2026 Packaging and Paper Product (PPP) Collection Cost Study

Multi-Material Recycling Inc. (MMRI)

17 June 2026

Contents

1. Disclaimer

Multi-Material Recycling Inc. (“MMRI”) has engaged Deloitte LLP (“Deloitte”) to conduct the 2026 PPP Collection Cost Study (“Cost Study”) for costs relevant to the year 2025. Deloitte is pleased to present the results of the Cost Study with the submission of this report (the “Report”) to MMRI as per the agreed scope of work.

The Report includes certain observations with respect to the Cost Study findings that were gathered by Deloitte through the information provided by cost study participants (“Participants”) in the Cost Study via questionnaire(s) and/or during telephone discussions with the Deloitte team over the period between March 12 to May 22, 2026. Such observations reflect best information available at the date of completion of the data collection process. While the information contained herein is believed to be accurate, Deloitte has not conducted any investigation or due diligence with respect to such information provided by the participants of the Cost Study. Additionally, the Participants were not asked to provide any invoices or ledgers to verify their responses, and Deloitte assessed the information provided by the Participants as reliable.

The Report is intended for the use of MMRI. Deloitte accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken based on the Report.

Except where otherwise indicated, the Report is current to May 22, 2026, and any observations/conclusions provided in the Report are subject to change in the event of receipt of additional information.

The data collection, analysis and results presented in this Report do not constitute an audit conducted in accordance with generally accepted auditing standards, an examination or compilation of, or the performance of agreed upon procedures with respect to prospective financial information, an examination of or any other form of assurance with respect to internal controls, or other attestation or review services in accordance with standards or rules established by the Canadian Institute of Chartered Accountants (“CICA”) or other regulatory body.

Unless defined herein, all capitalized terms in the Report shall have the meaning ascribed in the Glossary of Terms.

2. Glossary of Terms

Term	Definition
CICA	Canadian Institute of Chartered Accountants
CPI	Consumer Price Index
EPR	Extended Producer Responsibility
FAQ	Frequently Asked Questions
HH	Household
MMRI	Multi-Material Recycling Inc.
NBV	Net Book Value
P&E	Promotion and Education
PPP	Packaging and Paper Product
PRO	Producer Responsibility Organization
RWA	Regional Waste Authorities
SA	Service Administration

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4. Executive Summary

The 2026 Packaging and Paper Product ("PPP") Cost Study is the fourth (4^{th}) cost study undertaken by Multi-Material Recycling Inc. ("MMRI" or "SK Recycles"), formerly known as Multi-Material Stewardship Western ("MMSW"). The previous cost studies were undertaken by SK Recycles in 2017, 2019, and 2022. The purpose of the cost studies is to canvass collection service providers (collectors) who operate in Saskatchewan under MMRI's Household Packaging and Paper Stewardship Program Plan ("Product Stewardship Plan"). Collectors were canvassed for operating and collection costs and related information to be used by MMRI in for setting incentive rates for curbside/multi-family and depot programs transitioning to the new full Extended Producer Responsibility ("EPR") program for Phase 3[1] of the Product Stewardship Plan. Cost Study results will also be used to reassess incentive rates currently applied to Phase 1 and 2[2] collectors and adjust, if applicable.

The Cost Study was based on 2025 calendar year collection, promotion and education ("P&E"), and service administration ("SA") costs from two (2) service provider types: local governments including Regional Waste Authorities ("RWA") and private collectors. These collectors manage collection programs that include curbside and multi-family individually, curbside and multi-family together, and/or depot collection.

Data was collected from a total of 52 collectors via questionnaires. In the Cost Study analysis, two (2) questionnaires were excluded due to non-submission of costs (these collectors provided some data related to their program; however, no cost data was provided even after multiple follow-ups via email and phone calls), and seven (7) anomaly questionnaires (refer to section 6.2 for details on definition and methodology for identification of anomalies) were removed for various reasons, resulting in a total of 43 questionnaires to be used in the analysis. Table 1 provides weighted average cost per Household ("HH") / tonne (as appropriate) results and a summary of the number of Participants behind these findings by category.

The Report also provides details on the Cost Study methodology, data integrity and accuracy, and will present the detailed Cost Study results.

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[1] Phase 3 will focus on the introduction of depot collection and system optimization as part of MMRI's transition to the future EPR model. Phase 3 will complete the transition to a program that is fully funded and operated by Producers.

[2] Transition Phase 1 is centered on curbside and multi-family collection from eligible communities in larger urban areas. Transition Phase 2 is focused on the expansion of curbside and multi-family collection to smaller and rural communities, including remote and Indigenous communities, that are not eligible under Transition Phase 1, as well as multi-family collection in Transition Phase 1 communities that do not meet the multi-family thresholds.

Table 1. Summary of Collectors in 2026 Cost Study

Cost Category	Total Questionnaires Received	Number of Collection Programs[3]	Number of Anomalies	Questionnaire excluded in the analysis	Weighted Average ("$/ HH or $/tonne"))[4]
Collection Cost					
Curbside Collection (*Cost/ HH)*	26	22	3	1	$41
Multi-family Collection *(Cost/HH)*	8	7	1	0	$38
Depot Collection *(Cost/ Tonne)*	18	14	3	1	$441
Total	**52**	**43**	**7**	**2**	N/A
Other Costs – Promotion and Education ("P&E") and Service Administration ("SA")					
Curbside/Multi-family P&E *(Cost/HH)*[5]	N/A	13	1	N/A	$4
Curbside/Multi-family P&E *(Cost/tonne)*	N/A	13	1	N/A	$39
Depot P&E *(Cost/tonne)*	N/A	4	0	N/A	$8
All Collectors P&E *(Cost/tonne)*	N/A	16	2	N/A	$37
Curbside/Multi-family SA *(Cost/HH)*[6]	N/A	8	1	N/A	$4
Curbside/Multi-family SA *(Cost/tonne)*	N/A	8	1	N/A	$43
Depot SA *(Cost/tonne)*	N/A	5	1	N/A	$84
All Collectors SA *(Cost/tonne)*	N/A	13	2	N/A	$47

[3] The number of collection program exclude anomalies.
[4] Weighted average calculations are based on averages in relation to number of households or tonnage, as applicable.
[5] This analysis includes curbside and multi-family collectors. The multi-family collectors provide curbside collection as well; therefore, the curbside and multifamily P&E costs are assessed together.
[6] This analysis includes curbside and multi-family collectors. The multi-family collectors provide curbside collection as well; therefore, the curbside and multifamily SA costs are assessed together.

5. Background

Saskatchewan is in the midst of a major change to its recycling program with the launch of a full EPR program for packaging and paper, shifting to producer-led end-of-life management of the province-wide recycling program. The Waste Packaging and Paper Stewardship Plan was approved in 2013 by the Saskatchewan government. Since then, producers of Paper and Packaging Products ("PPP") ("Producers") have shared responsibility with municipalities to fund the collection and recycling of household PPP. Under the shared responsibility model, local governments and RWAs provide household collection and/or depot collection services to residents and some First Nations and Métis communities. In March 2023, the Government of Saskatchewan enacted the Household Packaging and Paper Stewardship Program Regulations, 2023. These regulations fundamentally restructured the province's approach to managing PPP by transitioning from a shared-responsibility model where Producers funded up to 75% of recycling costs to a full EPR framework, requiring producers to assume complete financial and operational responsibility for the collection, processing, and recycling of PPP. The regulations also introduced a formal requirement for producers (or Producer Responsibility Organizations – PROs) to submit a product stewardship program for Ministerial approval, outlining program design, operational approach, performance targets, and stakeholder engagement.

In response, SK Recycles developed a province-wide Product Stewardship Plan, which was subsequently approved by the Saskatchewan Ministry of Environment in May 2024. This approval marked the formal transition to a producer-led EPR system, with a phased transition and implementation:

- Transition Phase 1: Curbside and multi-family collection in larger urban areas.
- Transition Phase 2: Expansion to smaller and rural communities.
- Transition Phase 3: Introduction of depot collection and system optimization.

Each phase requires a detailed understanding of efficient and effective collection costs, including variations in geography, population density, service type, and material composition.

Under this transition, Producers are required to operate an approved product stewardship program or enter into an agreement with a producer responsibility organization ("PRO") to operate a product stewardship program approved by the Minister of Environment. This shift introduces new cost considerations and accountability requirements. To build a cost-efficient system and ensure Producers are charged appropriately, MMRI must understand the full costs associated with its program.

MMRI will offer financial incentives to collectors participating in the Product Stewardship Plan. These incentives will be designed to provide collectors with incentives to collect the PPP required and to cover collection costs. We understand that each phase of the transition towards the new model will require a detailed understanding of efficient and effective collection costs, including variations in geography, population density, and service collection type.

6. Cost Study Methodology

6.1. Data Collection Methodology

In late 2025/early 2026, local governments and private collectors received communications from MMRI requesting their participation in the Cost Study. Following this initial invitation, MMRI sent a memorandum to participants to provide an overview of the Cost Study and introduce Deloitte, the third-party professional services firm engaged to facilitate the process. Deloitte, in collaboration with MMRI, developed two (2) sets of questionnaires, one for curbside/multi-family collectors and one for depot collectors. The questionnaires requested general information as well as data specific to either the curbside/multi-family or depot collector. Deloitte facilitated two (2) questionnaire webinars to explain the purpose of the Cost Study, provide a walk-through of the questionnaire, and present the Cost Study timelines. Participants were sent an email from SK Recycles in February 2026 inviting Participants to SK Recycles' 2026 Cost Study Webinar. Participants were provided with details about the Program Plan and the purpose of the Cost Study. Ahead of the two (2) webinars, Participants received another communication regarding the upcoming webinars, along with the questionnaires themselves. Collated documents of frequently asked questions ("FAQ") were also shared with Participants. The curbside/multi-family and depot sessions were held on March 16, 2026 and March 17, 2026, respectively. The webinars were recorded to allow Participants to review details at a later time and for Participants that were not able to attend the webinars as a reference while filling out the questionnaires.

From March to May 2026, e-mail correspondences and virtual meetings were conducted with Participants and the Deloitte team to review the questionnaire template and answer data collection questions. Following the submission of the questionnaire, additional virtual meetings and e-mail correspondences were conducted to clarify/collect information in relation to incomplete data sets, unclear information, and anomalies.

A summary of the cost results from the data collection process is included in the 2026 Collection Cost Results section. Note that all dollar values reported in this Report are in CAD.

6.2. Study Size

In the 2026 Cost Study, questionnaires were received from the following:

- 46 Collectors who have contracted out their collection; and
- 6 Collectors who have in-house collection operations.

The following questionnaires were excluded from the analysis:

- One (1) curbside questionnaire as details on costs were not provided even after multiple follow-ups with the collector.
- One (1) depot questionnaire as it did not provide complete information on the costs.

In total, there were 43 questionnaires analyzed in the 2026 Cost Study as shown in Table 2:

Table 2. Collector Participation in Cost Study (incl. Anomalies)

Cost Category	2022 Participation	2026 Participation
Collection Cost		
Curbside Collection	16	25
Multi-family Collection	4	8
Depot Collection	14	17
Promotion and Education	19	18
Service Administration	19	15

6.3. Definitions

Collection, P&E, and SA costs were analyzed for three (3) collection types: Curbside, Multi-family, and Depot.

Collection Cost

Collection costs include operating and capital amortization costs. The operating costs collected were actual 2025 expenditures. Participants were requested to only report collection and post-collection (only for depot programs) costs for PPP services in their questionnaire. Only costs attributable to PPP services have been included in the analysis for collectors that provide both PPP and garbage services. Guidance was provided to the participants to distinguish collection costs from post-collection costs by MMRI and Deloitte via email or virtual meetings. For capital amortization costs, participants were requested to identify all capital assets used to provide PPP collection service within the amortization periods provided for various asset class within the questionnaire.

Post-Collection Costs

Post-collection costs were only asked from depot collectors. If collection and post-collection services are contracted out to one single service provider and Participants were not able to separate out costs, Participants were asked to appropriately allocate costs between the two functions. Participants were asked to provide details on the methodology used to allocate costs between collection and post-collection activities in the Notes column.

If collection and post-collection services could not be costed separately, Participants were asked to include all associated costs in the collection costs category.

Primary Depot

A primary depot is defined as a depot that services households that do not have curbside or multi-family collection services offered under the MMRI program or any other private collection program.

Supplemental Depot

A supplemental depot is defined as a depot that services households that have curbside or multi-family collection services offered under the MMRI program or any other private collection program.

Class 1 Depot

Class 1 depots, or unsupervised depots, are defined as depot locations that are unsupervised and provide 24-hour public access, allowing users to drop off materials at any time. A Class 1 depot location includes one or more bins grouped together to deliver depot services efficiently.

Class 2 Depot

Class 2 depots, or partially staffed depots, are defined as depot locations that include staff who are present during operating hours, though they generally do not interact with most residents or provide guidance on recycling rules. With Class 2 depots, established operating hours are posted and enforced, and the site is fenced or otherwise secured to prevent public access during non-operating hours.

Class 3 Depot

Class 3 depots, or fully staffed depots, are defined as depot locations that include staff who are present during operating hours and actively monitor and assist residents dropping off recycling. With Class 3 depots, established operating hours are posted and enforced, and the site is fenced or otherwise secured to prevent public access during non-operating hours.

Promotion & Education Cost

P&E includes labour and supply costs incurred to educate and promote the PPP Program to residents.

Service Administration Cost

SA refers to any overhead costs incurred to manage the PPP program that are not covered in collection nor P&E costs including but not limited to administration and support staff, director of waste management (or equivalent) and customer service (e.g., call centre).

6.4. Cost Allocations by Cost Category

The non-PPP percentage (non-PPP%) of reported costs were requested to calculate the Adjusted Net Residential PPP Cost. Where the non-PPP% was not provided by the participants, virtual meetings and e-mail correspondences were conducted to verify the non-PPP%. However, if the data was not available to the Participant (who only provide PPP services and no other stream) or if there was no response, it was assumed that the entire gross cost provided by the Participant would be allocated to the PPP.

6.5. Cost Allocation by Equivalent Household Ratio (Curbside vs. Multi-Family)

Where Participants were unable to separately report curbside and multi-family collection costs, total reported collection costs were split between curbside and multi-family using an equivalent household approach. This method derived the relative cost per household of multi-family collection compared to curbside collection (based on Participants that provided separate data for curbside and multi-family collection) and applied that ratio (1 curbside household being equivalent to 0.92 multi-family household) to convert reported multi-family households into "curbside-equivalent" households. Total collection costs were then allocated in proportion to these equivalent household counts.

6.6. Cost Allocation into Collection and Post-Collection

For Participants that have contracted out their operations, contracts frequently included both collection and post-collection services. While some agreements itemized these components separately, others were structured as a bundled price, limiting the ability of Participants to disaggregate costs. To address this data gap, an average cost split between collection and post-collection activities was derived from Participants that were able to provide disaggregated data. This ratio (49% being collection costs) was then applied to allocate costs for collectors reporting bundled contract values.

6.7. Identification of Anomaly for Cost Normalization

Percentile-based trimming was applied to identify and exclude anomalous values, ensuring that the analysis reflects representative cost ranges. For curbside and multi-family collection costs, values below the 5th percentile and above the 95th percentile were treated as anomalies, resulting in a 10% trim (5% from each tail). This approach aligns with common practice in survey data analysis to reduce the influence of extreme values.

For depot collection costs, P&E, and SA costs, a wider threshold was used due to higher variability in the data. Observations below the 10th percentile and above the 90th percentile were considered anomalies, resulting in a 20% trim.

6.8. Cost Allocations by Material Type

For depot Participants, there was a section in the questionnaire that requested Participants to provide the allocation of PPP cost to material type. The total PPP collection costs would be allocated to mixed paper, mixed container, glass, flexible plastics, and expanded polystyrene, and comingled. Based on Participant responses, including follow-up emails and phone calls, information by material type is not tracked and therefore was not provided. Therefore, costs by material type were not analyzed and presented for the purposes of this Cost Study.

6.9. Weighted average calculation

The weighted averages in this Report are calculated as below:

Weighted average cost $ / HH = $\frac{\sum(Average\ cost\ per\ HH \times Number\ of\ HH)}{\sum Number\ of\ HH}$

Weighted average cost $ / tonne = $\frac{\sum(Average\ cost\ per\ Tonne \times Number\ of\ Tonne)}{\sum Number\ of\ Tonne}$

6.10. Capital Costs Amortization and Cost of Capital

Capital Cost Amortization

Capital assets were amortized based on the amortization periods shown in Table 3. Any capital assets purchased before the amortization period were considered fully amortized and therefore, excluded from collection costs. Amortization periods were confirmed with MMRI and consistent with prior year studies.

Table 3. Amortization Periods of capital assets

Capital Assets	Collection Type	Amortization Period (Years)
Purchase of Collection Vehicles	Curbside, Multi-family	7
Initial Purchase of Curbside Carts /Containers/Bags Provided to Residents	Curbside, Multi-family	10
Replacement, Maintenance, and Distribution Costs of Carts /Containers/Bags Provided to Residents	Curbside, Multi-family	10
Purchase of New Build of Initial Depot Facility	Depot	25
Purchase of Initial Depot Equipment / Major Renovations	Depot	Defined by Collector
Purchase of Minor Expansions / Retrofits	Depot	5
Purchase of Other Uncategorized Capital Assets	Curbside, Multi-family and Depot	Defined by Collector

Annual amortization expense was calculated by dividing the adjusted PPP allocation of the original purchase price by amortization period.

Cost of Capital

Cost of capital calculation:

- Net book value ("NBV") as of January 1, 2026, was calculated by subtracting accumulated amortization up to end of 2025 from the adjusted PPP allocation of the original purchase price.
- Cost of capital was derived by calculating the change in the Consumer Price Index ("CPI") from the purchase year to 2025 and applying it to the NBV.

7. Data Integrity and Accuracy

7.1. Data Integrity

Participants were requested to provide actual costs incurred in 2025 (calendar year).

This Report relies on information provided by the Cost Study Participants, and Deloitte has not performed an independent review of this information. It does not constitute an audit conducted in accordance with generally accepted auditing standards, an examination or compilation of, or the performance of agreed upon procedures with respect to prospective financial information, an examination of or any other form of assurance with respect to internal controls, or other attestation or review services in accordance with standards or rules established by the CICA or other regulatory body.

It should be noted that enquiries were made with participants to confirm if the reported costs appeared to be anomalies based on other collectors of similar size and/or geography.

7.2. Data Accuracy

Participants were requested to either provide PPP-specific costs or provide the gross costs and provide the non-PPP% of the costs to calculate the adjusted PPP costs.
Where necessary, Deloitte followed up with participating collectors with virtual meetings or e-mail correspondence to clarify the following.

- Annual contract costs;
- Non-PPP%;
- Cost drivers;
- Allocation of PPP cost to material type;
- Post-collection costs (for depot collectors);
- P&E costs; and
- SA costs.

Data Assumptions

There were cases where the requested data was not provided by the collector. In these cases, the data was either not available to the Participant, or the Participant did not respond to the follow-up request initiated by Deloitte. The data and the associated workarounds are listed in Table 4 below.

Table 4. Workarounds for assumed data

Data	Workaround
Non-PPP Percentage (Non-PPP%)	It was assumed that the gross cost is equal to the PPP cost. Therefore, the non-PPP% would be 0%. See Section 6.4.
Allocation of PPP Cost to Material Type	Allocation of PPP cost to material type was not included as part of the analysis due to an absence of material-specific data from depot Participants.

8. 2026 Cost Study Results

8.1. Overall Results

In the 2026 Cost Study, the collection costs from 43 questionnaires (excluding seven (7) anomalies) were analyzed for costs relevant to the 2025 calendar year. The 2025 collection costs were compared with the 2021 collection costs. It is worth noting that the Participants differ in the previous cost study from a number and respondents perspective; however, the costs shown in the tables and figures below are the available collection costs from the respective cost studies excluding anomalies. Table 5, Table 6, and Table 7 present the overall collection costs for curbside, multi-family, and depots, respectively.

Table 5. Curbside Collection Costs per HH

Metrics	2021 – Including Anomalies ($/HH)	2021 – Excluding Anomalies ($/HH)	2025 – Including Anomalies ($/HH)	2025 – Excluding Anomalies ($/HH)
Mean	$65	$69	$106	$92
Median	$65	$69	$80	$79
Weighted Average	$46	$47	$41	$41
Minimum	$2	$5	$8	$28
Maximum	$133	$133	$322	$238
Count (#)	16	15	25	22

Table 6. Multi-family Collection Costs per HH

Metrics	2021 – Including Anomalies ($/HH)	2021 – Excluding Anomalies ($/HH)	2025 – Including Anomalies ($/HH)	2025 – Excluding Anomalies ($/HH)
Mean	$30	$31	$50	$42
Median	$28	$31	$38	$38
Weighted Average	$45	$45	$38	$38
Min	$15	$15	$26	$26
Max	$46	$46	$109	$73
Count (#)	4	3	8	7

Table 7. Depot Collection Costs per tonne

Metrics	2021 – Including Anomalies ($/tonne)	2021 – Excluding Anomalies ($/tonne)	2025 – Including Anomalies ($/tonne)	2025 – Excluding Anomalies ($/tonne
Mean	$627	$ 674	$908	$655
Median	$457	$ 567	$592	$572
Weighted Average	$487	$ 545	$441	$441
Min	$13	$ 70	$26	$134
Max	$2,333	$2,333	$3,896	$1,607
Count (#)	14[7]	13	17	14

[7] For the purposes of Depot analysis in this Report unless otherwise stated, the count refers to number of collectors and not number of depots or municipalities under the RWA.

8.2. Cost Drivers

Participants were requested to provide significant cost drivers that have impacted operations from 2022 to 2025. Common themes of cost drivers include:

- Labour (e.g., union contracts, collective agreements)
- CPI (e.g., inflationary increases)
- Vehicles/equipment (e.g., fuel, vehicle purchases, vehicle/equipment maintenance)
- Contracts (e.g., contract renewals)

Figure 1 below provides the most frequently cited cost drivers affecting collection programs. Fuel and labour emerge as primary cost pressures, while factors such as equipment, services, CPI, and contract-related elements also contribute to overall cost variability.

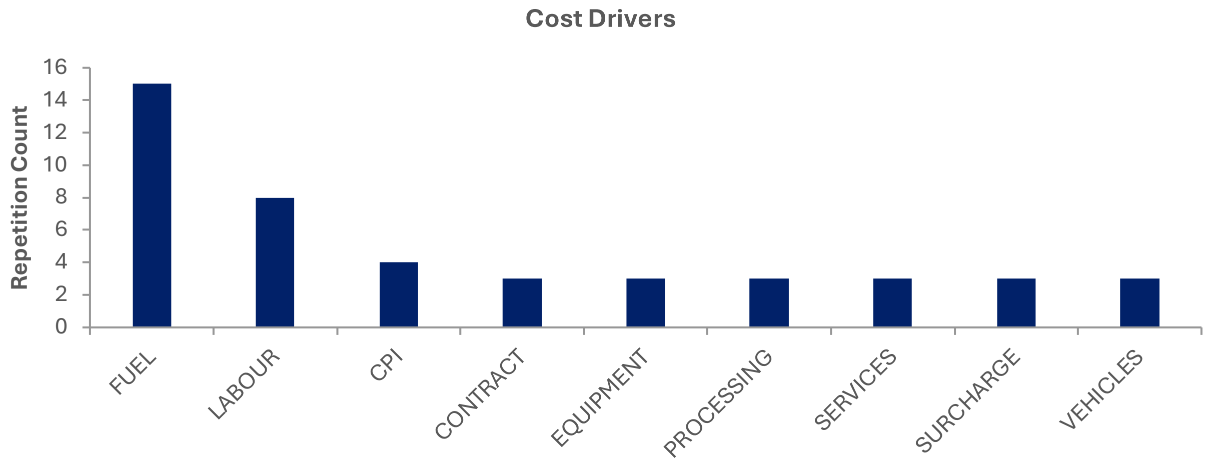

Figure 1. Most frequently cited cost drivers

8.3. Curbside Collection

The collection cost/HH for Curbside collectors in 2025 ranged from $28 to $238, as shown in Figure 2. The collection cost/HH for Curbside collectors in 2021 ranged from $5 to $133 . Three (3) anomalies were identified with costs greater than $274.95/household for two (2) and lower than $28.52 for one (1) collector and have not been used as representative sample costs, as shown in Figure 3 and Table 8.

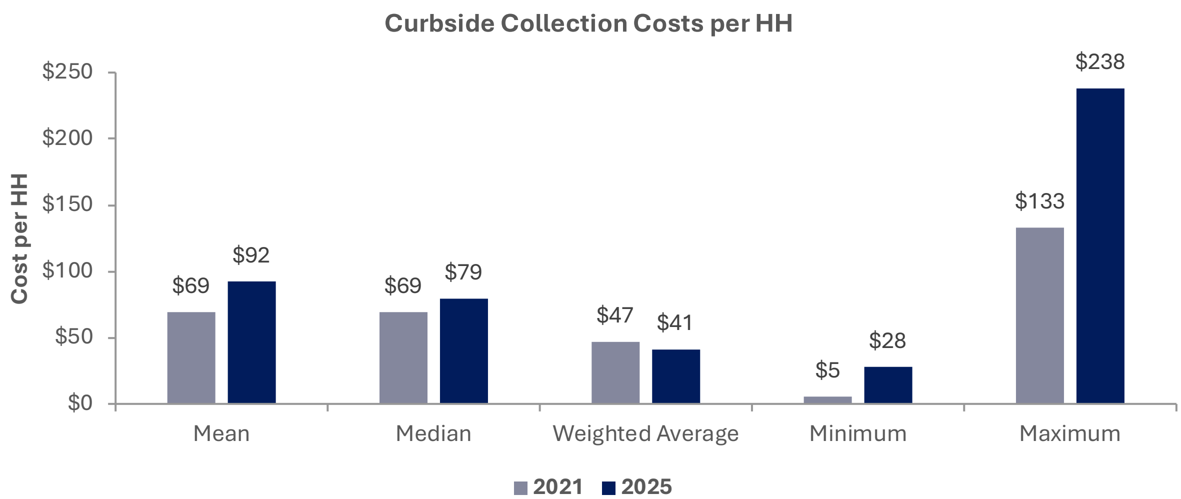

Figure 2. Curbside Collection Costs per HH - excluding anomalies

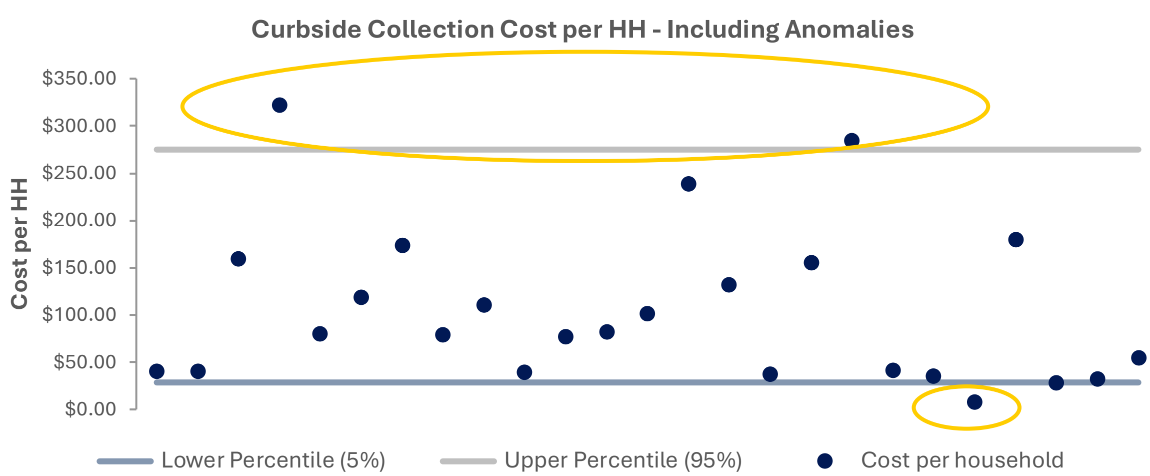

Figure 3. Curbside Collection Cost per HH for 2025, including anomalies

Note: Collectors are distributed across the x-axis using randomly assigned serial numbers.

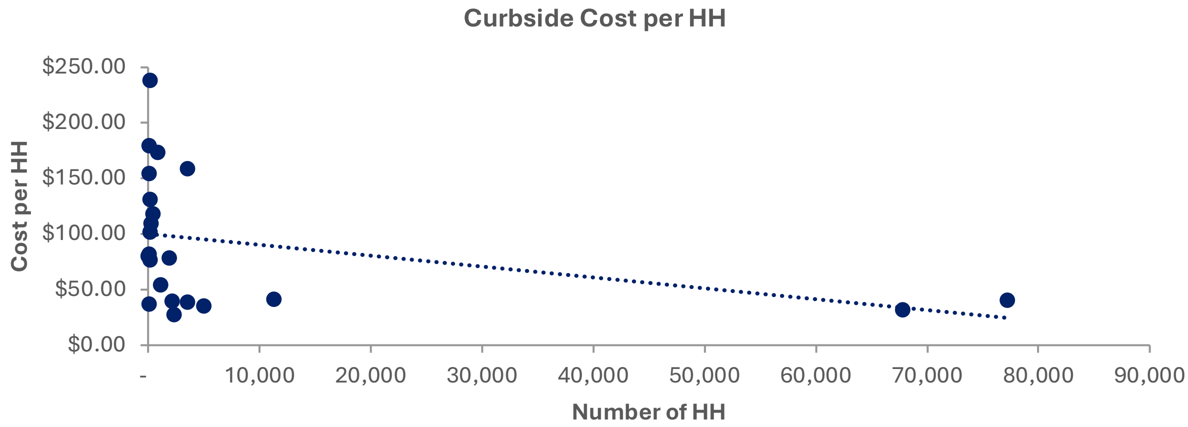

Figure 4. Curbside Collection Costs per HH by HH

Table 8. Curbside Collection Costs metrics for 2025 including and excluding anomalies

Metric	Collectors (Including Anomalies) ($/HH)	Collectors (Excluding Anomalies) ($/HH)
Mean	$105.72	$92.22
Median	$80.00	$79.34
Weighted Average	$41.32	$41.10
Minimum	$8.00	$27.68
Maximum	$322.05	$238.10
Count (#)	25	22

For curbside collectors who have contracted out operations, the curbside collection costs per household ranges from $32 to $238 with a weighted average of $41, as shown in Figure 5 and Table 9.

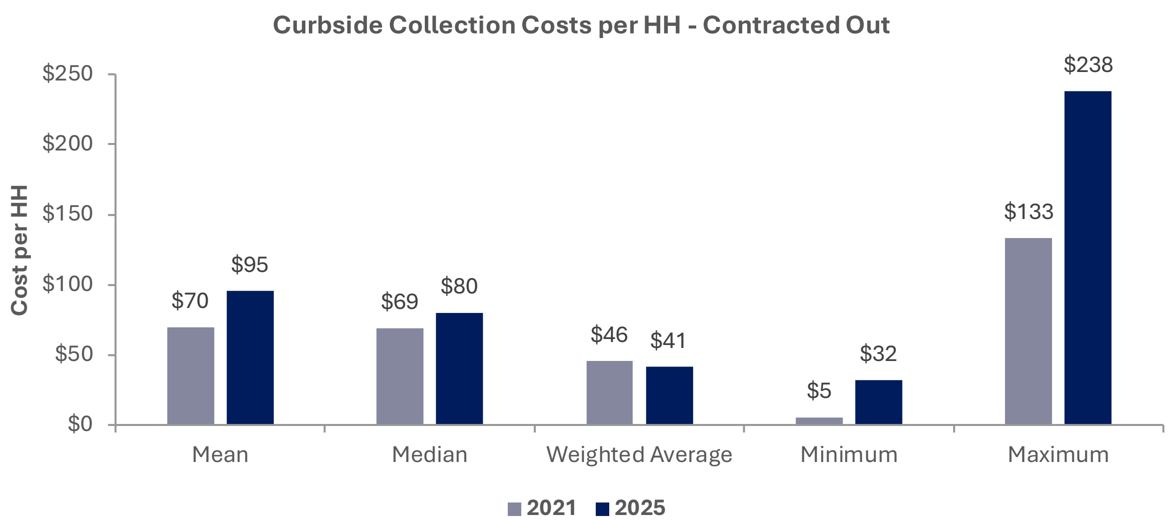

Figure 5. Curbside Collection Costs per HH for Collectors with contracted out collection - excluding anomalies

Table 9 . Curbside Collection Costs per HH for Collectors with contracted out collection - excluding anomalies

Metrics	2021 ($/HH)	2025 ($/HH)
Mean	$70	$95
Median	$69	$80
Weighted Average	$46	$41
Minimum	$5	$32
Maximum	$133	$238
Count (#)	14	21

For all collectors who collect PPP separately, the curbside collection costs per HH range from $35 to $173, with a weighted average of $64/HH as shown in Figure 6 and Table 10.

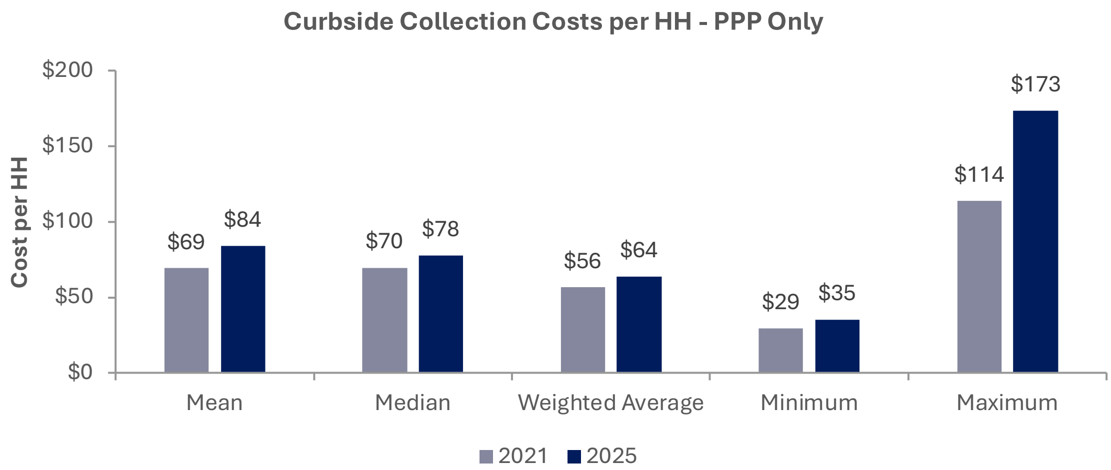

Figure 6. Curbside Collection Costs per HH for PPP Only - excluding anomalies

Table 10 . Curbside Collection Costs per HH for PPP Only - excluding anomalies

Metrics	2021 ($/HH)	2025 ($/HH)
Mean	$69	$84
Median	$70	$78
Weighted Average	$56	$64
Minimum	$29	$35
Maximum	$114	$173
Count (#)	6	10

For all collectors who collect both PPP and garbage, the curbside collection costs per household only for PPP range from $28 to $238, with a weighted average of $37/HH as shown in Figure 7 and Table 11.

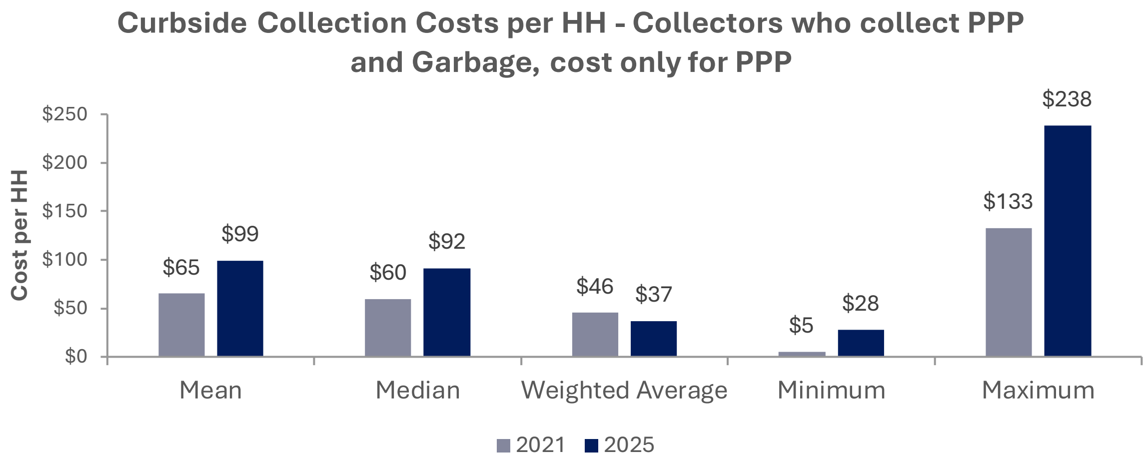

Figure 7. Curbside Collection Costs per HH for PPP and Garbage - excluding anomalies

Table 11. Curbside Collection Costs per HH for PPP and Garbage - excluding anomalies

Metrics	2021 ($/HH)	2025 ($/HH)
Mean	$65	$99
Median	$60	$92
Weighted Average	$46	$37
Minimum	$5	$28
Maximum	$133	$238
Count (#)	9	12

Observations:

- Only 23% of collectors were common between the 2022 and 2026 cost studies.
- 81% of service provider contracts have been negotiated or renewed since 2022.
- Curbside tonnages in 2025 declined by 6% relative to 2021 levels.
- In the 2022 cost study, 9 out of 16 collectors served areas with more than 3,000 households; in 2026, this decreased to 6 out of 22 collectors.
- All curbside collection services, except for one (1), are provided by private collectors, i.e., contracted out
- For three (3) common collectors between the 2022 and 2026 cost studies, total costs decreased by 31% from 2022 to 2026 cost studies (with a resulting lower contracted value) suggesting a plausible reason for lower averages in 2026 from 2022.

Curbside Participants were requested to provide significant cost drivers that have impacted operations from 2022 to 2025. Common themes of cost drivers for curbside collection include:

- Fuel;
- Labour;
- CPI;
- Vehicles;
- Service changes and route expansions;
- Increase in volume of material collected; and
- Contract extensions/negotiations.

8.4. Multi-Family Collection

The collection cost/HH for multi-family collectors in 2025 ranged from $26 to $73 as shown in Table 12, Figure 8, Figure 9 and Figure 10. The collection cost/HH for multi-family collectors in 2021 ranged from $15 to $46, as shown in Table 13. One (1) anomaly was identified with costs greater than $96/HH and has not been used as representative sample costs.

Table 12. Multi-family Collection Costs metrics for 2025 including and excluding anomalies

Metric	Collectors (Including Anomalies) ($/HH)	Collectors (Excluding Anomalies) ($/HH)
Mean	$50.36	$41.98
Median	$38.02	$37.93
Weighted Average	$38.14	$38.13
Min	$25.56	$25.56
Max	$109.02	$72.64
Count (#)	8	7

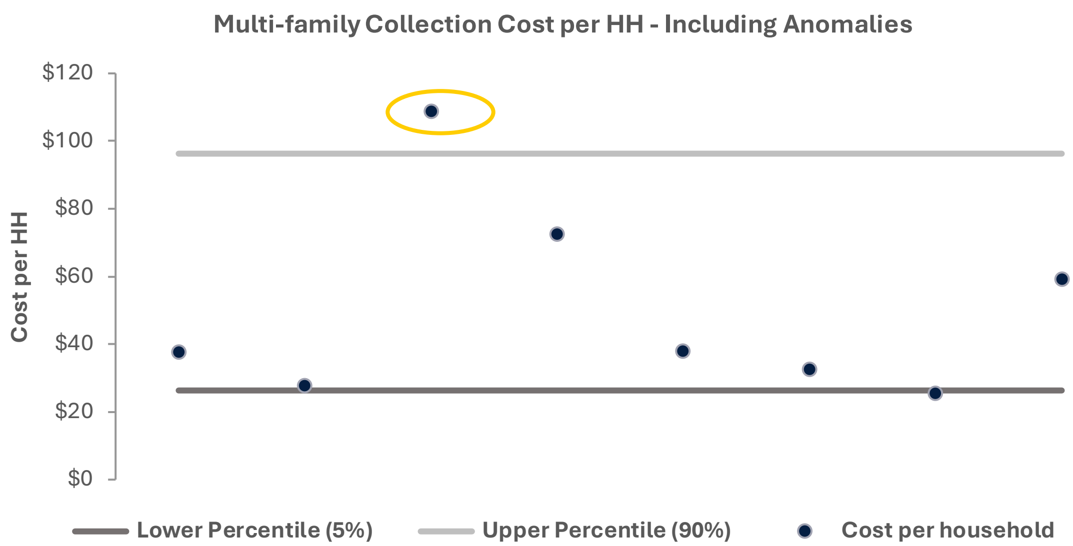

Figure 8. Multi-family Collection Costs per HH for 2025, including anomalies

Note: Collectors are distributed across the x-axis using randomly assigned serial numbers.

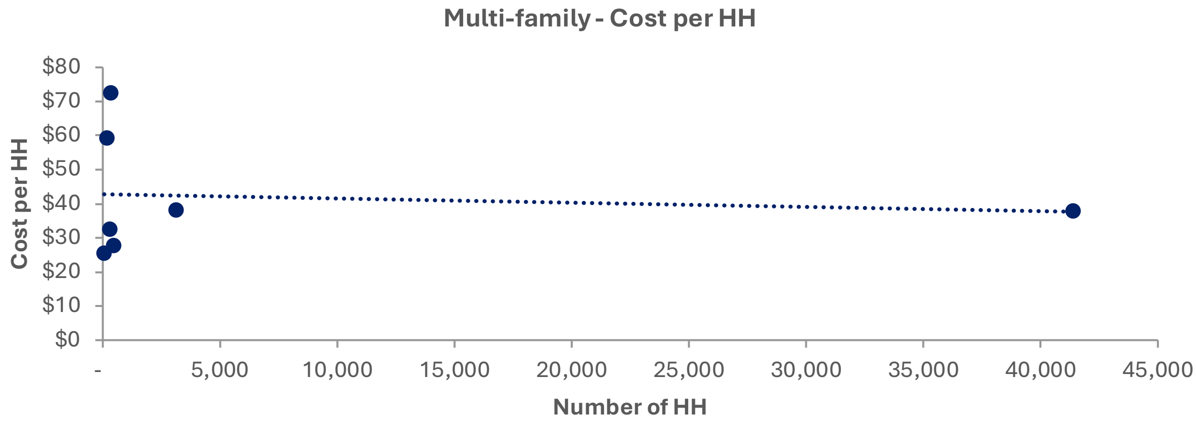

Figure 9. Multi-Family Collection Costs per HH by HH

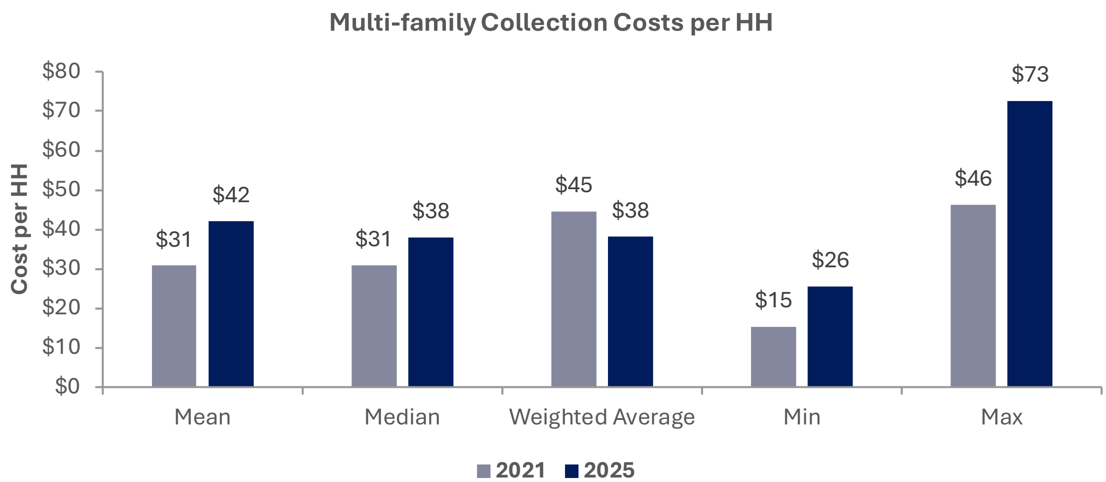

Figure 10. Multi-family Collection Costs per HH - excluding anomalies

Table 13. Multi-family Collection Costs per HH - excluding anomalies

Metrics	2021 ($/HH)	2025 ($/HH)
Mean	$31	$42
Median	$31	$38
Weighted Average	$45	$38
Min	$15	$26
Max	$46	$73
Count (#)	3	7

Observations:

- Only 14% of collectors were common between the 2022 and 2026 cost studies.
- All service provider contracts have been negotiated or renewed since 2022.

- Separate multi-family tonnage data was reported by only one (1) collector.
- In 2022, four (4) collectors provided data on multi-family collection, of which two (2) served areas with more than 3,000 households. In 2026, seven (7) collectors provided data on multi-family collection, of which two (2) served areas with more than 3,000 households. All multi-family collection services are delivered by private (i.e., contracted out) collectors.
- Contracts for six (6) multi-family collectors were embedded within curbside collection arrangements.

Multi-family Participants were requested to provide significant cost drivers that have impacted operations from 2022 to 2025. Common themes of cost drivers for multi-family collection include:

- Fuel;
- Labour;
- Carbon tax; and
- Green technology.

8.5. Depot Collection

The collection cost/tonne for depot collectors in 2025 ranged from $134 to $1,607 as shown in Table 14, Table 15, Figure 11, Figure 12, and Figure 13. The collection cost/tonne for depot collectors in 2021 ranged from $70 to $2,333. For 2026, three (3) anomalies were identified with costs greater than $1,902/tonne for two (2) and lower than $210 for one (1) collector and have not been used as representative sample costs.

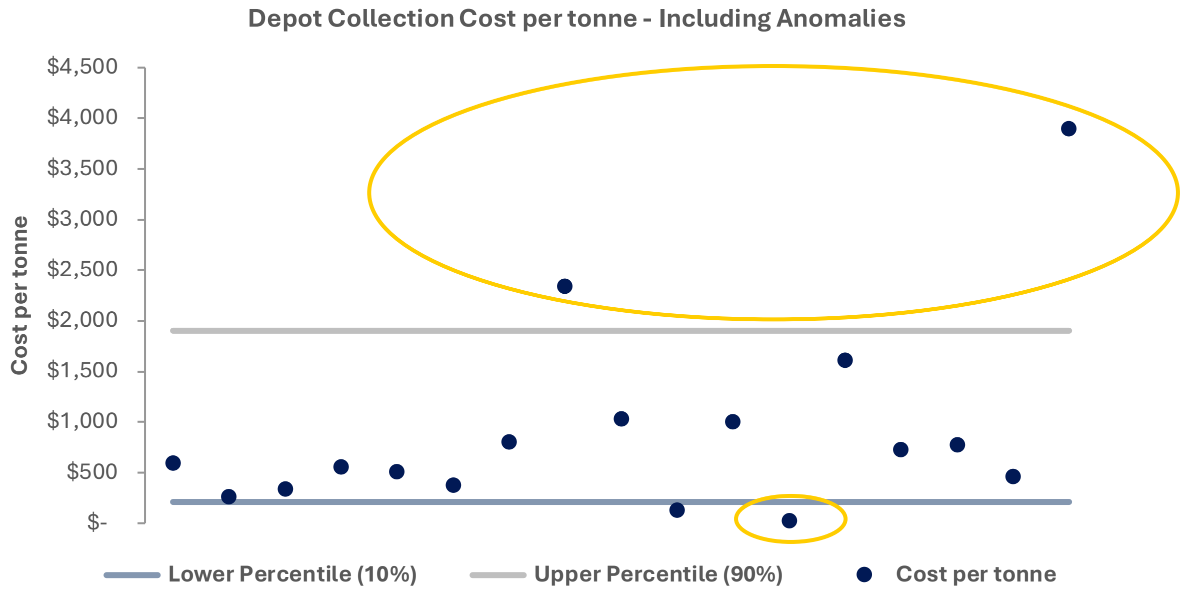

Figure 11. Depot Collection Costs per HH for 2025, including anomalies

Note: Depot collectors are distributed across the x-axis using randomly assigned serial numbers.

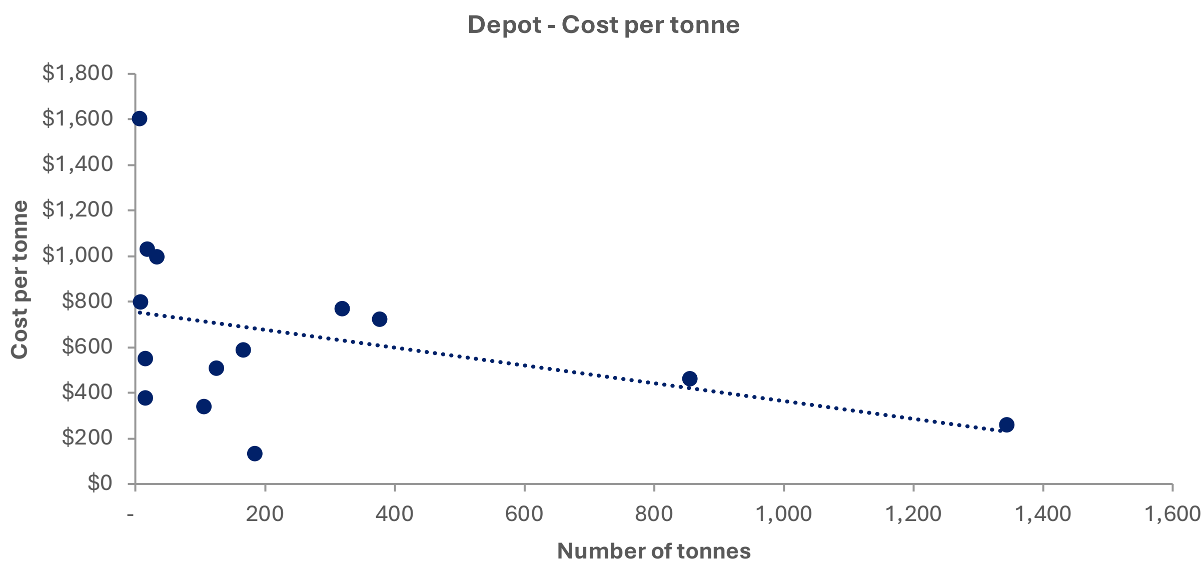

Figure 12. Depot Costs per tonne by total tonnage collected

Table 14. Depot Collection Costs metrics for 2025 including and excluding anomalies

Metric	Collectors (Including Anomalies) ($/tonne)	Collectors (Excluding Anomalies) ($/tonne)
Mean	$908	$655
Median	$592	$572
Weighted Average	$441	$441
Min	$26	$134
Max	$3,896	$1,607
Count (#)	17	14

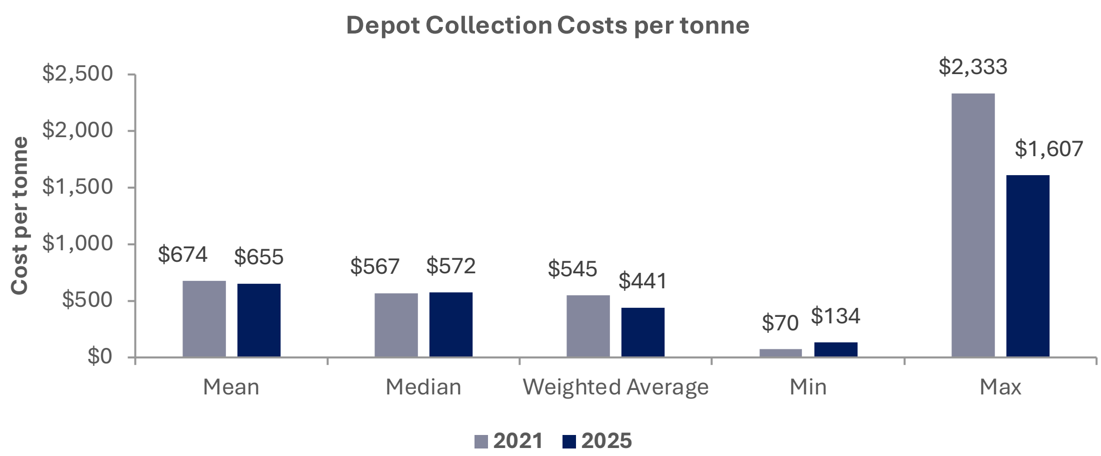

Figure 13. Depot Collection Costs per tonne - excluding anomalies

Table 15. Depot Collection Costs per tonne - excluding anomalies

Metrics	2021 ($/tonne)	2025 ($/tonne)
Mean	$674	$655
Median	$567	$572
Weighted Average	$545	$441
Min	$70	$134
Max	$2,333	$1,607
Count (#)	13	14

For municipalities with contracted-out depot collection services, the depot collection costs per tonne range from $134 to $1,607 with a weighted average of $521, as shown in Figure 14 and Table 16.

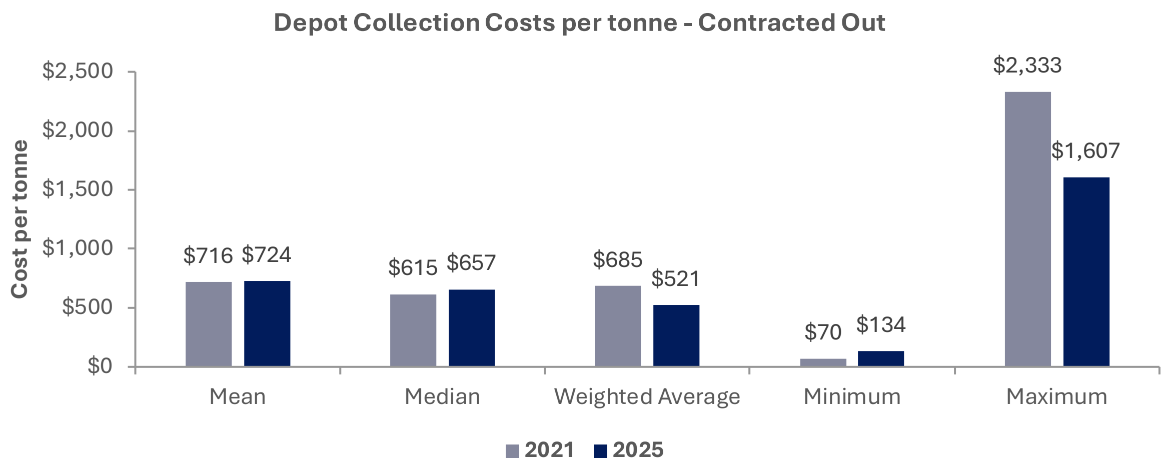

Figure 14. Depot Collection Costs per tonne for Collectors with contracted out collection - excluding anomalies

Table 16. Depot Collection Costs per tonne for Collectors with contracted out collection - excluding anomalies

Metrics	2021 ($/tonne)	2025 ($/tonne)
Mean	$716	$724
Median	$615	$657
Weighted Average	$685	$521
Minimum	$70	$134
Maximum	$2,333	$1,607
Count (#)	11	10

For municipalities with in-house depot collection services, the depot collection costs per tonne range from $262 to $553 with a weighted average of $265, as shown in Figure 15 and Table 17.

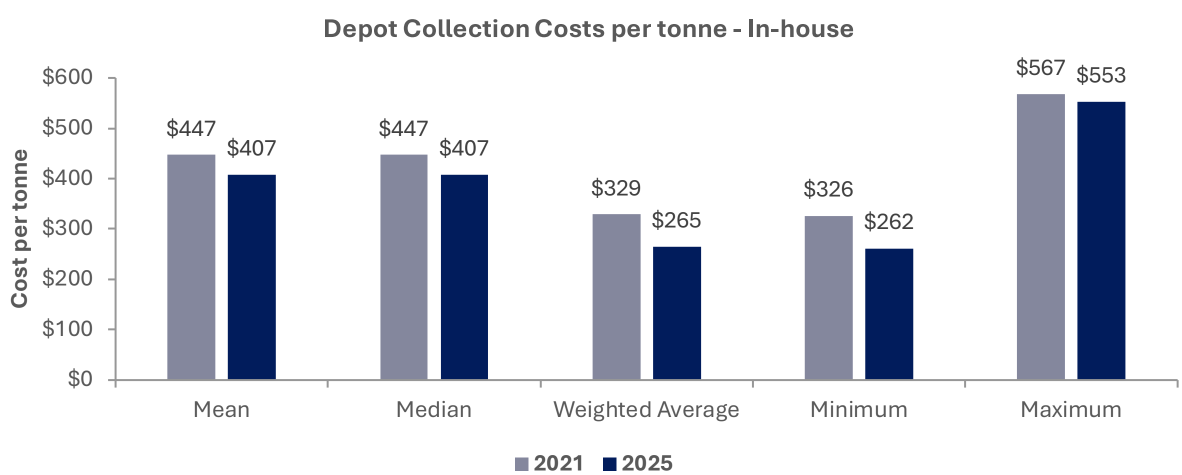

Figure 15. Depot Collection Costs per tonne for In-house collectors - excluding anomalies

Table 17. Depot Collection Costs per tonne for In-house collectors - excluding anomalies

Metrics	2021 ($/tonne)	2025 ($/tonne)
Mean	$447	$407
Median	$447	$407
Weighted Average	$329	$265
Minimum	$326	$262
Maximum	$567	$553
Count (#)	2	2

For RWAs with depot collection services, costs range from $341 to $773, with a weighted average of $666 as shown in Figure 16 and Table 18.

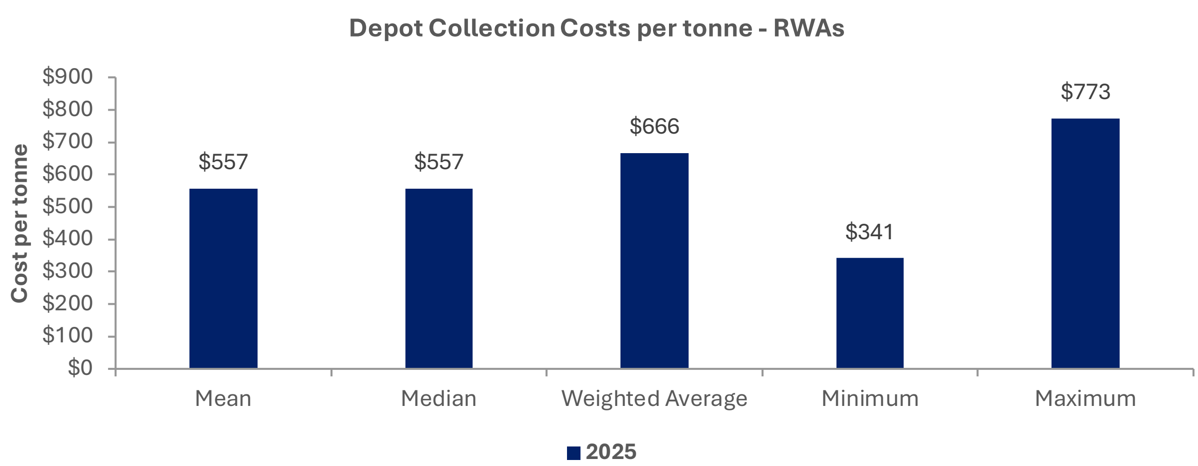

Figure 16. Depot Collection Costs per tonne for RWAs - excluding anomalies

Table 18. Depot Collection Costs per tonne for RWAs - excluding anomalies

Metrics	2025 ($/tonne)
Mean	$557
Median	$557
Weighted Average	$666
Minimum	$341
Maximum	$773
Count (#)	2

For depots classified as primary depots, the depot collection costs per tonne range from $341 to $1,607 with a weighted average of $673, as shown in Figure 17 and Table 19 and the costs per household range from $10 to $119, with a weighted average of $59, as shown in Figure 18 and Table 20.

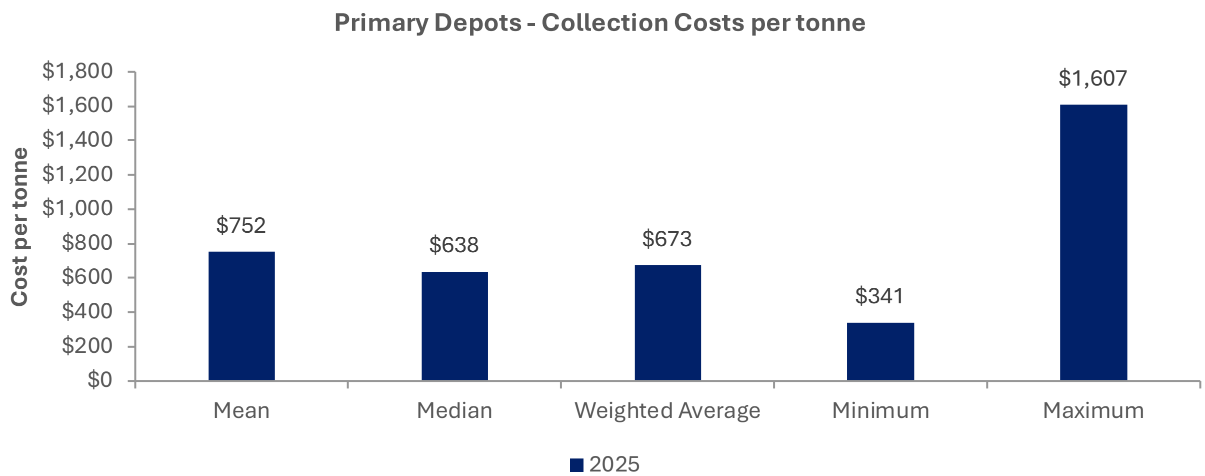

Figure 17. Collection Costs per tonne for primary depots

Table 19. Collection Costs per tonne for primary depots

Metrics	2025 ($/tonne)
Mean	$752
Median	$638
Weighted Average	$673
Minimum	$341
Maximum	$1,607
Count (#)	6

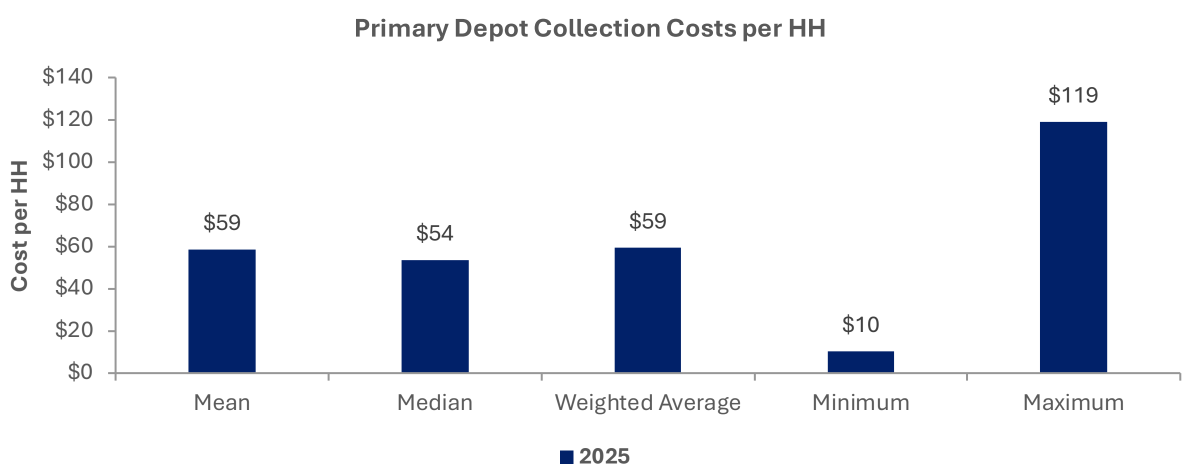

Figure 18. Collection Costs per HH for primary depots

Table 20. Collection Costs per HH for primary depots

Metrics	2025 ($/HH)
Mean	$59
Median	$54
Weighted Average	$59
Minimum	$10
Maximum	$119
Count (#)	6

For depots classified as supplemental depots, the depot collection costs per tonne range from $134 to $1,034 with a weighted average of $357, as shown in Figure 19 and Table 21.

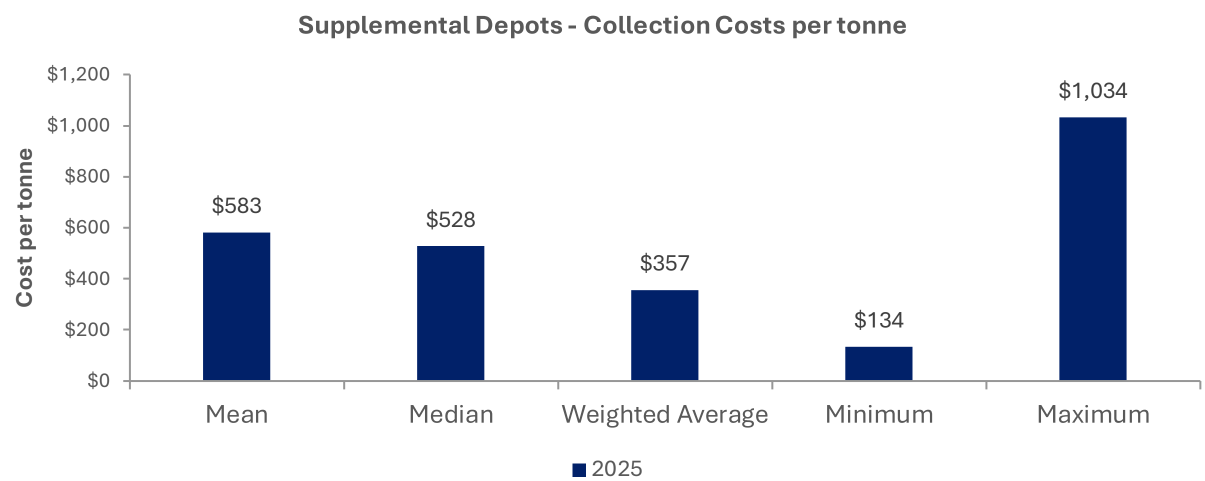

Figure 19. Collection Costs per tonne for supplemental depots

Table 21. Collection Costs per tonne for supplemental depots

Metrics	2025 ($/tonne)
Mean	$583
Median	$528
Weighted Average	$357
Minimum	$134
Maximum	$1,034
Count (#)	8

For Class 1 depots, the depot collection costs per tonne range from $341 to $1,607 with a weighted average of $542, as shown in Figure 20 and Table 22.

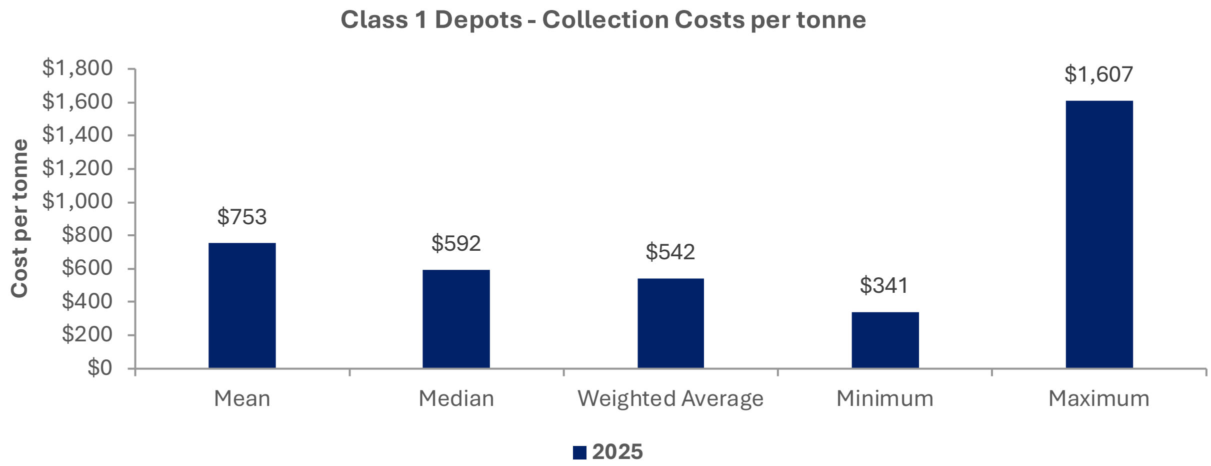

Figure 20. Collection Costs per tonne for Class 1 depots

Table 22. Collection Costs per tonne for Class 1 depots

Metrics	2025 ($/tonne)
Mean	$753
Median	$592
Weighted Average	$542
Minimum	$341
Maximum	$1,607
Count (#)	7

For Class 2 depots, the depot collection costs per tonne range from $134 to $800 with a weighted average of $250, as shown in Figure 21 and Table 23.

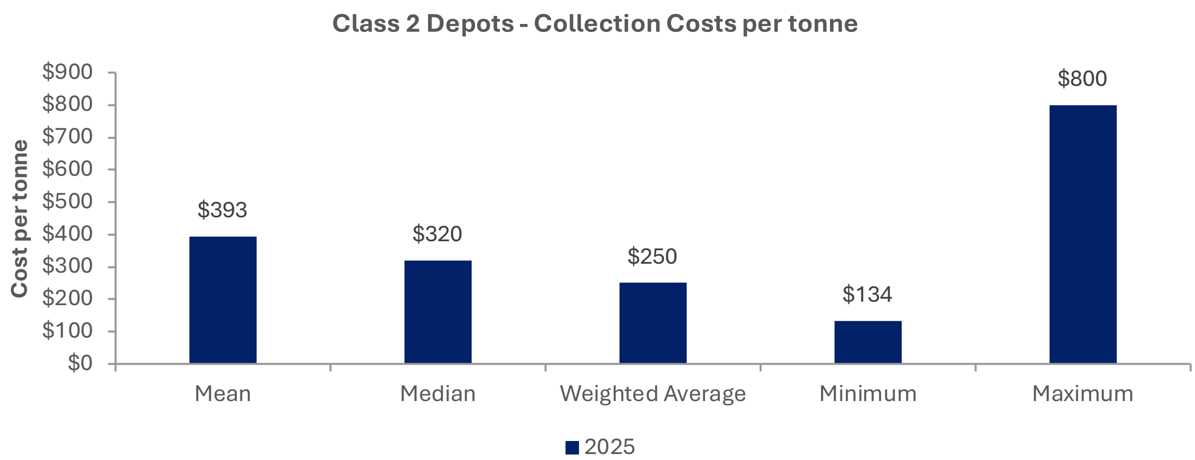

Figure 21. Collection Costs per tonne for Class 2 depots

Table 23. Collection Costs per tonne for Class 2 depots

Metrics	2025 ($/tonne)
Mean	$393
Median	$320
Weighted Average	$250
Minimum	$134
Maximum	$800
Count (#)	4

For Class 3 depots, the depot collection costs per tonne range from $553 to $1,000 with a weighted average of $785, as shown in Figure 22 and Table 24.

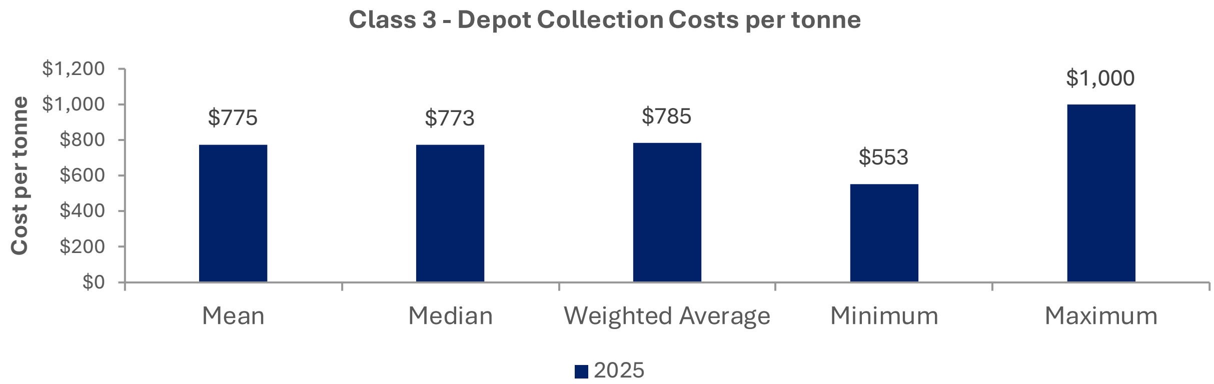

Figure 22. Collection Costs per tonne for Class 3 depots

Table 24. Collection Costs per tonne for Class 3 depots

Metrics	2025 ($/tonne)
Mean	$775
Median	$773
Weighted Average	$785
Minimum	$553
Maximum	$1,000
Count (#)	3

Observations:

- Only 36% of collectors were common between 2022 and 2026 cost studies.
- All service provider contracts have been negotiated or renewed since 2022.
- Depot tonnages in 2025 increased by 6% compared to 2021.
- 71% of depots have collection services delivered by private (i.e., contracted out) collectors.
- No RWA submissions were recorded for depot collection in the 2022 cost study.
- For the three (3) collectors common to both studies, total costs decreased by 49% by 2025, indicating a plausible reason for reduction in average costs from 2021 to 2025.
- In the 2022 cost study, some collectors were unable to distinguish between collection and post-collection costs; as a result, these costs were reported together under collection costs. In contrast, for the 2026 cost study, some of the common collectors between the two (2) cost studies were able to separately identify collection and post-collection costs, which also suggested a plausible reason for reduction in average costs from 2021 to 2025.
- Class 1 depots comprise 4 primary depots and 3 supplemental depots. Class 2 depots comprise all supplemental depots, and Class 3 depots comprise 2 primary depots and 1 supplemental depot.

Depot Participants were requested to provide significant cost drivers that have impacted operations from 2022 to 2025. Common themes of cost drivers for depot collection include:

- Fuel;
- Labour;
- CPI;
- Vehicles;
- Increase in volume of material collected;
- Contract extensions/negotiations; and
- Maintenance.

8.6. Promotion & Education Costs

The promotion and education costs/tonne for all collectors in 2025 ranged from $1.27 to $51.35 as shown in Figure 23 and Figure 24.

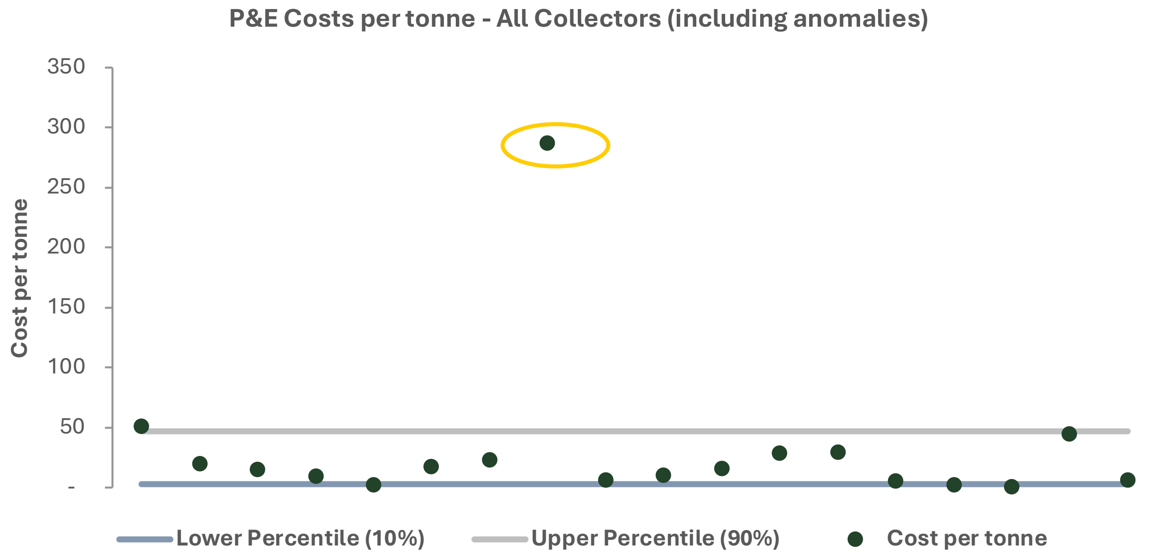

Figure 23. P&E Costs per tonne for all collectors

Note: Collectors are distributed across the x-axis using randomly assigned serial numbers.

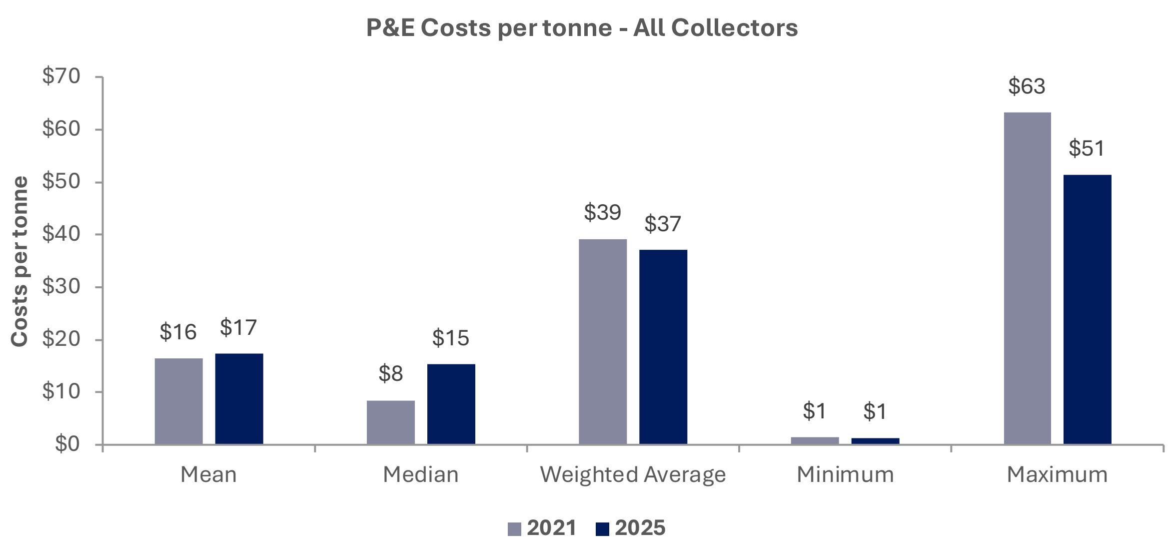

Figure 24. P&E Costs per tonne for all collectors for 2025

The P&E costs/household for curbside and multi-family collectors in 2025 ranged from $0.22 to $4.96 as shown in Figure 25 and Figure 26.

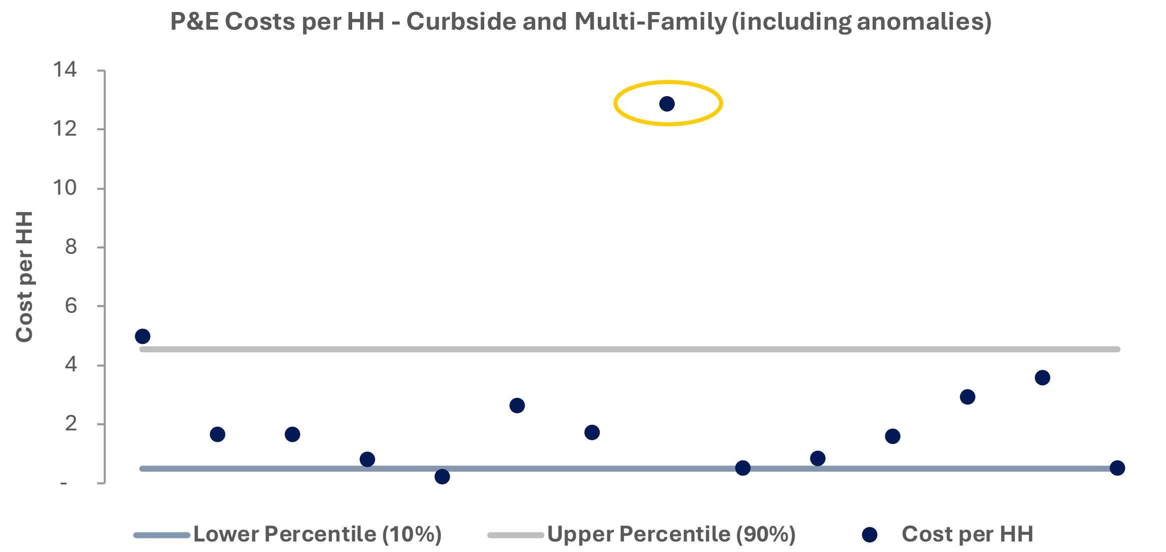

Figure 25. P&E Costs per HH for curbside and multi-family collectors - including anomalies

Note: Collectors are distributed across the x-axis using randomly assigned serial numbers.

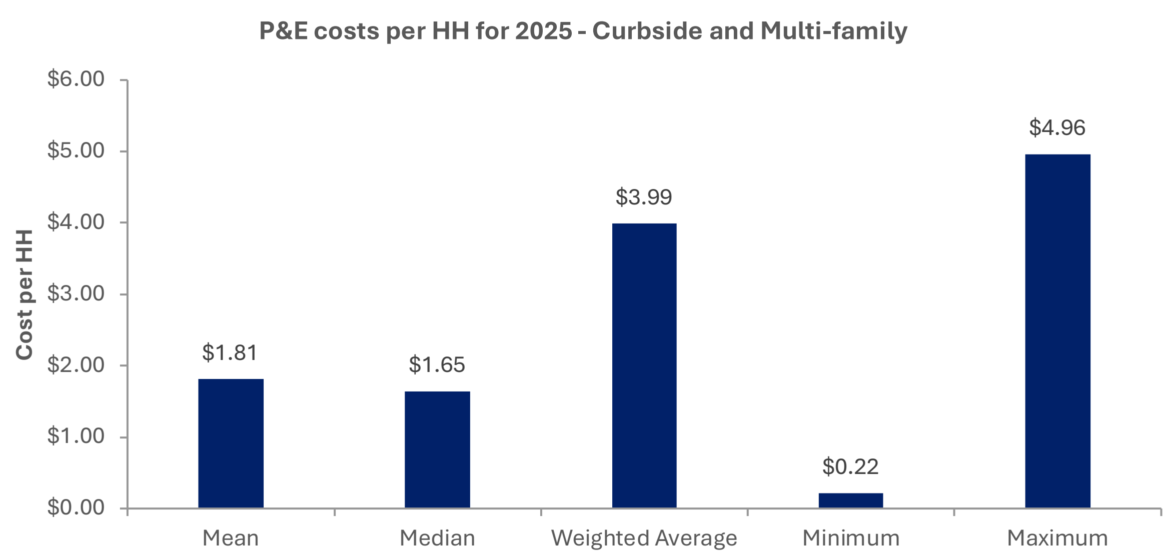

Figure 26. P&E Costs per HH for curbside and multi-family collectors for 2025

The P&E costs per tonne for curbside and multi-family collectors in 2025 ranged from $2.51 to $51.35 with a weighted average of $38.97, as shown in Figure 27.

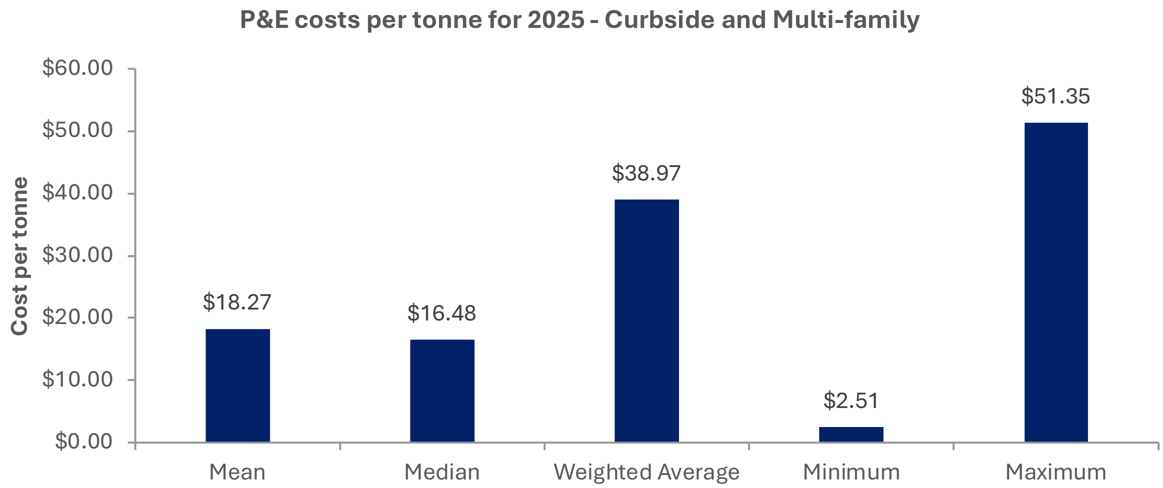

Figure 27. P&E Costs per tonne for curbside and multi-family collectors for 2025

The P&E costs per tonne for depot in 2025 ranged from $1.27 to $44.96 with a weighted average of $10.89, as shown in Figure 28.

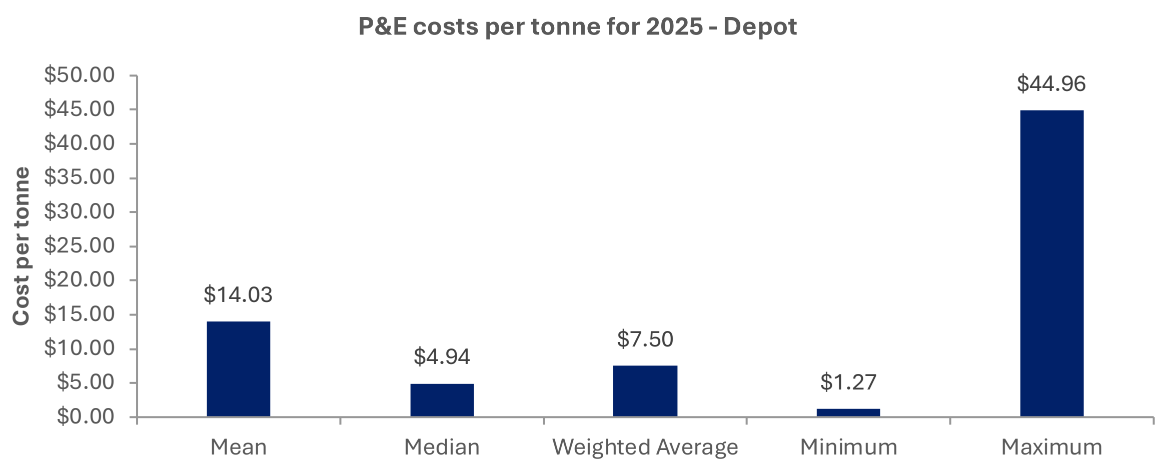

Figure 28. P&E Costs per tonne for depots for 2025

8.7. Service Administration Costs

The SA costs/tonne for all collectors in 2025 ranged from $19.58 to $340.09 with a weighted average of $47.37 as shown in Figure 29 and Figure 30.

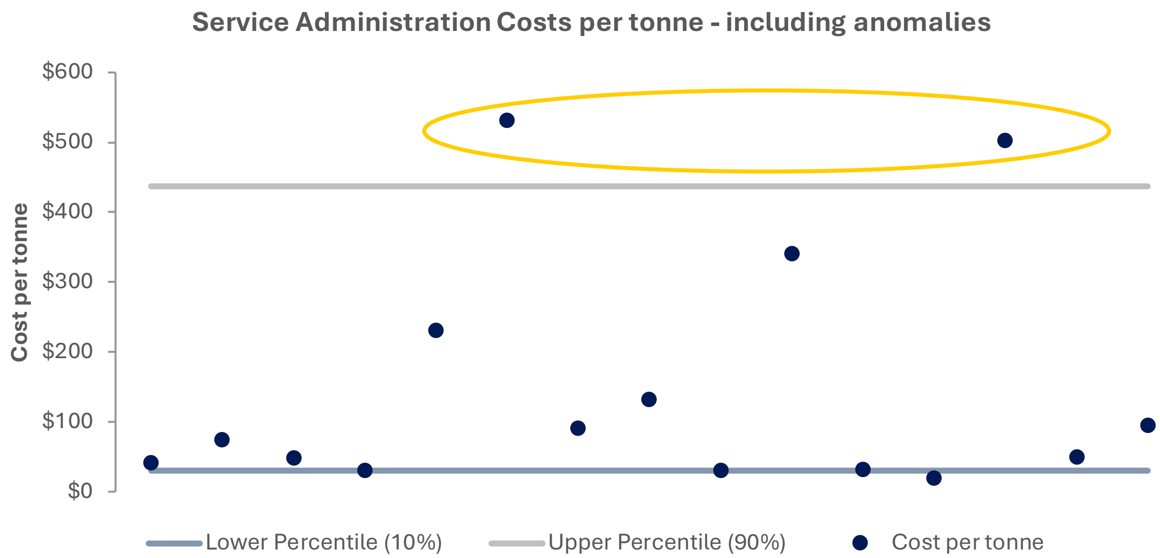

Figure 29. SA Costs per tonne for all collectors - including anomalies

Note: Collectors are distributed across the x-axis using randomly assigned serial numbers.

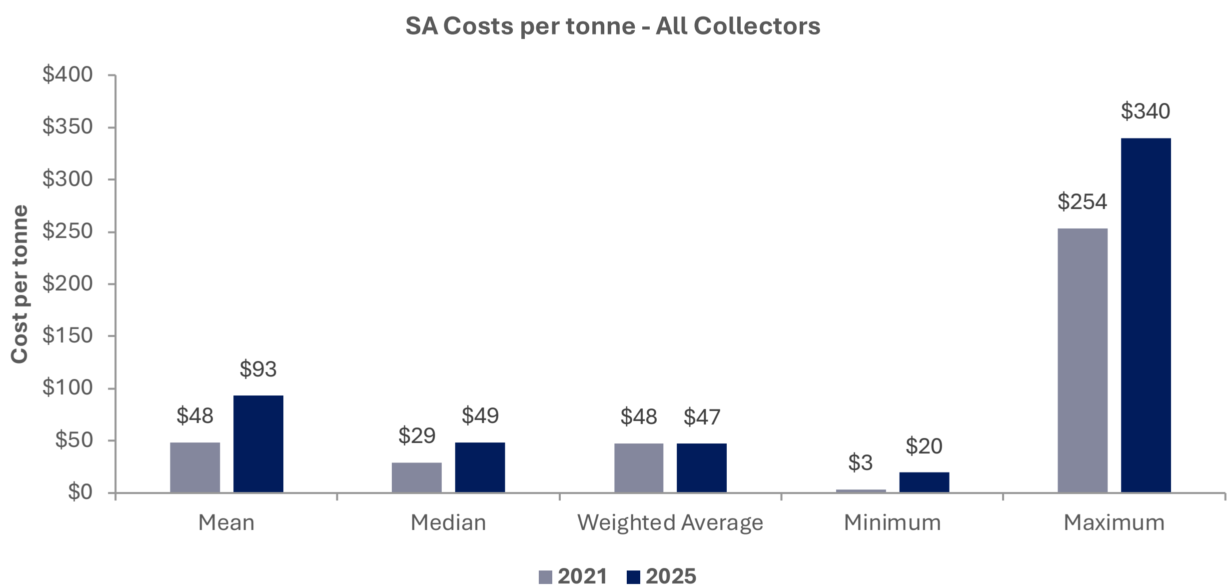

Figure 30. SA Costs per tonne for all collectors for 2025

The SA costs/household for curbside and multi-family collectors in 2025 ranged from $3.67 to $14.35 with a weighted average of $4.40 as shown in Figure 31 and Figure 32.

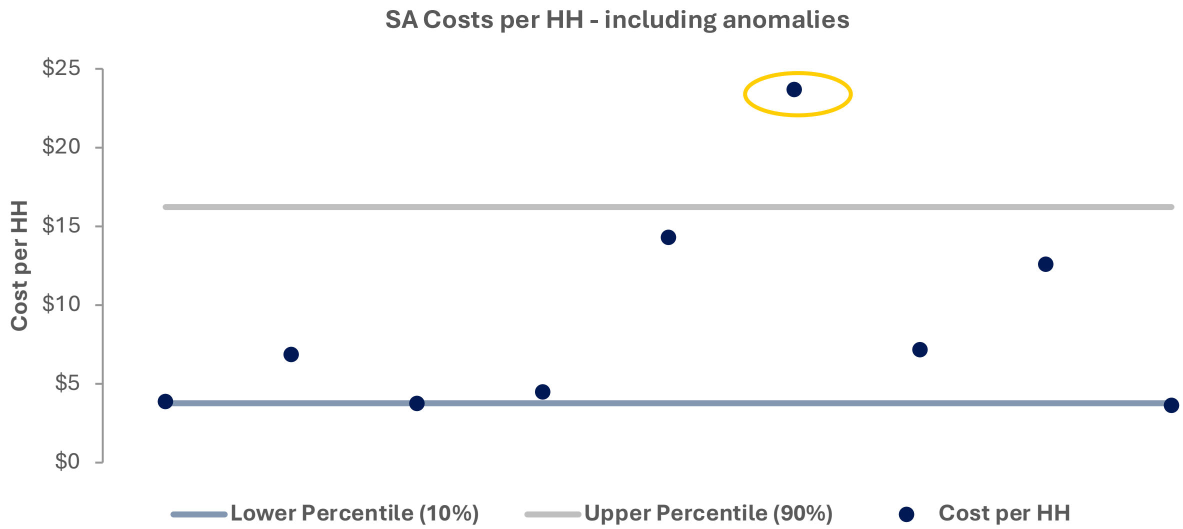

Figure 31. Service Administration Costs per HH for curbside and multi-family collectors - including anomalies

Note: Collectors are distributed across the x-axis using randomly assigned serial numbers.

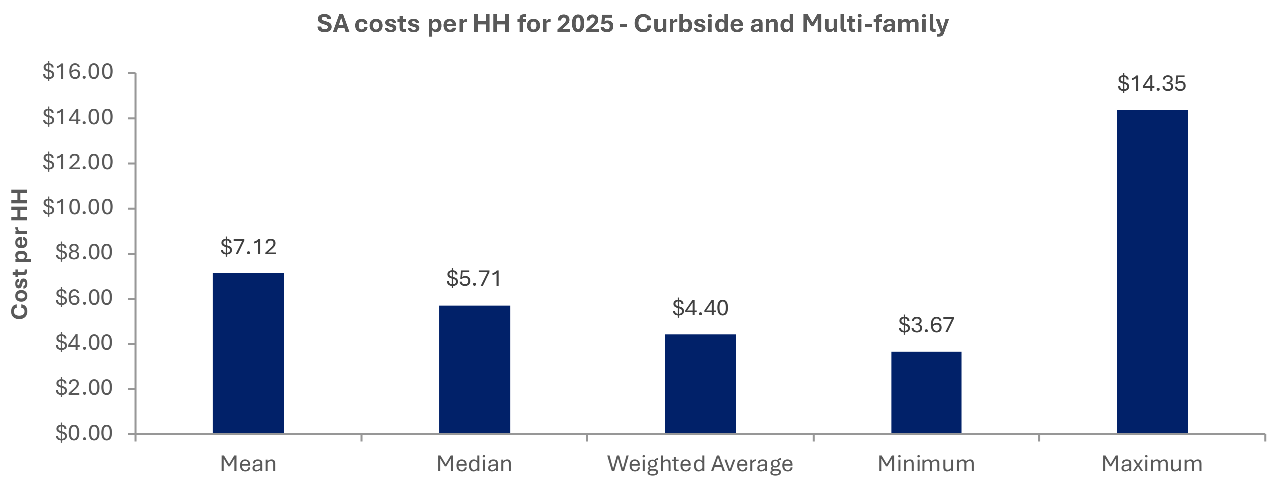

Figure 32. SA Costs per HH for curbside and multi-family collectors for 2025

The SA costs/tonne for curbside and multi-family collectors in 2025 ranged from $29.85 to $230.95 with a weighted average of $43.60 as shown in Figure 33.

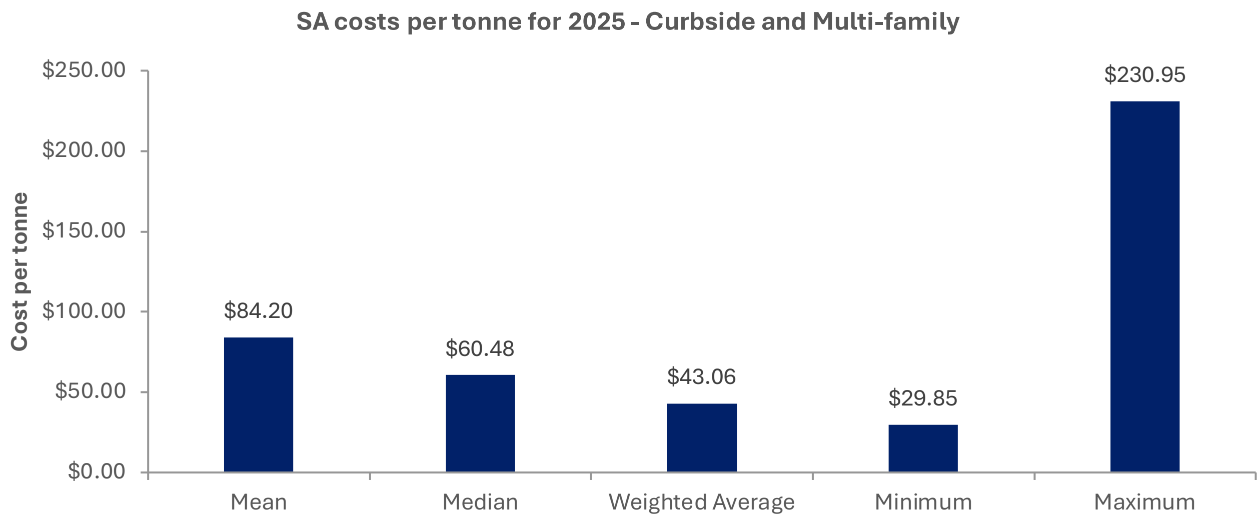

Figure 33. SA Costs per tonne for curbside and multi-family collectors for 2025

The SA costs/tonne for depot collectors in 2025 ranged from $19.58 to $340.09 with a weighted average of $83.58 as shown in Figure 34.

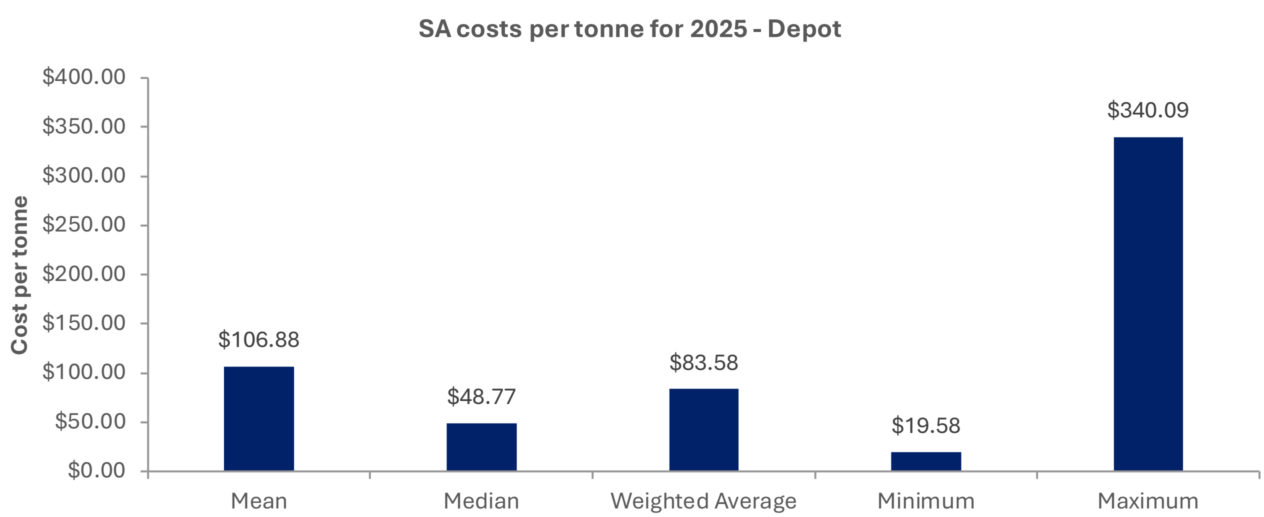

Figure 34. SA Costs per tonne for depots for 2025

8.8. Post Collection – Depot

Post-collection cost information was collected for depot operations only. Of the 17 depots, only five (5) collectors provided post-collection costs as a separate line item, while seven (7) collectors indicated that they do not incur any post-collection costs. For the remaining five (5) collectors, post-collection costs were embedded within overall collection costs as part of their contractual arrangements. For these cases, post-collection costs were estimated by applying a proportional split derived from collectors that provided disaggregated cost data. Post collection costs per tonne for depots range from $24.93 to $657.83 as shown in Figure 36. Further, for four (4) primary depots which provided post collection costs, the cost per household range from $3.36 to $30.56, with a weighted average of $16.60, as shown in Figure 39.

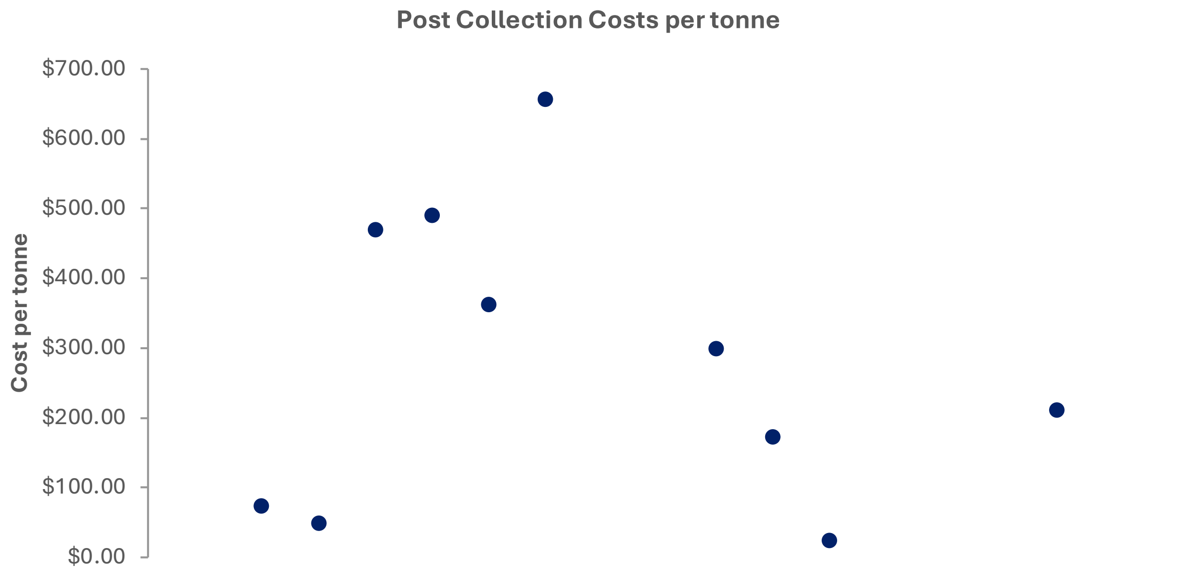

Figure 35. Post Collection Costs per tonne for depots

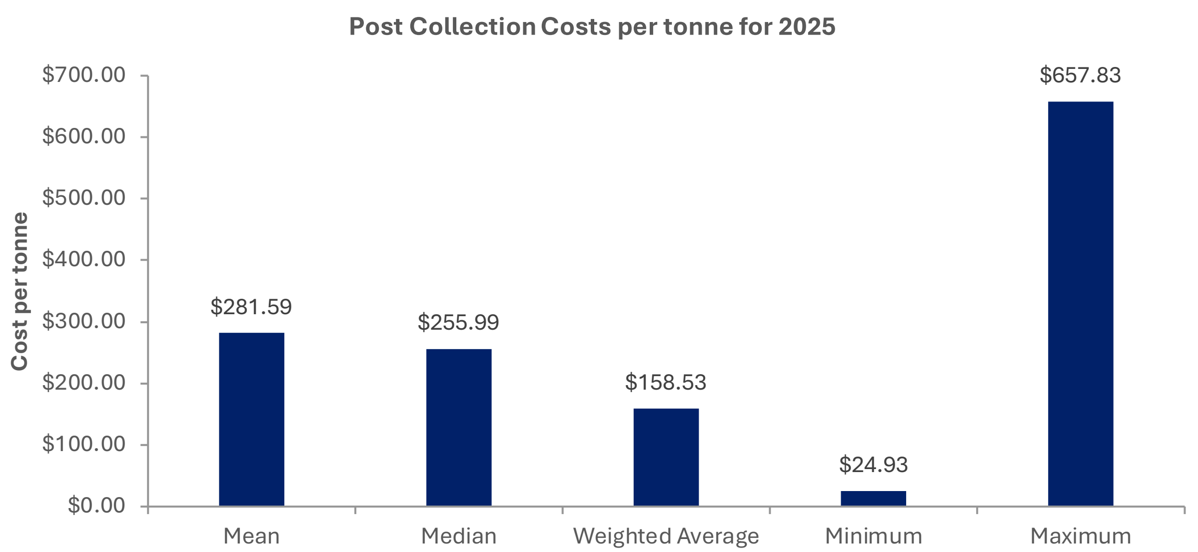

Figure 36. Post Collection Costs per tonne for depots

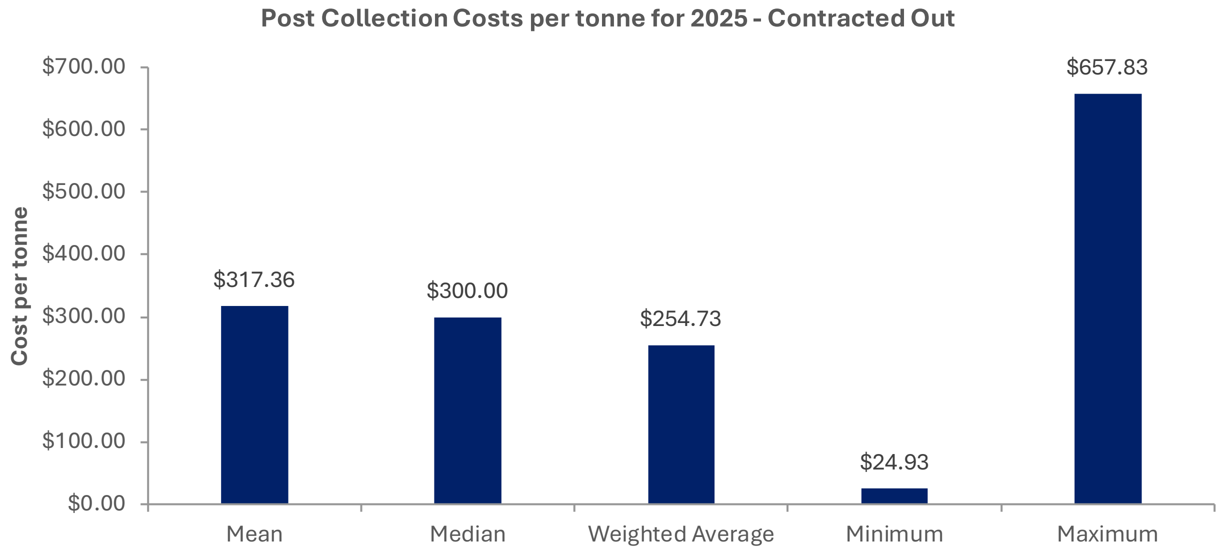

Figure 37. Post Collection Costs per tonne for depots with contracted out operations

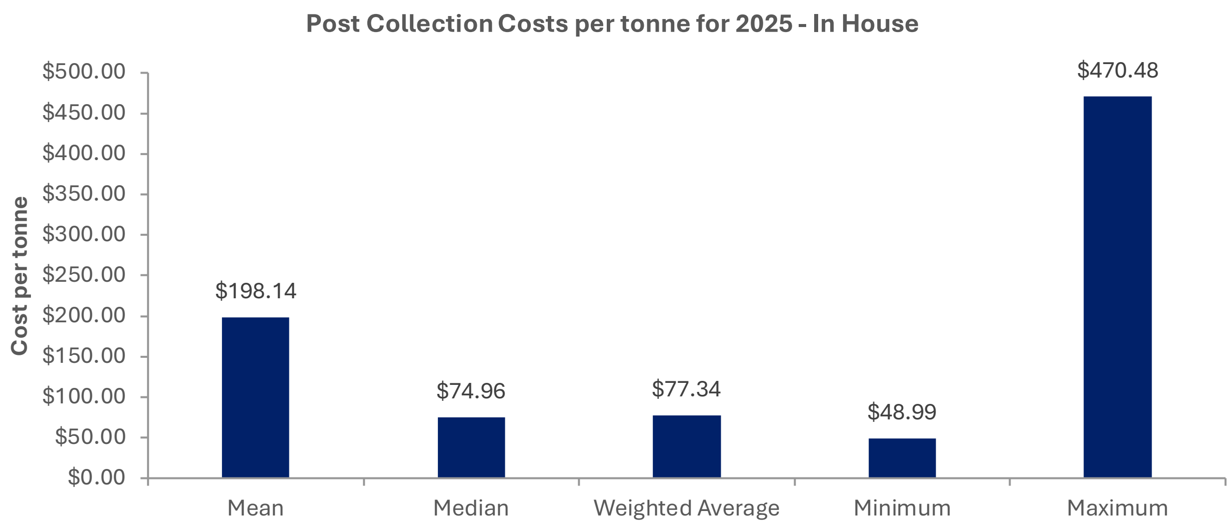

Figure 38. Post Collection Costs per tonne for depots with in-house operations

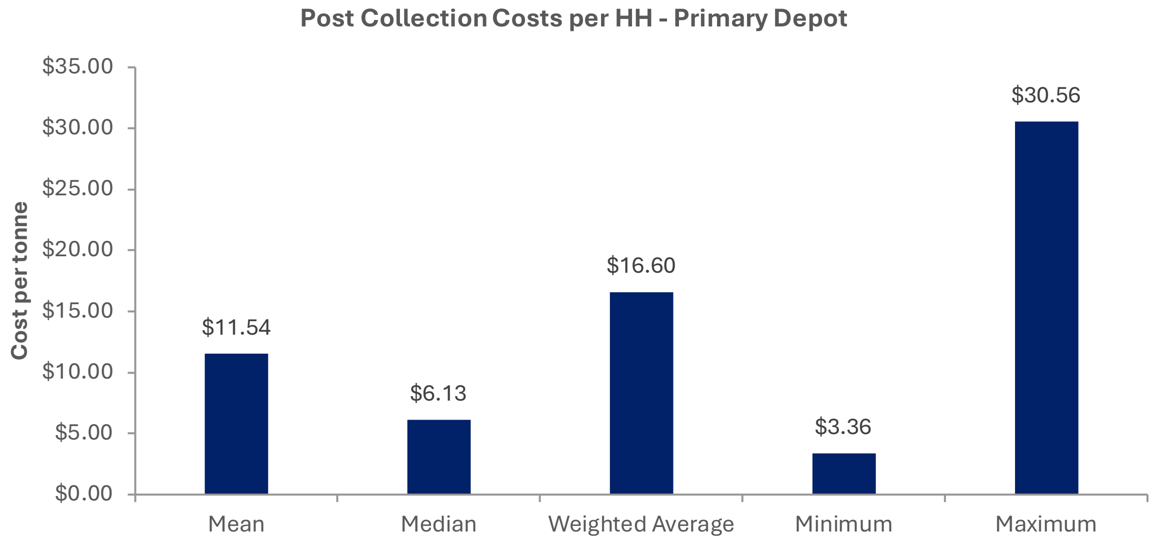

Figure 39. Post Collection Costs per HH for Primary Depots

Observations:

- Seven (7) depot collectors have outsourced post-collection activities, while three (3) operate in-house.
- The 10 collectors with reported post-collection costs account for 75% of the total 2025 tonnage for all the depot collectors in the 2026 Cost Study.
- It is also worth noting that only one (1) RWA provided post-collection cost details, therefore, data has not been classified / provided by RWA to preserve the anonymity of the collector.

End of report