

Municipal Solid Waste Quarterly Report

Research, Analytics, and Insights Team
Solid Waste Planning & Program Management Division
SPU_SW_Reports@seattle.gov

Municipal Solid Waste Quarterly Report - City Contracted and Self-haul Tonnage

Q4
2021

Select Report Quarter

Q4

Select Report Year

2021



About the Data



Help



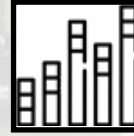
Summary



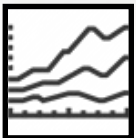
Compare Residential
Subsectors



Average Annual Changes
in Tonnage



Residential Garbage and
Recycling Material Classes



Estimated MSW Tons
Over Time



How to use this Tableau report

Interactivity:

- * All tables/figures are interactive
- * Click or hover on a data point or any part of a figure for more information
- * To narrow results, use filters on the left-hand side of each tab or sheet (called a "dashboard" in Tableau)
- * Click on sections of figures or tables to "highlight" that section. Click again to remove the highlight.

Note that actions can be reset and will not affect the dashboard for other viewers.

Navigation:

- * Tableau reports are organized into dashboards, which are individual sheets or tabs. This report has 8 dashboards.
- * To return to the home page dashboard, click the home button in the top right corner located on every dashboard
- * The homepage has links to all dashboards

Downloading Data, Plots, or Tables:

- * Data, plots, and tables can be downloaded using the Download button in the top right corner of each dashboard
- * Only the data used to create the displayed table or plot will be downloaded. This means downloaded data will reflect user choices, including which dashboard is open and the choices made to filter the table/plot.

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About the Data

Q4
2021



Data

Critical Note:

The data in this report include estimated City contracted and self-haul tonnage plus some garbage and organics data from private stations. The data presented are not a full account of the municipal solid waste (MSW) in the City and do not include estimates of non-contracted commercial recycling and composting or activities such as home composting. In addition, this report does not exclude estimated tons of contaminants. For these reasons, the data in this report may differ from other reports published by SPU.

The data in this report are estimated and are subject to change.

Obtaining Data/Plots/Tables:

Plots, tables, and the data used to generate any tables or plot in this report can be downloaded by pressing the Download button in the top right corner of each dashboard. Note that the full data table will not be downloaded. Data will be subset based on the selections made to filter the data, such as sector and year, and the report dashboard open.

Data Sources

- Contracted tonnage data is uploaded weekly by vendors under contract with SPU to the Solid Waste Data Integration (SWDI) database. Data undergoes a QA/QC process weekly to identify errors and missing data. Corrections are submitted, on average, within a week.
- Commercial non-contracted tonnage data come from:
 - Garbage: Vendor monthly Excel reports
 - "Mid-Month Report" from Waste Management and "Flow Control Report" from Republic/Lander.
 - Organics: Waste Management monthly online report (ENSPIRE) and Cedar Grove quarterly PDF report.
- Material estimate percentages come from the [SPU Waste Composition Studies](#) for the Residential Sector.
 - Garbage: [2010](#), [2014](#), [2020](#)
 - Recycling: [2010](#), [2015](#), [2020](#)

Terms

- **Municipal Solid Waste (MSW):** Includes all garbage, recycling, and organics (food and yard waste) material that Seattle customers set out for collection or haul to a City transfer station.
- **Contracted Tonnage:** Number of tons collected by vendors under contract with SPU
- **Non-contracted Tonnage:**
 - Self-haul includes only material transported by customers to SPU's transfer stations
 - Commercial garbage and organics include both contracted and non-contracted tonnage. Commercial recycling includes only the contracted portion.
- **Sector:** Residential, Commercial, Self-haul
 - **Residential:** Single family + Multifamily subsectors
 - **Single family:** Dwellings with no more than four units
 - **Multifamily:** Apartments and condominiums with five or more units
- **Contaminant:** Items that did not meet the requirements of Seattle's recycling program (as of 2014-15)
- **Stream:** Waste stream including garbage, recycling, and organics (food and yard waste)

Municipal Solid Waste (MSW) Quarterly Report

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Estimated City Contracted and Self-haul MSW Tonnage

Q4
2021



Percent difference Q4 2021 and previous quarter

Single family	Multifamily	Commercial	Self-haul
4.95%	-4.64%	-5.41%	-9.56%

Percent difference Q4 2021 and Q4 2021

Single family	Multifamily	Commercial	Self-haul
-10.74%	-4.15%	5.42%	1.95%

Estimated Single family Tons by Waste Stream (Q1-Q4)

	2014	2015	2016	2017	2018	2019	2020	2021
Garbage	59,772	52,529	54,390	55,077	57,725	58,191	66,878	67,082
Recycling	59,849	60,697	60,597	61,334	59,619	56,196	61,345	57,123
Organics	77,611	84,080	86,422	86,839	84,982	84,842	96,028	83,958
Estimated Total	197,233	197,307	201,409	203,251	202,327	199,229	224,250	208,163

Make Selections

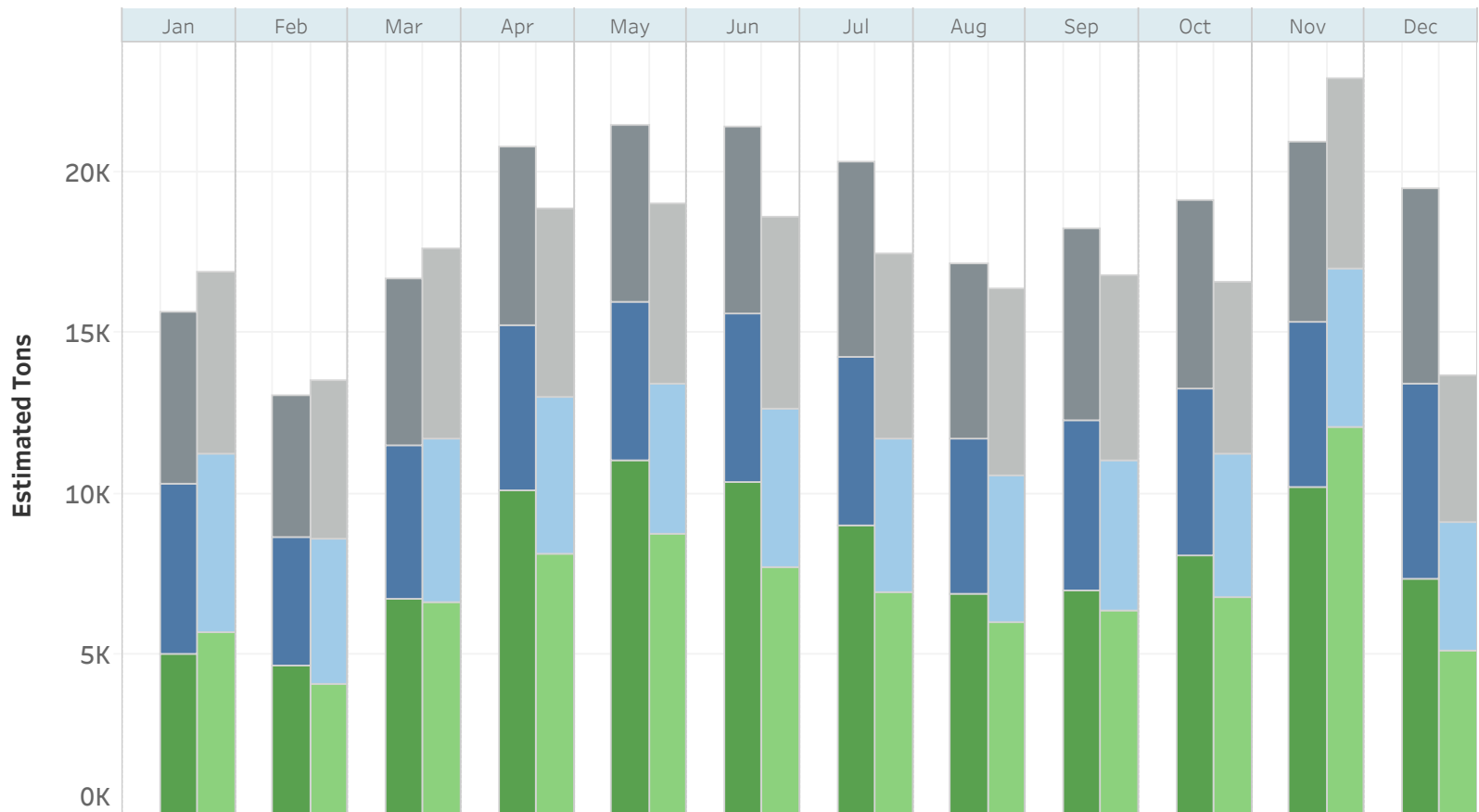
Select Plot
 Estimated tons

- Stream
- Garbage
 - Recycling
 - Organics

- Sector
- Commercial
 - Multifamily
 - Self-haul
 - Single family

Legend

- Garbage, 2021
- Garbage, 2022
- Recycling, 2021
- Recycling, 2022
- Organics, 2021
- Organics, 2022



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Estimated City Contracted and Self-haul MSW Tons Over Time

Q4
2021



Estimated City contracted and self-haul MSW tons by Sector

Make Selections

Select Plot

Sector

Date (Year, Quarter, Month)

Quarter

Sector

- Commercial
- Multifamily
- Self-haul
- Single family

Waste Stream

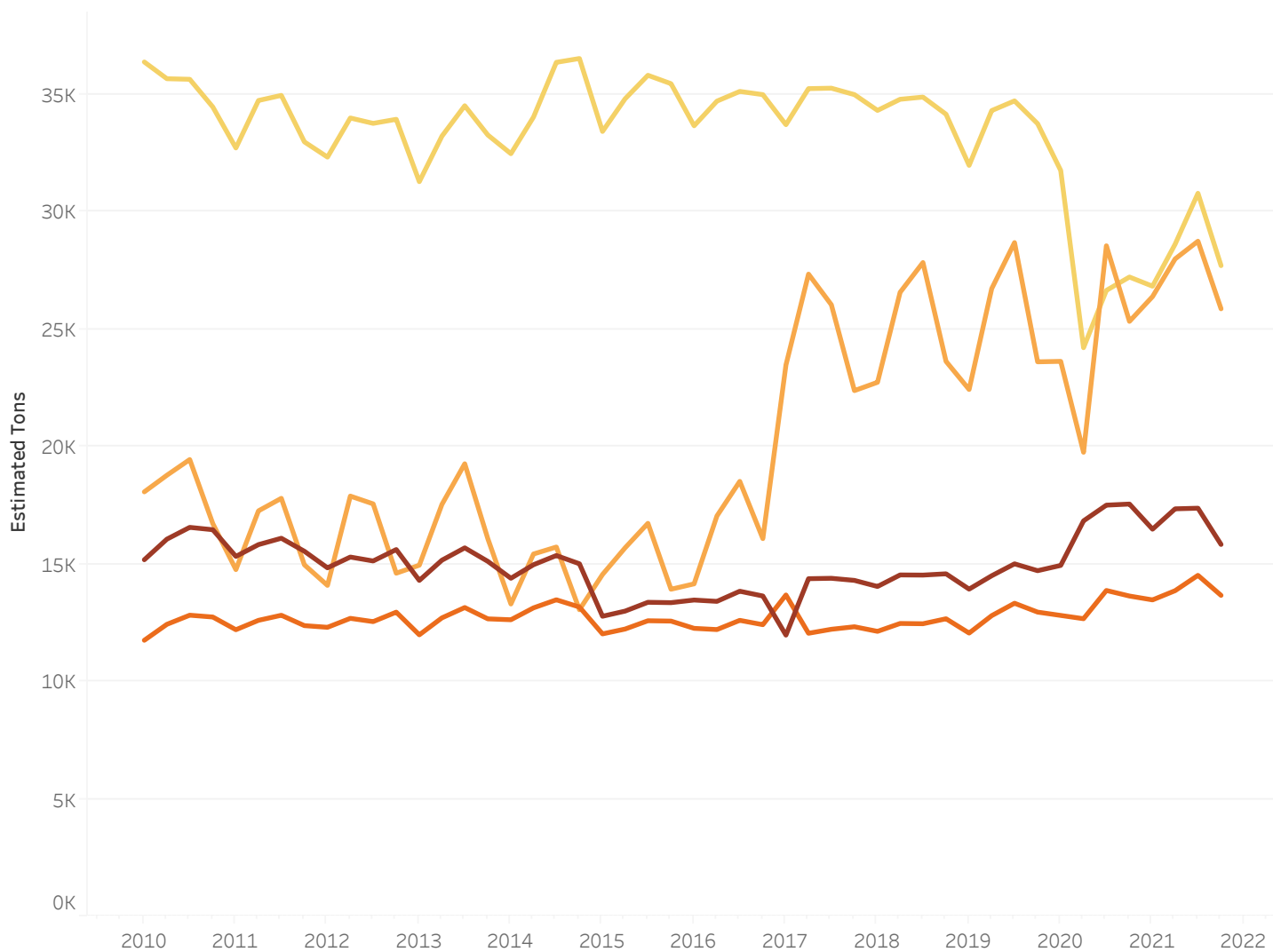
- Garbage
- Recycling
- Organics

Year

All

Figure Legend

- Single family
- Multifamily
- Self-haul
- Commercial



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Difference in Estimated Annual City Contracted and Self-haul MSW Tonnage from the 2014-2021 Mean

**Q4
2021**



Difference in estimated annual MSW tons from the 2014-2021 mean. Means calculated for each sector/stream combination.

	Single family			Multifamily			Commercial			Self-haul		
	Garbage	Recycling	Organics	Garbage	Recycling	Organics	Garbage	Recycling	Organics	Garbage	Recycling	Organics
2015	-6,426	1,102	-1,515	-1,961	-1,910	719	7,840	640	-8,567	-25,599	-282	-1,489
2016	-4,565	1,002	827	-1,884	217	1,037	6,828	840	-1,146	-20,698	-112	-1,262
2017	-3,879	1,739	1,244	-1,089	354	-464	7,547	817	13,368	12,753	81	470
2018	-1,230	24	-613	-1,645	206	-450	6,487	482	19,205	14,288	209	471
2019	-765	-3,399	-753	-228	524	-165	3,100	-259	19,242	14,968	278	1,300
2020	7,922	1,750	10,432	1,621	2,840	-592	-21,822	-1,326	-11,348	10,782	45	1,123
2021	8,127	-2,472	-1,638	4,150	1,863	-647	-17,720	-1,414	-13,854	22,508	203	857

Make Selections

Stream

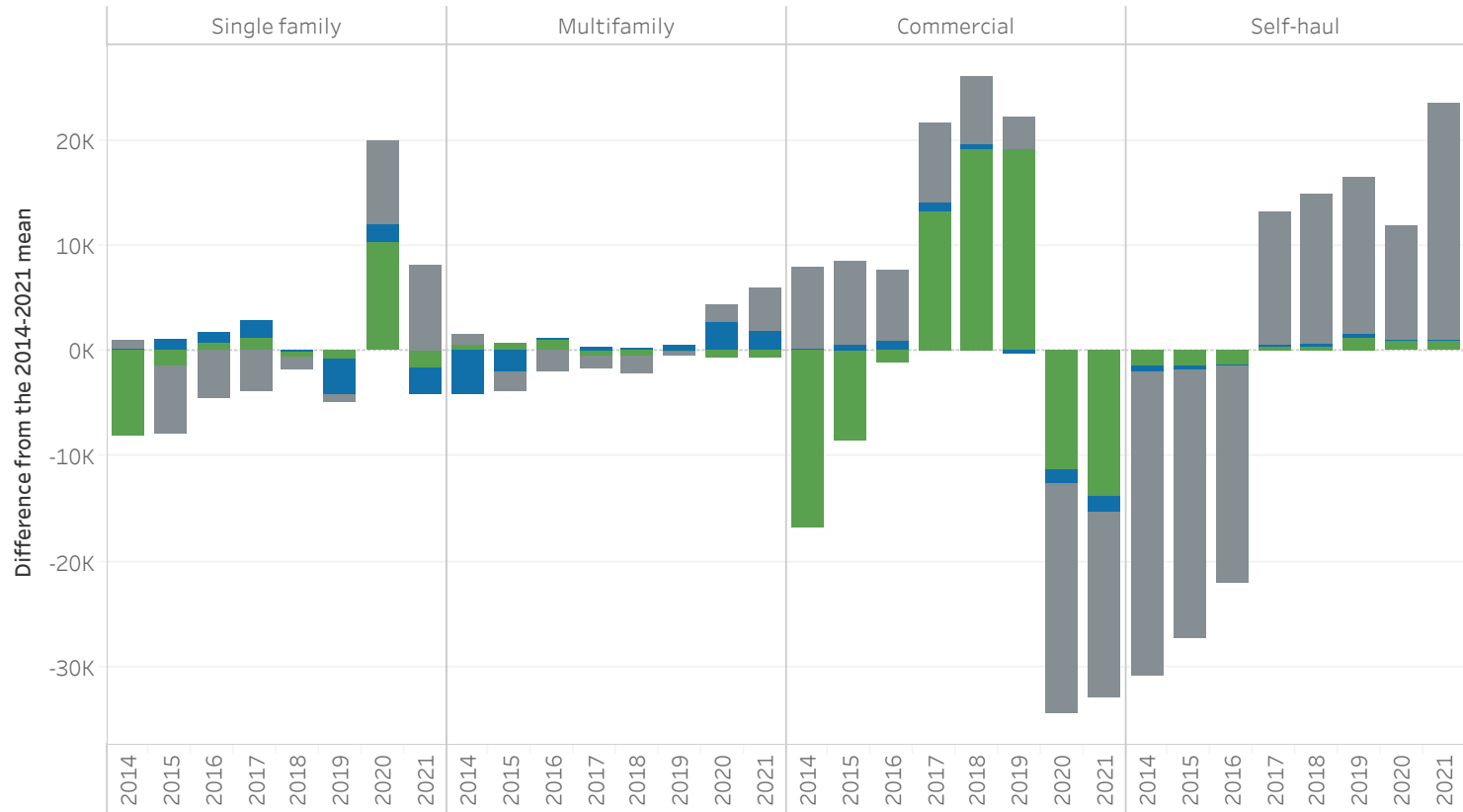
- Garbage
- Recycling
- Organics

Sector

- Commercial
- Multifamily
- Self-haul
- Single family

Figure Legend

- Garbage
- Recycling
- Organics



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Estimated Composition of City Contracted MSW Tonnages for Residential Subsectors using Waste Composition Study Material Proportions

Q4
 2021



Waste Composition study years

* Garbage (2010,2014,2020)

* Recycling (2010, 2015, 2020)

		2010	2015	2020
Recycling	Multifamily	20,726	25,569	30,318
	Single family	61,099	60,697	61,364
Total		81,825	86,266	91,682

Estimated tons of Recycling material classes for single family and multifamily subsectors in Q1 through Q4

Make Selections

Commodity

- Garbage
- Recycling

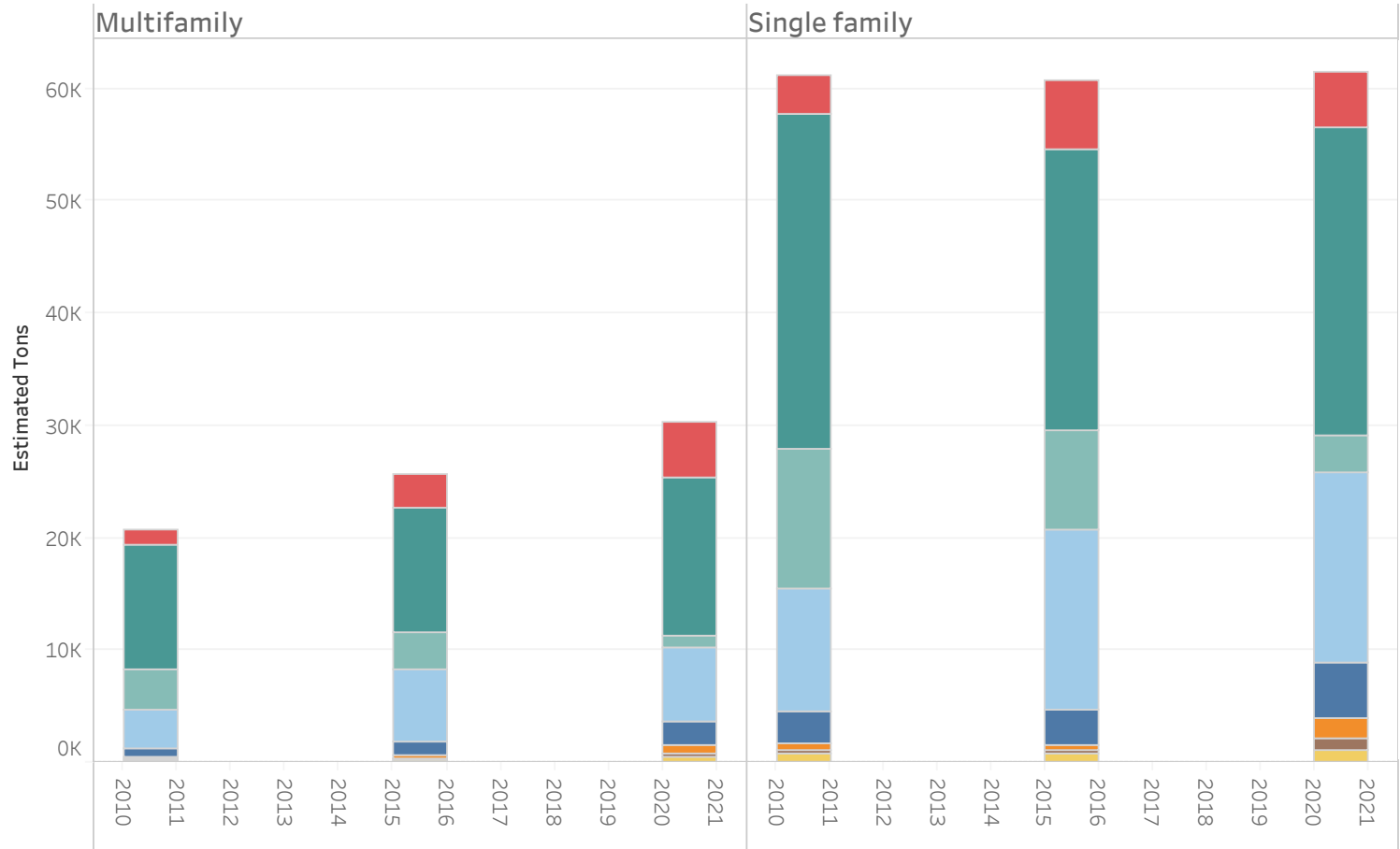
Materials

All

Figure Legend

Material

- Contaminants
- Mixed Paper
- Newspaper
- Glass
- Plastic
- Aluminum
- Ferrous Metal
- Tin



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Estimated City Contracted MSW Tonnages for Material Classes in the Residential Garbage and Recycling Streams using Waste Composition Study Material Proportions

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Estimated collected tons for material classes in the Garbage stream in 2020

	C&D	Curbside Recycla..	Food	Hazardous	Other Curbside C..	Other Material	Total Tons*
Garbage	2,801	13,982	10,552	1,001	6,237	18,163	52,736

*Total Tons excludes estimated tons of contaminants (Total tons Without Contaminants)

** Only years with relevant waste composition studies are provided

*** Material proportions are calculated for each study year and applied to monthly estimated City contracted MSW tons. Proportions do not change between months.

Make Selections

- Sector**
- Multifamily
 - Single family

- Stream**
- Garbage
 - Recycling

- Year****
- 2010
 - 2014
 - 2020

- Material Class**
- All

Figure Legend

- Material**
- C&D
 - Food
 - Other Curbside Compostable
 - Curbside Recyclable
 - Hazardous
 - Other Material

