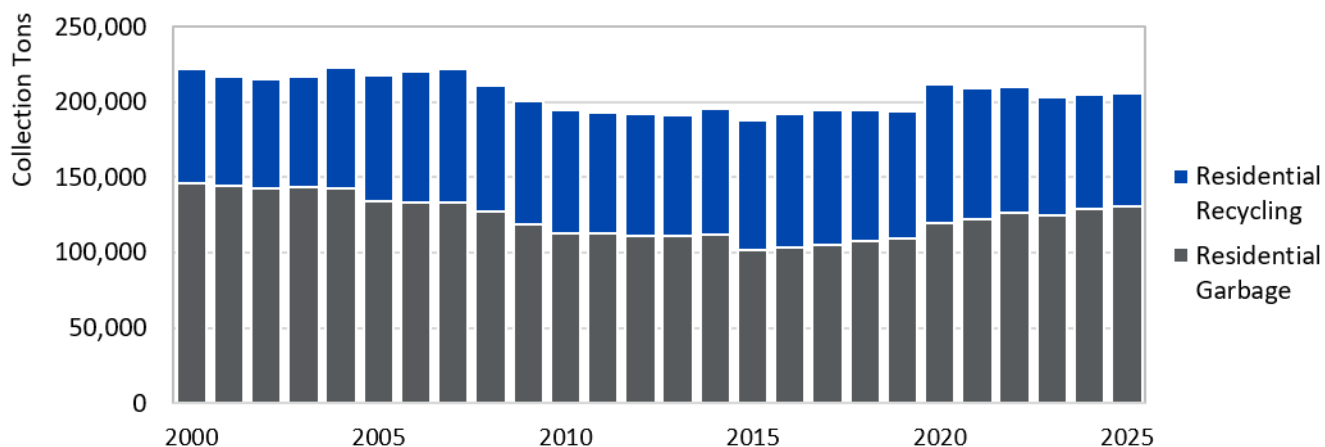


Trends in Residential Garbage & Recycling Collection Tons

Figure 2 shows curbside collection tons of garbage and recycling from the residential sector between 2000 and 2025.

- Residential garbage and recycling tonnage decreased between 2000 and 2025. In 2000, SPU reported a combined total of 222,226 collection tons, compared to 205,654 tons in 2025.
- Residential garbage tonnage decreased from a high of 145,832 collection tons in 2000 to a low of 101,972 collection tons in 2015.
 - In 2025, SPU reported 130,925 residential garbage collection tons.
- Residential recycling tonnage was highest in 2020, with 91,664 collection tons, and has decreased each year since then.
 - In 2025, SPU reported 74,729 tons collected for recycling.
 - Despite a decrease in recycling tonnage in 2025, residential recycling capture rates have increased since the 2020/21 study for both sectors.

Figure 2. 2000 - 2025 Tons by Stream: Residential

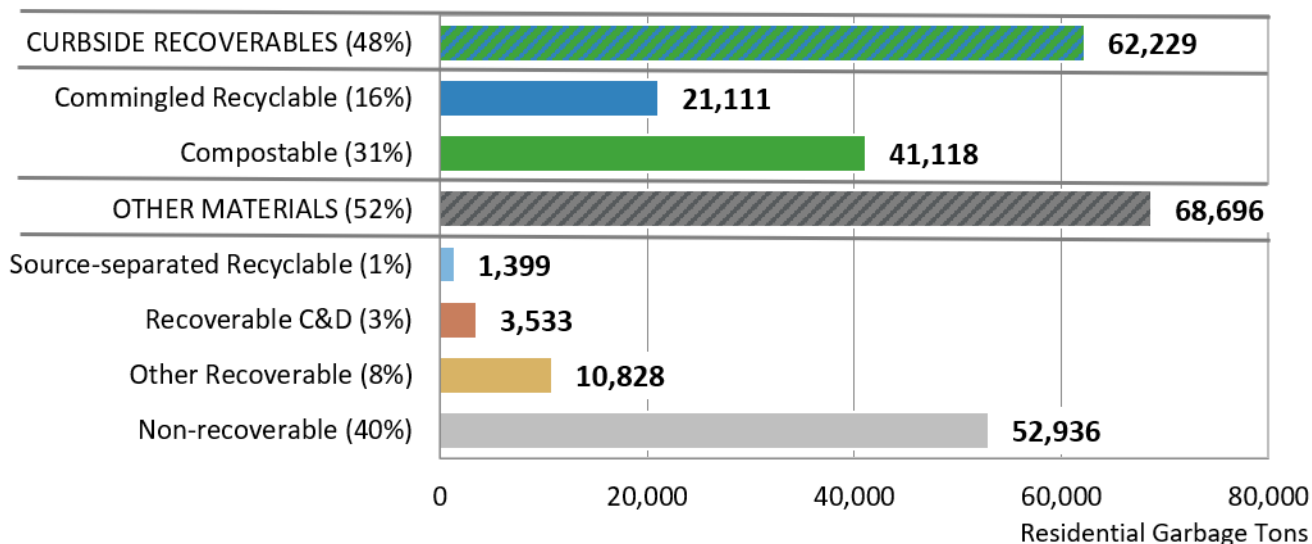


Garbage Study Findings

Figure 3 shows the recoverability class composition for the residential garbage stream, including the subtotals of curbside recoverables that could be recovered through the curbside commingled recycling or composting streams.

- Curbside recoverables accounted for 62,229 tons (48%) of the residential garbage stream.
 - **Commingled Recyclable** materials accounted for 16%, or 21,111 tons.
 - **Compostable** materials accounted for 31%, or 41,118 tons.
- Other materials accounted for 68,696 tons (52%) of the residential garbage stream.
 - **Non-recoverable** materials accounted for the greatest proportion of other materials in the residential garbage stream (40%, or 52,936 tons).
 - Prevalent **Non-recoverable** material types in the residential garbage stream included Diapers & Absorbent Pads, Animal By-products, and Mixed or Other Film.
 - **Other Recoverable** materials accounted for the second greatest proportion of other materials in the residential garbage stream (8%, or 10,828 tons).
 - Prevalent **Other Recoverable** material types in the residential garbage stream included Textiles and Mixed Textiles.
 - **Recoverable C&D** (3%, or 3,533 tons) and **Source-separated Recyclable** (1%, or 1,399 tons) accounted for the remainder of other materials in the residential garbage stream.

Figure 3. Recoverability Class Composition: Residential Garbage

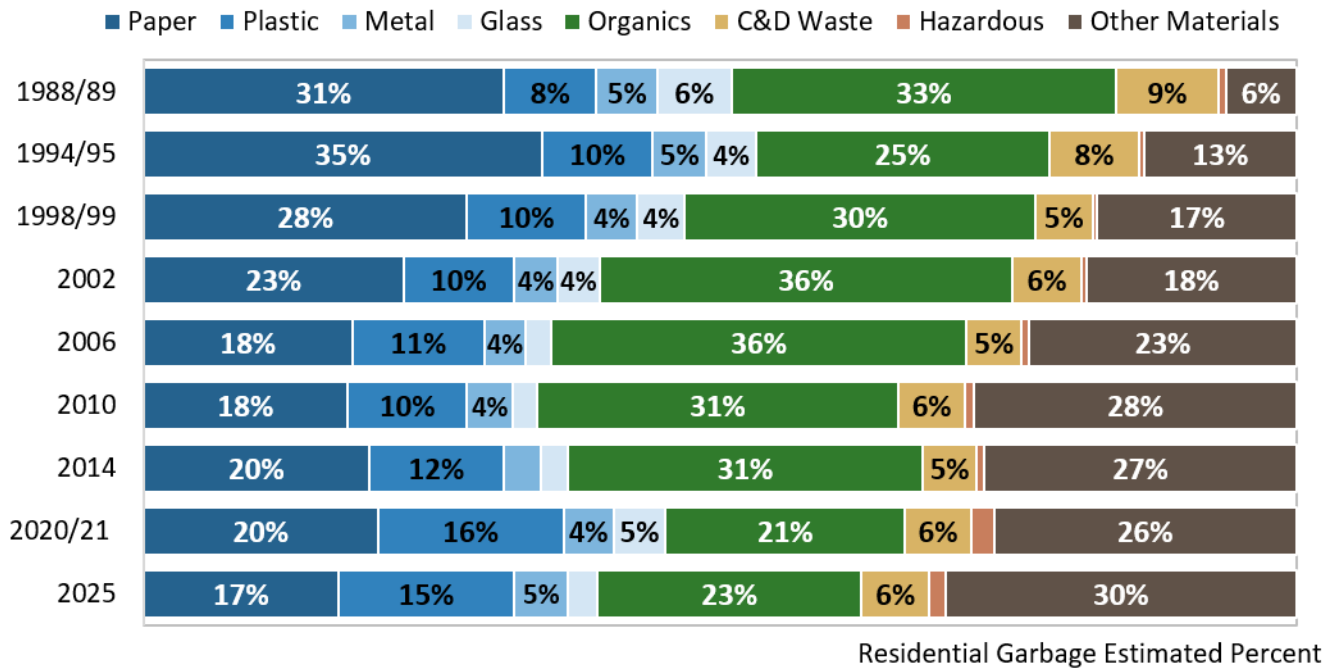


Trends in Garbage Composition

Figure 4 shows the material class composition in each residential garbage study year since 1988.

- **Paper** and **Organics** were the most prevalent material classes from the 1988/89 study to the 2002 study.
- From the 2006 study to the 2025 study, **Organics** and **Other Materials** were the two most prevalent material classes in the residential garbage stream.
- **Paper** has decreased from 1988/89 to 2025, from 31% to 17%.
- **Plastic** has increased from 1988/89 to 2025, from 8% to 15%.
- **Other Materials** has increased from 1988/89 to 2025, from 6% to 30%.
- **Metal, Glass, C&D Waste, and Hazardous Materials** each continue to represent a relatively small proportion of the residential garbage stream across all study years.

Figure 4. 1988 – 2025 Material Class Composition by Study Year: Residential Garbage

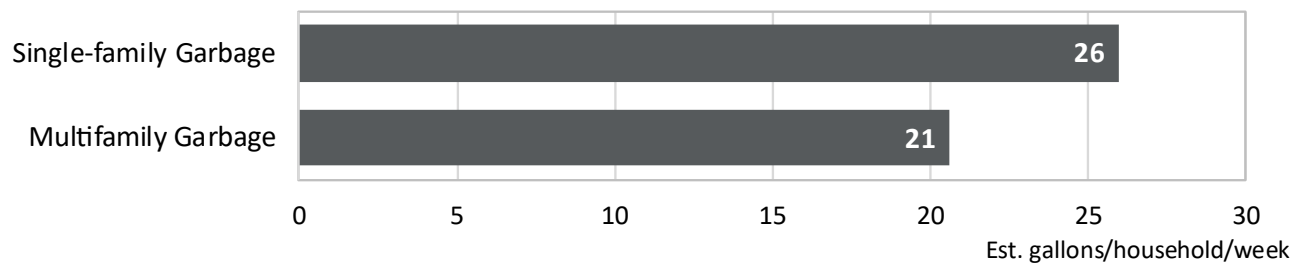


Estimated Garbage Generation Rate

Figure 5 shows the average generation rate of garbage in gallons per household per week for each sector.

- The average single-family generation rate was 26 gallons per household per week.
- The average multifamily generation rate was 21 gallons per household per week.

Figure 5. Stream Generation Rate: Residential Garbage

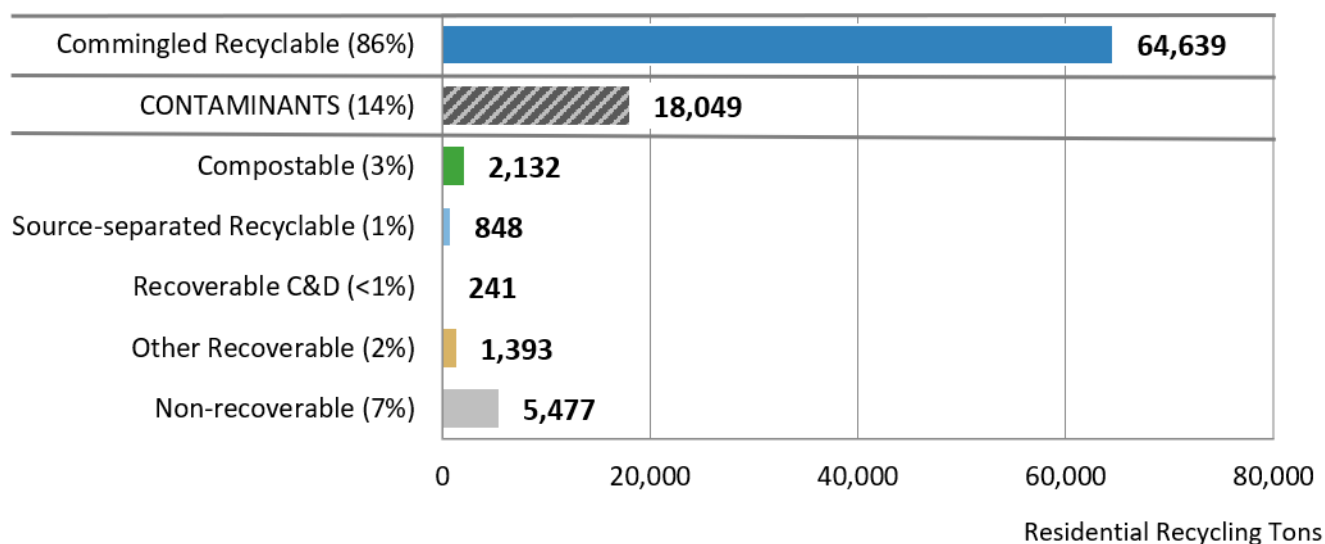


Recycling Study Findings

Figure 6 shows the recoverability class composition of the residential recycling stream, including collection tons and proportion of the stream for each recoverability class.

- **Commingled Recyclable** materials accounted for 64,639 (86%) of the residential recycling stream.
- The remaining portion of the stream (14%, or 18,049) was contaminant material, including:
 - **Non-recoverable** materials (7%, or 5,477 tons), which accounted for the second greatest proportion of the residential recycling stream.
 - Prevalent **Non-recoverable** materials in the residential recycling stream include Non-distinct Fines and Mixed or Other Paper.
 - **Compostable** materials (3%, or 2,132 tons), which are curbside recoverable materials but are not accepted in the residential recycling stream.
 - Prevalent **Compostable** materials in the residential recycling stream include Compostable Single-use Food Service Packaging and Packaged Edible Food.

Figure 6. Recoverability Class Composition: Residential Recycling



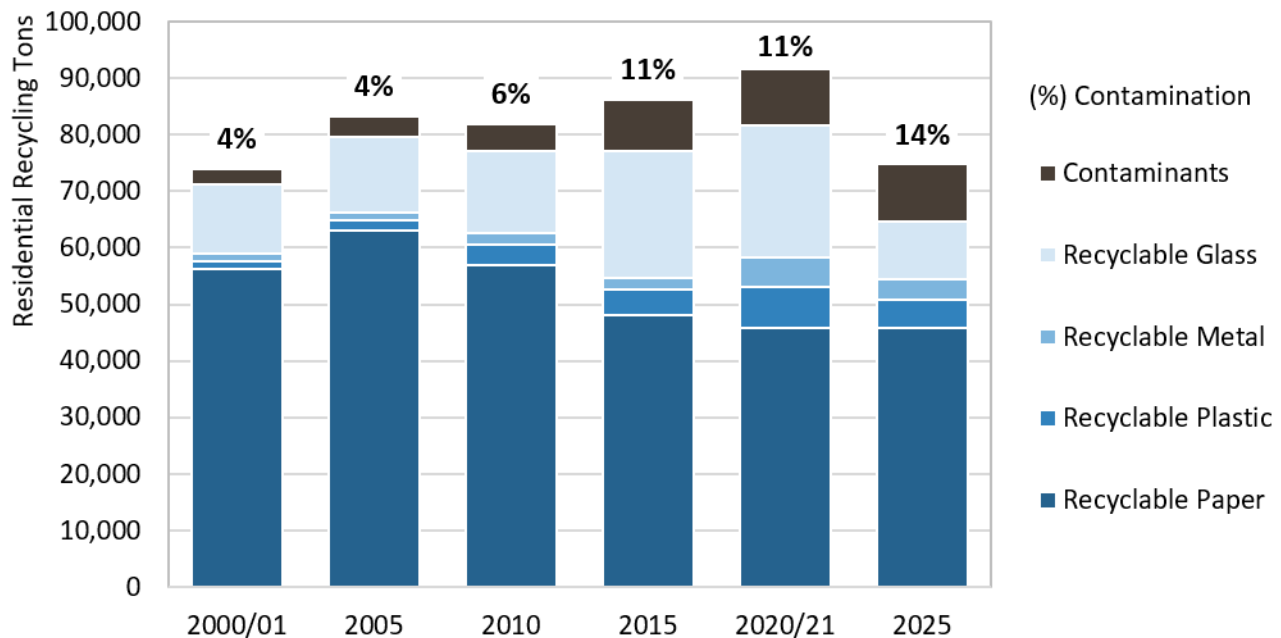
Trends in Recycling Composition

Figure 7 shows estimated tons of residential recycling by recoverable material class and for contaminants.

- **Recyclable Paper** continues to be the most prevalent material class, as it has been since the first recycling study in 2000/01; it consistently makes up more than half of collected commingled recycling.
- 2025 is the first year since 2000 that the proportion of **Recyclable Plastics** has not increased. The 5,002 tons of **Recyclable Plastic** estimated for 2025 was a decrease from the 7,227 tons estimated for 2020/21.
- The estimated tons of **Recyclable Glass** decreased to 10,104 tons in 2025, from 22,542 tons in 2015 and 23,270 tons in 2020/21.

- The contamination rate has continued to increase since the 2000/01 study. The contamination rate in 2025 was 14 percent, compared to 11 percent estimated in the 2015 and 2020/21 studies.

Figure 7. 2000 – 2025 Class Composition: Residential Recycling



Residential Recycling Generation Rate

Figure 8 shows the average generation rate of recycling in gallons per household per week for each sector.

- The average single-family generation rate was 23 gallons per household per week.
- The average multifamily generation rate was 10 gallons per household per week.

Figure 8. Stream Generation Rate: Residential Recycling

