2023 Waste Prevention & Recycling Report

Introduction

Seattle Public Utilities (SPU) reports to the City Council annually on the previous year's progress preventing and reducing waste. The Solid Waste Advisory Committee (SWAC), an advisory body mandated by RCW 70A.205.110 to provide recommendations and informed advice to SPU about solid waste management issues, comments on the annual report. The SWAC's comments appear in a letter to the City Council at the end of this report. Key solid waste results from 2023 appear below, with additional details starting on page 5. A summary of 2023 Solid Waste highlights, including the new solid waste metrics, policy actions, and waste prevention efforts starts on page 3. Data tables with annual tonnage results by customer sector begin on page 15.

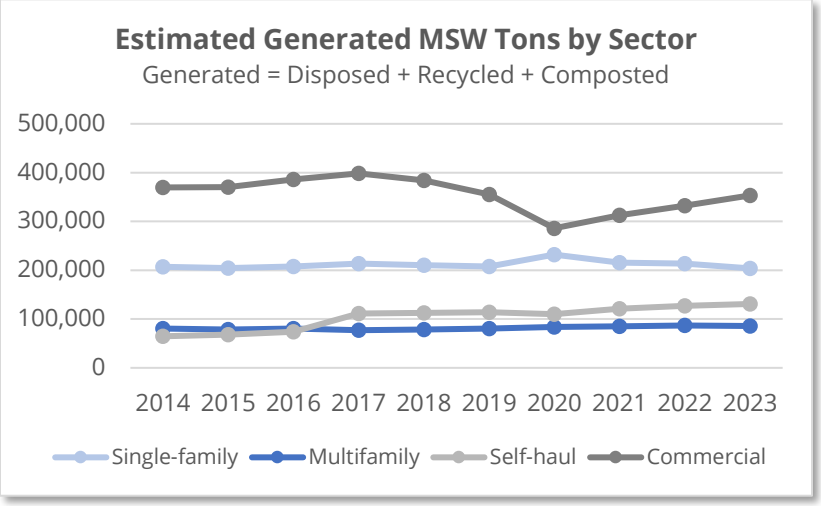
Key results

Seattle's *2023 Waste Prevention & Recycling Report* shows how municipal solid waste (MSW) and construction and demolition (C&D) debris generation and disposal changed with the end of the COVID-19 Public Health Emergency. While the overall MSW tonnage generated continued to return to pre-pandemic levels, the composition of waste has shifted. Commercial sector composted and recycled tons have increased over pre-pandemic levels and disposal has declined, while single-family sector composted and recycled tons have declined and disposal has increased. The following sections highlight key results for MSW generation, disposal and C&D debris.

Municipal solid waste (MSW) generation

- **Overall MSW generation increased slightly over 2022 levels (1.9% or 14,604 tons).** Commercial sector generation grew more than any other sector (6.4% or 21,383 tons) as businesses continued to recover post-pandemic. Although overall commercial generation has returned to 2019 levels, the composition of the commercial waste stream has shifted post-COVID, with disposal in this sector down 12% and combined recycled and composted tons up 6% from 2019.

- **Meanwhile, residential MSW generation declined, primarily in the single-family sector (-9,671 tons), as more residents return to worksites.** The disruption observed during the height of the pandemic, where commercial sector MSW generation dipped and single-family MSW generation spiked, is now returning to pre-pandemic levels. Both the daily per capita generation and disposal rates for residential MSW remained below targets.

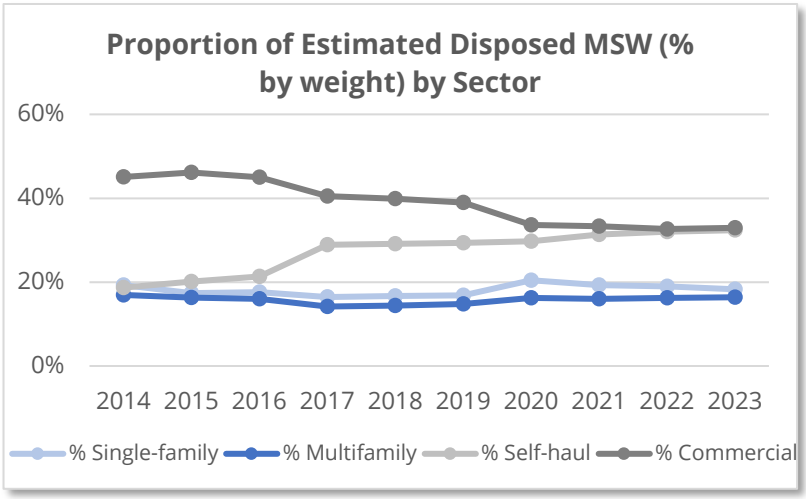


Contents

Municipal solid waste (MSW) disposal

- **While overall MSW disposal remained flat, disposal at the City's transfer stations via the self-haul sector increased again in 2023 for a 24-year high of 116,751 tons**. Since 2015, the proportion of disposed MSW in the self-haul sector has steadily increased, nearly reaching commercial sector disposal levels (118,662 tons).

- **The 2023 Self-haul Garbage Stream Composition Study conducted by SPU to better understand the customers and types of waste self-hauled to the transfer stations found that almost two-thirds (63.2%) of self-haul garbage in 2023 could have been recycled, composted, or taken to alternate drop-off or take-back locations.** SPU is conducting an evaluation of trips, tons, and composition data to identify options to curb the growth of self-haul disposal.



Municipal solid waste (MSW) includes all the garbage, composting, and recyclables that Seattle customers set out for collection or haul to a City transfer station. It includes some materials and items that need special handling, such as old refrigerators and tires.

Self-haul waste at the South Transfer Station, 2023.

Construction and demolition (C&D) debris

- **Self-reported C&D debris tonnage declined for the third straight year to a 13-year low, making 2023 the first year that commercial sector generation (353,366 tons) surpassed C&D sector generation (346,085 tons) since 2010.** According to data self-reported to SPU by C&D debris collection, processing, and disposal vendors, C&D debris generation decreased by 25,161 tons (-6.8%) from 2022 levels. This decline indicates an overall reduction in construction and demolition activity, as reflected in the decrease in construction and demolition permits issued from 2021-2023.

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Seattle Public Utilities

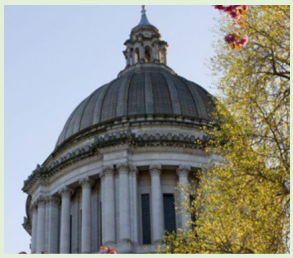
2023 Solid Waste Highlights

New Solid Waste Metrics

Like other leaders in the solid waste industry, Seattle is rethinking longstanding solid waste goals which are based primarily on the recycling rate and instead developing new ways of measuring climate, policy, and programmatic impacts, especially in waste prevention. Seattle gets closer to zero waste by minimizing waste upstream and producing and using less, not just recycling more. That's why, in 2023, SPU began assessing the solid waste metrics proposed in the 2022 Solid Waste Plan Update: Moving Upstream to Zero Waste. Based on extensive research, data analysis, and evaluation of quantitative and qualitative criteria, SPU is establishing a set of key weight-based metrics and targets to quantify waste reduction and diversion to recycling and composting. These key metrics and targets will be finalized by the end of 2024, and SPU will begin reporting on these metrics in the next annual Waste Prevention & Recycling Report due on October 1, 2025.

Key policy actions

In 2023, more than 50 experts from SPU reviewed 120 bills introduced by state legislators to ensure state legislation helps SPU meet its objectives to protect community and employee health and reduce waste and pollution. Highlights from the 2023 legislative session are summarized below.



Source: SPU

- **SB 5144** takes effect in 2027 and provides free and convenient battery recycling services statewide. The program, which will be funded by battery manufacturers, increases recovery of the valuable materials in batteries, provides reimbursements for battery collection and recycling activities, and protects SPU employee safety by reducing the risk of fires at City facilities caused by improperly disposed batteries.
- **HB 1085** reduces plastic pollution and unnecessary waste including reducing single-use plastic water bottles, phasing out small single-use plastic bottles, wrappers or packaging containing personal health or beauty products at lodging establishments, and reducing plastic foam in our waterways. Requirements are being phased in between June 2024 and July 2026.
- **The Washington Recycling and Packaging Act (WRAP Act**), which would establish an extended producer responsibility (EPR) system in Washington for consumer packaging and paper products, did not pass in 2023, but SPU continues to work with key stakeholders to reduce packaging waste and make sure more of Washington's recyclable items are recycled.

In addition, the following Director's Rules (DR), which affect how SPU conducts business and provides services to customers and the public, were approved in 2023:

- DR Solid Waste-404 Ban on Electronic-Waste & Battery Disposal, with implementation beginning in 2024;
- DR Solid Waste-406 Temporary Container & Bag Placement and Removal at Curbs and Public Alleys; and
- DR Solid Waste-450 Collection Disruptions Due to Unforeseen Conditions.

Waste Prevention Plan

To move closer to zero waste, SPU is looking at the whole life cycle of materials and products to eliminate waste as far upstream as possible. 2023 signaled the kick-off of SPU's waste prevention planning efforts, which focused on initiating community involvement in the process to develop the new Waste Prevention Plan. The Waste Prevention Plan will define:

- Meaningful waste prevention goals, priorities, and metrics that reflect community priorities;

- Where SPU can most effectively leverage its unique role to amplify existing waste prevention efforts, reduce or eliminate barriers to preventing waste, and support new waste prevention strategies; and,
- Strategies and tools to measure success.

Community involvement in the planning effort has included extensive surveys, interviews and listening sessions with Seattle residents, businesses, organizations, and public sector stakeholders, as well as the Seattle Race to Zero Waste contest, where students and community members shared their creative waste prevention ideas.

Throughout the planning process, SPU is centering the experience of communities who carry the greatest environmental burden and are often excluded from decision-making processes. This includes prioritizing meaningful involvement focused on Black and Indigenous communities, immigrant and refugee populations, people with disabilities, low-income communities, elders, youth, and people experiencing homelessness. By honoring community knowledge and examining potential environmental justice impacts and community benefits, SPU is working to minimize disparate impacts and increase opportunities for traditionally underserved communities.

Waste prevention graphic developed for SPU community outreach effort

Reuse Seattle

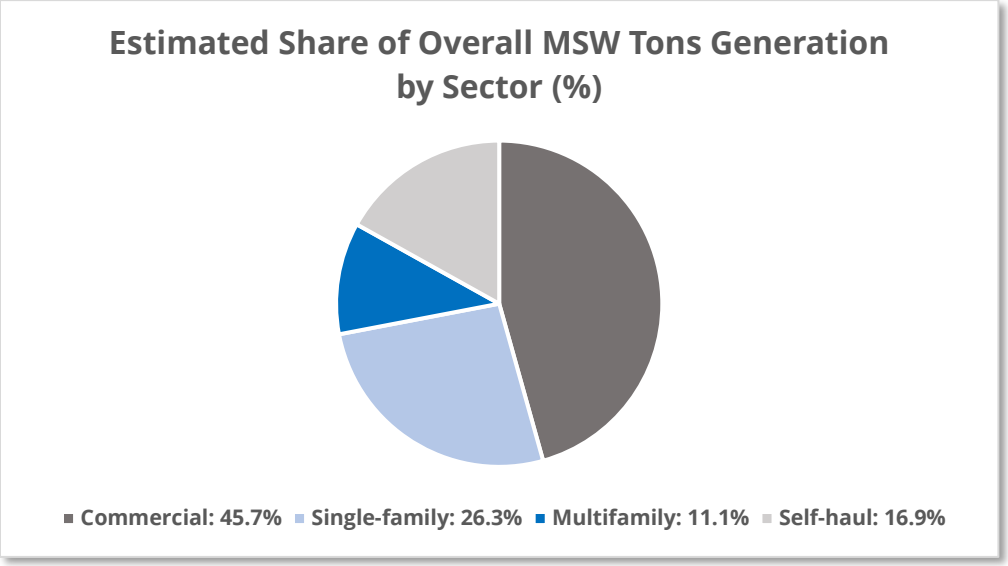
2023 also marked a year of significant investment in Reuse Seattle, an initiative led by SPU that brings together a coalition of reuse providers and local businesses to create practical solutions that will help the City move toward a network of reusable food and beverage containers, where systems of collection, transportation, and washing are designed to facilitate reuse at a community-wide level.

Reuse Seattle launched a new incentive program funded by the Seattle Office of Economic Development and SPU that provides food service businesses in Seattle with up to $500 in reusable dishware to replace single-use alternatives, and assisted in the launch of reuse services at multiple entertainment venues and events in the city. Reuse advocacy organization Upstream recognized SPU's leadership and collaborative approach in this area of growing importance, selecting Reuse Seattle as the 2023 recipient of the Reusies – Community Action of the Year Award.

Source: Reuse Seattle

Results details

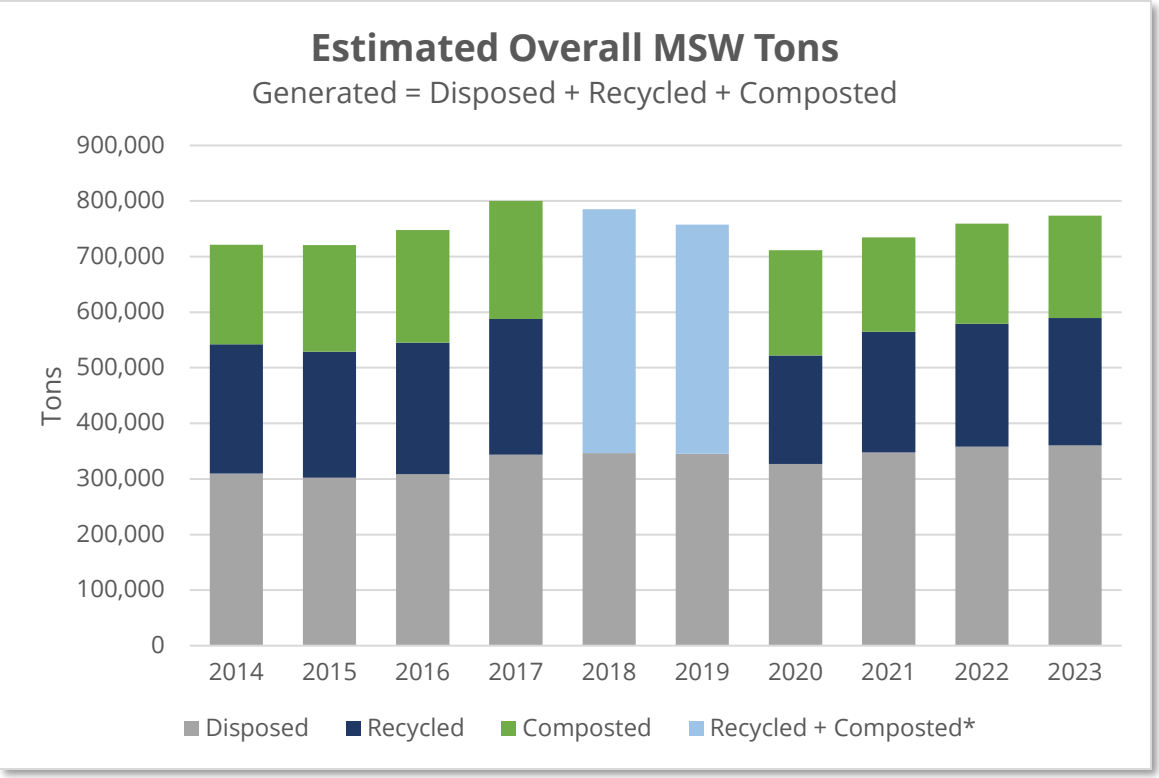
Estimated overall MSW



- Overall MSW generation continued to increase after hitting a low during the peak of COVID-19 restrictions in 2020, growing 1.9% (14,604 tons) from 2022 to 2023.
- Increased commercial sector generation (21,383 tons) accounted for most of the net increase in MSW generation overall, outpacing declines in the single-family and multifamily residential sectors (-10,570) by a factor of two-to-one.
- Overall MSW disposal stayed flat, with customers landfilling approximately 360,600 tons, up just 0.6% (2,317 tons) from 2022.

About the results

- *Percentages may not add up to 100% due to rounding.*
- *The **recycle rate** is the estimated percentage of municipal solid waste (MSW) diverted from landfill by recycling, composting, and some reuse.*
- *To estimate some of the commercial and construction and demolition (C&D) debris tonnages, SPU relies on commercial and C&D debris recyclers to report annually their recycling activities, per Seattle Municipal Code, 6.250.*

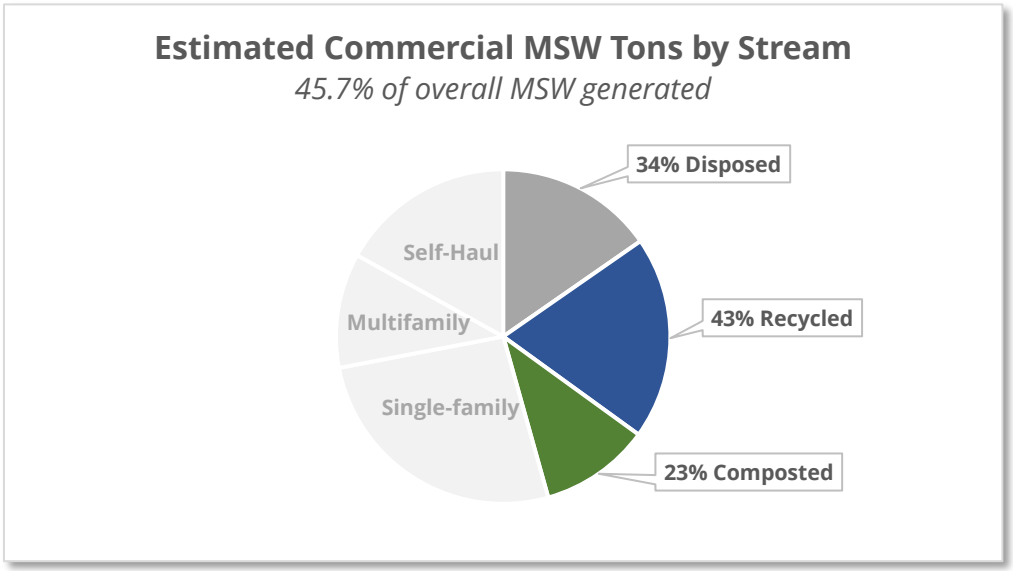


Notes:

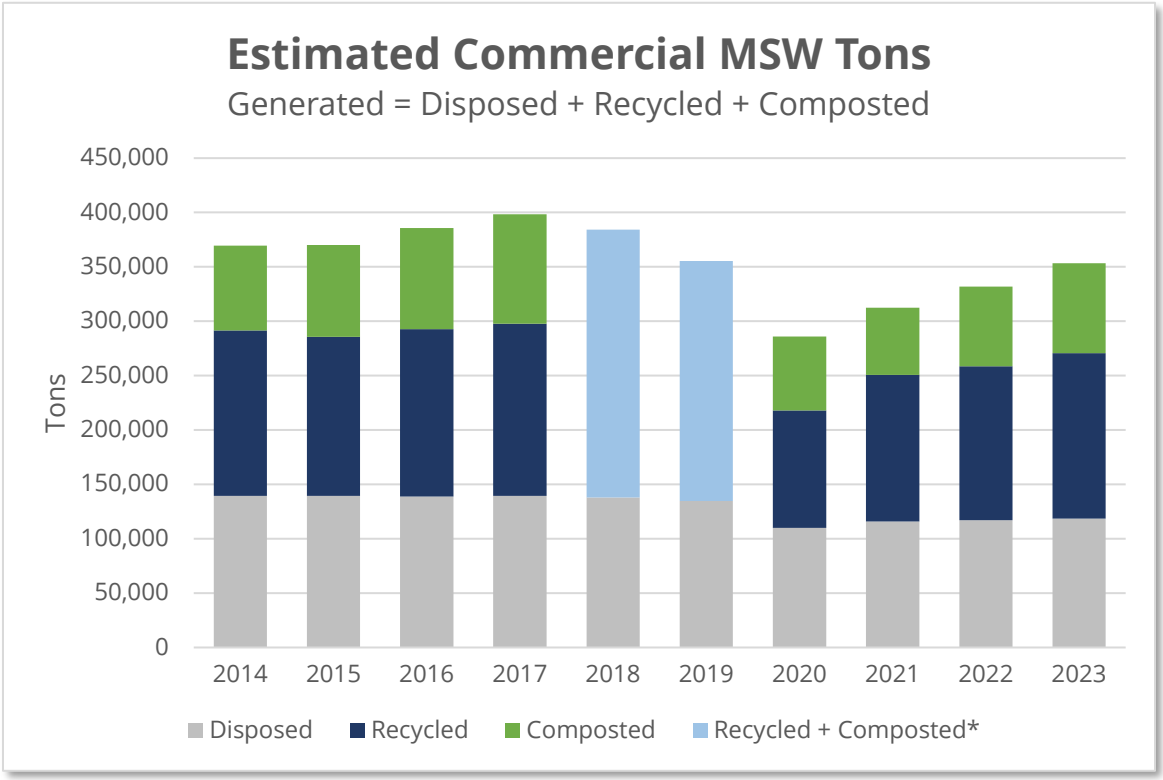
1) **SPU used an econometric regression analysis to estimate the open market portion of commercial diversion (recycled and composted) overall in 2018 and 2019 due to poor response rates of mandatory recycler reporting (Seattle Municipal Code 6.250). As such, a breakdown of recycled versus composted tonnage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

Estimated MSW by sector

Estimated commercial MSW



- As businesses continue to recover post-pandemic, commercial MSW generation increased for the third straight year, growing 6.4% (21,383 tons) from 2022 to 353,366 tons in 2023. Businesses either composted (9,203 tons) or recycled (10,579 tons) most of the additional waste—93%—rather than throw it away as garbage.
- The commercial sector generated more tons overall than any other individual MSW sector in 2023 (45.7% of overall MSW), including the C&D sector, and is back on par with pre-COVID-19 Public Health Emergency levels.
- Although overall commercial generation is similar to pre-pandemic levels, the composition of the waste stream has changed. Commercial disposal is 12% lower and diversion (combined recycled and composted tons) is 6% higher than in 2019, with diversion increasing at a higher annual rate (7%) than disposal (1%). Consequently, of the commercial waste generated, two-thirds (66.4%) was diverted from landfill to recycling and composting.



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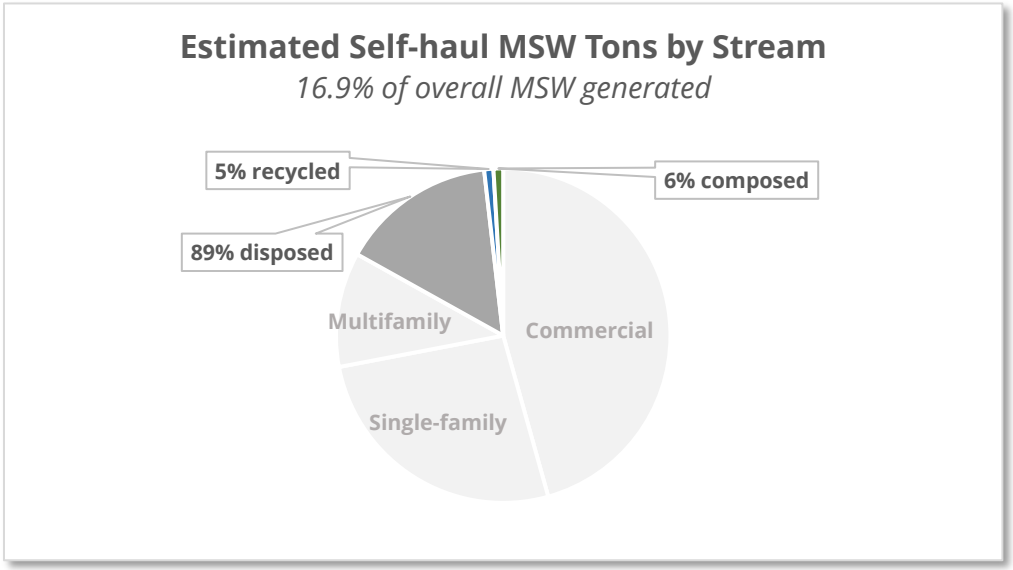
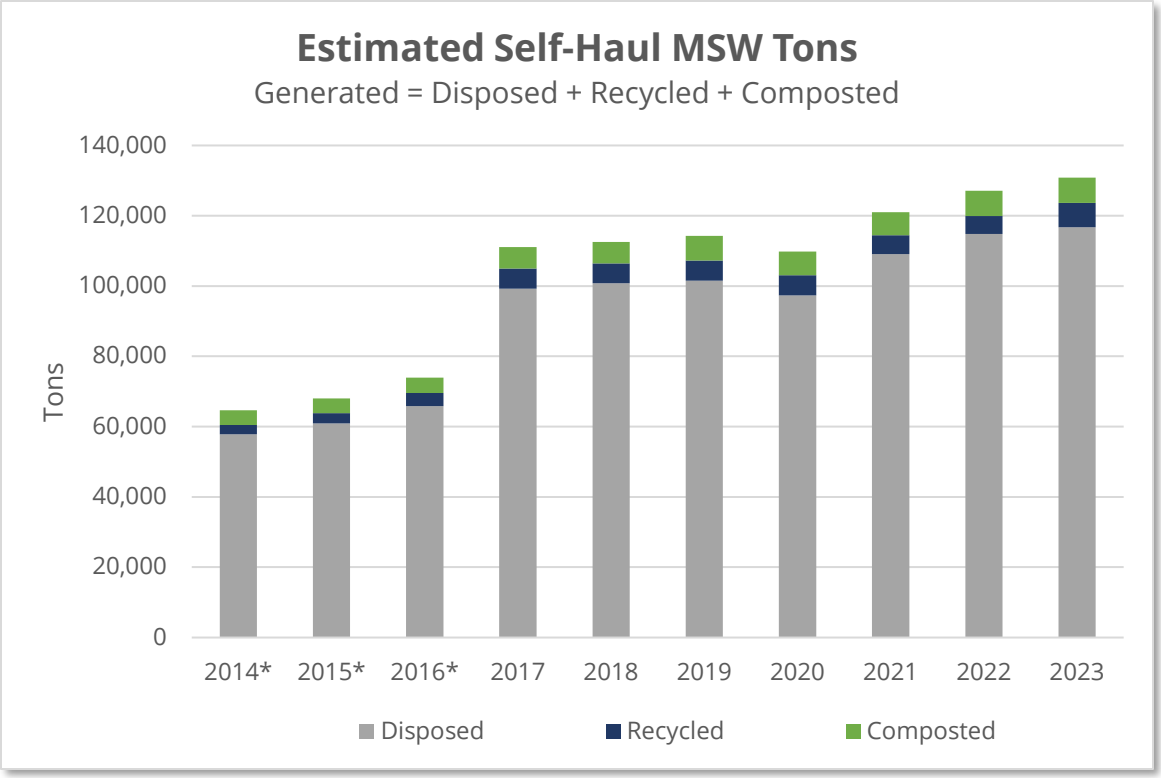
Estimated self-haul MSW



- Disposed tons of waste "self-hauled" directly to the City's two transfer stations increased in 2023 for the third straight year, reaching a 24-year all-time high.
- The amount of material self-hauled to the transfer stations by a mix of residential and nonresidential (e.g., businesses, nonprofits, and institutions) customers increased about 3,792 tons (3.0%) to 130,888 tons.
- As has been the case for about the last 10 years, about 90% of that waste went to landfill. Even though self-haul accounts for only 16.9% of total generated MSW, it comprises almost a third (32.4%) of Seattle's landfilled MSW.
- Self-haul disposed tons have increased for the last nine years, with the exception of 2020, when the transfer stations briefly limited hours of operation during the pandemic.
- As self-haul disposed tons have increased, so too has the self-haul sector's share of overall disposed MSW. Meanwhile, the proportion of disposed MSW in the residential and commercial sectors has flatlined or trended downward since 2015.



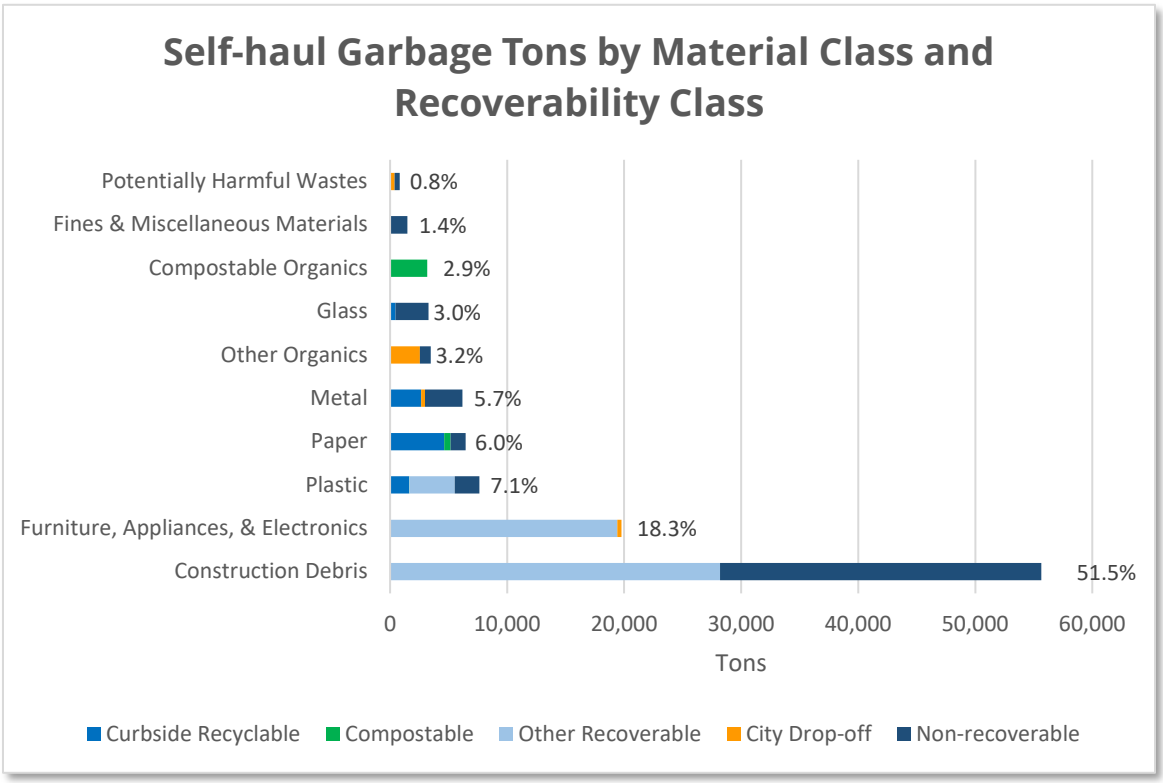
Notes:

*1) *The North Transfer Station was closed from 2014-2016 for construction of the new station.*

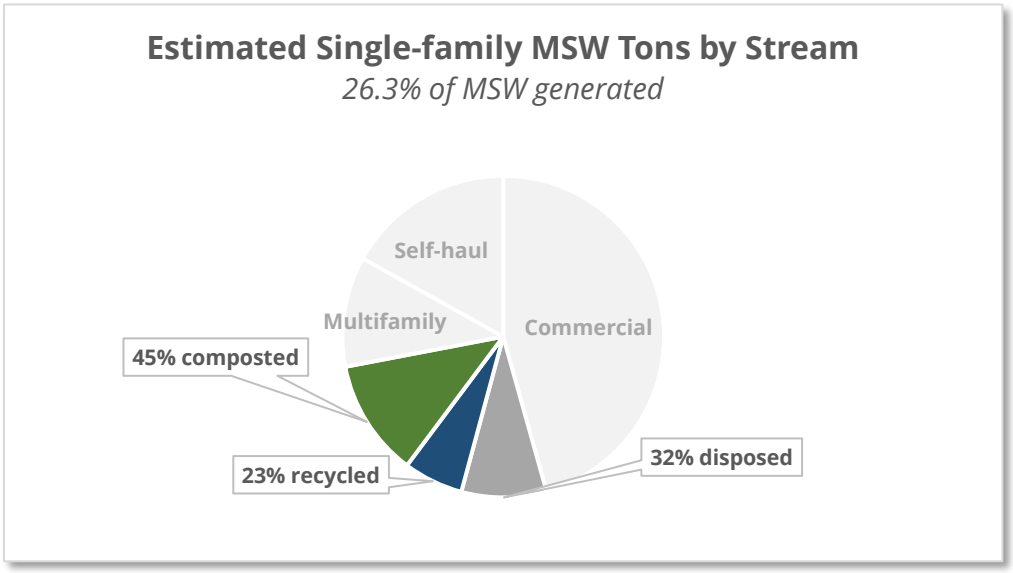
- To better understand waste self-hauled to the transfer stations, especially opportunities to reduce disposal, the City conducted a waste composition study of self-haul materials in 2023.
- SPU found that 63.2% (68,253 tons) of self-haul garbage in 2023 was recoverable[1], meaning it could have been recycled, composted, or taken to alternate drop-off or take-back locations.
- The study found that the most common materials in self-haul garbage were construction debris (52%); furniture, appliances, and electronics (18%); and plastic (7%). Notably, of the overall C&D material self-hauled to the transfer stations in 2023, at least 39.6% (22,051 tons) is banned from disposal in Seattle.[2]
- With most disposed self-haul waste consisting of recoverable materials and with self-haul waste accounting for an increasing share of overall MSW disposal, SPU is conducting an evaluation of trips, tons, and composition data to identify options to curb the growth of self-haul disposal.

[1]The study assigned materials to five recoverability classes: 1) Curbside recyclable, 2) Compostable, 3) City drop-off, 4) Other recoverable (e.g. private drop-off and store take-back programs), 5) Non-recoverable.

[2]This excludes the readily recyclable banned materials of metal and cardboard, and includes the following C&D materials that are banned from disposal in Seattle: asphalt paving, bricks, concrete, new construction gypsum scrap, and unpainted and untreated wood. https://www.seattle.gov/utilities/construction-resources/collection-and-disposal/construction-and-demolition#materialsbannedfromdisposal

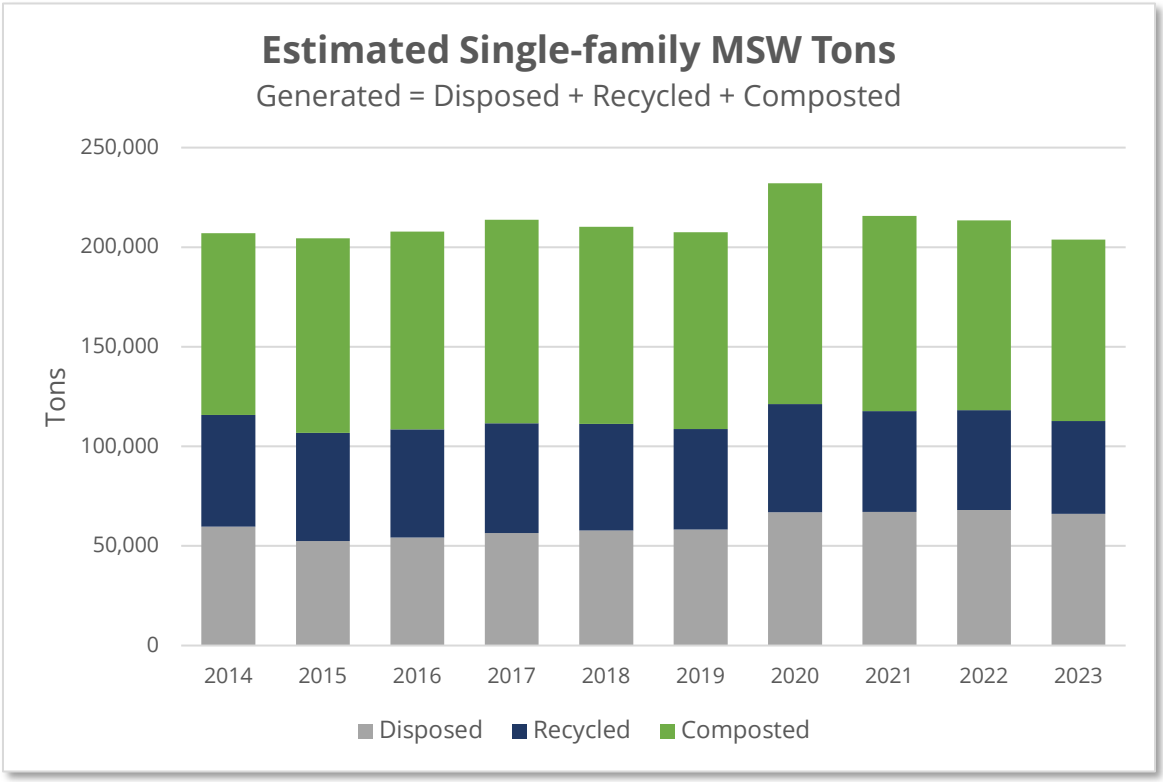


Estimated single-family MSW

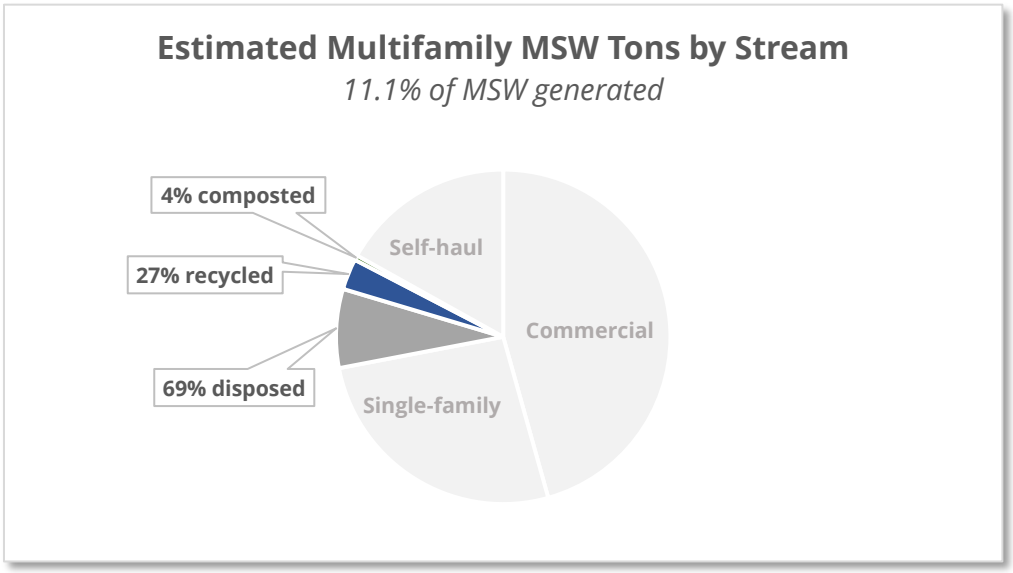


- Waste generation levels for single-family households fell once again in 2023, down 4.5% or 9,671 tons, to a 24-year low after peaking during COVID-19-related quarantine. For the first time since 2013, all single-family sector waste streams—disposed, recycled, and composted—decreased in 2023 over the previous year's levels.
- Notably, decreases in single-family diversion (combined recycled and composted tons) outpaced the decline in disposal. Single-family composted tons declined by 4.4% (4,228 tons) to the lowest level since 2014, and recycled tons declined by 6.8% (3,410 tons) to a 24-year low.

- The post-pandemic decline in single-family MSW generation could be related to fewer residents working from home as several of Seattle's large employers either instated mandates for workers to return to the office or encouraged in-office worker presence after the COVID-19 Public Health Emergency.[3,4]



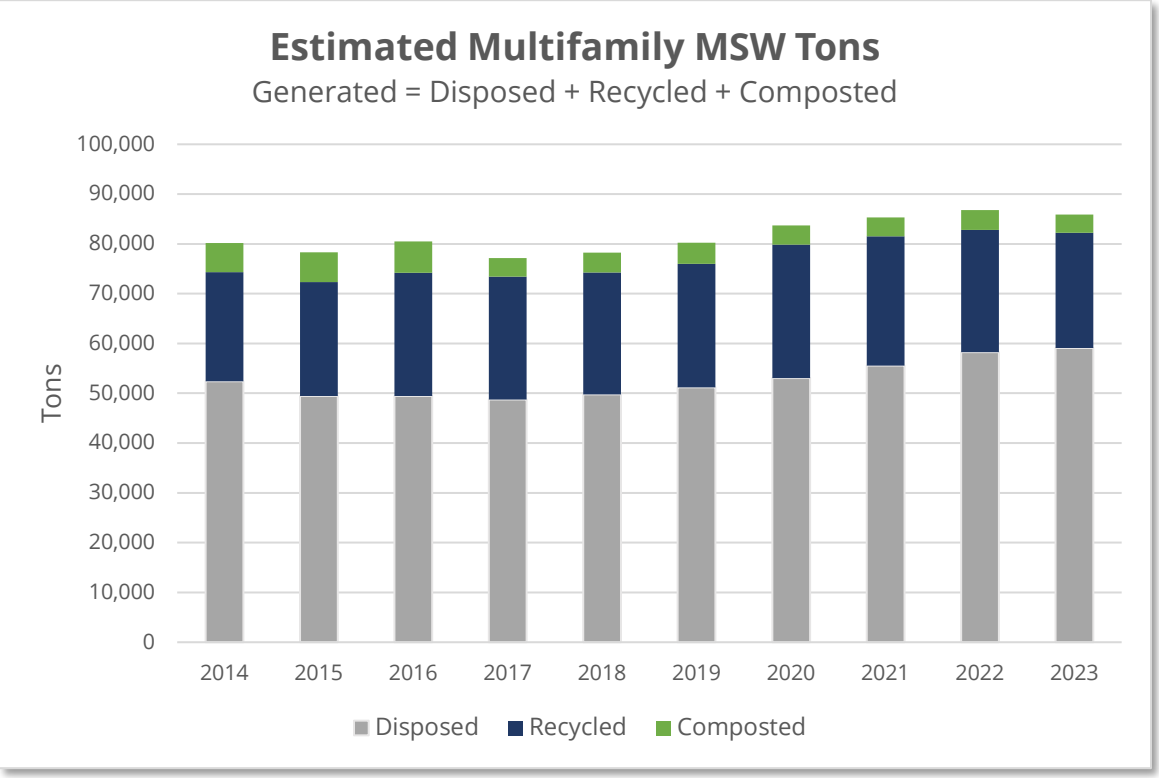
Estimated multifamily MSW



- In 2023, multifamily household MSW generation declined by 1% to 85,866 tons from the record high set in 2022 of 86,765 tons, despite continued growth in the multifamily sector.
- The share of multifamily MSW diverted from landfill (recycled and composted) has been declining since the height of the pandemic in 2020, while disposal has been steadily increasing since 2018.

[3] Balk, Gene. "New data shows why Seattle's downtown feels more lively" *Seattle Times, July 20, 2023.*
[4] Balk, Gene. "After record surge, Seattle sees sharp drop in remote work" *Seattle Times, September 26, 2024.*

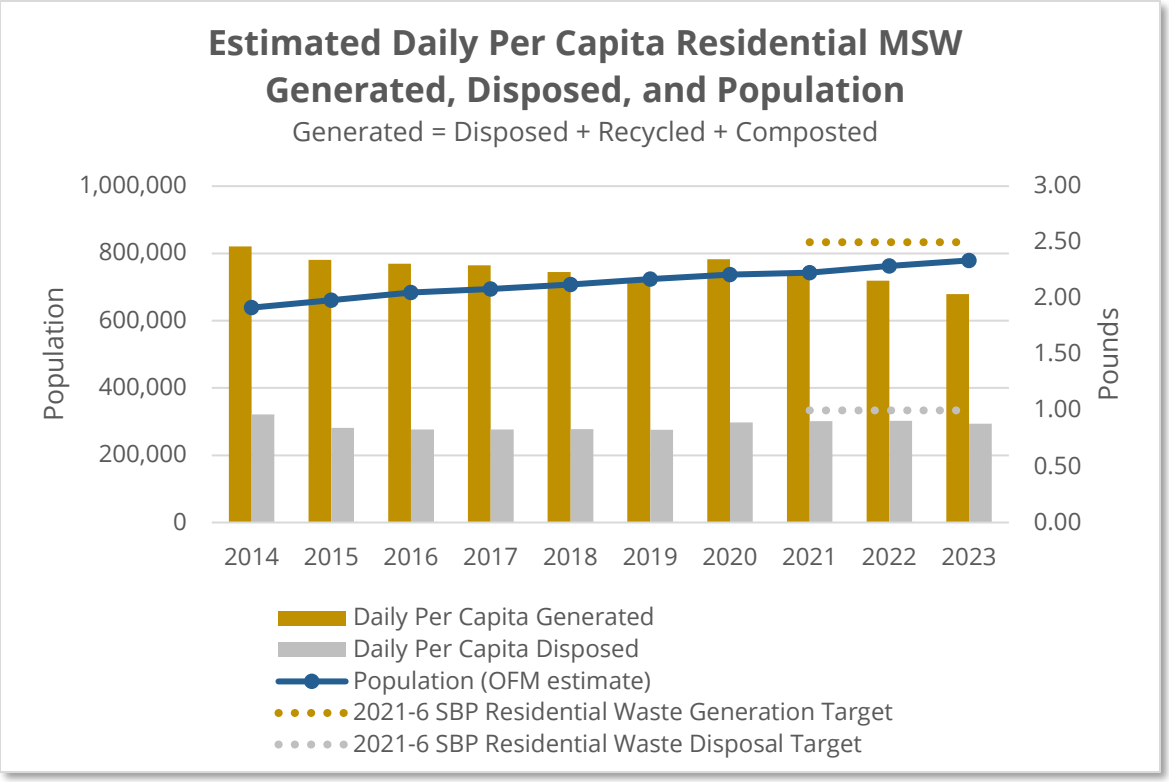
- Relative to other customer sectors, multifamily residents continued to make the least waste of any MSW sector, contributing only 11.1% to the overall generated MSW and 16.4% of the overall disposed MSW.



Estimated daily residential MSW (single-family and multifamily) generated and disposed per capita

- In 2023, residential sector MSW generation dropped back to pre-pandemic levels, with total generation similar to 2019 levels. The single-family sector accounted for most of the decline (-9,671 tons) in residential MSW generation (-10,570 tons).
- As the population continued to grow, daily residential MSW generation declined to 2.04 pounds per person. Since 2013, the City has met the "Essential Service" target of no more than 2.5 pounds of residential waste generated per person per day.[5]
- With residential disposal down slightly (1,193 tons or -1%) and population growth up 2%, daily per person residential waste disposal decreased to 0.88 pounds. The City's target for residential per person disposal is no more than 1 pound per person per day.

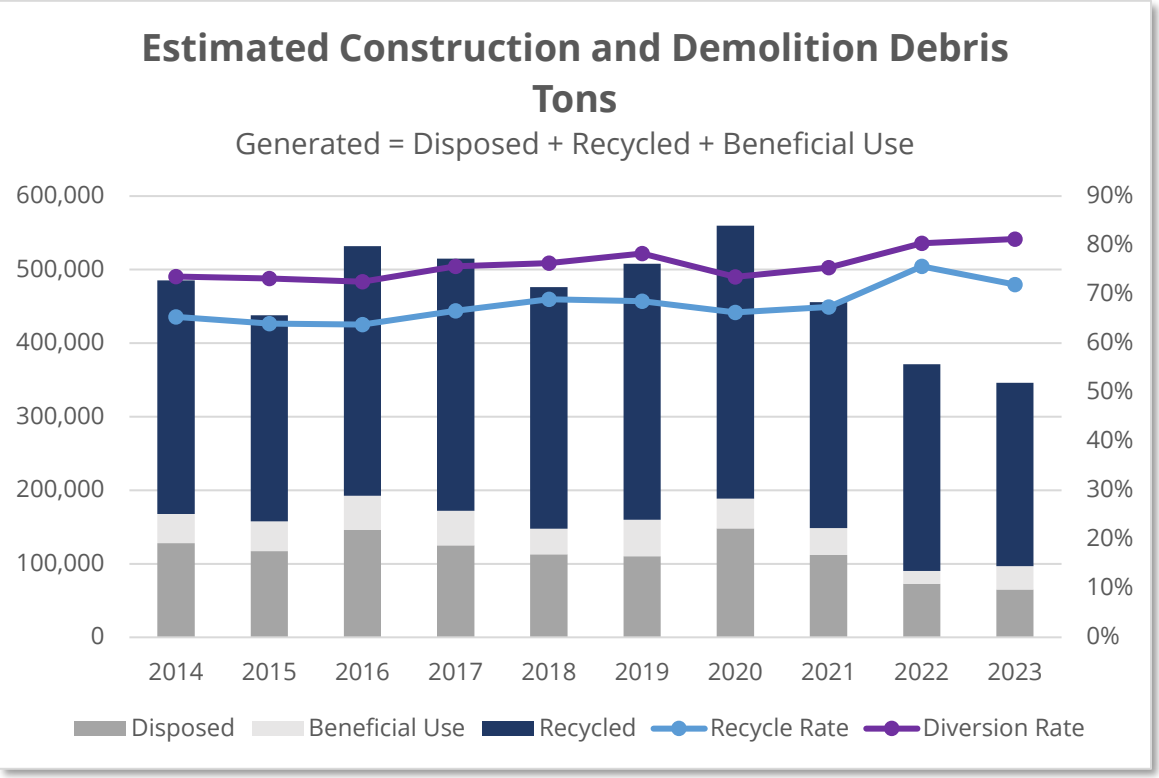
[5] SPU has been reporting on daily pounds of residential MSW disposed per capita as an "Essential Service Metric" in SPU's Strategic Business Plan Quarterly Report.



Estimated construction and demolition (C&D) debris

- According to data self-reported to the City by construction and demolition debris collection, processing, and disposal vendors, C&D debris generation fell for a third straight year to the lowest level since 2011, after reaching an all-time high in 2020.[6]
- This decline indicates an overall reduction in construction activity, as reflected by the decrease in construction and demolition permits issued from 2021-2023.
- Of the C&D debris generated in 2023, the majority--about 72%--was recycled. Meanwhile, disposal fell to a 17-year low of 64,902 tons.
- With the continued decline in C&D generation, the commercial sector generated more tons overall (353,366) than any other individual MSW sector, surpassing the C&D sector (346,085 tons) for the first time since 2010.

[6] Per Seattle Municipal Code 6.250, Seattle requires recycling collectors and processors to report their recycling activities to obtain a Recycler License that allows them to operate in the City. SPU verifies data reported by C&D recyclers against monthly reports sent by Qualified Facilities.



Notes:

1) *SPU estimates C&D debris disposal and beneficial use tons based on C&D companies' self-reporting via the Qualified Facilities Monthly Report and the Annual Recycling and Reuse Report.*
2) *SPU estimates C&D debris recycled tons based on C&D companies' self-reporting in the Annual Recycling and Reuse Report.*
3) *In 2020, SPU updated disposal estimates for 2018 and 2019 following additional data analysis.*
4) *In 2022, SPU updated disposal estimates for 2021 after finding and correcting a calculation error.*

Data tables - Annual tonnages by customer sector

The following sections include data tables with annual tonnages by customer sector. The tables include MSW tonnage by sector for the years 2000-2023 and C&D debris tonnage for the years 2007-2023.

Estimated overall MSW

Estimated Overall MSW Tons, 2000-2023

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%
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	346,322	NA[1]	NA[1]	55.9%
2019	757,466	345,559	NA[1]	NA[1]	54.4%
2020	711,619	327,114	195,220	189,285	54.0%
2021	734,420	347,549	216,960[2]	169,912[2]	52.7%
2022	759,357	358,268	221,119[2]	179,970[2]	52.8%
2023	**773,961**	**360,585**	**228,704**	**184,672**	**53.4%**

Notes:

1) *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.*

Estimated commercial MSW

Estimated Commercial MSW Tons, 2000-2023

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%
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[1]	NA[1]	64.1%
2019	355,453	134,686	NA[1]	NA[1]	62.1%
2020	286,036	109,891	108,190	67,955	61.6%
2021	312,420	115,869	134,847[2]	61,704[2]	62.9%
2022	331,984	117,061	141,467[2]	73,456[2]	64.7%
2023	**353,366**	**118,662**	**152,045**	**82,659**	**66.4%**

Notes:

1) 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.

Estimated self-haul MSW

Estimated Self-haul MSW Tons, 2000-2023

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%
2012	80,568	70,474	3,501	6,593	12.5%
2013	84,341	74,019	4,032	6,290	12.2%
2014[1]	64,681	57,847	2,635	4,199	10.6%
2015[1]	67,993	60,938	2,888	4,167	10.4%
2016[1]	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	114,234	101,506	5,771	6,957	11.1%
2020	109,844	97,320	5,744	6,780	11.4%
2021	121,007	109,046	5,448	6,513	9.9%
2022	127,096	114,842	5,107	7,147	9.6%
2023	**130,888**	**116,751**	**6,916**	**7,221**	**10.8%**

Notes:

1) The North Transfer Station was closed from 2014 – 2016 for construction of the new station.

Estimated single-family MSW

Estimated Single-family MSW Tons, 2000-2023

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%**

Estimated multifamily MSW

Estimated Multifamily MSW Tons, 2000-2023

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%
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[1]	77,150	48,773	24,652	3,725	36.8%
2018	78,245	49,760	24,520	3,965	36.4%
2019	80,241	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%**

Notes:

1) 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.

Estimated residential MSW (single-family and multifamily)

Estimated Residential MSW Tons, Population, and Pounds Per Person Rates, 2000-2023

Year	*Tons*			Population estimate[1,2]	*Pounds per person per day*	
	Generated	Disposed	Recycled and Composted		Generated	Disposed
2000	279,412	145,832	133,580	563,376	2.72	1.42
2001	280,593	144,559	136,034	567,491	2.71	1.40
2002	276,618	142,910	133,708	572,854	2.65	1.37
2003	277,897	143,532	134,365	574,530	2.65	1.37
2004	281,772	142,527	139,245	576,906	2.68	1.35
2005	281,000	134,557	146,442	579,779	2.66	1.27
2006	292,491	133,721	158,770	587,755	2.73	1.25
2007	297,235	133,341	163,895	594,339	2.74	1.23
2008	288,112	127,160	160,952	599,055	2.64	1.16
2009	285,539	118,725	166,814	603,155	2.59	1.08
2010	287,159	114,097	173,062	608,660	2.59	1.03
2011	283,006	112,772	170,234	611,249	2.54	1.01
2012	285,579	111,420	174,159	614,283	2.55	0.99
2013	283,563	110,839	172,724	624,045	2.49	0.97
2014	287,182	112,211	174,971	638,784	2.46	0.96
2015	282,675	101,972	180,703	660,908	2.34	0.85
2016	288,282	103,735	184,547	684,136	2.31	0.83
2017	290,859	105,315	185,544	694,513	2.29	0.83
2018	288,534	107,485	181,049	707,555	2.23	0.83
2019	287,779	109,367	178,412	724,144	2.18	0.83
2020	315,739	119,903	195,836	737,015	2.35	0.89
2021	300,994	122,634	178,360	742,400	2.22	0.91
2022	300,277	126,365	173,912	762,500	2.16	0.91
2023	**289,707**	**125,172**	**164,535**	**779,200**	**2.04**	**0.88**

Notes:

1) *SPU uses April 1 population estimates provided by the Washington State Office of Financial Management (OFM). For this report, SPU updated the population estimates for 2010-2020 using OFM's Intercensal Estimates of April 1 Population and Housing, 2010-2020: https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fofm.wa.gov%2Fsites%2Fdefault%2Ffiles%2Fpublic%2Fdataresearch%2Fpop%2Fapril1%2Fhseries%2Fofm_april1_intercensal_estimates_2010_2020.xlsx&wdOrigin=BROWSELINK.*
2) *Current (2023) April 1 population estimates from OFM appear on the City of Seattle's website: https://seattlecitygis.maps.arcgis.com/apps/dashboards/c8cfcb827e564623a6fa3af6360141fe.*

Estimated construction and demolition (C&D) debris

Estimated Construction & Demolition Debris Tons, 2007-2023

Year	Generated	Disposed[1]	Recycled[2]	Beneficial Use[1]	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[3]	476,433	112,900	328,568	34,965	69.0%	76.3%
2019[3]	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[4]	455,800	111,998	307,050	36,752	67.4%	75.4%
2022	371,246	72,837	280,909	17,500	75.7%	80.4%
2023	**346,085**	**64,902**	**249,116**	**32,067**	**72.0%**	**81.2%**

Notes:

1) *SPU estimates C&D debris disposal and beneficial use tons based on C&D companies' self-reporting via the Qualified Facilities Monthly Report and the Annual Recycling and Reuse Report.*
2) *SPU estimates C&D debris recycled tons based on C&D companies' self-reporting in the Annual Recycling and Reuse Report.*
3) *In 2020, SPU updated disposal estimates for 2018 and 2019 following additional data analysis.*
4) *In 2022, SPU updated disposal estimates for 2021 after finding and correcting a calculation error.*

Solid Waste Advisory Committee comment letter

November 26, 2024

Councilmember Joy Hollingsworth
Chair, Parks, Public Utilities & Technology Committee
PO Box 34025
Seattle, WA 98124-4025

Dear Councilmember Hollingsworth and Committee Members,

The Solid Waste Advisory Committee (SWAC) has carefully reviewed Seattle Public Utility (SPU)'s draft of the 2023 Annual Waste Prevention & Recycling Rate (WP&RR) Report. We appreciate the opportunity to provide our insights and recommendations.

New Metrics for Waste Reduction and Diversion

SWAC commends SPU's development of new solid waste metrics and goals to better capture the impact of waste prevention and reduction efforts. We support the shift from tracking per capita disposal for residential Municipal Solid Waste (MSW) generation to overall MSW generation. The ambitious target of reducing overall per capita MSW disposal by at least 15 percent by 2030 relative to 2015 is both challenging and achievable. This approach will provide a more comprehensive assessment of waste generation trends in Seattle and align with international climate action goals, enabling us to benchmark against other leading sustainable cities.

Diversity, Equity, and Inclusion

While we appreciate the significant DEI efforts incorporated into waste prevention planning, we encourage SPU to provide more detailed information on community feedback from program and outreach efforts. SWAC continues to advocate for enhanced communication with Seattle's BIPOC, refugee, immigrant, and underserved communities. We believe that a deep investment in understanding cultural barriers is crucial for tailoring messaging and improving outcomes, in line with SPU's guiding principles of equity and empowerment.

Self-Haul Sector Disposal

SWAC shares SPU's concern regarding the steady increase in disposal at the City's transfer stations by self-haulers, which reached a 24-year all-time high in 2023. We eagerly await the results of SPU's analysis of the 2023 self-haul waste composition study to better understand the root causes of this increase. Based on preliminary findings, we recommend prioritizing this sector, as it presents significant opportunities for reducing disposal through enhanced compliance and enforcement activities, incentives, and improved recycling and reuse options.

We appreciate your consideration of our comments and recommendations. SWAC remains committed to supporting SPU's efforts in waste prevention and recycling to create a more sustainable Seattle.

Sincerely,

Aleema Gray, Chair, 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.

Cc:

Andrew Lee, General Manager/CEO, Seattle Public Utilities
Jeff Fowler, Deputy Director, Solid Waste Line of Business
Bob Hennessey, SPU City Council Liaison

Katie Swanson, Solid Waste Lead Planner
Casey Colley, SWAC Coordinator