

# **Moving Toward Zero Waste**

**2024 Annual Solid Waste Report** 



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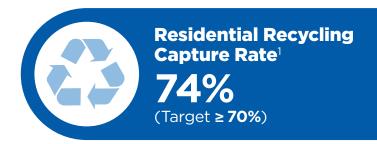


# At a Glance: 2024 Key Metrics Results











<sup>&</sup>lt;sup>1</sup>Recycling Capture Rate = Tons of collected residential recyclable material ÷ Tons of recyclable material in overall residential waste (which includes garbage, recycling, and compost).

<sup>2</sup>C&D Debris Diversion Rate = Percent of C&D materials kept out of the landfill for reuse, recycling, or another beneficial use.

# **Putting Prevention First**

Seattle is recognized globally for its leadership in solid waste management thanks to committed political leadership, thoughtful strategic planning, a willingness to try new things, and enduring community support.

Over the past several decades, Seattle Public Utilities (SPU) has implemented many successful policies and programs to reduce the amount of waste going to the landfill and increase diversion to recycling and composting.

But our waste stream is changing. More single-use packaging and hard-to-recycle products mean that recycling and composting alone won't get us to zero waste.

That's why in 2024, SPU's Solid Waste Line of Business established new metrics and targets focused not just on diversion but also on prevention. We are shifting the focus upstream, away from managing waste after it's created and toward stopping waste from being generated in the first place.

Meeting our waste prevention goals is critical to helping Seattle remain a leader in solid waste management and move toward a zero waste future. This report marks a pivotal step forward by introducing new prevention-focused metrics, and highlights recent program accomplishments, policy developments, and performance results that show our progress toward achieving our goals.



# What is Zero Waste?

In a zero-waste world, all materials have value, and we strive to waste nothing. We must look at the whole life cycle of materials so we can eliminate waste, prevent pollution, encourage product durability and reusability, conserve natural resources, and ultimately build a circular and inclusive economy. Zero waste protects health and the environment through the conservation of all resources from production through consumption without burning or pollution to land, water, or air.

# Measuring What Matters: New & Improved Metrics

Since 1988, the City of Seattle's (City) solid waste management goals have focused on the recycling rate—the percentage of municipal solid waste (MSW) kept out of the landfill by recycling, composting, and some reuse.

SPU's shift to prevention-focused metrics will improve how we track progress toward zero waste and align with the City's climate goals.

This shift is consistent with the actions of other solid waste industry leaders, including the U.S. Environmental Protection Agency, the Oregon Department of Environmental Quality, and the Washington State Department of Ecology, which discontinued tracking of the statewide recycling rate in 2016. It also reflects SPU's 2022 Solid Waste Plan Update and aligns with the C40 goal for reducing MSW.<sup>3</sup>

The new set of metrics includes:

- **Daily Waste Generated Per Person:** Measures the total amount of materials disposed, recycled, or composted by Seattle residents and businesses, excluding construction and demolition (C&D) debris hauled to third-party facilities
- **Daily Garbage Thrown Away Per Person:** Measures the amount of waste thrown into the garbage for landfill disposal across customer sectors, excluding C&D debris

# **Annual Food Waste Thrown Away in the Garbage:**

Measures the amount of food waste from Seattle residents and businesses that is thrown into the trash

**Residential Recycling Capture Rate:** Measures the weight of recyclable material collected for recycling divided by the weight of all recyclables in the waste stream, reflecting the percentage of recyclable materials that actually end up in recycling

## **Construction & Demolition (C&D) Debris Diversion Rate:**

Measures the amount of C&D material kept out of the landfill through recycling and beneficial use like burning for energy recovery

<sup>3</sup>Seattle is a member of C40, a global network of cities that are "united in action to confront the climate crisis."

## Municipal Solid Waste (MSW)

Municipal solid waste includes all the garbage, recyclable materials, and compostable organic materials collected in Seattle at home or work or hauled to a city transfer station. It includes some materials and items that need special handling, such as old refrigerators and tires, and excludes construction and demolition debris hauled to third-party facilities.

## **Preventing Food Waste**

Food waste is uneaten or unused food lost at any stage from production to distribution to consumption. Food waste can be edible food, spoiled food, and unusable food scraps like peels, pits, and bones.

Food disposed of in landfills is one of the largest sources of methane emissions, a potent greenhouse gas contributing to climate change. Keeping food waste out of the garbage is one of the most impactful opportunities for decreasing the environmental and social impacts of our waste.



# **New SPU Solid Waste Metrics and Targets**

The table below summarizes SPU's new solid waste performance metrics and targets.<sup>4</sup> Detailed explanations of each metric and 2024 results can be found in Appendix I: Key Metrics Results Detail.

METRIC	DESCRIPTION OF MEASUREMENT (All Measurements are Estimates)	TARGET
DAILY POUNDS OF MSW GENERATED PER PERSON	Total garbage + recycling + compostables per person <sup>5</sup> per day in pounds <sup>6</sup>	15% reduction (2015-2030) to 5.07 lbs/person/day
DAILY POUNDS OF MSW DISPOSED PER PERSON	Garbage thrown away per person <sup>5</sup> per day in pounds <sup>6</sup>	15% reduction (2015-2030) to 2.13 lbs/person/day
ANNUAL TONS OF FOOD WASTE DISPOSED (RESIDENTIAL + COMMERCIAL)	Total tons of food waste thrown out (residential + commercial) <sup>7</sup>	Tracked every 4-5 years
RESIDENTIAL RECYCLING CAPTURE RATE	Percentage of residential recyclables correctly sorted as recycling	≥ 70%
CONSTRUCTION AND DEMOLITION DEBRIS DIVERSION RATE	Percentage of C&D debris diverted to reuse/recycling/beneficial use <sup>8</sup>	≥80% by 2030 and increase proportion reused

<sup>&</sup>lt;sup>4</sup>As part of developing the new key solid waste metrics for annual reporting, SPU also reviewed the methodology and data sources used to calculate total annual tons of MSW, including diversion through recycling and composting. Several opportunities to improve the methodology have been identified and are being evaluated. The revised methodology will be completed and incorporated into the 2025 Annual Report, which will be published in 2026.

<sup>&</sup>lt;sup>5</sup>Based on City of Seattle Annual Growth Stats (residential) from the Washington State Office of Financial Management (OFM) for Seattle's residential population.

<sup>&</sup>lt;sup>6</sup>Excluding construction and demolition debris hauled to third-party facilities.

<sup>&</sup>lt;sup>7</sup>Through City-contracted garbage collection services.

<sup>&</sup>lt;sup>8</sup>Beneficial use is diverting C&D debris from landfills in a way that replaces another material in a manufacturing process. A common example is using untreated wood waste as a fuel for industrial boilers to replace other fuels. SPU defines "beneficial use" in <u>Administrative Rule #SPU-DR-01-07</u>. The Washington State Department of Ecology may also approve a specific use as beneficial use under <u>Washington Administrative Code 173-350-200</u>.

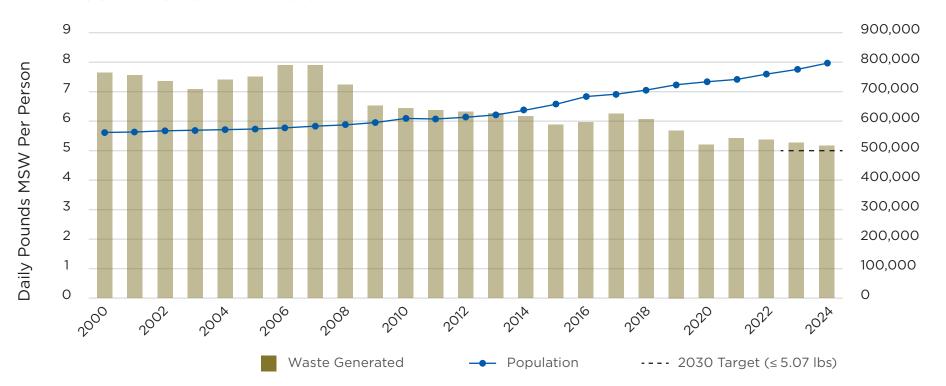


# **Daily Waste Generated Per Person Declined**

As population growth continued to outpace waste generated, the amount of MSW generated per Seattleite per day in 2024 declined to 5.21 pounds, down from 5.31 pounds in 2023. This marks the lowest level since 2000. (See Appendix I, page 1 for details.)

# **MSW Generated**

Daily pounds per person and population



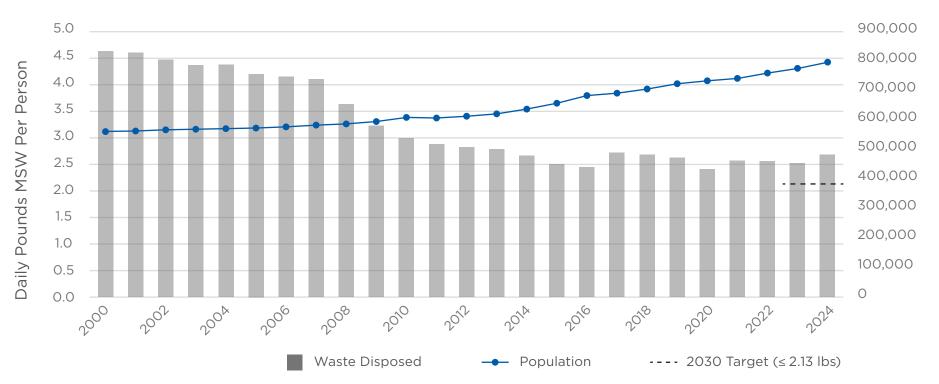


# **Daily Waste Disposed Per Person Increased**

People threw away about 2.68 pounds daily in 2024, up slightly from 2.54 pounds in 2023. This level has remained relatively stable over the past 10 years and puts us off track to reach SPU's target of 2.13 pounds of trash per person per day by 2030. With daily disposal per person increasing and daily waste generation per person decreasing, the share of our MSW being recycled and composted is declining. (See Appendix I, page 3, and Appendix III, page 15 for details.)

# **MSW Disposed**

Daily pounds per person and population



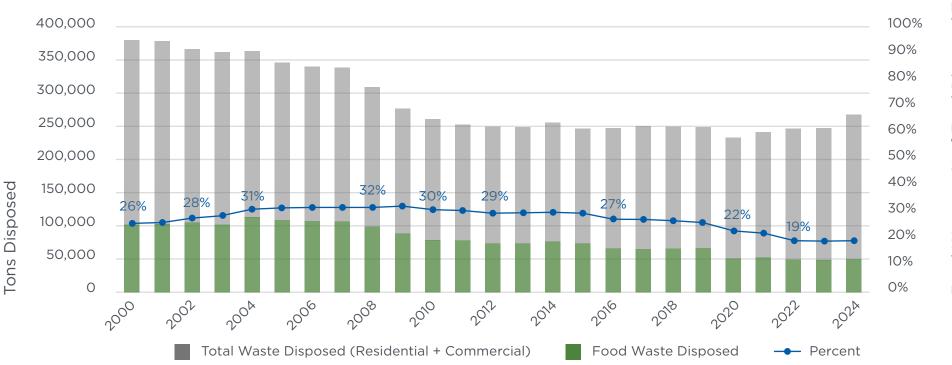


# **Estimated Disposed Food Waste Tons Increased**

Residents and businesses in Seattle threw out about 50,000 tons of food waste in 2024, which represents about 19% of all waste sent to the landfill.<sup>9</sup> While there is still progress to be made, food waste tonnage over the past four years has been 50% less than the peak level in 2004. (See Appendix I, page 5 for details.)

# **Food Waste Disposed**

Annual tons and percentage of total disposed tons



The data required to calculate the amount of food waste disposed to landfill is collected through waste composition studies conducted at approximately 5-year intervals. The next study will be conducted in 2026.

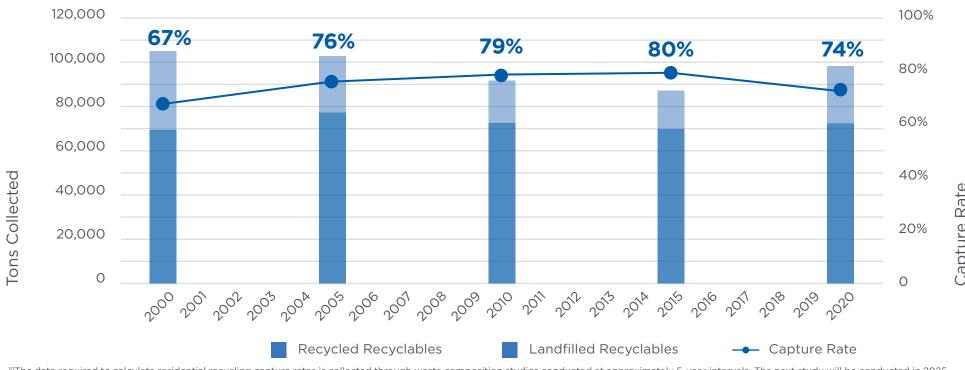


# **Nearly Three Quarters of Recycling** is Properly Sorted

Seattle residents correctly sorted 74% of their residential recyclables in 2020, down six percentage points from 2015, when SPU last measured this metric.<sup>10</sup> Despite this decline, Seattle households vastly outperform the average U.S. household with a curbside recycling program, which recycles about 57% of recyclable materials.<sup>11</sup> (See Appendix I, page 7 for details.)

# **Residential Recyclable Materials**

Tons collected and capture rate



<sup>&</sup>lt;sup>10</sup>The data required to calculate residential recycling capture rates is collected through waste composition studies conducted at approximately 5-year intervals. The next study will be conducted in 2025.

<sup>11</sup>Recycling Partnership, (2024), State of Recycling: The Present and Future of Residential Recycling in the U.S.

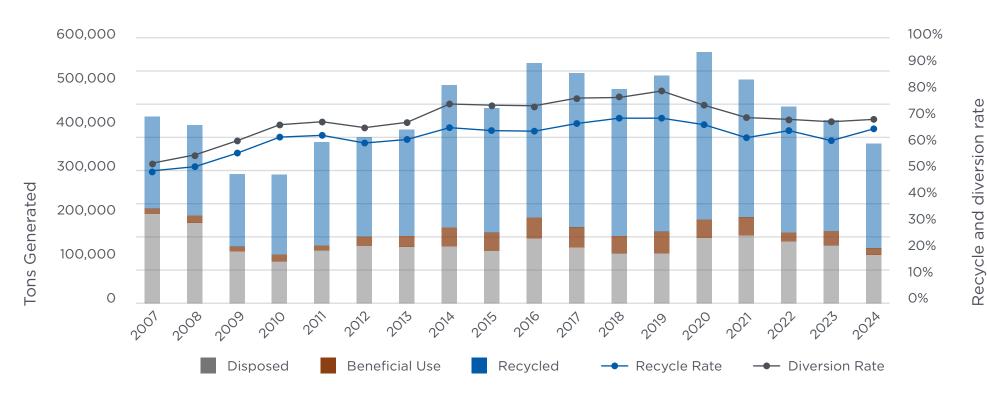


# The Construction & Demolition (C&D) Debris Diversion Rate Held Steady

The amount of C&D debris created by job sites fell for the fourth straight year in 2024, reflecting a continued slowdown in local construction activity and reaching its lowest point since 2011. C&D diversion from the landfill remained steady at 68.6%, falling short of SPU's 80% goal. (See Appendix I, page 9 for details.)

# **Construction & Demolition Debris**

Tons generated and recycle and diversion rate



# **Advancing Zero Waste Policies**

In the 2024 state legislative session, SPU celebrated accomplishments in affordability, environmental justice, and waste reduction.

#### **Highlights include:**

- Mercury Phase-Out and Bulb Recycling: House Bill 1185 extends
   Washington's LightRecycle program for fluorescent tubes and bulbs
   until 2035 and phases out the sale of mercury-containing lightbulbs
   by 2029.
- Food and Yard Waste: <u>House Bill 2301</u> funds food waste prevention and requires food and yard waste collection from single-family and commercial customers by April 2030. It also creates a work group to study food donation from businesses.
- Producer Responsibility: The Recycling Reform Act (formerly the Washington Recycling and Packaging Act) creates a statewide extended producer responsibility (EPR) system for consumer packaging and paper products. SPU's efforts from 2019 through 2024 helped lay the foundation for its successful passage in 2025.
- <u>Director's Rules (DR)</u> establishing requirements for food packaging (<u>DR Solid Waste-500</u>) and prohibiting certain C&D materials from disposal (<u>DR Solid Waste-640</u>) were updated.



# **Developing a Community-Centered Plan**

To develop a Waste Prevention Plan that will serve as a guide for future waste prevention and reuse programming, SPU engaged more than 1,000 residents and 100 businesses to collect perspectives on waste prevention motivations, practices, challenges, and opportunities between 2023 and 2024.

#### **Key themes included:**

- Environmental protection for current and future generations
- Shared responsibility among producers, businesses, and consumers
- Resources and incentives to encourage waste prevention and reuse
- Meaningful community connections and collaboration
- Reduced disparities and environmental justice

Using what we learned from the community, we developed draft goals, metrics, strategies, and ways to measure progress for waste prevention. We included voices from communities most impacted by pollution and often left out of decision-making, including Black and Indigenous communities, immigrants and refugees, people with disabilities, low-income residents, elders, youth, and people experiencing homelessness. By centering these voices in our planning, we are working to reduce disparities and increase equitable waste prevention opportunities and outcomes. The draft Waste Prevention Plan will be released in 2026 for public comment.



# **Expanding the Reuse Movement**

2024 was another successful year for <u>Reuse Seattle</u>, an initiative led by SPU and a coalition of reuse providers and local businesses to build a community-wide system for collecting, transporting, washing, and reusing food and beverage containers and make reuse the new norm.

In 2024, the Reuse Seattle team piloted reusable food service ware at events and expanded business participation.

## Key accomplishments included:

- Brought reusable cups and dishware to over 75 community events
- Provided incentives to over 50 businesses, including coffee shops and restaurants, to switch to reusable food service ware items
- Helped 16 local entertainment venues, including concert halls and SIFF theaters, introduce reusable cup and dishware programs









# It's Up to All of Us!

This report reflects a renewed commitment to reducing waste, cutting emissions, and building a more circular economy. We're making progress—but getting to zero waste will require action from all of us.

SPU is a leader in solid waste management thanks to you, our customers and community.

Your involvement remains critical as we continue along the path to a more sustainable, waste-free future.



Check out the following resources to learn more about preventing waste at home and at work:

Waste prevention tips Recycling tips



## Appendix I: Key Metrics Results Detail

#### Daily Pounds of MSW Generated Per Person

Municipal solid waste (MSW) generation represents the total amount of materials disposed, recycled, or composted by Seattle residents and businesses, excluding construction and demolition (C&D) debris hauled to third-party facilities. Reducing waste generation represents a significant opportunity to decrease greenhouse gas emissions globally.

SPU computes daily generation per person rates by dividing total MSW tons generated (in pounds) each year by the Washington State Office of Financial Management (OFM) population estimate for Seattle for that year and then by 365 (calendar days in a year).



SPU has set a bold yet feasible target of reducing the amount of MSW generation by at least 15% by 2030 relative to 2015, consistent with other global leaders in waste reduction. This equates to reducing daily pounds of waste generated per person from 6.0 pounds per person per day in 2015 to **5.07 pounds** per person per day in 2030.<sup>1</sup>

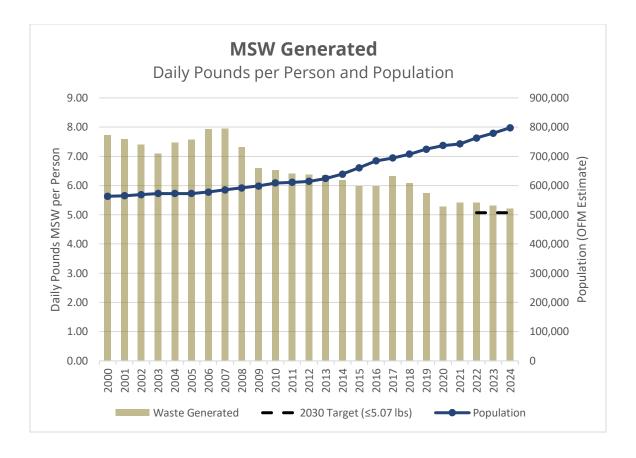
**RESULTS**: Daily MSW generation per person dropped sharply in 2020 at the onset of the pandemic, then gradually increased through 2021 and 2022. As pandemic conditions eased in 2023 and 2024 and more routine operations resumed, a slowdown in economic activity likely contributed to slowing the growth of waste generation.

In 2024, population growth continued to outpace generation, and daily MSW generation per person declined to **5.21 pounds** from 5.31 pounds in 2023. This marks the lowest amount of waste created per person on a daily basis in the past 25 years.

Since its peak of 7.94 pounds in 2007, the overall trend in Seattle's daily per person MSW generation has shown a steady decline.

1

<sup>&</sup>lt;sup>1</sup> The global network, C40, of which Seattle is a member, identified per person MSW generation as a key metric for cities interested in reducing waste and associated climate pollution. Using the baseline year of 2015 aligns with the C40 network and many other jurisdictions. The target year of 2030 signifies a significant international milestone for reducing worldwide climate-changing greenhouse gas emissions as detailed in Seattle's Climate Action Plan (2013). Cities such as Vancouver, Boston, Toronto, and San Francisco have also pledged to reduce waste generation to this target on this timeline



#### Daily Pounds of MSW Disposed Per Person

Daily pounds of garbage thrown away per person (daily MSW disposed per person) in Seattle's MSW system, excluding C&D debris hauled to third-party facilities, measures the total amount of waste collected for landfill disposal across customer sectors.

Similar to the daily pounds of MSW generated per person metric, SPU computes daily per person disposal rates by dividing total annual pounds disposed by OFM's Seattle population estimates and by calendar days (365).

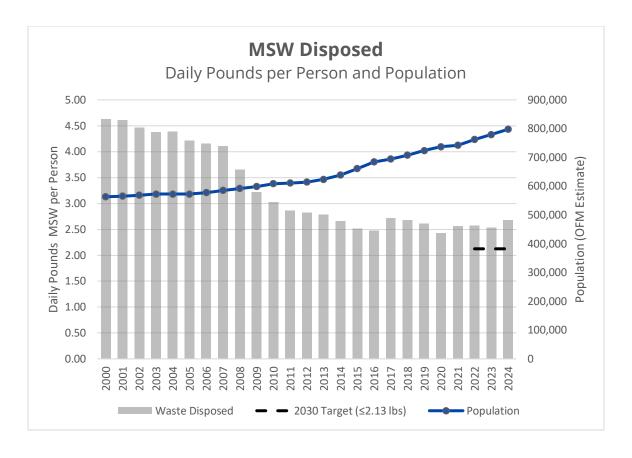


Consistent with SPU's target for daily MSW generated per person, SPU has set a target of reducing daily MSW disposed per person by at least 15% by 2030 relative to 2015. This translates to reducing landfilling from 2.5 pounds per person per day in 2015 to **2.13 pounds** per person per day by 2030.

**RESULTS**: In 2024, daily per person MSW disposed was **2.68 pounds**, up slightly from 2.54 pounds in 2023. Seattle's daily pounds of MSW disposed per person have fluctuated around 2.5 to 3 pounds per person per day since 2010 and dropped to a low of 2.43 pounds per person per day in 2020 during the height of the COVID pandemic. With daily disposal per person increasing and daily waste generation per person decreasing, the share of our MSW being recycled and composted is declining.

To achieve the target of 2.13 daily pounds of MSW disposed per person by 2030, SPU will need to take additional action. SPU has identified some promising opportunities to reduce MSW disposal at the two transfer stations it owns and operates that, if implemented, should help bring down overall MSW disposal in the City.

Seattle residents and businesses have the option of transporting their MSW directly to Seattle's two transfer stations, a practice referred to as "self-hauling." Although the self-haul sector accounted for less than a quarter (18.6%) of Seattle's MSW generation in 2024, it comprised a third of Seattle's landfilled MSW. 2024 marked the fourth year in a row that self-haul disposal reached a record high. SPU is evaluating options to address the rise in self-haul disposal—such as redirecting C&D debris haulers to the recycling facilities specifically designed for C&D materials instead of the transfer stations and implementing stricter enforcement to ensure materials originating from outside Seattle are not accepted.



#### Annual Tons of Food Waste Disposed (Residential + Commercial)

Reducing food waste in the garbage offers SPU one of the most promising options for decreasing the environmental and social impacts of MSW. Food not only comprises the single largest share of any given material in Seattle's residential and commercial garbage by weight, making up 20% of the tons disposed in each sector, but also has a disproportionately large environmental impact. <sup>2,3</sup> Disposal of food in landfills is one of the largest sources of methane emissions, a potent greenhouse gas, so understanding how much food is being thrown away in the garbage by Seattle residents and businesses is key for assessing whether the City's efforts to reduce carbon emissions from food waste are succeeding.

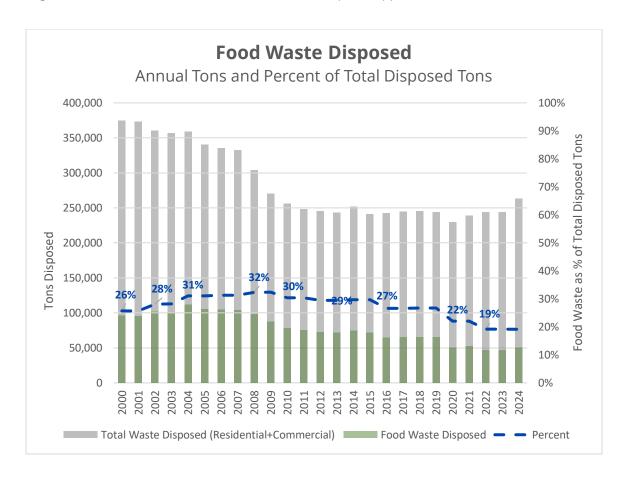
SPU measures the amount of food waste thrown away in the garbage by using detailed data from residential and commercial sector garbage, which is gathered through waste composition studies conducted at approximately five-year intervals.<sup>4</sup>

<u>RESULTS</u>: In 2024, residents and businesses in Seattle disposed of approximately **50,396 tons** of food waste, making up 19% of all waste sent to the landfill that year. While this reflects an increase of about 3,700 tons compared to 2023, it remains significantly lower than the pre-pandemic total of 65,261 tons in 2019. Food waste disposed hit a low in 2020, largely due to stay-at-home orders that significantly affected commercial activity.

<sup>&</sup>lt;sup>2</sup> Seattle Public Utilities, et al. (2022). *2020 Seattle Residential Garbage and Recycling Composition Study*. http://www.seattle.gov/documents/Departments/SPU/Documents/Reports/SolidWaste/2020ResidentialWasteRecyclingCompositionStudies.pdf

<sup>&</sup>lt;sup>3</sup> Jaglo, K., Kenny, S., Stephenson, J., & U.S. Environmental Protection Agency. (2021). *From Farm to Kitchen: The environmental Impacts of U.S. food waste* (EPA 600-R21 171). <a href="http://www.epa.gov/system/files/documents/2021-11/from-farm-to-kitchen-the-environmental-impacts-of-u.s.-food-waste">http://www.epa.gov/system/files/documents/2021-11/from-farm-to-kitchen-the-environmental-impacts-of-u.s.-food-waste</a> 508-tagged.pdf

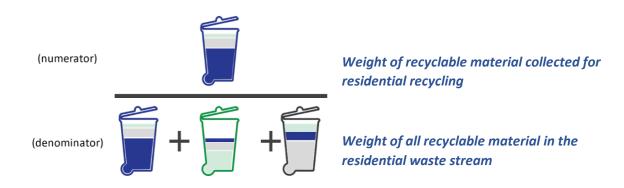
<sup>&</sup>lt;sup>4</sup> Food waste disposed is the percent, by weight, of the sector-specific garbage waste stream that is food multiplied by the total tons of garbage collected from each sector in a year. Because waste composition studies are conducted at approximately five-year intervals, the percentage of the garbage stream that is food waste will remain constant between study years but the tons of food waste disposed will vary with total tons disposed.



Despite Seattle's significant progress in reducing food waste in the garbage over the past 20 years, challenges remain. Residents continue to dispose of roughly twice as much food in the trash as they do in the food and yard waste bin. SPU sees significant opportunities for both prevention and diversion of food waste through actions in Seattle's 2022 Solid Waste Plan Update: Moving Upstream to Zero Waste, the Seattle Public Utilities Strategic Business Plan, and the Seattle Food Action Plan (2024 Update). As part of these ongoing efforts to mitigate food waste, SPU will be dedicating staff resources to focus on the largest generators of food waste in the commercial and multifamily sectors to ensure compliance with the City's ban on food waste disposal.

#### Residential Recycling Capture Rate

As the City focuses upstream to avoid more waste in the first place, SPU requires new metrics to track waste prevention efforts. That is why SPU now measures the recycling capture rate instead of the recycling rate. The residential recycling **capture rate** is the tons of materials designated as recyclable that are collected in the residential (single-family<sup>5</sup> + multifamily) recycling stream divided by the total tons of designated recyclables found across all residential waste streams (garbage + recycling + compostable organics). In contrast to the recycling rate, capture rates are not negatively affected by waste prevention efforts or changes in the waste stream.



Unlike the recycling rate, the recycling capture rate includes only those materials designated as recyclable in the calculation, making the recycling capture rate less sensitive to changes in material weight and type over time. The residential recycling capture rate provides a more constant measure of the effectiveness of SPU's recycling program and waste prevention efforts.

SPU aims to maintain **at least a 70%** recycling capture rate based on both the latest residential recycling capture rate and historic residential recycling capture rates. This target is consistent with the spirit of Seattle's historic 70% recycling rate target while better accounting for accomplishments in waste prevention and acknowledging that the City has limited ability to influence the recyclability of products and materials in the MSW stream.

**RESULTS:** SPU's latest data estimated a residential recycling capture rate of **74%**, meaning that together, single-family and multifamily customers correctly sorted 74% of their recyclable materials. By contrast, U.S. households with a curbside program recycle about 57% of recyclable materials, on average, according to the Recycling Partnership. Seattle's residential recycling capture rate has stayed above 70% since 2005, hitting a high of 80% in 2015.

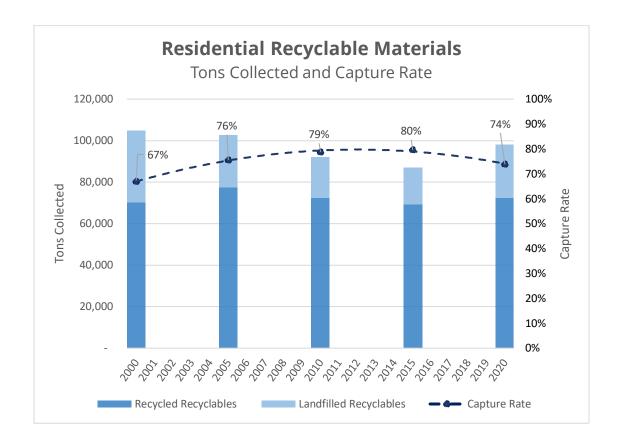
SPU will advance multiple efforts to improve Seattle's recycling capture rate. These efforts include continuing to provide simplified, multilingual guidelines that highlight the <u>top five priority items</u> for

<sup>&</sup>lt;sup>5</sup> Townhomes and Accessory Dwelling Units composed of four or fewer units are classified as single-family residences.

<sup>&</sup>lt;sup>6</sup> Measuring residential recycling capture rates requires detailed data on materials in all three waste streams (garbage, recycling, and compostable organics) collected through waste composition studies conducted at approximately 5-year intervals. Due to cost and logistical considerations, SPU is not able to obtain the data necessary to evaluate commercial recycling capture rates, so SPU measures the residential recycling capture rate exclusively.

<sup>&</sup>lt;sup>7</sup> Recycling Partnership. (2024). *State of Recycling: The Present and Future of Residential Recycling in the U.S.*, <a href="https://recyclingpartnership.org/wp-content/uploads/dlm\_uploads/2024/01/Recycling-Partnership-State-of-Recycling-Report-1.12.24.pdf">https://recyclingpartnership.org/wp-content/uploads/dlm\_uploads/2024/01/Recycling-Partnership-State-of-Recycling-Report-1.12.24.pdf</a>.

recycling and composting. As the growth of multifamily buildings outpaces single-family homes, SPU will continue to invest in these properties to ensure they are set up for successful recycling participation by residents. Additionally, SPU will support implementation of <a href="Washington's new producer responsibility program">Washington's new producer responsibility program</a>, which will help reduce confusion about what can be put in the recycling bin and strengthen the state's residential recycling system.



#### Construction and Demolition Debris Diversion Rate

Construction and demolition (C&D) activities produce a significant amount of waste. Over the past 18 years, waste from C&D activities accounted for about one-third of all waste generated in Seattle (residential + commercial + self-haul + C&D). Given the amount of C&D debris generated each year, keeping recyclable or reusable C&D debris out of the landfill represents a valuable opportunity for waste prevention and reduction.

The C&D diversion rate measures the estimated total tons of C&D material diverted from landfill through recycling and beneficial use (e.g., incineration with energy recovery). The diversion rate is calculated as the total tons diverted (recycled + beneficial use) divided by the total tons of C&D debris generated (diverted + disposed). Measuring the C&D debris diversion rate helps to identify trends in C&D management even while the quantities of C&D waste fluctuate with construction cycles.

Many C&D materials, like concrete, wood, and gypsum wallboard, are carbon-intensive to produce, heavy, and take up considerable space in a landfill. And many of these materials can be reused, recycled, or put to other "beneficial use" if properly sorted and handled. Keeping reusable and recyclable C&D debris materials circulating in the local economy represents a significant waste reduction and thus a carbon-cutting opportunity for Seattle. By increasing the proportion of C&D material diverted to salvage and reuse, the City could do even better in reducing waste and climate impacts. <sup>10,11,12</sup> That is why SPU aims to achieve a C&D diversion rate of **at least 80%** or higher, an ambitious goal that the City has not yet reached. <sup>13</sup>

**RESULTS:** C&D debris generation fell for the fourth straight year in 2024, reaching its lowest point since 2011 after peaking in 2020. Disposed tons also declined – roughly matching 2019 levels – to 110,704 tons. The decline points to a continued slowdown in construction activity, as indicated by the drop in construction and demolition permits issued between 2021 and 2024. Of the C&D debris generated in 2024, about **68.6% was diverted** from disposal (3.4% beneficial use + 65.2% recycled), falling short of the 80% target.

<sup>&</sup>lt;sup>8</sup> Beneficial use is diverting C&D debris from landfills in a way that replaces another material in a manufacturing process. A common example is using untreated wood waste as a fuel for industrial boilers to replace other fuels. SPU defines "beneficial use" in <u>Administrative Rule #SPU-DR-01-07</u>. The Washington State Department of Ecology may also approve a specific use as beneficial use under <u>Washington Administrative Code 173-350-200</u>.

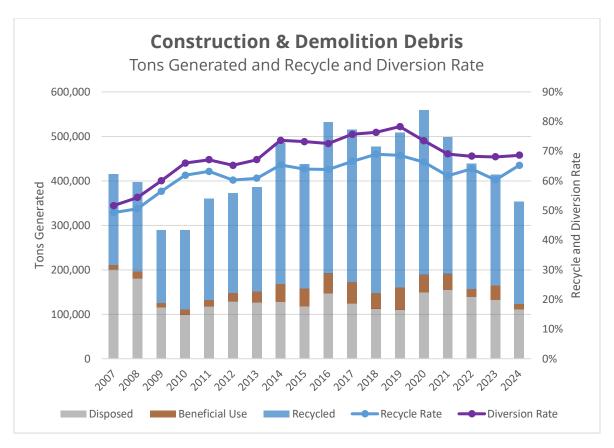
<sup>&</sup>lt;sup>9</sup> SPU estimates C&D debris disposal, beneficial use, and recycled tons based on C&D companies' self-reporting via the <u>Qualified</u> <u>Facilities Monthly Report</u> and the <u>Annual Recycling and Reuse Report</u>.

<sup>&</sup>lt;sup>10</sup> Center for Science and Environment. (2024) *Construction and Demolition Waste,* cdn.cseindia.org/attachments/0.49371000 1560337022 Construction-demolition C&D-WasteFactsheet.pdf.

<sup>&</sup>lt;sup>11</sup> "Pacific Coast Collaborative. (2024). *Vision and Action Plan for a Low-Carbon Pacific Coast Construction Sector*, <a href="https://pacificcoastcollaborative.org/wp-content/uploads/2024/01/PCC-Low-Carbon-Construction-Vision-and-Action-Plan-011124.pdf">https://pacificcoastcollaborative.org/wp-content/uploads/2024/01/PCC-Low-Carbon-Construction-Vision-and-Action-Plan-011124.pdf</a>.

<sup>&</sup>lt;sup>12</sup> C40 has a number of related resources, including "How to start deconstructing and stop demolishing your city's built assets", available at <a href="https://www.c40knowledgehub.org/s/article/How-to-start-deconstructing-and-stop-demolishing-your-citys-buildings?language=en\_US.">https://www.c40knowledgehub.org/s/article/How-to-start-deconstructing-and-stop-demolishing-your-citys-buildings?language=en\_US.</a>

<sup>13</sup> In the December 2024 Report on New Solid Waste Metrics and Targets, SPU originally proposed a C&D diversion rate target of *Keep at or above 80% and increase proportion reused*, based on reported diversion rates exceeding 80% in 2022 and 2023. However, SPU later identified an inconsistency in how C&D facilities were reporting disposal numbers, resulting in an underestimation of disposal from 2021 through 2023. After correcting the data, actual C&D diversion rates were found to be below the original target. As a result, SPU has updated its diversion rate target to *Reach or exceed* (≥) 80% and increase the proportion reused.



To achieve the 80% diversion rate goal for C&D debris, further evaluation of existing incentives, policies, and programs to identify opportunities to reduce the amount of C&D debris landfilled will be needed. This includes enhancing diversion systems and markets through support for deconstruction, salvage, and material reuse. As part of this effort, SPU will focus on ensuring that Qualified C&D Receiving and Recycling Facilities are in compliance with established requirements for recovering targeted construction and demolition materials for recycling and beneficial use.

# Appendix II. Key Metrics Data Tables—Results Over Time

The following sections include data tables with annual tonnages and other relevant data for each of the five key metrics

Estimated Daily Overall MSW Generated and Disposed per Person

## Estimated Daily Overall MSW Generated and Disposed per Person, 2000-2024

				Daily Per	Daily Per
Year	Generated	Disposed	Population (OFM	person	person
i cai	(tons)	(tons)	Estimate)	Generated	Disposed
2000	702.042	476 122		(lbs.)	(lbs.)
2000	793,842	476,132	563,376	7.72	4.63
2001	782,974	475,270	565,228	7.59	4.61
2002	768,462	462,996	568,908	7.40	4.46
2003	741,337	458,011	572,472	7.10	4.38
2004	780,346	458,405	572,595	7.47	4.39
2005	790,456	440,694	572,857	7.56	4.22
2006	836,499	438,381	577,921	7.93	4.16
2007	848,759	439,407	585,436	7.94	4.11
2008	789,688	394,828	591,870	7.31	3.66
2009	719,424	351,689	598,539	6.59	3.22
2010	724,469	335,570	608,660	6.52	3.02
2011	715,996	319,341	611,249	6.42	2.86
2012	713,821	315,983	614,283	6.37	2.82
2013	724,385	317,259	624,045	6.36	2.79
2014	721,270	309,515	638,784	6.19	2.66
2015	720,705	302,467	660,908	5.98	2.51
2016	748,051	308,379	684,136	5.99	2.47
2017	800,380	343,922	694,513	6.31	2.71
2018	785,223	346,321	707,555	6.08	2.68
2019	757,426	345,559	724,144	5.73	2.61
2020	711,207	327,114	737,015	5.29	2.43
2021	733,958	347,549	742,400	5.42	2.57
2022	752,304	358,268	762,500	5.41	2.57
2023	755,614	360,585	779,200	5.31	2.54
2024	759,199	390,353	797,700	5.21	2.68

## Estimated Tons of Food Waste Disposed (Residential + Commercial)

# Estimated Tons of Food Waste Disposed<sup>14</sup> (Residential + Commercial), 2000-2024

Year	Residential Disposed	Residential Food Waste Proportion	Commercial Disposed	Commercial Food Waste Proportion	Food Waste Disposed
2000	145,832	0.267	228,417	0.25	96,041
2001	144,559	0.267	228,405	0.25	95,699
2002	142,910	0.329	217,195	0.25	101,316
2003	143,532	0.329	213,247	0.25	100,534
2004	142,527	0.329	216,112	0.299	111,509
2005	134,557	0.329	205,637	0.299	105,755
2006	133,721	0.334	201,231	0.299	104,831
2007	133,341	0.334	198,968	0.299	104,027
2008	127,160	0.334	176,774	0.316	98,332
2009	118,725	0.334	151,398	0.316	87,496
2010	114,097	0.29	142,180	0.316	78,017
2011	112,772	0.29	135,536	0.316	75,533
2012	111,420	0.29	134,089	0.299	72,404
2013	110,839	0.29	132,401	0.299	71,731
2014	112,211	0.295	139,457	0.299	74,800
2015	101,972	0.295	139,557	0.299	71,809
2016	103,735	0.295	138,804	0.245	64,609
2017	105,315	0.295	139,317	0.245	65,201
2018	107,485	0.295	138,009	0.245	65,520
2019	109,367	0.295	134,686	0.245	65,261
2020	119,903	0.197	109,891	0.245	50,544
2021	122,634	0.197	115,869	0.245	52,547
2022	126,365	0.197	117,061	0.186	46,667
2023	125,172	0.197	118,662	0.186	46,730
2024	129,241	0.197	134,063	0.186	50,396

<sup>&</sup>lt;sup>14</sup> Tons of food waste disposed is calculated based on the food waste proportion derived from residential and commercial garbage waste composition studies, which are calculated at approximately 5-year intervals. Between waste composition studies, food waste disposed is calculated using proportions from the most-recent waste composition study.

## Estimated Residential Recycling Capture Rate

# Estimated Residential Recycling Capture Rate<sup>15</sup>, 2000-2020

Year	Total Recyclables Collected (tons)	Recycled Recyclables (tons)	Landfilled Recyclables (tons)	Capture Rate
2000	104,935	70,209	34,726	67%
2001	-	-	-	-
2002	-	-	-	-
2003	-	-	-	-
2004	-	-	-	-
2005	102,659	77,552	25,106	76%
2006	-	-	-	-
2007	-	-	-	-
2008	-	-	-	-
2009	-	-	-	-
2010	92,113	72,540	19,573	79%
2011	-	-	-	-
2012	-	-	-	-
2013	-	-	-	-
2014	-	-	-	-
2015	86,930	69,199	17,731	80%
2016	-	-	-	-
2017	-	-	-	-
2018	-	-	-	-
2019	-	-	-	-
2020	98,085	72,426	25,659	74%

<sup>&</sup>lt;sup>15</sup> The residential recycling capture rate is the total tons of recyclable materials in the recycling stream divided by the total tons of recyclables across the garbage, recycling, and organics streams. Calculating the capture rate requires waste composition studies, which are done at approximately 5-year intervals. Cost and time constraints limit the frequency of waste composition studies.

### Estimated Construction and Demolition (C&D) Debris Diversion Rate

### Estimated Construction & Demolition Debris Tons, 2007-2024

Year	Generated	Disposed <sup>1</sup>	Recycled <sup>2</sup>	Beneficial Use <sup>1</sup>	Recycle Rate	Diversion Rate
2007	415,801	201,156	204,907	9,738	49.3%	51.6%
2008	397,052	181,241	200,851	14,961	50.6%	54.4%
2009	288,551	115,446	162,742	10,362	56.4%	60.0%
2010	288,957	98,309	178,794	11,854	61.9%	66.0%
2011	359,390	118,216	227,049	14,125	63.2%	67.1%
2012	371,962	129,383	224,060	18,519	60.2%	65.2%
2013	386,200	127,040	234,982	24,178	60.8%	67.1%
2014	485,242	128,024	317,331	39,887	65.4%	73.6%
2015	437,883	117,343	280,205	40,336	64.0%	73.2%
2016	532,126	146,139	339,478	46,509	63.8%	72.5%
2017	514,858	125,074	342,755	47,029	66.6%	75.7%
2018 <sup>3</sup>	476,433	112,900	328,568	34,965	69.0%	76.3%
2019 <sup>3</sup>	507,793	110,275	348,032	49,486	68.5%	78.3%
2020	559,575	148,209	370,942	40,424	66.3%	73.5%
2021 <sup>4</sup>	498,029	154,227 <sup>5</sup>	307,050	36,752	61.7%	69.0%
2022	438,387	138,935 <sup>5</sup>	280,909	18,543	64.1%	68.3%
2023	413,189	132,006 <sup>5</sup>	249,116	32,067	60.3%	68.1%
2024	352,716	110,704	229,936	12,076	65.2%	68.6%

#### Notes:

<sup>1)</sup> SPU estimates C&D debris disposal and beneficial use tons based on C&D companies' self-reporting via the <u>Qualified</u> Facilities Monthly Report and the <u>Annual Recycling and Reuse Report</u>.

<sup>2)</sup> SPU estimates C&D debris recycled tons based on C&D companies' self-reporting in the <u>Annual Recycling and Reuse</u>
Report.

<sup>3)</sup> In 2020, SPU updated disposal estimates for 2018 and 2019 following additional data analysis.

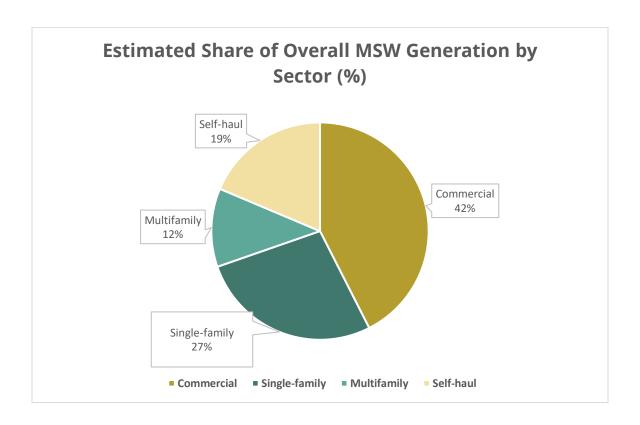
<sup>4)</sup> In 2022, SPU updated disposal estimates for 2021 after finding and correcting a calculation error.

<sup>5)</sup> In 2025, SPU identified an inconsistency in how C&D facilities were reporting disposal numbers, resulting in an underestimation of disposal from 2021 through 2023. The error was not present in years prior to 2021. The correction of the disposal numbers resulted in lower C&D recycling and diversion rates than previously reported.

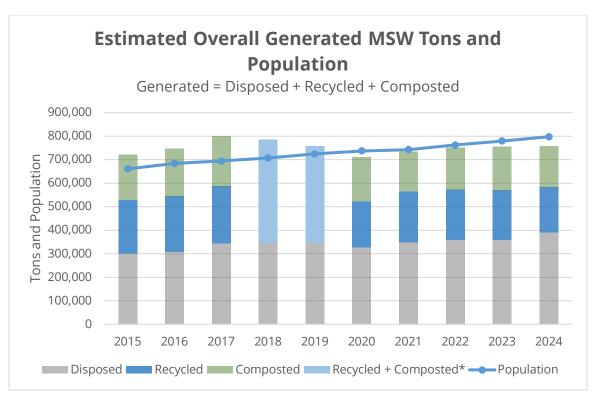
# Appendix III. Estimated Tonnage by Customer Sector - Results Detail and Data Tables

The following sections present a summary analysis along with yearly estimated tonnage data results over time for overall MSW and for each customer sector: commercial, self-haul (hauled directly to the City's transfer stations by both residential and nonresidential customers), single-family residential, and multifamily residential.

#### **Estimated Overall MSW**



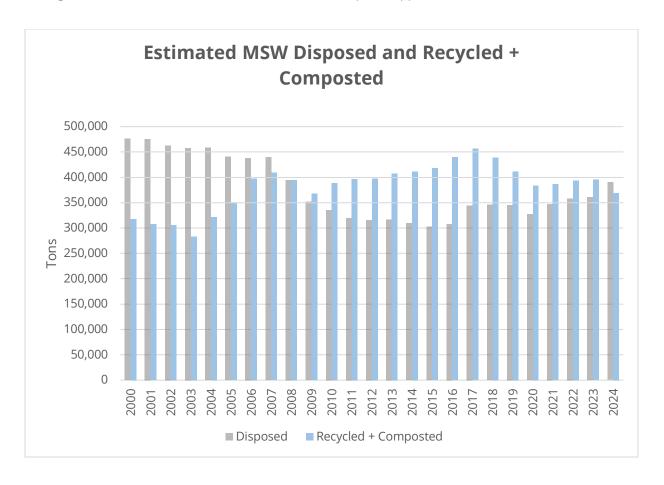
- Despite ongoing population growth of 2.4% from 2023 to 2024, overall MSW generation in Seattle only rose by a modest 0.5% over that same period.
- A decline in commercial sector generation (-12,678 tons) was offset by increases in the self-haul (11,147 tons) and residential (5,116 tons) sectors, resulting in a net increase of 3,585 tons in overall waste generation.
- Overall MSW disposal increased by 8.3% (29,768 tons), the biggest single year increase since 2017. Although all sectors saw higher disposal, the commercial (15,401 tons) sector accounted for most of the overall increase.
- Recycled tons decreased by 8.7% from 2023 levels (-18,215 tons), driven primarily by declines in commercial recycling. Composted tons also decreased, but not as severely as recycling (-4.3% or -7,968 tons). Taken together, total tons diverted from landfill through recycling and composting dropped by 6.6% (-26,183 tons) to the lowest level since 2009.



\*SPU used an econometric regression analysis to estimate the open market portion of commercial diversion (recycled and composted) overall in 2018 and 2019 due to poor response rates of mandatory recycler reporting (Seattle Municipal Code 6.250). As such, a breakdown of recycled versus composted tonnage is not available for those years.

- Disposal has increased for 4 years in a row and recycling has declined for the third straight year. Composting also declined this year, reversing a brief upward trend. Notably, for the first time since 2007, the tons of materials disposed exceeded the tons of materials diverted through recycling and composting.
- The decline in recycling is likely driven by the decreasing weight of recyclable materials over time. With the shift from physical paper formats to digital formats, fewer paper items, such as magazines and newspapers, are produced and enter the waste stream. At the same time, producers are shifting to lighter weight packaging materials, such as replacing glass with plastic bottles.
- Composting tonnage may be declining partly due to Seattle's shift from predominantly single-family to predominantly multifamily housing. The share of single-family homes dropped from 52% in 2015 to 43% in 2024. <sup>16</sup> The single-family sector contributes over 90% of residential organics and more than half of the city's composted MSW, largely from yard waste. As the multifamily housing sector grows, yard waste generation is expected to decrease.

<sup>&</sup>lt;sup>16</sup> Data Source: Washington State Office of Financial Management.



## Estimated Overall MSW Tons, 2000-2024

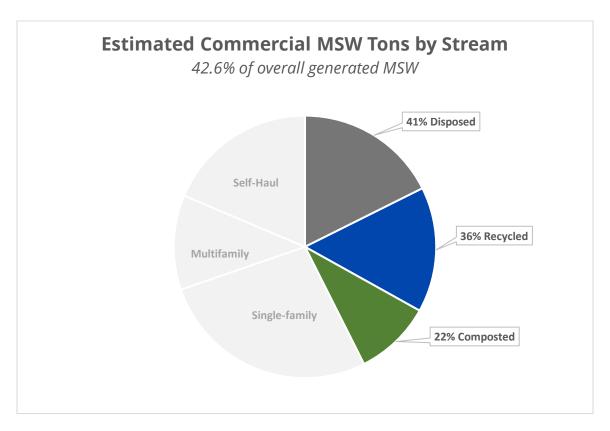
Year	Generated	Disposed	Recycled	Composted	Recycle Rate
2000	793,842	476,132	230,939	86,771	40.0%
2001	782,974	475,270	211,591	96,113	39.3%
2002	768,462	462,996	221,381	84,085	39.8%
2003	741,337	458,011	186,439	96,888	38.2%
2004	780,346	458,405	215,369	106,572	41.3%
2005	790,456	440,694	241,896	107,867	44.2%
2006	836,499	438,381	272,578	125,540	47.6%
2007	848,759	439,407	280,515	128,838	48.2%
2008	789,688	394,828	255,842	139,017	50.0%
2009	719,424	351,689	201,814	165,921	51.1%
2010	724,469	335,570	227,204	161,694	53.7%
2011	715,996	319,341	229,828	166,826	55.4%
2012	713,821	315,983	222,713	175,125	55.7%

Year	Generated	Disposed	Recycled	Composted	Recycle Rate
2013	724,385	317,259	232,281	174,845	56.2%
2014	721,270	309,515	232,587	179,168	57.1%
2015	720,705	302,467	226,337	191,901	58.0%
2016	748,051	308,379	236,555	203,118	58.8%
2017	800,380	343,922	243,936	212,522	57.0%
2018	785,223	346,321	NA <sup>1</sup>	NA <sup>1</sup>	55.9%
2019	757,426	345,559	NA <sup>1</sup>	NA <sup>1</sup>	54.4%
2020	711,207	327,114	194,807³	189,285	54.0%
2021	733,958	347,549	216,497³	169,912 <sup>2</sup>	52.6%
2022	752,304	358,268	213,299 <sup>3</sup>	180,737²	52.4%
2023	755,614	360,585	210,357 <sup>3</sup>	184,672	52.3%
2024	759,199	390,353	192,142	176,704	48.6%

#### Notes:

- SPU used an econometric regression analysis to estimate the open market portion of commercial diversion (recycled + composted) overall in 2018 and 2019 due to poor response rates of mandatory recycler reporting (Seattle Municipal Code 6.250). As such, a breakdown of recycled versus composted tonnage is not available for those years.
- 2) In 2022 and 2023, SPU adjusted commercial recycling and commercial composting estimates for 2021 and 2022 after conducting additional quality checks.
- 3) In 2025, SPU adjusted commercial recycling numbers for years 2020-2023 after identifying a calculation error. The error was not present in years prior to 2020.

## Estimated MSW by Sector Estimated Commercial MSW



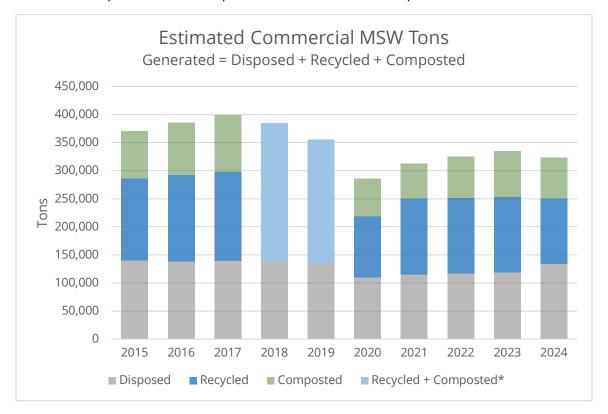
- For the first time since 2020, commercial MSW generation declined (-12,678 tons), marking a shift from the increase observed during the post-pandemic recovery. Rising inflation likely contributed to a reduction in overall waste generation volumes.
- Even so, the commercial sector generated more tons overall (322,810 tons) than any other sector except the C&D sector (352,716 tons).
- Compared with 2023, commercial disposal increased by 13% (15,401) to 134,063 tons, roughly
  aligned with pre-pandemic levels. In contrast, both recycling and composting declined (-17,687
  and -10,392 tons, respectively), although it is worth noting the 2023 composting level was high
  compared to recent years.
  - Recycling was down because container glass declined by 55%<sup>17</sup> compared to 2023 due, in part, to the permanent closure of Ardagh Glass Packaging, a major local bottle manufacturing plant, in July 2024,<sup>18,19</sup> which eliminated the local market for recycled

<sup>&</sup>lt;sup>17</sup> Calculated from self-reported glass recycled in Seattle's required Annual Recycling and Reuse Reports.

<sup>&</sup>lt;sup>18</sup> Seattle Public Utilities. (2024, November 20). *Seattle Public Utilities remains committed to glass recycling amid market challenges*. At Your Service. <a href="https://atyourservice.seattle.gov/2024/11/20/seattle-public-utilities-remains-committed-to-glass-recycling-amid-market-challenges/">https://atyourservice.seattle.gov/2024/11/20/seattle-public-utilities-remains-committed-to-glass-recycling-amid-market-challenges/</a>

<sup>&</sup>lt;sup>19</sup> Seattle Public Utilities. (2025, June 16). *Glass recycling is back in action!* At Your Service. <a href="https://atyourservice.seattle.gov/2025/06/16/glass-recycling-is-back-in-action/">https://atyourservice.seattle.gov/2025/06/16/glass-recycling-is-back-in-action/</a>

- glass. Paper recycling, including high grade paper, newspaper, and cardboard, also decreased, according to self-reporting by commercial recyclers.
- Stumps, brush, and limbs were also down, indicating less land clearing. Stumps, brush, and limbs are currently categorized under Commercial Recycling, as the majority are recycled into wood chips that are used to create new products.



<sup>\*</sup>SPU used an econometric regression analysis to estimate the open market portion of commercial diversion (recycled + composted) overall in 2018 and 2019 due to poor response rates of mandatory recycler reporting (Seattle Municipal Code 6.250). As such, a breakdown of recycled versus composted tonnage is not available for those years.

### Estimated Commercial MSW Tons, 2000-2024

Year	Generated	Disposed	Recycled	Composted	Recycle Rate
2000	391,406	228,417	150,949	12,040	41.6%
2001	377,927	228,405	132,095	17,427	39.6%
2002	366,224	217,195	140,475	8,554	40.7%
2003	339,844	213,247	104,450	22,147	37.3%
2004	375,739	216,112	130,345	29,282	42.5%
2005	385,093	205,637	150,817	28,639	46.6%

Year	Generated	Disposed	Recycled	Composted	Recycle Rate
2006	416,564	201,231	178,309	37,023	51.7%
2007	418,979	198,968	182,694	37,317	52.5%
2008	390,267	176,774	165,432	48,060	54.7%
2009	335,992	151,398	119,051	65,542	54.9%
2010	345,692	142,180	145,450	58,061	58.9%
2011	351,214	135,536	150,102	65,576	61.4%
2012	347,673	134,089	143,296	70,288	61.4%
2013	356,480	132,401	152,340	71,739	62.9%
2014	369,407	139,457	151,982	77,967	62.2%
2015	370,037	139,557	146,256	84,224	62.3%
2016	385,846	138,804	153,871	93,171	64.0%
2017	398,422	139,317	158,480	100,626	65.0%
2018	384,139	138,009	NA <sup>1</sup>	NA <sup>1</sup>	64.1%
2019	355,453	134,686	NA <sup>1</sup>	NA <sup>1</sup>	62.1%
2020	286,036	109,891	108,190	67,955	61.6%
2021	312,420	115,869	134,847 <sup>2</sup>	61,704 <sup>2</sup>	62.9%
2022	325,391	117,061	134,107 <sup>2</sup>	74,223 <sup>2</sup>	64.0%
2023	335,488	118,662	134,167 <sup>3</sup>	82,659	64.6%
2024	322,810	134,063	116,480	72,267	58.5%

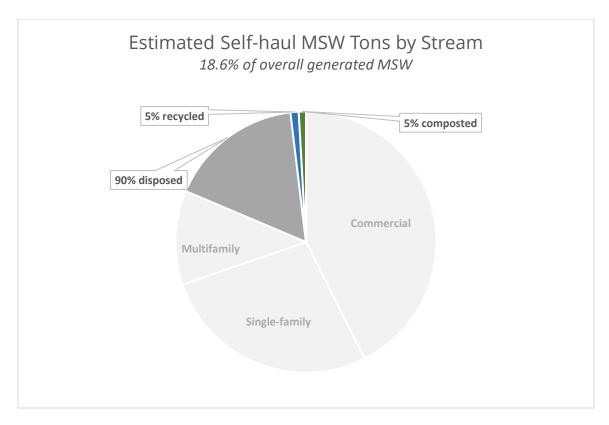
#### Notes:

<sup>1)</sup> SPU used an econometric regression analysis to estimate the open market portion of commercial diversion (recycled + composted) overall in 2018 and 2019 due to poor response rates of mandatory recycler reporting (Seattle Municipal Code 6.250). As such, a breakdown of recycled versus composted tonnage is not available for those years.

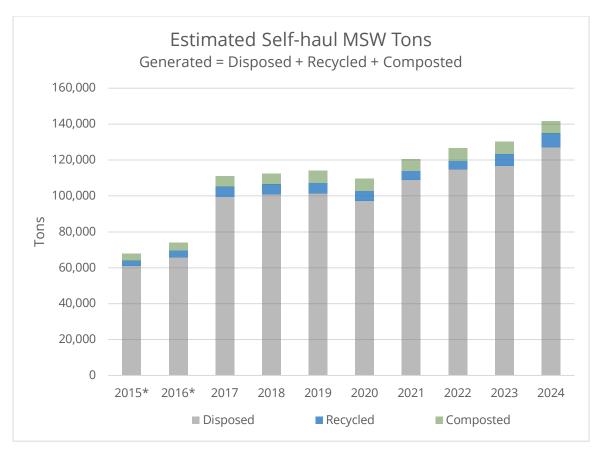
<sup>2)</sup> In 2022 and 2023, SPU adjusted commercial recycling and commercial composting estimates for 2021 and 2022 after conducting additional quality checks.

<sup>3)</sup> In 2025, SPU adjusted commercial recycling and composting estimates for 2020-2023 after additional quality checks.

#### Estimated Self-haul MSW



- Disposed tons of waste self-hauled directly to the City's two transfer stations continued to increase in 2024, with the highest measured tonnage for the past 25 years of 127,049 tons.
- The amount of material self-hauled to the transfer stations increased by 11,147 tons (8.5%) compared to 2023. Consistent with past years, most (90%) of 2024's self-hauled waste was disposed of at the landfill.
- The self-haul sector accounted for 18.6% of MSW generation in 2024 but comprised a full third of Seattle's landfilled MSW.
- The City conducted a waste composition study of self-haul materials in 2023, and SPU analyzed trips, tons, and composition data in 2024 to identify options to curb the year-over-year increase in self-haul disposal. SPU has identified the self-haul disposal waste stream as a priority area for decreasing the City's landfilling. SPU is researching why self-haul disposal has been increasing year-over-year and evaluating options to address the causes.



<sup>\*</sup>The North Transfer Station was closed from 2014-2016 for construction of the new station

## Estimated Self-haul MSW Tons, 2000-2024

Year	Generated	Disposed	Recycled	Composted	Recycle Rate
2000	123,024	101,883	7,109	14,032	17.2%
2001	124,453	102,305	7,114	15,034	17.8%
2002	125,620	102,891	8,363	14,366	18.1%
2003	123,597	101,232	8,209	14,156	18.1%
2004	122,835	99,766	8,164	14,905	18.8%
2005	124,364	100,499	9,940	13,925	19.2%
2006	127,444	103,429	9,738	14,277	18.8%
2007	132,545	107,098	11,200	14,247	19.2%
2008	111,309	90,894	8,522	11,893	18.3%
2009	97,893	81,565	6,179	10,149	16.7%
2010	91,618	79,293	4,643	7,682	13.5%
2011	81,776	71,033	3,949	6,794	13.1%

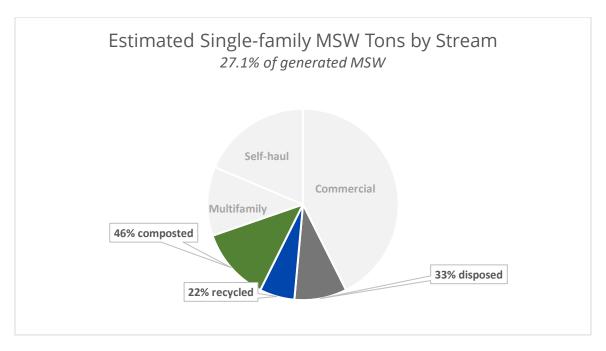
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Year	Generated	Disposed	Recycled	Composted	Recycle Rate
2012	80,568	70,474	3,501	6,593	12.5%
2013	84,341	74,019	4,032	6,290	12.2%
2014 <sup>1</sup>	64,681	57,847	2,635	4,199	10.6%
2015 <sup>1</sup>	67,993	60,938	2,888	4,167	10.4%
2016 <sup>1</sup>	73,923	65,840	3,693	4,390	10.9%
2017	111,098	99,290	5,681	6,127	10.6%
2018	112,550	100,827	5,595	6,127	10.4%
2019	114,207	101,506	5,744 <sup>2</sup>	6,957	11.1%
2020	109,432	97,320	5,332 <sup>2</sup>	6,780	11.1%
2021	120,544	109,046	4,985 <sup>2</sup>	6,513	9.5%
2022	126,636	114,842	4,647 <sup>2</sup>	7,147	9.3%
2023	130,419	116,751	6,447 <sup>2</sup>	7,221	10.5%
2024	141,566	127,049	7,751	6,766	10.3%

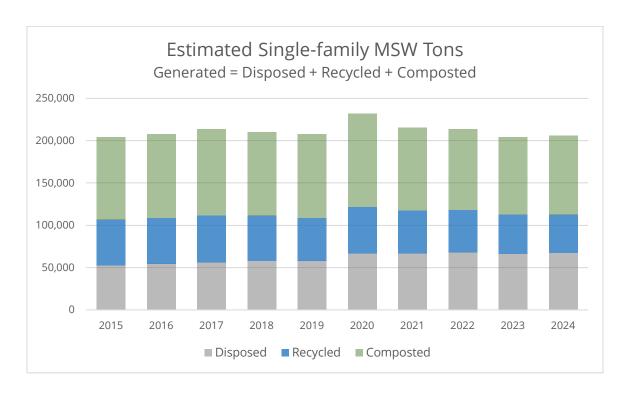
#### Notes:

The North Transfer Station was closed from 2014 – 2016 for construction of the new station
 In 2025, SPU adjusted self-haul recycling estimates for 2019 - 2023 after additional quality checks

### Estimated Single-family MSW



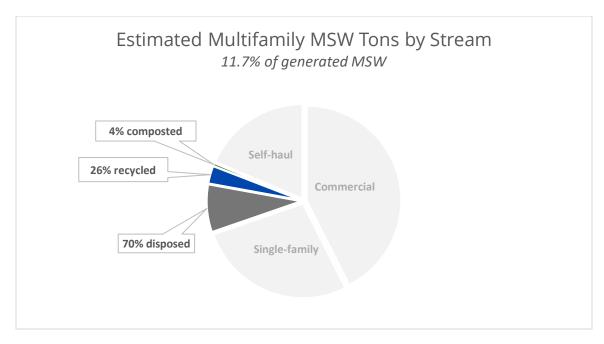
- In 2024, waste generation among single-family households remained relatively stable, up just 1.1% (2,334 tons) from 2023. Disposal also held steady, up just 1.9% (1,231 tons).
- Recycled tons continued to decline (3.3%; -1,531 tons) reaching their lowest point in 25 years. At the same time, composted material increased by 2.9% (2,634 tons).



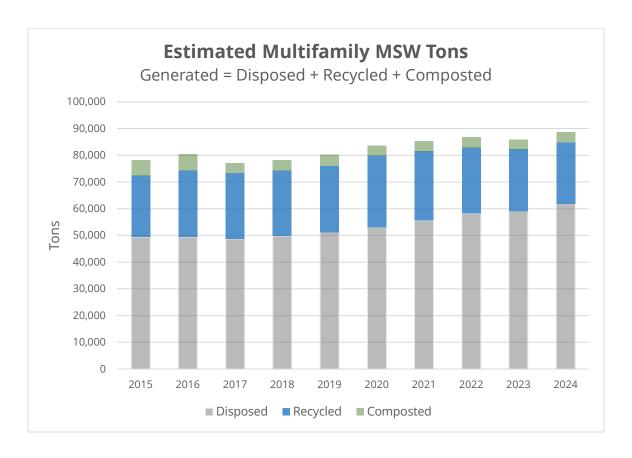
# Estimated Single-family MSW Tons, 2000-2024

Year	Generated	Disposed	Recycled	Composted	Recycle Rate
2000	208,468	87,499	61,972	58,997	58.0%
2001	211,982	91,072	59,107	61,803	57.0%
2002	206,474	87,834	59,200	59,440	57.5%
2003	205,748	87,426	59,433	58,889	57.5%
2004	209,132	86,029	61,474	61,629	58.9%
2005	208,675	80,478	63,715	64,482	61.4%
2006	216,946	78,078	65,371	73,496	64.0%
2007	220,128	77,494	66,121	76,513	64.8%
2008	213,889	73,961	61,956	77,972	65.4%
2009	215,015	67,229	58,786	89,000	68.7%
2010	216,484	64,309	57,578	94,597	70.3%
2011	212,861	62,779	57,234	92,848	70.5%
2012	211,030	60,906	55,317	94,807	71.1%
2013	206,603	60,302	55,023	91,278	70.8%
2014	206,992	59,772	56,065	91,155	71.1%
2015	204,397	52,529	54,314	97,554	74.3%
2016	207,804	54,298	54,213	99,293	73.9%
2017	213,709	56,541	55,123	102,045	73.5%
2018	210,289	57,725	53,582	98,982	72.5%
2019	207,538	58,191	50,505	98,842	72.0%
2020	232,038	66,877	54,433	110,728	71.2%
2021	215,678	67,073	50,677	97,928	68.9%
2022	213,512	68,131	49,976	95,405	68.1%
2023	203,841	66,098	46,566	91,177	67.6%
2024	206,175	67,329	45,035	93,811	67.3%

#### Estimated Multifamily MSW



- Multifamily household MSW generation rose by 3.2% (2,782 tons) in 2024, reaching a 25-year high
  of 88,648 tons. The corresponding increase in disposal (2,838 tons) indicates that the additional
  generated waste was entirely landfilled.
- Multifamily recycling tons declined for the fourth year in a row and composting tons for this sector increased slightly from 2023.
- Relative to other customer sectors, multifamily residents continued to make the least waste of any MSW sector, contributing only 11.7% to the overall generated MSW and 15.9% of the overall disposed MSW in 2024.
- However, the growth of multifamily housing units has been outpacing single-family housing units in Seattle. Between 2010 to 2024, the share of multifamily-family homes increased from 44% to 57% of Seattle's housing stock. As this trend continues, SPU anticipates that multifamily disposal (61,912 tons in 2024) could surpass that of single-family households (67,329 tons in 2024) within the next five years.



## Estimated Multifamily MSW Tons, 2000-2024

Year	Generated	Disposed	Recycled	Composted	Recycle Rate
2000	70,944	58,333	10,909	1,702	17.8%
2001	68,611	53,487	13,275	1,849	22.0%
2002	70,144	55,076	13,343	1,725	21.5%
2003	72,149	56,106	14,347	1,696	22.2%
2004	72,640	56,498	15,386	756	22.2%
2005	72,325	54,080	17,424	821	25.2%
2006	75,545	55,643	19,159	743	26.3%
2007	77,108	55,847	20,501	760	27.6%
2008	74,223	53,199	19,932	1,092	28.3%
2009	70,524	51,497	17,798	1,230	27.0%
2010	70,675	49,788	19,532	1,355	29.6%
2011	70,145	49,993	18,544	1,608	28.7%
2012	74,549	50,514	20,599	3,437	32.2%
2013	76,960	50,537	20,886	5,538	34.3%

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Year	Generated	Disposed	Recycled	Composted	Recycle Rate
2014	80,189	52,439	21,905	5,845	34.6%
2015	78,278	49,443	22,880	5,956	36.8%
2016	80,478	49,437	24,778	6,263	38.6%
2017 <sup>1</sup>	77,150	48,773	24,652	3,725	36.8%
2018	78,245	49,760	24,520	3,965	36.4%
2019	80,228	51,176	24,802	4,250	36.2%
2020	83,701	53,026	26,853	3,822	36.6%
2021	85,316	55,561	25,988	3,767	34.9%
2022	86,765	58,234	24,569	3,962	32.9%
2023	85,866	59,074	23,177	3,615	31.2%
2024	88,648	61,912	22,876	3,860	30.2%

#### Notes:

Before 2017, the combined residential (single-family and multifamily) composted tonnage was measured and then attributed to either the single-family or multifamily sector based on estimates. Starting in 2017, composted tonnage data by individual residential sector became available. The adjustment in calculation methodology likely explains the shift in the recycling rate in 2017.

## Appendix IV. Solid Waste Advisory Committee (SWAC) Letter

October 1, 2025

Councilmember Joy Hollingsworth
Chair of the Seattle City Council's Parks, Public Utilities & Technology Committee
PO Box 34025
Seattle, WA 98124-4025

Dear Councilmember Joy Hollingsworth and Committee Members:

We represent the Seattle Solid Waste Advisory Committee (SWAC), comprised of 15 members, including representatives from Community Based Organizations, Business Improvement Areas, and solid waste contracted haulers.

We appreciate the work of Seattle Public Utilities (SPU) in advancing the City's sustainability and waste diversion goals, particularly in leading the nation in recycling rates and pursuing a zero-waste future. We recognize the challenges inherent in these efforts and acknowledge the progress made toward creating a more sustainable and resilient Seattle.

Our committee believes the report reflects a strong commitment to these critical goals and aligns well with our shared vision for a cleaner, more sustainable city. However, we also see areas where improvements could be made and where additional resources, support, and engagement are necessary to achieve the ambitious targets set forth. We hope that the Seattle City Council will consider our recommendations as part of its ongoing effort to strengthen Seattle's solid waste policies and practices and support Seattle Public Utilities in achieving its goals.

#### Highlights:

- Seattle's Commitment to Sustainability: The City's efforts to increase recycling rates, develop
  more affordable housing options, and support increased density are essential in making
  progress toward a more sustainable urban environment. Success in these areas will complement
  the City's broader sustainability goals. We encourage continued City Council support for these
  initiatives, acknowledging that additional resources and sustained investment will be necessary
  to overcome current challenges and achieve the goals outlined in the report. We urge City
  Council to ensure that waste diversion and sustainability initiatives are adequately funded and
  prioritized.
- Waste Prevention: This report emphasizes the value of waste prevention, and this is a forward-looking and useful approach. The City has been proactive in making major events "zero waste" (such as the upcoming World Cup), and we would like to continue to see these initiatives supported and adopted as a normal way of managing the influx of guests to Seattle. We look forward to the establishment of waste prevention-specific KPIs with the finalization of the waste prevention plan, and we urge City Council to continue to follow recommendations from the

upcoming plans. Implementing these recommendations in collaboration with event planners, the local business community, and environmental stakeholders will help further our ability to reduce waste generated.

#### **Recommendations:**

- Self-Haul Disposal, Rates, and Enforcement: We continue to be concerned about the rising amount of self-haul disposal. We recommend that SPU re-evaluate the rates for self-haul disposal to incentivize alternative, more sustainable disposal methods. In doing so, equity considerations should be centered to ensure that disadvantaged populations are not adversely impacted by rate changes. We encourage the City to explore and measure ways to increase diversion of self-haul materials to qualified facilities. The effectiveness of waste diversion programs depends on strong enforcement of rules and regulations. We urge the City to actively strengthen compliance with existing policies, particularly around self-haul disposal.
- Food Waste: Food waste is a major concern, and we want to encourage continued expansion of
  programs for preventing it and diverting it from our landfills. Both policies and improvements to
  infrastructure should be considered in finding reductions. For example, access to food and yard
  waste collection infrastructure can be more difficult for residents of multifamily housing
  compared to those living in single-family homes, which can result in more food in the garbage.
  With Seattle being a majority-renter city, the unique challenge presented there could benefit
  from additional attention. We hope to see solutions specific to this challenge.
- Glass Recycling: Seattle's primary glass recycling facility closed, and its potential impact
  highlighted the fragility of our sustainability ecosystem. This could pose a significant challenge to
  meeting recycling goals. We urge City Council to support the development of additional glass
  recycling infrastructure and consider getting additional support from the Office of Economic
  Development to bolster these vital services.
- Community-Centered Waste Prevention Plan: A critical component of Seattle's waste diversion success will be its ability to engage a wide range of community members, especially in multifamily housing. We request that once the waste prevention plan is finalized, future outreach and engagement efforts continue to consider the diverse and evolving needs of our city's residents. This will be vital in ensuring that SPU programs are accessible, equitable, and effective for all. Ensuring the waste prevention materials are accessible and broadcast effectively to the broader public is crucial for ensuring that citizens can engage meaningfully in waste prevention programs and contribute to the City's goals.

#### **Conclusion:**

The Seattle Solid Waste Advisory Committee commends City Council and SPU for their ongoing efforts to improve waste division and sustainability in Seattle. We believe that with additional focus on the areas outlined above, we can achieve even greater success. We urge City Council to consider these recommendations and continue to prioritize investments in achieving the seven goals outlined in Seattle's 2022 Solid Waste Plan Update: Moving Upstream to Zero Waste.

We appreciate your consideration of our feedback and look forward to working with you to build a greener, more sustainable future for all Seattle residents.

Sincerely,

Joe Camero

Interim Chair, SWAC

Melanie Coerver

M.E. Coerder

Secretary, SWAC

SWAC is one of Seattle Public Utilities' Community Advisory Committees. Its members are appointed by the SPU CEO/General Manager. It is administered and staffed by SPU. This letter reflects the opinions of Committee Members, independent of SPU.