



# RECYCLE BC

Financial Incentive Review  
Including Cost Study Results  
June 2020

# WELCOME

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## Webinar Format

- Technical Information
  - If you are having difficulty with audio or visuals please alert us via email at [acasey@cssalliance.ca](mailto:acasey@cssalliance.ca)
- Submitting a Question
  - Clarifying questions can be submitted throughout the webinar by using the Q&A function in the toolbar at the bottom of your screen. Move your mouse to the bottom of the Zoom screen to reveal the toolbar if it's not visible.

## Pre-Read

- The 2019 Cost Study Report is posted at <https://recyclebc.ca/recyclebc-consultation/>



# AGENDA

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## July 7

- Introduction
  - Process for Submitting Feedback
- Financial Incentive Review Process Overview
- Cost Study Findings
- Financial Payment Model Elements
- Proposed Financial Incentive Rates:
  - Curbside
  - Multi-Family
    - Q&A Clarifying Questions
  - Depot
    - Q&A Clarifying Questions
- Process for Submitting Feedback & Next Steps

## July 8

- Introduction
  - Process for Submitting Feedback
- Financial Incentive Review Process Overview
- Cost Study Findings
- Financial Payment Model Elements
- Proposed Financial Incentive Rates:
  - Depot
    - Q&A Clarifying Questions
  - Curbside
  - Multi-Family
    - Q&A Clarifying Questions
- Process for Submitting Feedback & Next Steps

# PROCESS FOR SUBMITTING FEEDBACK & NEXT STEPS

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- Following today's webinar there is a 30-day consultation feedback period
- The feedback period is open until Friday, August 7, 2020
- Please send your comments to us via  
[consultation@recyclebc.ca](mailto:consultation@recyclebc.ca)
- Specific feedback by collectors is essential to this process
- Recycle BC will review all feedback provided and publish a Consultation Report which will include a summary of stakeholder comments and how they were addressed

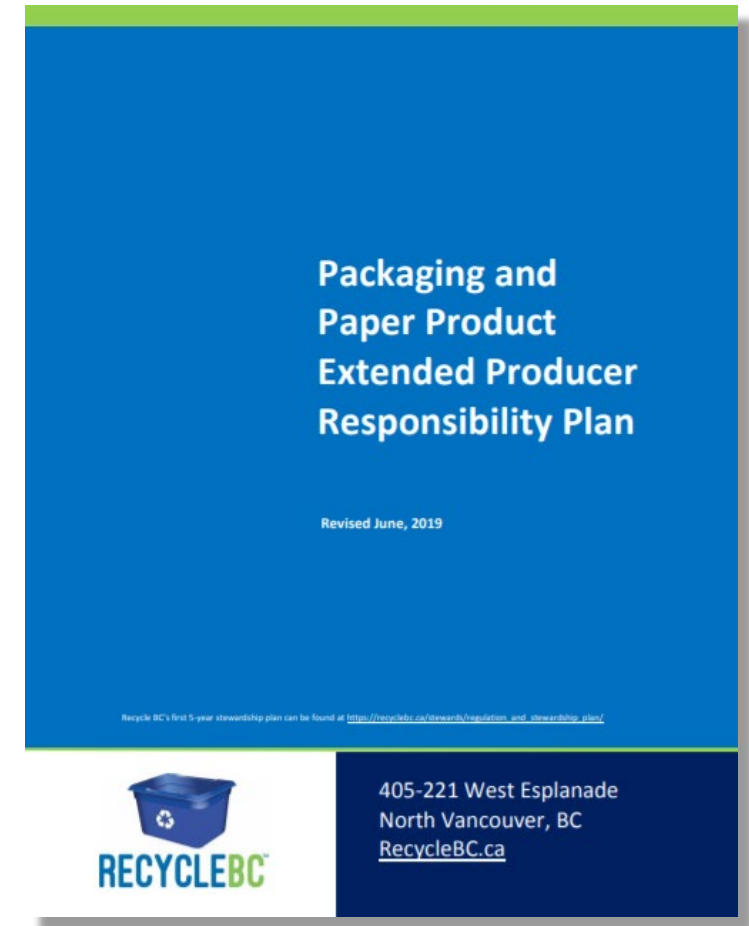


# FINANCIAL INCENTIVE REVIEW PROCESS OVERVIEW

# PURPOSE & PROGRAM PLAN COMMITMENT

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- Recycle BC's objective is to set fair and reasonable incentives
- The Regulation requires Recycle BC to adequately provide for the producer collecting and paying the costs of collecting and managing products within the product category covered by the plan
- Recycle BC's program plan outlines the process for establishing financial incentives for collection and the methodology by which the financial incentives will be reviewed



# REVIEW PROCESS

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- Process for Establishing Financial Incentives for Collection (Section 4.3.1 of Plan)
  - Undertake an analysis to assess existing incentives in the current market context and any necessary adjustments in order to propose revised financial offers for consultation with collectors
  - Hold consultation sessions with collectors to review the proposed financial offers, discuss, answer questions and request feedback
  - Review all feedback provided to finalize the financial incentives that will comprise part of the published collection services agreements

For this 2020 review, Recycle BC began in May 2019 with an internal working group and in June 2019 Recycle BC's Advisory Committee was brought into the project to provide oversight to the cost study. The established methodology was followed ultimately resulting in this consultation webinar.

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# METHODOLOGY

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- Methodology to prepare revised financial incentives (Section 4.3.2 of Plan)
  - Review the past 3 - 5 years of program data, including collection performance by collection channel
  - Review contamination levels and their impact on total supply chain costs
  - Undertake a cost study to determine current collection costs and compare current costs to historical costs in the current market context
  - Assess inflationary factors including a review of the BC Consumer Price Index
  - Review service performance requirement changes since the prior services agreements were established that may have had a financial impact on the collector.

The proposed financial incentive rates derived from the above process are presented for consultation to collectors.

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# COST STUDY FINDINGS

2019 Cost Study

# COST STUDY PURPOSE

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- The purpose of this 2020 cost study is to understand 2019 collection costs and compare them to those in 2017 identified in the 2018 cost study.

2013



Summary of Collection Cost Research

2018



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Packaging and Paper Product Collection Costs

Five Year Cost Study Refresh

2020



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Recycle BC

Packaging and Paper Product Collection Costs

2019 Cost Study

July, 2020

# STUDY METHODOLOGY

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## ○ Data Collection Methodology

- October 2019, local governments and private collectors received a letter from Recycle BC requesting their participation, to determine study size. All collectors were given the opportunity to volunteer to participate.
- December 2019, a competitive RFP process was released to engage a third-party professional service firm to undertake the cost study, at the set study size and scope
- February 2020, letter to collector participants to launch study and data collection
- February 2020, participants received the Cost Study Report Template along with guidance notes on how to complete the data fields. A collated document of Frequently Asked Questions was also shared with participants during the data collection process
- February & March 2020, virtual and face-to-face meetings were conducted
- March 20, 2020, data submission deadline extended to April 10 due to pandemic
- April 2020, total data points collected was 69 out of 96 requested and a 72% response rate

# STUDY METHODOLOGY

## ○ Study Size

- In total, out of 96 collection programs' data requested of local governments, private collectors, and direct service programs, 69 collection programs were received
- The difference in total collection programs' data requested and received was due to collectors not responding to the request and five participant declines

Cost Category	2018 Participation	2020 Participation
Collection Cost		
Curbside Collection	11	23
Multi-Family Collection	5	8
Depot Collection	8	38
<b>Total Collection Cost</b>	<b>24</b>	<b>69</b>
Promotion and Education <sup>7</sup>	17	66
Service Administration	17	66

# STUDY METHODOLOGY

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## ○ Cost Category Definitions

- Collection, Promotion and Education (P&E) and Service Administration costs were studied for three collection types: Curbside, Multi-Family and Depot.
- Collection
  - Operating costs were actual 2019 expenditures for collection of residential PPP
  - Capital amortization costs were all capital assets used to provide PPP collection service within the amortization periods
- P&E
  - Includes labour and supply costs incurred to educate and promote the PPP program to residents
- Administration
  - Any overhead costs incurred to manage the Recycle BC PPP program that are not covered in Collection or Promotion & Education costs such as the program's share of a call centre

# STUDY METHODOLOGY

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## ○ Cost Allocations Methodology

- Participants were requested to provide their costs specific to the Recycle BC PPP Collection Program.
- For those unable to segregate their PPP costs from their gross costs, the third-party professional service firm engaged to facilitate this cost study allocated based on the methodologies outlined in the 2019 Cost Study report

## ○ Capital Costs Amortization and Cost of Capital

- Capital assets were amortized based on amortization periods consistent with the previous cost studies
- The cost of capital calculation is provided in the 2019 Cost Study report

# DATA INTEGRITY AND ACCURACY

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## ○ Data Integrity

- Participants were requested to provide actual costs incurred in 2019
- Enquiries were made with participants to confirm the numbers if they appeared to be outliers based on other collectors in the same geographical region or of similar size
- Report outliers were identified and quantified in the report and are not used as representative sample costs

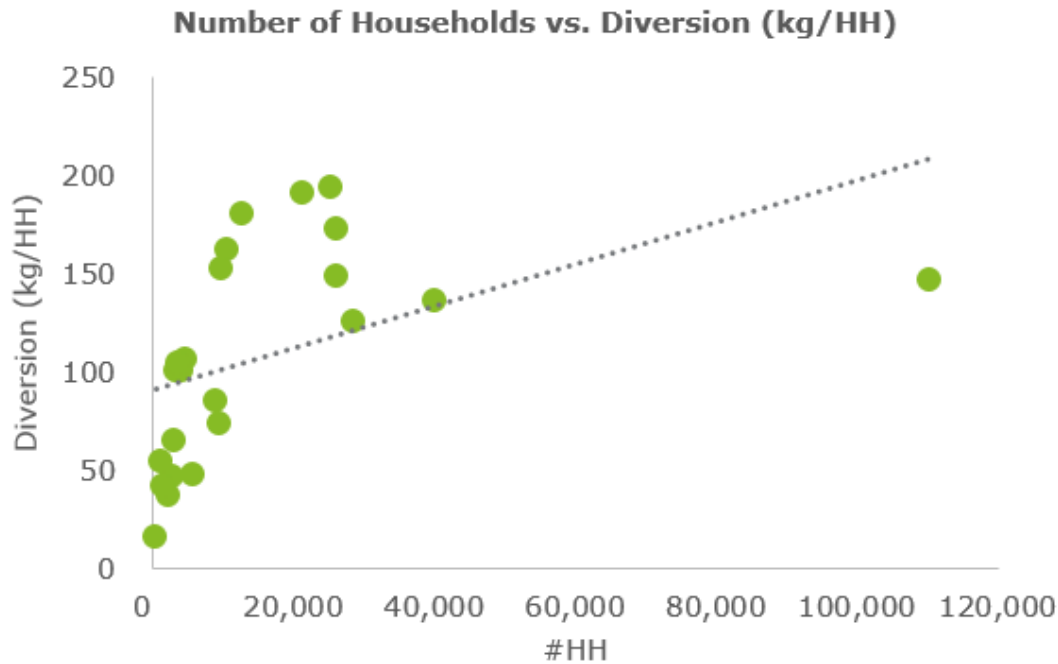
## ○ Data Accuracy

- Of the total 69 collection programs' data received:
  - 40 were provided entirely by participants and determined to be reflective of the time and effort associated with operating the PPP collection programs
  - 20 collection programs required the third-party professional service firm to allocate approximate costs in accordance with the Cost Allocation Methodology
  - 9 collection programs were collected during the meetings as best estimates provided by participants

# COLLECTION COST RESULTS – DIVERSION RATES

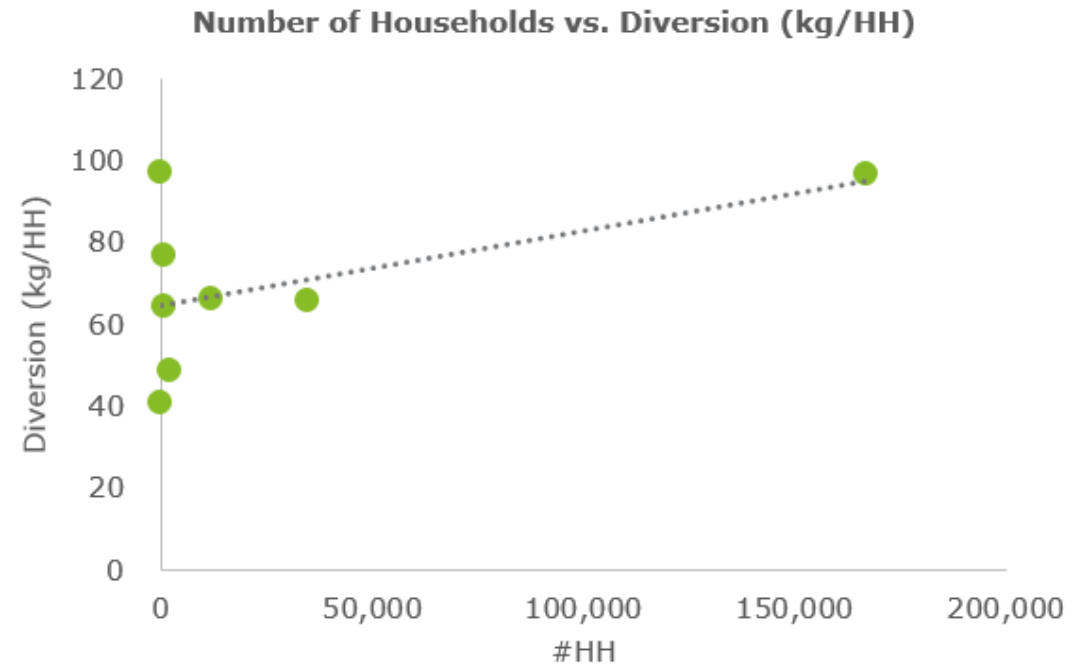
## Curbside

○ Ranged from 16 Kg/HH to 193 Kg/HH



## Multi-Family

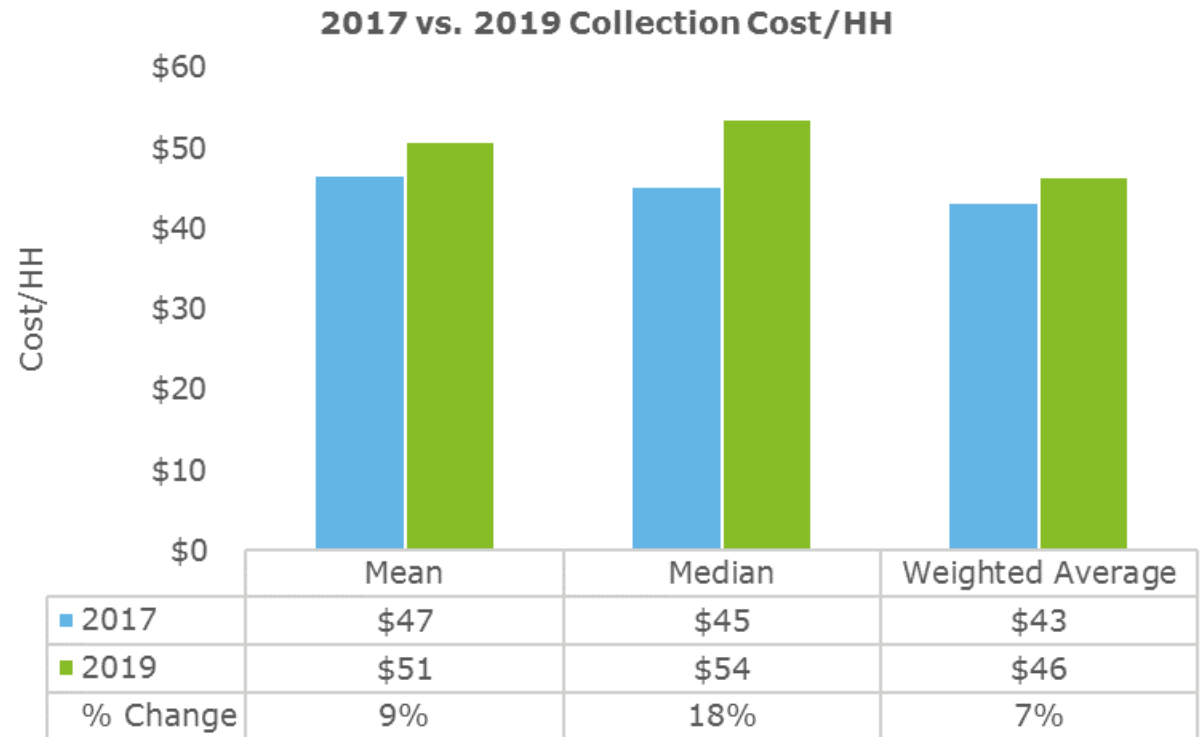
○ Ranged from 41 Kg/HH to 97 Kg/HH





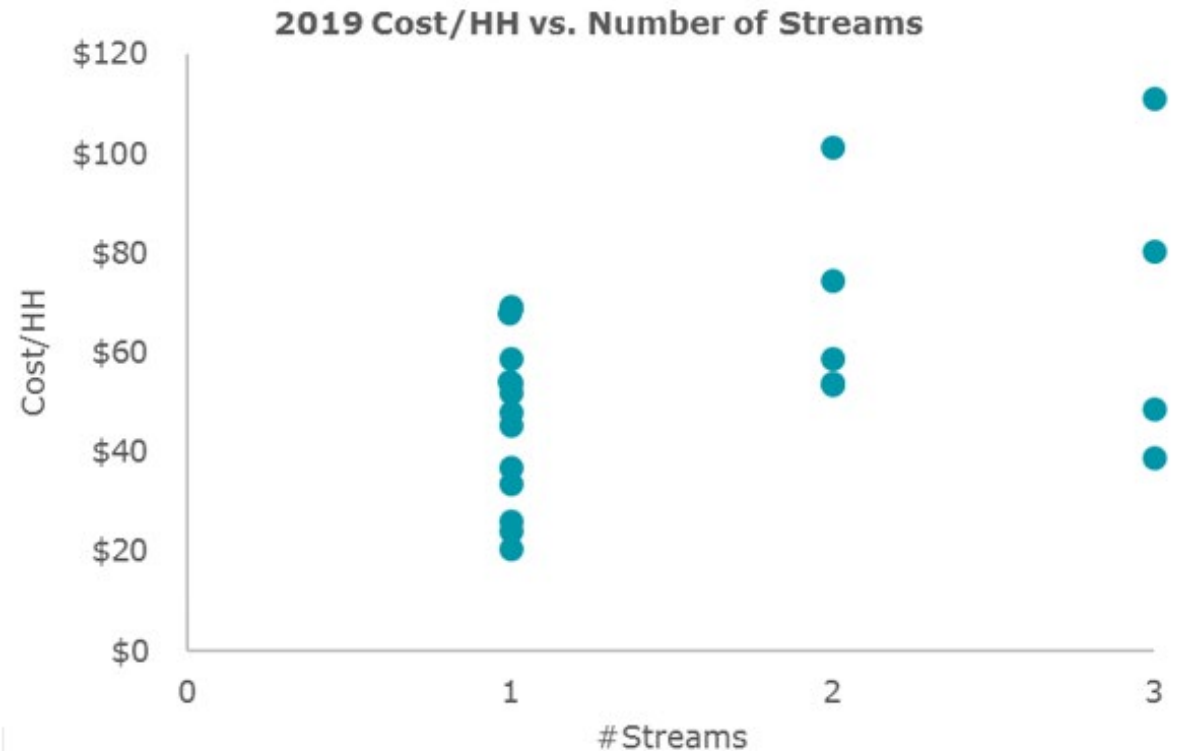
# CURBSIDE COLLECTION

- Out of 30 curbside collection programs requested, 23 collection programs' costs were received and analyzed in the 2020 cost study
- Cost/HH in 2019 ranged from \$21 to \$80
- Cost/HH in 2017 ranged from \$27 to \$69
- Weighted average \$46, a 7% increase in reported costs



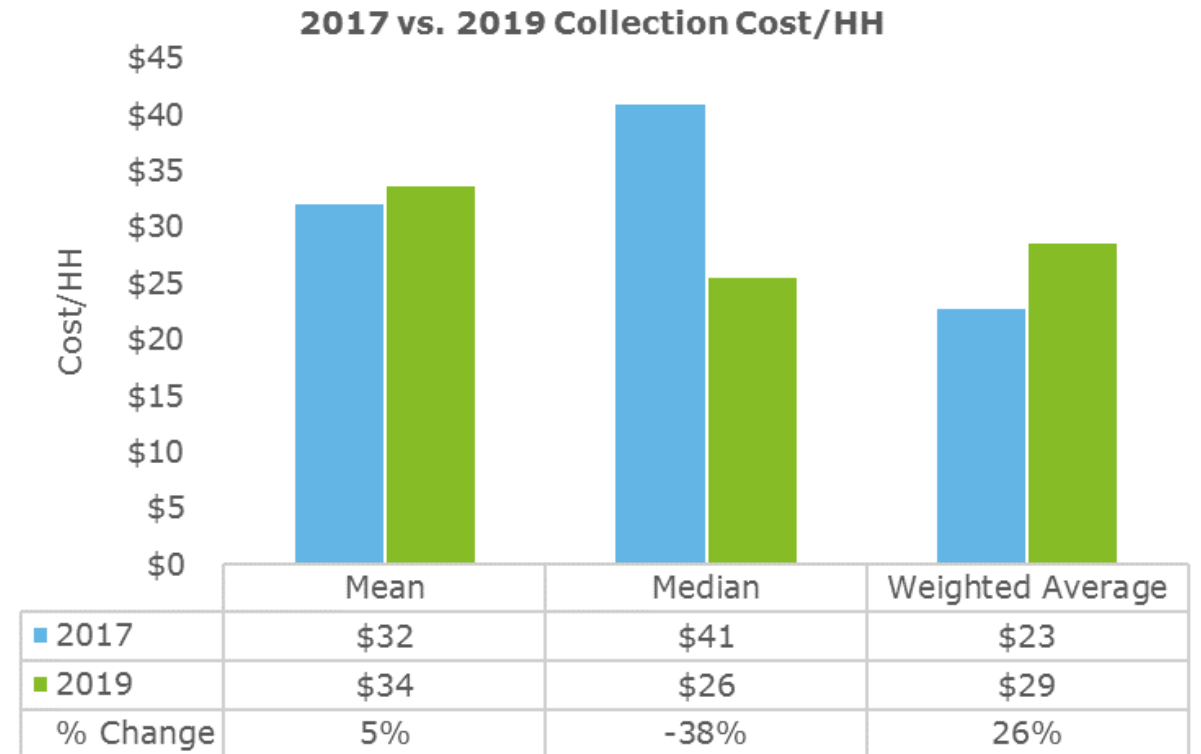
# CURBSIDE COLLECTION

- The more robust data set in 2019 showed that cost variation within a stream, as illustrated in this chart) was not due to differences in density (households per hectare) disproving the theory that the lower the density the higher the cost of service per HH



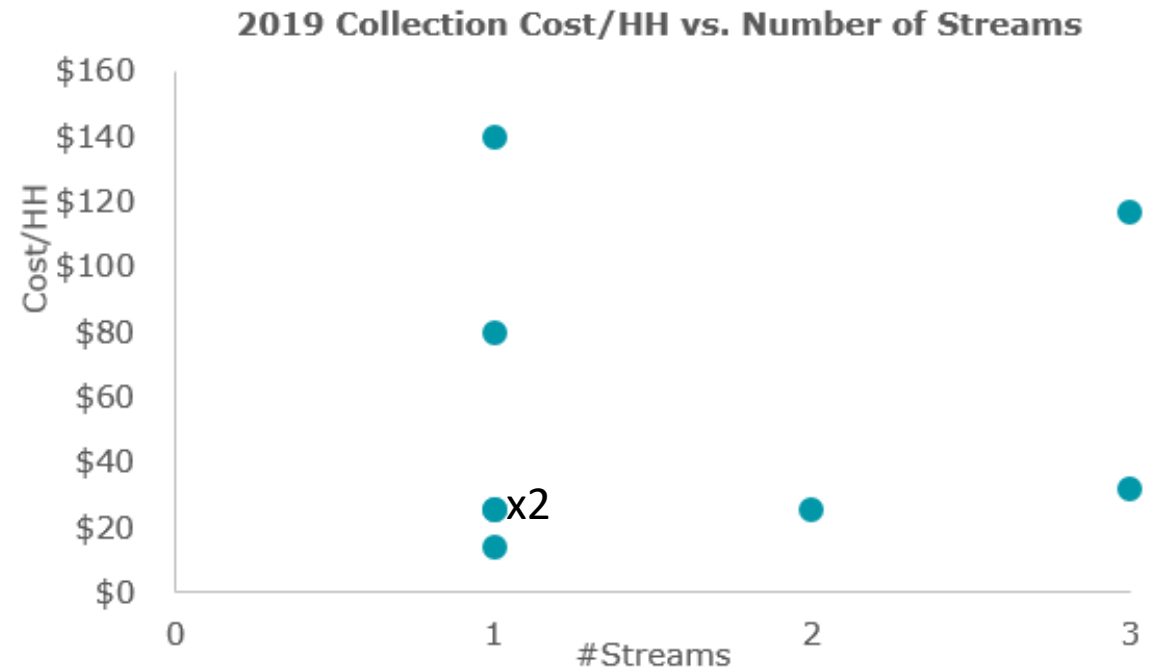
# MULTI-FAMILY COLLECTION

- Out of 13 multi-family collection programs requested, 8 collection programs' costs were received and analyzed in the 2020 cost study
- Given the dataset is small, multi-family cost data should be reviewed with discretion
- Cost/HH in 2019 ranged from \$14 to \$80
- Cost/HH in 2017 ranged from \$14 to \$43
- Weighted average \$29, a 26% increase in reported costs



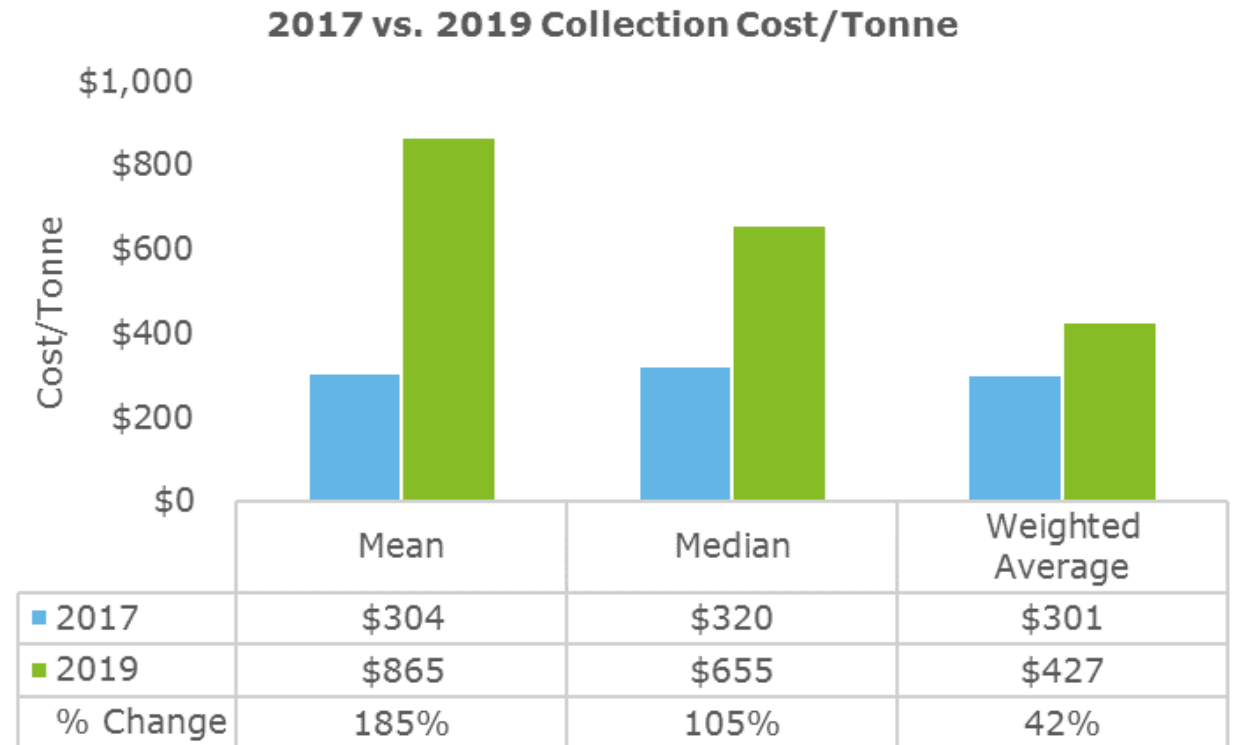
# MULTI-FAMILY COLLECTION

- The weighted average cost/HH for one, two and three streams was \$18, \$25 and \$32 respectively



# DEPOT COLLECTION

- Out of 53 depot collection programs requested, 38 collection programs' costs were received and analyzed in the 2020 cost study
- Cost/Tonne in 2019 ranged from \$161 to \$2,803
- Cost/Tonne in 2017 ranged from \$148 to \$420
- Weighted average \$427, a 42% increase in reported costs



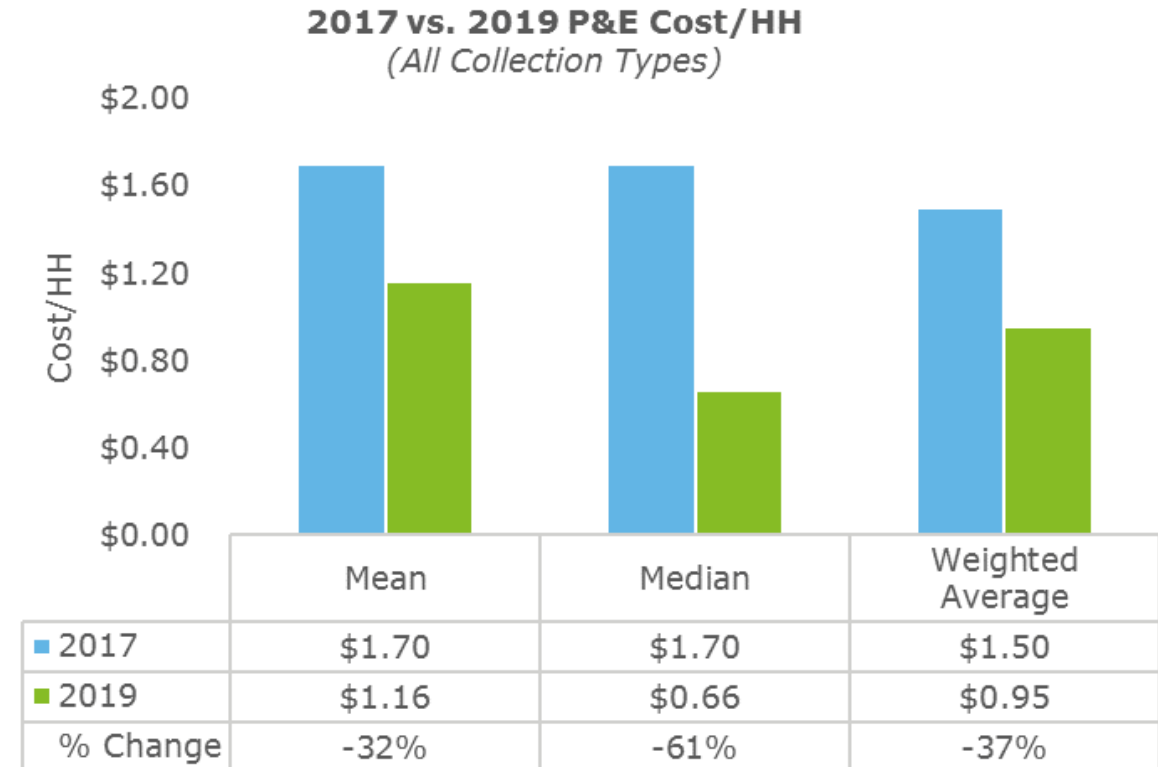
# DEPOT COLLECTION

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- The 2020 cost study included two types of depot collectors: Local government and private collectors whereas 2018 cost study only included local government
  - Additionally, the larger number of samples from 8 in 2018 to 38 in 2020 provided a more robust data set for analysis
- Out of 53 depot collection programs requested, 38 collection programs' costs were received and analyzed in the 2020 cost study
  - Of the 38, this study was comprised of 25 local government collection programs and 13 private collectors
- The weighted average cost/tonne for local governments is significantly lower than for private companies at \$452 and \$949, respectively

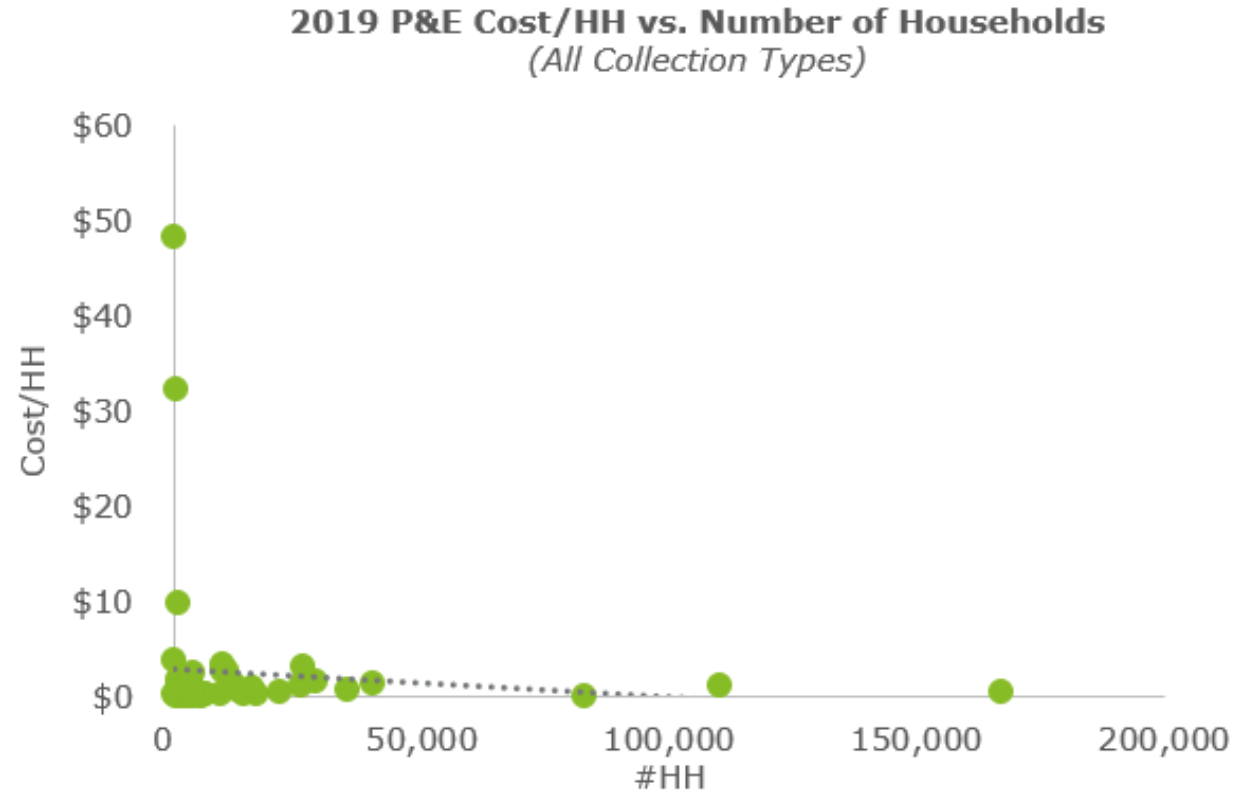
# PROMOTION AND EDUCATION (P&E)

- Out of 96 Promotion & Education collection programs' costs requested, 66 were received and analyzed in the 2020 cost study
- Only 22 out of 35 depots had the number of households available and hence were included in the analysis
- Cost/HH in 2019 ranged from \$0 to \$10
- Cost/HH in 2017 ranged from \$0.02 to \$7
- Weighted average \$0.95, a 37% decrease in reported costs



# PROMOTION AND EDUCATION (P&E)

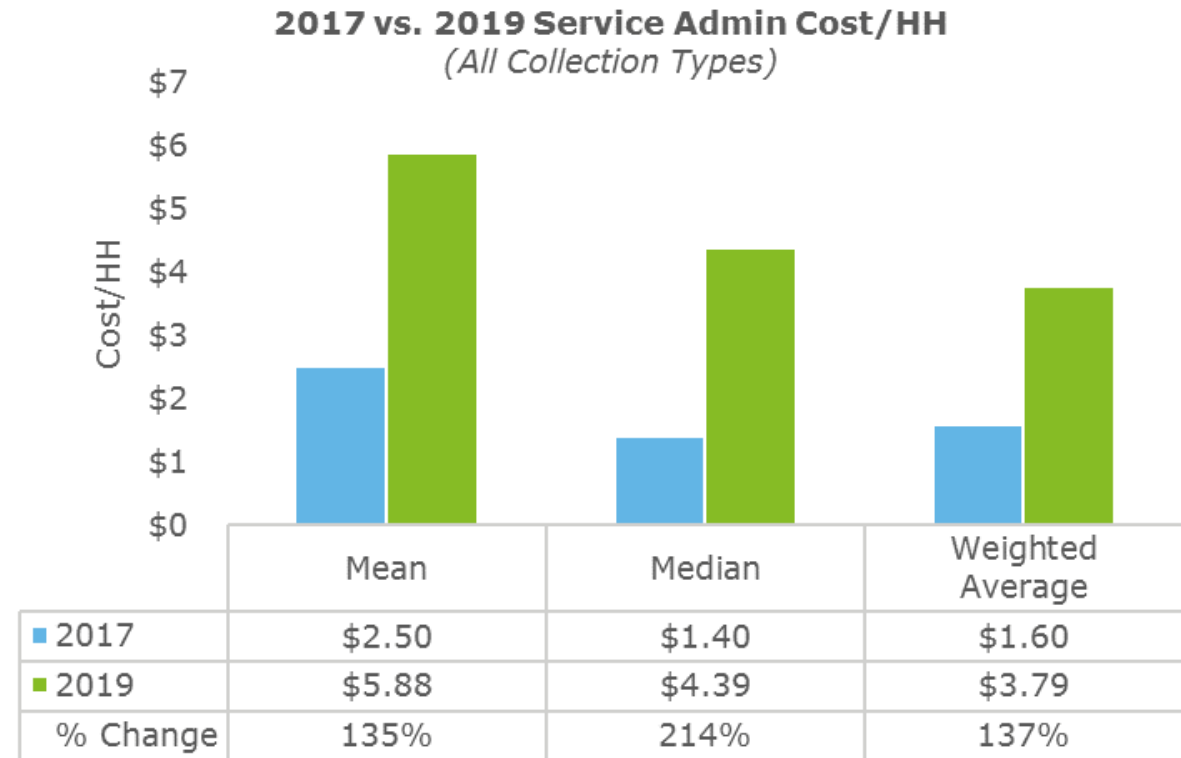
- The increase in social media for P&E may be a key factor in reduced costs in this category





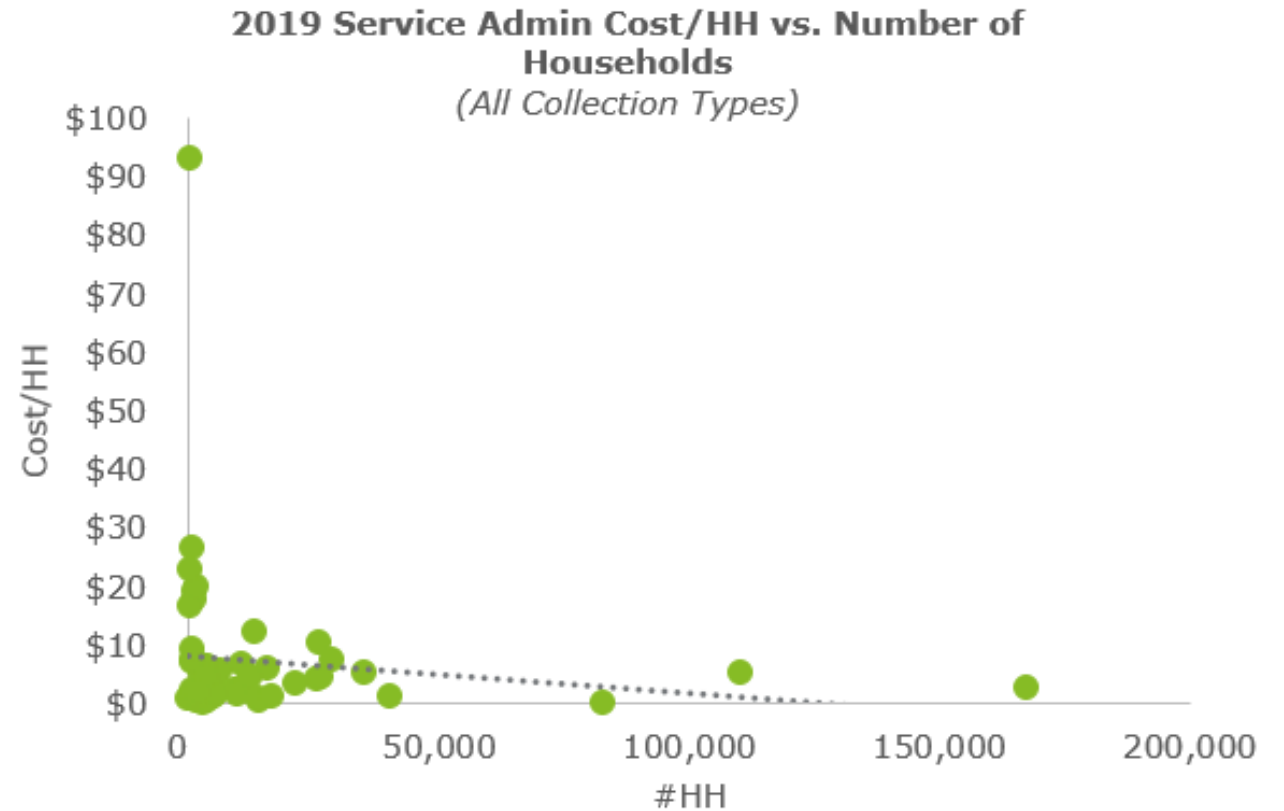
# SERVICE ADMINISTRATION

- Out of 96 Service Administration collection programs' costs requested, 66 were received and analyzed in the 2020 cost study
- Only 22 out of 35 depots had the number of households available and hence were included in the analysis
- Cost/HH in 2019 ranged from \$0.48 to \$27
- Cost/HH in 2017 ranged from \$0.18 to \$8
- Weighted average \$3.79, a 137% increase in reported costs



# SERVICE ADMINISTRATION

- The more robust data set (66 collection programs in this study vs 17 in the previous study) allowed for greater analysis of service administration costs by collection channel and by collector type
- This was used to help determine the proposed financial incentive rates



# SUMMARY

- The following table provides a summary of key numbers for each cost category with a comparison to the 2018 cost study results

Cost Category	# of Collection Programs	Weighted Average	2-Year Change %
Collection Cost			
Curbside Collection (Cost/Household (HH))	23	\$46	7%
Multi-Family Collection (Cost/HH)	8	\$29	26%
Depot Collection (Cost/Tonne)	38	\$427	42%
<b>Total Collection Cost</b>	<b>69</b>		
P&E (Cost/HH) <sup>1</sup>	66	\$0.95	-37%
Service Administration (Cost/HH)	66	\$3.79	137%

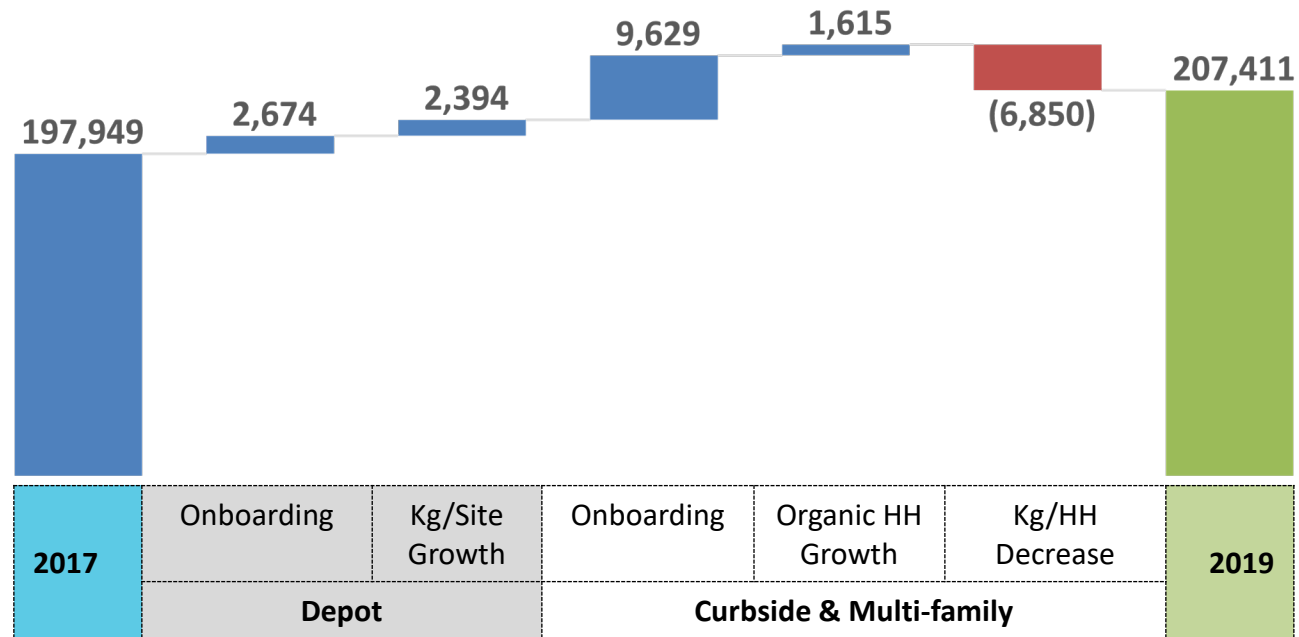


# FINANCIAL PAYMENT MODEL ELEMENTS

# COLLECTION PERFORMANCE BY CHANNEL

## ○ Collected Tonnage Growth 2017-2019

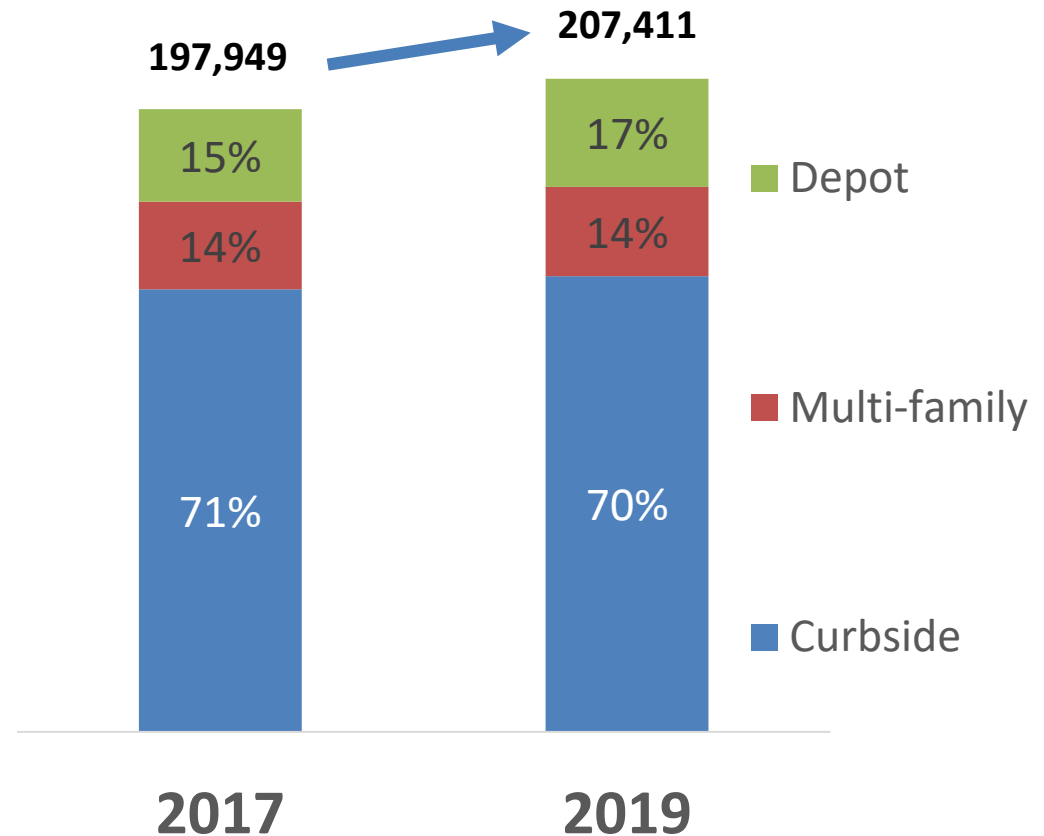
- Collected tonnage increases were mainly driven by new collectors joining the program plus higher collection from existing depot locations, which more than offset the lower capture rate from existing curbside and multi-family locations



# COLLECTION PERFORMANCE BY CHANNEL

## ○ Collected Tonnage Mix by Channel

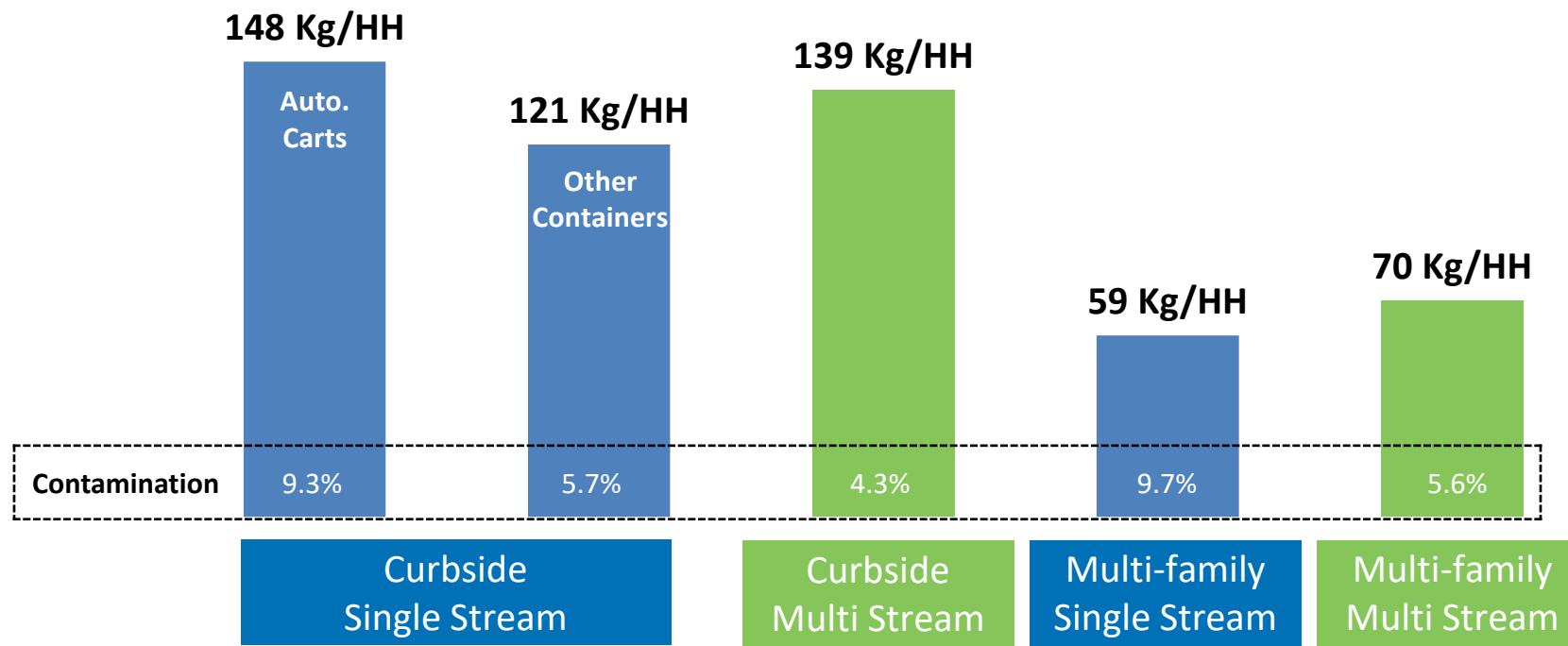
- As the collected tonnage increased from 2017 to 2019, there is evidence of a continued shift in the collection share amongst the three channels
- The expansion of our Depot channel has resulted in a small gain in collected share. In our first full year of operations (2015) depots made up 14% of our collected tonnes and curbside was 72%



# CAPTURE RATES

## ○ Capture and Contamination Rates by Channel

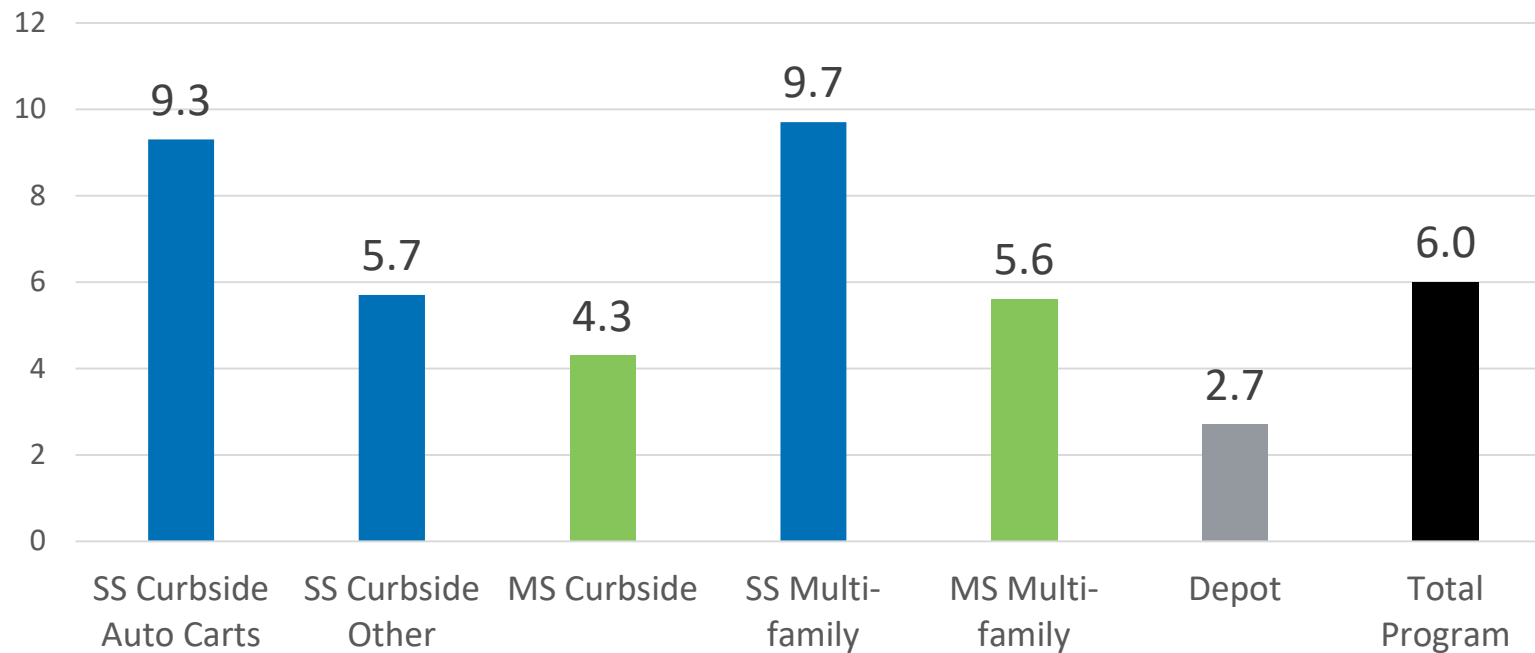
- Multi-stream curbside collection provides the best capture rate and cleanest material at 139 Kg/HH compared to total single stream curbside which has a capture rate of 137 Kg/HH and higher contamination



# CONTAMINATION RATES

## ○ Contamination Rates - Non-PPP Collection

- Single stream collection results in higher contamination rate regardless of channel
- High contamination drives increased sorting to maintain bale quality and marketability

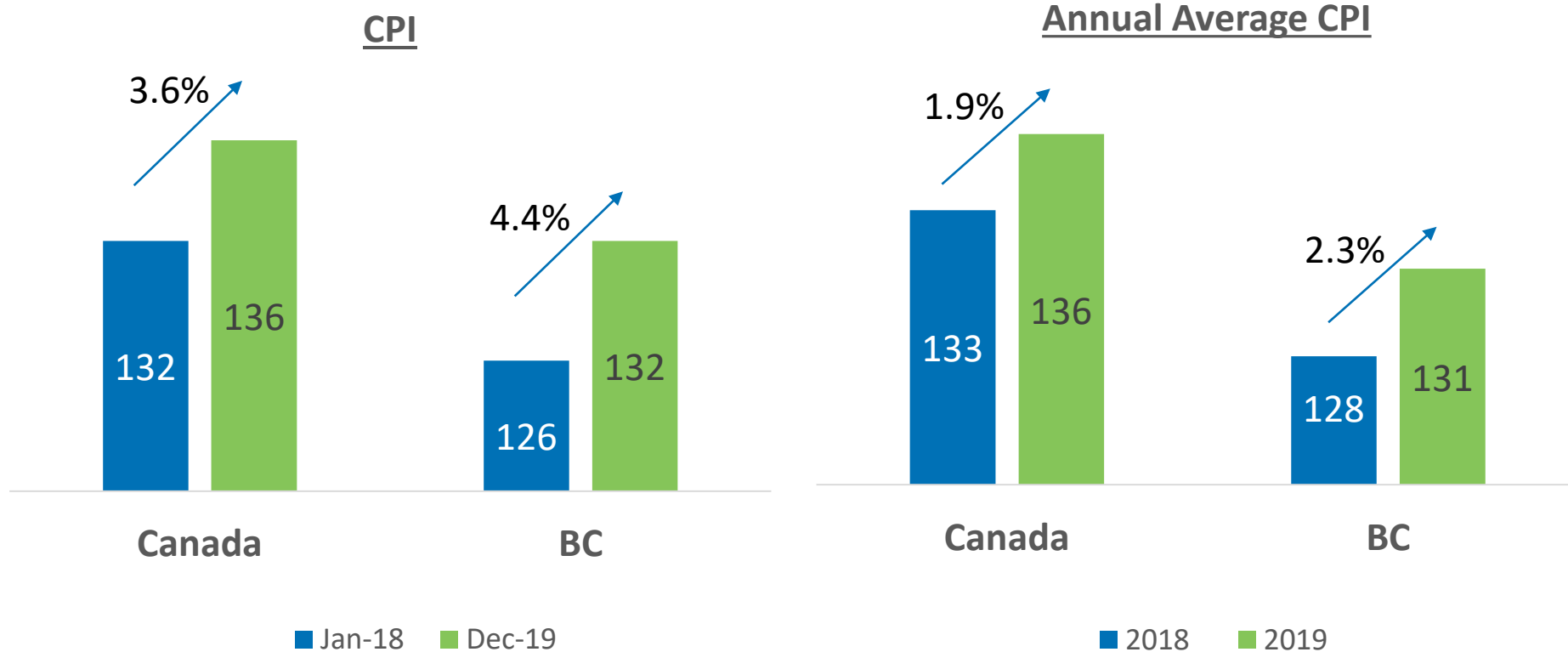




# BC CONSUMER PRICE INDEX

## ○ Two-Year CPI Trend

- CPI increases reflect higher price inflation in BC even though the basket of goods is less costly in BC



# COST STUDY FINDINGS

## ○ Comparison to 2017 Cost Study Results

- The larger number of samples (69 vs 24 in 2017) gave greater range in costs
- The more robust data set showed that density (HH/Ha) was not a factor in cost/HH
- The increase in social media for P&E may be a key factor in reduced costs in this category

Cost Category	# Collection Program Participants	2-Year % Change
Collection Cost	69	
Curbside Collection (Cost/HH)	23	7%
Multi-Family Collection (Cost/HH)	8	26%
Depot Collection (Cost/Tonne)	38	42%
P&E (Cost/HH)	66	-37%
Service Administration (Cost/HH)	66	137%



# PROPOSED FINANCIAL INCENTIVE RATES

# CURBSIDE COLLECTION



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# KEY INPUTS

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## ○ Collection Performance

- Tonnage declines in existing curbside programs = overall decline in channel's contribution
- Collection tonnage/HH from curbside is double that from multi-family HH = productive channel

## ○ Contamination Impact

- Multi-stream contamination 4.3% = effective collection method (but can do better)
- Single stream automated carts at 9.3% = increased post-collection costs & unmarketable material

## ○ Cost Study Findings

- Payment gap largest in highest density group = higher collection costs in >2 HH/Hectare
- In-house collection more expensive than sub-contracted collection = reasonability of costs vs. payments
- Larger number of samples gave greater range in costs but for same yoy participants costs rose avg. +5%
- Administration cost: reported significant increases across all collection streams

## ○ Other Factors: Some collectors reported increases below CPI rate; GHG tracking launched in 2019

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# CHANGES

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- Increased payments to highest density collectors (approx. +12%) then to medium density collectors (approx. +6%) and no increase to very low density collectors – mirrors cost study analysis results
    - Did not decrease any collection cost payment values even if cost study revealed lower costs in sample
  - No P&E increase or decrease – payment flat to current \$0.75 to incent increased activity with costs decreasing
  - Depot top-up removed from curbside payments to add to depot payments directly
  - Service administration payment increase – doubled value from \$1.75 to \$3.50/HH. Reasonability of value – matches value for one stream’s service administration costs
  - No change to segregated glass payment – contamination costs \$ at processing
  - No change to achieved bonus amount – no validation of effectiveness at this time
-

# PROPOSED PAYMENT RATES

Service Area Density (Households/Hectare)	Current Incentive Rate (\$/HH/Year)	Proposed Incentive Rate (\$/HH/Year)	% Change (9% overall)
<b>Group 1 - Single Stream collectors using automated carts</b>			
> 2 HH/Hectare	\$33.40	\$37.40	12.0%
0.2-2 HH/Hectare	\$35.40	\$37.40	5.6%
< 0.2 HH/Hectare	\$37.40	\$37.40	0%
<b>Group 2 - Single Stream collectors using other container types</b>			
> 2 HH/Hectare	\$34.50	\$38.80	12.5%
0.2-2 HH/Hectare	\$36.65	\$38.80	5.9%
< 0.2 HH/Hectare	\$38.80	\$38.80	0%
<b>Group 3 - Multi-Stream collectors</b>			
> 2 HH/Hectare	\$38.45	\$42.80	11.3%
0.2-2 HH/Hectare	\$40.65	\$42.80	5.3%
< 0.2 HH/Hectare	\$42.80	\$42.80	0%
Resident Education	\$ 0.75	\$0.75	0%
Service Administration	\$1.75	\$3.50	100%

# MULTI-FAMILY COLLECTION



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# KEY INPUTS

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## ○ Collection Performance

- Share of collection tonnage unchanged over past 5 years = maintaining channel's contribution
- Collection tonnage/HH from multi-family HH is less than half of curbside = less productive channel

## ○ Contamination Impact

- Multi-stream contamination 5.6% = more work needed + concern with plastic bags, glass in carts
- Single stream contamination at 9.7% (highest) = very poor material and drives additional system cost

## ○ Cost Study Findings

- Payment gap largest in highest density group = higher collection costs in >2 HH/Hectare
- Very small number of multi-stream samples did not provide reliable data to determine cost increases
- Only one private collector responded to cost study participation request
- Administration cost: SS cost increase completely originating from increases to service admin costs

## ○ Other Factors: None identified particular to multi-family collection costs

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# CHANGES

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- Applied 2-year average CPI to single stream collection costs; insufficient response from multi-stream collectors to have data to change that payment rate
- No change to resident education top up paid to local governments – current rate equals study cost finding
- Depot top-up removed from MF payments to add to depot payments directly
- Service administration payment increase –from \$1.25 to \$2.00/HH. Will now be paid to private collectors in addition to local governments
- No change to segregated glass payment – contamination costs \$ at processing
- No change to achieved bonus amount – no validation of effectiveness at this time

# PROPOSED PAYMENT RATES

Multi-Family Collector Type	Current Incentive Rate (\$/HH/Year)	Proposed Incentive Rate (\$/HH/Year)	% Change (3% overall)
Single Stream Collectors	\$18.30	\$18.75	2.3%
Multi-Stream Collectors	\$21.90	\$21.90	0%
Resident Education	\$1.00	\$1.00	0%
Service Administration - LG	\$1.25	\$2.00	60%
Service Administration - Private	\$0	\$2.00	new

# CURBSIDE & MULTI-FAMILY QUESTIONS?

Questions for Clarity



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# DEPOT COLLECTION



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# KEY INPUTS

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## ○ Collection Performance

- Growth in share of collection tonnage over past 5 years = increased channel's contribution
- Higher collection tonnage from existing depots = impact adding OFPP collection

## ○ Contamination Impact

- Lowest contamination channel due to segregated categories and staff sorting = quality when clean
- Non-stewarded material (IC&I) enters program through depot system = cost burden

## ○ Cost Study Findings

- The weighted average cost/tonne for local government is significantly lower than private company at \$452 and \$949, respectively
- Administration cost: Local gov't depots have historically been paid a service administration top-up while private depots have not. Private depots reported high service administration costs in the study

## ○ Other Factors: Depots experienced an increase in costs due to increased volume of light-weight material

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# CHANGES

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- Concentrated payment increases in light-weight material categories
  - Analyzed average price per mega bag and per bale to increase price for light-weight vs heavier fibre and glass – cost study provides total cost data not costs by material type
  - 150% collection payment increase for film and OFPP material in bags; 100% increase to baling incentive
  - 150% collection payment increase for foam; 100% increase to baling incentive
- 30% increase to containers and 10% for paper (heavier) to give equivalency for mega bags and bales for these materials (depots without curbside)
- No increase for glass – heavy material and less sorting time needed
- Historic service administration top up for local government depots eliminated in this model and all cost categories factored into inclusive price per tonne – private and local government depots treated equally

# PROPOSED PAYMENT RATES

Category Description	Current (\$/Tonne)			Proposed (\$/Tonne)			% Change (58% overall)		
	Without Curb/MF Rate	With Curb/MF Rate	Baled	Without Curb/MF Rate	With Curb/MF Rate	Baled	Without Curb/MF Rate	With Curb/MF Rate	Baled
Paper and cardboard	\$80	\$60	\$110	\$88	\$60	\$110	10%	0%	0%
Containers	\$130	\$90	\$110	\$169	\$90	\$110	30%	0%	0%
Plastic Bags & Overwrap + OFPP	\$500	\$500	\$330	\$1,250	\$1,250	\$660	150%	150%	100%
Foam - White & Coloured	\$800	\$800	\$330	\$2,000	\$2,000	\$660	150%	150%	100%
Glass Containers	\$90	\$90		\$90	\$90		0%	0%	0%



# QUESTIONS?

Questions for Clarity



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## PROCESS FOR SUBMITTING FEEDBACK & NEXT STEPS

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- The feedback period is open until Friday, August 7, 2020
- Please send your comments to us via  
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**THANKS FOR PARTICIPATING**