



## Beverage Container Management Board

### Phase I Report, Release #2

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A black mug with the MNP logo is in the upper left. A hand holds a silver pen over a document in the center. Another hand rests on the document to the right. The background is a white surface.

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### 3. EXECUTIVE SUMMARY

The Beverage Container Management Board (BCMB) has retained MNP as the Data Collection Agent (DCA) for the beverage container recycling industry in Alberta. In addition to ongoing support of BCMB initiatives, there are two major activities that MNP completes as part of this role. The major components of the DCA role are collecting, summarizing, and analyzing annual survey data submitted by depots (see Section 4.3 – UCA Data Collection Process for further details) and supporting Handling Commission Review (HCR) processes. This report describes the results of these activities.

Since the last (2016/2017) HCR, there have been a number of changes to the data collection process as follows:

- The 2018 UCA was updated with input from the 2016/2017 Handling Commission Review Committee to collect different data in the following ways:
  - Labour data was reformatted to collect T4/overhead labour in two tables and contract/temporary labour on a separate table. In all cases, employees were required to be identified by job class, work type, and if they were related to the depot owner.
  - For depots that reported vehicle costs, information on the make, model, year, and use of the vehicle was collected.
  - Other revenue reported by depots was reviewed in more detail than previously, and a specific description of each type of other revenue was obtained.
- Additional data was collected by the DCA to help inform the Return Margin and Real Estate Expert reports. This data included balance sheet items not included in the financial data provided by depots as well as some additional pieces of data related to these items.
- The DCA implemented data verification flags which identified outliers on six different criteria. Data identified as an outlier was reviewed, discussed with the depot, and changed when it was deemed that revisions would be more accurate.
- The DCA added a second raw data type, As Accepted Data, which includes As Reported Data that was changed in cases where data was deemed unreasonable with respect to accuracy by the DCA. The focus of these changes was on labour data, vehicle data, and other revenue data.
- Vehicle and equipment data have been separated in the analysis and reporting for both this report and the Phase II report as they are escalated and distributed in different ways.
- Based on information provided by the indices expert in their final report, fuel costs have been separated from vehicle costs in the Total System and Target Year and escalated using the index provided by the expert.

This report has been developed to support the 2019/2020 HCR process and consists of analyses completed on the 2018 data collected from depots.

The key results of the 2019/2020 HCR processes are as follows:

- Total fiscal year 2018 volume was 2.0 billion containers.
- 172 of the 219 active depots completed a full UCA submission. These 172 depots constitute the Study System.
- Based in large part on the additional data collected around labour and vehicle costs, the BCMB's Offsite Collections Policy has been triggered, removing a total of \$2.5 million.

- Changes to the minimum wage implemented by the Alberta government have led to higher hourly wages. However, depots have found efficiencies and reduced the total hours in the system.
- Throughout this report we have grouped depot costs into seven cost categories. Based on our adjustments, calculations, and the application of BCMB policies described throughout, the Total System Costs for each category are as follows:
  - Direct Labour: \$35.1 million;
  - Collector Labour: \$0.8 million;
  - Overhead Labour: \$13.2 million;
  - Building: \$19.0 million;
  - Equipment: \$4.8 million;
  - Vehicle: \$1.9 million; and
  - Overhead: \$11.5 million.
- The Total System Revenue Requirement for the Target Year ending April 1, 2020 is \$106.6 million. This represents a 8.9% increase to the Revenue Requirement. The Revenue Requirement calculation is summarized in Table 1 below.

**TABLE 1 – TOTAL SYSTEM REVENUE REQUIREMENT CALCULATION**

	<b>Total Amount</b>
Total System Operating Expenses	\$ 93,559,031
After Tax Total Return	\$ 12,144,275
Total System Income Tax Expense	\$ 1,438,363
Miscellaneous Revenue	\$ (532,702)
<b>Revenue Requirement</b>	<b>\$ 106,608,967</b>

## 4. INTRODUCTION

### 4.1 Industry Background

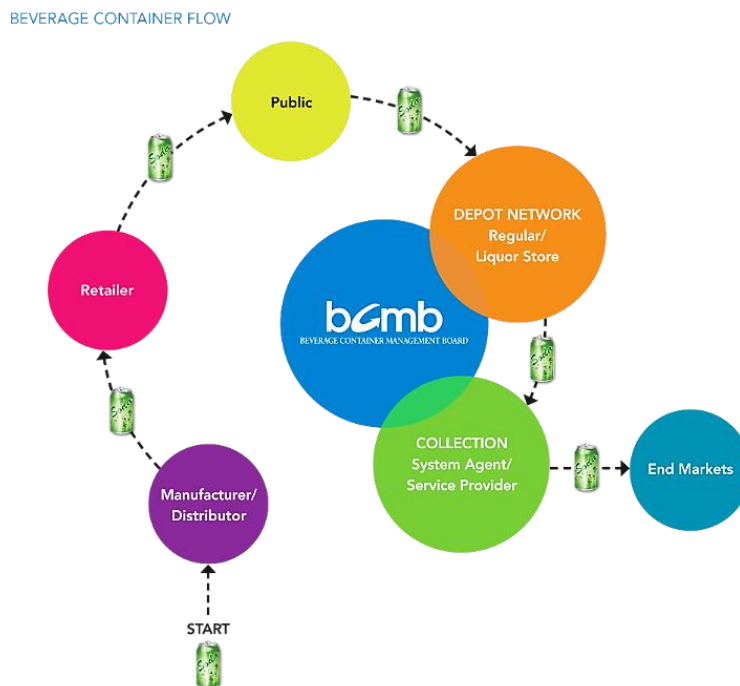
Beverage container recycling has been occurring for over 100 years in Alberta. From the return and reuse of glass bottles in saloons and taverns in the late 19<sup>th</sup> century to the resurgence and rising popularity of deposit return systems in the 21<sup>st</sup> century, beverage container recycling has evolved into a business focused on environmental, economic, and social returns.<sup>1</sup>

The ultimate outcome of beverage container recycling is the minimization of waste through the reuse and recycling of beverage containers. Meaningful social and economic outcomes are also achieved through beverage container recycling.<sup>2</sup>

The performance of the system has been broadly measured using return rate as the key performance indicator. Other performance indicators and certain performance measures are used for internal management (auditing and improvement), external comparisons (benchmarking), and transparency (public reporting).<sup>3</sup>

The beverage container flow is depicted in Figure 1 below.

**FIGURE 1 – BEVERAGE CONTAINER FLOW**



<sup>1</sup> From BCMB's 2018 annual report

<sup>2</sup> From BCMB's 2018 annual report

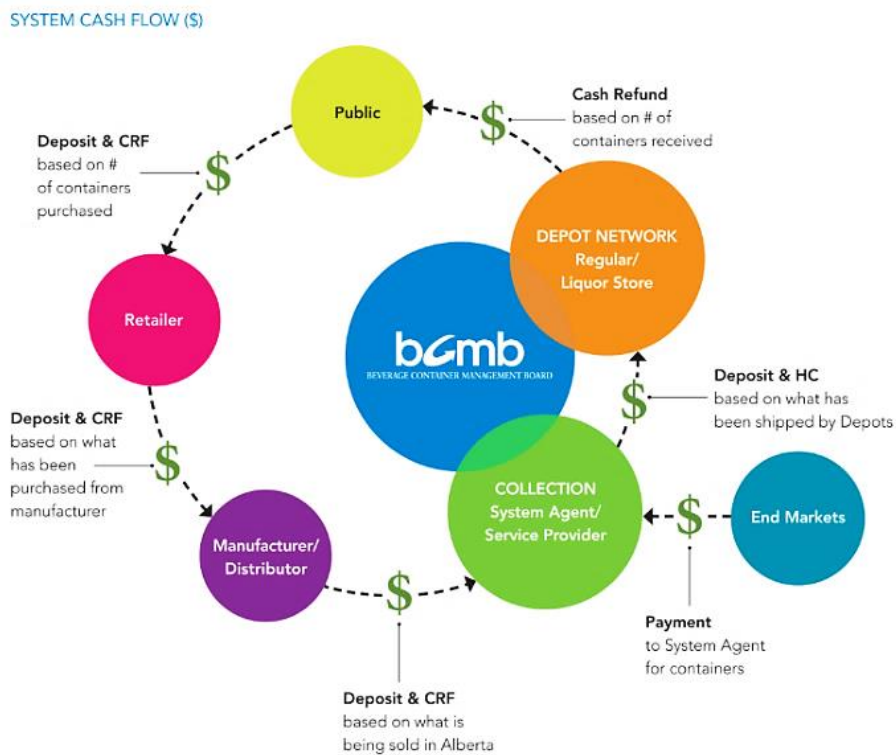
<sup>3</sup> From BCMB's 2018 annual report

A bottle depot is a business that purchases used Registered Containers from Customers, and then resells them to the Collection System Agent (CSA) and the Collection Service Providers (CSPs) who then recycle or reuse the containers. Currently, the Alberta bottle depot industry consisted of 219 Universal Bottle Depots.

Alberta operates as a ‘deposit jurisdiction’. When a retailer purchases a beverage container from a manufacturer, the retailer must pay a container deposit and a Container Recycling Fee (CRF). Both are directly passed on to the end use customer as part of the retail sales transaction. For non-refillable containers the CRF, plus unredeemed deposits, and the value of the materials recycled pays for the recycling costs of the container, including the handling commissions paid to the depot and the CSA costs. For the refillable containers, the CRF alone pays for the recycling costs. The CRF is non-refundable.

Upon return of the empty registered container to a depot, the depot pays the customer the full deposit that was initially paid to the retailer when the product was purchased. The depot then sells the registered container to the CSA for the same deposit amount and a handling commission. The handling commission is the depot’s compensation for handling the registered container. The remainder of the CRF and unredeemed deposits, if any, are retained by the CSA to support system operations. Figure 2 below depicts the industry’s cash flow cycle.

**FIGURE 2 – BEVERAGE RECYCLING INDUSTRY CASH FLOW**



**Cash Refund/Deposit:** 10¢ (1 litre or less) and 25¢ (over 1 litre) for each container  
**Container Recycling Fee (CRF):** Non-refundable – based on type of container  
**Handling Commission (HC):** Payment to depot for sorting and handling container

The handling commission for each container is set by the process laid out in the BCMB's Handling Commission By-law. As stated in the By-law, the purpose of handling commissions are as follows:

- To provide sufficient funds to enable depots as a group to recover prudently incurred costs, expenses, and taxes and to earn a fair return;
- To maintain a viable depot network;
- To minimize the net cost of handling commissions on manufacturers and end-use consumers and any cross-subsidization between different container streams;
- To share the benefits from more efficient handling or processing technologies implemented through the cooperation of manufacturers and depots, or from significant additions of new registered containers, or from significant increases in volumes of certain types of existing containers equitably between the manufacturers and the depots; and
- To maximize beverage container return rates.<sup>4</sup>

Handling Commission Reviews are conducted when initiated by the BCMB Board (the Board) in accordance with the Handling Commission Review By-law at minimum every six years. A Handling Commission Review was initiated by the Board in February 2019 at which point the DCA was directed to prepare this report. The Handling Commission Review By-law states that this report shall include the following:

- The relevant data collected by the DCA from the Uniform Code of Accounts (UCA)<sup>5</sup>, organized and analyzed as appropriate;
- Where the data collected by the DCA from the UCA has been adjusted, an explanation as to how and why that data has been adjusted;
- The DCA's opinion as to the appropriate Revenue Requirements and Container Stream Cost Allocation for the 12-month period up to and including the Target Date;
- The basis for the DCA's opinion with respect to the Revenue Requirement and container stream cost allocation including any facts, assumptions or third-party reports or opinions relied upon and copies of any written reports relied upon; and
- Confirmation that the DCA has applied the relevant BCMB Handling Commission policies and where applicable, explanations as to how the BCMB Handling Commission policies have been applied.

## 4.2 BCMB By-laws, Procedures and Policies

The BCMB is regulated by a series of by-laws and policies. The BCMB's Handling Commission By-law outlines the processes to be followed during an HCR. The Handling Commission By-law sets out high level direction on how Handling Commissions will be determined. In summary, the By-law has provisions for the following to be used in the derivation of the Revenue Requirement and Handling Commissions:

- Determination of building sizes;
- Use of deemed lease rates to determine building costs;

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<sup>4</sup> HCR 2019/2020 Document 11 - 2019.02.01HC.bylaw.board.approved.November.7.2018. Section 4

<sup>5</sup> HCR 2019/2020 Document 77 - 2019.08.20.2018.UCA.Template.MNP

- Handling commission shall be variable only, postage stamp throughout Alberta, and shall not have a fixed charge component;
- The return shall be calculated using a Return Margin Methodology and applied to operating expenses and deposits; and
- Income tax will be calculated on an individual depot basis.

The specific parameters of the HCR process are contained in the following BCMB policies:

- Depot Building Deemed Lease Rate Policy<sup>6</sup>
- Depot Building Size Cap Policy<sup>7</sup>
- Depot Manager Cost Determination Policy<sup>8</sup>
- Depot Viability Policy<sup>9</sup>
- Handling Commission Rate Setting Policy<sup>10</sup>
- Income Tax Calculation Methodology Policy<sup>11</sup>
- Offsite Collections Policy<sup>12</sup>
- Return Margin Methodology Policy<sup>13</sup>

Under the direction of the By-law and policies mentioned above, the DCA procured four external reports. The experts for these reports were selected via a Request for Proposal (RFP) process with input from the interested parties on each RFP document. The proposals were reviewed by a DCA review committee, and a successful proponent was selected based on the criteria in each respective RFP. The experts executed consulting services contracts with the DCA to provide the requested reports.

### 4.3 UCA Data Collection Process

As part of the ongoing work of the DCA, MNP prepared and sent UCA documents to all 219 Alberta depots active in 2018. The UCA package included the following components:

- A cover letter email that included filing deadlines and document requirements;
- The 2018 UCA forms, which included monthly depot-specific container volumes, handling commissions, and deposit data by container stream for the depot's 12-month fiscal year period (in both Microsoft Excel and PDF formats); and
- The 2018 UCA Instruction Manual.<sup>14</sup>

For depots that had completed a previous UCA, the 2018 UCA form was prepopulated with data that is generally consistent year over year. This data included operational statistics (hours open, ownership type, number of parking stalls, number of cash registers, number of buying stations, etc.) and building square footage.

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<sup>6</sup> HCR 2019/2020 Document 12 - 2018.11.07.Depot.Building.Deemed.Lease.Rate.Policy.BOARD.APPROVED.

<sup>7</sup> HCR 2019/2020 Document 13 - 2018.11.07.Depot.Building.Size.Cap.Policy.BOARD.APPROVED.

<sup>8</sup> HCR 2019/2020 Document 14 - 2018.11.07.Depot.Manager.Cost.Determination.Policy.BOARD.APPROVED.

<sup>9</sup> HCR 2019/2020 Document 15 - 2018.11.07.Depot.Viability.Policy.BOARD.APPROVED.

<sup>10</sup> HCR 2019/2020 Document 16 - 2018.11.07.Handling.Commission.Rate.Setting.Policy.BOARD.APPROVED.

<sup>11</sup> HCR 2019/2020 Document 17 - 2018.11.07.Income.Tax.Calculation.Methodology.Policy.BOARD.APPROVED.

<sup>12</sup> HCR 2019/2020 Document 18 - 2018.11.07.Offsite.Collections.Policy.BOARD.APPROVED.

<sup>13</sup> HCR 2019/2020 Document 20 - 2018.11.07.Return.Margin.Methodology.Policy.BOARD.APPROVED.

<sup>14</sup> HCR 2019/2020 Document 84 - 2019.03.14.UCA.Instruction.Manual

One of BCMB's reporting standards includes an exemption from filing a full UCA for depots below a container return threshold. In 2018, the exemption threshold was increased from 750,000 to 2,000,000 containers annually. These small depots are exempt from filing a full UCA as their cost structure is similar to those depots between 2,000,000 and 6,000,000 containers and the cost to report the full UCA was unreasonably prohibitive when compared to their revenue or the impact of the additional data provided to the overall Study System.

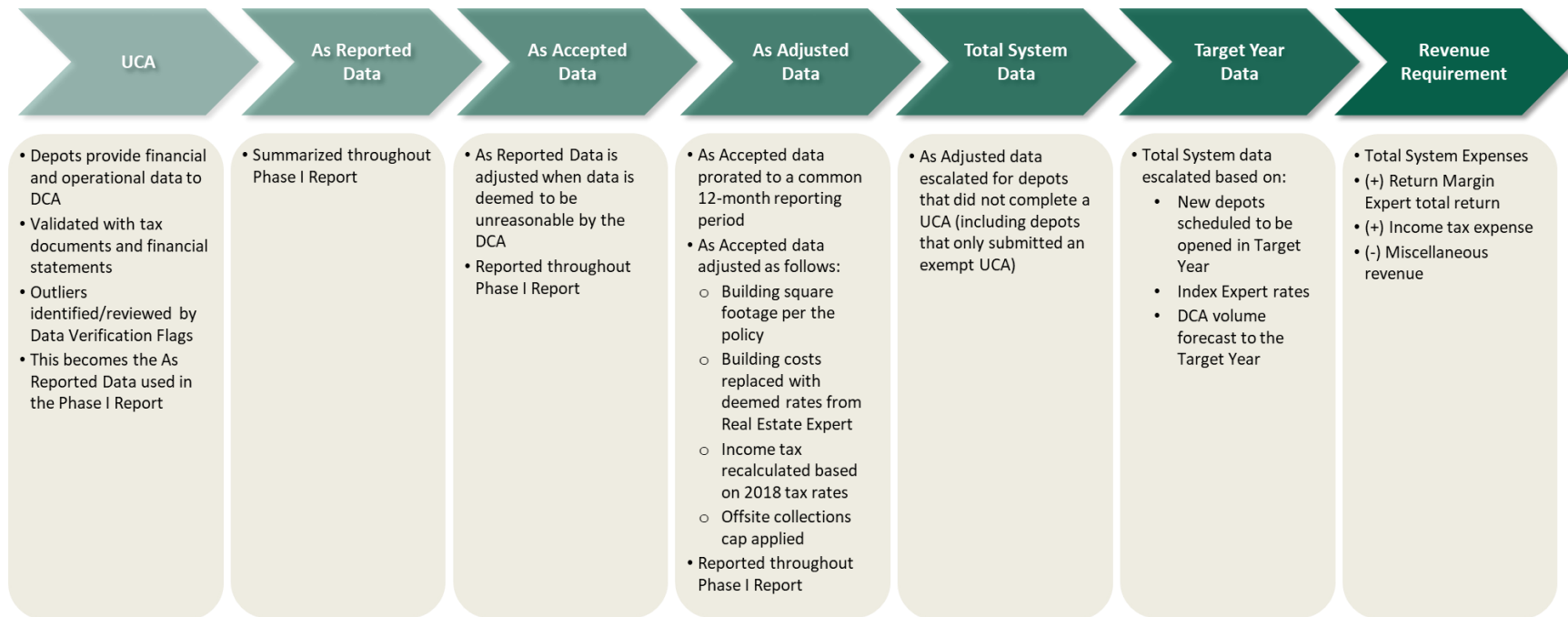
As a result of the change in exemption threshold, in 2018 a total of 47 depots were exempt from completing a full UCA. These depots were instead required to complete Table 1 – Operational Statistics of the UCA and provide supporting documents including tax documents and financial statements.

#### **4.4 Phase I and II Reports**

As stated in Section 4.1, we have prepared two reports to support the HCR process. These reports are the culmination of all the work the DCA completed during 2018 and 2019. This includes the UCA data collection, contracting and receiving expert reports identified in the Handling Commission Review By-law, and DCA analysis for the purpose of recommending a Revenue Requirement and set of handling commissions for each of the container streams.

The Phase I Report details the costs reported by depots and any adjustments made during the UCA review process, as well as any adjustments made during the Handling Commission Review process. Overall, the Phase I Report transforms raw UCA data (As Reported Data) to a Target Year Revenue Requirement. During this process, six types of data are used. Figure 3 below summarizes this transformation which is described in more detail following the figure.

**FIGURE 3 – PHASE I DATA TRANSFORMATION**



1. **Uniform Code of Accounts (UCA):** This is the 2018 financial and operational data that depots initially submit to the DCA following their respective fiscal year ends.
2. **As Reported Data:** This is the 2018 UCA data received from depots, reviewed and verified by the DCA as described in Section 3. This data represents the 172 depots that make up the Study System. All reported data is denoted by “As Reported”.
3. **As Accepted Data:** This data represents the 2018 UCA data as revised following the review process for UCA items that were unrelated to depot operations or were deemed to be unreasonable by the DCA. Deemed changes were made in the following areas:
  - Labour hours
  - Labour costs
  - Vehicle costs

The details of each of these changes are included in the cost sections below. This data is included for the same 172 depots that are represented in the As Reported Data.

4. **As Adjusted Data:** This data represents the As Accepted Data adjusted based on BCMB policies relating to the HCR process. These adjustments include the following:
  - Prorating costs to a common 12-month reporting period (Stub UCA Adjustment);
  - Removing As Accepted building costs and replacing them with deemed building lease rates and use costs as determined by the real estate expert;
  - Applying the offsite collection cap as calculated by the methodology in the BCMB’s Offsite Collections Policy (note that this cap came into effect and removed a total of \$2.5 million from the system); and
  - Recalculating taxes based on 2018 tax rates.

The details of each of these adjustments are included in the individual cost sections below.

5. **Total System Data:** Here, As Adjusted Data is prorated to account for exempt depots that do not report costs in their UCA and for depots that did not complete their UCA by the DCA determined mid-August cut off. This step increases costs from the Study System (172 depots) to the Total System (i.e. all 219 depots in operation). Costs are prorated based on container volumes and the number of depots.
6. **Target Year Data:** Using the Total System Data, costs are escalated from the 2018 fiscal year period to the Target Year (the 12-month period ending on the target date of April 1, 2020.) This is done using volume and depot escalators based on the Target Year forecast presented in Section 9 – Volume Forecast and the list of new depots to be opened in the Target Year provided by the BCMB.
7. **Revenue Requirement:** This is calculated by adding Total System Expenses plus the Return Margin plus Income Tax Expense, and subtracting Miscellaneous Revenue.

The Phase I Report describes the outputs of the DCA’s HCR Model. This model applies the following policies: Depot Building Deemed Lease Rate, the Depot Building Size Cap, the Depot Manager Cost Determination, the Depot Viability, the Handling Commission Rate Setting, Income Tax Calculation Methodology, and the Return Margin Methodology to transform the As Reported Data to the Target Year Data described above. The details of each of these applications are below. The Phase II Report builds upon the Phase I Report, taking the revenue requirement and allocating it to the container streams identified in the Handling Commission Review By-law, and incorporating information provided by the time and motion expert.

## 5. 2018 UCA INFORMATION REVIEW AND VERIFICATION

As part of the regular UCA review process, the DCA reviewed in detail each depot submitted UCA and supporting document for reasonability and consistency with depots' financial statements and tax documents. Once a UCA has been accepted as free from error, it is uploaded into the DCA database and is included in the As Reported Data.

Over the past year we have also developed and implemented a data verification flag protocol as part of the review process to identify outliers for further scrutiny.

There are six data verification flags as follows:

- Labour costs per container (run separately for manager labour, direct labour, and collector labour);
- Hourly labour rate (run separately for manager labour, direct labour, and collector labour);
- Labour seconds per container (run separately for manager labour, direct labour, and collector labour);
- Building cost per container;
- Equipment cost per container; and
- Vehicle cost per container.

Each data verification flag calculates the standard deviation for each depot as compared with both the Total System and within that depot's combination of size classification (small, medium, or large) and location classification (metro, urban, or rural). If a depot is outside two standard deviations, the reviewer investigates the UCA, supporting financial information, and information contained in depot communications to identify reasons for the variance from the depot's peers. If a reason is found, the information is recorded in the UCA or in database notes. If no reason is apparent, the reviewer contacts the depot to ask about the item and records the reasoning provided in the UCA or the database notes.

Once a reason has been identified and recorded, it is deemed to be either reasonable or unreasonable. If the value is deemed to be reasonable, no changes are made. If the value is deemed to be unreasonable, the reviewer creates an As Accepted version of the UCA and updates the items that are unreasonable. In determining what is reasonable, the reviewer considers historic UCAs for the depot, variability in the peer answers, and information collected during the review process. Once all of this has been completed, the DCA imports the Accepted UCA into the database, where it becomes part of the As Accepted Data.

As directed by 2016/2017 Handling Commission Review Committee and in conjunction with every Handling Commission Review going forward, the DCA collected additional data on depot balance sheet items not included in the UCA for the 2017 fiscal year. This decision is documented in the March 15, 2018 meeting minutes of the committee.

## 6. UCA SURVEY RESULTS – OPERATIONAL STATISTICS

The UCA is designed to collect both operational and financial data from depots. In this section, we summarize the operational statistics collected. This information comes from UCA Table 1 – General Statistics. There are a number of items in this section that relate to criteria depots are required to meet based on their BCMB Beverage Container Depot Permit. These include:

- Number of parking stalls;
- Number of cash registers;
- Number of buying stations; and
- Total operating hours.

Depots also report operational information not regulated by BCMB including:

- Ownership type;
- Fiscal year end (FYE);
- Number of full-time and part-time staff; and
- Contact information for both the depot owner and the person responsible for completing the UCA.

While these items are not cost related and do not have a direct impact on the Revenue Requirement recommended as part of this report, this information has been included in the Phase I Report to give context to the sizes and differences between depots.

### 6.1 Return Statistics

There are 219 depots in the Total System. Of these 219 depots, 172 were non-exempt (i.e. they were required to submit a full UCA), and 47 were exempt (i.e. they were required to submit an exempt UCA (a UCA with only Table 1 and Attachments A, B, and C included) but not a full UCA). Of the 172 non-exempt depots, 167 submitted a full UCA. The remaining five depots had changes in ownership and, although these depots were required to submit full UCAs, they did not submit UCAs. Of the 47 exempt depots, 37 depots submitted an exempt UCA, five depots did not submit a full or partial UCA prior to the DCA deadline, and five depots elected to submit a full UCA. The 167 non-exempt depots and five exempt depots that submitted full UCAs formed the Study System.

Table 2 below shows the breakdown of depots in both the Study System and the Total System. As UCAs were finalized with depots following the data collection cut off, we monitored progress and decided in mid-August to include all completed UCAs. It was determined that including more depots in the Study System would benefit the system as adjustments and escalations would be minimized, replaced with real data from depots.

**TABLE 2 – TOTAL AND STUDY SYSTEM COMPARISON**

	Number of Depots	Total Calendar Year Volume	Percent of Total System Volume	Average Volume
<b>Study System</b>	<b>172</b>	<b>1,930,325,689</b>	<b>97.7 %</b>	<b>11,222,824</b>
<i>Non-Exempt Depot UCAs</i>	<i>167</i>	<i>1,922,151,926</i>	<i>97.3 %</i>	<i>11,509,892</i>
<i>Exempt Depot UCAs</i>	<i>5</i>	<i>8,173,763</i>	<i>0.4 %</i>	<i>1,634,753</i>
<b>Total System</b>	<b>219</b>	<b>1,976,124,818</b>	<b>100.0 %</b>	<b>9,023,401</b>

## 6.2 Operational Statistics

Most of the information in this section is consistent year over year, with most changes relating to operational hours. Every depot completed this section of the UCA in full.

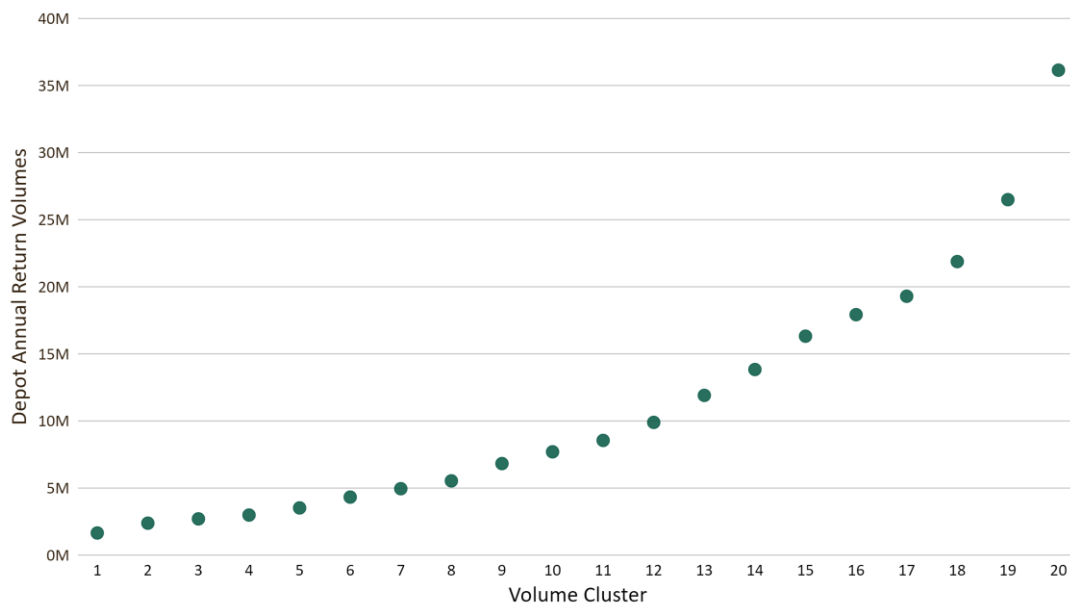
### 6.2.1 Classifications and Ownership Type

In the Phase I and II Reports we will use the following classifications to aggregate depot data:

- **Size Classification:** as stated in the Depot Building Size Cap Policy, this classification splits depots into three groups: small, medium, or large. Below is an explanation of the classifications:
  - **Small depots:** Handle fewer than 6 million container per year
  - **Medium depots:** Handle between 6 million and 15.5 million containers per year
  - **Large depots:** Handle over 15.5 million containers per year
- **Location Classification:** as found in the BCMB Depot By-law, depots are classified as Metro, Urban, or Rural. Below is an explanation of the classifications:
  - **Metro:** The City of Edmonton and the City of Calgary
  - **Urban:** Municipalities with an official population equal to or greater than 10,000
  - **Rural:** Municipalities with populations below 10,000
    - **Small rural:** Population of 4,000 or less
    - **Large rural:** Population of more than 4,000 and less than 10,000
- **Volume Cluster Classification:** during the HCR process, the DCA completes a calculation to split the Study System depots into twenty equally sized volume clusters.

The graph below shows the average container volume returned by each volume cluster in 2018.

**FIGURE 4 – AVERAGE 2018 RETURN VOLUME BY VOLUME CLUSTER**



In addition to the classification noted above, depots also specify the type of ownership on a few criteria as stated below:

- For profit or not for profit;
- Multi-business or single business;
- Walk-in, drive-thru, or both; and
- Tax ownership type.

This information can be used to differentiate depots and identify characteristics that may contribute to profitability in depots.

Tax ownership type is dictated by the type of tax return filed by the depot. Sole proprietors report their revenues and costs on their personal tax returns, incorporated entities complete a corporate tax return, and registered charities report as non-profit charities. The depots classified as other in 2018 are both partnerships.

Data related to the various types of ownership is summarized in Table 3 below.

**TABLE 3 –STUDY SYSTEM (INCLUDING EXEMPT DEPOTS) DEPOT VOLUME SUMMARY**

Depot Category	Number of Depots	Average Container Volume	% of Total Volume
<b>Systems</b>			
Total System Depots	219	9,023,401	100.0 %
Depots without Completed UCA (Including Exempt Depots)	47	1,147,558	2.7 %
Study System Depots	172	11,222,824	97.7 %
<b>Size Classification</b>			
Large	51	22,913,999	59.1 %
Medium	54	9,780,361	26.7 %
Small	67	3,486,153	11.8 %
<b>Location Classification</b>			
Metro	46	20,179,127	47.0 %
Urban	37	16,068,548	30.1 %
Rural	89	4,579,209	20.6 %
<b>Business Type</b>			
Single Business	149	11,780,619	88.8 %
Multi-Business	23	7,609,278	8.9 %
<b>Ownership Type</b>			
Sole Proprietorship	8	2,695,533	1.1 %
Incorporated	152	11,516,571	88.6 %
Registered Charity	10	12,510,216	6.3 %
Partnership	2	16,570,267	1.7 %

*Note: Total System Volume 1,976,124,818*

## 6.2.2 Multi-Businesses, Depot Stalls, Cash Registers, and Buying Stations

A total of 23 depots operated multi-businesses in Fiscal Year (FY) 2018. A multi-business is defined as a depot with additional businesses operating out of the same location. Depots that used a multi-business format were typically smaller depots or depots part of a charity organization.

We also collect information on the number of parking stalls, buying stations, and cash registers that each depot has on-site. Generally, as depots get bigger, there are more of each of these items to accommodate customers. Table 4 below summarizes this information.

**TABLE 4 – DEPOT OPERATIONAL STATISTICS<sup>15</sup>**

Volume Cluster	Range		Number of Depots	% Operating as Multi-Business	% Operating as Single Business	Average Number of Parking Stalls	Average Number of Cash Registers	Average Number of Buying Stations
1	0	2,243,000	8	25.0 %	75.0 %	6.00	1.25	2.75
2	2,243,001	2,520,000	9	22.2 %	77.8 %	8.22	1.33	2.56
3	2,520,001	2,781,000	8	12.5 %	87.5 %	6.50	1.25	2.50
4	2,781,001	3,166,000	9	22.2 %	77.8 %	8.11	1.22	2.00
5	3,166,001	3,686,000	9	22.2 %	77.8 %	8.89	1.22	3.00
6	3,686,001	4,735,000	8	12.5 %	87.5 %	7.25	1.13	2.63
7	4,735,001	5,159,000	9	11.1 %	88.9 %	7.00	1.22	3.33
8	5,159,001	5,970,000	8	25.0 %	75.0 %	12.00	1.50	3.13
9	5,970,001	7,432,000	9	0.0 %	100.0 %	14.00	1.11	3.67
10	7,432,001	8,188,000	9	33.3 %	66.7 %	14.00	1.78	3.78
11	8,188,001	8,860,000	8	12.5 %	87.5 %	10.13	1.63	3.38
12	8,860,001	10,969,000	9	22.2 %	77.8 %	11.89	2.00	4.33
13	10,969,001	13,052,000	8	0.0 %	100.0 %	18.38	2.00	7.63
14	13,052,001	14,878,000	9	22.2 %	77.8 %	15.33	2.44	4.67
15	14,878,001	16,941,000	9	0.0 %	100.0 %	18.44	1.67	6.56
16	16,941,001	18,341,000	8	0.0 %	100.0 %	19.50	2.25	6.63
17	18,341,001	20,482,000	9	0.0 %	100.0 %	14.33	2.89	5.33
18	20,482,001	22,958,000	8	12.5 %	87.5 %	28.75	1.13	7.63
19	22,958,001	30,288,000	9	11.1 %	88.9 %	18.56	1.67	6.44
20	30,288,001	40,613,000	9	0.0 %	100.0 %	22.78	1.33	9.44

<sup>15</sup> Note that the ranges shown in this table vary slightly from the ranges provided in HCR 2019/2020 Document 75 - 2019.07.26.Volume.Cluster.Details.MNP as the total number of depots was increased by 5 to include the exempt depots that opted to completed a full UCA.

The BCMB Depot By-law identifies criteria for the minimum number of parking stalls and buying stations at each depot. The By-law also requires that all depots have at least one cash register capable of generating a customer receipt showing the number of containers at each refund rate, the total refund, and the depot's name, address, and telephone number. The tables below show these criteria and the amounts reported by depots. These tables show that several depots are not yet meeting the criteria established in the By-law. That said, there have been improvements in most categories from the 2016 Phase I Report.

**TABLE 5 – AS REPORTED NUMBER OF PARKING STALLS PER DEPOT**

Depot Category	Number of Depots Reporting	Average Number of Parking Stalls	Minimum Required Parking Stalls	Number of Depots Under Criteria	% of Depots Under Criteria
Metro	46	19	12	5	10.9 %
Urban	37	18	10	5	13.5 %
Rural	89	9	5	7	7.9 %
<b>Total</b>	<b>172</b>	<b>14</b>	<b>5</b>	<b>17</b>	<b>9.9 %</b>

**TABLE 6 – AS REPORTED NUMBER OF CASH REGISTERS PER DEPOT**

Depot Category	Number of Depots Reporting	Average Number of Cash Registers
Metro	46	1.67
Urban	37	2.05
Rural	89	1.38
<b>Total</b>	<b>172</b>	<b>1.60</b>

**TABLE 7 – AS REPORTED NUMBER OF BUYING STATIONS PER DEPOT**

Depot Category	Number of Depots Reporting	Average Number of Buying Stations	Minimum Required Buying Stations	Number of Depots Under Criteria	% of Depots Under Criteria
Metro	46	6.91	5	10	21.7 %
Urban	37	5.73	4	3	8.1 %
Rural	89	2.88	2	11	12.4 %
<b>Total</b>	<b>172</b>	<b>4.57</b>	<b>2</b>	<b>24</b>	<b>14.0 %</b>

### 6.2.3 Operating Hours

Depots report their scheduled hours in Table 1 of the UCA. This includes the number of additional, non-public hours the depot is operational in a week. These additional hours are spent on activities that include further sorting and shipping; preparing to open; cleaning up after closing; and after-hours management functions such as hiring, interviewing new staff, planning, and meeting with professionals. Figure 5 below shows the average number of operating hours (including scheduled and additional hours) reported by depots in each volume cluster.

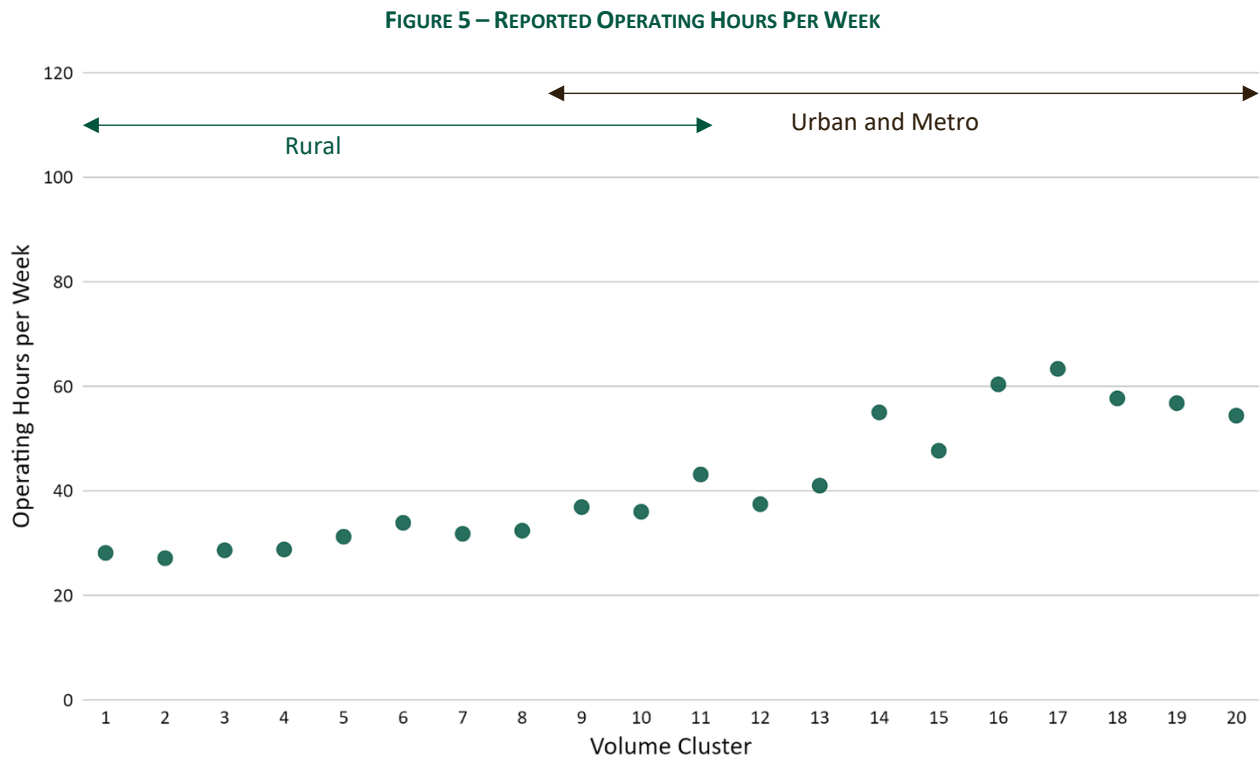


Table 8 shows this same data using the Location Classification and the number of depots that are under the criteria set by Depot By-law.

**TABLE 8 – AS REPORTED DEPOT OPERATING HOURS**

Depot Category	Population	Number of Depots Reporting	Average Weekly Operating Hours	Minimum Number of Hours Open Per Week	Number of Depots Under Criteria	% of Depots Under Criteria
Metro		46	56.7	52	6	13.0%
Large Urban	Over 20,000	25	53.1	40	1	4.0%
Small Urban	Under 20,000	12	39.3	28	3	25.0%
Large Rural	Over 4,000	30	33.0	28	11	36.7%
Small Rural	Under 4,000	59	29.9	16	6	10.2%
<b>Total</b>		<b>172</b>	<b>41.6</b>	<b>16</b>	<b>27</b>	<b>15.7%</b>

## 7. UCA SURVEY RESULTS – REVENUES AND COSTS

As previously stated, the UCA collects both depot operational statistics and depot financial data. In this section, we detail the financial data. This data is broken up into sub-sections as follows:

- Revenues
- Labour Costs
- Building Costs
- Vehicle Costs
- Equipment Costs
- Overhead Costs

Each of these sub-sections details the As Reported, As Accepted, and As Adjusted Data and the changes between the data types. At the beginning of each subsection, we will show a summary of As Reported, As Accepted, and As Adjusted Data. Analysis is shown using only the As Accepted and As Adjusted Data (i.e. As Reported Data is shown only in the summary data except where As Reported and As Accepted Data are the same).

### 7.1 Revenues

#### 7.1.1 Handling Commission Revenue

Handling commission revenue is the amount payable for each container collected from a Depot in accordance with Section 13(b) of the BCMB's Handling Commission By-law. We have calculated the theoretical handling commission revenue for each depot based on CSA return volume data. This revenue figure is relied upon for calculations throughout this report instead of the revenue reported by depots as we have observed several ways depots report items on their financial statement or tax document which have an impact on total revenue. These include the following:

- Some depots report only the handling commission component of the CSA receipts as revenue (i.e. excluding the deposit portion of the amounts received)
- Some depots report handling commission components that may or may not be net of BCMB and Alberta Bottle Depot Association (ABDA) fees
- Some depots report revenue that includes both the handling commission and deposit portion of CSA receipts and then deduct purchases which may include collection costs, and over/underpayment to customers
- Some depot owners work at the depot and, instead of paying themselves salary, receive payment as dividends or report this cost as part of their revenue for tax planning purposes

Each UCA package includes both the volumes reported to MNP by ABCRC and Brewers Distributor Ltd. (BDL) in monthly volume reports and handling commissions and deposits calculated by MNP using the volumes and rates stored in the database. On Table 9 of the UCA, depots are asked to validate and report discrepancies in these values when compared with their own records. For depots that do not complete this table, it is assumed that the values provided by ABCRC and BDL are accurate when compared with depot records.

When a depot reports a discrepancy, the reviewer confirms if the discrepancy is above or below a 1% difference. If the difference is equal to or below 1%, the difference is deemed to be immaterial and is ignored. If the difference is

greater than 1%, the UCA reviewer asks the depot to provide documentation previously received by the depot from ABCRC/BDL stating the volume received. The reviewer then compares this documentation to volumes the DCA receives from ABCRC/BDL. In all cases when this analysis was performed, the discrepancy was resolved due to timing or other issues. Table 9 below summarizes the discrepancies identified by depots.

**TABLE 9 – HANDLING COMMISSION REVENUE COMPARISON**

Depot Category	Number of Depots in Study System	Number of Depots Reporting	Depots Reporting Discrepancy >1%	Depots Reporting Discrepancy <1%	% of Depots Reporting	Reported Handling Commissions	Calculated Handling Commissions	Difference	Percent Difference
Small	67	28	8	20	41.8 %	\$ 10,863,601	\$ 10,869,189	\$ 5,588	0.1 %
Medium	54	35	13	22	64.8 %	\$ 25,380,687	\$ 25,381,575	\$ 888	0.0 %
Large	51	36	14	22	70.6 %	\$ 58,131,953	\$ 58,344,139	\$ 212,186	0.4 %
<b>Total</b>	<b>172</b>	<b>99</b>	<b>35</b>	<b>64</b>	<b>57.6 %</b>	<b>\$ 94,376,241</b>	<b>\$ 94,594,903</b>	<b>\$ 218,662</b>	<b>0.2 %</b>

As noted earlier, there are several reasons that could explain the discrepancy between calculated and reported handling commission revenues. In discussions with the 35 depots that reported a discrepancy between these two revenue figures, all discrepancies were due to the following reasons:

- **Timing differences in when the depot reported the volume of processed containers and when the CSA reported it:** In most cases, depots report the revenue when the containers are removed from their facility and loaded onto transport trucks. The CSA volumes are recorded when the containers are processed in their facilities. This can cause a discrepancy when containers are shipped near the end of the month, causing the depot to report the revenue in one month and the CSA to report the revenue in the next month.
- **Recording location of ABDA and BCMB fees:** Some depots choose to record these fees as part of Cost of Goods Sold (COGS) and, as such, they reduce the depot’s total revenue. The calculated handling commissions do not include any COGS.

Table 10 below shows the total difference in reported and calculated handling commissions and fees.

**TABLE 10 – HANDLING COMMISSION REVENUE RECONCILIATION**

Category	Amount
Reported Handling Commissions	\$ 94,376,241
Calculated Handling Commissions	\$ 94,594,903
Excess Revenue Reported	\$ (218,662)
ABDA & BCMB Fees Reported	\$ 1,251,107
ABDA & BCMB Fees Calculated	\$ 2,015,078
ABDA & BCMB Fees Not Reported	\$ 763,971
Unaccounted for Difference	\$ 545,309

As the discrepancies between these two revenue amounts are minor, we use the calculated numbers based on the manufacturer volumes.

### 7.1.2 Deposit Revenue

Deposit revenue is the refund provided by a depot to a person returning an empty registered container to the depot. The total refund for all containers shipped by the depot to the CSA is paid to the depot as deposit revenue.

Similar to its process for determining handling commission revenue, the DCA calculates deposit revenue based on manufacturers' monthly volume reports. The DCA then reports these revenue amounts to each depot on their UCA forms. Depots are then given the opportunity to state discrepancies between their records and the DCA-calculated deposit revenues. Table 11 below shows the discrepancies between reported and calculated deposit revenues.

**TABLE 11 – DEPOSIT REVENUE COMPARISON**

Depot Category	Number of Depots in Study System	Number of Depots Reporting	Depots Reporting Discrepancy >1%	Depots Reporting Discrepancy <1%	% of Depots Reporting	Reported Purchases	Calculated Purchases	Difference	Percent Difference
Small	67	27	6	21	40.3 %	\$ 25,526,363	\$ 25,519,755	\$ (6,608)	(0.0)%
Medium	54	33	11	22	61.1 %	\$ 58,487,339	\$ 58,339,121	\$ (148,218)	(0.3)%
Large	51	35	6	29	68.6 %	\$ 129,489,566	\$ 131,060,629	\$ 1,571,063	1.2 %
<b>Total</b>	<b>172</b>	<b>95</b>	<b>23</b>	<b>72</b>	<b>55.2 %</b>	<b>\$ 213,503,268</b>	<b>\$ 214,919,505</b>	<b>\$ 1,416,237</b>	<b>0.7 %</b>

In discussions with depots that reported a discrepancy greater than 1% of the total, we identified that in most cases, the discrepancy was due to the inclusion of collection costs and/or overhead costs in COGS. These differences are detailed in Table 12 below.

**TABLE 12 – DEPOSIT REVENUE RECONCILIATION**

Category	Amount
Reported Purchases	\$ 213,503,268
Calculated Purchases	\$ 214,919,505
Additional Purchases	\$ 1,416,237
Additional Collection Costs	\$ 616,956
Additional Overhead Costs	\$ 950,202
Total Additional Costs	\$ 1,567,158
Unaccounted For Difference	\$ 150,921

\*Overhead costs include deposit incentives, casual labour, cash payments from till, shrinkage, and other costs reported on table 9 of the UCA

When the discrepancy between reported and calculated deposits is compared with the additional collection and overhead costs reported by depots, the remaining difference is insignificant. As such, we use calculated purchases for the analysis in this report.

### 7.1.3 Miscellaneous Revenue

Miscellaneous Revenue is reported on Table 8 of the UCA. Miscellaneous revenue is revenue other than regular handling commission and deposit revenue received from the manufacturing agents. These revenues include cardboard sales, pick-up/collection fees, other recycling fees, bottle sales, value added fees, and other revenues. Other revenue includes revenue received where the expenses to provide the service are also reported in the UCA document, but which is not included in a different miscellaneous revenue category.

During the 2018 UCA review process, the DCA paid close attention to the revenue reported in this section, as directed by the Handling Commission Review Committee that was convened after the 2016/2017 HCR. As part of this concentrated effort, the UCA reviewer discussed reported other revenue with most depots that reported miscellaneous revenue to determine the validity of each entry. These discussions included ascertaining if related expenses were reported in the UCA, if depots gained the revenue from a secondary business (i.e. the depot was a multi-business), and if the revenue should be reported. In all cases, the DCA removed revenue that was not related to the depot in the As Reported version of the UCA.

It is worth noting that the 53 depots that reported miscellaneous revenue in 2018 all completed UCAs for a full fiscal year. Thus, the DCA did not need to make any changes to miscellaneous revenue in the As Adjusted Data related to stub UCAs. Per the BCMB's Offsite Collections Policy<sup>16</sup>, and the analysis done in section 8 - Collection Costs, the collections cost cap was applied during this HCR so related pick-up fees have been removed. Finally, as all costs associated with building rental revenue have been removed and subsequently replaced by deemed costs using the depot specific square footage multiplied by the deemed lease and use rates, these revenues associated with extra space have also been removed from the Other Revenue category.

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<sup>16</sup> HCR 2019/2020 Document 18 - 2018.11.07.Offsite.Collections.Policy.BOARD.APPROVED.

Table 13 below summarizes the amount of miscellaneous revenue As Reported (and As Accepted) and As Adjusted by depots in 2018.

**TABLE 13 – AS REPORTED / ACCEPTED AND AS ADJUSTED MISCELLANEOUS REVENUE**

As Reported / Accepted					
Category	Small	Medium	Large	Total	
Cardboard Sales	\$ 1,199	\$ 1,035	\$ 5,899	\$ 8,133	
Pick-up Fees	\$ 274,239	\$ 72,095	\$ 89,076	\$ 435,410	
Other Recycling	\$ 0	\$ 12,204	\$ 31,582	\$ 43,786	
Bottle Sales	\$ 84	\$ 226	\$ 9,326	\$ 9,636	
Value Added Fee	\$ 0	\$ 0	\$ 112,035	\$ 112,035	
Other Revenue	\$ 219,646	\$ 61,103	\$ 125,456	\$ 406,205	
<b>Total</b>	<b>\$ 495,168</b>	<b>\$ 146,663</b>	<b>\$ 373,374</b>	<b>\$ 1,015,205</b>	
As Adjusted					
Category	Small	Medium	Large	Total	
Cardboard Sales	\$ 1,199	\$ 1,035	\$ 5,899	\$ 8,133	
Pick-up Fees	\$ 0	\$ 0	\$ 0	\$ 0	
Other Recycling	\$ 0	\$ 12,204	\$ 31,582	\$ 43,786	
Bottle Sales	\$ 84	\$ 226	\$ 9,326	\$ 9,636	
Value Added Fee	\$ 0	\$ 0	\$ 112,035	\$ 112,035	
Other Revenue	\$ 50,550	\$ 38,117	\$ 68,371	\$ 157,038	
<b>Total</b>	<b>\$ 51,833</b>	<b>\$ 51,582</b>	<b>\$ 227,213</b>	<b>\$ 330,628</b>	

Table 14 shows miscellaneous revenue as a percentage of handling commission revenue. This table shows that miscellaneous revenue is proportionally higher for smaller depots, though miscellaneous revenue is still a small portion of total revenue.

**TABLE 14 – AS ADJUSTED MISCELLANEOUS REVENUE AS A PERCENTAGE OF HANDLING COMMISSION REVENUE**

	Small	Medium	Large	Total
Handling Commission Revenue	\$ 10,869,189	\$ 25,381,575	\$ 59,252,960	\$ 95,503,724
Miscellaneous Revenue	\$ 51,833	\$ 51,582	\$ 227,213	\$ 330,628
	<b>0.5 %</b>	<b>0.2 %</b>	<b>0.4 %</b>	<b>0.3 %</b>

Historically, “other revenue” has been a source of concern both during handling commission reviews and by the 2016/2017 Handling Commission Review Committee as the detail around other revenue has not been available. Additional detail has been collected for 2018 and Table 15 below shows the details of this miscellaneous revenue category.

**TABLE 15 – AS ADJUSTED OTHER REVENUE DETAILS**

Revenue Category	Number of Depots Reporting	Total Amount Reported	Percent of Total
Total Revenue	172	\$ 95,834,352	100.0 %
Depots Reporting Miscellaneous Revenue	44	\$ 330,628	0.3 %
Depots Reporting Other Revenue	40	\$ 157,038	0.2 %

Other Revenue Category	Number of Depots Reporting Other Revenue	Total Other Revenue Reported	% of Other Revenue
Confection	1	\$ 4,273	2.7 %
Donations	2	\$ 1,158	0.7 %
Grants	2	\$ 2,072	1.3 %
Insurance Proceeds	1	\$ 17,000	10.8 %
Interest	17	\$ 99,291	63.2 %
Rental	8	\$ 0	0.0 %
Other	9	\$ 33,244	21.2 %
<b>Total</b>	<b>40</b>	<b>\$ 157,038</b>	<b>100.0 %</b>

As noted earlier, during the UCA review process, our team spoke with depots about their miscellaneous revenue, with particular interest in other revenue. The details for each category are listed below.

- **Confection:** One depot runs a small confection operation in their depot. This revenue is produced by sale of goods to depot customers which are completed by depot employees.
- **Donations:** In two cases, depots received or collected containers that the customer did not collect the deposit for. One of these was as payment for offsite collection activities.
- **Grants:** Two depots received Recycling Infrastructure Partnership (RIP) grants in relation to their depot business.
- **Insurance proceeds:** One depot received an insurance payment for damage done to their facility, for which the expenses/repairs are included in the UCA costs.
- **Interest:** Each depot that included these costs in their UCA stated that the interest revenue was received for moneys obtained for payment of deposits or was related to dividends received from a subsidiary company of the depot (e.g. a depot set up a business that owned the depot building, and profit was paid in a dividend to the depot).

- **Rental:** In all cases included above, rental revenue reported relates to a rental or subletting scenario where the costs of managing this contract, utilities, and all other costs are included in the UCA as they cannot be segregated.
- **Other:** Nine depots did not give details further than stating that the costs included were “other revenue”. As further description could not be obtained, we recommend that this revenue is included.

We have determined that each of the entries included as miscellaneous revenue should be excluded from the total Revenue Requirement in order to offset the directly associated costs which are not required for depot operations.

## 7.2 Labour Costs

### 7.2.1 Labour Cost Overview

Labour costs represent the highest proportion of depot expenditures (approximately 57% of total expenses). In 2018, the depot system’s total labour cost was \$49.0 million, with personnel working 2.4 million hours. Table 16 below shows the total hours and pay for As Reported, As Accepted, and As Adjusted Data.

**TABLE 16 – TOTAL LABOUR SUMMARY**

	As Reported		As Accepted		As Adjusted	
	Total Labour Hours	Total Labour Pay	Total Labour Hours	Total Labour Pay	Total Labour Hours	Total Labour Pay
Small	311,548	\$ 5,625,434	304,152	\$ 5,323,319	304,152	\$ 5,323,319
Medium	741,021	\$ 15,213,870	740,988	\$ 14,907,111	740,988	\$ 14,907,111
Large	1,347,821	\$ 31,091,860	1,339,861	\$ 28,904,986	1,348,467	\$ 29,094,702
<b>Total</b>	<b>2,400,390</b>	<b>\$ 51,931,164</b>	<b>2,385,001</b>	<b>\$ 49,135,416</b>	<b>2,393,607</b>	<b>\$ 49,325,132</b>

Changes between the reported and accepted labour and pay amounts occurred in nine of the Study System depots. These adjustments were made for the following reasons:

- **Removal of payment for depot owners that did not work any hours at the depot:** In both cases where this adjustment was made, the payment was discussed with the accountant who completed the UCA and they indicated that this was profit sharing for tax planning purposes. This reduction totaled \$422,571.
- **Reduction in salary paid to third-party managers:** In one instance, a depot had three part time managers. The managers were paid either \$32, \$44, or \$61 per hour. We reduced both of the higher paid managers’ wages to \$32 per hour. This adjustment was based on a manager that worked at the depot as well as analysis of third-party manager wages for depots of similar size. This reduction totaled \$60,220.
- **Reduction in salary paid to related managers:** In six instances, depot wages paid to related managers were reduced by varying amounts. The DCA discussed these changes with the individuals who completed the respective UCA. In these discussions, we identified that the amounts depots paid in excess of the averages identified in the data verification flag process were due to profit sharing for tax planning purposes. This reduction totaled \$1,896,266.

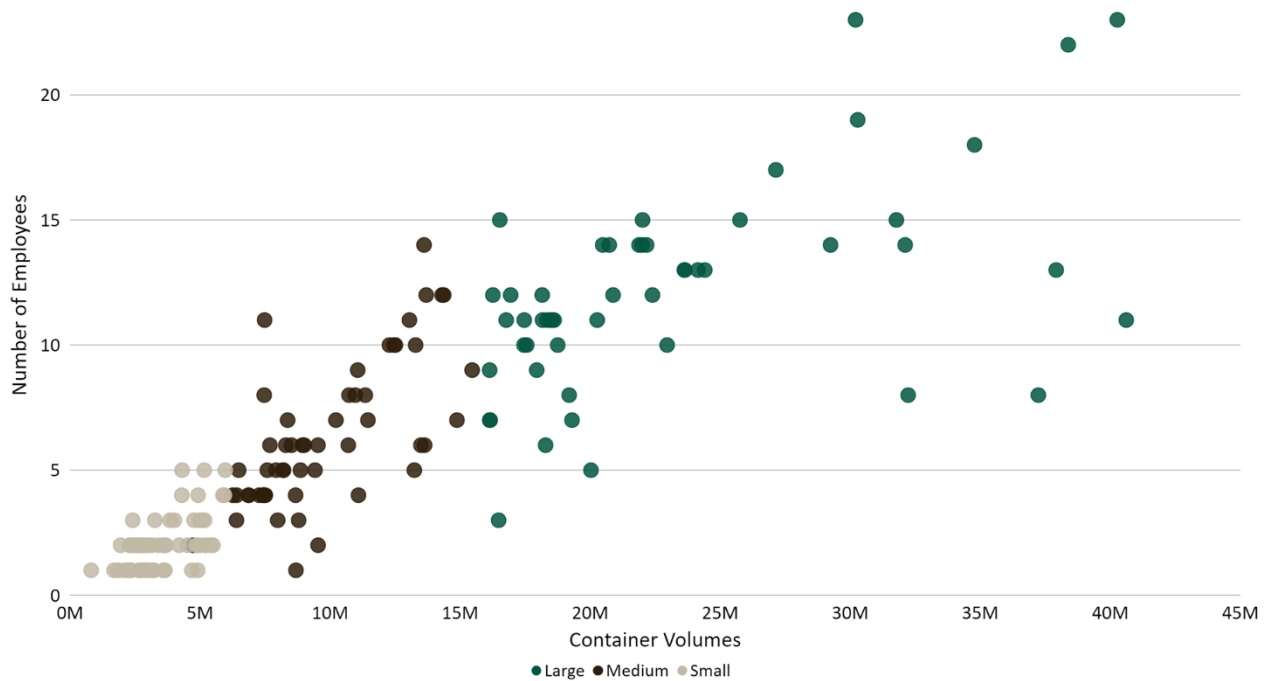
As an example, one of these depots reported manager hours of 11,000 while the depot was only operational for about 4,000 hours per year. Additionally, all management time was incurred by related parties and was paid out at hourly wages ranging from \$18 to \$238. During discussions with the owner, we identified that a number of these hours had been misallocated to the manager (MGR) percentage and that a portion of the wages paid were profit sharing. We adjusted the percent allocated to the MGR work activity and reduced the total wages to a range between \$18 and \$25 per hour based on depot owner estimates of the profit and salary portions of the amount paid.

- **Reduction in salary paid to related employees:** In four cases, wages paid to related party employees completing direct labour activities were reduced. In these cases, unrelated employees were paid significantly lower wages for similar activities, so the hourly wage was reduced. This reduction totaled \$416,691.
- **Reduction of hours recorded for related managers:** In three cases, depots recorded hours for related managers that seemed unreasonable (i.e. working significantly more than 2,080 hours (the full-time equivalent hours) in the year). In these cases, hours were reduced.

Changes between As Accepted and As Adjusted Data were related to the Stub UCA Adjustment. With these adjustments, we believe that the As Adjusted Data is correct and will be used for the remainder of our labour analysis.

Figure 6 below shows the number of full-time equivalent employees at each depot. In this calculation we have assumed that a full-time employee works 2,080 hours annually.

**FIGURE 6 – FTEs BY DEPOT**



## 7.2.2 UCA Labour Data Classification

In the 2018 UCA, depots completed three tables detailing the hours and costs associated with the labour to operate the depot. The UCA breaks labour into two sections: T4/Owner labour and Contract/Temporary labour. The following descriptions are provided in the UCA Instruction Manual to help distinguish these two classes of labour:

- **T4 / Owner Labour:** All employees providing labour for the depot that either receive a T4 for the work completed, own the depot, or are related to the depot owner. Employees included on this table are those that perform the following functions: customer interface, cashiers, sorters, collection of containers from outside the depot, loading trucks, administrative duties, management duties, and other similar duties.
- **Contract / Temporary Labour:** Contract and temporary labour are for human resources that are not included on the depots' T4 Summary. This may include individuals that are subcontractors, hired through another company, or that received cash payments for their work in the depot.

For each of the employees listed under either class of labour, depots completed two categorizations: a job class and a work type. Job classes include:

- **Manager (MGR):** a person who manages the depot on a day-to-day basis, provides some administrative services and who does not own a financial interest in the depot.
- **Owner (OWN):** a person who provides some type of management services and who owns a financial interest in the depot.
- **Leadhand, Bookkeeper, or Handler (LBH):** Any person who performs the functions of a Leadhand, Bookkeeper, or Handler. All time spent performing direct labour functions such as customer interface, cashiers, sorters, or loading trucks. should be allocated to this job class. A brief description of each of the three jobs in this class is found below:
  - **Leadhand:** A person who provides floor supervision but is not involved in day-to-day administrative functions.
  - **Bookkeeper:** A person who is responsible for maintaining the day-to-day bookkeeping of the depot.
  - **Handlers:** A person who works on the shop floor in direct labour functions.
- **Collector (COL):** A person who is paid an hourly fee to pick up containers from customers rather than customers bringing containers to the depot.

The tables below show the As Adjusted total hours and costs associated with each job class separated by the UCA labour classification.

**TABLE 17 – AS ADJUSTED T4 / OWNER LABOUR STATISTICS BY JOB CLASS**

Job Class	Hours	Hours / Depot	Dollars	\$/Hour
<b>Small</b>				
MGR	48,727	727	\$ 904,843	\$ 18.57
OWN	76,508	1,142	\$ 1,560,237	\$ 20.39
LDH, BK, or HND	136,213	2,033	\$ 2,044,002	\$ 15.01
COL	11,966	179	\$ 185,762	\$ 15.52
<b>Subtotal</b>	<b>273,414</b>	<b>4,081</b>	<b>\$ 4,694,844</b>	<b>\$ 17.17</b>
<b>Medium</b>				
MGR	74,601	1,382	\$ 2,094,474	\$ 28.08
OWN	62,139	1,151	\$ 1,507,401	\$ 24.26
LDH, BK, or HND	489,066	9,057	\$ 8,178,582	\$ 16.72
COL	48,517	898	\$ 785,168	\$ 16.18
<b>Subtotal</b>	<b>674,323</b>	<b>12,487</b>	<b>\$ 12,565,625</b>	<b>\$ 18.63</b>
<b>Large</b>				
MGR	114,242	2,240	\$ 3,645,596	\$ 31.91
OWN	74,585	1,462	\$ 3,100,699	\$ 41.57
LDH, BK, or HND	946,057	18,550	\$ 16,132,415	\$ 17.05
COL	71,788	1,408	\$ 1,287,898	\$ 17.94
<b>Subtotal</b>	<b>1,206,672</b>	<b>23,660</b>	<b>\$ 24,166,608</b>	<b>\$ 20.03</b>
<b>Total</b>	<b>2,154,409</b>	<b>12,526</b>	<b>\$ 41,427,077</b>	<b>\$ 19.23</b>

**TABLE 18 – AS ADJUSTED CONTRACT / TEMPORARY LABOUR STATISTICS BY JOB CLASS**

Job Class	Hours	Hours / Depot	Dollars	\$/Hour
<b>Small</b>				
MGR	3,472	52	\$ 90,002	\$ 25.93
OWN	15,436	230	\$ 107,740	\$ 6.98
LBH	17,475	261	\$ 272,949	\$ 15.62
COL	1,752	26	\$ 29,666	\$ 16.94
<b>Subtotal</b>	<b>38,134</b>	<b>569</b>	<b>\$ 500,357</b>	<b>\$ 13.12</b>
<b>Medium</b>				
MGR	18,411	341	\$ 582,840	\$ 31.66
OWN	5,120	95	\$ 155,070	\$ 30.29
LBH	32,913	610	\$ 570,325	\$ 17.33
COL	10,254	190	\$ 154,367	\$ 15.05
<b>Subtotal</b>	<b>66,698</b>	<b>1,235</b>	<b>\$ 1,462,603</b>	<b>\$ 21.93</b>
<b>Large</b>				
MGR	18,570	364	\$ 659,697	\$ 35.52
OWN	29,057	570	\$ 1,149,397	\$ 39.56
LBH	63,660	1,248	\$ 1,268,688	\$ 19.93
COL	23,662	464	\$ 310,905	\$ 13.14
<b>Subtotal</b>	<b>134,949</b>	<b>2,646</b>	<b>\$ 3,388,686</b>	<b>\$ 25.11</b>
<b>Total</b>	<b>239,781</b>	<b>1,394</b>	<b>\$ 5,351,646</b>	<b>\$ 22.32</b>

In addition to identifying labour hours and pay by job class, depots also identified these by work type. While job class is mostly indicative of an employee’s title, work type represents the activities employees perform. Depots indicate these labour activities by allocating a percentage of total time spent by each employee to each of three work types: Manager (MGR), Leadhand, Bookkeeper, or Handler (LBH), and Collector (COL). The two tables below show the As Adjusted total hours and costs associated with each work type for the two UCA labour classifications (T4/Owner and Temporary/Contract).

**TABLE 19 – AS ADJUSTED T4 / OWNER LABOUR STATISTICS BY WORK TYPE**

Work Type	Hours	Hours / Depot	Dollars	\$/Hour
<b>Small</b>				
MGR	78,927	1,178	\$ 1,551,122	\$ 19.65
LBH	168,719	2,518	\$ 2,641,923	\$ 15.66
COL	18,372	274	\$ 278,528	\$ 15.16
<b>Subtotal</b>	<b>266,018</b>	<b>3,970</b>	<b>\$ 4,471,573</b>	<b>\$ 16.81</b>
<b>Medium</b>				
MGR	114,647	2,123	\$ 2,971,803	\$ 25.92
LBH	532,956	9,870	\$ 8,908,858	\$ 16.72
COL	26,686	494	\$ 475,150	\$ 17.80
<b>Subtotal</b>	<b>674,290</b>	<b>10,064</b>	<b>\$ 12,355,812</b>	<b>\$ 18.32</b>
<b>Large</b>				
MGR	163,538	3,207	\$ 4,952,075	\$ 30.28
LBH	1,016,915	19,940	\$ 17,618,864	\$ 17.33
COL	33,065	648	\$ 692,801	\$ 20.95
<b>Subtotal</b>	<b>1,213,518</b>	<b>23,794</b>	<b>\$ 23,263,740</b>	<b>\$ 19.17</b>
<b>Total</b>	<b>2,153,826</b>	<b>12,522</b>	<b>\$ 40,091,125</b>	<b>\$ 18.61</b>

**TABLE 20 – AS ADJUSTED CONTRACT / TEMPORARY LABOUR STATISTICS BY WORK TYPE**

Work Type	Hours	Hours / Depot	Dollars	\$/Hour
<b>Small</b>				
MGR	12,234	183	\$ 160,906	\$ 13.15
LBH	23,372	349	\$ 305,459	\$ 13.07
COL	2,528	38	\$ 33,992	\$ 13.45
<b>Subtotal</b>	<b>38,134</b>	<b>569</b>	<b>\$ 500,357</b>	<b>\$ 13.12</b>
<b>Medium</b>				
MGR	17,959	333	\$ 605,287	\$ 33.70
LBH	41,013	759	\$ 739,944	\$ 18.04
COL	7,727	143	\$ 117,371	\$ 15.19
<b>Subtotal</b>	<b>66,698</b>	<b>995</b>	<b>\$ 1,462,603</b>	<b>\$ 21.93</b>
<b>Large</b>				
MGR	44,507	873	\$ 1,717,004	\$ 38.58
LBH	66,780	1,309	\$ 1,360,777	\$ 20.38
COL	23,662	464	\$ 310,905	\$ 13.14
<b>Subtotal</b>	<b>134,949</b>	<b>2,646</b>	<b>\$ 3,388,686</b>	<b>\$ 25.11</b>
<b>Total</b>	<b>239,781</b>	<b>1,394</b>	<b>\$ 5,351,646</b>	<b>\$ 22.32</b>

Most labour hours (90%) and wages (88%) are incurred by T4/Owner labour. This increases the confidence in labour data as the wages can be verified through T4 documentation as well as through the financial statements and tax documents provided by depots.

### 7.2.3 DCA Labour Data Classification

To further analyze the labour data, we have used the work type identified by depots in the UCA to create the following labour classifications:

- **Direct Labour:** Includes all time associated with the Leadhand, Bookkeeper, and Handler work type.
- **Collector Labour:** Includes all time associated with the Collector work type.
- **Overhead Labour:** Includes all time associated with the Manager work type.

The sections below relate to the DCA labour data classifications.

### 7.2.4 Direct Labour

In 2018, a total of 1.8 million hours and \$34.6 million were classified as direct labour. The average hourly wage paid for these hours was \$18.72. Table 21 below shows a breakdown of direct labour by size classification.

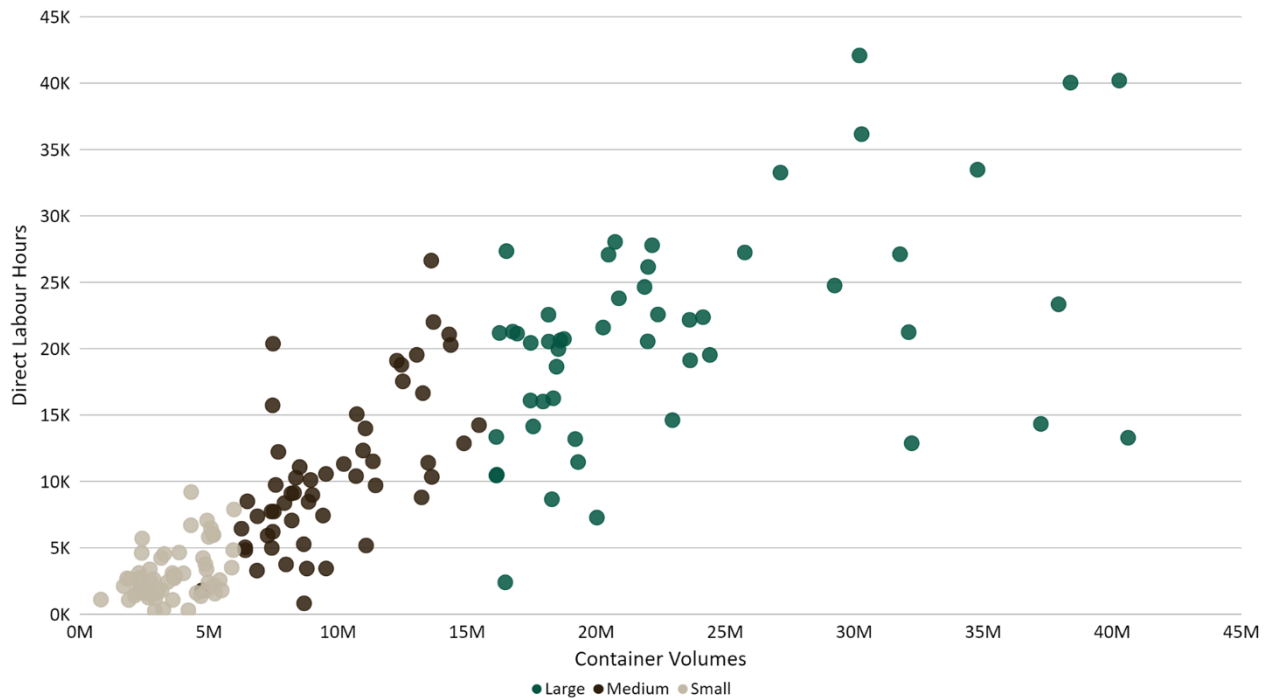
**TABLE 21 – AS ADJUSTED DIRECT LABOUR STATISTICS**

Depot Category	Hours	Benefits Paid	% of Total T4 Cost (\$/Hour)	Benefits Paid	Salary Paid*	% of Total T4 Cost (\$/Hour)	Salary Paid	Total T4 Costs	Total T4 Costs (\$/Hour)
Small	192,091	\$ 282,141	8.8 %	\$ 1.47	\$ 2,938,005	91.2 %	\$ 15.29	\$ 3,220,146	\$ 16.76
Medium	573,969	\$ 980,870	9.3 %	\$ 1.71	\$ 9,511,409	90.7 %	\$ 16.57	\$ 10,492,280	\$ 18.28
Large	1,083,695	\$ 2,161,678	10.3 %	\$ 1.99	\$ 18,755,094	89.7 %	\$ 17.31	\$ 20,916,772	\$ 19.30
<b>Total</b>	<b>1,849,755</b>	<b>\$ 3,424,689</b>	<b>9.9 %</b>	<b>\$ 1.85</b>	<b>\$ 31,204,508</b>	<b>90.1 %</b>	<b>\$ 16.87</b>	<b>\$ 34,629,197</b>	<b>\$ 18.72</b>

*\*Salary includes bonuses*

Figure 7 below shows the As Adjusted direct labour hours by depot. While there is some correlation between direct labour and container volume, we also see significant variation in the number of direct labour hours similar-sized depots incur.

**FIGURE 7 – AS ADJUSTED DIRECT LABOUR HOURS BY DEPOT**



Depots paid a total of \$4.3 million in benefits to these employees. Depots provide benefits in a number of cost categories as follows:

- **Taxable Benefits:** Total taxable benefits paid, including for example, RRSP contributions, contributions to pension funds, and life insurance payments, for the fiscal year.
- **Health Care:** Any non-taxable benefits paid to all employees including Alberta Health Care and private health care plan expenses.
- **EI & CPP:** Total employer’s portion of Employment Insurance and Canada Pension Plan payments for all employees.
- **WCB:** Total Worker’s Compensation Board payments for all employees.
- **Other:** Any cost associated with labour that has not been reported elsewhere.

Table 22 breaks this amount down to the individual cost categories reported by depots.

**TABLE 22 – AS ADJUSTED DIRECT LABOUR BENEFITS**

Depot Category	Taxable Benefits	Health Care	EI & CPP	WCB	Other	Total Cost
Small	\$ 9,376	\$ 24,544	\$ 248,278	\$ 59,858	\$ 18,709	\$ 360,765
Medium	\$ 137,044	\$ 135,543	\$ 718,270	\$ 183,771	\$ 51,463	\$ 1,226,089
Large	\$ 224,547	\$ 349,614	\$ 1,387,506	\$ 400,278	\$ 304,878	\$ 2,666,823
<b>Total</b>	<b>\$ 370,967</b>	<b>\$ 509,701</b>	<b>\$ 2,354,053</b>	<b>\$ 643,907</b>	<b>\$ 375,050</b>	<b>\$ 4,253,678</b>

Table 23 below summarizes several direct labour statistics used to evaluate performance, identify outliers, and provide comparison between depots. The number of depots reporting direct labour costs and hours shows only the depots that included this type of labour in their reporting.

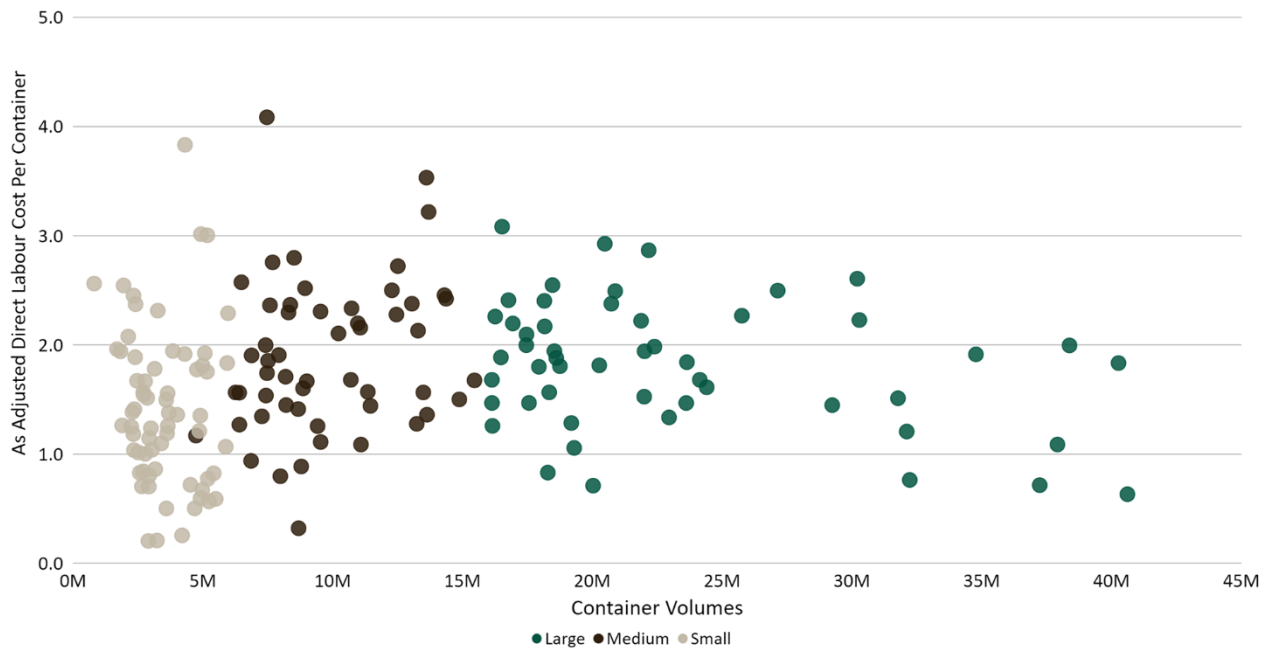
**TABLE 23 – AS ADJUSTED DIRECT LABOUR STATISTICS**

	Small	Medium	Large	Total
Depots Reporting Direct Labour Costs	65	54	51	170
% of Total	97.0 %	100.0 %	100.0 %	98.8 %
Depots Reporting Direct Labour Hours	65	54	51	170
% of Total	97.0 %	100.0 %	100.0 %	98.8 %
Average Hourly Wage (\$/Hour)	\$ 16.76	\$ 18.28	\$ 19.30	\$ 18.72
Average Cost per Container (¢/container)	1.38	1.99	1.76	1.78
Average Time Per Container (s/container)	2.96	3.91	3.29	3.42

There were four depots that provided only costs with no hours associated. These costs were provided in the other labour cost category shown in Table 22. These costs include snow removal and lawn maintenance.

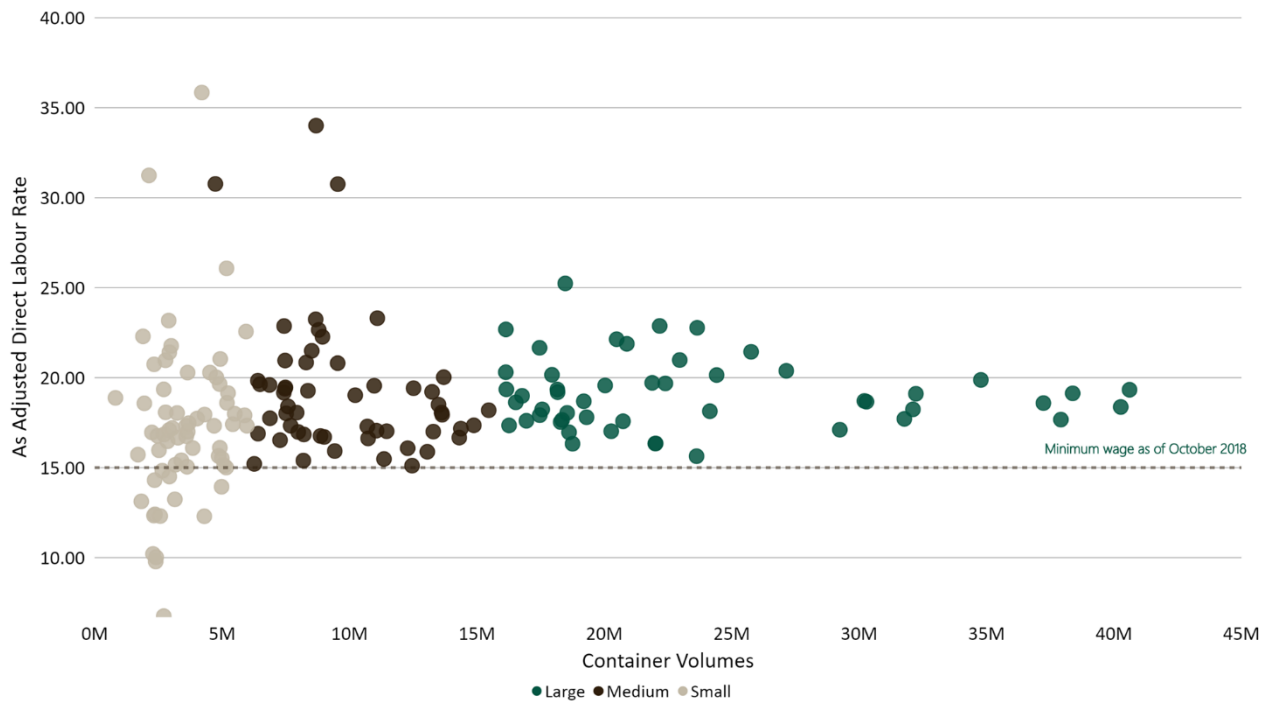
In the two figures below, we expand on the average cost per container and the average hourly wage shown in Table 23. Figure 8 shows the cost per container by depot. There is more variability in the small and medium depots in this cost, though there is still significant variability between depots in the large size class.

**FIGURE 8 – AS ADJUSTED DIRECT LABOUR COST PER CONTAINER**



As with Figure 8, Figure 9 shows more variability in small and medium depots, though there is not a direct correlation between wages paid and container volume processed. One area of note is the number of depots paying wages below the minimum wage. Some of these instances are transparent and reasonable, such as cases where employees performed a portion of their labour hours prior to the October 2018 minimum wage increase, or depots participating in subsidized employment programs. Regardless, we have not increased the wages paid to employees below the minimum wage, as one of the purposes of handling commissions is to recover prudently incurred costs. We do not believe that increasing costs when depots have found ways to reduce the total amount paid would align with this purpose.

**FIGURE 9 – AS ADJUSTED AVERAGE DIRECT LABOUR HOURLY WAGE BY DEPOT**



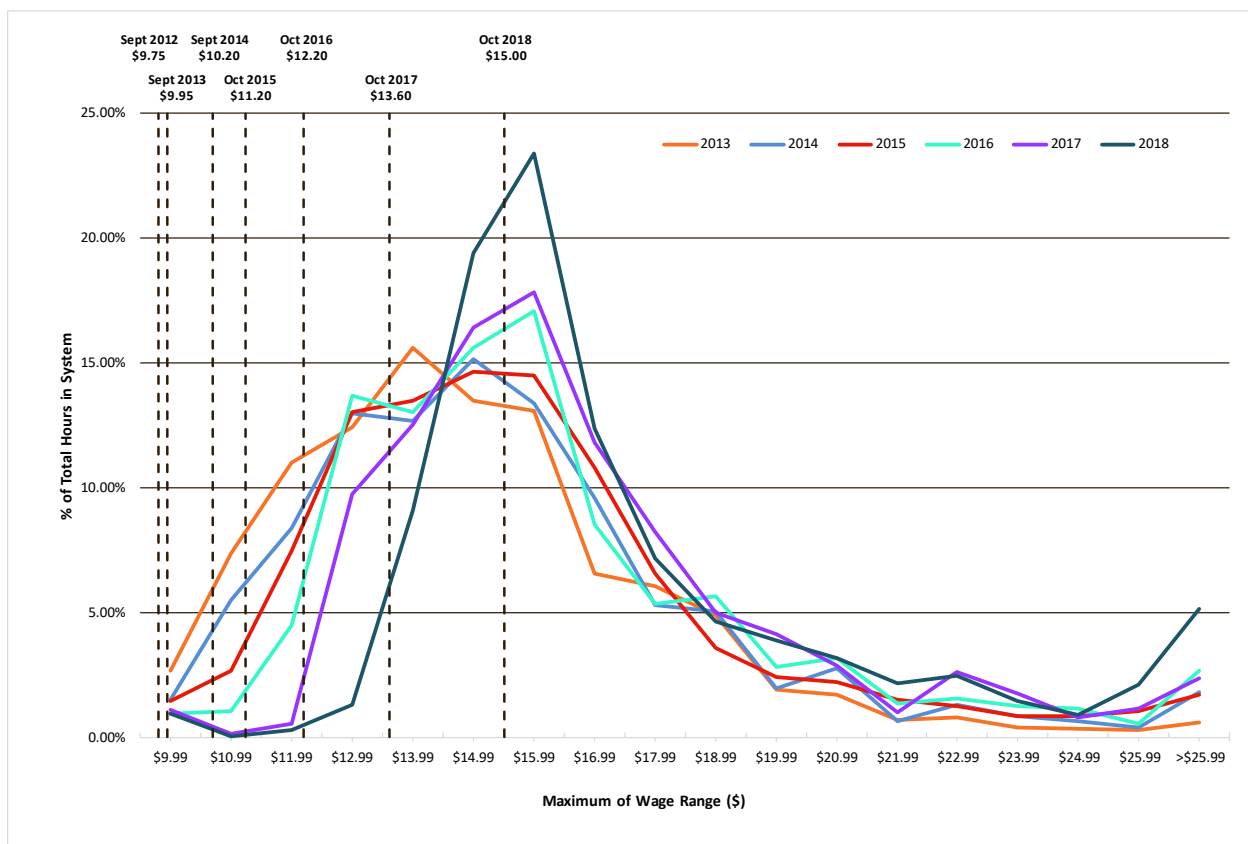
### 7.2.4.1 MINIMUM WAGE IMPACT ANALYSIS

During the 2016/2017 HCR, there was significant emphasis and concern around the minimum wage legislation that has come into effect over the past few years and raised Alberta’s minimum wage to \$15.00/hour. With this heightened concern, we have investigated the impact of this increase on the depot system. While the minimum wage increases applied to all labour, this section has been included in the direct labour section as the majority of employees paid below, at, or near minimum wage work under this classification.

Throughout this section, we have used the 2018 As Reported Data so that the results are comparable to those from prior years.

Figure 10 below shows a yearly comparison of the labour hours in the system by wage range.

**FIGURE 10 – YEARLY COMPARISON OF TOTAL LABOUR HOURS**



As shown by Figure 10, the average hourly wage in the system has increased along with the increases in minimum wage. In 2018, more than 20% of the total hours in the system are being paid at between \$14.00 and \$15.00 per hour. As the 2018 data refers to depot fiscal year ends, the 2018 year includes data from February 2017 (depots having a fiscal year end of January 31, 2018) through December 31, 2018. The final increase to minimum wage came into effect in October 2018, so some wages paid by depots during that period were, reasonably, under the \$15.00 per hour rate.

Table 24 shows the average hourly wage for direct, contract, and overhead labour. As with Figure 9, this table shows the increase in wages paid to direct labour employees, however, we have also seen a drop in the hourly wage paid to contract and overhead labour.

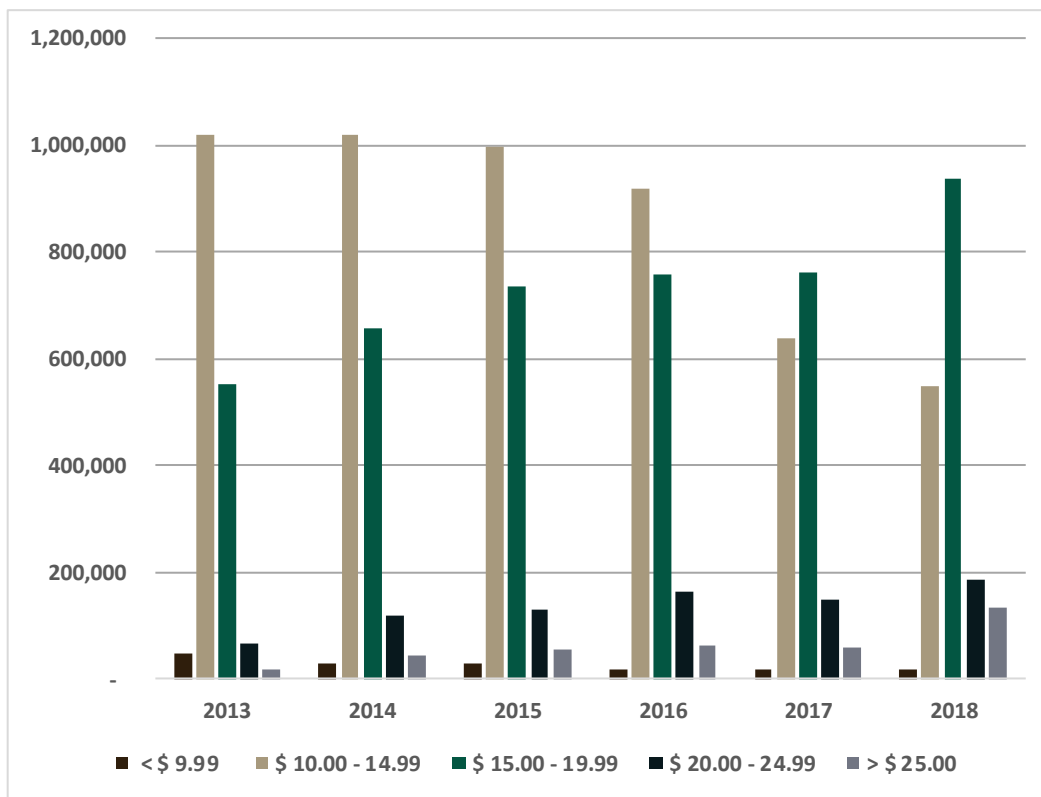
**TABLE 24 – HISTORIC HOURLY WAGES**

	2013	2014	2015	2016	2017	2018
Direct Labour	\$14.36	\$15.03	\$15.31	\$15.74	\$16.28	\$19.34
Contract Labour	\$18.46	\$19.92	\$23.72	\$26.14	\$27.90	\$17.07
Overhead Labour	\$26.67	\$26.76	\$28.66	\$29.13	\$30.75	\$30.49
<b>Total Labour</b>	<b>\$17.19</b>	<b>\$17.70</b>	<b>\$18.61</b>	<b>\$19.13</b>	<b>\$19.96</b>	<b>\$21.63</b>

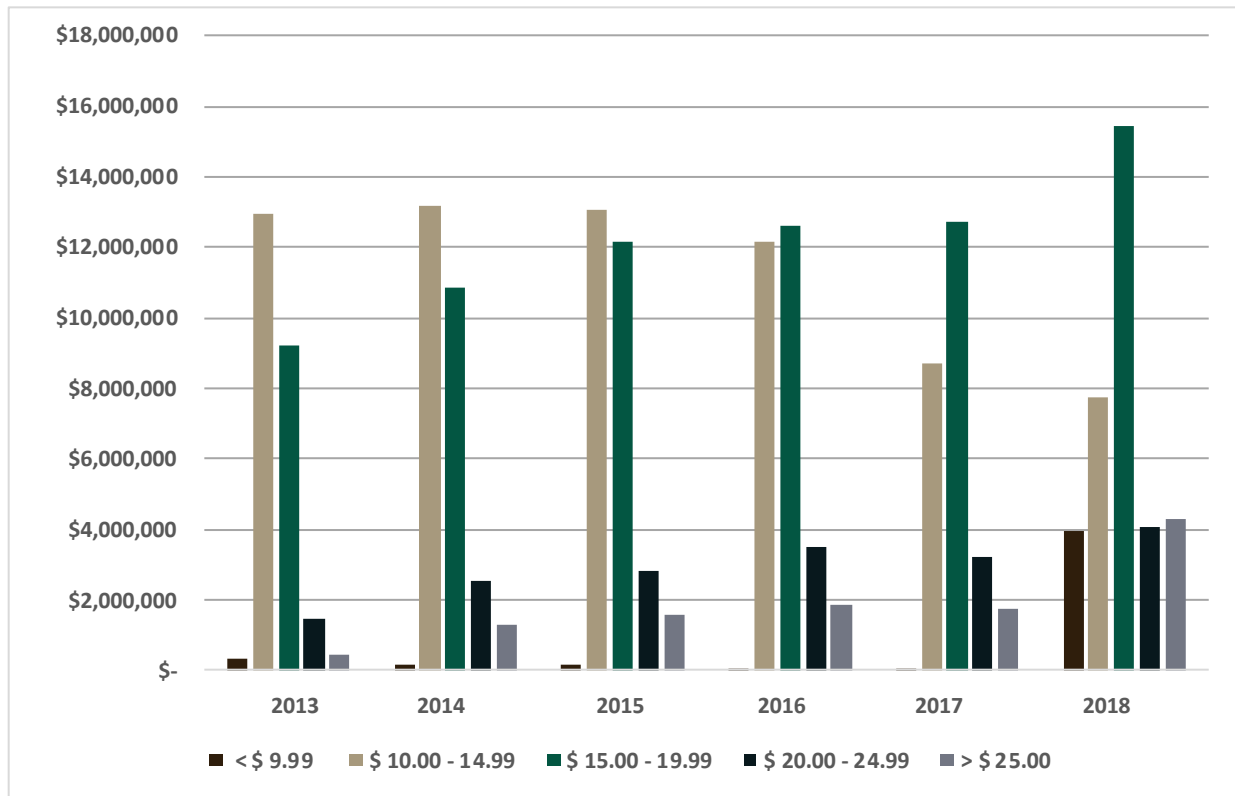
We identified that in the years 2013 through 2018, between 2% and 6% of hours in the system were paid at rates below the minimum wage in effect at that time. Some of these hours can be explained when a minimum wage increase occurred in the year, as some portion of the hours would have occurred before the minimum wage increase. An additional portion of these wages can be explained by depots participating in subsidized employment programs. However, these factors would not likely explain the whole number of hours compensated at less than the minimum wage.

The figures below show the number of hours and the total cost associated with a strata. This analysis was performed on direct labour specifically, as lower wages are generally associated with this classification.

**FIGURE 11 – DIRECT LABOUR HOURS BY STRATA**



**FIGURE 12 – DIRECT LABOUR COSTS BY STRATA**



As shown in the figures above, there has been an increase in number of hours and total cost associated with the \$15.00 per hour and greater strata.

While we have seen an increase in the hourly wage paid across the system, depots have found efficiencies in managing the total labour costs they are incurring. Table 25 shows the total hours and dollars over the past four years. At the highest point, in 2016, total wages paid were \$50.4 million and increased to \$51.9 million in 2018 following a \$6.0 million drop in 2017.

**TABLE 25 – HISTORIC TOTAL HOURS AND DOLLARS**

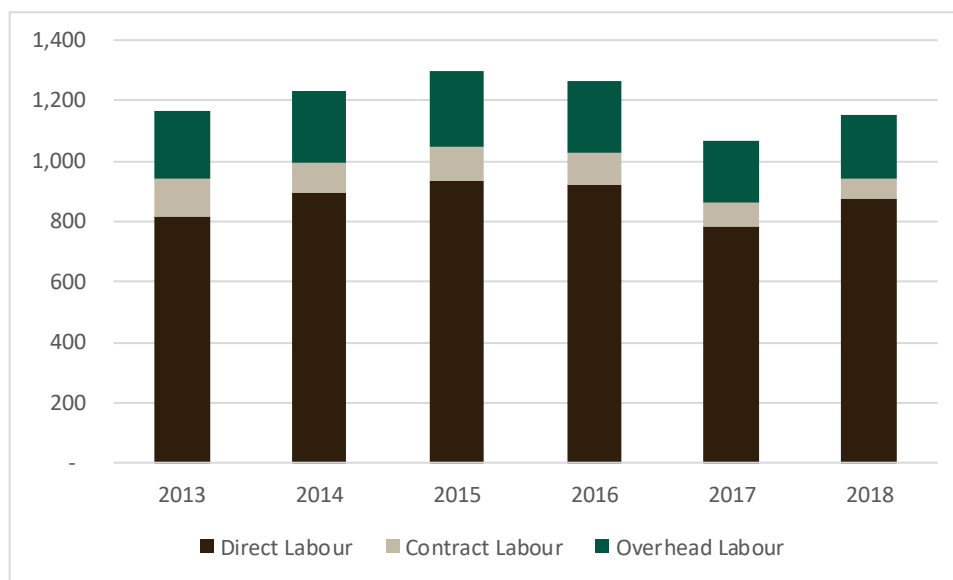
	2013		2014		2015	
	Total Hours	Total Dollars	Total Hours	Total Dollars	Total Hours	Total Dollars
Direct Labour	1,701,082	\$24,432,565	1,864,664	\$28,030,206	1,946,243	\$29,799,814
Contract Labour	254,568	\$4,698,312	203,803	\$4,060,608	230,624	\$5,469,298
Overhead Labour	473,477	\$12,628,144	498,356	\$13,337,026	522,442	\$14,971,880
<b>Total Labour</b>	<b>2,429,127</b>	<b>\$41,759,021</b>	<b>2,566,823</b>	<b>\$45,427,840</b>	<b>2,699,309</b>	<b>\$50,240,992</b>

	2016		2017		2018	
	Total Hours	Total Dollars	Total Hours	Total Dollars	Total Hours	Total Dollars
Direct Labour	1,918,748	\$30,202,704	1,625,601	\$26,470,336	1,821,553	\$35,512,862
Contract Labour	217,073	\$5,675,280	170,526	\$4,757,200	141,511	\$2,415,182
Overhead Labour	496,815	\$14,473,648	429,680	\$13,210,696	437,326	\$14,003,119
<b>Total Labour</b>	<b>2,632,636</b>	<b>\$50,351,632</b>	<b>2,225,807</b>	<b>\$44,438,233</b>	<b>2,400,390</b>	<b>\$51,931,164</b>

With this increase in the total wages paid, the number of hours worked in the system has also increased by 174,583.

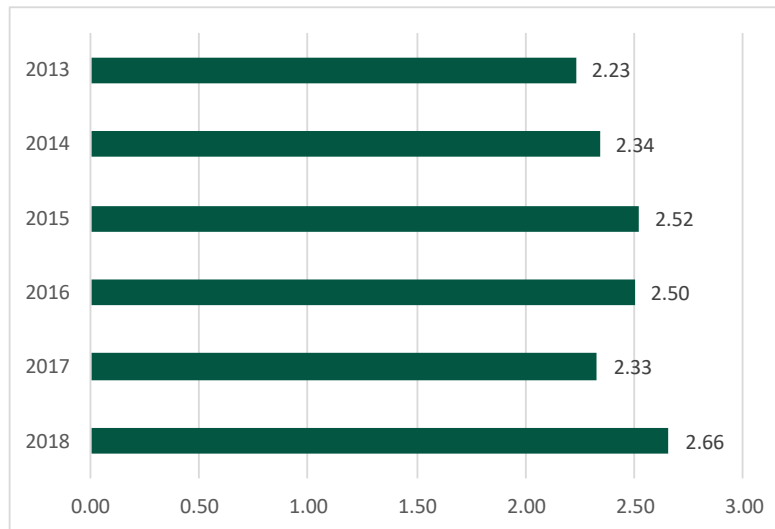
Figure 13 below shows the historical number of FTEs (assuming 2,080 hours worked annually) for each category of labour. The Total System number of FTEs dropped from 1,298 at its highest in 2015 to 1,154 in 2018.

**FIGURE 13 – HISTORICAL FTEs**



The final piece of analysis we've completed is on the cost per container spent on labour, shown in Figure 14 below. As with the other pieces there has been significant change in the cost per container experienced by depots over the past six years.

**FIGURE 14 – LABOUR COSTS (¢) / CONTAINER**



While some of the changes shown in the figures and tables above may be related to increased use of technology and increased efficiency, some of the drop in total labour cost is likely a reaction to the minimum wage increase. Some depots seem to have reduced the number of hours worked in their depot. While no investigation into the reduction of hours worked in depots has been completed, we assume that this decrease would lead to depots favouring longer wait times for customers or cutting down on staff in historically slower periods of collection.

With this information, it is evident that one cannot simply look at upcoming government policy changes and conclude their impact on the system. When the minimum wage increases were announced, it would have been easy to look at the policy and the depot system, with its heavy dependence on low cost labour, and assume that costs would be driven up by the policy change. However, this is not what occurred. Policy changes can have an impact on operational management, in this case driving efficiency up and reducing the total hours in the system.

Additionally, it is important to consider all factors that may impact a cost item for depots. In the case of minimum wage, the total effect on costs may have been reduced as depots are embracing the technological advances made in the field reducing the total labour hours required to process containers.

Finally, the BCMB, with input from the Handling Commission Review Committee, has implemented a policy of updating costs with depot actuals annually as noted in the Handling Commission Review By-law. This annual update will capture any changes in cost that depots are experiencing. Additionally, the Indices Expert Report will be updated annually to capture any changes to costs that may occur during the year. The combination of these two items will effectively account for all changes in cost that depots experience.

## 7.2.5 Collector Labour

Collector labour is related to offsite collections tasks which are limited to employees going offsite to collect containers from customers (as opposed to customers bringing containers into the depot) and any initial sorting and counting of containers done by employees offsite. Collector labour does not include any time for employees processing containers once they are received at the depot. Only about 30% of depots report costs related to offsite collections. Table 26 below summarizes the collection labour hours and dollars for each of the three depot size categories.

**TABLE 26 – AS ADJUSTED COLLECTOR LABOUR<sup>17</sup>**

Depot Category	Total Hours	Total Dollars
Small	20,900	\$ 312,519
Medium	34,413	\$ 592,522
Large	56,727	\$ 1,003,706
<b>Total</b>	<b>112,040</b>	<b>\$ 1,908,747</b>

Two depots reported free hours worked by employees. In the UCA instruction manual, depots are instructed to include hours for free labour received from any source. For example, labour provided through a government work training program. As these hours were included as free labour, we did not allocate cost to them.

Table 27 below summarizes collector labour statistics.

**TABLE 27 – AS ADJUSTED COLLECTOR LABOUR STATISTICS**

	Small	Medium	Large	Total
Depots Reporting Collector Labour Costs	27	19	16	62
% of Total	40.3 %	35.2 %	31.4 %	36.0 %
Depots Reporting Collector Labour Hours	31	19	16	66
% of Total	46.3 %	35.2 %	31.4 %	38.4 %
Average Hourly Wage (\$/Hour)	\$ 14.95	\$ 17.22	\$ 17.69	\$ 17.04
Average Cost per Container (¢/container)	0.13	0.11	0.08	0.10
Average Time Per Container (s/container)	0.32	0.23	0.17	0.21

More details on offsite collections can be found in Section 8 - Collection Costs.

<sup>17</sup> Costs included in Table 26 are totals prior to the Offsite Collections Cap. The application of this cap reduces these costs by \$1.1 million.

### 7.2.6 Overhead Labour Costs

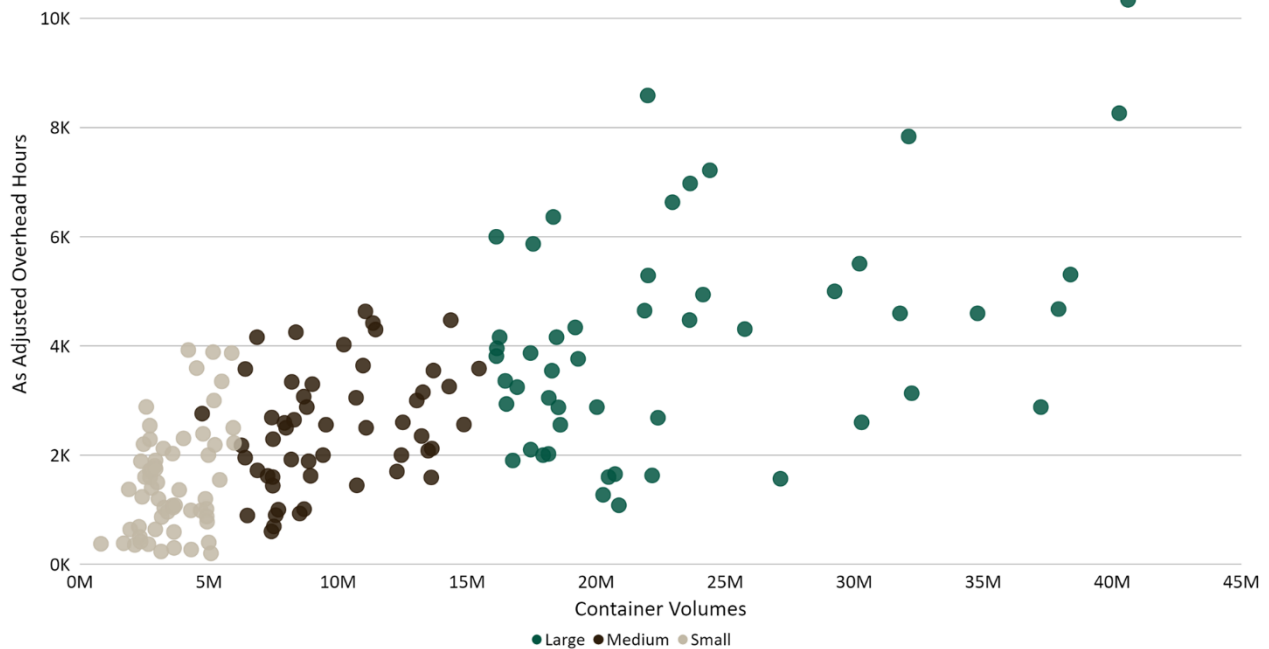
The final portion of labour is allocated to overhead or manager labour. This portion of labour totaled \$12.8 million in 2018. The breakdown between depot size classifications is shown in Table 28 below.

**TABLE 28 – AS ADJUSTED OVERHEAD LABOUR**

Depot Category	Total Hours	Total Dollars
Small	91,161	\$ 1,790,653
Medium	132,606	\$ 3,822,309
Large	208,044	\$ 7,174,225
<b>Total</b>	<b>431,812</b>	<b>\$ 12,787,187</b>

Figure 15 below shows the total adjusted overhead labour hours per depot and the variability in overhead labour hours between depots.

**FIGURE 15 – AS ADJUSTED OVERHEAD LABOUR HOURS BY CONTAINER VOLUME**



This variability is also found when comparing overhead labour cost per container as shown in Figure 16 below.

**FIGURE 16 – AS ADJUSTED OVERHEAD LABOUR COST PER CONTAINER**

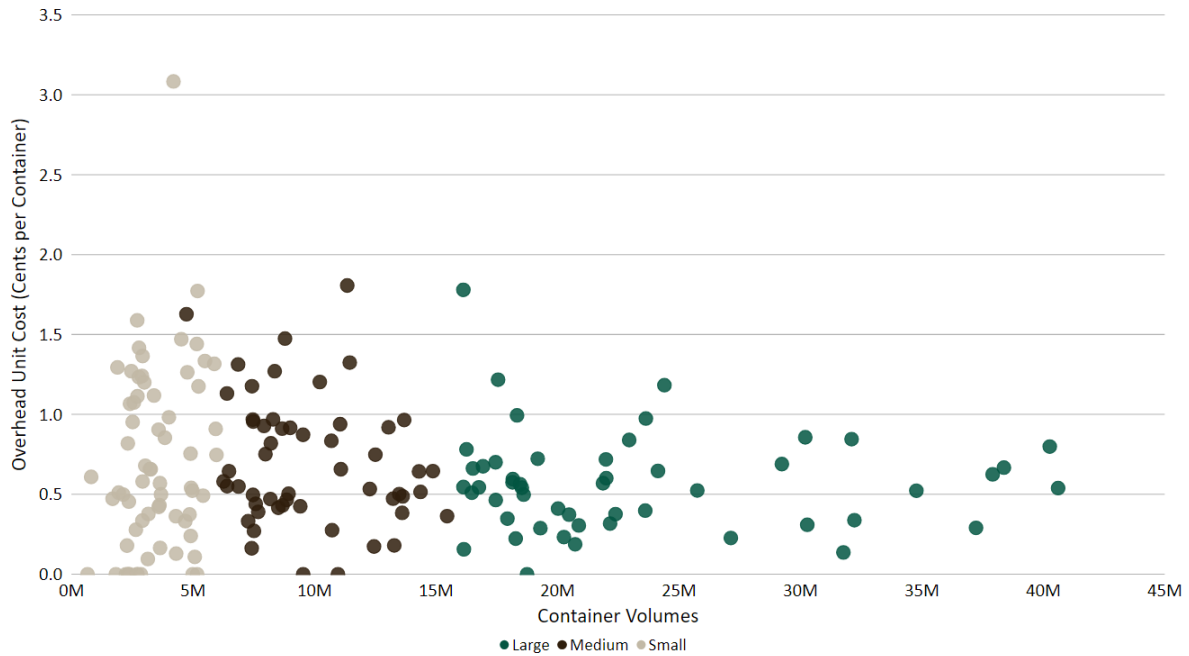
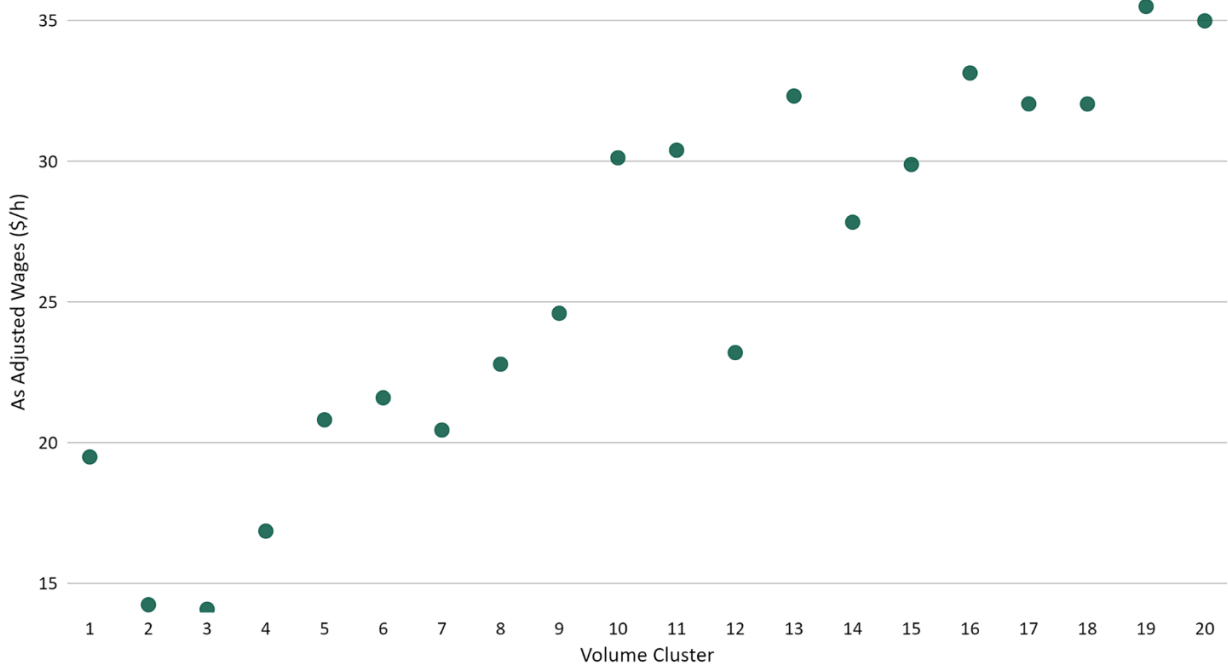


Figure 17 below shows the average hourly wage for each volume cluster. While wages appear to increase along with depot size in general, there is significant variance in the average hourly wage.

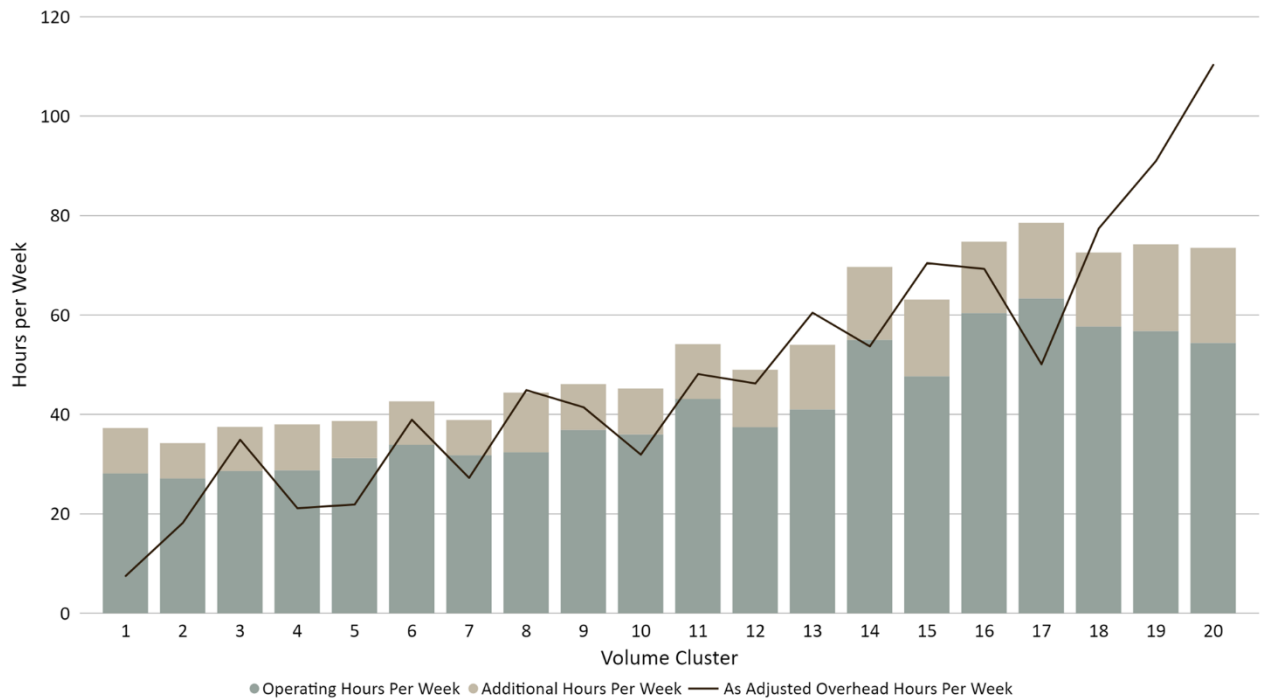
**FIGURE 17 – AS ADJUSTED AVERAGE OVERHEAD HOURLY WAGE**



In Figure 18 below, operating hours per week, additional hours per week, and adjusted overhead hours per week are shown. Operating hours are those hours that depots are open to the public. Additional hours are hours that depots are not open to the public but are considered operational and are used for additional sorting and shipping; preparing to open; cleaning up after closing; and after-hours management functions such as hiring, interviewing new staff, planning, and meeting with professionals. In general, overhead hours follow the trend of the sum of operating hours and additional hours.

In each of volume clusters 18, 19, and 20 there are three or four depots that have an average of more than 100 manager hours per week. In discussions with each of these depots, it was identified that each depot requires one or two managers on the floor to manage employees processing containers, depending on the number of expected customers, and an additional manager that completes bookkeeping/reporting functions. Those depots that reported an additional manager to complete bookkeeping/reporting functions were all part of a larger multi-business usually involving more than one depot.

**FIGURE 18 – AS ADJUSTED OPERATING HOURS, ADDITIONAL HOURS, AND OVERHEAD HOURS PER WEEK**



As with direct and collector labour, Table 29 below shows overhead labour statistics for the year. There were three depots that used free labour for a portion of their manager time, so costs were not increased to account for this. Approximately 20% of depots did not report overhead labour in their allocations. These depots felt that the Leadhand and Bookkeeper classifications better described the work performed by their managers at the depot, so the time was allocated there.

**TABLE 29 – AS ADJUSTED OVERHEAD LABOUR STATISTICS**

	Small	Medium	Large	Total
Depots Reporting Overhead Labour Costs	49	45	43	137
% of Total	73.1 %	83.3 %	84.3 %	79.7 %
Depots Reporting Overhead Labour Hours	52	46	43	141
% of Total	77.6 %	85.2 %	84.3 %	82.0 %
Average Hourly Wage (\$/Hour)	\$ 19.64	\$ 28.82	\$ 34.48	\$ 29.61
Average Cost per Container (¢/container)	0.77	0.72	0.60	0.66
Average Time Per Container (s/container)	1.41	0.90	0.63	0.80

#### 7.2.6.1 OVERHEAD LABOUR STATISTICS AND PROFIT

This section contains a comparison of overhead labour statistics for profitable and unprofitable depots. Table 30 below shows a breakdown of profitable and unprofitable depots by tax ownership type. For the profitable and unprofitable depots section, the “Other” category includes the categories sole proprietorships, registered charities, and partnerships. These categories were grouped together as the number of depots reporting in each category were too small to maintain anonymity.

**TABLE 30 – AS ADJUSTED OVERHEAD LABOUR STATISTICS AND PROFIT BY TAX OWNERSHIP TYPE**

Depot Category	Number of Depots Reporting	As Accepted Profit Before Tax	Overhead Labour Hours	Overhead Labour Cost	FY Volume	Manager Labour Cost (¢/container)	Manager Labour Rate (\$/Hour)
<b>All Unprofitable Depots</b>							
Incorporated	52	\$ (2,428,142)	111,564	\$ 3,295,385	396,141,926	0.83	\$ 29.54
Other	10	\$ (876,583)	18,698	\$ 689,421	83,856,751	0.82	\$ 36.87
<b>Subtotal</b>	<b>62</b>	<b>\$ (3,304,724)</b>	<b>130,261</b>	<b>\$ 3,984,806</b>	<b>479,998,677</b>	<b>0.83</b>	<b>\$ 30.59</b>
<b>All Profitable Depots</b>							
Incorporated	100	\$ 15,213,266	287,048	\$ 8,451,432	1,372,993,700	0.62	\$ 29.44
Other	10	\$ 339,279	14,503	\$ 350,949	95,950,198	0.37	\$ 24.20
<b>Subtotal</b>	<b>110</b>	<b>\$ 15,552,545</b>	<b>301,551</b>	<b>\$ 8,802,381</b>	<b>1,468,943,898</b>	<b>0.60</b>	<b>\$ 29.19</b>
<b>All Depots</b>							
Sole Proprietorship	8	\$ 40,362	8,694	\$ 134,015	21,564,260	0.62	\$ 15.42
Incorporated	152	\$ 12,785,124	398,612	\$ 11,746,817	1,769,135,626	0.66	\$ 29.47
Registered Charity	10	\$ (718,105)	19,240	\$ 820,833	125,102,156	0.66	\$ 42.66
Partnership	2	\$ 140,439	5,267	\$ 85,522	33,140,533	0.26	\$ 16.24
<b>Total</b>	<b>172</b>	<b>\$ 12,247,821</b>	<b>431,812</b>	<b>\$ 12,787,187</b>	<b>1,948,942,575</b>	<b>0.66</b>	<b>\$ 29.61</b>

As shown above, a portion of the loss experienced by unprofitable depots is due to the higher wages paid for overhead labour. For instance, “Other” unprofitable depots are paying an average of \$12.67 per hour higher than their

profitable counterparts. For the 18,698 hours incurred by overhead labour in “Other” unprofitable depots, this difference totals \$236,903. This comparison can also be made with cost per container where the difference is \$0.45 per container.

Table 31 below shows a similar comparison between multi-businesses and single businesses.

**TABLE 31 – AS ADJUSTED OVERHEAD LABOUR STATISTICS AND PROFIT BY MULTI AND SINGLE BUSINESS**

Depot Category	Number of Depots Reporting	As Accepted Profit Before Tax	Manager Labour Hours	Manager Labour Cost	FY Volume	Manager Labour Cost (¢ / container)	Manager Labour Rate (\$/Hour)
<b>All Unprofitable Depots</b>							
Multi-Business	13	\$ (1,257,816)	20,276	\$ 672,956	82,724,019	0.81	\$ 33.19
Single Business	49	\$ (2,046,909)	109,985	\$ 3,311,850	397,274,658	0.83	\$ 30.11
<b>Subtotal</b>	<b>62</b>	<b>\$ (3,304,724)</b>	<b>130,261</b>	<b>\$ 3,984,807</b>	<b>479,998,677</b>	<b>0.83</b>	<b>\$ 30.59</b>
<b>All Profitable Depots</b>							
Multi-Business	10	\$ 638,732	16,371	\$ 516,345	92,289,378	0.56	\$ 31.54
Single Business	100	\$ 14,913,813	285,179	\$ 8,286,036	1,376,654,520	0.60	\$ 29.06
<b>Subtotal</b>	<b>110</b>	<b>\$ 15,552,545</b>	<b>301,551</b>	<b>\$ 8,802,381</b>	<b>1,468,943,898</b>	<b>0.60</b>	<b>\$ 29.19</b>
<b>All Depots</b>							
Multi-Business	23	\$ (619,083)	36,647	\$ 1,189,301	175,013,397	0.68	\$ 32.45
Single Business	149	\$ 12,866,904	395,165	\$ 11,597,887	1,773,929,178	0.65	\$ 29.35
<b>Total</b>	<b>172</b>	<b>\$ 12,247,821</b>	<b>431,812</b>	<b>\$ 12,787,187</b>	<b>1,948,942,575</b>	<b>0.66</b>	<b>\$ 29.61</b>

As with tax ownership type, we observe that profitable depots generally pay a lower hourly wage than their unprofitable counterparts. This table also shows that, on average, multi-businesses pay higher overhead labour hourly wages than single businesses, with the total difference for all depots in the system equating to \$3.10 per hour.

The final overhead labour comparison is between depots run for profit and depots that are not-for-profit.

**TABLE 32 – AS ADJUSTED OVERHEAD LABOUR STATISTICS AND PROFIT BY FOR-PROFIT AND NOT-FOR-PROFIT**

Depot Category	Number of Depots Reporting	As Accepted Profit Before Tax	Manager Labour Hours	Manager Labour Cost	FY Volume	Manager Labour Cost (¢/container)	Manager Labour Rate (\$/Hour)
<b>All Unprofitable Depots</b>							
For-Profit	54	\$ (2,232,645)	114,266	\$ 3,317,868	396,620,429	0.84	\$ 29.04
Not-For-Profit	8	\$ (1,072,080)	15,995	\$ 666,938	83,378,248	0.80	\$ 41.70
<b>Subtotal</b>	<b>62</b>	<b>\$ (3,304,724)</b>	<b>130,261</b>	<b>\$ 3,984,807</b>	<b>479,998,677</b>	<b>0.83</b>	<b>\$ 30.59</b>
<b>All Profitable Depots</b>							
For-Profit	106	\$ 15,418,528	294,388	\$ 8,485,000	1,397,567,111	0.61	\$ 28.82
Not-For-Profit	4	\$ 134,017	7,163	\$ 317,381	71,376,787	0.44	\$ 44.31
<b>Subtotal</b>	<b>110</b>	<b>\$ 15,552,545</b>	<b>301,551</b>	<b>\$ 8,802,381</b>	<b>1,468,943,898</b>	<b>0.60</b>	<b>\$ 29.19</b>
<b>All Depots</b>							
For-Profit	160	\$ 13,185,883	408,654	\$ 11,802,868	1,794,187,540	0.66	\$ 28.88
Not-For-Profit	12	\$ (938,063)	23,158	\$ 984,319	154,755,035	0.64	\$ 42.50
<b>Total</b>	<b>172</b>	<b>\$ 12,247,821</b>	<b>431,812</b>	<b>\$ 12,787,187</b>	<b>1,948,942,575</b>	<b>0.66</b>	<b>\$ 29.61</b>

Table 32 shows that for-profit depots are paying significantly lower hourly overhead wages than not-for-profit depots. For the Study System, this difference is \$13.62 per hour.

#### 7.2.6.2 OVERHEAD LABOUR COMPARISON DATA – WILLIS TOWERS WATSON

The DCA took into consideration the Willis Towers Watson 2018 General Industry Middle Management, Professional, and Support Compensation Survey Report to benchmark depot overhead labour wages against market rates.

In selecting comparable positions to depot manager in the Willis Towers Watson report, we have determined that depot managers fall within the category of professional/individual contributor (as opposed to executive management or senior management). The following bullets provide the Willis Towers Watson description of the types of work activities and staff they manage:

- Project management is a body of skills and expertise; project managers achieve work objectives by applying these skills and expertise to guide a team. At lower levels of project management, the focus is on professional project management skills, and individuals in these roles may manage multiple projects and/or projects with shorter duration.
- Jobs that focus on "managing" a body of work or a process are applying individual expertise. Such jobs require that a job holder has a specific level of knowledge or skills in a subject of critical value to the organization's business strategy. There is no requirement on the job to provide wider leadership beyond acting as the "custodian" of the knowledge.
- A job is achieving results through application of individual expertise if:
  - Work is focused on managing the parameters (e.g., service levels, compliance, policy interpretation) of the contract/vendor relationship (i.e., work is not focused on managing the vendor's employees)
  - The vendor/contract management role/work is short-term in nature, intended to fill a temporary staffing gap, peak volume period, or conduct work on a specific short-term project

The Willis Towers Watson data provided in Table 33 below is used to further break down the professional/individual contributor job category.

**TABLE 33 – WILLIS TOWERS WATSON INDIVIDUAL CONTRIBUTOR DESCRIPTION**

Individual Contributor				
Professional (P)		Support		
		Technical Support (T)	Business Support (U)	Production / Manual Labour (W)
Entry Level Education/Training	Has conceptual knowledge of theories, practices and procedures typically acquired through a college or university degree or equivalent work experience	Requires vocational training or equivalent experience and may require external certification, but typically does not require a university degree	May require vocational training or equivalent work experience, but does not require a university degree	Typically, does not require vocational training or a university degree
Types of Duties and Responsibilities	Performs work in a specialized area of expertise that requires knowledge of fundamental themes, principles and concepts	Performs specialized technical tasks or skilled craft work	Performs clerical, administrative or specialized support tasks in an office, field or retail store/site setting	Performs unskilled or semi-skilled work

Based on these descriptions, depot managers fall within either the Business Support or Production/Manual Labour classification.

Finally, each of the support categories is broken down further as described in Table 34 below. The Willis Towers Watson Global Grading System measures the relative internal value of distinct jobs within a company according to specific dimensions and aligns those values with quantifiable differences in pay levels in the external marketplace. Global Grades, which are linked to organization size, reflect the impact of size on job scope at higher levels, thus enhancing data comparability across organizations of varied size. Global Grades create a single top-to-bottom framework to facilitate leveling and drive consistency across career bands, functions and disciplines. They provide the foundation, or underpinning, for both executive benchmarks and the broad-based career levels. They also define the start and end points of a career progression.

**TABLE 34 – WILLIS TOWERS WATSON SUPPORT CATEGORIES DESCRIPTION**

Business Support Career Band (U)	
<b>U4 Lead/Advanced (aligns with Global Grades 8 and 9)</b>	
<ul style="list-style-type: none"> <li>• Has advanced and specialized expertise, typically developed through a combination of job-related training and considerable work experience</li> <li>• May act as a lead, coordinating and facilitating the work of others, but is not a supervisor</li> <li>• Works autonomously within established procedures and practices</li> <li>• May support the development of new and innovative solutions to complex problems</li> <li>• Spends most working time performing the same work processes and activities as employees on team</li> </ul>	
<b>Global Grade 9 Differentiators</b>	

### Business Support Career Band (U)

- Performs a variety of the most complex tasks and/or may lead one or more teams
- Supports the delivery of new solutions complex problems where precedent may not exist

#### Global Grade 8 Differentiators

- Performs a variety of complex tasks and/or may lead a team in the performance of a variety of tasks that are often routine
- May support the development of solutions to complex problems of a recurring nature

### U3 Senior (aligns with Global Grade 7)

- Has full proficiency gained through job-related training and considerable work experience
- Completes work with a limited degree of supervision
- Likely to act as an informal resource for colleagues with less experience
- Identifies key issues and patterns from partial/conflicting data
- Takes a broad perspective to problems and spots new, less obvious solutions

### U2 Intermediate (aligns with Global Grades 5 and 6)

- Has working knowledge and skills developed through formal training or work experience
- Works within established procedures with a moderate degree of supervision
- Identifies the problem and all relevant issues in straightforward situations, assesses each using standard procedures and makes sound decisions

#### Global Grade 6 Differentiators

- Has prior relevant training or related work experience
- Performs routine tasks following specific instructions or under close supervision
- Work is clearly defined and completed according to instruction

#### Global Grade 5 Differentiators

- Has limited prior relevant training or work experience
- Has limited discretion to vary from established procedures

### U1 Entry (aligns with Global Grade 4)

- Entry level position with little or no prior relevant training or work experience
- Acquires basic skills to perform routine tasks
- Work is prescribed and completed with little autonomy
- Works with either close supervision or under clearly defined procedures

### Production/Manual Labor Career Band (W)

#### W4 Lead/Advanced (aligns with Global Grades 7 and 8)

- Has advanced skills, typically gained through a combination of job-related training and considerable work experience
- May act as a lead, coordinating the work of others, but is not a supervisor
- Works autonomously within established procedures and practices
- Has developed a specialized level of skill to perform assigned tasks

## Production/Manual Labor Career Band (W)

### Global Grade 8 Differentiators

- Performs a variety of the most complex tasks and/or may lead one or more teams
- Supports the delivery of new solutions complex problems where precedent may not exist

### Global Grade 7 Differentiators

- Performs a variety of complex tasks and/or may lead a team in the performance of a variety of tasks that are often routine
- May support the development of solutions to complex problems of a recurring nature

### W3 Senior (aligns with Global Grade 6)

- Has proficiency through job-related training and considerable work experience
- Completes work with a limited degree of supervision; regularly provides guidance to others with less experience
- May act as an informal resource for colleagues with less experience

### W2 Intermediate (aligns with Global Grades 4 and 5)

- Has skills developed through formal training or work experience
- Works within established procedures and guidelines with limited ability to modify methods and approach
- Completes assigned tasks with a moderate degree of supervision

### Global Grade 5 Differentiators

- Performs the full range of established procedures, and will typically be considered skilled through work experience
- Resolves routine issues without supervisory approval

### Global Grade 4 Differentiators

- Performs most established procedures and will typically be considered semi-skilled through work experience
- Resolves routine issues with senior staff or supervisory guidance and approval

### W1 Entry (aligns with Global Grades 2 and 3)

- Has little or no prior relevant training or work experience
- Works under close supervision with little autonomy
- Works with clearly defined methods and tasks that are described in detail

### Global Grade 3 Differentiators

- Has limited prior relevant training or work experience
- Contributes directly to specific unskilled tasks or processes
- Has limited discretion to vary from established procedures

### Global Grade 2 Differentiators

- Has no prior relevant training or work experience
- Contributes indirectly to specific unskilled tasks or processes
- Has no discretion to vary from established procedures

Based on these descriptions, Business Support Career Band Level U2 and U1 or Production/Manual Labour Career Band W2 or W1 are the most accurate given that most depot managers will have gained skills through work experience and work with some autonomy on routine tasks. We acknowledge that some depot managers at larger, more complex depots may perform work described in the higher levels, however most depots in the system are small and medium depots where these higher-level skills are not required.

After filtering the Willis Towers Watson data by Global Grade, there are 105 job functions available to select from. In our review, we have included statistics from the following functions:

- Administrative Services
- Customer Support/Operations
- Manual/Unskilled Labour
- Supply Chain and Logistics

From these functions, we have included the following disciplines:

- Administrative Services - No Applicable Discipline
- Administrative Services Generalist/Multidiscipline
- Clerical
- Customer Service
- Customer Support/Operations – No Applicable Discipline
- Customer Support/Operations Generalist/Multidiscipline
- Data Entry
- Forklift Operations
- Manual/Unskilled Labor Generalist/Multidiscipline

Table 35 below summarizes the annual and hourly wages for each of these job classifications.

**TABLE 35 – WILLIS TOWERS WATSON ANNUAL AND HOURLY WAGE SUMMARY**

Global Grade	Function	Discipline	Average Annual Salary	Average Hourly Salary*
2	All Functions	All Disciplines	\$39,855	\$19.16
	Manual / Unskilled Labour	Manual/Unskilled Labour Generalist / Multidiscipline	\$41,178	\$19.80
	Supply Chain and Logistics	Forklift Operations	\$38,532	\$18.53
3	All Functions	All Disciplines	\$38,532	\$18.53
	Manual / Unskilled Labour	Manual / Unskilled Labour Generalist / Multidiscipline	\$50,360	\$24.21
4	All Functions	All Disciplines	\$43,654	\$20.99
	Administrative Services	All Disciplines	\$42,800	\$20.58
		Administrative Services - No Applicable Discipline	\$47,717	\$22.94
		Administrative Services Generalist / Multidiscipline	\$45,135	\$21.70
		Clerical	\$41,955	\$20.17
		Data Entry	\$36,394	\$17.50
	Customer Support / Operations	All Disciplines	\$41,853	\$20.12
		Customer Service	\$42,167	\$20.27
		Customer Support / Operations Generalist / Multidiscipline	\$41,538	\$19.97
		Manual / Unskilled Labour	Manual / Unskilled Labour Generalist / Multidiscipline	\$49,213
Supply Chain and Logistics	Forklift Operations	\$45,112	\$21.69	
5	All Functions	All Disciplines	\$51,326	\$24.68
	Administrative Services	All Disciplines	\$51,263	\$24.65
		Administrative Services - No Applicable Discipline	\$59,617	\$28.66
		Administrative Services Generalist / Multidiscipline	\$50,364	\$24.21
		Clerical	\$48,288	\$23.22
		Data Entry	\$46,784	\$22.49
		All Disciplines	\$50,287	\$24.18
	Customer Support / Operations	Customer Service	\$46,468	\$22.34
		Customer Support / Operations - No Applicable Discipline	\$58,440	\$28.10
		Customer Support / Operations Generalist / Multidiscipline	\$45,953	\$22.09
	Manual / Unskilled Labour	Manual/Unskilled labour Generalist / Multidiscipline	\$57,033	\$27.42
	Supply Chain and Logistics	Forklift Operations	\$48,989	\$23.55
	6	All Functions	All Disciplines	\$57,394
Administrative Services		All Disciplines	\$56,918	\$27.36
		Administrative Services Generalist / Multidiscipline	\$57,712	\$27.75
		Clerical	\$62,548	\$30.07
		Data Entry	\$50,493	\$24.28
		All Disciplines	\$60,827	\$29.24
Customer Support / Operations		Customer Service	\$55,080	\$26.48
		Customer Support / Operations - No Applicable Discipline	\$75,156	\$36.13
		Customer Support / Operations Generalist / Multidiscipline	\$52,245	\$25.12
Manual / Unskilled Labour		Manual / Unskilled Labour Generalist / Multidiscipline	\$57,161	\$27.48
Supply Chain and Logistics	Forklift Operations	\$48,754	\$23.44	
7	All Functions	All Disciplines	\$59,275	\$28.50
	Administrative Services	All Disciplines	\$60,098	\$28.89
		Administrative Services - No Applicable Discipline	\$67,725	\$32.56
		Administrative Services Generalist / Multidiscipline	\$60,254	\$28.97
		Clerical	\$58,118	\$27.94
		Data Entry	\$54,293	\$26.10
	Customer Support / Operations	Customer Service	\$58,222	\$27.99
		Customer Support / Operations - No Applicable Discipline	\$56,517	\$27.17
		Customer Support / Operations Generalist / Multidiscipline	\$65,252	\$31.37
	Manual / Unskilled Labour	Manual / Unskilled Labour Generalist / Multidiscipline	\$52,898	\$25.43

\*Assumes 2,080 hours worked annually

As seen in Table 35 above, there is a wide range of wages paid to personnel in management positions, from \$17.50 to \$36.13 per hour. This variation is due to the wide range of functions and disciplines that could compare with depot manager activities. However, when reviewing the different functions and disciplines, we have determined that the majority of depot manager time is spent in the Manual/Unskilled Labour Function. Table 36 below summarizes the wage variation in that function.

**TABLE 36 – WILLIS TOWERS WATSON ANNUAL AND HOURLY WAGE SUMMARY – MANUAL / UNSKILLED LABOUR**

Global Grade	Average Annual Salary	Average Hourly Salary*
2	\$41,178	\$19.80
3	\$50,360	\$24.21
4	\$49,213	\$23.66
5	\$57,033	\$27.42
6	\$57,161	\$27.48
7	\$59,143	\$28.43

\*Assumes 2,080 hours worked annually

When comparing these wages with the As Accepted Wages reported in Table 29 – As Adjusted Overhead Labour Statistics, we believe the necessary adjustments have been made and that the accepted wages, with the Stub UCA Adjustment applied, accurately depict the total cost required for depots’ overhead labour cost. As Adjusted Overhead Labour Wages average \$29.61 per hour and range from \$19.64 to \$34.48 per hour. Based on the breakdown of Willis Towers Watson data, managers working under similar conditions and performing similar work tasks as depot managers are paid between \$17.50 and \$36.13 per hour, with the function most like depot managers ranging from \$19.80 to \$28.43 per hour. The As Adjusted Wages are within these boundaries.

### 7.3 Building Costs

Building costs are the second largest cost in the system, totaling \$19.0 million in As Accepted Data in 2018. Building data is adjusted by the square footage and the lease rate. Square footage is capped using the procedure identified in BCMB’s Depot Building Size Cap Policy and costs reported by depots are replaced in accordance with BCMB’s Depot Building Deemed Lease Rate Policy. This section describes our analysis of these changes and our assessment of the building costs depots incur.

Table 37 summarizes the As Reported, As Accepted, and As Adjusted Data for building costs. Note that no changes were made between the As Reported and As Accepted Data.

**TABLE 37 – BUILDING COST SUMMARY**

	As Reported and Accepted		As Adjusted	
	Total	Average	Total	Average
Use Costs	\$ 3,815,067	\$ 22,181	\$ 5,731,612	\$ 33,323
NNN Rent	\$ 15,190,184	\$ 88,315	\$ 12,195,706	\$ 70,905
<b>Total</b>	<b>\$ 19,005,251</b>	<b>\$ 110,496</b>	<b>\$ 17,927,318</b>	<b>\$ 104,229</b>

### 7.3.1 Building Square Footage

During annual BCMB inspections, BCMB Compliance Officers measure the square footage of depots. This square footage is broken into two parts: permanent and semi-permanent.

- Permanent square footage includes all square footage that is in constant or daily use by the depot for its operations. This building space is primarily used for depot operations including customer areas, sorting areas, loading areas, storage areas, and office/administration areas. In addition to the space that houses the main part of the depot operations it might also include mezzanines, additional floors or levels, or even storage areas in separate buildings if they are constantly used for depot operations and are part of the owned or leased square footage.
- Semi-permanent square footage includes any square footage used for depot operations that is not part of permanent square footage. This might include space in storage sheds, fenced/covered storage areas, shipping containers used for onsite storage, or mobile trailers used for storage.

Table 38 below summarizes the BCMB measured square footage for the Study System depots by location and size classification.

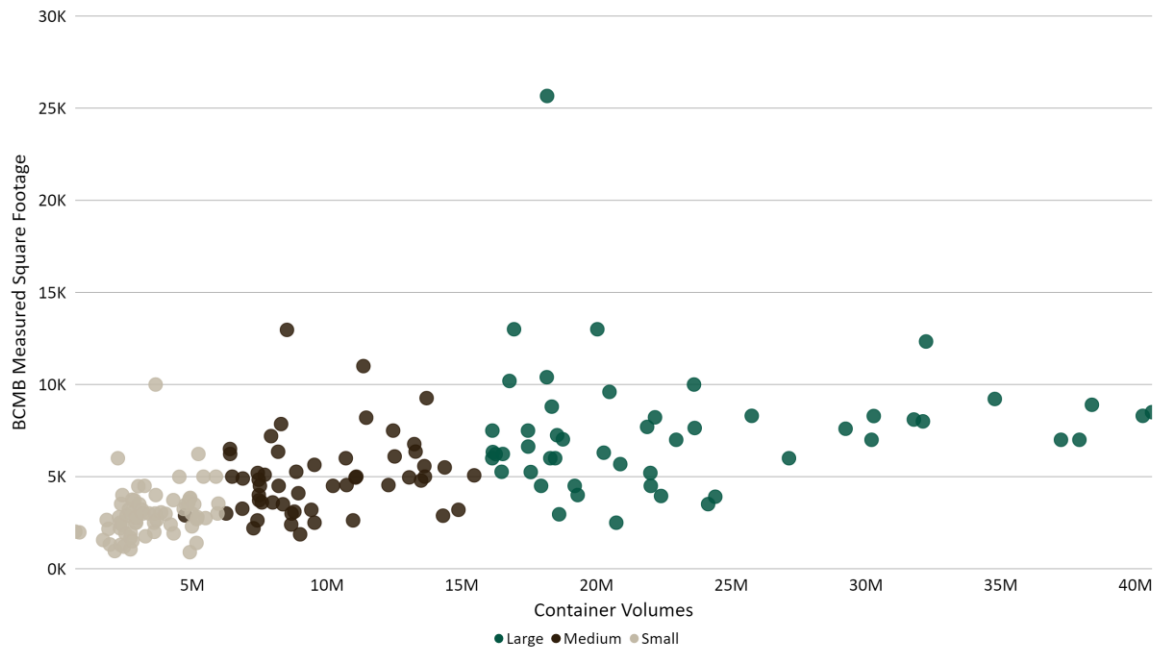
**TABLE 38 – BCMB MEASURED SQUARE FOOTAGE**

Depot Category	Number of Depots	Total Square Footage	Average Square Footage
<b>Location Classification</b>			
Metro	46	287,092	6,241
Urban	37	261,506	7,068
Rural	89	301,411	3,387
<b>Total</b>	<b>172</b>	<b>850,009</b>	<b>4,942</b>
<b>Size Classification</b>			
Small	67	200,614	2,994
Medium	54	268,931	4,980
Large	51	380,464	7,460
<b>Total</b>	<b>172</b>	<b>850,009</b>	<b>4,942</b>

When UCA packages are prepared, the square footage measured by BCMB is reported to depots on UCA Table 5. Depots are asked to verify the measurements and provide information if their square footage has changed since the last BCMB inspection, or if they disagree with the measurements provided. During 2018, four depots provided alternate square footage measurements. When the differences were discussed with depots, all were due to a misinterpretation of the definitions of square footage. As such, BCMB measured square footage (referred to hereafter as square footage) will be relied upon.

Figure 19 below shows the square footage by container volume. As seen in this figure, larger depots generally use more space.

**FIGURE 19 – BCMB MEASURED BUILDING SQUARE FOOTAGE BY CONTAINER VOLUME**



In the UCA, depots are asked to split their square footage into the following categories: office, customer interface, loading, sorting, and storage. Each of these categories is described below:

- **Office:** Space used for administrative functions. This space would include back rooms that are offices, lunchrooms, bathrooms, or any other space devoted to administrative functions.
- **Customer Interface:** Space used to serve customers including counter space, payment stations, waiting areas, and any other area used for serving customers.
- **Loading:** Space devoted primarily to loading trucks.
- **Sorting:** Space devoted to sorting containers into shipment bags or pallets for storage. Generally, this space is located behind the service counters and includes area for counting and sorting containers to prepare them for shipping.
- **Storage:** Space primarily used for bulk storage of filled shipment bags or pallets until they can be loaded onto trucks.

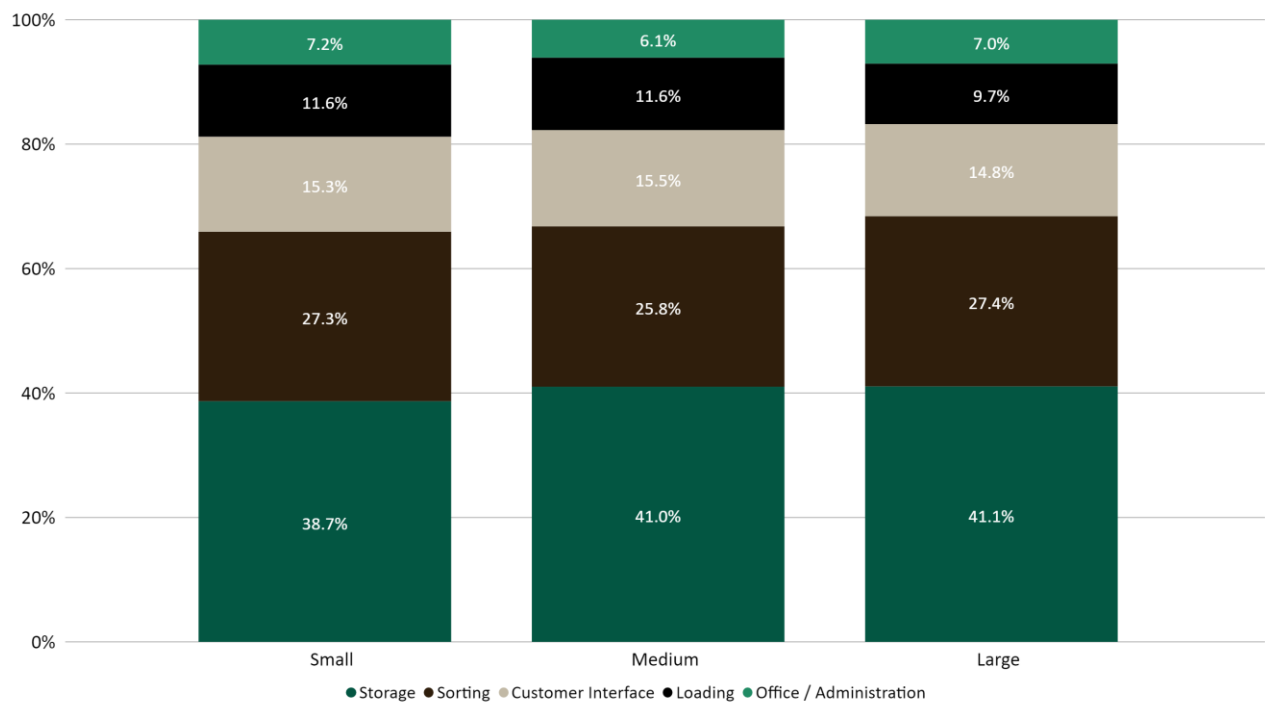
Table 39 below summarizes the system allocations to these categories.

**TABLE 39 – CLASSIFICATION OF BUILDING SPACE**

Category	Total Square Footage	Percentage
Office	58,834	6.9 %
Customer Interface	129,776	15.3 %
Loading	89,691	10.6 %
Sorting	225,989	26.6 %
Storage	345,719	40.7 %
<b>Total</b>	<b>850,009</b>	<b>100.0 %</b>

Figure 20 below shows the average building space allocation percentage for each depot size classification. These allocations are relatively consistent across depot size classification.

**FIGURE 20 – CLASSIFICATION OF BUILDING SPACE BY SIZE CLASSIFICATION**



### 7.3.2 Determination of the Building Square Footage Cap

Using the methodology outlined in the BCMB’s Depot Building Size Cap Policy, we have analyzed building volume groups to be used. We have considered the percent change in volume and efficiency between members of each group, the number of depots in each group, and the total volume processed in each group to create four building volume groups with the following volume ranges:

- Fewer than 2,999,999 containers
- 3,000,000 – 6,999,999 containers
- 7,000,000 – 24,999,999 containers
- Greater than 25,000,000 containers

The reduction in the number of volume groups as compared with those recommended by the policy is due to the minimal (less than 100 square feet) differences in square footage cap suggested when using seven volume clusters.

Table 40 below summarizes the size caps used in the Total System.

**TABLE 40 – TOTAL SYSTEM BUILDING SQUARE FOOTAGE CAP CALCULATION**

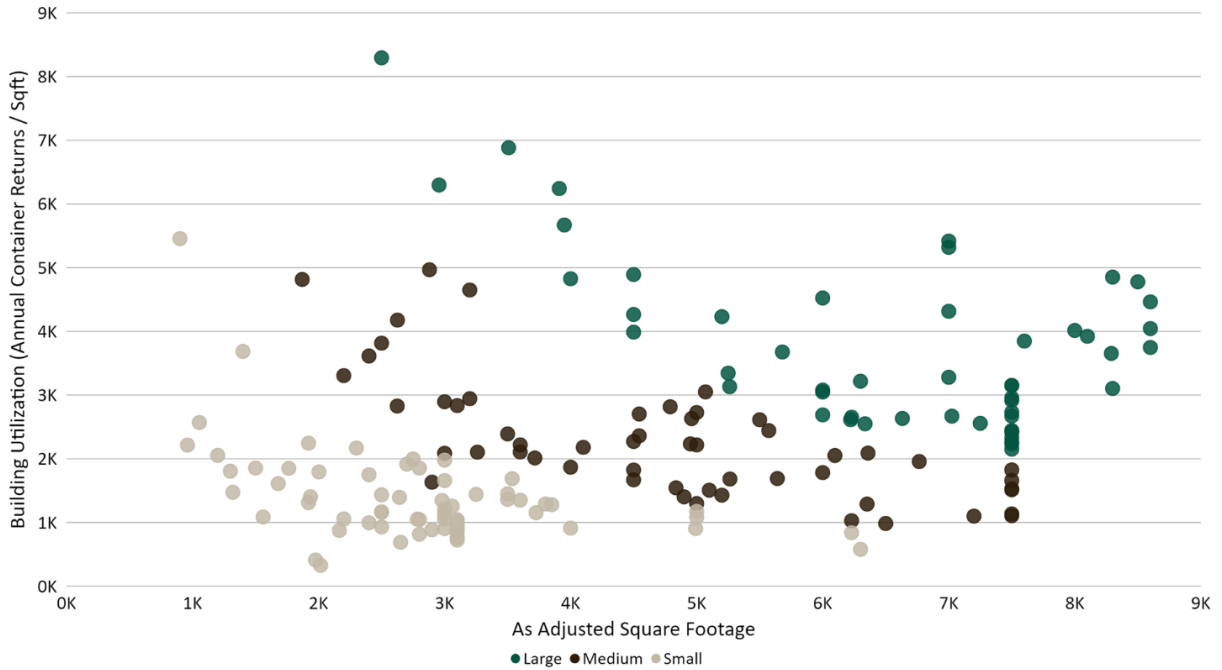
Building Volume Group	Volume Range		Number of Depots	Total Reported Square Feet	Maximum Square Feet Per Depot	Adjusted Square Feet	% Reduction
1	0	2,999,999	76	159,653	3,100	154,633	3.1 %
2	3,000,000	6,999,999	45	151,071	6,300	147,933	2.1 %
3	7,000,000	24,999,999	84	471,313	7,500	437,888	7.1 %
4	25,000,000	+	14	102,498	8,600	99,502	2.9 %
<b>Total</b>	<b>0</b>	<b>25,000,000+</b>	<b>219</b>	<b>884,535</b>	<b>8,600</b>	<b>839,956</b>	<b>5.0 %</b>

As seen in Table 40 above, there is variability in the number of depots in each building volume group; however, the depots in these groups processed containers with similar efficiency and in that respect were similarly sized.

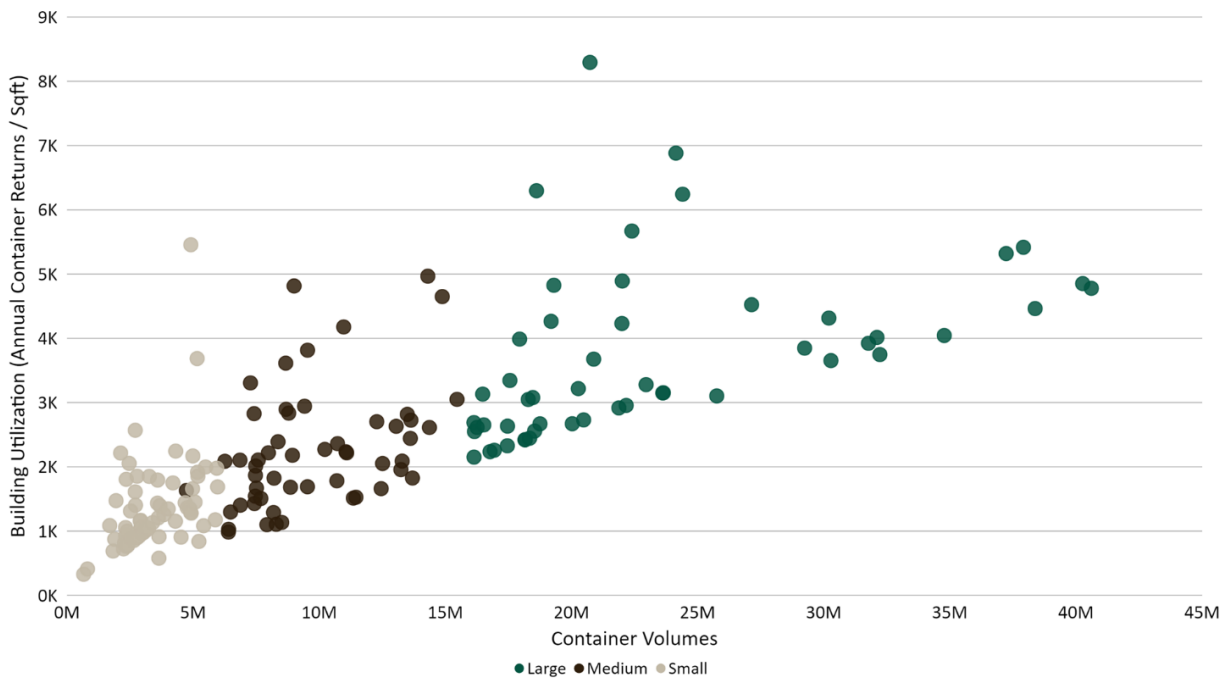
Overall, the application of the cap removes a total of 5.0% of total reported square footage (or 45,000 square feet) from the system. We believe this is reasonable as only 26 depots are affected by the cap. Of these, 14 depots are more than 10% larger than the cap for their volume group.

The figures below show building utilization, calculated as containers per square foot, against both total square footage and container volume.

**FIGURE 21 – BUILDING UTILIZATION PER SQUARE FOOT**



**FIGURE 22 – BUILDING UTILIZATION PER CONTAINER VOLUME**

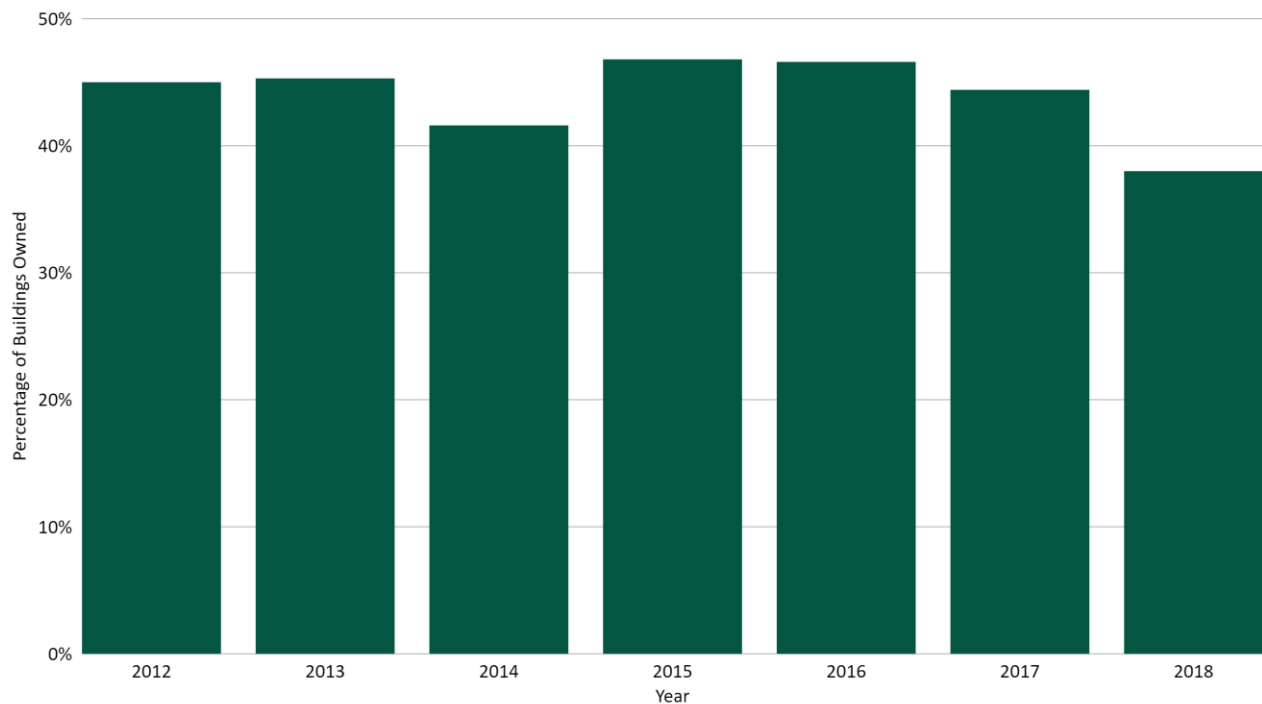


The figures on the previous page demonstrate that there is high variability in the number of containers processed per square foot of space used by the depot. Some of this variability may be due to the limited number of available buildings suitable for running a depot. While it does seem that larger depots use more space than smaller depots, there are also some large and medium depots that use square footage more efficiently.

Depots have the option to lease or own the building that they operate out of. In the UCA, depots identify which of these categories they fall into. Over time, we have seen a decrease in the number of owned buildings in the system. This could be due, in part, to depots transferring ownership of their building to a related business. In conversations with depots over the last year, several depots discussed implementing this process for tax planning purposes. As we do not collect detailed information on leases (except anecdotally), we cannot provide the number of third-party or related-party leases that are being utilized in the system.

Figure 23 below shows the percentage of depots that have owned their building over the past seven years.

**FIGURE 23 – PERCENTAGE OF DEPOT BUILDINGS OWNED BY DEPOT OWNER**



### 7.3.3 Building Costs

During the UCA review process, depot reported costs were verified with tax documents and financial statements as detailed in Section 4.3. During this process, none of the costs were altered in the As Accepted Data. Table 37 – Building Cost Summary in the beginning of this section summarizes the changes between the Reported/Accepted Data and the Adjusted Data.

As shown in Table 37 at the beginning of this section, costs were reduced by \$1.1 million through the process outlined in the Depot Building Deemed Lease Rate Policy and detailed below. This change is likely due to several factors including the following:

- **Non-third-party leases:** As mentioned earlier, there are depots in the system that rent their facilities from related parties for tax planning purposes. As such, some portion of rental costs may include profit sharing between these businesses.
- **Depots with space greater than needed:** As seen in Figure 21 – Building Utilization Per Square Foot and Figure 22 – Building Utilization Per Container Volume, there is a high degree of variability in the number of containers processed per square foot of available space. In some cases, depots with limited space have found ways to run their business effectively. These strategies could be used to decrease the space used by depots with lower utilization rates.

Based on the analysis presented in the CBRE Real Estate Expert Report<sup>18</sup>, the rates suggested are reasonable. The total As Adjusted dollars shown in Table 37 – Building Cost Summary at the beginning of this section were calculated using rates provided by CBRE. These rates are shown below in Table 41.

**TABLE 41 – CBRE MARKET RENT AND EXPENSE SUMMARY**

	2015 NNN Rent	2016 NNN Rent	2017 NNN Rent	2018 NNN Rent	2019 NNN Rent	2019 Property taxes	2019 Utilities	2019 Insurance	2019 Maintenance	2019 Use Costs
Calgary Retail	\$ 26.25	\$ 26.50	\$ 27.00	\$ 27.50	\$ 27.75	\$ 8.00	\$ 2.75	\$ 0.30	\$ 3.75	\$ 14.80
Calgary Commercial	\$ 12.25	\$ 12.25	\$ 12.50	\$ 12.75	\$ 13.00	\$ 4.15	\$ 2.50	\$ 0.25	\$ 3.00	\$ 9.90
Edmonton Retail	\$ 18.50	\$ 18.25	\$ 18.00	\$ 18.25	\$ 18.50	\$ 5.25	\$ 2.75	\$ 0.30	\$ 3.75	\$ 12.05
Edmonton Commercial	\$ 15.00	\$ 14.50	\$ 14.50	\$ 14.75	\$ 15.00	\$ 3.50	\$ 2.00	\$ 0.25	\$ 2.50	\$ 8.25
Edmonton Industrial	\$ 10.00	\$ 9.75	\$ 9.75	\$ 9.50	\$ 9.75	\$ 2.75	\$ 1.75	\$ 0.20	\$ 1.50	\$ 6.20
Bedroom City	\$ 21.75	\$ 21.50	\$ 23.00	\$ 25.00	\$ 27.00	\$ 2.00	\$ 1.75	\$ 0.20	\$ 1.65	\$ 5.60
North City	\$ 14.00	\$ 14.00	\$ 14.50	\$ 15.25	\$ 15.50	\$ 2.35	\$ 2.75	\$ 0.20	\$ 2.50	\$ 7.80
South City	\$ 14.75	\$ 14.75	\$ 14.75	\$ 15.00	\$ 15.25	\$ 2.00	\$ 2.15	\$ 0.20	\$ 2.50	\$ 6.85
Rural North Town	\$ 10.75	\$ 10.75	\$ 11.00	\$ 11.50	\$ 11.75	\$ 1.50	\$ 2.15	\$ 0.20	\$ 1.75	\$ 5.60
Rural South Town	\$ 11.00	\$ 11.00	\$ 11.50	\$ 12.25	\$ 13.00	\$ 1.25	\$ 2.25	\$ 0.20	\$ 1.50	\$ 5.20
Rural Village	\$ 10.00	\$ 10.00	\$ 10.25	\$ 10.50	\$ 10.75	\$ 1.00	\$ 2.00	\$ 0.20	\$ 1.00	\$ 4.20
Rural Hamlet	\$ 9.00	\$ 9.00	\$ 9.25	\$ 9.50	\$ 9.75	\$ 2.00	\$ 2.00	\$ 0.15	\$ 1.00	\$ 5.15

\*All values in \$/SF per annum

\*\*All values as of July 1 of each year

<sup>18</sup> HCR document 76 - 2019.08.13.Real.Estate.Final.Report.CBRE.

Using the 2019 Triple Net (NNN) Rent, the 2019 Total Use Costs columns, and the Real Estate Expert depot classification for building group, we have produced Table 42 below which summarizes adjusted values for average square footage, lease costs, use costs, and dollars per square foot by building group classification.

**TABLE 42 – AS ADJUSTED BUILDING COSTS**

	Number of Depots Reported	Average Square Footage	Average Adjusted Lease Costs	Average Adjusted Use Cost	Average Adjusted Total Cost	Average Adjusted \$/Square Foot
Calgary Retail	10	6,335	\$ 175,788	\$ 93,754	\$ 269,541	\$ 42.55
Calgary Commercial	15	6,048	\$ 78,625	\$ 59,876	\$ 138,501	\$ 22.90
Edmonton Retail	3	6,567	\$ 121,483	\$ 79,128	\$ 200,612	\$ 30.55
Edmonton Commercial	13	6,332	\$ 94,982	\$ 52,240	\$ 147,223	\$ 23.25
Edmonton Industrial	5	5,753	\$ 56,094	\$ 35,670	\$ 91,764	\$ 15.95
Bedroom City	13	5,253	\$ 141,843	\$ 29,419	\$ 171,263	\$ 32.60
North City	5	6,950	\$ 107,722	\$ 54,208	\$ 161,930	\$ 23.30
South City	14	5,457	\$ 83,213	\$ 37,378	\$ 120,590	\$ 22.10
Rural North Town	28	3,717	\$ 43,669	\$ 20,812	\$ 64,481	\$ 17.35
Rural South Town	43	3,556	\$ 46,222	\$ 18,489	\$ 64,711	\$ 18.20
Rural Village	21	2,624	\$ 28,205	\$ 11,020	\$ 39,225	\$ 14.95
Rural Hamlet	2	1,468	\$ 14,313	\$ 7,560	\$ 21,873	\$ 14.90
<b>Study System</b>	<b>172</b>	<b>4,531</b>	<b>\$ 70,905</b>	<b>\$ 33,323</b>	<b>\$ 104,229</b>	<b>\$ 23.01</b>

According to CBRE’s report, the average market cost of a building, including use costs, is \$23.01 per square foot. When these rates are applied to the Total System of depots, because of the different building group classification mix, the average system rate is \$22.60 per square foot.<sup>19</sup>

The building costs provided by CBRE and applied to the capped square footage reasonably reflect the costs of the system and adhere to BCMB policies. These costs should be included in the Revenue Requirement.

## 7.4 Vehicle and Equipment Costs

Vehicle and equipment costs are reported by depots on UCA Tables 6a Owned Vehicle/Equipment Costs and 6b Leased Vehicle/Equipment Costs. In 2018 these costs totalled \$7.2 million, making it the smallest cost category for depots. Table 43 shows the As Reported, As Accepted, and As Adjusted total cost for vehicles and equipment. The changes between these data types are discussed in more detail in the subsections below.

**TABLE 43 – VEHICLE AND EQUIPMENT SUMMARY**

	As Reported	As Accepted	As Adjusted
Small	\$ 1,260,976	\$ 1,252,137	\$ 1,128,884
Medium	\$ 1,827,426	\$ 1,847,728	\$ 1,756,578
Large	\$ 4,493,267	\$ 4,351,267	\$ 4,322,661
<b>Total</b>	<b>\$ 7,581,669</b>	<b>\$ 7,451,132</b>	<b>\$ 7,208,123</b>

<sup>19</sup> See Table 67 – Total Building Costs for more detail

Table 44 below summarizes the costs by depot size classification.

**TABLE 44 – AS ADJUSTED VEHICLE AND EQUIPMENT COST SUMMARY**

	Small	Medium	Large	Total
<b>Equipment</b>				
CCA	\$ 326,928	\$ 198,596	\$ 642,539	\$ 1,168,062
Lease Payments	\$ 23,634	\$ 503,063	\$ 2,183,559	\$ 2,710,256
Operating Costs	\$ 178,141	\$ 149,244	\$ 551,285	\$ 878,670
<b>Total</b>	<b>\$ 528,703</b>	<b>\$ 850,903</b>	<b>\$ 3,377,383</b>	<b>\$ 4,756,988</b>
<b>Vehicles</b>				
CCA	\$ 125,244	\$ 126,125	\$ 117,661	\$ 369,031
Lease Payments	\$ 66,845	\$ 244,101	\$ 330,282	\$ 641,228
Operating Costs	\$ 408,092	\$ 535,449	\$ 497,335	\$ 1,440,876
<b>Total</b>	<b>\$ 600,181</b>	<b>\$ 905,676</b>	<b>\$ 945,278</b>	<b>\$ 2,451,135</b>
<b>Equipment and Vehicle Total</b>	<b>\$ 1,128,884</b>	<b>\$ 1,756,578</b>	<b>\$ 4,322,661</b>	<b>\$ 7,208,123</b>

Owned assets are classified by CCA class in Table 45 below.

**TABLE 45 – AS ADJUSTED OWNED ASSET CCA CLASS CAPITAL COST ALLOWANCE BY DEPOT SIZE CLASSIFICATION**

CCA Class	Small	Medium	Large	Total Annual CCA Cost
1 - Buildings (bought after 1987)	\$ 47,630	\$ 1,173	\$ 0	\$ 48,803
6 - Storage Sheds	\$ 2,710	\$ 1,742	\$ 0	\$ 4,452
8 - Equipment	\$ 120,657	\$ 135,408	\$ 228,073	\$ 484,138
10 - Computer Hardware	\$ 14,891	\$ 17,557	\$ 13,879	\$ 46,327
10 - Motor Vehicles	\$ 125,244	\$ 122,001	\$ 110,838	\$ 358,083
10.1 - Passenger Vehicles	\$ 0	\$ 4,125	\$ 6,823	\$ 10,948
13 - Leasehold Interest	\$ 56,807	\$ 0	\$ 0	\$ 56,807
14 - Patents	\$ 0	\$ 0	\$ 74,591	\$ 74,591
14.1 - Goodwill	\$ 51,269	\$ 9,766	\$ 268,365	\$ 329,400
17 - Parking Lots	\$ 0	\$ 82	\$ 857	\$ 939
29 - Machinery and Equipment	\$ 3,581	\$ 0	\$ 0	\$ 3,581
43 - Machinery and Equipment	\$ 2,268	\$ 0	\$ 0	\$ 2,268
45 - Electronic Equipment	\$ 51	\$ 1,238	\$ 9,107	\$ 10,396
50 - Computer Hardware	\$ 21,210	\$ 31,024	\$ 39,375	\$ 91,610
99 - Other	\$ 5,853	\$ 604	\$ 8,291	\$ 14,748
<b>Total</b>	<b>\$ 452,172</b>	<b>\$ 324,721</b>	<b>\$ 760,200</b>	<b>\$ 1,537,093</b>

Leased assets are classified by the DCA into one of the following categories: auto, building, office, or sorting/loading/cardboard. Table 46 below shows the breakdown of lease cost in these categories by depot size classification.

**TABLE 46 – AS ADJUSTED LEASED ASSET LEASE COST CATEGORY**

	Auto	Building	Office	Sorting / Loading / Cardboard	Total
Small	\$ 61,433	\$ 0	\$ 918	\$ 22,717	\$ 85,067
Medium	\$ 222,436	\$ 17,394	\$ 61,143	\$ 479,526	\$ 780,499
Large	\$ 300,861	\$ 70,746	\$ 135,880	\$ 1,926,544	\$ 2,434,032
<b>Total</b>	<b>\$ 584,730</b>	<b>\$ 88,140</b>	<b>\$ 197,941</b>	<b>\$ 2,428,787</b>	<b>\$ 3,299,598</b>

Vehicle and equipment costs are broken down further in the sections below.

### 7.4.1 Vehicle Costs

Vehicle costs are separated into two categories, leased and owned. Depots identified leased vehicle assets by make and model, and the DCA confirmed these assets were vehicles. Owned vehicle assets were classified in any of the following CCA classes:

- 10 - Motor Vehicles;
- 10.1 - Passenger Vehicles;
- 16 - Taxis, Other Vehicles;
- 43.1 - Electrical Vehicle Charging Stations (supplying more than 10 kilowatts but less than 90 kilowatts of continuous power); and
- 43.2 - Electrical Vehicle Charging Stations (supplying 90 kilowatts or more of continuous power).

Table 47 below summarizes the aggregated leased and owned vehicle costs for depots in As Reported, As Accepted, and As Adjusted Data.

**TABLE 47 – VEHICLE COST SUMMARY**

	As Reported	As Accepted	As Adjusted
Small	\$ 745,918	\$ 723,307	\$ 600,181
Medium	\$ 1,003,951	\$ 996,953	\$ 905,676
Large	\$ 999,437	\$ 992,840	\$ 945,278
<b>Total</b>	<b>\$ 2,749,306</b>	<b>\$ 2,713,100</b>	<b>\$ 2,451,135</b>

Changes between As Reported and As Accepted Data are due to the removal of vehicles used entirely for personal use (i.e. vehicles not used for business or offsite collections). The Stub UCA Adjustment is applied to the As Accepted Data. The portion of vehicle costs associated with personal use are then removed (i.e. the portion of costs related to business or offsite collections are carried forward to As Adjusted Data), resulting in As Adjusted Data.

This year, depots reported a total of 228 vehicles. During the UCA review process, the DCA collected information on the use of vehicles using the following three categories:

- **Personal Use:** Any driving by an employee for purposes not related to depot business.
- **Business Use:** Any driving by an employee for purposes related to depot business and unrelated to offsite collection use.
- **Offsite Collection Use:** Any driving by an employee for purposes related to offsite collection of containers. See Section 8 Offsite Collections for further details.

Table 48 below summarizes the total As Accepted cost in each of these categories.

**TABLE 48 – AS ACCEPTED VEHICLE COST BY USE TYPE**

	Personal	Business	Offsite Collections	Total Costs
Small	\$ 123,126	\$ 302,303	\$ 297,878	\$ 723,307
Medium	\$ 76,612	\$ 558,597	\$ 361,744	\$ 996,953
Large	\$ 65,459	\$ 515,258	\$ 412,123	\$ 992,840
<b>Total</b>	<b>\$ 265,196</b>	<b>\$ 1,376,157</b>	<b>\$ 1,071,746</b>	<b>\$ 2,713,100</b>

As shown in the table above, 10% of the cost reported was allocated by depots and the DCA to personal use, 51% was allocated to business use, and the remaining 39% to offsite collections. The allocation depots provided broke down to a total of 9% personal, 55% business, and 36% offsite collections. The DCA made changes to allocations provided by depots when the type of vehicle reported would not typically be used for the indicated activity (e.g. depots reporting BMWs for offsite collections).

All the decrease between As Accepted and As Adjusted Data was due to the removal of vehicle costs for personal use. We also see a slight increase in costs associated with business use due to the escalation of Stub UCAs. Table 49 below shows the total As Adjusted vehicle cost.

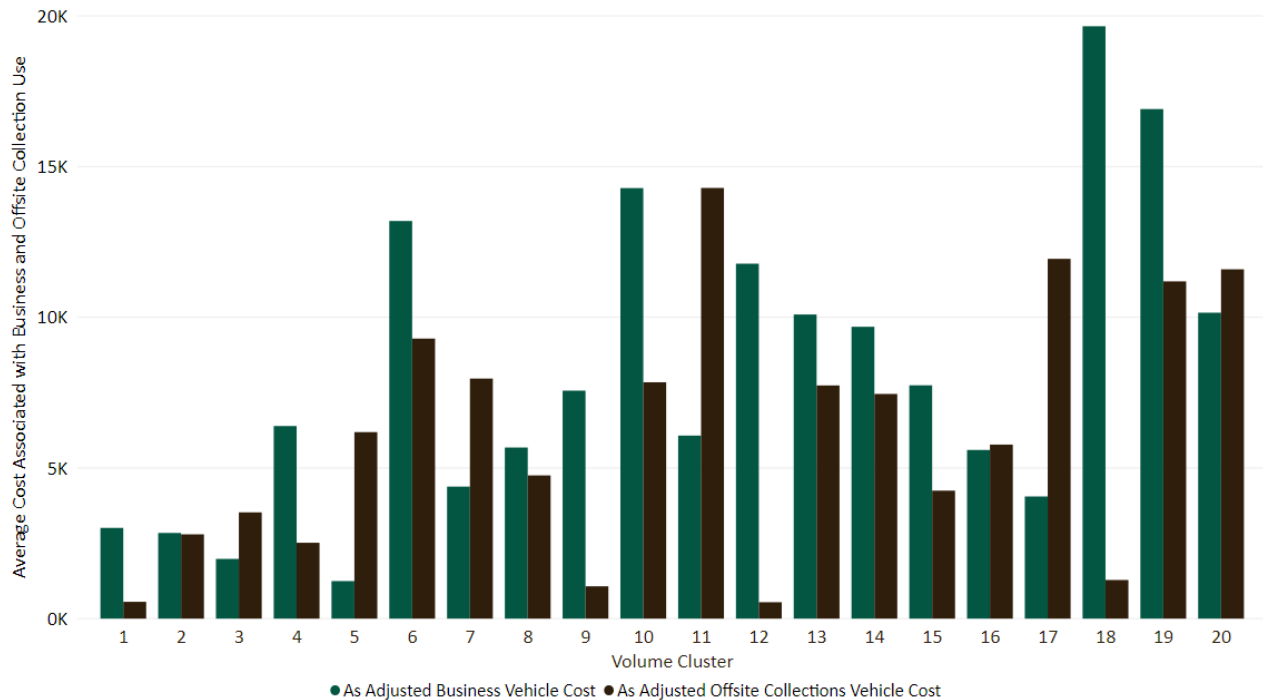
**TABLE 49 – AS ADJUSTED VEHICLE COST BY USE TYPE**

	Personal	Business	Offsite Collection	Total
Small	\$ 0	\$ 302,303	\$ 297,878	\$ 600,181
Medium	\$ 0	\$ 554,930	\$ 350,745	\$ 905,676
Large	\$ 0	\$ 538,155	\$ 407,123	\$ 945,278
<b>Total</b>	<b>\$ 0</b>	<b>\$ 1,395,388</b>	<b>\$ 1,055,747</b>	<b>\$ 2,451,135</b>

All costs allocated to offsite collections in Table 49 above have been included in the offsite collection analysis performed in conjunction with the BCMB’s Offsite Collections Cap Policy. See Section 8 – Offsite Collections for further details.

Figure 24 below shows the average As Adjusted vehicle cost for the business and offsite collections use categories.

**FIGURE 24 – AS ADJUSTED VEHICLE COST BY USE CATEGORY AND VOLUME CLUSTER**



Vehicle costs are classified by depot into seven categories. Table 50 below summarizes these categories, showing the total vehicle costs associated with each size classification. Note that “other” vehicle costs include repairs, travel, delivery, parking, propane fuel, and parts purchased for vehicles.

**TABLE 50 – AS ADJUSTED VEHICLE COSTS**

	Capital Cost Allowance	Loan Payments	Lease Payments	Maintenance	Gas or Mileage	Insurance & Registration	Other Costs	Total Costs
Small	\$ 125,244	\$ 1,502	\$ 66,845	\$ 107,990	\$ 184,588	\$ 94,259	\$ 19,753	\$ 600,181
Medium	\$ 126,125	\$ 829	\$ 244,101	\$ 176,649	\$ 240,208	\$ 89,731	\$ 28,032	\$ 905,676
Large	\$ 117,661	\$ 112	\$ 330,282	\$ 133,978	\$ 235,736	\$ 97,115	\$ 30,393	\$ 945,278
<b>Total</b>	<b>\$ 369,031</b>	<b>\$ 2,442</b>	<b>\$ 641,228</b>	<b>\$ 418,618</b>	<b>\$ 660,533</b>	<b>\$ 281,105</b>	<b>\$ 78,178</b>	<b>\$ 2,451,135</b>

Total vehicle cost by depot is shown in Figure 25 below.

**FIGURE 25 – AS ADJUSTED VEHICLE COSTS BY DEPOT**

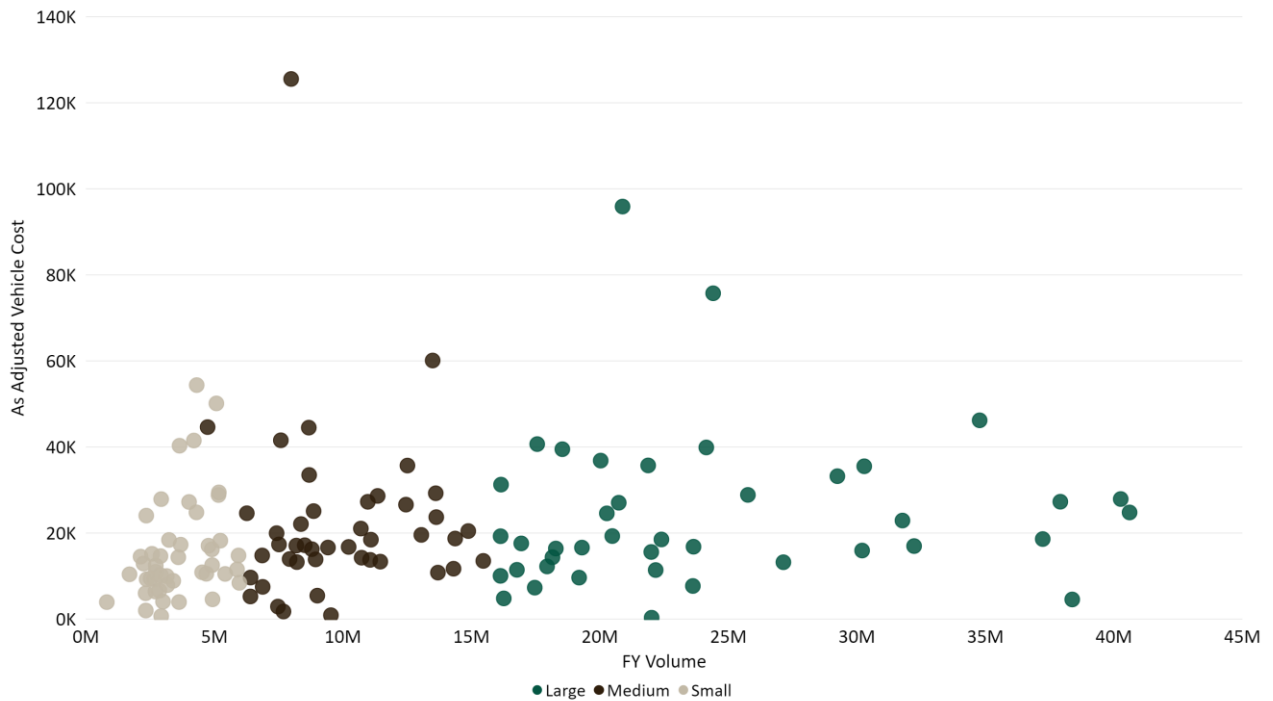


Figure 25 above shows the variability in total vehicle cost by depot. There are a number of depots that report no vehicle cost as well as a number of depots that report very high vehicle costs.

Vehicle capital cost allowance (CCA) is broken down by CCA class in Table 51 below.

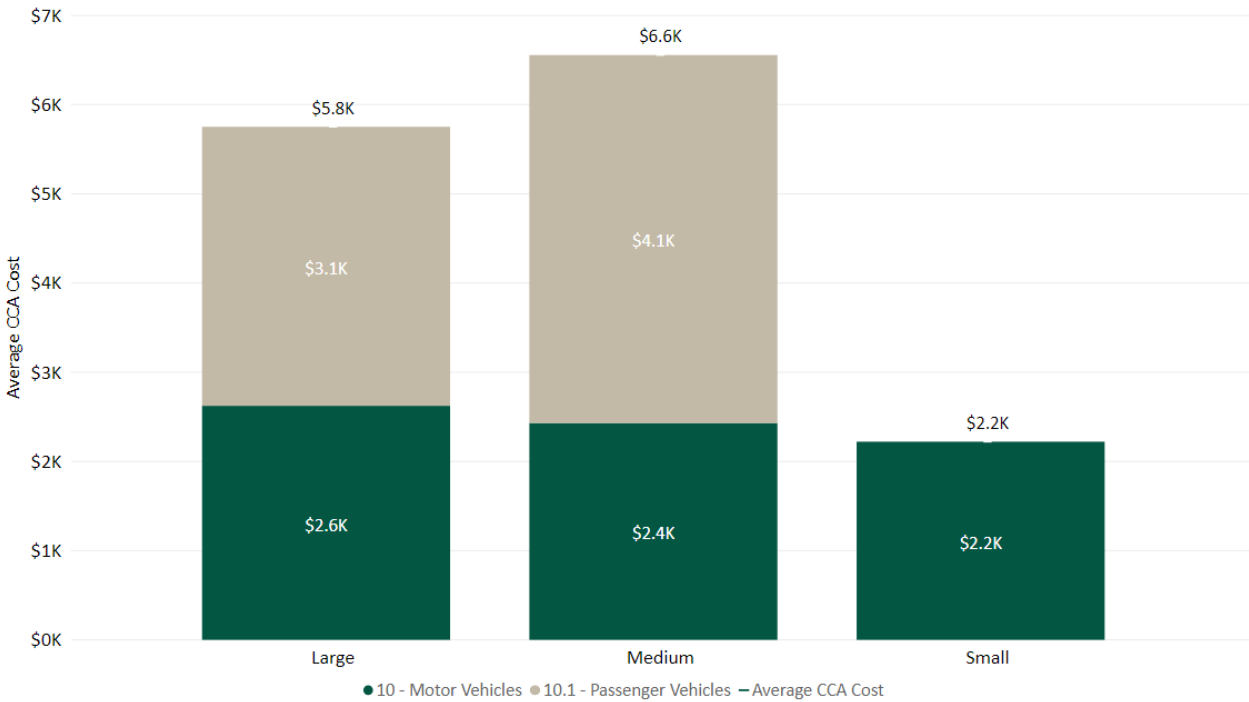
**TABLE 51 – AS ACCEPTED VEHICLE CAPITAL COST ALLOWANCE BY USE TYPE**

	Personal Use	Business Use	Offsite Collections	Total
10 - Motor Vehicles	\$ 0	\$ 213,767	\$ 144,316	\$ 358,083
10.1 - Passenger Vehicles	\$ 0	\$ 10,948	\$ 0	\$ 10,948
<b>Total</b>	<b>\$ 0</b>	<b>\$ 224,715</b>	<b>\$ 144,316</b>	<b>\$ 369,031</b>

In 2018, there were no vehicles reported in CCA classes 16, 43.1, or 43.2 so these categories have not been included. In addition, all passenger vehicles were used for personal or business use.

Figure 26 below shows the average vehicle cost grouped by CCA class.

**FIGURE 26 – AS ADJUSTED AVERAGE VEHICLE COST BY CCA CLASS**



This figure shows that small depots used vehicles under CCA class 10 only, while medium and large depots used vehicles classified as both CCA class 10 and 10.1. This may indicate that depots of all sizes are purchasing vehicles that can be used for multiple purposes (i.e. both business and offsite collection use), while a few medium and large depots have enough business-related activities to have use for passenger vehicles.

In moving from As Accepted to As Adjusted Data, the cost associated with personal use are removed, while costs associated with business and offsite collection use are consistent between the two data types. Table 52 and Table 53 break down the As Accepted and As Adjusted vehicle lease costs by use type.

**TABLE 52 – AS ACCEPTED VEHICLE LEASE COSTS BY USE TYPE**

	Personal	Business	Offsite Collection	Total
Small	\$ 6,143	\$ 16,041	\$ 39,249	\$ 61,433
Medium	\$ 19,772	\$ 77,853	\$ 124,811	\$ 222,436
Large	\$ 17,550	\$ 137,895	\$ 145,416	\$ 300,861
<b>Total</b>	<b>\$ 43,466</b>	<b>\$ 231,788</b>	<b>\$ 309,476</b>	<b>\$ 584,730</b>

**TABLE 53 – AS ADJUSTED VEHICLE LEASE COSTS BY USE TYPE**

	Personal	Business	Offsite Collection	Total
Small	\$ 0	\$ 16,041	\$ 39,249	\$ 55,289
Medium	\$ 0	\$ 77,853	\$ 124,811	\$ 202,664
Large	\$ 0	\$ 137,895	\$ 145,416	\$ 283,311
<b>Total</b>	<b>\$ 0</b>	<b>\$ 231,788</b>	<b>\$ 309,476</b>	<b>\$ 541,264</b>

With the Stub UCA Adjustment and other adjustments made to remove personal vehicle costs, the As Adjusted vehicle costs fully represent the Study System and are included in the determination of the revenue requirement (subject to the offsite collections cap - see Section 8 Offsite Collections for further details).

### 7.4.2 Equipment Costs

Owned equipment costs are those costs related to assets classified in any of the following CCA classes:

- 0 - No CCA
- 6 - Storage Sheds
- 8 - Equipment
- 10 - Computer Hardware
- 12 - Tools
- 17 - Parking Lots
- 29 - Machinery and Equipment
- 38 - Power-Operated Moveable Equipment
- 43 - Machinery and Equipment
- 46 - Data Network Equipment
- 53 - Machinery and Equipment
- 99 – Other

Leased equipment costs are assets that are classified under one of the following classifications: building, office, or sorting / loading / cardboard. Descriptions of these items included security systems, garbage bins, computers, fax machines, phones, forklifts, POR equipment, lawn mowers, snow blowers, automation equipment, bailers, and conveyors. Table 54 below shows the As Reported, As Accepted, and As Adjusted Data for equipment cost.

**TABLE 54 – EQUIPMENT COST SUMMARY BY DEPOT SIZE CLASSIFICATION**

	As Reported	As Accepted	As Adjusted
Small	\$ 515,058	\$ 528,830	\$ 528,703
Medium	\$ 823,475	\$ 850,775	\$ 850,903
Large	\$ 3,493,830	\$ 3,358,427	\$ 3,377,383
<b>Total</b>	<b>\$ 4,832,363</b>	<b>\$ 4,738,032</b>	<b>\$ 4,756,988</b>

The differences between As Reported and As Accepted Data are the removal of pieces of equipment reported by multi-businesses that were unrelated to depot business.

Equipment costs are broken down into four categories as shown in Table 55 below. Other equipment costs include cleaning, insurance, fuel, and registration.

**TABLE 55 – AS ADJUSTED EQUIPMENT COSTS BY DEPOT SIZE CLASSIFICATION**

	Amortization Expense	Lease Payments	Maintenance	Other Costs	Total
Small	\$ 326,928	\$ 23,634	\$ 82,882	\$ 95,259	\$ 528,703
Medium	\$ 198,596	\$ 503,063	\$ 102,923	\$ 46,321	\$ 850,903
Large	\$ 642,539	\$ 2,183,559	\$ 400,838	\$ 150,447	\$ 3,377,383
<b>Total</b>	<b>\$ 1,168,062</b>	<b>\$ 2,710,256</b>	<b>\$ 586,643</b>	<b>\$ 292,027</b>	<b>\$ 4,756,988</b>

Figure 27 shows the As Adjusted equipment costs by depot. Figure 27 shows that equipment costs generally rise with depot size, however there is significant variation in these costs. As shown in this figure, there is one outlier large depot with significantly higher equipment costs than other depots. This depot utilizes multiple pieces of sorting and compacting equipment which have significant cost associated with their use. In reviewing the costs reported by this depot, we identified that the depot has a significantly lower cost per container associated with labour costs than other depots of a similar size. This depot also has a higher cost per container as shown in the figure below.

**FIGURE 27 – AS ADJUSTED EQUIPMENT COSTS BY DEPOT**

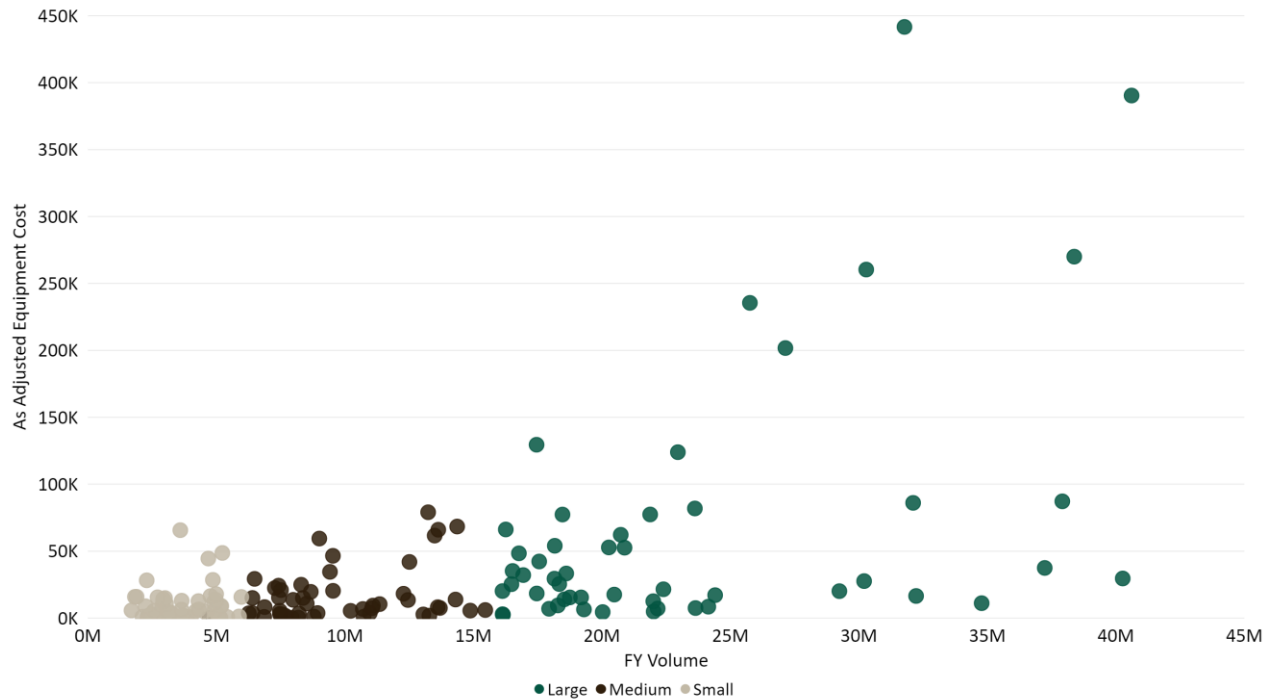
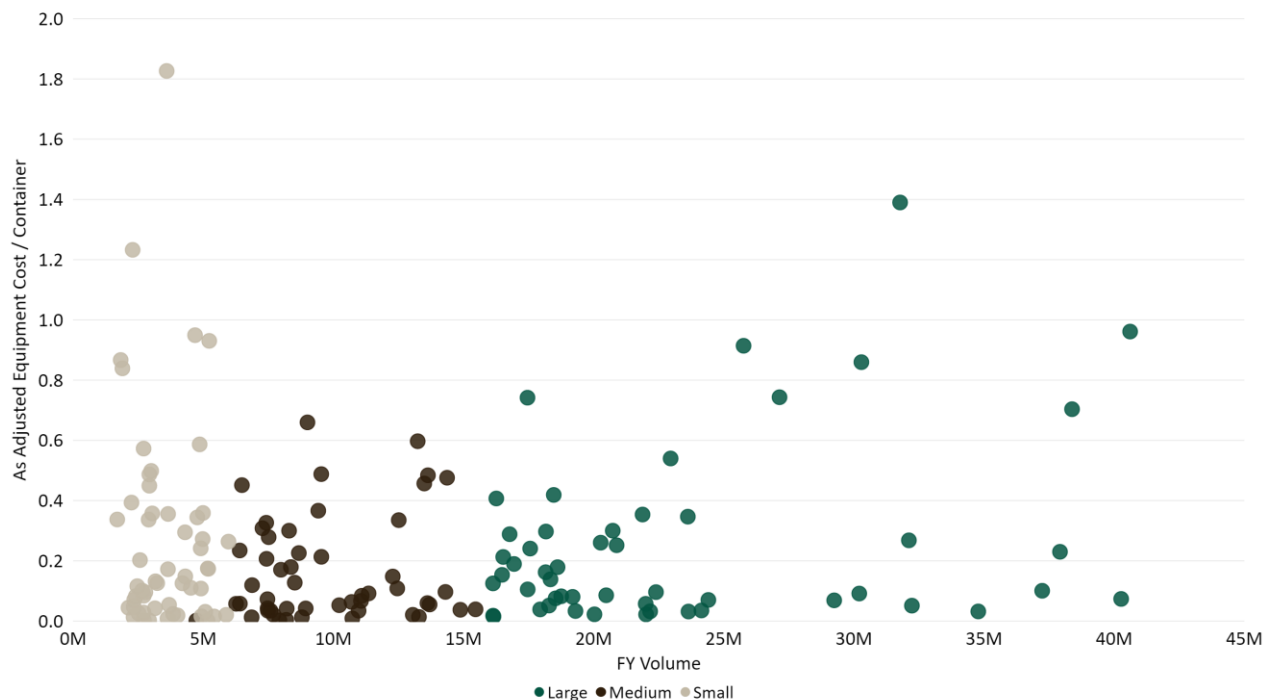


Figure 28 below shows the equipment cost per container, which also has significant variation.

**FIGURE 28 – AS ADJUSTED EQUIPMENT COST PER CONTAINER**



After reviewing costs provided by depots and applying the Stub UCA Adjustment, further adjustments are not required, and the total As Adjusted equipment costs should be included in the determination of the revenue requirement.

## 7.5 Overhead Costs

Overhead costs are reported on UCA Table 7. These costs include office costs, supply costs, and other costs related to running a depot that do not fall under any of the categories described above. Table 56 below summarizes the total overhead costs for As Reported, As Accepted, and As Adjusted Data.

**TABLE 56 – OVERHEAD COSTS SUMMARY**

	As Reported	As Accepted	As Adjusted
<b>Overhead Costs</b>	\$ 11,045,476	\$ 11,736,261	\$ 11,653,596
<b>Average Depot Cost</b>	\$ 64,218	\$ 68,234	\$ 67,753
<b>Total Cost (¢) / Container</b>	0.57	0.60	0.60

As shown in Table 56 above, there is a difference of \$690,785 between the As Reported and As Accepted overhead costs. This increase is due to the addition of \$763,971 in BCMB and ABDA fees that depots had originally reported as Cost of Goods Sold and the removal of expenses identified by depots as management fees in the “other costs” section of the UCA. In discussion with these depots it was identified that these management fees were profit sharing between related companies and there was no service provided; as such, they were removed.

There is also a \$82,664 net difference between the As Accepted and As Adjusted Data. A \$730,033 decrease is due to the removal of Charitable Donations, BCMB Fines / Levies, and Goodwill CCA from the Adjusted data. It has been deemed that while these costs are incurred by the depots, they should not be included in the revenue requirement for the following reasons:

- Charitable donations are deemed to be a personal or shareholder cost that should not be included in the determination of the revenue requirement.
- BCMB Fines / Levies are avoidable expenses that, if a depot is compliant with the criteria set out in the BCMB’s Depot By-law, will not be incurred.
- Goodwill CCA has been excluded. Goodwill is a value that is based on the projected future cashflows of an individual depot which is based on the revenue requirement / return margin calculated in the handling commission review. Including the associated CCA as a cost in the determination of revenue requirement / return margin can result in an inappropriate calculation of margin on the expected margin. The removal of goodwill CCA from overhead costs is consistent with the approach used in the 2013/14 and 2016/17 HCRs as well as with rate setting standard practices in the utilities sector in Alberta.

The \$730,033 decrease is offset by a \$627,488 increase to account for scheduled BCMB and ABDA fee increases in 2020. The remaining net difference (\$19,881) is due to the Stub UCA Adjustment.

Figure 29 below shows the As Adjusted average overhead costs per container for each of the size classifications. These costs are relatively consistent between large and medium depots; however, as many costs are fixed (telephone costs, internet costs, professional fees, insurance costs, etc.), smaller depots that process fewer containers are seen to incur somewhat higher costs per container.

**FIGURE 29 – OVERHEAD COST (¢) PER CONTAINER**

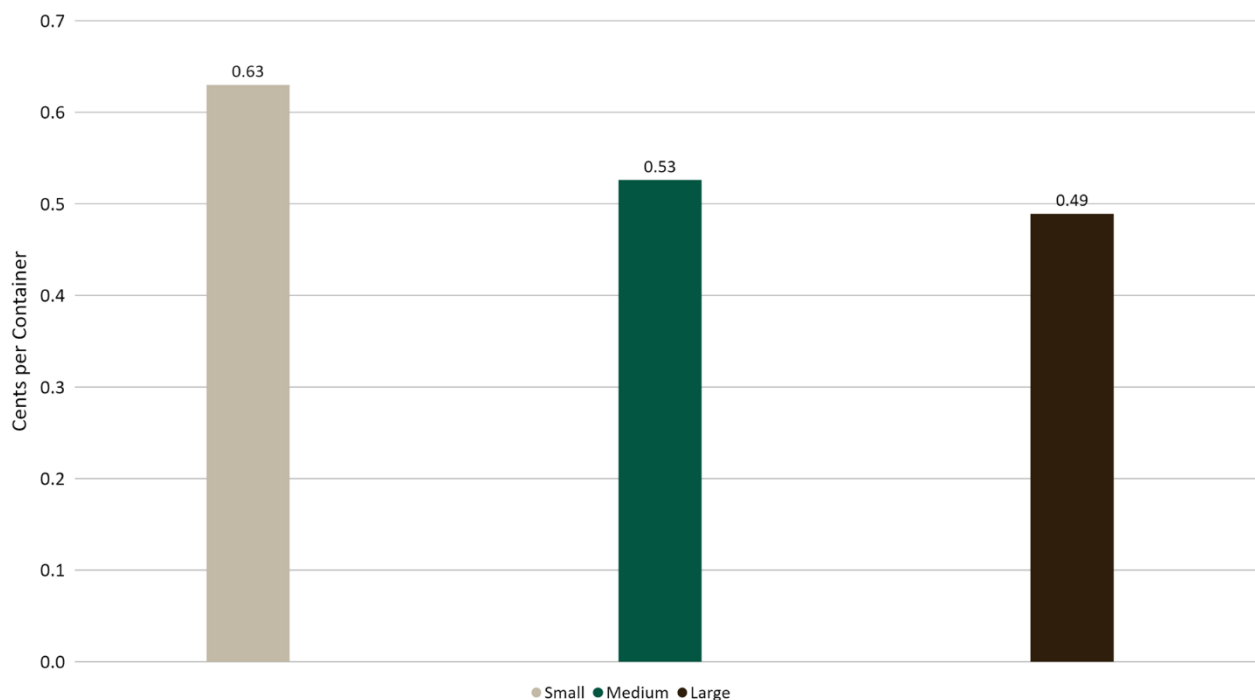


Table 57 below shows the As Adjusted total, average, and unit cost for each of the overhead cost categories by depot size classification.

**TABLE 57 – AS ADJUSTED OVERHEAD COST BY DEPOT SIZE CLASSIFICATION**

	Small			Medium			Large			All Depots
	Total Cost	Average Cost	Unit Cost (¢) / Container	Total Cost	Average Cost	Unit Cost (¢) / Container	Total Cost	Average Cost	Unit Cost (¢) / Container	Total Cost
Office Expenses	\$ 99,620	\$ 1,487	0.04	\$ 151,717	\$ 2,810	0.03	\$ 431,676	\$ 8,464	0.04	\$ 683,013
Shop Supplies	\$ 80,638	\$ 1,204	0.03	\$ 211,427	\$ 3,915	0.04	\$ 370,136	\$ 7,258	0.03	\$ 662,201
Telephone	\$ 153,354	\$ 2,289	0.07	\$ 217,012	\$ 4,019	0.04	\$ 343,152	\$ 6,728	0.03	\$ 713,518
Charitable Donations	\$ -	\$ -	0.00	\$ -	\$ -	0.00	\$ -	\$ -	0.00	\$ -
Internet	\$ 24,939	\$ 372	0.01	\$ 20,813	\$ 385	0.00	\$ 24,582	\$ 482	0.00	\$ 70,334
Bank Charges	\$ 98,588	\$ 1,471	0.04	\$ 149,495	\$ 2,768	0.03	\$ 247,788	\$ 4,859	0.02	\$ 495,871
Professional Fees	\$ 195,415	\$ 2,917	0.08	\$ 345,405	\$ 6,396	0.07	\$ 572,322	\$ 11,222	0.05	\$ 1,113,142
Training Courses	\$ 4,827	\$ 72	0.00	\$ 16,489	\$ 305	0.00	\$ 9,820	\$ 193	0.00	\$ 31,136
Marketing and Promotions	\$ 29,119	\$ 435	0.01	\$ 98,235	\$ 1,819	0.02	\$ 258,375	\$ 5,066	0.02	\$ 385,729
Advertising	\$ 60,600	\$ 904	0.03	\$ 164,073	\$ 3,038	0.03	\$ 443,847	\$ 8,703	0.04	\$ 668,520
Other Insurance	\$ 63,601	\$ 949	0.03	\$ 62,051	\$ 1,149	0.01	\$ 211,354	\$ 4,144	0.02	\$ 337,006
Municipal Taxes & License	\$ 41,300	\$ 616	0.02	\$ 51,140	\$ 947	0.01	\$ 215,609	\$ 4,228	0.02	\$ 308,049
BCMB Fees	\$ 186,858	\$ 2,789	0.08	\$ 422,512	\$ 7,824	0.08	\$ 949,785	\$ 18,623	0.08	\$ 1,559,154
BCMB Fines / Levies	\$ -	\$ -	0.00	\$ -	\$ -	0.00	\$ -	\$ -	0.00	\$ -
ABDA Fees	\$ 142,654	\$ 2,129	0.06	\$ 355,772	\$ 6,588	0.07	\$ 584,985	\$ 11,470	0.05	\$ 1,083,411
Other Office Costs	\$ 23,376	\$ 349	0.01	\$ 143,159	\$ 2,651	0.03	\$ 126,375	\$ 2,478	0.01	\$ 292,910
Non-Labour Collection	\$ -	\$ -	0.00	\$ 9,825	\$ 182	0.00	\$ 564,952	\$ 11,077	0.05	\$ 574,777
Deposit Incentives	\$ -	\$ -	0.00	\$ -	\$ -	0.00	\$ 78,525	\$ 1,540	0.01	\$ 78,525
Goodwill CCA	\$ -	\$ -	0.00	\$ -	\$ -	0.00	\$ -	\$ -	0.00	\$ -
Shrinkage	\$ 8,098	\$ 121	0.00	\$ 59,467	\$ 1,101	0.01	\$ 54,909	\$ 1,077	0.00	\$ 122,474
Other Costs	\$ 427,160	\$ 6,376	0.18	\$ 287,761	\$ 5,329	0.05	\$ 502,109	\$ 9,845	0.04	\$ 1,217,030
Table 9 Collection Costs	\$ 26,448	\$ 395	0.01	\$ 150,840	\$ 2,793	0.03	\$ 558,502	\$ 10,951	0.05	\$ 735,790
Table 9 Cash & Shrinkage	\$ 26,632	\$ 397	0.01	\$ 62,659	\$ 1,160	0.01	\$ 431,715	\$ 8,465	0.04	\$ 521,006
<b>Total</b>	<b>\$ 1,693,227</b>	<b>\$ 25,272</b>	<b>0.72</b>	<b>\$ 2,979,852</b>	<b>\$ 55,182</b>	<b>0.56</b>	<b>\$ 6,980,518</b>	<b>\$ 136,873</b>	<b>0.59</b>	<b>\$ 11,653,596</b>

Non-labour collection costs, and UCA Table 9 collection costs are all subject to the collection costs cap discussed in Section 1.6 – Collection Costs.

Figure 30 shows the total adjusted overhead cost by depot.

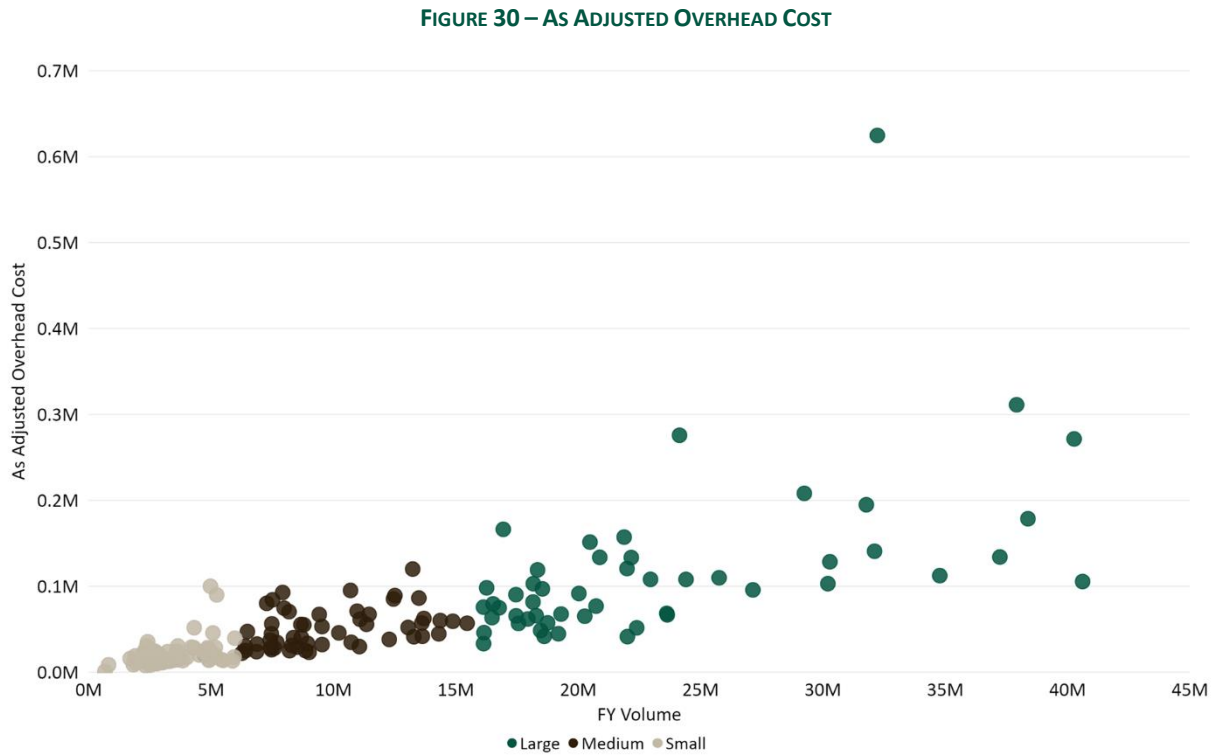
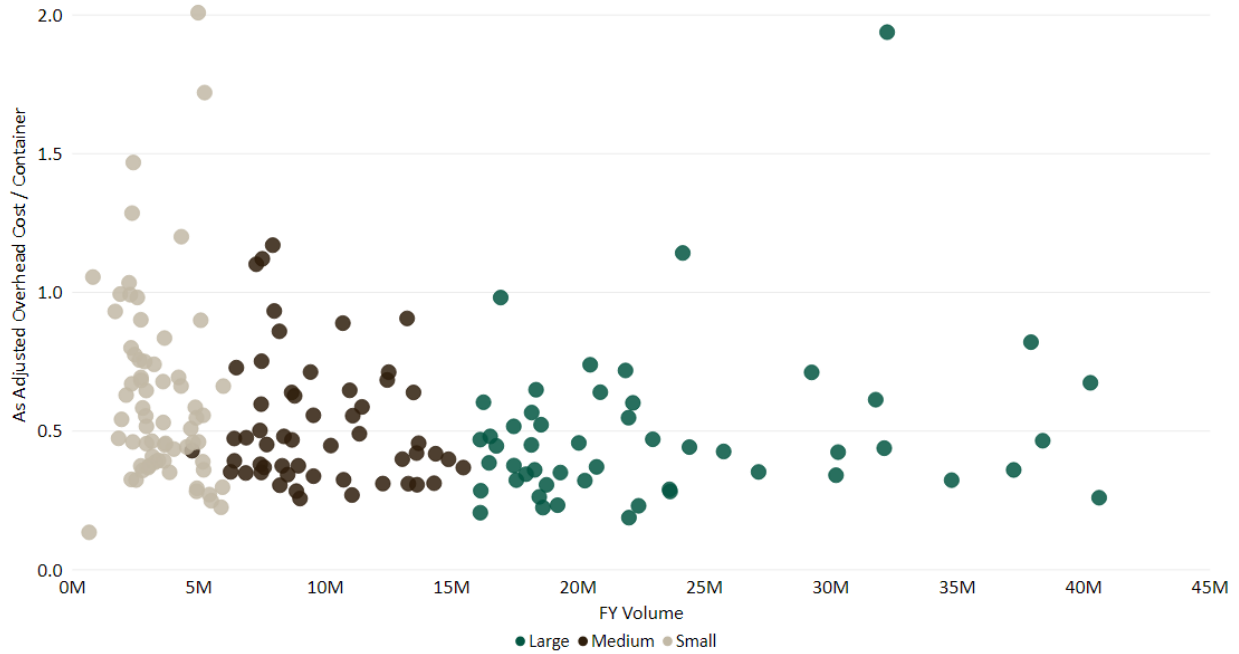


Figure 30 shows that overhead costs generally increase with depot size, but there is still substantial variation between depots of similar size. There is one outlier depot in this figure with significantly higher overhead costs than the rest of the depots. This depot incurred significant offsite collection costs that were paid to third-party contractors. This cost was included on line 745 of the UCA by the depot and so has been included in overhead costs.

The general variation in overhead costs by depot is more easily identifiable when looking at depot cost per container as shown in Figure 31 below.

**FIGURE 31 – AS ADJUSTED OVERHEAD COST PER CONTAINER<sup>20</sup>**



As previously noted, small depots have proportionately higher fixed overhead costs than medium and large depots, causing higher costs per container for these depots.

With the adjustments discussed and subject to the collection cost cap, the As Adjusted overhead costs accurately represent the depot system and are to be included in the determination of the revenue requirement.

<sup>20</sup> One depot processing 4.8 million containers has been removed from this figure as their cost per container is more than 5 times the next highest value.

## 7.6 Income Tax

During a Handling Commission Review Process, income tax is recalculated on an individual depot basis as specified in the BCMB’s Income Tax Expense Calculation Methodology Policy. Table 58 below shows the summary of As Reported, As Accepted, and As Adjusted income tax. Please note that there was no change between As Reported and As Accepted costs for income tax.

**TABLE 58 – INCOME TAX SUMMARY**

	<b>As Reported and Accepted</b>	<b>As Adjusted</b>
Incorporated	\$ 899,148	\$ 2,356,251
Other	\$ 8,506	\$ 42,029
<b>Total</b>	<b>\$ 907,654</b>	<b>\$ 2,398,281</b>

In Table 58, the “Other” category includes depots that operate as sole proprietorships, partnerships, and registered charities. To calculate As Adjusted income tax expense, we applied the following 2018 Alberta tax rates.

**TABLE 59 – INCOME TAX RATES**

<b>Depot Net Income Range</b>	<b>Marginal Tax Rate</b>
<b>Sole Proprietors and Partnerships</b>	
\$ - \$ 11,809	0.0 %
\$ 11,810 \$ 18,915	15.0 %
\$ 18,916 \$ 46,605	25.0 %
\$ 46,606 \$ 93,208	30.5 %
\$ 93,209 \$ 128,145	36.0 %
\$ 128,146 \$ 144,489	38.0 %
\$ 144,490 \$ 153,773	41.0 %
\$ 153,774 \$ 205,031	42.0 %
\$ 205,032 \$ 205,842	43.0 %
\$ 205,843 \$ 307,547	47.0 %
Greater than \$ 307,548	48.0 %
<b>Corporations</b>	
\$ - \$ 500,000	12.0 %
Greater than \$ 500,001	27.0 %

Using the rates in Table 59, we calculated As Adjusted income tax based on the As Adjusted revenues and expenses detailed in Sections 7.1 through 7.5 for the 172 depots in the Study System. These calculations were performed on an individual depot basis. Registered charities and depots that were in a loss position based on our calculation were assumed to have no tax expense for the year. This aligns with the income tax reported by depots.

Table 60 below summarizes the As Adjusted income tax expense.

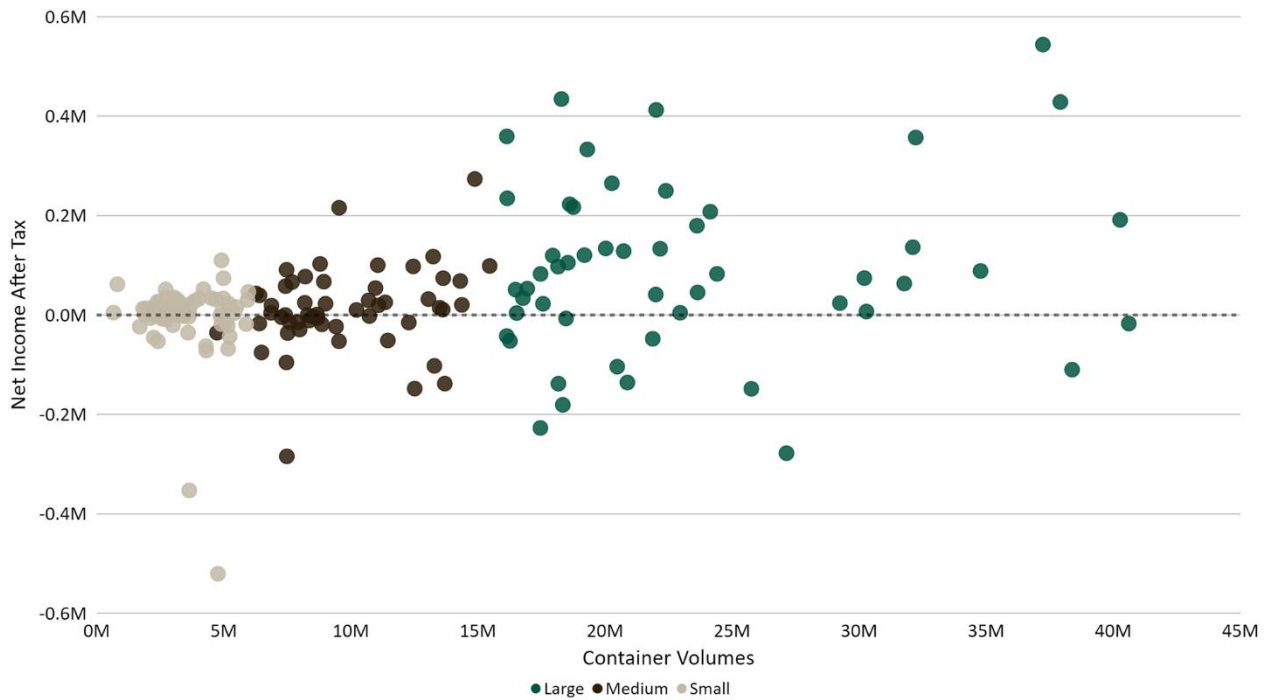
**TABLE 60 – AS ADJUSTED INCOME TAX**

	Number of Depots	Number of Depots That Incurred Income Tax Expense	Percentage Reporting	Income Tax As Adjusted
Incorporated	152	100	65.8 %	\$ 2,356,251
Other	20	5	25.0 %	\$ 42,029
<b>Total</b>	<b>172</b>	<b>105</b>	<b>61.0 %</b>	<b>\$ 2,398,281</b>

*\*Other includes Sole Proprietorships, Registered Charities, and Other*

Approximately 36% of the depots in the system are in a loss position and thus, don't incur income tax expense. Figure 32 below shows the As Adjusted net income after tax for all depots in the system.

**FIGURE 32 – AS ADJUSTED NET INCOME AFTER TAX BY DEPOT**



As shown in the figure above, there is a large range in net income after tax obtained by depots. While there is a general trend that larger depots obtain more profit than smaller depots, there are depots in all depot size categories that are profitable and unprofitable.

The As Adjusted income tax expense is included in the determination of the revenue requirement.

## 8. COLLECTION COSTS

The BCMB’s Offsite Collections Policy defines offsite collections as the collection of empty and used containers outside of depot premises. This policy states that these costs are the direct and documented costs and expenses which have been incurred by depots as payment to third parties who bring empty containers to those depots. We have determined that these costs include collector labour (see Section 7.2.5 – Collector Labour for details), vehicles allocated to offsite collections (see Section 7.4.1 – Vehicle Costs for details), and overhead costs including non-labour collection costs, deposit incentives, shrinkage, and casual labour.

We have collected more detail on several cost items in the 2018 data. This increased detail allowed us to identify the portion of costs that relate to offsite collection in the following areas:

- **Direct Labour:** Depots have completed work type classifications for all types of labour in 2018 where previously this information was only included for overhead and contract labour.
- **Vehicle Costs:** Depots provided a usage breakdown for each vehicle in the system in 2018.

With this new data, we have been able to allocate costs to offsite collections that previously could not be separated.

Table 61 below shows the total collection costs for the As Adjusted Data. UCA Table 9 Collection Costs include other cost of goods sold that are not included in a depots’ financial statement. The UCA Instruction Manual indicates that these costs are to include total third-party collection costs and the total deposit incentives that are not recorded as expenses on a depot’s income statement.

**TABLE 61 – AS ADJUSTED COLLECTION COSTS**

	Small	Medium	Large	Total
Table 9 Collection Costs	\$ 26,448	\$ 150,840	\$ 558,502	\$ 735,790
Collector Labour	\$ 312,519	\$ 592,522	\$ 1,003,706	\$ 1,908,747
Vehicle Costs	\$ 297,878	\$ 350,745	\$ 407,123	\$ 1,055,747
Non-Labour Collection Costs	\$ 0	\$ 9,825	\$ 564,952	\$ 574,777
<b>Total</b>	<b>\$ 636,846</b>	<b>\$ 1,103,932</b>	<b>\$ 2,534,284</b>	<b>\$ 4,275,062</b>

As shown in Table 61, the total cost related to offsite collections is \$4.3 million.

The BCMB’s Offsite Collections Policy imposes a cap on offsite collection costs. This practice began in 2010 when the cap was implemented at \$1.2 million. Since 2010, the cap has been escalated per the methodology outlined in the policy. Table 62 below shows the calculated cap for this year.

**TABLE 62 – 2019/20 HANDLING COMMISSION REVIEW OFFSITE COLLECTIONS CAP**

Category	Amount
<b>Volume Escalator</b>	
2019 HC Review Target Year Volume	1,995,218,459
2016 HC Review Target Year Volume	2,134,604,789
Volume Escalator	93.5 %
<b>Labour Escalator</b>	
2019 HC Review As Adjusted Direct Labour Rate	\$ 18.72
2016 HC Review As Adjusted Direct Labour Rate	\$ 17.22
Labour Escalator	108.7 %
<b>Maximum Collection Costs</b>	
2016 HC Review Maximum Collection Costs	\$ 1,719,843
<b>2019 HC Review Maximum Collection Costs</b>	<b>\$ 1,747,660</b>

Given that the discrepancy between the As Adjusted collection costs (\$4.3 million) and the cap (\$1.7 million) was \$2.5 million, we completed a preliminary review of offsite collection programs at 11 depots in the province. These depots represent \$2.1 million (44%) of the total adjusted collection cost. In our discussions with these depots, we identified the following types of offsite collections practices:

- **Bottle Drives:** These are typically fundraising activities where individuals (not employed by the depot) collect bottles from customers as a donation to their organization. Depots provide transportation and, in some cases, sorting for the collected containers. None of the 11 depots we talked to reported charging a fee for this service.
- **Commercial Pickups Within Town:** On a weekly, bi-weekly, or other arranged schedule, depot employees collect containers from organizations that use a large number of containers during operations. These included hotels, restaurants, schools, hospitals, municipalities, and golf courses. Some but not all depots reported charging fees for this service. The amount of fees varies significantly from one account to the next and between depots.
- **Out of Town Pickups:** On an arranged schedule, depots collect containers from customers (either individuals or commercial locations) from outside of the municipality the depot is located in. In our investigation, this type of service usually had a fee associated with it, though it varied depending on the customer, the distance from the depot, and the number of containers being picked up.

While these services may be valuable to the community and bring containers into the depot, they may not increase the total number of containers processed by the system. In some cases, it appears as though depots are competing for customers in the offsite collection space, which was reported by a few depots that have recently reduced or removed their fees for offsite collection services to remain competitive.

To identify the number of containers and the total revenue received through offsite collection activities, we contacted a selection of ten depots about their programs. These ten depots comprised of the seven depots with the highest reported offsite collection costs and the three related depots connected with those seven (e.g. three depots with shared ownership and offsite collection programs). Table 63 below summarizes some key information we gathered about revenue related to these depots offsite collection programs.

**TABLE 63 – OFFSITE COLLECTION PROGRAM INVESTIGATION SUMMARY**

	Total Amount
Number of Depots Included in offsite Collections Review	10
Total Container Volume Processed	177.7 million
Total Container Volume Collected by Offsite Collections Program <sup>21</sup>	14.0 million (8% of total)
Average Handling Commission Received in 2018 <sup>22</sup>	\$0.049
Estimated Handling Commission Associated with Offsite Collection Programs	\$686,000
Reported and Accepted Miscellaneous Revenue Related to Offsite Collection Programs <sup>23</sup>	\$138,000
Total Revenue Related to Offsite Collection Programs	\$824,000

Given that the \$824,000 in revenue related to offsite collection programs is significantly less than these depots' As Reported and As Accepted total offsite collections cost of \$2.1 million, we do not believe we have captured the total revenue received for these activities.

It is probable that depots are accepting a portion of the deposit in exchange for these services, that costs we have deemed to be included in the calculation of total cost are not directly related to depots' offsite collection activities, or that depots have underrepresented the total additional revenue received. Currently, no additional information on the apparent under-representation of revenue is available.

Based on the additional data collected, we believe that the cap, calculated at a total of \$1.7 million for the 2019/2020 HCR, allows for costs that are bringing new containers into the system while removing costs that may not contribute to increased system-wide return volumes. We have maintained the cap during this HCR.

<sup>21</sup> Based on estimates provided by depots

<sup>22</sup> \$0.049 calculated as total volume processed in CY2018 divided by the total handling commissions received in CY2018

<sup>23</sup> As Reported miscellaneous revenue for the category of Pick Up Fees

The application of the cap is implemented to each of the cost categories identified in Table 61 – As Adjusted Collection Costs equally based on the percent of the total offsite collections. This is shown in Table 64 below.

**TABLE 64 – APPLICATION OF OFFSITE COLLECTIONS COST CAP**

	Total Adjusted Cost	Percent of Total	Application of Cap	Total Adjusted Cost (Less Collection Cap)
Table 9 Collection Costs	\$ 735,790	17.2%	\$ (434,997)	\$ 300,793
Collector Labour	\$ 1,908,747	44.6%	\$ (1,128,445)	\$ 780,303
Vehicle Costs	\$ 1,055,747	24.7%	\$ (624,154)	\$ 431,593
Non-Labour Collection	\$ 574,777	13.4%	\$ (339,806)	\$ 234,971
<b>Total</b>	<b>\$ 4,275,062</b>	<b>100.0%</b>	<b>\$ (2,527,402)</b>	<b>\$ 1,747,660</b>

The reduction shown above is detailed in each of the summary tables in Appendix I – Phase I Schedules. These tables show the As Adjusted cost in two ways:

- Prior to the application of the cap, which lines up with the details shown in Section 7 – UCA Survey Results – Revenues and Costs; and
- Following the application of the cap, which lines up with the totals shown in Table 64 above.

It is recommended that a detailed assessment of the BCMB’s Offsite Collection Policy be undertaken during the upcoming Handling Commission Review Committee. The data available on offsite collection cost details can inform an assessment of historical cap and an evaluation of whether the costs reported by depots are achieving the BCMB’s goals.

## 9. VOLUME FORECAST

In determining the Target Year Revenue Requirement, one of the inputs is a container volume forecast for each container stream. As directed by the BCMB's Handling Commission Rate Setting Policy, generating this forecast involves collecting volumes processed by depots in the Total System and then projecting these volumes to the Target Year.

In the Study System, a total of 1.95 billion containers were processed by 172 depots. In the Total System, 219 depots processed 1.98 billion containers. After applying the forecasting approach agreed upon during the recent Handling Commission Review Committee meeting, we project 224 depots to process 2.00 billion containers in the Target Year. We discuss key elements of the forecasting approach below.

We used a consistent forecasting methodology for each individual container stream. At a high level, this methodology was to test forecasting approaches, evaluate forecasting accuracy, and generate a Target Year forecast by applying the more accurate of the approaches.

**Test Forecasting Approaches:** For each container stream, we used all available historical container return and sales volume data to test two forecasting approaches. The first approach was to forecast based on historical return volume ("return volume forecast"). The second was to forecast based on return rates, that is, returns as a percentage of sales ("return rate forecast").

To choose between the two forecasting approaches, it was important to evaluate forecast accuracy using genuine return data. To accomplish this, we split the historical data into two portions: training data and test data. Training data is historical data used to estimate forecasting parameters and generate a forecast over a test period. Test data is actual data from the test period that we could use to evaluate the accuracy of the forecast.

In our process, training data comprised of all available historical return and sales volume data up to and including August 2018. We used the training data as an input for the Excel forecasting function to generate test period forecasts. Test data was generally one year of actual return and sales volumes from September 2018 through August 2019 (the test period). In cases where fewer than twelve months of historical container return and sales volume data were available, the training and test periods were shortened accordingly.

**Evaluate Forecasting Accuracy:** Once test period forecasts were generated for each container stream, we compared the forecast with the actual returns from September 2018 through August 2019 and evaluated test period forecast accuracy using three error measures as follows:

- **Mean Absolute Percent Error (MAPE):** The MAPE measures the size of the error in percentage terms. It is calculated as the average of the unsigned percentage error.<sup>24</sup>
- **Mean Absolute Deviation (MAD):** The MAD measures the size of the error in units. It is calculated as the average of the unsigned errors.<sup>25</sup>
- **Root Mean Square Error (RMSE):** RMSE is a quadratic scoring rule that also measures the average magnitude of the error. It's the square root of the average of squared differences between prediction and actual observation.<sup>26</sup>

<sup>24</sup> <https://www.forecastpro.com/Trends/forecasting101August2011.html>

<sup>25</sup> <https://www.forecastpro.com/Trends/forecasting101August2011.html>

<sup>26</sup> <https://medium.com/human-in-a-machine-world/mae-and-rmse-which-metric-is-better-e60ac3bde13d>

For each container stream, we selected the forecasting approach – either a return volume forecast or a return rate forecast – that performed most accurately against the three measures above.

This evaluation determined that for 15 of the 22 container stream forecasts, the historical return volumes more accurately depicted the actual returns for the one-year test period. These 15 container streams were as follows.

- Aluminum;
- Bag in Box Over 1 L;
- Bi-Metal Over 1 L;
- Drink Pouches 0 - 1 L;
- Glass 0 - 1 L;
- Glass Over 1 L;
- Industry Standard Bottle;
- Miller Genuine Draft;
- Other Plastics 0 - 1 L;
- Other Plastics Over 1 L;
- Plastic One-Way Keg over 1L;
- Sleemans;
- Steam Whistle;
- Tetra 0 - 1 L; and
- Tetra Over 1 L.

For the remaining seven container streams, the return rate better forecasted the actual returns during the test period. These container streams were as follows.

- Bi-metal 0 -1 L;
- Gable Top 0 - 1 L;
- Gable Top Over 1 L;
- High-Density Polyethylene Resin (HDPE);
- Liquor and Wine Ceramics;
- Polyethylene Terephthalate (PET) 0 - 1 L; and
- PET Over 1 L.

We did not generate forecasts for either the Crystal Decanter 700 ml or the Patron el Laliq 1750 ml container streams, as no historical return data exists for those two container types.

**Generate Forecast:** Using the forecasting approach that most accurately forecasted return volumes during the test period for each respective container stream, we generated actual forecasts using all available historical data. In the case of return data, this typically included data from 2002 onward. For sales, this included data from 2014 forward.

Figure 33 below summarizes the Total System container returns since 2010, as well as projected container returns during the forecasted period.

**FIGURE 33 – HISTORICAL AND FORECAST RETURN VOLUME**

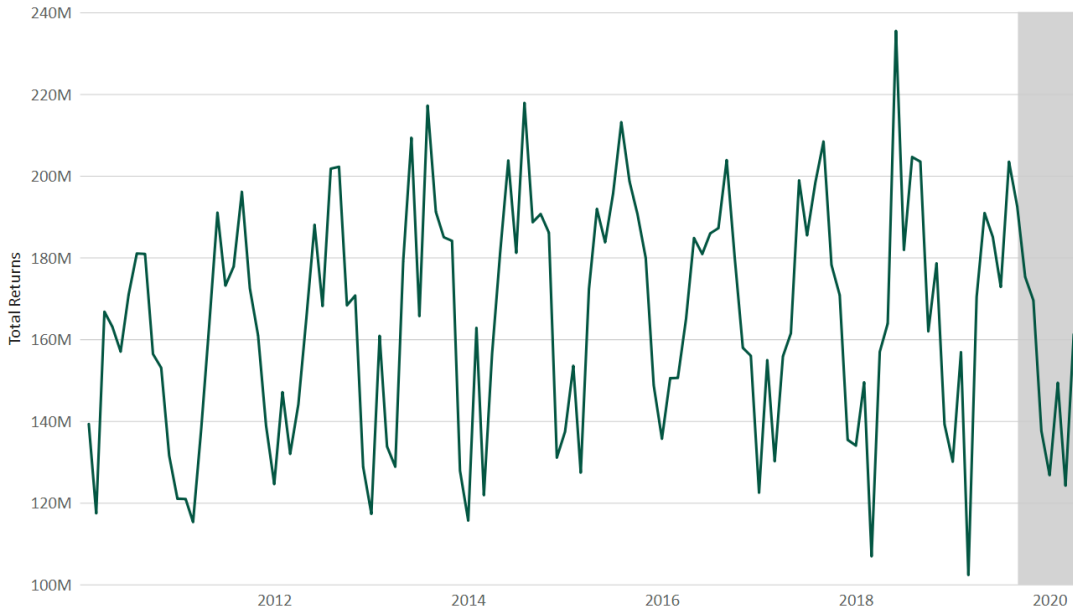
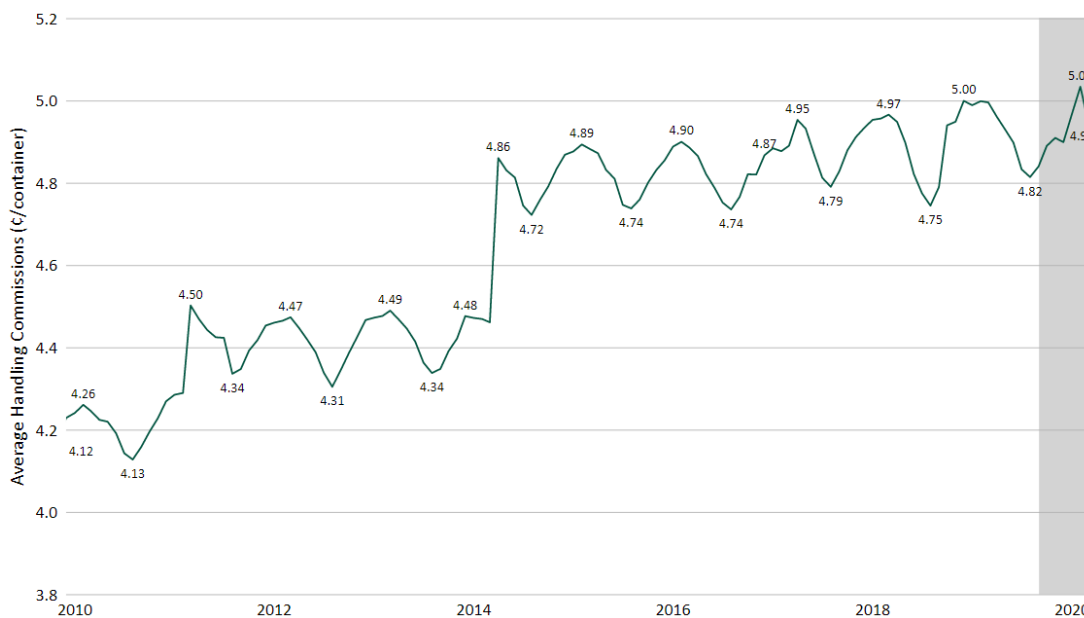


Figure 34 below shows the progression of the average handling commission received per month from January 2010 forecasted through to March 2020. Forecasted handling commissions are displayed with a grey background. The average handling commission has been calculated as the total volume processed in the system divided by the total handling commission received.

**FIGURE 34 – AVERAGE HANDLING COMMISSION JANUARY 2009 – MARCH 2020**



## 10. STUDY SYSTEM SUMMARY

With the adjustments detailed throughout Sections 7 and 8 completed, the Study System data accurately and completely reflect depots' 2018 revenues and costs. The As Adjusted Study System contains information from 172 depots as discussed in Section 1. Appendix I – Phase I Schedules summarizes these Study System revenues and costs for both the As Accepted and As Adjusted Data.

Figure 35 below summarizes the As Adjusted average revenue, average depot cost, and the revenue to cost ratio for each volume cluster in the Study System.

**FIGURE 35 – AS ADJUSTED AVERAGE DEPOT COST, AVERAGE DEPOT REVENUE, AND REVENUE TO COST RATIO BY VOLUME CLUSTER**

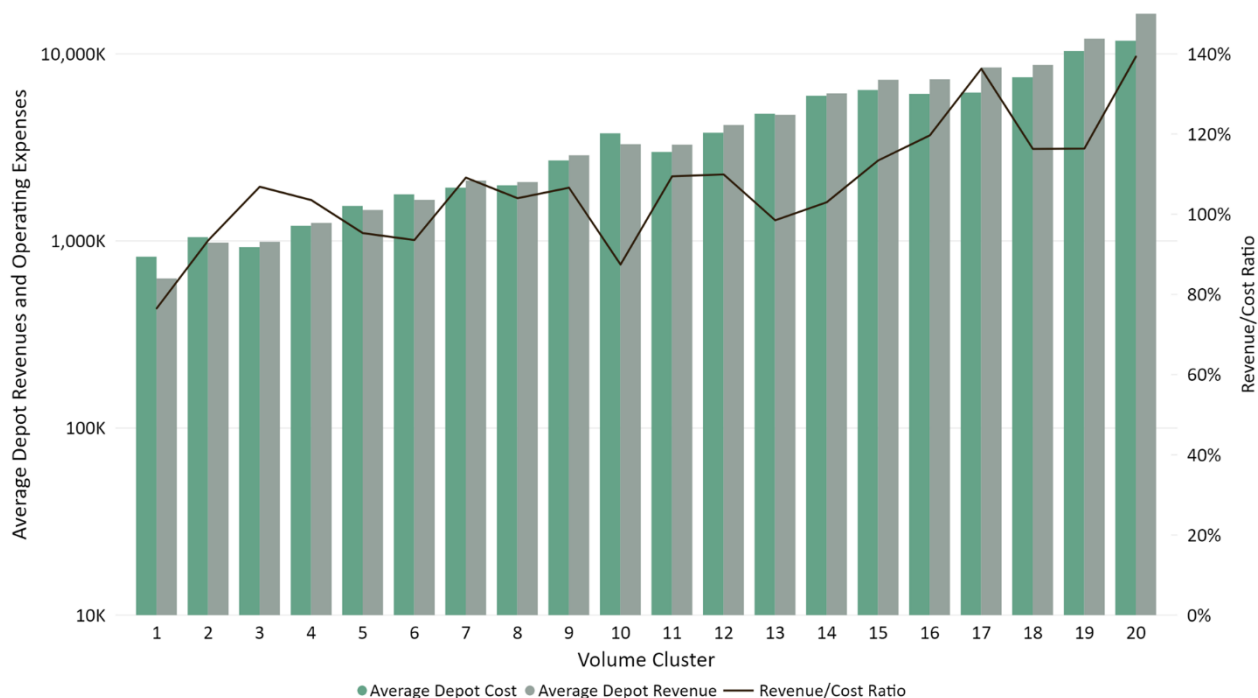


Figure 35 shows that in some volume clusters, the average depot is experiencing a loss. Table 65 below summarizes the number of depots reporting losses and the total value of the loss in As Adjusted Data.

**TABLE 65 – AS ADJUSTED STUDY SYSTEM LOSS STATISTICS**

	Number of Depots Reporting Losses			Total Value of Loss		
	As Reported	As Accepted	As Adjusted	As Reported	As Accepted	As Adjusted
Small	22	22	30	\$ (1,363,459)	\$ (1,182,271)	\$ (1,019,941)
Medium	23	25	24	\$ (1,171,734)	\$ (1,301,913)	\$ (1,816,280)
Large	13	10	8	\$ (1,510,986)	\$ (1,055,725)	\$ (468,503)
<b>Total</b>	<b>58</b>	<b>57</b>	<b>62</b>	<b>\$ (4,046,179)</b>	<b>\$ (3,539,909)</b>	<b>\$ (3,304,724)</b>

As shown in this table, losses are experienced by depots in all size classifications, but significantly fewer depots experience these losses in the large category.

Figure 36 below shows the cost per container for each of the cost categories and the revenue per container received.

**FIGURE 36 – AS ADJUSTED COST AND REVENUE SUMMARY**

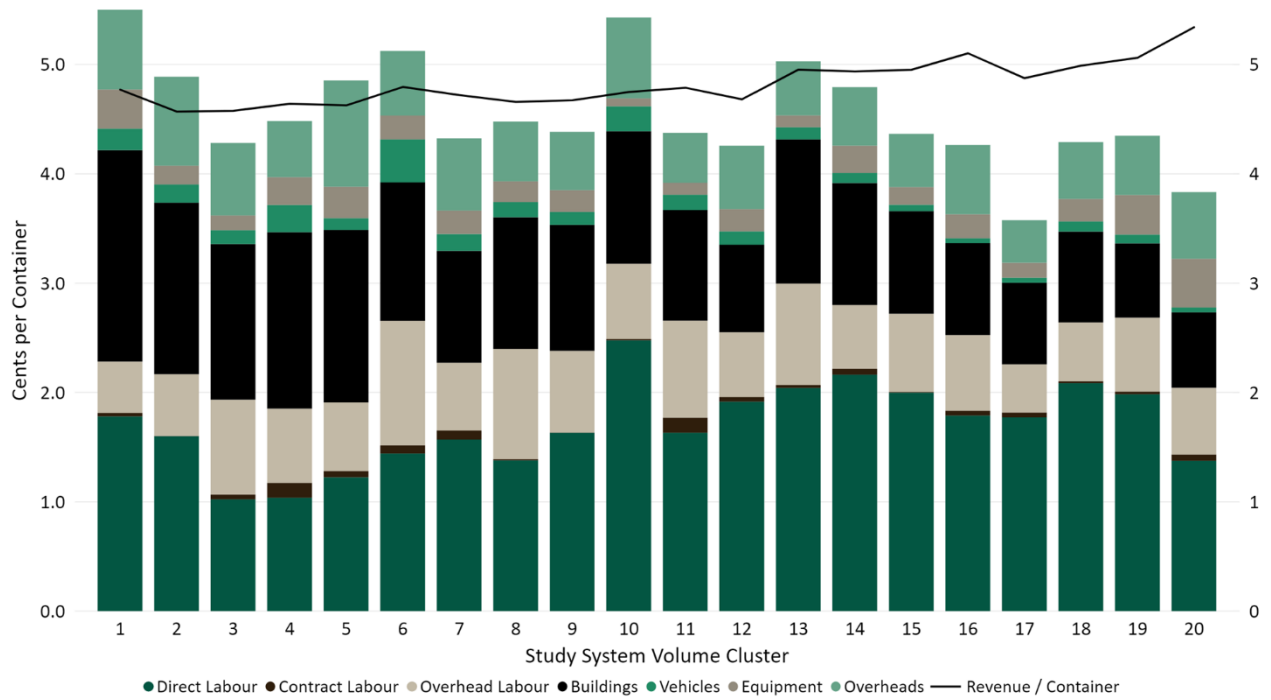


Table 66 below shows the net income earned by the As Adjusted Study System. The cents per container column shows the value based on the total number of containers processed by the 172 depots in the As Adjusted Study System – 1,948,942,575.

**TABLE 66 – AS ADJUSTED STUDY SYSTEM REVENUES AND EXPENSES**

	\$	c / container
<b>Revenue</b>		
Revenue	\$ 312,508,622	16.03
Less Purchases	\$ 217,004,898	11.13
Handling Commission	\$ 95,503,724	4.90
Misc Revenue	\$ 330,628	0.02
<b>Net Revenue</b>	<b>\$ 95,834,352</b>	<b>4.92</b>
<b>Expenses</b>		
Direct Labour	\$ 34,629,197	1.78
Collector Labour	\$ 780,303	0.04
Overhead Labour	\$ 12,787,187	0.66
Building	\$ 17,927,318	0.92
Equipment	\$ 4,756,988	0.24
Vehicle	\$ 1,826,981	0.09
Overhead	\$ 10,878,794	0.56
<b>Total Expenses</b>	<b>\$ 83,586,768</b>	<b>4.29</b>
<b>Earnings Before Taxes</b>	<b>\$ 12,247,584</b>	<b>0.63</b>
Income Taxes	\$ 2,398,281	0.12
<b>Net Income</b>	<b>\$ 9,849,304</b>	<b>0.51</b>

As shown in Table 66, depots generated a total margin of \$95.8 million and incurred \$83.6 million in expenses, leaving \$9.8 million of net income.

## 11. TOTAL SYSTEM DATA

To calculate the Total System Data, we used two ratios as shown in Schedule 10a below. The first is a depot ratio, calculated as the number of depots in the Total System divided by the number of depots in the Study System. The second, is the volume ratio, calculated as the number of containers processed by the Total System divided by the number of containers processed by the Study System.

**SCHEDULE 10A: CALCULATION OF TOTAL SYSTEM RATIOS**

Volume Cluster	Depots in Study System	Depots In Total System	Study System Depots, FY2018 Volume	Total System		Depot Ratio	Volume Ratio
				Depots Calendar Year	Volume		
No.	(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	1	8	52	13,203,876	64,746,690	6.50	4.90
2	2	9	9	21,435,642	20,867,440	1.00	0.97
3	3	8	9	21,625,661	23,807,548	1.13	1.10
4	4	9	10	26,886,124	29,282,851	1.11	1.09
5	5	9	11	31,676,691	37,998,586	1.22	1.20
6	6	8	8	34,611,606	34,424,800	1.00	0.99
7	7	9	8	44,573,837	39,556,744	0.89	0.89
8	8	8	9	44,293,617	50,401,787	1.13	1.14
9	9	9	8	61,415,969	59,283,430	0.89	0.97
10	10	9	9	69,303,169	67,559,096	1.00	0.97
11	11	8	9	68,398,078	78,870,796	1.13	1.15
12	12	9	8	89,051,743	77,348,855	0.89	0.87
13	13	8	8	95,257,116	99,731,267	1.00	1.05
14	14	9	9	124,515,557	126,219,118	1.00	1.01
15	15	9	9	146,865,474	143,472,935	1.00	0.98
16	16	8	8	143,380,270	150,998,803	1.00	1.05
17	17	9	9	173,651,913	173,501,576	1.00	1.00
18	18	8	8	175,034,575	169,366,588	1.00	0.97
19	19	9	9	238,451,042	231,062,955	1.00	0.97
20	20	9	9	325,310,615	297,622,953	1.00	0.91
<b>21</b>	<b>Total</b>	<b>172</b>	<b>219</b>	<b>1,948,942,575</b>	<b>1,976,124,818</b>	<b>1.27</b>	<b>1.01</b>

All changes to the number of depots between the Study System and Total System occur in volume clusters 1 – 5, 7 – 9, 11, and 12. Changes in clusters 1 through 4 relate to depots that only completed an exempt UCA. Changes in cluster 5 relate to both adding exempt depots and timing differences. Changes in clusters 7 through 9, 11, and 12 are due to timing differences, as the Total System volume is based on calendar 2018 instead of fiscal year 2018.

The depot ratio is applied to overhead labour costs to escalate the As Adjusted Study System costs to the Total System. The volume ratio is applied to each of the following revenue and cost categories to escalate the As Adjusted Study System costs to the Total System:

- Miscellaneous Revenue;
- Deposit Revenue;
- Handling Commission Revenue;
- Direct Labour Cost;
- Collector Labour Cost;
- Vehicle Costs;
- Equipment Costs; and
- Overhead Costs.

Building costs were calculated based on BCMB square footage and real estate expert deemed rates. Table 67 below summarizes the Total System costs by building group.

**TABLE 67 – TOTAL BUILDING COSTS**

	Number of Depots	Average Square Footage	Average Deemed Lease Costs	Average Deemed Use Cost	Average Deemed Total Cost	Average Deemed \$/Square Foot
Calgary Retail	11	6,281	\$ 174,285	\$ 92,952	\$ 267,237	\$ 42.55
Calgary Commercial and Industrial	16	6,060	\$ 78,542	\$ 59,401	\$ 137,943	\$ 22.76
Edmonton Retail	3	6,342	\$ 117,327	\$ 76,421	\$ 193,748	\$ 30.55
Edmonton Commercial	13	5,838	\$ 87,564	\$ 48,160	\$ 135,725	\$ 23.25
Edmonton Industrial	5	5,988	\$ 58,387	\$ 37,128	\$ 95,515	\$ 15.95
Bedroom City	14	4,824	\$ 130,250	\$ 27,015	\$ 157,265	\$ 32.60
North City	5	7,230	\$ 112,065	\$ 56,394	\$ 168,459	\$ 23.30
South City	14	5,222	\$ 79,632	\$ 35,769	\$ 115,401	\$ 22.10
Rural North Town	36	2,975	\$ 34,951	\$ 16,657	\$ 51,608	\$ 17.35
Rural South Town	52	3,137	\$ 40,775	\$ 16,310	\$ 57,085	\$ 18.20
Rural Village	42	2,048	\$ 22,021	\$ 8,604	\$ 30,625	\$ 14.95
Rural Hamlet	8	2,006	\$ 19,556	\$ 10,330	\$ 29,886	\$ 14.90
<b>Total System</b>	<b>219</b>	<b>3,835</b>	<b>\$ 58,971</b>	<b>\$ 27,701</b>	<b>\$ 86,672</b>	<b>\$ 22.60</b>

Table 68 below shows a summary of Total System revenues and costs.

**TABLE 68 – TOTAL SYSTEM SUMMARY**

	\$	c / container
<b>Revenue</b>		
Revenue	\$ 315,658,738	15.97
Less Purchases	\$ 219,635,505	11.11
Handling Commission	\$ 96,023,233	4.86
Misc Revenue	\$ 497,502	0.03
<b>Net Revenue</b>	<b>\$ 96,520,734</b>	<b>4.88</b>
<b>Expenses</b>		
Direct Labour	\$ 35,104,224	1.78
Collector Labour	\$ 798,238	0.04
Overhead Labour	\$ 13,207,358	0.67
Building	\$ 18,981,196	0.96
Equipment	\$ 4,815,072	0.24
Vehicle	\$ 1,921,773	0.10
Overhead	\$ 11,504,714	0.58
<b>Total Expenses</b>	<b>\$ 86,332,575</b>	<b>4.37</b>
<b>Earnings Before Taxes</b>	<b>\$ 10,188,159</b>	<b>0.52</b>
Income Taxes	\$ 2,315,348	0.12
<b>Net Income</b>	<b>\$ 7,872,811</b>	<b>0.40</b>

Total System net income is \$7.9 million. This represents a \$2.0 million decrease in net income when compared with the As Adjusted Study System Data. This is due, in large part, because smaller depots are less profitable than larger depots and, in some cases, small depots are unprofitable. As noted above, all the 47 depots added into the Total System Data fall into volume clusters 1 through 5, with 44 of these depots landing in volume cluster 1. There is also slight variation in the number of depots in the Total System in larger volume clusters as the Total System is based on calendar year volume.

## 12. TARGET YEAR SYSTEM

To escalate the Total System Data to the Target Year, we account for any changes in the number of active depots, projected container volumes, and depot costs (as captured in a series of indices).

To account for changes in the number of active depots and projected container volumes, three ratios and an average fiscal year quarter for each volume cluster were calculated. The ratios are as follows:

- **Depot Ratio:** Calculated as the number of depots in the Target Year divided by the number of depots in the Total System.
- **Volume Ratio:** Calculated as the Target Year volume divided by the Total System volume.
- **Total System Ratio:** Calculated as the Target Year total operating expenses divided by the Total System total operating expenses.

The fiscal year quarter (FY Quarter) is calculated as an average of the fiscal year end for each depot in a cluster. Schedule 11a below shows the ratios and quarter for each volume cluster in the system.

**SCHEDULE 11A: CALCULATION OF TARGET YEAR RATIOS**

	Volume Cluster	Total System Depots	Target Year Depots	Total System Volume	Target Year Volume	Depot Ratio	Volume Ratio	Total System Ratio	FY Quarter
No.	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
1	1	52	52	64,746,690	65,372,283	1.00	1.01	1.05	Q3
2	2	9	9	20,867,440	21,069,065	1.00	1.01	1.05	Q4
3	3	9	9	23,807,548	24,037,580	1.00	1.01	1.05	Q4
4	4	10	10	29,282,851	29,565,787	1.00	1.01	1.05	Q3
5	5	11	11	37,998,586	38,365,735	1.00	1.01	1.05	Q4
6	6	8	8	34,424,800	34,757,418	1.00	1.01	1.05	Q4
7	7	8	8	39,556,744	39,938,948	1.00	1.01	1.06	Q3
8	8	9	9	50,401,787	50,888,777	1.00	1.01	1.06	Q3
9	9	8	8	59,283,430	59,856,236	1.00	1.01	1.06	Q3
10	10	9	9	67,559,096	68,211,863	1.00	1.01	1.07	Q3
11	11	9	9	78,870,796	79,632,859	1.00	1.01	1.06	Q3
12	12	8	8	77,348,855	78,096,212	1.00	1.01	1.06	Q3
13	13	8	9	99,731,267	100,694,887	1.13	1.01	1.11	Q4
14	14	9	9	126,219,118	127,438,668	1.00	1.01	1.07	Q2
15	15	9	9	143,472,935	144,859,194	1.00	1.01	1.07	Q3
16	16	8	8	150,998,803	152,457,778	1.00	1.01	1.07	Q3
17	17	9	9	173,501,576	175,177,977	1.00	1.01	1.07	Q2
18	18	8	9	169,366,588	171,003,036	1.13	1.01	1.12	Q2
19	19	9	11	231,062,955	233,295,523	1.22	1.01	1.14	Q3
20	20	9	10	297,622,953	300,498,635	1.11	1.01	1.10	Q3
21	Total	219	224	1,976,124,818	1,995,218,459	1.02	1.01	1.08	Q3

The Total System ratio is applied to miscellaneous revenue. Deposit and handling commission revenue are calculated based on the forecast. The depot ratio is applied to both overhead labour costs and building costs. The volume ratio is applied to direct labour costs, contract labour costs, vehicle costs, equipment costs, and overhead costs.

Depot costs are escalated based on the Indices Expert rates set out in their final report<sup>27</sup>. These rates, for wages (labour), buildings, transportation (gasoline and vehicles), equipment (machinery) and general overhead, are captured in Table 69 below.

**TABLE 69 – INDICES EXPERT RATES**

Forecast Summary	2018				2019				2020			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Wage Index	100.6	101.0	101.6	103.7	104.5	106.2	107.1	108.2	108.8	109.4	110.2	110.9
Percent Change	0.6 %	0.4 %	0.6 %	2.1 %	0.7 %	1.7 %	0.8 %	1.0 %	0.6 %	0.5 %	0.7 %	0.7 %
Building Index	100.2	100.0	100.4	100.7	101.4	102.1	102.7	103.3	104.0	104.7	105.5	106.4
Percent Change	0.0 %	(0.3) %	0.4 %	0.4 %	0.6 %	0.8 %	0.5 %	0.6 %	0.7 %	0.7 %	0.8 %	0.8 %
Gasoline Index	110.4	126.2	129.1	109.0	102.6	114.8	114.6	114.7	115.1	115.3	115.8	115.8
Percent Change	4.2 %	14.3 %	2.3 %	(15.6) %	(5.9) %	11.9 %	(0.1) %	0.0 %	0.4 %	0.2 %	0.4 %	0.0 %
Vehicle Index	101.5	101.9	102.4	102.7	103.2	103.8	104.3	104.8	105.3	105.8	106.4	106.9
Percent Change	0.5 %	0.4 %	0.4 %	0.3 %	0.5 %	0.5 %	0.5 %	0.5 %	0.5 %	0.5 %	0.5 %	0.5 %
Equipment Index	99.2	101.7	103.2	103.9	104.3	104.6	104.6	103.8	103.1	102.7	102.5	101.8
Percent Change	0.0 %	0.0 %	0.0 %	0.0 %	(7.8) %	(2.5) %	0.8 %	(0.3) %	3.7 %	7.0 %	4.4 %	(0.7) %
General Overhead Index	101.6	102.5	103.1	102.6	103.4	104.5	104.9	105.1	105.6	106.1	106.7	107.2
Percent Change	1.2 %	0.8 %	0.6 %	(0.4) %	0.7 %	1.1 %	0.3 %	0.2 %	0.5 %	0.5 %	0.5 %	0.5 %

As noted in the briefing note submitted to BCMB<sup>28</sup>, there was a question regarding the Statistics Canada wage growth figures which led to Conference Board of Canada providing a supplement to their report<sup>29</sup> that reflected additional, more recent data.

In their report update, Conference Board of Canada states “The goal of the original analysis was to provide MNP with an understanding of what trend, or long-term, growth in industry wages would be under the different macroeconomic assumptions which were outlined in the report. In this context, the most appropriate rates to consider are those derived from the regression estimated trend line. This is particularly true if the focus is on the annual growth rates in the series, which as shown [in chart 5 of the update report], can be heavily influenced by historical data in the near-term.” Given this direction from the expert, the labour rates shown in the table above are based on forecasts in the update report.

<sup>27</sup> HCR 2019/2020 Document 79 – 2019.08.21.Indices.Final.Report.Conference.Board

<sup>28</sup> HCR 2019/2020 Document 78 - 2019.08.21.Indices.Briefing.Note.MNP

<sup>29</sup> HCR 2019/2020 Document 83 - 2019.10.10.Indices.Forecast.Update.Report.MNP, page 8

Table 70 below summarizes the Target Year revenues and costs.

**TABLE 70 – TARGET YEAR SUMMARY**

	\$	c / container
<b>Revenue</b>		
Revenue	\$ 319,763,708	16.03
Less Purchases	\$ 221,876,675	11.12
Handling Commission	\$ 97,887,033	4.91
Misc Revenue	\$ 532,702	0.03
<b>Net Revenue</b>	<b>\$ 98,419,735</b>	<b>4.93</b>
<b>Expenses</b>		
Direct Labour	\$ 38,145,284	1.91
Collector Labour	\$ 867,090	0.04
Overhead Labour	\$ 15,050,305	0.75
Building	\$ 20,733,770	1.04
Equipment	\$ 4,848,985	0.24
Vehicle	\$ 1,939,096	0.10
Overhead	\$ 11,974,502	0.60
<b>Total Expenses</b>	<b>\$ 93,559,031</b>	<b>4.69</b>
<b>Earnings Before Taxes</b>	<b>\$ 4,860,703</b>	<b>0.24</b>
Income Taxes	\$ 1,438,363	0.07
<b>Net Income</b>	<b>\$ 3,422,340</b>	<b>0.17</b>

The \$3.4 million in Target Year net income shown in Table 70 (above) represents a decrease of \$4.5 million when compared with the Total System. This decrease accounts for the additional five large depots that are scheduled to be added into the system in 2020 which will add costs that are projected to exceed the additional revenues generated by higher container volumes.

### 13. TARGET YEAR REVENUE REQUIREMENT

To calculate the Target Year Revenue Requirement, the operating expenses and purchases shown in Table 70 – Target Year Summary are used to calculate a total return based on the Return Margin Expert’s recommended rate. This was done to bring the recommendation into the 2018 year as the return margin for operating expenses was based on the 2017 data available to Concentric Energy Advisors at the time of their report. The overall return recommended in the final return margin report<sup>30</sup> (3.85%) as well as the return margin on deposits (1.83%) have both been kept consistent with the expert’s analysis. Table 71 below shows this calculation.

**TABLE 71 – RETURN MARGIN CALCULATION**

Item	Amount
<b>No. Cost of Goods Sold</b>	
1 Operating Expenses	\$ 93,559,031
2 Deposits	\$ 221,876,675
3 Cost of Goods Sold (1 + 2)	<b>\$ 315,435,706</b>
<b>After Tax Margin Calculation</b>	
4 Return Margin (Combined)	3.85 %
5 After Tax Margin (3 * 4)	\$ 12,144,275
<b>Margin on Deposits and Operating Expenses</b>	
6 Margin on Deposits	1.83 %
7 Margin on Deposits (2 * 6)	\$ 4,060,343
8 Margin on TOE Required (6 - 9)	\$ 8,083,932
9 Margin Operating Expenses (8 / 1)	8.64 %

Using these rates, the Target Year Revenue Requirement is calculated as the Total System operating expense plus the total return plus Total System income tax expense minus miscellaneous revenue.

<sup>30</sup> HCR 2019/2020 Document 41 - 2019.06.04.Return.Margin.Final.Report.Concentric

This calculation is shown in a summary of Schedule 12 below.

**SCHEDULE 12: TARGET YEAR REVENUE REQUIREMENT**

No.	Existing Handling Commissions - Target Year Forecast		Proposed Handling Commissions - Target Year Forecast		
	\$	c / container	\$	c / container	
	(a)	(b)	(c)	(d)	
1	Revenue	\$ 319,763,708	16.03	\$ 328,485,642	16.46
2	Less Purchases	\$ 221,876,675	11.12	\$ 221,876,675	11.12
3	Gross Margin (HC)	\$ 97,887,033	4.91	\$ 106,608,967	5.34
4	Misc Revenue	\$ 532,702	0.03	\$ 532,702	0.03
5	Net Revenue	\$ 98,419,735	4.93	\$ 107,141,669	5.37
6	<b>Expenses</b>				
7	Direct Labour	\$ 38,145,284	1.91	\$ 38,145,284	1.91
8	Contract Labour	\$ 867,090	0.04	\$ 867,090	0.04
9	Overhead Labour	\$ 15,050,305	0.75	\$ 15,050,305	0.75
10	Building	\$ 20,733,770	1.04	\$ 20,733,770	1.04
11	Equipment	\$ 4,848,985	0.24	\$ 4,848,985	0.24
12	Vehicle	\$ 1,939,096	0.10	\$ 1,939,096	0.10
13	Overhead	\$ 11,974,502	0.60	\$ 11,974,502	0.60
14	<b>Total Operating Expenses</b>	<b>\$ 93,559,031</b>	<b>4.69</b>	<b>\$ 93,559,031</b>	<b>4.69</b>
15					
16	Return on Purchases	\$ 4,060,343	0.20	\$ 4,060,343	0.20
17	Return Margin	1.83%		0.00	
18	Return on Operations (After Tax)	\$ 8,083,932	0.41	\$ 8,083,932	0.41
19	Return Margin	8.64%		0.00	
20	<b>Total Return</b>	<b>\$ 12,144,275</b>	<b>0.61</b>	<b>\$ 12,144,275</b>	<b>0.61</b>
21	After Tax Return	3.85 %		3.85 %	
22	Income Taxes	\$ 1,438,363	0.07	\$ 1,438,363	0.07
23	<b>Revenue Requirement</b>	<b>\$ 106,608,967</b>	<b>5.34</b>	<b>\$ 106,608,967</b>	<b>5.34</b>
24	Total Revenue at Current Rates	\$ 98,419,735	4.93		
25	Proposed Rate Increase	8.9 %		0.0 %	
<b>System Data</b>					
26	Total Container Volume		1,995,218,459		1,995,218,459
27	Number of Depots		224		224

As shown in this table and based on our analysis, the Revenue Requirement should be increased by 8.9% to achieve the goals set in the BCMB's Handling Commission By-law of providing sufficient funds to enable depots as a group to recover prudently incurred costs, expenses, and taxes and to earn a fair return. The majority of this increase can be attributed to the following items.

- There are more depots in the total system than there was during the last HCR. In the 2016/2017 HCR there was a total 216 depots in the Total System with one additional depot scheduled to open during the Target Year. As shown in the table above, there are 224 depots in the Target Year. These depots add additional cost to the system but have no impact on the Target Year volume forecast.
- Total volume projected for the Target Year has increased (1.98 billion in the Total System and 2.00 billion in the Target Year). This volume represents a decrease from the 2016/2017 HCR when the Target Year Volume was 2.10 billion. All things being equal, this volume decrease causes a decrease in total system revenues.
- Total operating expenses have increased from the 2016/2017 HCR despite the application of the Collections Cost Cap which removed \$2.5 million from the system.
- Total return margin has increased from 3.76% in the 2016/17 HCR to 3.85% as recommended by the Return Margin Expert.

## 14. APPENDIX I – PHASE I SCHEDULES

SCHEDULE 1: ADJUSTMENT SUMMARY

No.	2018 Fiscal Year As Accepted		2018 Fiscal Year As Adjusted			Total System			Target System (Current HC)			Total Change	
		\$ c / container	\$ c / container	\$ c / container	Difference (Accepted to Adjusted)	\$ c / container	\$ c / container	Difference (Adjusted to Total System)	\$ c / container	\$ c / container	Difference (Total System to Target System)	Difference (Accepted to Target System)	% Change (Accepted to Target System)
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
<b>1 Revenue</b>													
2 Revenue	\$ 309,514,408	16.03	\$ 312,508,622	16.03	\$ 2,994,214	\$ 315,658,738	15.97	\$ 3,150,116	\$ 319,763,708	16.03	\$ 4,104,970	\$ 10,249,300	(0.0)%
3 Less Purchases	\$ 214,919,505	11.13	\$ 217,004,898	11.13	\$ 2,085,393	\$ 219,635,505	11.11	\$ 2,630,607	\$ 221,876,675	11.12	\$ 2,241,170	\$ 6,957,170	(0.1)%
4 Handling Commission	\$ 94,594,903	4.90	\$ 95,503,724	4.90	\$ 908,821	\$ 96,023,233	4.86	\$ 519,509	\$ 97,887,033	4.91	\$ 1,863,800	\$ 3,292,130	0.1 %
5 Misc Revenue	\$ 1,015,205	0.05	\$ 330,628	0.02	\$ (684,577)	\$ 497,502	0.03	\$ 166,874	\$ 532,702	0.03	\$ 35,200	\$ (482,503)	(49.2)%
<b>6 Net Revenue</b>	\$ 95,610,108	4.95	\$ 95,834,352	4.92	\$ 224,244	\$ 96,520,734	4.88	\$ 686,382	\$ 98,419,735	4.93	\$ 1,899,000	\$ 2,809,627	(0.4)%
<b>7 Expenses</b>													
8 Direct Labour	\$ 35,322,460	1.83	\$ 34,629,197	1.78	\$ (693,263)	\$ 35,104,224	1.78	\$ 475,027	\$ 38,145,284	1.91	\$ 3,041,060	\$ 2,822,824	4.5 %
9 Collector Labour	\$ 1,908,747	0.10	\$ 780,303	0.04	\$ (1,128,445)	\$ 798,238	0.04	\$ 17,936	\$ 867,090	0.04	\$ 68,852	\$ (1,041,657)	(56.1)%
10 Overhead Labour	\$ 11,904,209	0.62	\$ 12,787,187	0.66	\$ 882,979	\$ 13,207,358	0.67	\$ 420,171	\$ 15,050,305	0.75	\$ 1,842,947	\$ 3,146,097	22.3 %
11 Building	\$ 19,007,776	0.98	\$ 17,927,318	0.92	\$ (1,080,458)	\$ 18,981,196	0.96	\$ 1,053,878	\$ 20,733,770	1.04	\$ 1,752,574	\$ 1,725,994	5.5 %
12 Equipment	\$ 4,738,032	0.25	\$ 4,756,988	0.24	\$ 18,956	\$ 4,815,072	0.24	\$ 58,084	\$ 4,848,985	0.24	\$ 33,913	\$ 110,953	(1.0)%
13 Vehicle	\$ 2,713,100	0.14	\$ 1,826,981	0.09	\$ (886,119)	\$ 1,921,773	0.10	\$ 94,792	\$ 1,939,096	0.10	\$ 17,322	\$ (774,004)	(30.9)%
14 Overhead	\$ 11,736,261	0.61	\$ 10,878,794	0.56	\$ (857,467)	\$ 11,504,714	0.58	\$ 625,920	\$ 11,974,502	0.60	\$ 469,788	\$ 238,241	(1.3)%
<b>15 Total Expenses</b>	\$ 87,330,585	4.52	\$ 83,586,768	4.29	\$ (3,743,817)	\$ 86,332,575	4.37	\$ 2,745,808	\$ 93,559,031	4.69	\$ 7,226,456	\$ 6,228,446	3.6 %
<b>16 Earnings Before Taxes</b>	\$ 8,279,523	0.43	\$ 12,247,584	0.63	\$ 3,968,061	\$ 10,188,159	0.52	\$ (2,059,426)	\$ 4,860,703	0.24	\$ (5,327,455)	\$ (3,418,820)	(43.2)%
17 Income Taxes	\$ 907,654	0.05	\$ 2,398,281	0.12	\$ 1,490,627	\$ 2,315,348	0.12	\$ (82,932)	\$ 1,438,363	0.07	\$ (876,985)	\$ 530,709	53.3 %
<b>18 Net Income</b>	\$ 7,371,869	0.38	\$ 9,849,304	0.51	\$ 2,477,435	\$ 7,872,811	0.40	\$ (1,976,493)	\$ 3,422,340	0.17	\$ (4,450,470)	\$ (3,949,529)	(55.1)%
<b>System Data</b>													
19 Total Container Volume		1,930,325,689			1,948,942,575			1,976,124,818			1,995,218,459	64,892,770	3.4 %
20 Number of Depots		172			172			219			224	52	30.2 %

**SCHEDULE 1A: NET INCOME SUMMARY**

		Small	Medium	Large	Total
No.	(a)	(b)	(c)	(d)	(e)
<b>2018 Fiscal Year As Accepted</b>					
1	Net Income	\$ (152,773)	\$ 738,555	\$ 6,786,087	\$ 7,371,869
2	¢ per container	(0.01)	0.04	0.35	0.38
<b>2018 Fiscal Year As Adjusted</b>					
3	Net Income	\$ (169,388)	\$ 363,383	\$ 9,655,306	\$ 9,849,302
4	¢ per container	(0.01)	0.02	0.50	0.51
5	Difference	-\$ 16,615	-\$ 375,172	\$ 2,869,220	\$ 2,477,433
<b>Total System</b>					
6	Net Income	\$ (2,029,555)	-\$ 416,568	10,318,934	7,872,811
7	¢ per container	(0.10)	(0.02)	0.52	0.40
8	Difference	-\$ 1,860,167	-\$ 779,951	\$ 663,627	-\$ 1,976,491
<b>Target System (Current HC)</b>					
8	Net Income	\$ (1,146,780)	\$ (508,621)	\$ 5,077,741	\$ 3,422,340
9	¢ per container	(0.06)	(0.03)	0.25	0.17
10	Difference	\$ 882,775	-\$ 92,053	-\$ 5,241,192	-\$ 4,450,470
<b>Total Change</b>					
11	Difference (As Accepted Data to Target System Data)	\$ (994,007)	\$ (1,247,176)	\$ (1,708,346)	\$ (3,949,529)
12	Percent Change (As Accepted Data to Target System Data)	626.2 %	(166.6)%	(27.6)%	(55.1)%

**SCHEDULE 1B: LABOUR EFFICIENCY AND COST SUMMARY**

		Direct Labour	Collector Labour	Overhead Labour
No.	(a)	(b)	(c)	(d)
<b>2018 Fiscal Year As Accepted</b>				
1	Hours	1,842,589	112,040	430,372
2	S/Container	3.44	0.21	0.80
3	\$/Hour	\$19.17	\$17.04	\$27.66
<b>2018 Fiscal Year As Adjusted</b>				
5	Hours	1,849,755	112,040	431,812
6	S/Container	3.42	0.21	0.80
7	\$/Hour	\$18.72	\$6.96	\$29.61
<b>Total System</b>				
9	Hours	1,875,129	114,616	446,001
10	S/Container	3.42	0.21	0.81
11	\$/Hour	\$18.72	\$6.96	\$29.61
<b>Target System (Current HC)</b>				
13	Hours	2,037,570	124,502	508,235
14	S/Container	3.68	0.22	0.92
15	\$/Hour	\$18.72	\$6.96	\$29.61

**SCHEDULE 1C: PREVIOUS YEAR SUMMARY**

No.	2015 Fiscal Year As Reported			2018 Fiscal Year As Accepted			Per Container or Hour		
	\$	¢ / container	% Change	\$	¢ / container	% Change	% Change From 2004	Ave. Annual	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	
<b>1</b>	<b>Revenue</b>								
<b>2</b>	Revenue	\$ 313,797,306	15.99	2.1 %	\$ 309,514,408	16.03	0.3 %	157.3 %	7.0 %
<b>3</b>	Less Purchases	\$ 219,246,569	11.17	(0.7)%	\$ 214,919,505	11.13	(0.4)%	170.3 %	7.4 %
<b>4</b>	Gross Margin (HC)	\$ 94,550,737	4.82	9.1 %	\$ 94,594,903	4.90	1.7 %	131.9 %	6.2 %
<b>5</b>	Misc Revenue	\$ 1,472,526	0.08	80.7 %	\$ 1,015,205	0.05	(29.9)%	189.2 %	7.9 %
<b>6</b>	Total Margin	\$ 96,023,263	4.89	9.7 %	\$ 95,610,108	4.95	1.2 %	132.3 %	6.2 %
<b>7</b>	<b>Expenses</b>								
<b>8</b>	Direct Labour	\$ 32,304,174	1.65	7.2 %	\$ 35,322,460	1.83	10.9 %	176.3 %	7.5 %
<b>9</b>	Contract / Collector Labour	\$ 5,378,012	0.27	10.3 %	\$ 1,908,747	0.10	(63.4)%	103.9 %	5.2 %
<b>10</b>	Overhead Labour	\$ 14,006,160	0.71	4.6 %	\$ 11,904,209	0.62	(13.1)%	61.9 %	3.5 %
<b>11</b>	Building	\$ 15,592,449	0.79	12.1 %	\$ 19,007,776	0.98	24.6 %	451.9 %	13.0 %
<b>12</b>	Equipment and Vehicles	\$ 6,723,403	0.34	9.8 %	\$ 7,451,132	0.39	13.5 %	512.5 %	13.8 %
<b>13</b>	Overhead	\$ 9,228,973	0.47	(10.1)%	\$ 11,736,261	0.61	29.4 %	98.0 %	5.0 %
<b>14</b>	<b>Total Operating Expenses</b>	\$ 83,233,170	4.24	6.0 %	\$ 87,330,585	4.52	6.7 %	166.2 %	7.2 %
<b>15</b>	<b>Earnings Before Taxes</b>	\$ 12,790,093	0.65	40.9 %	\$ 8,279,523	0.43	(34.0)%	(0.8)%	(0.1)%
<b>16</b>	<b>Income Taxes</b>	\$ 1,438,367	0.07	15.8 %	\$ 907,654	0.05	(32.8)%	(59.0)%	(6.2)%
<b>17</b>	<b>Net Income</b>	\$ 11,351,726	0.58	44.7 %	\$ 7,371,869	0.38	(34.2)%	20.2 %	1.3 %
<b>System Data</b>									
<b>18</b>	<b>Total Container Volume</b>			1,962,055,288			1,930,325,689	88.2 %	4.6 %
<b>19</b>	<b>Number of Depots</b>			179			172	8.9 %	0.6 %

**SCHEDULE 2: DIRECT LABOUR COSTS**

No.	2018 Fiscal Year As Accepted				2018 Fiscal Year As Adjusted			
	Hours	Salary & Wages	Benefits	Total	Hours	Salary & Wages	Benefits	Total
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
<b>1</b> Small	192,091	\$ 2,938,005	\$ 360,765	\$ 3,298,771	192,091	\$ 2,938,005	\$ 282,141	\$ 3,220,146
<b>2</b> Medium	573,969	\$ 9,511,409	\$ 1,226,089	\$ 10,737,499	573,969	\$ 9,511,409	\$ 980,870	\$ 10,492,280
<b>3</b> Large	1,076,529	\$ 18,630,083	\$ 2,656,108	\$ 21,286,191	1,083,695	\$ 18,755,094	\$ 2,161,678	\$ 20,916,772
<b>4 Total</b>	<b>1,842,589</b>	<b>\$ 31,079,497</b>	<b>\$ 4,242,963</b>	<b>\$ 35,322,460</b>	<b>1,849,755</b>	<b>\$ 31,204,508</b>	<b>\$ 3,424,689</b>	<b>\$ 34,629,197</b>

**SCHEDULE 3: COLLECTOR LABOUR COSTS**

No.	Size Class	2018 Fiscal Year As Accepted		2018 Fiscal Year As Adjusted		
		Hours	\$	Hours	\$	(Less Collection Costs Cap)
		(a)	(b)	(c)	(d)	(e)
<b>1</b>	Small	20,900	\$ 312,519	20,900	\$ 312,519	\$ 127,759
<b>2</b>	Medium	34,413	\$ 592,522	34,413	\$ 592,522	\$ 242,225
<b>3</b>	Large	56,727	\$ 1,003,706	56,727	\$ 1,003,706	\$ 410,319
<b>4</b>	<b>Total</b>	<b>112,040</b>	<b>\$ 1,908,747</b>	<b>112,040</b>	<b>\$ 1,908,747</b>	<b>\$ 780,303</b>

**SCHEDULE 4: OVERHEAD LABOUR COSTS**

No.	Size Class	2018 Fiscal Year As Accepted		2018 Fiscal Year As Adjusted	
		Hours	\$	Hours	\$
		(a)	(b)	(c)	(d)
<b>1</b>	Small	91,161	\$ 1,712,029	91,161	\$ 1,790,653
<b>2</b>	Medium	132,606	\$ 3,577,091	132,606	\$ 3,822,309
<b>3</b>	Large	206,604	\$ 6,615,089	208,044	\$ 7,174,225
<b>4</b>	<b>Total</b>	<b>430,372</b>	<b>\$ 11,904,209</b>	<b>431,812</b>	<b>\$ 12,787,187</b>

**SCHEDULE 5: BUILDING COSTS**

No.		2018 Fiscal Year As Accepted				2018 Fiscal Year As Adjusted			
		Small	Medium	Large	Total	Small	Medium	Large	Total
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
<b>1</b>	<i>Sq. Ft.</i>	200,614	268,931	380,464	850,009	188,024	257,149	334,100	779,273
<b>2</b>	Building CCA	\$ 255,271	\$ 203,165	\$ 187,248	\$ 645,684				
<b>3</b>	Use Costs incl. Mortgage Interest	\$ 1,985,690	\$ 4,269,471	\$ 10,347,338	\$ 16,602,499				
<b>4</b>	Utilities	\$ 376,826	\$ 483,968	\$ 898,799	\$ 1,759,593				
<b>5</b>	Deemed Lease Cost					\$ 2,258,538	\$ 3,992,263	\$ 5,944,906	\$ 12,195,706
<b>6</b>	Deemed Usage Cost					\$ 949,835	\$ 1,774,558	\$ 3,007,218	\$ 5,731,612
<b>7</b>	<b>Total</b>	<b>\$ 2,617,787</b>	<b>\$ 4,956,604</b>	<b>\$ 11,433,385</b>	<b>\$ 19,007,776</b>	<b>\$ 3,208,373</b>	<b>\$ 5,766,821</b>	<b>\$ 8,952,124</b>	<b>\$ 17,927,318</b>

**SCHEDULE 6: EQUIPMENT COSTS**

No.	2018 Fiscal Year As Accepted				2018 Fiscal Year As Adjusted			
	Small	Medium	Large	Total	Small	Medium	Large	Total
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1 CCA	\$ 327,055	\$ 198,468	\$ 638,433	\$ 1,163,956	\$ 326,928	\$ 198,596	\$ 642,539	\$ 1,168,062
2 Lease Payments	\$ 23,634	\$ 503,063	\$ 2,168,709	\$ 2,695,406	\$ 23,634	\$ 503,063	\$ 2,183,559	\$ 2,710,256
3 Operating Costs	\$ 178,141	\$ 149,244	\$ 551,285	\$ 878,670	\$ 178,141	\$ 149,244	\$ 551,285	\$ 878,670
<b>4 Total</b>	<b>\$ 528,830</b>	<b>\$ 850,775</b>	<b>\$ 3,358,427</b>	<b>\$ 4,738,032</b>	<b>\$ 528,703</b>	<b>\$ 850,903</b>	<b>\$ 3,377,383</b>	<b>\$ 4,756,988</b>

**SCHEDULE 7: VEHICLE COSTS**

No.	2018 Fiscal Year As Accepted				2018 Fiscal Year As Adjusted				2018 Fiscal Year As Adjusted (After Collections)		
	Small	Medium	Large	Total	Small	Medium	Large	Total	Business Vehicle Cost	Offsite Collections	Total Vehicle Cost*
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
1 CCA	\$ 142,159	\$ 137,079	\$ 127,967	\$ 407,205	\$ 125,244	\$ 126,125	\$ 117,661	\$ 369,031	\$ 210,083	\$ 64,979	\$ 275,061
2 Lease Payments	\$ 61,433	\$ 222,437	\$ 300,862	\$ 584,732	\$ 66,845	\$ 244,101	\$ 330,282	\$ 641,228	\$ 365,040	\$ 112,907	\$ 477,947
3 Operating Costs	\$ 519,715	\$ 637,437	\$ 564,011	\$ 1,721,163	\$ 408,092	\$ 535,449	\$ 497,335	\$ 1,440,876	\$ 820,265	\$ 253,708	\$ 1,073,973
<b>4 Total</b>	<b>\$ 723,307</b>	<b>\$ 996,953</b>	<b>\$ 992,840</b>	<b>\$ 2,713,100</b>	<b>\$ 600,181</b>	<b>\$ 905,676</b>	<b>\$ 945,278</b>	<b>\$ 2,451,135</b>	<b>\$ 1,395,388</b>	<b>\$ 431,593</b>	<b>\$ 1,826,981</b>

\* Less Offsite Collections Cost Cap

**SCHEDULE 8: OVERHEAD COSTS**

No.	2018 Fiscal Year As Accepted				2018 Fiscal Year As Adjusted					
	Small (a)	Medium (b)	Large (c)	Total (d)	Small (e)	Medium (f)	Large (g)	Total (h)	Total (Less Offsite) (h)	
<b>1</b>	<b>Overhead - Office</b>									
2	Office Expenses	\$ 99,620	\$ 151,717	\$ 429,838	\$ 681,175	\$ 99,620	\$ 151,717	\$ 431,676	\$ 683,013	\$ 683,013
3	Shop Supplies	\$ 80,638	\$ 211,427	\$ 363,701	\$ 655,766	\$ 80,638	\$ 211,427	\$ 370,136	\$ 662,201	\$ 662,201
4	Telephone	\$ 153,354	\$ 217,012	\$ 343,068	\$ 713,434	\$ 153,354	\$ 217,012	\$ 343,152	\$ 713,518	\$ 713,518
5	Charitable Donations	\$ 21,895	\$ 85,764	\$ 66,164	\$ 173,823	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
6	Internet	\$ 24,939	\$ 20,813	\$ 24,582	\$ 70,334	\$ 24,939	\$ 20,813	\$ 24,582	\$ 70,334	\$ 70,334
7	Bank Charges	\$ 98,588	\$ 149,495	\$ 241,760	\$ 489,843	\$ 98,588	\$ 149,495	\$ 247,788	\$ 495,871	\$ 495,871
8	Professional Fees (Accounting/Legal)	\$ 195,415	\$ 345,405	\$ 554,071	\$ 1,094,891	\$ 195,415	\$ 345,405	\$ 572,322	\$ 1,113,142	\$ 1,113,142
9	Training Courses (3rd Party)	\$ 4,827	\$ 16,489	\$ 9,820	\$ 31,136	\$ 4,827	\$ 16,489	\$ 9,820	\$ 31,136	\$ 31,136
10	Marketing and Promotions	\$ 29,119	\$ 98,235	\$ 257,862	\$ 385,216	\$ 29,119	\$ 98,235	\$ 258,375	\$ 385,729	\$ 385,729
11	Advertising	\$ 60,600	\$ 164,073	\$ 443,832	\$ 668,505	\$ 60,600	\$ 164,073	\$ 443,847	\$ 668,520	\$ 668,520
12	Other Insurance (non-property)	\$ 63,601	\$ 62,051	\$ 211,354	\$ 337,006	\$ 63,601	\$ 62,051	\$ 211,354	\$ 337,006	\$ 337,006
13	Municipal Taxes & License Fees	\$ 41,300	\$ 51,140	\$ 209,174	\$ 301,614	\$ 41,300	\$ 51,140	\$ 215,609	\$ 308,049	\$ 308,049
14	Other Office costs	\$ 23,376	\$ 143,159	\$ 121,252	\$ 287,787	\$ 23,376	\$ 143,159	\$ 126,375	\$ 292,910	\$ 292,910
15	<b>Sub Total</b>	<b>\$ 897,272</b>	<b>\$ 1,716,780</b>	<b>\$ 3,276,478</b>	<b>\$ 5,890,530</b>	<b>\$ 875,377</b>	<b>\$ 1,631,016</b>	<b>\$ 3,255,036</b>	<b>\$ 5,761,429</b>	<b>\$ 5,761,429</b>
<b>16</b>	<b>Overhead - Fees</b>									
17	BCMB Fees	\$ 151,536	\$ 343,207	\$ 759,564	\$ 1,254,307	\$ 186,858	\$ 422,512	\$ 949,785	\$ 1,559,154	\$ 1,559,154
18	BCMB Fines / Levies	\$ 10,363	\$ 2,951	\$ 10,567	\$ 23,881	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
19	ABDA Fees	\$ 91,609	\$ 214,457	\$ 454,704	\$ 760,771	\$ 142,654	\$ 355,772	\$ 584,985	\$ 1,083,411	\$ 1,083,411
20	<b>Sub Total</b>	<b>\$ 253,508</b>	<b>\$ 560,615</b>	<b>\$ 1,224,836</b>	<b>\$ 2,038,959</b>	<b>\$ 329,512</b>	<b>\$ 778,284</b>	<b>\$ 1,534,770</b>	<b>\$ 2,642,565</b>	<b>\$ 2,642,565</b>
<b>21</b>	<b>Overhead - Other</b>									
22	Non-labour collection costs	\$ 0	\$ 9,825	\$ 564,952	\$ 574,777	\$ 0	\$ 9,825	\$ 564,952	\$ 574,777	\$ 234,971
23	Deposit incentives	\$ 0	\$ 0	\$ 78,525	\$ 78,525	\$ 0	\$ 0	\$ 78,525	\$ 78,525	\$ 78,525
24	Goodwill - Current Year CCA	\$ 531,829	\$ 500	\$ 0	\$ 532,329	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
25	Shrinkage	\$ 8,098	\$ 59,467	\$ 54,909	\$ 122,474	\$ 8,098	\$ 59,467	\$ 54,909	\$ 122,474	\$ 122,474
26	Other costs	\$ 427,160	\$ 287,761	\$ 500,911	\$ 1,215,832	\$ 427,160	\$ 287,761	\$ 502,109	\$ 1,217,030	\$ 1,217,030
27	<b>Sub Total</b>	<b>\$ 967,087</b>	<b>\$ 357,553</b>	<b>\$ 1,199,297</b>	<b>\$ 2,523,937</b>	<b>\$ 435,258</b>	<b>\$ 357,053</b>	<b>\$ 1,200,495</b>	<b>\$ 1,992,806</b>	<b>\$ 1,653,000</b>
<b>28</b>	<b>Overhead - Table 9</b>									
29	Table 9 Collections costs	\$ 26,448	\$ 150,840	\$ 558,502	\$ 735,790	\$ 26,448	\$ 150,840	\$ 558,502	\$ 735,790	\$ 300,793
30	Table 9 Cash & Shrinkage	\$ 26,632	\$ 65,022	\$ 455,391	\$ 547,045	\$ 26,632	\$ 62,659	\$ 431,715	\$ 521,006	\$ 521,006
31	<b>Sub Total</b>	<b>\$ 53,080</b>	<b>\$ 215,862</b>	<b>\$ 1,013,893</b>	<b>\$ 1,282,835</b>	<b>\$ 53,080</b>	<b>\$ 213,499</b>	<b>\$ 990,217</b>	<b>\$ 1,256,796</b>	<b>\$ 821,799</b>
<b>32</b>	<b>Total</b>	<b>\$ 2,170,947</b>	<b>\$ 2,850,810</b>	<b>\$ 6,714,504</b>	<b>\$ 11,736,261</b>	<b>\$ 1,693,227</b>	<b>\$ 2,979,852</b>	<b>\$ 6,980,518</b>	<b>\$ 11,653,596</b>	<b>\$ 10,878,794</b>

**SCHEDULE 9: MISCELLANEOUS REVENUE**

	2018 Fiscal Year As Accepted				2018 Fiscal Year As Adjusted			
	Small	Medium	Large	Total	Small	Medium	Large	Total
<b>No.</b>	<b>(a)</b>	<b>(b)</b>	<b>(c)</b>	<b>(d)</b>	<b>(e)</b>	<b>(f)</b>	<b>(g)</b>	<b>(h)</b>
<b>1</b> Cardboard Sales	\$ 1,199	\$ 1,035	\$ 5,899	\$ 8,133	\$ 1,199	\$ 1,035	\$ 5,899	\$ 8,133
<b>2</b> Pick-up Fees	\$ 274,239	\$ 72,095	\$ 89,076	\$ 435,410	\$ 0	\$ 0	\$ 0	\$ 0
<b>3</b> Other Recycling	\$ 0	\$ 12,204	\$ 31,582	\$ 43,786	\$ 0	\$ 12,204	\$ 31,582	\$ 43,786
<b>4</b> Wine Bottle Sales	\$ 84	\$ 226	\$ 9,326	\$ 9,636	\$ 84	\$ 226	\$ 9,326	\$ 9,636
<b>5</b> Value Add Fee (VAF)	\$ 0	\$ 0	\$ 112,035	\$ 112,035	\$ 0	\$ 0	\$ 112,035	\$ 112,035
<b>6</b> Other Revenue	\$ 219,646	\$ 61,103	\$ 125,456	\$ 406,205	\$ 50,550	\$ 38,117	\$ 68,371	\$ 157,038
<b>7 Total</b>	<b>\$ 495,168</b>	<b>\$ 146,663</b>	<b>\$ 373,374</b>	<b>\$ 1,015,205</b>	<b>\$ 51,833</b>	<b>\$ 51,582</b>	<b>\$ 227,213</b>	<b>\$ 330,628</b>

**SCHEDULE 10: REVENUE**

No.	2018 Fiscal Year As Accepted				2018 Fiscal Year As Adjusted				
	Small	Medium	Large	Total	Small	Medium	Large	Total	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	
1	<i>Volume</i>	233,572,267	528,139,482	1,168,613,940	1,930,325,689	233,572,267	528,139,482	1,187,230,826	1,948,942,575
2	Revenue	\$ 36,884,112	\$ 83,867,359	\$ 189,778,142	\$ 310,529,613	\$ 36,440,777	\$ 83,772,278	\$ 192,626,195	\$ 312,839,250
3	Less: Purchases	\$ 25,519,755	\$ 58,339,121	\$ 131,060,629	\$ 214,919,505	\$ 25,519,755	\$ 58,339,121	\$ 133,146,022	\$ 217,004,898
4	Gross Margin	\$ 11,364,357	\$ 25,528,238	\$ 58,717,513	\$ 95,610,108	\$ 10,921,022	\$ 25,433,157	\$ 59,480,173	\$ 95,834,352
5	Income Taxes	\$ 153,067	\$ 227,430	\$ 527,157	\$ 907,654	\$ 112,981	\$ 312,181	\$ 1,973,119	\$ 2,398,281

**SCHEDULE 10A: CALCULATION OF TOTAL SYSTEM RATIOS**

Volume Cluster	Depots in Study System	Depots In Total System	Study System Depots, FY2018 Volume	Total System			
				Depots Calendar Year Volume	Depot Ratio	Volume Ratio	
No.	(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	1	8	52	13,203,876	64,746,690	6.50	4.90
2	2	9	9	21,435,642	20,867,440	1.00	0.97
3	3	8	9	21,625,661	23,807,548	1.13	1.10
4	4	9	10	26,886,124	29,282,851	1.11	1.09
5	5	9	11	31,676,691	37,998,586	1.22	1.20
6	6	8	8	34,611,606	34,424,800	1.00	0.99
7	7	9	8	44,573,837	39,556,744	0.89	0.89
8	8	8	9	44,293,617	50,401,787	1.13	1.14
9	9	9	8	61,415,969	59,283,430	0.89	0.97
10	10	9	9	69,303,169	67,559,096	1.00	0.97
11	11	8	9	68,398,078	78,870,796	1.13	1.15
12	12	9	8	89,051,743	77,348,855	0.89	0.87
13	13	8	8	95,257,116	99,731,267	1.00	1.05
14	14	9	9	124,515,557	126,219,118	1.00	1.01
15	15	9	9	146,865,474	143,472,935	1.00	0.98
16	16	8	8	143,380,270	150,998,803	1.00	1.05
17	17	9	9	173,651,913	173,501,576	1.00	1.00
18	18	8	8	175,034,575	169,366,588	1.00	0.97
19	19	9	9	238,451,042	231,062,955	1.00	0.97
20	20	9	9	325,310,615	297,622,953	1.00	0.91
<b>21</b>	<b>Total</b>	<b>172</b>	<b>219</b>	<b>1,948,942,575</b>	<b>1,976,124,818</b>	<b>1.27</b>	<b>1.01</b>

**SCHEDULE 10B: REVENUES**

		Miscellaneous Revenue		Deposits		Handling Commissions		Total Revenue		
Volume Cluster	Volume Ratio	Study System	Total System (b * c)	Study System	Total System	Study System	Total System	Study System (c + g)	Total System (d + h)	
No.	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
1	1	4.90	\$ 43,000	\$ 210,855	\$ 1,390,960	\$ 6,458,391	\$ 586,760	\$ 2,722,073	\$ 629,760	\$ 2,932,928
2	2	0.97	\$ 900	\$ 876	\$ 2,342,145	\$ 2,344,655	\$ 978,410	\$ 979,529	\$ 979,310	\$ 980,405
3	3	1.10	\$ 6,576	\$ 7,239	\$ 2,348,495	\$ 2,644,934	\$ 983,046	\$ 1,113,564	\$ 989,622	\$ 1,120,804
4	4	1.09	\$ 0	\$ 0	\$ 2,956,147	\$ 3,246,245	\$ 1,247,662	\$ 1,375,007	\$ 1,247,662	\$ 1,375,007
5	5	1.20	\$ 299	\$ 359	\$ 3,477,170	\$ 3,622,203	\$ 1,464,933	\$ 1,527,881	\$ 1,465,232	\$ 1,528,240
6	6	0.99	\$ 84	\$ 84	\$ 3,768,841	\$ 3,827,877	\$ 1,659,179	\$ 1,479,314	\$ 1,659,263	\$ 1,479,398
7	7	0.89	\$ 900	\$ 799	\$ 4,873,723	\$ 4,322,494	\$ 2,102,762	\$ 1,875,952	\$ 2,103,662	\$ 1,876,751
8	8	1.14	\$ 74	\$ 84	\$ 4,875,321	\$ 5,023,299	\$ 2,062,911	\$ 2,131,384	\$ 2,062,985	\$ 2,131,468
9	9	0.97	\$ 582	\$ 562	\$ 6,733,854	\$ 5,951,307	\$ 2,869,126	\$ 2,530,264	\$ 2,869,708	\$ 2,530,826
10	10	0.97	\$ 12,177	\$ 11,871	\$ 7,624,401	\$ 7,670,043	\$ 3,278,322	\$ 3,296,961	\$ 3,290,499	\$ 3,308,831
11	11	1.15	\$ 13,091	\$ 15,095	\$ 7,540,927	\$ 8,504,409	\$ 3,261,076	\$ 3,345,833	\$ 3,274,167	\$ 3,360,929
12	12	0.87	\$ 2,681	\$ 2,329	\$ 9,804,024	\$ 8,640,856	\$ 4,165,800	\$ 3,680,150	\$ 4,168,481	\$ 3,682,478
13	13	1.05	\$ 15,080	\$ 15,788	\$ 10,535,678	\$ 10,554,974	\$ 4,703,237	\$ 4,707,922	\$ 4,718,317	\$ 4,723,711
14	14	1.01	\$ 7,971	\$ 8,080	\$ 13,863,093	\$ 13,882,001	\$ 6,137,580	\$ 6,138,416	\$ 6,145,551	\$ 6,146,496
15	15	0.98	\$ 75,133	\$ 73,397	\$ 16,347,566	\$ 16,368,357	\$ 7,196,856	\$ 7,198,431	\$ 7,271,989	\$ 7,271,829
16	16	1.05	\$ 35,862	\$ 37,768	\$ 16,279,715	\$ 16,299,355	\$ 7,279,586	\$ 7,282,402	\$ 7,315,448	\$ 7,320,169
17	17	1.00	\$ 38,955	\$ 38,921	\$ 19,343,654	\$ 19,359,124	\$ 8,425,459	\$ 8,426,215	\$ 8,464,414	\$ 8,465,137
18	18	0.97	\$ 1,533	\$ 1,483	\$ 19,606,792	\$ 19,628,968	\$ 8,730,221	\$ 8,733,334	\$ 8,731,754	\$ 8,734,817
19	19	0.97	\$ 48,527	\$ 47,023	\$ 26,744,726	\$ 26,776,271	\$ 12,020,435	\$ 12,023,643	\$ 12,068,962	\$ 12,070,666
20	20	0.91	\$ 27,203	\$ 24,888	\$ 36,547,666	\$ 34,509,743	\$ 16,350,363	\$ 15,454,958	\$ 16,377,566	\$ 15,479,846
<b>21</b>	<b>Total</b>	<b>1.01</b>	<b>\$ 330,628</b>	<b>\$ 497,502</b>	<b>\$ 217,004,898</b>	<b>\$ 219,635,505</b>	<b>\$ 95,503,724</b>	<b>\$ 96,023,233</b>	<b>\$ 95,834,352</b>	<b>\$ 96,520,734</b>
<b>22</b>	<b>Percent Change</b>			<b>150.5%</b>		<b>101.2%</b>		<b>100.5%</b>		<b>100.7%</b>

**SCHEDULE 10C: COSTS**

No.	Volume Cluster	Depot Ratio	Volume Ratio	Direct Labour		Collector Labour		Overhead Labour		Building		Vehicle		Fuel		Equipment		Overhead		Summary		
				Study System	Total System (c x d)	Study System	Total System (c x f)	Study System	Total System (b x h)	Study System	Total System (Calculated)	Study System	Total System (c x l)	Study System	Total System (c x o)	Study System	Total System (c x q)	Study System	Total System (c x w)	Study System	Total System	Operating Cost *
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	
1	1	6.50	4.90	\$ 235,124	\$ 1,152,957	\$ 4,307	\$ 21,119	\$ 61,970	\$ 402,805	\$ 255,404	\$ 1,606,744	\$ 14,205	\$ 69,655	\$ 11,695	\$ 57,348	\$ 47,214	\$ 231,519	\$ 193,040	\$ 946,592	\$ 822,958	\$ 4,488,739	6.93
2	2	1.00	0.97	\$ 343,017	\$ 333,924	\$ 537	\$ 523	\$ 121,157	\$ 121,157	\$ 335,977	\$ 314,931	\$ 24,724	\$ 24,069	\$ 11,139	\$ 10,843	\$ 36,752	\$ 35,778	\$ 174,275	\$ 169,655	\$ 1,047,577	\$ 1,010,880	4.84
3	3	1.13	1.10	\$ 221,249	\$ 243,571	\$ 9,445	\$ 10,398	\$ 187,429	\$ 210,857	\$ 308,034	\$ 331,989	\$ 7,515	\$ 8,273	\$ 19,865	\$ 21,870	\$ 29,160	\$ 32,102	\$ 143,388	\$ 157,855	\$ 926,083	\$ 1,016,914	4.27
4	4	1.11	1.09	\$ 278,795	\$ 303,648	\$ 36,674	\$ 39,944	\$ 182,537	\$ 202,819	\$ 433,909	\$ 419,471	\$ 43,797	\$ 47,702	\$ 22,978	\$ 25,026	\$ 68,600	\$ 74,715	\$ 137,902	\$ 150,195	\$ 1,205,193	\$ 1,263,520	4.31
5	5	1.22	1.20	\$ 387,861	\$ 465,268	\$ 17,878	\$ 21,446	\$ 198,940	\$ 243,149	\$ 499,828	\$ 646,951	\$ 9,766	\$ 11,715	\$ 24,211	\$ 29,043	\$ 91,259	\$ 109,472	\$ 307,971	\$ 369,434	\$ 1,537,714	\$ 1,896,480	4.99
6	6	1.00	0.99	\$ 499,153	\$ 496,459	\$ 25,488	\$ 25,351	\$ 394,480	\$ 394,480	\$ 438,104	\$ 424,157	\$ 87,196	\$ 86,725	\$ 48,737	\$ 48,474	\$ 75,518	\$ 75,110	\$ 204,563	\$ 203,459	\$ 1,773,239	\$ 1,754,215	5.10
7	7	0.89	0.89	\$ 699,621	\$ 620,874	\$ 37,072	\$ 32,899	\$ 276,089	\$ 245,412	\$ 455,895	\$ 436,478	\$ 31,216	\$ 27,702	\$ 37,506	\$ 33,285	\$ 95,913	\$ 85,117	\$ 294,316	\$ 261,188	\$ 1,927,627	\$ 1,742,956	4.41
8	8	1.13	1.14	\$ 610,706	\$ 694,924	\$ 4,396	\$ 5,002	\$ 446,700	\$ 502,538	\$ 534,003	\$ 579,301	\$ 48,152	\$ 54,792	\$ 12,805	\$ 14,571	\$ 84,489	\$ 96,140	\$ 242,467	\$ 275,903	\$ 1,983,718	\$ 2,223,171	4.41
9	9	0.89	0.97	\$ 1,001,781	\$ 966,996	\$ 1,556	\$ 1,502	\$ 458,874	\$ 407,888	\$ 707,757	\$ 624,831	\$ 55,815	\$ 53,877	\$ 16,209	\$ 15,646	\$ 122,627	\$ 118,369	\$ 327,161	\$ 315,801	\$ 2,691,781	\$ 2,504,911	4.23
10	10	1.00	0.97	\$ 1,716,734	\$ 1,673,531	\$ 7,779	\$ 7,584	\$ 477,865	\$ 477,865	\$ 839,839	\$ 697,725	\$ 108,443	\$ 105,714	\$ 48,978	\$ 47,746	\$ 50,431	\$ 49,162	\$ 512,725	\$ 499,822	\$ 3,762,795	\$ 3,559,148	5.27
11	11	1.13	1.15	\$ 1,116,078	\$ 1,286,966	\$ 94,474	\$ 108,939	\$ 606,683	\$ 682,518	\$ 691,745	\$ 1,053,745	\$ 55,596	\$ 64,109	\$ 39,721	\$ 45,803	\$ 74,850	\$ 86,311	\$ 312,622	\$ 360,489	\$ 2,991,770	\$ 3,688,880	4.68
12	12	0.89	0.87	\$ 1,705,960	\$ 1,481,768	\$ 37,710	\$ 32,754	\$ 527,346	\$ 468,752	\$ 713,503	\$ 731,874	\$ 76,154	\$ 66,146	\$ 31,842	\$ 27,657	\$ 181,423	\$ 157,581	\$ 517,249	\$ 449,274	\$ 3,791,187	\$ 3,415,807	4.42
13	13	1.00	1.05	\$ 1,944,265	\$ 2,035,586	\$ 25,246	\$ 26,432	\$ 884,196	\$ 884,196	\$ 1,255,344	\$ 1,160,276	\$ 77,098	\$ 80,719	\$ 28,934	\$ 30,293	\$ 103,416	\$ 108,273	\$ 471,854	\$ 494,016	\$ 4,790,352	\$ 4,819,792	4.83
14	14	1.00	1.01	\$ 2,693,023	\$ 2,729,867	\$ 67,422	\$ 68,345	\$ 726,601	\$ 726,601	\$ 1,387,976	\$ 1,311,376	\$ 75,657	\$ 76,692	\$ 38,920	\$ 39,453	\$ 311,934	\$ 316,202	\$ 665,959	\$ 675,071	\$ 5,967,492	\$ 5,943,606	4.71
15	15	1.00	0.98	\$ 2,934,271	\$ 2,866,490	\$ 8,334	\$ 8,142	\$ 1,052,965	\$ 1,052,965	\$ 1,377,129	\$ 1,248,476	\$ 69,358	\$ 67,755	\$ 15,936	\$ 15,568	\$ 238,672	\$ 233,159	\$ 714,952	\$ 698,437	\$ 6,411,617	\$ 6,190,991	4.32
16	16	1.00	1.05	\$ 2,565,083	\$ 2,701,379	\$ 64,267	\$ 67,682	\$ 990,799	\$ 990,799	\$ 1,204,907	\$ 1,036,127	\$ 45,322	\$ 47,730	\$ 18,328	\$ 19,302	\$ 315,336	\$ 332,091	\$ 909,271	\$ 957,586	\$ 6,113,312	\$ 6,152,696	4.07
17	17	1.00	1.00	\$ 3,079,086	\$ 3,076,420	\$ 76,009	\$ 75,943	\$ 765,777	\$ 765,777	\$ 1,295,225	\$ 1,344,257	\$ 56,116	\$ 56,067	\$ 24,280	\$ 24,259	\$ 236,725	\$ 236,520	\$ 677,167	\$ 676,580	\$ 6,210,383	\$ 6,255,823	3.61
18	18	1.00	0.97	\$ 3,649,310	\$ 3,531,138	\$ 31,498	\$ 30,478	\$ 939,628	\$ 939,628	\$ 1,455,489	\$ 1,604,671	\$ 122,050	\$ 118,098	\$ 39,380	\$ 38,104	\$ 362,196	\$ 350,467	\$ 908,601	\$ 879,178	\$ 7,508,152	\$ 7,491,763	4.42
19	19	1.00	0.97	\$ 4,728,819	\$ 4,582,303	\$ 58,018	\$ 56,220	\$ 1,613,288	\$ 1,613,288	\$ 1,620,251	\$ 1,511,485	\$ 134,620	\$ 130,449	\$ 58,715	\$ 56,896	\$ 860,267	\$ 833,613	\$ 1,295,081	\$ 1,254,955	\$ 10,369,060	\$ 10,039,210	4.34
20	20	1.00	0.91	\$ 4,219,261	\$ 3,860,154	\$ 172,192	\$ 157,537	\$ 1,873,863	\$ 1,873,863	\$ 2,117,000	\$ 1,896,329	\$ 81,847	\$ 74,881	\$ 52,156	\$ 47,717	\$ 1,369,970	\$ 1,253,370	\$ 1,868,231	\$ 1,709,223	\$ 11,754,520	\$ 10,873,073	3.65
21	<b>Total</b>	<b>1.27</b>	<b>1.01</b>	<b>\$ 34,629,197</b>	<b>\$ 35,104,224</b>	<b>\$ 780,303</b>	<b>\$ 798,238</b>	<b>\$ 12,787,187</b>	<b>\$ 13,207,358</b>	<b>\$ 17,927,318</b>	<b>\$ 18,981,196</b>	<b>\$ 1,224,646</b>	<b>\$ 1,272,870</b>	<b>\$ 602,335</b>	<b>\$ 648,904</b>	<b>\$ 4,756,752</b>	<b>\$ 4,815,072</b>	<b>\$ 10,878,794</b>	<b>\$ 11,504,714</b>	<b>\$ 83,586,531</b>	<b>\$ 86,332,575</b>	<b>4.37</b>
22	<b>Percent Change</b>				<b>101.4%</b>		<b>102.3%</b>		<b>103.3%</b>		<b>105.9%</b>		<b>103.9%</b>		<b>107.7%</b>		<b>101.2%</b>		<b>105.8%</b>		<b>103.3%</b>	

\*[(d+f+h+i)+l+n+p+r]  
 \*\*[(g+i)+k+m+o+q+s]

**SCHEDULE 11A: CALCULATION OF TARGET YEAR RATIOS**

	Volume Cluster	Total System Depots	Target Year Depots	Total System Volume	Target Year Volume	Depot Ratio	Volume Ratio	Total System Ratio	FY Quarter
No.	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
1	1	52	52	64,746,690	65,372,283	1.00	1.01	1.05	Q3
2	2	9	9	20,867,440	21,069,065	1.00	1.01	1.05	Q4
3	3	9	9	23,807,548	24,037,580	1.00	1.01	1.05	Q4
4	4	10	10	29,282,851	29,565,787	1.00	1.01	1.05	Q3
5	5	11	11	37,998,586	38,365,735	1.00	1.01	1.05	Q4
6	6	8	8	34,424,800	34,757,418	1.00	1.01	1.05	Q4
7	7	8	8	39,556,744	39,938,948	1.00	1.01	1.06	Q3
8	8	9	9	50,401,787	50,888,777	1.00	1.01	1.06	Q3
9	9	8	8	59,283,430	59,856,236	1.00	1.01	1.06	Q3
10	10	9	9	67,559,096	68,211,863	1.00	1.01	1.07	Q3
11	11	9	9	78,870,796	79,632,859	1.00	1.01	1.06	Q3
12	12	8	8	77,348,855	78,096,212	1.00	1.01	1.06	Q3
13	13	8	9	99,731,267	100,694,887	1.13	1.01	1.11	Q4
14	14	9	9	126,219,118	127,438,668	1.00	1.01	1.07	Q2
15	15	9	9	143,472,935	144,859,194	1.00	1.01	1.07	Q3
16	16	8	8	150,998,803	152,457,778	1.00	1.01	1.07	Q3
17	17	9	9	173,501,576	175,177,977	1.00	1.01	1.07	Q2
18	18	8	9	169,366,588	171,003,036	1.13	1.01	1.12	Q2
19	19	9	11	231,062,955	233,295,523	1.22	1.01	1.14	Q3
20	20	9	10	297,622,953	300,498,635	1.11	1.01	1.10	Q3
21	<b>Total</b>	<b>219</b>	<b>224</b>	<b>1,976,124,818</b>	<b>1,995,218,459</b>	<b>1.02</b>	<b>1.01</b>	<b>1.08</b>	<b>Q3</b>

SCHEDULE 11B: REVENUES

			Miscellaneous Revenue		Deposits		Handling Commissions		Total Revenue		
Volume Cluster	FY Quarter	Total System Ratio	Total System	Target Year	Total System	Target Year	Total System	Target Year	Total System (c + g)	Target System (d + h)	
No.	(a)	(b)	(c)	(d)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
1	1	Q3	1.05	\$ 210,855	\$ 222,016	\$ 6,458,391	\$ 7,269,673	\$ 3,274,660	\$ 3,207,217	\$ 3,485,516	\$ 3,429,233
2	2	Q4	1.05	\$ 876	\$ 919	\$ 2,344,655	\$ 2,342,969	\$ 1,055,402	\$ 1,033,665	\$ 1,056,278	\$ 1,034,585
3	3	Q4	1.05	\$ 7,239	\$ 7,595	\$ 2,644,934	\$ 2,673,080	\$ 1,204,102	\$ 1,179,303	\$ 1,211,342	\$ 1,186,899
4	4	Q3	1.05	\$ 0	\$ 0	\$ 3,246,245	\$ 3,287,840	\$ 1,481,024	\$ 1,450,521	\$ 1,481,024	\$ 1,450,521
5	5	Q4	1.05	\$ 359	\$ 376	\$ 3,622,203	\$ 4,266,431	\$ 1,921,835	\$ 1,882,254	\$ 1,922,194	\$ 1,882,630
6	6	Q4	1.05	\$ 84	\$ 88	\$ 3,827,877	\$ 3,865,171	\$ 1,741,086	\$ 1,705,227	\$ 1,741,169	\$ 1,705,315
7	7	Q3	1.06	\$ 799	\$ 846	\$ 4,322,494	\$ 4,441,379	\$ 2,000,641	\$ 1,959,437	\$ 2,001,440	\$ 1,960,283
8	8	Q3	1.06	\$ 84	\$ 89	\$ 5,023,299	\$ 5,659,046	\$ 2,549,145	\$ 2,496,645	\$ 2,549,230	\$ 2,496,734
9	9	Q3	1.06	\$ 562	\$ 597	\$ 5,951,307	\$ 6,656,265	\$ 2,998,348	\$ 2,936,595	\$ 2,998,910	\$ 2,937,192
10	10	Q3	1.07	\$ 11,871	\$ 12,647	\$ 7,670,043	\$ 7,585,446	\$ 3,416,902	\$ 3,346,529	\$ 3,428,772	\$ 3,359,176
11	11	Q3	1.06	\$ 15,095	\$ 16,045	\$ 8,504,409	\$ 8,855,508	\$ 3,989,008	\$ 3,906,853	\$ 4,004,103	\$ 3,922,898
12	12	Q3	1.06	\$ 2,329	\$ 2,477	\$ 8,640,856	\$ 8,684,627	\$ 3,912,034	\$ 3,831,463	\$ 3,914,362	\$ 3,833,941
13	13	Q4	1.11	\$ 15,788	\$ 17,501	\$ 10,554,974	\$ 11,197,694	\$ 5,044,057	\$ 4,940,173	\$ 5,059,846	\$ 4,957,674
14	14	Q2	1.07	\$ 8,080	\$ 8,652	\$ 13,882,001	\$ 14,171,715	\$ 6,383,720	\$ 6,252,244	\$ 6,391,800	\$ 6,260,896
15	15	Q3	1.07	\$ 73,397	\$ 78,316	\$ 16,368,357	\$ 16,108,951	\$ 7,256,357	\$ 7,106,909	\$ 7,329,755	\$ 7,185,225
16	16	Q3	1.07	\$ 37,768	\$ 40,230	\$ 16,299,355	\$ 16,953,945	\$ 7,636,989	\$ 7,479,702	\$ 7,674,757	\$ 7,519,932
17	17	Q2	1.07	\$ 38,921	\$ 41,768	\$ 19,359,124	\$ 19,480,527	\$ 8,775,101	\$ 8,594,373	\$ 8,814,022	\$ 8,636,141
18	18	Q2	1.12	\$ 1,483	\$ 1,656	\$ 19,628,968	\$ 19,016,256	\$ 8,565,967	\$ 8,389,547	\$ 8,567,451	\$ 8,391,204
19	19	Q3	1.14	\$ 47,023	\$ 53,499	\$ 26,776,271	\$ 25,943,442	\$ 11,686,353	\$ 11,445,667	\$ 11,733,377	\$ 11,499,166
20	20	Q3	1.10	\$ 24,888	\$ 27,384	\$ 34,509,743	\$ 33,416,711	\$ 15,052,724	\$ 14,742,706	\$ 15,077,612	\$ 14,770,091
21	<b>Total</b>	<b>Q3</b>	<b>1.08</b>	<b>\$ 497,502</b>	<b>\$ 532,702</b>	<b>\$ 219,635,505</b>	<b>\$ 221,876,675</b>	<b>\$ 99,945,456</b>	<b>\$ 97,887,033</b>	<b>\$ 100,442,957</b>	<b>\$ 98,419,735</b>
22	<b>Percent Change</b>				<b>107.08%</b>		<b>101.02%</b>		<b>97.94%</b>		<b>97.99%</b>

**SCHEDULE 11C: COSTS**

Study System Volume Cluster	Depot Ratio	Volume Ratio	Direct Labour		Contract Labour		Overhead Labour		Building		Vehicle		Fuel		Equipment		Overhead		Total Operating Expense																				
			FY 2018 Index (2017 Q4 = 100.0)	Target Year	FY 2018 Index (2017 Q4 = 100.0)	Target Year	FY 2018 Index (2017 Q4 = 100.0)	Target Year	FY 2018 Index (2017 Q4 = 100.0)	Target Year	FY 2018 Index (2017 = 100.0)	Target Year	FY 2018 Index (2017 = 100.0)	Target Year	FY 2018 Index (2017 = 100.0)	Target Year	FY 2018 Index (2017 = 100.0)	Target Year	Total System	Target Year																			
No.	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)																			
1				109.43		109.43		109.43		104.70		105.80		115.30		102.70		106.10																					
2	1	1.00	1.01	101.6 \$	1,253,514	101.6 \$	22,961	101.6 \$	433,746	100.4 \$	1,675,559	102.4 \$	72,663	129.1 \$	51,713	103.2 \$	232,624	103.1 \$	983,548	\$ 4,488,739 \$ 4,726,328																			
3	2	1.00	1.01	103.7 \$	355,644	103.7 \$	557	103.7 \$	127,803	100.7 \$	327,440	102.7 \$	25,035	109.0 \$	11,581	103.9 \$	35,706	102.6 \$	177,138	\$ 1,010,880 \$ 1,060,904																			
4	3	1.00	1.01	103.7 \$	259,414	103.7 \$	11,074	103.7 \$	222,423	100.7 \$	345,176	102.7 \$	8,605	109.0 \$	23,357	103.9 \$	32,038	102.6 \$	164,817	\$ 1,016,914 \$ 1,066,904																			
5	4	1.00	1.01	101.6 \$	330,131	101.6 \$	43,428	101.6 \$	218,398	100.4 \$	437,437	102.4 \$	49,762	129.1 \$	22,567	103.2 \$	75,072	103.1 \$	156,059	\$ 1,263,520 \$ 1,332,853																			
6	5	1.00	1.01	103.7 \$	495,532	103.7 \$	22,841	103.7 \$	256,486	100.7 \$	672,649	102.7 \$	12,185	109.0 \$	31,019	103.9 \$	109,253	102.6 \$	385,728	\$ 1,896,480 \$ 1,985,694																			
7	6	1.00	1.01	103.7 \$	528,751	103.7 \$	26,999	103.7 \$	416,118	100.7 \$	441,006	102.7 \$	90,206	109.0 \$	51,771	103.9 \$	74,960	102.6 \$	212,432	\$ 1,754,215 \$ 1,842,244																			
8	7	1.00	1.01	101.6 \$	675,025	101.6 \$	35,768	101.6 \$	264,263	100.4 \$	455,172	102.4 \$	28,898	129.1 \$	30,014	103.2 \$	85,523	103.1 \$	271,385	\$ 1,742,956 \$ 1,846,049																			
9	8	1.00	1.01	101.6 \$	755,533	101.6 \$	5,438	101.6 \$	541,139	100.4 \$	604,112	102.4 \$	57,158	129.1 \$	13,139	103.2 \$	96,599	103.1 \$	286,675	\$ 2,223,171 \$ 2,359,793																			
10	9	1.00	1.01	101.6 \$	1,051,335	101.6 \$	1,633	101.6 \$	439,219	100.4 \$	651,591	102.4 \$	56,204	129.1 \$	14,109	103.2 \$	118,934	103.1 \$	328,131	\$ 2,504,911 \$ 2,661,156																			
11	10	1.00	1.01	101.6 \$	1,819,491	101.6 \$	8,245	101.6 \$	514,571	100.4 \$	727,607	102.4 \$	110,280	129.1 \$	43,054	103.2 \$	49,396	103.1 \$	519,336	\$ 3,559,148 \$ 3,791,981																			
12	11	1.00	1.01	101.6 \$	1,399,211	101.6 \$	118,440	101.6 \$	734,944	100.4 \$	1,098,876	102.4 \$	66,877	129.1 \$	41,302	103.2 \$	86,722	103.1 \$	374,563	\$ 3,688,880 \$ 3,920,936																			
13	12	1.00	1.01	101.6 \$	1,611,003	101.6 \$	35,611	101.6 \$	504,758	100.4 \$	763,220	102.4 \$	69,003	129.1 \$	24,940	103.2 \$	158,333	103.1 \$	466,814	\$ 3,415,807 \$ 3,633,682																			
14	13	1.13	1.01	103.7 \$	2,167,990	103.7 \$	28,151	103.7 \$	1,049,284	100.7 \$	1,357,160	102.7 \$	83,959	109.0 \$	32,353	103.9 \$	108,057	102.6 \$	515,805	\$ 4,819,792 \$ 5,342,758																			
15	14	1.00	1.01	101.0 \$	2,985,101	101.0 \$	74,735	101.0 \$	786,932	100.0 \$	1,373,010	101.9 \$	80,397	126.2 \$	36,393	101.7 \$	322,396	102.5 \$	705,532	\$ 5,943,606 \$ 6,364,497																			
16	15	1.00	1.01	101.6 \$	3,116,497	101.6 \$	8,852	101.6 \$	1,133,846	100.4 \$	1,301,946	102.4 \$	70,681	129.1 \$	14,038	103.2 \$	234,271	103.1 \$	725,705	\$ 6,190,991 \$ 6,605,836																			
17	16	1.00	1.01	101.6 \$	2,936,985	101.6 \$	73,585	101.6 \$	1,066,904	100.4 \$	1,080,503	102.4 \$	49,791	129.1 \$	17,405	103.2 \$	333,676	103.1 \$	994,971	\$ 6,152,696 \$ 6,553,821																			
18	17	1.00	1.01	101.0 \$	3,364,056	101.0 \$	83,043	101.0 \$	829,361	100.0 \$	1,407,437	101.9 \$	58,775	126.2 \$	22,378	101.7 \$	241,153	102.5 \$	707,110	\$ 6,255,823 \$ 6,713,314																			
19	18	1.13	1.01	101.0 \$	3,861,289	101.0 \$	33,328	101.0 \$	1,144,854	100.0 \$	1,890,102	101.9 \$	123,802	126.2 \$	35,150	101.7 \$	357,333	102.5 \$	918,850	\$ 7,491,763 \$ 8,364,707																			
20	19	1.22	1.01	101.6 \$	4,981,957	101.6 \$	61,124	101.6 \$	2,123,256	100.4 \$	1,926,491	102.4 \$	136,082	129.1 \$	51,305	103.2 \$	837,589	103.1 \$	1,303,950	\$ 10,039,210 \$ 11,421,756																			
21	20	1.11	1.01	101.6 \$	4,196,825	101.6 \$	171,276	101.6 \$	2,241,999	100.4 \$	2,197,274	102.4 \$	78,115	129.1 \$	43,028	103.2 \$	1,259,349	103.1 \$	1,775,954	\$ 10,873,073 \$ 11,963,819																			
22	Total	1.02	1.01		\$ 38,145,284		\$ 867,090		\$ 15,050,305		\$ 20,733,770		\$ 1,328,480		\$ 610,616		\$ 4,848,985		\$ 11,974,502	\$ 93,559,031																			
23	Total System / % Increase				\$35,104,224		108.66%		\$798,238		108.63%		\$13,207,358		113.95%		\$20,733,770		109.23%		\$1,272,870		104.37%		\$648,904		94.10%		\$4,815,072		100.70%		\$11,504,714		104.08%		\$86,332,575		108.37%

**SCHEDULE 11D: NET INCOME**

Volume Cluster	Total Revenue			Total Operating Expenses			Net Income Before Tax			Calculated Income Tax			Net Income After Tax			
	Study System	Total System	Target Year	Study System	Total System	Target Year	Study System	Total System	Target Year	Study System	Total System	Target Year	Study System	Total System	Target Year	
No.	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
1	1	\$ 629,760	\$ 2,932,928	\$ 3,429,233	\$ 2,213,918	\$ 10,947,130	\$ 11,996,000	\$ (193,198)	\$ (1,555,811)	\$ (1,297,095)	\$ 0	\$ 0	\$ 0	\$ (193,198)	\$ (1,555,811)	\$ (1,297,095)
2	2	\$ 979,310	\$ 980,405	\$ 1,034,585	\$ 3,389,722	\$ 3,355,535	\$ 3,403,873	\$ (68,267)	\$ (30,475)	\$ (26,319)	\$ 6,174	\$ 6,011	\$ 0	\$ (74,442)	\$ (36,486)	\$ (26,319)
3	3	\$ 989,622	\$ 1,120,804	\$ 1,186,899	\$ 3,274,578	\$ 3,661,849	\$ 3,739,984	\$ 63,539	\$ 103,889	\$ 119,994	\$ 13,478	\$ 14,838	\$ 23,496	\$ 50,061	\$ 89,052	\$ 96,498
4	4	\$ 1,247,662	\$ 1,375,007	\$ 1,450,521	\$ 4,161,340	\$ 4,509,765	\$ 4,620,693	\$ 42,469	\$ 111,486	\$ 117,669	\$ 9,797	\$ 10,671	\$ 23,041	\$ 32,672	\$ 100,815	\$ 94,627
5	5	\$ 1,465,232	\$ 1,528,240	\$ 1,882,630	\$ 5,014,884	\$ 5,518,683	\$ 6,252,125	\$ (72,482)	\$ (368,240)	\$ (103,064)	\$ 13,625	\$ 16,344	\$ 0	\$ (86,107)	\$ (384,584)	\$ (103,064)
6	6	\$ 1,659,263	\$ 1,479,398	\$ 1,705,315	\$ 5,542,080	\$ 5,582,092	\$ 5,707,415	\$ (113,976)	\$ (274,817)	\$ (136,929)	\$ 8,712	\$ 8,665	\$ 0	\$ (122,687)	\$ (283,482)	\$ (136,929)
7	7	\$ 2,103,662	\$ 1,876,751	\$ 1,960,283	\$ 6,801,350	\$ 6,065,450	\$ 6,287,428	\$ 176,035	\$ 133,795	\$ 114,234	\$ 29,968	\$ 26,595	\$ 22,369	\$ 146,067	\$ 107,200	\$ 91,866
8	8	\$ 2,062,985	\$ 2,131,468	\$ 2,496,734	\$ 6,859,039	\$ 7,246,470	\$ 8,018,839	\$ 79,267	\$ (91,702)	\$ 136,941	\$ 31,227	\$ 35,533	\$ 26,815	\$ 48,040	\$ (127,235)	\$ 110,126
9	9	\$ 2,869,708	\$ 2,530,826	\$ 2,937,192	\$ 9,425,635	\$ 8,456,218	\$ 9,317,420	\$ 177,927	\$ 25,915	\$ 276,037	\$ 39,895	\$ 38,509	\$ 54,052	\$ 138,033	\$ (12,594)	\$ 221,985
10	10	\$ 3,290,499	\$ 3,308,831	\$ 3,359,176	\$ 11,387,196	\$ 11,229,191	\$ 11,377,426	\$ (472,296)	\$ (250,317)	\$ (432,804)	\$ 13,810	\$ 13,462	\$ 0	\$ (486,106)	\$ (263,779)	\$ (432,804)
11	11	\$ 3,274,167	\$ 3,360,929	\$ 3,922,898	\$ 10,532,697	\$ 12,193,288	\$ 12,776,445	\$ 282,397	\$ (327,951)	\$ 1,961	\$ 52,326	\$ 60,338	\$ 384	\$ 230,072	\$ (388,289)	\$ 1,577
12	12	\$ 4,168,481	\$ 3,682,478	\$ 3,833,941	\$ 13,595,211	\$ 12,056,663	\$ 12,318,308	\$ 377,294	\$ 266,671	\$ 200,259	\$ 73,264	\$ 63,636	\$ 39,213	\$ 304,030	\$ 203,035	\$ 161,046
13	13	\$ 4,718,317	\$ 4,723,711	\$ 4,957,674	\$ 15,326,030	\$ 15,374,765	\$ 16,540,453	\$ (72,035)	\$ (96,081)	\$ (385,084)	\$ 33,047	\$ 34,600	\$ 0	\$ (105,083)	\$ (130,681)	\$ (385,084)
14	14	\$ 6,145,551	\$ 6,146,496	\$ 6,260,896	\$ 19,830,585	\$ 19,825,606	\$ 20,536,213	\$ 178,059	\$ 202,890	\$ (103,601)	\$ 71,709	\$ 72,690	\$ 0	\$ 106,350	\$ 130,200	\$ (103,601)
15	15	\$ 7,271,989	\$ 7,271,829	\$ 7,185,225	\$ 22,759,183	\$ 22,559,348	\$ 22,714,787	\$ 860,372	\$ 1,080,837	\$ 579,389	\$ 125,088	\$ 122,198	\$ 113,452	\$ 735,285	\$ 958,639	\$ 465,937
16	16	\$ 7,315,448	\$ 7,320,169	\$ 7,519,932	\$ 22,393,027	\$ 22,452,051	\$ 23,507,766	\$ 1,202,136	\$ 1,167,474	\$ 966,111	\$ 231,280	\$ 243,569	\$ 189,177	\$ 970,855	\$ 923,904	\$ 776,934
17	17	\$ 8,464,414	\$ 8,465,137	\$ 8,636,141	\$ 25,554,037	\$ 25,614,947	\$ 26,193,841	\$ 2,254,031	\$ 2,209,313	\$ 1,922,827	\$ 282,992	\$ 282,747	\$ 376,514	\$ 1,971,039	\$ 1,926,566	\$ 1,546,312
18	18	\$ 8,731,754	\$ 8,734,817	\$ 8,391,204	\$ 27,114,944	\$ 27,120,732	\$ 27,380,963	\$ 1,223,602	\$ 1,243,054	\$ 26,496	\$ 159,176	\$ 154,021	\$ 5,188	\$ 1,064,426	\$ 1,089,033	\$ 21,308
19	19	\$ 12,068,962	\$ 12,070,666	\$ 11,499,166	\$ 37,113,786	\$ 36,815,481	\$ 37,365,198	\$ 1,699,902	\$ 2,031,456	\$ 77,411	\$ 195,334	\$ 189,282	\$ 15,158	\$ 1,504,568	\$ 1,842,175	\$ 62,253
20	20	\$ 16,377,566	\$ 15,479,846	\$ 14,770,091	\$ 48,302,186	\$ 45,382,816	\$ 45,380,530	\$ 4,623,046	\$ 4,606,773	\$ 2,806,272	\$ 1,007,380	\$ 921,640	\$ 549,504	\$ 3,615,666	\$ 3,685,133	\$ 2,256,768
21	Total	\$ 95,834,352	\$ 96,520,734	\$ 98,419,735	\$ 300,591,429	\$ 305,968,081	\$ 315,435,706	\$ 12,247,821	\$ 10,188,159	\$ 4,860,703	\$ 2,398,281	\$ 2,315,348	\$ 1,438,363	\$ 9,849,540	\$ 7,872,811	\$ 3,422,340

**SCHEDULE 12: TARGET YEAR REVENUE REQUIREMENT**

No.	Existing Handling Commissions - Target Year Forecast		Proposed Handling Commissions - Target Year Forecast	
	\$	c / container	\$	c / container
	(a)	(b)	(c)	(d)
<b>1 Revenue</b>	\$ 319,763,708	16.03	\$ 328,485,642	16.46
2 Less Purchases	\$ 221,876,675	11.12	\$ 221,876,675	11.12
3 Gross Margin (HC)	\$ 97,887,033	4.91	\$ 106,608,967	5.34
4 Misc Revenue	\$ 532,702	0.03	\$ 532,702	0.03
5 Net Revenue	\$ 98,419,735	4.93	\$ 107,141,669	5.37
<b>6 Expenses</b>				
7 Direct Labour	\$ 38,145,284	1.91	\$ 38,145,284	1.91
8 Contract Labour	\$ 867,090	0.04	\$ 867,090	0.04
9 Overhead Labour	\$ 15,050,305	0.75	\$ 15,050,305	0.75
10 Building	\$ 20,733,770	1.04	\$ 20,733,770	1.04
11 Equipment	\$ 4,848,985	0.24	\$ 4,848,985	0.24
12 Vehicle	\$ 1,939,096	0.10	\$ 1,939,096	0.10
13 Overhead	\$ 11,974,502	0.60	\$ 11,974,502	0.60
14 Total Operating Expenses	\$ 93,559,031	4.69	\$ 93,559,031	4.69
15				
16 Return on Purchases	\$ 4,060,343	0.20	\$ 4,060,343	0.20
17 Return Margin	1.83%			0.00
18 Return on Operations (After Tax)	\$ 8,083,932	0.41	\$ 8,083,932	0.41
19 Return Margin	8.64%			0.00
20 Total Return	\$ 12,144,275	0.61	\$ 12,144,275	0.61
21 After Tax Return	3.85 %		3.85 %	
22 Income Taxes	\$ 1,438,363	0.07	\$ 1,438,363	0.07
23 Revenue Requirement	\$ 106,608,967	5.34	\$ 106,608,967	5.34
24 Total Revenue at Current Rates	\$ 98,419,735	4.93		
25 Proposed Rate Increase	8.9 %		0.0 %	
<b>System Data</b>				
26 Total Container Volume		1,995,218,459		1,995,218,459
27 Number of Depots		224		224

## 15. APPENDIX II – GLOSSARY

Item	Definition
<b>Additional Hours</b>	Hours used for additional sorting and shipping; preparing to open; cleaning up after closing; and after-hours management functions such as hiring, interviewing new staff, planning, and meeting with professionals.
<b>Alberta Health Care</b>	Payments for services provided by Alberta Health Services.
<b>As Accepted Data</b>	<p>This data represents the 2018 UCA data as revised following the review process for UCA items that were unrelated to depot operations or were deemed to be ‘unreasonable’ by the DCA. “Deemed” changes were made in the following areas:</p> <ul style="list-style-type: none"> <li>• Labour hours</li> <li>• Labour costs</li> <li>• Vehicle use</li> </ul> <p>This data is included for the same 172 depots that are represented in the reported data.</p>
<b>As Adjusted Data</b>	<p>This data represents the As Accepted Data adjusted based on BCMB policies relating to the handling commission. These adjustments include the following:</p> <ul style="list-style-type: none"> <li>• Prorating costs to a common 12-month reporting period</li> <li>• Removing accepted building costs and replacing them with deemed building lease rates and use costs as determined by the real estate expert</li> <li>• Recalculating taxes based on 2018 tax rates</li> </ul>
<b>As Reported Data</b>	This is the 2018 UCA data received from depots, reviewed and verified by the DCA as described in Section 3. This data represents the 172 depots that make up the Study System. All reported data is denoted by “As Reported”.
<b>Beverage Container Management Board (BCMB)</b>	The Beverage Container Management Board was established as a management board under Alberta’s Environmental Protection and Enhancement Act. It is also a not-for-profit organization incorporated under the Societies Act of Alberta. The BCMB is responsible for regulating Alberta’s beverage container recycling system and leads the development of policy and programs that enable the recycling of beverage containers in Alberta.
<b>Canada Pension Plan (CPP)</b>	One of three levels of the Canadian government's retirement income system, which is responsible for paying retirement or disability benefits.
<b>Capital Cost Allowance (CCA)</b>	Amortization (Depreciation) allowed for income tax purposes.
<b>Collector (COL)</b>	A person who is paid an hourly fee to pick up containers from customers rather than customers bringing containers to the depot.

Item	Definition
<b>Collection Service Providers (CSP)</b>	<p>A Collection Service Provider (CSP) can be either of the following:</p> <ul style="list-style-type: none"> <li>• A manufacturer of refillable containers that collects empty refillable containers that contained a beverage manufactured by that manufacturer, or empty containers that were refillable, but which are no longer refillable that contained a beverage manufactured by that manufacturer; or</li> <li>• Person contracted by a manufacturer of refillable containers to collect empty refillable containers that contained a beverage manufactured by that manufacturer or empty Containers that were refillable, but which are no longer refillable that contained a beverage manufactured by that manufacturer.</li> </ul>
<b>Collection System Agent (CSA)</b>	The collection system agent appointed by manufacturers and approved by the BCMB in accordance with the BCMB's Collection System Agent By-law.
<b>Collector Labour</b>	The portion of labour allocated to the COL job percentage in the UCA.
<b>Container Recycling Fee</b>	Handling Commission
<b>Container Stream Cost Allocation</b>	The allocation of the Revenue Requirement to each of the Material Streams identified in the Handling Commission Review.
<b>Contract and Temporary Labour</b>	Contract and temporary labour are for human resources that are not included on your T4 Summary including any employees paid in cash that can be verified by documentation submitted to the DCA.
<b>Data Collection Agent (DCA)</b>	The person appointed by the BCMB for the purpose of collecting and analyzing information about the beverage container recycling system in Alberta and reporting on that information.
<b>Deposit</b>	The refund provided by a depot to a person returning an empty registered container to the depot. The total refund for all containers shipped by the depot to the CSA is paid to the depot as deposit revenue.
<b>Direct Labour</b>	The portion of labour allocated to the LDH, BK, or HND job percentage in the UCA.
<b>Drive-Thru Depot</b>	A depot that accepts containers from customers that drive up to a service counter.
<b>Employment Insurance (EI)</b>	A federal insurance program that provides benefits to eligible unemployed people. Payroll tax collected by the federal government.
<b>For-Profit</b>	Depots that have a profit mandate.
<b>Handling Commission</b>	The amount payable for each container collected from a Depot in accordance with Section 13(b) of the BCMB's Handling Commission By-law.
<b>Handling Commission Review</b>	A review of Handling Commission amounts directed by the Board pursuant to Section 7.1 of the BCMB's Handling Commission By-law.

Item	Definition
<b>Handling Commission Review Committee</b>	A BCMB committee that reviews the most recently completed HCR.
<b>Labour Hours and Costs – UCA Table 2</b>	Employees included on this table are those related to both Direct and Overhead Labour functions in the depot. Direct and Overhead Labour includes employees performing the following functions: customer interface, cashiers, sorters, collection of containers from outside the depot, loading trucks, administrative duties, management duties, etc. These employees include all employees receiving a T4 from the Depot as well as any Owners or Managers who do not receive salary.
<b>Large Depot</b>	A depot which handles over 15.5 million containers per year.
<b>Leadhand (LDH), Bookkeeper (BK), or Handler (HND)</b>	<p>Any person who performs the functions of a Leadhand, Bookkeeper, or Handler. All time spent performing direct labour functions such as customer interface, cashiers, sorters, loading trucks, etc. should be allocated to this job class. A brief description of each of the three job classes is found below:</p> <ul style="list-style-type: none"> <li>• <b>Leadhand:</b> A person who provides floor supervision, but is not involved in day-to-day administrative functions.</li> <li>• <b>Bookkeeper:</b> A person who is responsible for maintaining the day-to-day bookkeeping of the depot.</li> <li>• <b>Handlers:</b> A person who works on the shop floor in direct labour functions.</li> </ul>
<b>Location Classification</b>	As found in the BCMB Depot By-law, depots are classified as Metro, Urban, or Rural
<b>Manufacturer</b>	<p>A person who manufactures a beverage and includes:</p> <ul style="list-style-type: none"> <li>• a person who carries on the business of filling containers with a beverage; and</li> <li>• a person who imports a beverage in a container into Alberta for the purpose of distribution or sale in Alberta.</li> </ul>
<b>Medium Depot</b>	A depot which handles between 6 and 15.5 million containers per year.
<b>Metro Depot</b>	A depot in the City of Edmonton and/or the City of Calgary.
<b>Manager (MGR)</b>	A person who manages the depot on a day-to-day basis who does not own a financial interest in the depot.
<b>Miscellaneous Revenue</b>	Revenue other than regular handling commission and deposit revenue received from the manufacturing agents. These revenues include cardboard sales, pick-up/collection fees, other recycling fees, bottle sales, value added fees, and other revenues.
<b>Multi-Business</b>	A depot with additional businesses-operating out of the same location. Depots that utilize a multi-business format are typically smaller depots or depots part of a charity organization.
<b>Non-Profit</b>	Depots that have a not-for-profit mandate, typically Depots owned and/or operated by charities.

Item	Definition
<b>Offsite Collections</b>	Activities to procure and bring containers to the depot for processing.
<b>Other Revenue</b>	Revenue received where the expenses to provide the service are also reported in the UCA document, not included in a different miscellaneous revenue category.
<b>Overhead Labour</b>	The portion of labour allocated to the MGR job percentage in the UCA.
<b>Owner (OWN)</b>	A person who provides some type of management services and who owns a financial interest in the depot.
<b>Purchases</b>	Amounts paid by the CSA to the Depots to reimburse the Depot for monies refunded to Customers for the Deposits that they have paid on Registered Containers that are returned to the Depots.
<b>Registered Containers</b>	A Container that has been registered by the BCMB in accordance with the Regulation and the By-laws.
<b>Retailer</b>	A business that purchases a container from a Manufacturer to sell.
<b>Return Margin</b>	The quantum of money to be included in that particular Revenue Requirement which is derived from the Return Margin for Operating Expenses plus the quantum of money to be included in that particular Revenue Requirement which is derived from the Return Margin for Deposits.
<b>Return Margin Methodology</b>	A return margin utility model whereby depot return margins are determined based on an analysis of return margins for similar businesses with similar risk profiles.
<b>Revenue</b>	Handling Commission plus Miscellaneous Revenue. Equals Net Margin.
<b>Revenue Requirement</b>	The amount of money that all depots as a group must collect, through handling commissions, in a given period in order to recover prudently incurred costs, expenses and taxes and to earn a fair return.
<b>Registered Retirement Savings Plan (RRSP)</b>	A retirement savings and investing vehicle for employees and the self-employed in Canada.
<b>Rural Depot</b>	<p>A rural depot refers to depots in municipalities with populations below 10,000. There are two types of rural depots:</p> <ul style="list-style-type: none"> <li>• <b>Small rural:</b> Population of 4,000 or less</li> <li>• <b>Large rural:</b> Population of more than 4,000 and less than 10,000</li> </ul>
<b>Square Foot (SF)</b>	Measurement of building size in square feet.
<b>Single-Business</b>	A Depot where the related tax filing is for the Depot operations only; a business operation that is not a Multi-Business Depot.

Item	Definition
<b>Size Classification</b>	As stated in the Depot Building Size Cap Policy, this classification splits depots into three groups: small, medium, or large
<b>Small Depot</b>	A depot that handles less than 6 million container per year.
<b>Study System Depots</b>	The 179 Depots that submitted fully completed 2014/15 UCA packages that were received by the DCA prior to June 30, 2016. The Study System is a sub-set of the Total System.
<b>Target Year Data</b>	Using the Total System Data, costs are escalated from the 2018 fiscal year period to the Target Year: the 12-month period ending on the target date of April 1, 2020. This is done using volume and depot escalators based on the Target Year forecast presented in Section 16 and the list of new depots to be opened in the Target Year provided by the BCMB.
<b>Tax Ownership Type</b>	Dictated by the type of tax return filed by the depot. Sole proprietors report their revenues and costs on their personal tax returns, incorporated entities complete a corporate tax return, and registered charities report as non-profit charities.
<b>Total System Data</b>	Adjusted data is prorated based on volume and the number of depots to account for exempt depots that do not report costs in their UCA and for depots that did not complete their UCA by the July 20th filing deadline. This step increases costs from the 172 depots included in the Study System to the total 221 depots in the full system.
<b>Total System Depots</b>	All depots operational in Alberta.
<b>Uniform Code of Accounts (UCA)</b>	The series of forms identified as such and provided to Depot Permit Holders by the Data Collection Agent for the purpose of collecting financial and operational data on an annual basis.
<b>Universal Bottle Depot</b>	For the purposes of this report, a depot.
<b>Urban Depot</b>	A depot located in a municipality with an official population equal to or greater than 10,000.
<b>Walk-In Depot</b>	A depot that accepts containers from customers that walk into the depot with their containers.
<b>Workers' Compensation (WCB)</b>	Payroll levy collected by the Alberta Workers' Compensation Board for worker injury insurance.



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