

Alberta Bottle Depot System

Data Collection Agent

2006 Phase I Report

(2006 Revenue Requirement from 2005 UCAs)

January 31, 2007

Revision 1 – Submitted to the BCMB for Approval



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1 EXECUTIVE SUMMARY

2 The Beverage Container Management Board (BCMB) retained Desiderata Energy Consulting
3 Inc. for the role of Data Collection Agent (the DCA) to develop a 2005 Uniform Code of
4 Accounts (2005 UCA). The purpose of the 2005 UCA is to obtain information on the costs
5 incurred by Alberta's Depots in providing services related to the collection of empty beverage
6 containers from Customers and sorting and packaging for shipment to the Manufacturers. The
7 DCA was also tasked with determining a recommend calendar 2006 (Cal 2006) cost for the
8 Depots to provide these services, including a fair Return. The DCA is recommending a Cal
9 2006 Revenue Requirement of \$60.0 million or 4.20¢/container, on average.

10 The DCA developed the 2005 UCA, a document that consists of 10 Tables or forms, to collect
11 detailed information from Depots in the following main areas: Direct Labour, Contract Labour,
12 Overhead Labour, Buildings, Equipment & Vehicles, Overheads and Miscellaneous Revenue.
13 The 2005 UCA was delivered to 209 Depots and 165 completed and returned the 2005 UCA
14 which were utilized as the Study System. The Study System Depots represented 84% of the
15 Total System by volume of containers processed.

16 The 2005 UCA data was analyzed and reported in a series of five steps:

- 17 1. **Verification** – all 2005 UCAs returned to the DCA were analyzed with data entry errors and
18 omissions corrected. The DCA used financial statements, tax returns and other verification
19 documents provided by the Depots to ensure the data reported on the 2005 UCAs was
20 correct and properly categorized.
- 21 2. **As Reported** – data from the 165 verified 2005 UCAs were entered into a database and
22 revenues and costs were compiled and tabulated. As Reported Operating Expenses were
23 \$36.3 million, or 3.36¢/container, on average.
- 24 3. **As Adjusted** – the As Reported Data was re-categorized into homogeneous groups and
25 several adjustments made in an attempt to compensate for significant deficiencies in the
26 data provided and to align the costs with standard regulatory principles. The major
27 adjustments made by the DCA were:
 - 28 • All labour hours, costs and revenues were proportionally grossed up for Depots that
29 reported a Stub Fiscal Year to a standard 12 month year.
 - 30 • All Contract Labour hours and costs were reallocated to Direct Labour.
 - 31 • All non-managerial hours and costs reported as Overhead Labour were reallocated to
32 Direct Labour.
 - 33 • All managerial hours and costs reported as providing Direct Labour functions were
34 reallocated to Direct Labour with an adjustment made to the labour rate to reflect market
35 rates.

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- 1 • Managerial hours and costs (Primarily Overhead Labour for Depot Owners) reported as
2 providing supervisory / managerial functions were adjusted to reflect market rates and
3 an estimate of the actual time required to provide supervisory / managerial services.
4 Overall, labour costs were increased by 3.81% from the As Reported values.
- 5 • Reported Depot buildings are a mixture of owned and leased premises ranging in size
6 from about 350 to over 14,000 square feet. All buildings were deemed to be leased at
7 summer 2005 market rates. The size of the buildings were deemed to be of a maximize
8 size, with 39 building sizes adjusted downward. Utility and other costs were adjusted to
9 align with these determinations. Overall, building costs were reduced by 0.7%.
- 10 • Revenues (Handling Commissions and Purchases) and BCMB and ABDA fees were
11 calculated based on shipping data provided by the Manufacturers.

12 The net result of these adjustments is Revenues increased by 2.4% and Total Operating
13 Expenses increased by 3.1%, or 0.02¢/container, to \$37.4 million. Net Income After Tax
14 was reduced by 4% from \$5.1 to \$4.9 million. More significantly, the adjustments allocated
15 more costs to Small Depots and lowered costs to Large Depots, resulting in nearly a 300%
16 reduction in Net Income After Tax for Small Depots and a 39% increase in Net Income After
17 Tax for Large Depots.

- 18 4. **Cal 2006 Study System** – each Depot reported for their fiscal year end in 2005. Revenues
19 were adjusted based on actual volumes for calendar 2006. Each Depot's costs were
20 adjusted to calendar 2006 by inflating or escalating by the number of months from the
21 reported fiscal year end to December 31, 2006. The escalators used were based on
22 Statistics Canada indices for most cost categories, with the exception that building lease
23 costs were escalated based on a summer 2006 market survey.

24 From FY 2006 As Adjusted to Cal 2006 Study System Total Operating Revenues increased
25 by 10% and Expenses increased by 18% or 0.28¢/container to \$44.0 million, or
26 3.66¢/container, on average. The main cost increases related to labour costs (19%
27 increase) and buildings (29% increase). The net result was a 36% reduction in Net Income
28 After Tax to \$3.1 million.

- 29 5. **Cal 2006 Total System** – To forecast a Total System Revenue Requirement revenues and
30 costs were escalated from the 165 Study System Depots to the 215 Total System Depots.
31 Revenues were escalated based on actual Cal 2006 volumes. Costs were escalated over
32 20 groupings of Depots (Volume Clusters) based on the relative costs and actual 2006
33 volumes within each Volume Cluster. Since fewer higher cost smaller Depots were included
34 in the Study System, this approach provides a better representation of the total system
35 costs. Overall Costs increased by 25% when escalating from the 165 Depots in the Study
36 System to the 215 Depots in the Total System. Total Operating Expenses for Cal 2006 are
37 forecast to be \$54.8 million, or 3.83¢/container, on average.

38 The DCA was also tasked with recommending an appropriate Return to be included in the 2006
39 Revenue Requirement. Alberta Depots are primarily service based businesses that lack
40 significant capital assets which makes the application of a return on rate base model to
41 determine Return questionable. The DCA recommends a return margin methodology that has

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1 numerous regulatory precedents in Alberta. The DCA recommends a return margin of 1% after
2 tax on Purchases and 4% after tax on Total Operating Expenses (1.36% and 5.44% before tax,
3 respectively), to give a Cal 2006 After Tax Return of \$3.3 million.

4 Including a computed income tax amount of \$3.0 million, the DCA recommends a 2006
5 Revenue requirement of \$60.0 million, or 4.20¢/container, on average. Using the actual Cal
6 2006 container return volumes, the recommended 2006 Revenue Requirement can be
7 generated with a 1.9% increase to the current Handling Commission rates. The table on the
8 following page outlines the DCA's recommended 2006 Revenue Requirement.

9 The DCA has also been tasked with recommending 2006 Handling Commissions. The analysis
10 and determinations to collect the recommended 2006 Revenue Requirement of \$60.0 million will
11 be provided in the 2006 Phase II Report Rev 1.

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BEVERAGE CONTAINER MANAGEMENT BOARD 2006 PHASE I REPORT REV 1 2006 REVENUE REQUIREMENT

Line No.									
1	Report Volume	1,202,867,072 or 84% Total System	1,428,953,298 or 100% Total System	1,202,867,072 or 84% Total System	1,428,953,298 or 100% Total System	1,202,867,072 or 84% Total System	1,428,953,298 or 100% Total System	1,202,867,072 or 84% Total System	1,428,953,298 or 100% Total System
2	Report Depots	165 or 76% Total System	216 or 100% Total System	165 or 76% Total System	216 or 100% Total System	165 or 76% Total System	216 or 100% Total System	165 or 76% Total System	216 or 100% Total System
Existing Handling Commissions					Proposed 2006 Handling Commissions				
		Cal 2006 Study System Forecast		Cal 2006 Total System Forecast		Cal 2006 Study System Forecast		Cal 2006 Total System Forecast	
		\$	¢ per container	\$	¢ per container	\$	¢ per container	\$	¢ per container
		(a)	(b)	(c)	(d)	(a)	(b)	(c)	(d)
3	Revenue	\$140,093,784	11.65	\$166,631,564	11.66	\$141,549,919	11.77	\$168,881,994	11.82
4	Less Purchases	\$91,341,755	7.59	\$108,851,483	7.62	\$91,341,755	7.59	\$108,851,483	7.62
5	Gross Margin (HC)	\$48,752,029	4.05	\$57,780,080	4.04	\$50,208,165	4.17	\$60,030,511	4.20
6	Misc Revenue	\$811,330	0.07	\$1,012,495	0.07	\$811,330	0.07	\$1,012,495	0.07
7	Total Margin	\$49,563,359	4.12	\$58,792,575	4.11	\$51,019,494	4.24	\$61,043,006	4.27
Expenses									
8	Direct Labour	\$22,671,157	1.88	\$27,742,427	1.94	\$22,671,157	1.88	\$27,742,427	1.94
9	Contract Labour	\$0	-	\$0	-	\$0	-	\$0	-
10	Overhead Labour	\$6,118,822	0.51	\$7,779,143	0.54	\$6,118,822	0.51	\$7,779,143	0.54
11	Labour Subtotal	\$28,789,978	2.39	\$35,521,570	2.49	\$28,789,978	2.39	\$35,521,570	2.49
12	Building	\$7,327,617	0.61	\$9,402,541	0.66	\$7,327,617	0.61	\$9,402,541	0.66
13	Equipment	\$2,518,727	0.21	\$3,258,430	0.23	\$2,518,727	0.21	\$3,258,430	0.23
14	Overhead (Ex-Collections)	\$5,330,711	0.44	\$6,585,917	0.46	\$5,330,711	0.44	\$6,585,917	0.46
15	Collections	\$0	-	\$0	-	\$0	-	\$0	-
16	Total Operating Expenses	\$43,967,034	3.66	\$54,768,458	3.83	\$43,967,034	3.66	\$54,768,458	3.83
17	Return on Purchases (After Tax)	\$913,418	0.08	\$1,088,515	0.08	\$913,418	0.08	\$1,088,515	0.08
18	Return Margin 1.00%								
19	Return on Operations (After Tax)	\$1,758,681	0.15	\$2,190,738	0.15	\$1,758,681	0.15	\$2,190,738	0.15
20	Return Margin 4.00%								
21	Total Return (After Tax)	\$2,672,099	0.22	\$3,279,253	0.23	\$2,672,099	0.22	\$3,279,253	0.23
22	Return Margin 4.14%			2.46%		5.21%		3.83%	
23	Income Taxes (By Depot)	\$2,481,716	0.21	\$2,897,655	0.20	\$2,473,396	0.21	\$2,981,108	0.21
24	Revenue Requirement*	\$48,309,519	4.02	\$59,932,871	4.19	\$48,301,199	4.02	\$60,016,324	4.20

GLOSSARY

1	ABCC	Alberta Beer Container Corporation
2	ABCRC	Alberta Beverage Container Recycling Corporation
3	ABDA	Alberta Bottle Depot Association
4	As Adjusted	Refers to fiscal year 2005 UCA costs as recommended by the DCA. As Adjusted costs do not contain any adjustments for escalation or inflation. As Adjusted costs reflect individual Depot costs for their fiscal year ending in 2005.
5	As Reported	Refers to costs that are reported were reported in 2005 UCA booklets, with adjustments made by the DCA during the review and audit process. As Reported costs reflect actual individual Depot costs for their fiscal year ending in 2005.
7	BCMB	Beverage Container Management Board
8	BDL	Brewers Distributor Ltd.
9	Benefits	Employer wage-related costs of private health care plans, EI & CPP, and Workers' Compensation.
10	BK	Bookkeeper – UCA labour type category
11	Book Value	See Net Book Value
12	Building Costs	Detailed information on the cost of housing a Depot, regardless if the building is owned or leased.
13	Cal 2005	Refers to the 12 month period in 2005.
14	Cal 2006	Refers to the forecast of costs for the year ending December 31, 2006. These costs are FY 2005 As Adjusted costs escalated or inflated for each individual Depot from their fiscal year ending in 2005 to the calendar year 2006. Also refers to the 12 month period in 2006
15	Capex	See Capital Expenditures
16	Capital Expenditures	Money expended to acquire assets with an expected life greater than one year.

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1	CCA	Capital Cost Allowance – Amortization (Depreciation) allowed for income tax purposes.
2	CCPC	Canadian Controlled Private Corporation – Classification of corporation used by the CRA denoting a non-publicly traded company owned or controlled by Canadian residents.
3	CNB	Canada's National Brewers
4	COL	Collector – Third party collector of containers, either a contractor to a Depot or a Depot employee
5	CPP	Canada Pension Plan –payroll tax collected by federal government.
7	CRA	Canada Revenue Agency – federal government department responsible for administering GST, payroll, personal and corporate income taxes.
8	Container Stream	One of about 40 different Manufacturer defined groupings of containers for which an individual Handling Commission applies. For example, pop cans under one litre is a single Container Stream, regardless of the numerous different kinds of pop and juice beverages that are sold in aluminum can containers.
9	Cost of Service	A quantum of money calculated via study to determine the total cost to provide a regulated service
10	Contract Labour	Cost information for all non-employees (excluding Owners or shareholders who may get paid on a contract basis). These workers are any short-term workers (like those hired from a temp agency, for example) who you do not receive T-4 slips for, and are paid on the basis of an invoice submitted for the worker's time. All non-employees who work on the Depot floor or collect containers contribute to Contact Labour
11	CRF	Container Recycling Fee – a charge imposed on retailers by non-beer Manufacturers at the time the retailer Purchases a beverage from a Manufacturer. Some retailers show the CRF (e.g. grocery stores) as a separate line item on their cash register printouts, whereas other retailers include the recovery of the CRF in the purchase price and do not identify as a separate item to the Customer.
12	Customer	Any entity that sells empty containers to a Depot.

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1	DCA	Data Collection Agent – consultants (Desiderata Energy Consulting Inc.) retained by the BCMB to design the 2005 UCA, collect 2005 UCA data, analyze and summarize the data and report the results to the BCMB.
2	DECI	Desiderata Energy Consulting Inc.
3	Deposit	Amount paid by the Customer when a beverage container is purchased which is forwarded by the retailer to the Manufacturers
4	Depot	Universal Bottle Depots permitted by the BCMB to purchase beverage containers from Customers.
5	Deseasonalization	A statistical process used to remove the seasonality in a data set.
7	Direct Labour	Detailed labour cost information for all employees except administrative employees and Owners or shareholders. Costs relate to all employees whose primary function is to work on the Depot floor or collect containers contribute to Direct Labour.
8	DRV	Driver – UCA labour type category
9	EBT	Earnings Before (Income) Taxes
10	EI	Employment Insurance – payroll tax collected by federal government.
11	FY	Fiscal Year End – The date that denotes a Depot's year end for tax and financial statement reporting.
12	FY 2005	Refers to a Depot's year ending in 2005, or the aggregate of the results from the sum of all Study System Depots' UCA costs or Revenues over their various fiscal year ends in 2005.
13	FY 2005 Study System	Costs or Revenues (as the case may be) summed over all 165 Depots who comprise the Study System.
14	For-Profit	Depots that are not Non-Profit
15	Gross Book Value	Original purchase price of an asset (historical cost).
16	Handling Commission	Amount paid to Depots by Manufacturers for the collection and sorting of a beverage container.

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1	HCRP	Handling Commissions Review Panel – BCMB appointed panel responsible for adjudicating and make a recommendation on Handling Commissions.
2	HND	Handler – UCA labour type category.
3	ISB	Industry Standard Bottles - beer bottles that are re-useable.
4	Large Depot	Depot that has a Cal 2005 collection volume greater than 5,000,000 containers.
5	LDH	Lead Hand – UCA labour type category.
7	Manufacturer	Manufacturer representative, either ABCRC or ABCC, the agencies who buy containers from Depots.
8	Market Value	The current value of an asset sold in an arm's length transaction.
9	MGR	Manager – UCA labour type category.
10	Miscellaneous Revenue	Any non-Handling Commission revenue received by the Depot for which the costs related to generating the Miscellaneous Revenue were reported on the 2005 UCA. Typical Miscellaneous Revenue items include cardboard sales, wage subsidies, used oil recycling fees, etc.
11	Multi-Business	Depots that operate a business from the same location in addition to a Depot. For example, a gas station that also has a BCMB permit and operates as a Depot.
12	NBV	Net Book Value – original cost less accumulated amortization.
13	Net Book Value	Gross Book Value less Accumulated Amortization (Depreciation). Also referred to as UCC or Undepreciated Capital Cost.
14	Non-Profit	Depots that have a not-for-profit mandate, typically Depots owned and/or operated by charities.
15	Overhead Costs	From the 2005 UCA Table 7 tables pulls in the expenses reported on Tables 2, 3, 4, 5, and 6 and requires the reporting of all other expenses. The total expenses reported on Table 7 should match the expenses reported on your financial income statement. All non-Labour, Building and Vehicle / Equipment Costs are classified as Overhead Costs.

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1	Overhead Labour	Cost information for all administrative employees (those who are not reported on 2005 UCA Tables 2 or 3) and all Owners or shareholders. Administrative employees typically do not work on the Depot floor sorting containers.
2	OWN	Owner – UCA labour type category.
3	Purchases	Amounts paid by the Manufacturers to the Depots to provide the necessary monies to refund Customers for containers returned to the Depots.
4	R^2	A measure of best fit of a Regression line between scattered data points. It is measured between 0 and 1 where 1 implies perfect correlation and 0 implies no correlation among the data points.
5	Rate Base	The value of the owned assets that are used and useful for the provision of utility service. The value is typically close to or equal to the Net Book Value.
7	Regression	The relationship between the value of a random variable and the corresponding values of one or more independent variables. The Phase I Report Revision 1 uses linear Regression where a best fit line is found that minimizes the sum of the squares of the y-axis distance from each data point to the best fit line.
8	Revenue	Handling Commission plus Miscellaneous Revenue. Equals Net Margin.
9	Revenue Requirement	The total amounts of money that the beverage container return industry must collect in Revenues such that the Depots have a reasonable opportunity to pay prudently incurred expenses and have a reasonable opportunity to earn a fair Return.
10	Return	A notional amount included in the Revenue Requirement to provide additional revenue to Depots that will allow each Depot a reasonable opportunity to earn a fair profit.
11	Single-Business	A Depot that is not a Multi-Business Depot.
12	SF	Square Foot – measure of building size in square feet.
13	Small Depot	Depot that has Cal 2005 collection volume less than 5,000,000 containers.
14	Stantec	Stantec Consulting Ltd. acting in its role of DCA under contract to the BCMB from June 2004 to April 2006.

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1	Stub Fiscal Year	Fiscal year less than 12 months for which financial statements and a tax return were prepared and filed with the CRA.
2	Study System	The 165 Depots that submitted fully completed 2005 UCA packages that were verified by the DCA prior to September 30, 2006. The Study System is a sub-set of the Total System.
3	System Cost	A cost that is prudently incurred for provision of regulated service.
4	Total System	All 215 permitted and active Depots in Alberta with return volumes in Cal 2006.
5	UCA	Uniform Code of Accounts – Report that must submitted to the DCA by all Depots reporting their financial and operating results.
7	UCC	Undepreciated Capital Cost – Asset purchase price less accumulated CCA for tax purposes.
8	Unit Cost	Calculated as annual Depot cost divided by annual volume.
9	Universal Bottle Depots	215 bottle Depots permitted by the BCMB and active in Cal 2005 to take back all empty registered beverage containers.
10	Utilization	The level that an asset or employee is being used. Higher Utilization implies greater efficiency and lower Unit Cost.
11	Vehicle / Equipment Costs	Capital asset and operating cost information for vehicles and equipment, both owned and leased.
12	Workers' Compensation or WCB	Payroll levy collected by the Alberta Workers' Compensation Board for worker injury insurance.
13	Working Capital	Notional amount of cash required to pay expenses in advance of when related revenues are received. Defined as current assets less current liabilities.

1.0 BACKGROUND / DESCRIPTION

1.1 INTRODUCTION – 2004 UCA PROCESS

In June 2004 the Beverage Container Management Board (BCMB) retained Stantec Consulting Ltd. (Stantec) as the Data Collection Agent (DCA). The DCA contract was assigned to Desiderata Energy Consulting Inc. (the DCA) in April 2006. Our primary task was to collect financial and related information from Depots in Alberta. The data collected was to be used to assist the BCMB in determining 2005 Handling Commissions - the fee paid to Depots for collecting, sorting and packaging empty beverage containers ready for shipment to installations where they will be re-used or re-cycled.

Stantec gained knowledge of the beverage container return industry through consultations with key stakeholders and on-site tours. In the fall of 2004 Stantec prepared a document that outlined a process for the collection and verification of the data to be collected from the Depots. The "Straw Dog" report was approved by the BCMB in October 2004.

Stantec prepared a number of documents, including a 2004 Uniform Code of Accounts (UCA) booklet that was intended to be sent to and completed by the Depots to capture the required revenue, cost and additional operational data. The 2004 UCA was in many respects like a tax return and many Depots utilized the services of their accountant to complete the 2004 UCA booklets.

The 2004 UCA was tested on a sample of 10 Depots in December 2004 in an effort to improve the documents and to minimize the time and effort the Depots would have to expend to complete the UCA booklets. Stantec and the BCMB met with representatives from the 10 Depots and received their feedback on the test UCA. The revised UCA and related documents were approved by the BCMB on March 1, 2005 and were subsequently mailed to every Depot in Alberta.

By August 5, 2005 Stantec had received and processed usable UCAs from 158 Depots, which represented about 73% of the Depots or about 80% of the system return volume. These UCAs formed the basis for the determination of the aggregate Revenues and costs for the bottle Depot system in Calendar 2005 (2005 Revenue Requirement).

The 158 Depots' aggregate Fiscal Year 2004 Study System Revenues and Costs As Reported were \$32.8 million. Stantec reviewed the data collected and made the following determinations and recommendations to arrive at the recommended Fiscal Year 2004 Study System Revenues and Costs As Adjusted:

- Overhead Labour, primarily the amounts Depot Owners paid themselves, should be adjusted to reflect market-based amounts for the services provided, with any variances applied to Depot earnings.

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- 1 • The costs for buildings should be adjusted to reflect a deemed lease rate based on a
- 2 market survey of current lease rates in Alberta.
- 3 • Equipment costs should be adjusted to remove Goodwill and vehicle capital costs.
- 4 • Overhead costs were adjusted in a number of areas with the largest adjustments coming
- 5 from the removal of collection costs (costs incurred by some Depots in collecting
- 6 containers from third party locations) and inclusion of an allowance for vehicle costs for
- 7 Depot administrative functions.

8 With these adjustments, the total reported costs of \$32.8 million were recommended by Stantec

9 to be reduced to \$31.0 million (5.5% reduction).

10 The adjusted fiscal 2004 costs were then inflated / escalated to obtain the Calendar 2005 Study

11 System Revenues and Costs. The recommended 2005 costs were \$35.4 million (7.9%

12 increase).

13 The final step was to prorate the recommended 2005 costs from the Study System to the Total

14 System to arrive at the Calendar 2005 Total System Revenue Requirement. The total

15 recommended 2005 system cost was \$43.0 million. Based on Stantec's 2005 return forecast

16 and current Handling Commission rates, total Revenue in 2005 was estimated to be \$54.4

17 million, which will provide an estimated after tax return to the Total System of \$8.4 million

18 (15.4% net margin).

19 The derivation of the 2004 Depot Revenue requirement was provided in a Phase I Report

20 issued to the BCMB dated September 8, 2005. This report was revised and re-issued on

21 November 1, 2005 and subsequently accepted by the BCMB for information. The 2004 Phase I

22 Report Revision 1 detailed the 2004 UCA data collection, analysis and reporting process and

23 provided Stantec's recommendations for the Calendar 2005 Total System Revenue

24 Requirement, which was to assist the BCMB in approving the 2005 Handling Commissions.

25 Stantec also provided a number of conclusions and recommendations in an effort to further

26 improve the Handling Commission determination process, the success of the beverage

27 container return system in Alberta, and to help ensure that the public interest was protected.

28 On November 11, 2005 Stantec issued a Draft Phase II Report to the BCMB that described the

29 development of a Cost of Service study and the process used to determine Handling

30 Commissions for each of the BCMB's 32 Container Streams. The final 2005 Phase II Report

31 was issued by the DCA on September 27, 2006.

32 The DCA concluded that the implementation of a fixed fee of \$2,000/month/Depot as well as a

33 variable ¢/container fee would be an appropriate Rate Design for each Container Stream. The

34 DCA proposed that upon return of a container by a Depot, the Manufacturers pay a variable fee

35 to the BCMB and a variable fee to the Depot. As well, each month, the BCMB would pay the

36 \$2,000 per month per Depot fixed fee to each Depot. The analysis noted that the BCMB would

37 require some Working Capital to manage the cash flows resulting from volume variances.

38 The impact of Stantec's proposed allocation methodology directionally resulted in an increase in

39 Handling Commissions for Pop Cans and Beer Cans, and a decline in Handling Commissions

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for most other containers as compared to the Acton study proposed Handling Commissions. However, beer container Handling Commissions on the whole would increase as all beer Handling Commissions are currently at an interim rate of 2.83¢/container, which is lower than the Acton proposed rate for most beer containers. Overall, based on Cal 2005 volumes and existing Handling Commissions, the ABCRC containers were proposed to receive a \$5.1 million (13%) reduction in total cost, and the ABCC containers receive a \$4.8 million increase (35%).

The impact of the proposed fixed fee on the FY 2004 Study System would have been a shift in Revenue from Large Depots to Small Depots both within and outside the FY 2004 Study System, and no material impact on Manufacturer costs. Under the proposed 2005 Handling Commissions, FY 2004 As Adjusted Net Income for Small Depots moves from almost a \$530,000 loss to an income of \$1.2 million. Large Depots see a decline in net income from \$8 million to \$6.67 million.

Subsequent to the issuance of the Phase I and Phase II reports interested parties (ABDA and CNB) and the HCRP posed information requests to the DCA. Information responses were provided by the DCA.

The DCA posted a number of documents related to the 2004 UCA process on its ftp site. A list of these documents is provided under Appendix IV:¹

1.2 INTRODUCTION – 2005 UCA PROCESS

In April 2006 the BCMB tasked the DCA with the collection of fiscal 2005 financial information from the Depots and the preparation of 2006 Phase I and Phase II reports based on the data collected.

The DCA used the experience gained from the 2004 UCA process and input from ABDA to revise the 2004 UCA and create a 2005 UCA. The 2005 UCA was mailed to 209 Alberta Depots active in 2005² on June 1, 2006 with a filing deadline of August 1, 2006. This package included the following:

- Cover letter from the DCA³
- 2005 UCA booklet⁴
- 2005 UCA Instruction Manual⁵
- Return envelope

¹ Registered users can view these documents on the BCMB's secure web site. Please contact the BCMB to obtain access.

² Defined as manufacturer's agents reported volume received in 2005 (total of 216 Depots) and Depots still in operation. Some Depots were exempted by the BCMB prior to June 1, 2006 and were not mailed the 2005 UCA package.

³ Doc 10-001

⁴ Doc 10-002

⁵ Doc 10-003

- 1 ▪ Depot specific volume, Handling Commissions and Deposit report for 2004 and
- 2 2005⁶
- 3 ▪ Checklist of items to be returned to the DCA.⁷

4 Please see section 3.1 for information on the return statistics for the 2005 UCAs.

5 **1.3 INDUSTRY BACKGROUND**

6 A bottle Depot is a business that purchases empty beverage containers from the public, and
7 then resells them back to representatives of the original beverage Manufacturers,⁸ who then
8 recycle or reuse the containers. All ready to use non-milk beverage containers are required by
9 the Beverage Container Recycling Regulation to be permitted with the BCMB and must be
10 recyclable.⁹

11 In 2005, the Alberta bottle Depot industry consisted of 216 active¹⁰ Universal Bottle Depots and
12 about 78 Class "D" beer depots. Class "D" beer depots are only permitted to handle beer
13 containers, and are not the subject of this report. Universal Bottle Depots (hereafter "Depots")
14 are permitted to handle all non-milk beverage containers including beer containers. Depots, the
15 subject of this report, collected approximately 1.328 billion non-milk beverage containers in
16 2005.

17 Alberta operates as a 'deposit jurisdiction'. When a non-beer retailer purchases a beverage
18 container from a Manufacturer, the retailer must pay a container Deposit and a Container
19 Recycling Fee (CRF). Both of these amounts are directly passed on to the end Customer as
20 part of the retail sales transaction. The CRF pays for the recycling costs of the container, while
21 the Deposit gets paid back to the end Customer when they return the container to a Depot.

22 Beer containers are treated in the same basic manner as described above, however in all cases
23 the CRF cost is included in the wholesale and retail price of the product.

⁶ Doc 10-004. Each volume report contained Depot specific volume, Handling Commission and Purchases information that the Depot was asked to verify as correct. These individual reports are confidential.

⁷ Doc 10-005

⁸ The Manufacturer's representatives are the ABCRC and the ABCC.

⁹ The BCMB has the following Legislative Mandate:

- The Beverage Container Management Board was incorporated under the Societies Act on October 9, 1997.
- The Beverage Container Management Board was established as a management board under the Beverage Container Recycling Regulation pursuant to Section 168 of the Environment Protection and Enhancement Act on December 1, 1997.
- By Order in Council 355/201 dated August 2001, the Beverage Container Recycling Regulation has been extended for five years to expire October 31, 2006.
- The BCMB operates in accordance with the above, as well as the following by – laws set by the Board:
 - a) Beverage Container Management Board Administrative By – Law
 - b) Beverage Container Management Board Fee By – Law
 - c) Beverage Container Management Board Administrative Compliance By – Law

Source: www.bcmb.ab.ca

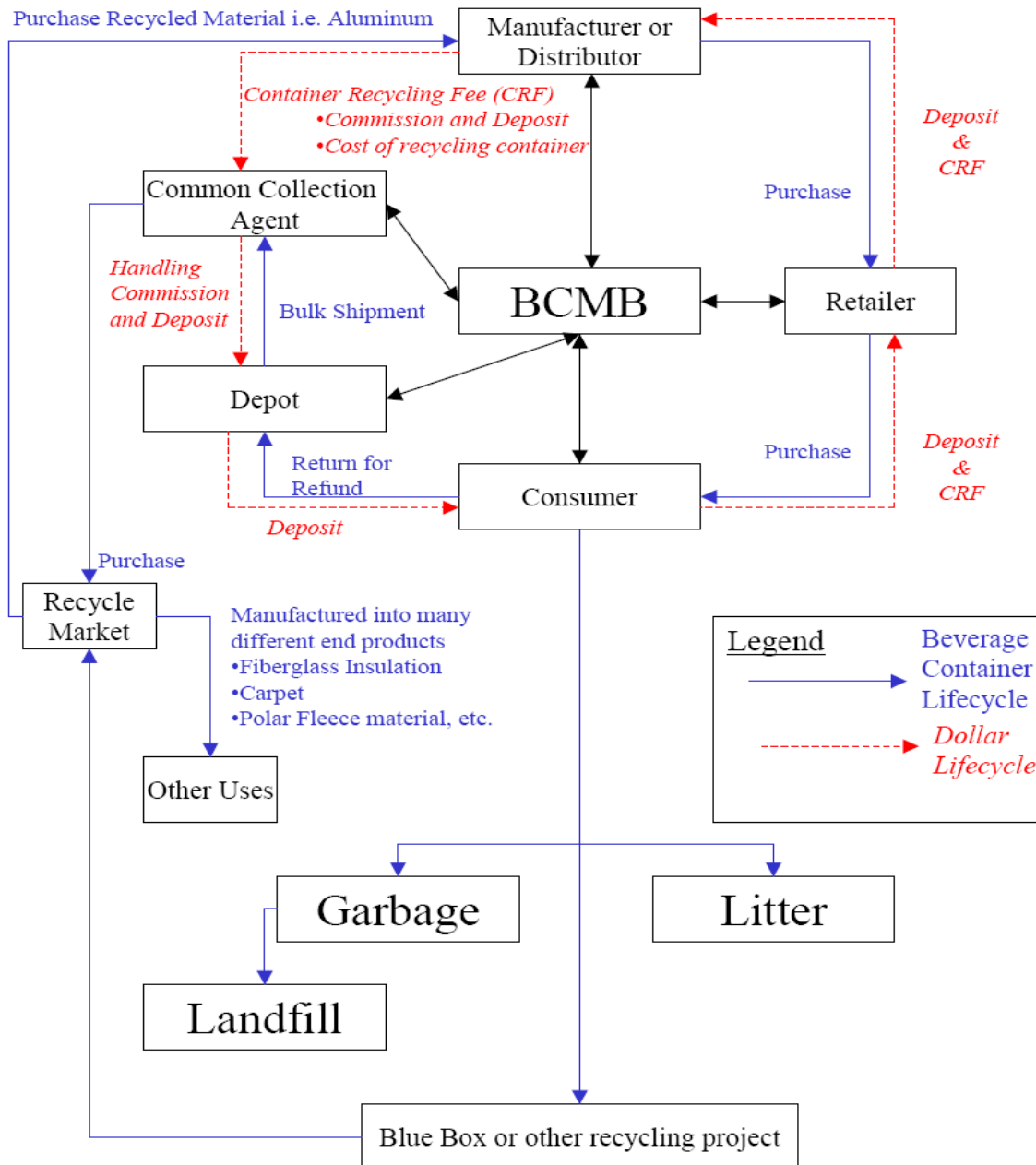
¹⁰ Active means return volumes As Reported by the Manufacturers.

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- 1 Upon return of the beverage container to a Depot, the Depot pays the member of the public (the
- 2 Customer) the Deposit that was initially paid to the retailer when the product was purchased.
- 3 The Depot then sells the container to the Manufacturer for the same Deposit amount and a
- 4 portion of the CRF. This portion of the CRF is the Depot's Handling Commission, or
- 5 compensation for handling the container.
- 6 The following is a graphic depicting the flow of funds just described as provided by the BCMB:



7

- 8 The deposits collected from Customers at the time of purchase are intended to provide an
- 9 incentive for Customers to return empty containers to Depots for refunds. For some Customers,

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the incentive to return containers is also based on the knowledge that containers will be re-used or re-cycled.

The Manufacturers of beverage containers use two organizations to fulfill their legislated obligations and operate the bulk beverage container return system in Alberta - the Alberta Beer Container Corporation (ABCC) and the Alberta Beverage Container Recycling Corporation (ABCRC).

The Depot's primary source of Revenue is the Handling Commission paid by the ABCC and the ABCRC.¹¹ Different types of containers have different Handling Commissions, varying from 2.80¢/container for aluminum pop cans to 8.00¢/container for certain beverage containers that have lower volume returns.¹²

Depots are what economic texts would consider a monopoly seller of empty beverage cans. Only Depots permitted by the BCMB are able to sell containers to Manufacturers, and the Manufacturers are required by law to purchase all containers collected and shipped by Depots.

As well, Depots can be considered monopsony buyers of containers. Depots, in most circumstances, have a geographic based franchise area that ensures limited¹³ direct competition by other permitted Depots. As well, only permitted Depots can purchase containers from the public and ship them to Manufacturers. While there are third-party entities whose primary business is to collect containers from the public, all third-party collection operations must ultimately sell their containers to a Depot, and cannot bypass the Depots and sell directly to Manufacturers.

1.4 REPORT OUTLINE

This report outlines the process and results of the efforts of the DCA to collect and report on the 2005 UCA information collected and analyzed. Each Depot was asked to provide information for their fiscal year that ended in 2005. For about 40% of the Depots, their fiscal year end coincided with the calendar year end (December 31, 2005). For the other Depots, data collected was provided for a 12-month period in 2004 and 2005 ending with their fiscal year end. The DCA analyzed the reported data and has made recommendations for adjustments to reallocate, reclassify, increase or decrease the reported amounts to reflect the DCA's experience and professional judgment. The adjusted costs were then inflated / escalated to Cal 2006 costs and finally prorated by volume from the UCA study to the entire Alberta system.

Section 2 discusses the Information Review and Verification process used to audit the data received in the 2005 UCAs.

Section 3 provides an overview of the results from the 2005 UCA data collection process.

¹¹ Some Depot Owners have other business activities in conjunction with the Depot - we call these Multi-Business Depots.

¹² See Appendix VII for a listing of current Handling Commission rates and Deposits

¹³ Although competitor franchises may not physically locate in a protected territory, they are not restricted from collecting containers in another territory.

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Section 4 provides an aggregate summary review of the 2005 UCA data collected for each main revenue and cost category:

- 4.2 REVENUE FROM CONTAINERS
- 4.3 MISCELLANEOUS REVENUE
- 4.4 DIRECT LABOUR COSTS
- 4.5 CONTRACT LABOUR COSTS
- 4.6 OVERHEAD LABOUR COSTS
- 4.7 BUILDING COSTS
- 4.8 VEHICLE / EQUIPMENT COSTS
- 4.9 OVERHEAD COSTS

Under each of these sub-sections the DCA summarizes its analysis of the data reported and provides recommendations for any adjustments. The DCA adjusted the aggregate Revenue and cost amounts to better reflect the DCA's estimate¹⁴ of actual total Revenue and costs in FY 2005.

Section 4 also provides some additional sub-sections:

- 4.10. WORKING CAPITAL STUDY – provides the results of the DCA's review of the Working Capital requirements of the Depots.
- 4.11 RATE BASE/CAPITAL STRUCTURE – summary of the net capital (Rate Base) amounts reported and the DCA's review of these costs.
- 4.12 RETURN STUDY – description of a Depot Return study performed by the DCA and a recommended level of Return to be included in the 2006 Alberta Revenue Requirement. A recommended level of income tax related to the Return and the resulting profitability of the Study System is also provided.
- 4.13 SUMMARY OF 2005 REPORTED AND ADJUSTED COSTS – summary of the adjustments made to the As Reported values.
- 4.14 NON-PROFIT DEPOTS – a review of the cost structure of the Non-Profit Depots in comparison to the For-Profit Depots.
- 4.15 MULTI-BUSINESS DEPOTS – a review of the cost structure of the Multi-Business Depots in comparison to the Single-Business Depots.

Section 5 contains the DCA's forecast of container return volumes for the period July to December 2006. Actual monthly container returns volume data, by Container Stream, was received from the ABCRC and the BDL for the months from January 2002 to June 2006. The 2006 six months of actuals and six months of forecast provide the recommended volume quantities for each Container Stream for Cal 2006 to be used in the determination of the 2006

¹⁴ The DCA has applied its experience and professional judgement in recommending adjustments to the UCA reported data.

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1 Handling Commissions. A forecast of 2006 Handling Commissions revenues using the current
2 Handling Commission rates is also provided.

3 Section 6 uses the FY 2005 Study System Revenues and Operating Expenses As Adjusted for
4 each Depot's fiscal year end in 2005 and inflates / escalates the costs to produce the Cal 2006
5 Study Revenues and Operating Expenses.

6 Section 7 shows how the Cal 2006 container return forecast presented in Section 5 and the
7 existing Handling Commissions were used to produce a forecast of the 2006 Revenue
8 Requirement. Using the 2006 Revenue and cost forecasts, a forecast of Revenues and costs
9 for all Depots over Calendar 2006 is presented.

10 Section 8 provides the DCA's conclusions and recommendations for future UCAs. While some
11 of these conclusions and recommendations are unsolicited, the DCA is hopeful that its
12 comments will assist with further improvements to the Handling Commission determination
13 process and the success of the beverage container return system in Alberta.

14 **1.5 ACKNOWLEDGEMENTS**

15 The DCA would like to express our thanks to the ABCRC and to the BDL for their assistance
16 and efforts in providing the DCA with detailed and timely system volume data information. Both
17 the ABCRC and the BDL were highly cooperative in assisting us in the provision of historical
18 volume data.

19 The ABDA also provided information to the DCA which was appreciated.

20 The DCA would also like to express our gratitude to the BCMB staff, and especially Mr. Bob
21 Saari, for their assistance.

2.0 2005 UCA INFORMATION REVIEW AND VERIFICATION

2.1 INFORMATION REVIEW AND VERIFICATION PROCESS

For the 2004 UCA process an information review and verification procedure was outlined in the Information Review and Verification Document dated January 12, 2005 that was approved by the BCMB during its February 8, 2005 Board meeting.¹⁵

The 2004 UCA Information Review and Verification Document contemplated a procedure where the DCA would verify 2004 UCA reported labour costs to tax filings and financial statements. As well, it contemplated a more thorough review of the top 80 Depots (having 80% of the volume). Also, it contemplated a lesser review of the smaller Depots that are more numerous, but generally are less significant in terms of the final setting of rates (given that the revenues they generate are small in proportion to their number).

The 2004 UCA returns proved to be of a quality that required the DCA to review every 2004 UCA received.

For the 2005 UCAs, the following processes were followed:

1. All returned 2005 UCAs (return booklets on paper or completed electronic Excel spreadsheets) were reviewed to ensure that the 2005 UCA was completed properly and corresponded to the verification documents provided (CRA & WCB reports, financial statements, tax return, property evaluations, Depot sketch, etc.).
2. Any obvious errors in the completed UCAs were corrected by the DCA (for example, labour costs in the wrong category – moved between tables 2, 3 and 4, data entered on the wrong line, costs (e.g. vehicle fuel) that were not reported on the financial statements were removed, costs (e.g. amortization) that were not entered on the 2005 UCA but were reported on the financial statements were added, etc.). The corrections made by the DCA were based on our professional experience and judgment.
3. In situations where the 2005 UCAs did not provide the data required (e.g. labour costs but not hours) or the data provided did not correlate to the verification documents, the UCA contacted the Depot Owner or the person who completed the 2005 UCA (typically their accountant) and asked for additional data or clarification. Additional data received was added to the 2005 UCA by the DCA.
4. In situations where verification documents were not provided, the DCA typically called the Depot and asked for the documents. If the documents were not provided within a day or two the DCA issued the Depot a deficiency letter requesting the additional information. A copy of the deficiency letters were provided to the BCMB. If the Depot

¹⁵ Doc 01-010(d)

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1 provided the additional documents requested, the 2005 UCA was reviewed as per item 2
2 above.

3 5. Once the DCA was satisfied that the data provided in the 2005 UCA and any additional
4 information provided was adequate and satisfactory, an electronic 2005 UCA was
5 created or reviewed. For 2005 UCAs provided in paper format, the data was entered
6 into the 2005 UCA electronic Excel spreadsheet by an administrative staff person. The
7 spreadsheet was then reviewed to check for data entry errors. For 2005 UCAs provided
8 by the Depots in electronic format, the spreadsheets were reviewed to ensure data
9 integrity (data entered in correct format, formulas not altered, etc.).

10 6. The completed 2005 UCA electronic Excel spreadsheet data was transposed into an
11 Access database. The transposition process contained a number of data integrity
12 checks and reported any errors or anomalies. Any data entry issues (e.g. missing key
13 fields like hours or Depot square footage) within the spreadsheets were manually
14 corrected and the correct spreadsheet was re-transposed to the database.¹⁶

15 7. After all the Study System Depots were entered into the database, the DCA prepared a
16 number of database queries to analyze the data and prepare this report. In reviewing
17 these queries some additional data entry errors were uncovered and corrected.

18 The DCA reviewed every returned 2005 UCA for all cost categories. We are of the view that the
19 costs reported in this Phase I Report materially reflects the operating costs incurred by the
20 Depots in Alberta for each of their individual 2005 fiscal year ends as reported on their financial
21 statements and/or their tax returns.¹⁷

22 Balance sheet information (assets and liabilities) was requested from all Depots and was used
23 to check capital cost allowance values and in some cases remuneration to Owners (dividends).
24 Many Depots did not report Gross Book Values of assets purchased - in these cases we
25 assumed that opening Undepreciated Capital Cost equaled Gross Book Value. Also, in some
26 cases, the DCA corrected the reported CCA class if the class reported did not reflect the asset
27 description.

28 The DCA consistently used tax return CCA values for amortization / depreciation costs. The
29 vast majority of Depots reported CCA values as their amortization / depreciation expense on
30 their financial statements.

31 There are two areas where we believe that actual costs are under-reported in the UCA
32 packages. These are in the areas of Goodwill and Collection costs.

¹⁶ The transposition process was sophisticated enough to delete any previous data transposed and replace with the current version. Data for a specific Depot could be transposed many times without duplication.

¹⁷ For some Multi-Business Depots verification documents for the Depot portion of their operations were not available. For these Depots the DCA checked the reported values for reasonableness and in some cases phoned the Depot to discuss how the Depot reported Depot related costs.

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2005 UCA INFORMATION REVIEW AND VERIFICATION

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1. Depots were requested to provide Goodwill costs on Table 6 of the UCA document. In some cases, these costs were reported on Table 6, with the value that was contained on the Depot's financial statements. If a Depot had a Goodwill asset and did not report it on Table 6 and also did not provide a balance sheet, there was no way to verify whether or not Goodwill existed. Some Depots reported amortization related to Goodwill, while others did not. Some Depots reported Goodwill depreciation on the 2005 UCA, however, it was absent from the filed tax return. Given the inconsistencies related to Goodwill, we are of the view that the reported Goodwill values should not be relied upon.

As noted in section 4.8, the DCA is of the view that Goodwill should not be included in Rate Base and amortization related to Goodwill and should not be included in the Revenue Requirement. The Goodwill values that were reported on the 2005 UCAs were not transposed to the Access database and are not included in the As Reported statistics.

2. The DCA is also of the view that Collection costs As Reported in the UCAs are understated. We observed several instances where Depot Purchases or cost of goods sold reported on financial statements were materially higher than the data from the Manufactures provided on Attachment C to the 2005 UCA and our theoretical calculation.¹⁸ We investigated this issue with a few Depots during the 2004 UCA process, and in those instances the explanation provided was that the discrepancy arose due to overpayments of Deposits (third-party collection costs), payment for services (including labour) in cash from the till, or over-payments of Deposits primarily to bulk Customers.

Table 9 was revised for the 2005 UCA to encourage Depots to review their Purchases / cost of goods sold and report cash payments and shrinkage. To some extent, the revisions to Table 9 were successful. Please see section 4.2.1 for additional discussion on this topic.

Overall, we believe that Collection costs were under-reported in the 2005 UCA documents submitted by some Depots. However, we also believe that the quantum of under-reporting in the 2005 UCAs is higher than for the 2004 UCAs as some large Depots were aware of the DCA's 2004 UCA determination and did not provide the breakout of collection costs as requested. As noted in section 4.9.1.1, the DCA is of the view that collection costs should form part of the 2006 Revenue Requirement, however, the recommended return should recognize the inclusion of these costs and the risk Depots face if beverage containers are not collected and brought in bulk to the Depots.

¹⁸ This calculation is further described in Section 4.2.1

3.0 2005 UCA SURVEY RESULTS

3.1 RETURN STATISTICS

As of September 30, 2006, the DCA received 165 completed 2005 UCA packages from Depots. Another 38 Depots were exempted by the BCMB from reporting for various reasons, including being new Owners and not having prior period records, changes in fiscal year end dates, etc. The 165 reporting Depots represented approximately 75% of total Depots and approximately 85% of Total System volume.

The following Table outlines the final statistics on the 2005 UCA collection process:

BCMB 2005 UCA Return Statistics

Date 10/11/2006

	Number of UCAs					
	Small		Large		Total	% Total
Filed UCA	95	68.8%	70	84.3%	165	74.7%
Filed and Deficient	1	0.7%	0	0.0%	1	0.5%
BCMB Exempt	32	23.2%	6	7.2%	38	17.2%
BCMB Extend	5	3.6%	1	1.2%	6	2.7%
Filed Electronic - Need Back-up	0	0.0%	1	1.2%	1	0.5%
No UCA	5	3.6%	5	6.0%	10	4.5%
	138	100.0%	83	100.0%	221	100.0%

	Volume (millions)					
	Small		Large		Total	% Total
Filed UCA	184.4	72.5%	943.9	87.9%	1,128.3	84.9%
Filed and Deficient	0.9	0.3%	-	0.0%	0.9	0.1%
BCMB Exempt	42.9	16.9%	58.3	5.4%	101.2	7.6%
BCMB Extend	13.7	5.4%	23.7	2.2%	37.4	2.8%
Filed Electronic - Need Back-up	-	0.0%	5.1	0.5%	5.1	0.4%
No UCA	12.4	4.9%	43.0	4.0%	55.5	4.2%
	254.3	100.0%	1,074.0	100.0%	1,328.4	100.0%

The status on the left side of the above table has the following meanings:

Filed UCA	Study System – 165 Depots
Filed and Deficient	Depot filed a UCA, however the verification information was deficient and the Depot did not provide appropriate back-up information by Sep 30 th , 2006
BCMB Exempt	BCMB provided formal exemption from filing
BCMB Extend	BCMB provided an extension to the filing deadline, however, the Depot did not provide the information by Sep 30 th , 2006
Filed Electronic - Need Back-up	Depot filed Excel spreadsheet, however, no verification information was received by Sep 30 th , 2006
No UCA	Depot did not file anything and did not contact the BCMB

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regarding an exemption or extension

1 The BCMB and the DCA prepared a listing of the Depots that were granted extensions and
2 were provided exemptions from filing the 2005 UCA.¹⁹ The DCA also prepared a listing of all
3 221 registered Depots and the status of each.²⁰

4 The DCA tracked 221 Depots throughout the 2005 UCA process. The following definitions were
5 used:

6 **BCMB System:** All Depots that had a permit as reported by the BCMB for Cal 2005.
7 There were 221 Depots

8 **Total System:** Any Depot that had return volume in Cal 2005 as reported by the
9 Manufactures. There were 216 Depots.

10 **Study System:** Any Depot that filed a fully completed 2005 UCA. There were 165
11 Depots.

12 Overall, the DCA is disappointed with the number of completed 2005 UCAs received from the
13 Depots. The following is a timeline of the process:

14	June 1, 2006	DCA mailed 2005 UCA packages to 211 Depots ²¹
15	August 1, 2006	2005 UCAs were to be returned to the DCA. By August 1, 2006
16		the DCA had only received 68 Filed UCAs (33% by volume).
17	August 16, 2006	BMCB mailed a letter to Depots that were deficient (Filed and
18		Deficient, BCMB Exempt, BCMB Extend, Filed Electronic - Need
19		Back-up) advising that if a completed 2005 UCA was not filed
20		within 30 days a \$200 fine would be levied as per the BCMB's
21		compliance policy. By August 16, 2006 the DCA had received
22		112 Filed UCAs (54% by volume).
23	September 13, 2006	BCMB mailed letters to Depots that were deficient issuing \$200
24		finances and advising that the BCMB management intended to
25		request suspension of permits as per the BCMB's compliance
26		policy for Depots that had not filed by the October 19, 2006
27		Board meeting. By September 11, 2006 the DCA had received
28		144 Filed UCAs (70% by volume).
29	September 30, 2006	The DCA received approval from the BCMB to cut off the
30		collection of 2005 UCAs from Depots. By September 30, 2006
31		the DCA had received 165 Filed UCAs (85% by volume).

¹⁹ Doc 10-008

²⁰ Doc 10-009

²¹ The DCA was aware that some Depots had no volume in 2005 or would be exempt by the BCMB and therefore a 2005 UCA package was not mailed.

3.2 OPERATIONAL STATISTICS

The DCA has provided the following data and analysis on the composition of Depots in Alberta to assist the BCMB and interested parties with further understanding of the Alberta Depot system. The information presented was collected from data provided by the Manufacturers and information provided by the Depots on Table 1 of the 2005 UCAs.

On Table 1 of the 2005 UCA the DCA collected information related to the operating characteristics of the Depots. Unfortunately, not all Depots completed Table 1 by providing all the requested information. As these operating characteristics were not essential to the development of the 2006 Revenue Requirement, the DCA did not expend the resources to force the Depots to comply with completing all fields in Table 1. However, all Depots were required to complete lines 128 and 129 (fiscal year end and number of months in the fiscal year, respectively).

3.2.1 Size Classifications

For the purposes of this study, the DCA categorized Depots as Small and Large Depots. The distinction is whether or not the Depot's volume is above or below 5 million containers in aggregate in Cal 2005. We chose this distinction, rather than the BCMB's classification of Metro, Urban or Rural,²² for the following reasons:

1. Confidentiality – given the smaller number of Metro Depots, the DCA felt that two larger groups (rather than the three BCMB-defined Metro, Urban, and Rural classifications) may impact our ability to report results in a manner that protects confidentiality.
2. Consistency - The BCMB defined Metro, Urban, and Rural classifications are, in some instances, not uniformly applied. For example, some rural Depots reside in or next to urban centers. The DCA postulates that the BCMB classifications are assigned when a Depot permit was first issued, and have not been consistently revised and/or updated.
3. Market Size – The Large Depots tend to operate in areas where the population density is high enough that there could be direct competition from other Depots (see analysis presented below).

In their information requests to the DCA on the 2005 Phase I Report, the HCRP asked a number of questions regarding the use of the Small/Large classification vs. the BCMB's Metro/Urban/Rural classification. The DCA continues to be convinced that the classification based on volume, to the extent used in the determination of the 2006 Revenue Requirement, is appropriate. The DCA believes that the volumes collected have a greater bearing on the

²² The BCMB's Beverage Container Depot Criteria is as follows as noted at <http://www.bcmb.ab.ca/bcdc.html>

"Depot" means a place operated as a business for the collection of empty beverage containers;

"Metro Areas" means the Cities of Calgary and Edmonton;

"Urban Areas" means a service area not restricted by municipal boundaries with a residential population equal to or greater than 10,000, but shall not include Calgary or Edmonton;

"Rural Areas" means a service area not restricted by municipal boundaries with a residential population of less than 10,000.

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operational characteristics of the depot and cost incurrence than does the BCMB's classifications partly based on geography. For future UCAs, updating the BCMB classification to move larger Depots currently classified as Rural to Urban if they are serving a larger population centre could allow a DCA to use the BCMB's classification with greater confidence.

As noted in this report, the Small/Large classification is used primarily for reporting purposes. The determination of the 2006 Revenue Requirement relies on the Small/Large classification only for certain determinations related to labour costs.

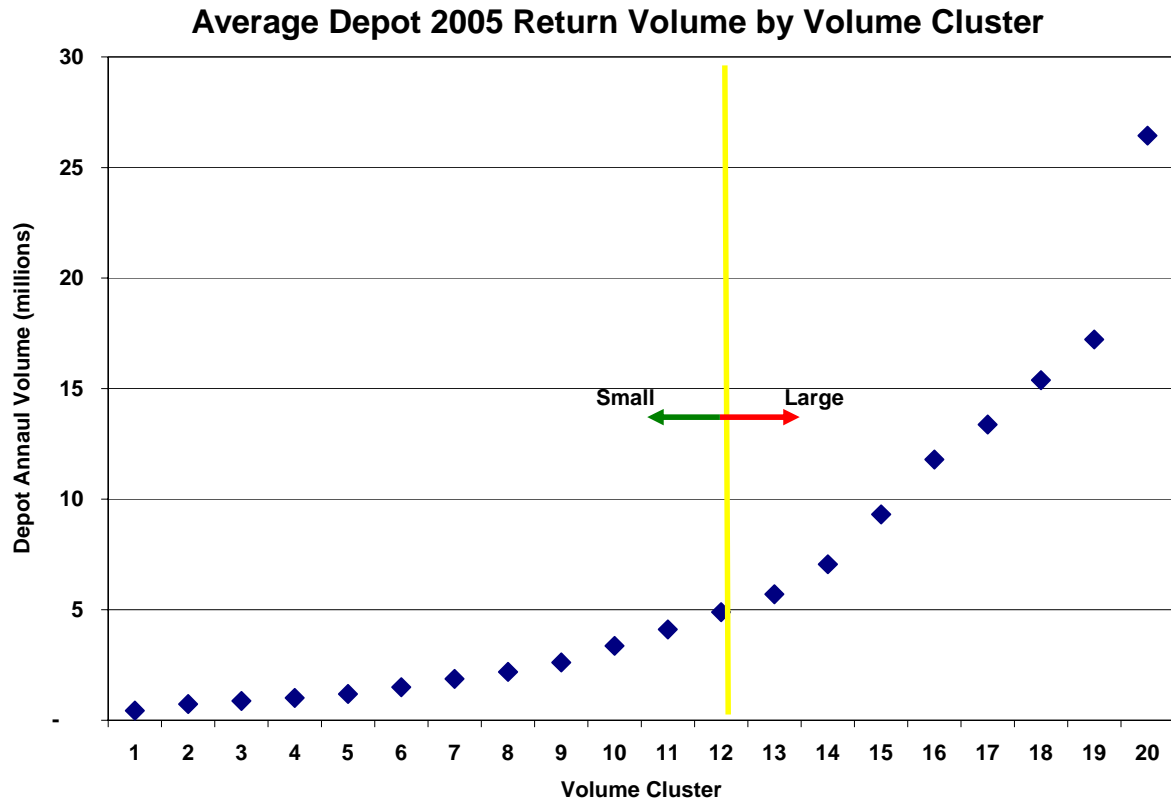
Further to our response to HCRP-Desiderata-19,²³ the DCA obtained additional population statistics for Alberta cities, towns, villages, municipalities, etc.²⁴ This data was used to analyze Depot volume size vs. an estimate of population in the cities, towns, villages, municipalities, etc. the Depot resides in. In order to protect Depot confidentiality, Depots were categorized into 20 "Volume Clusters", with about 1/20th of the smallest Depots placed in Volume Cluster 1, the next smallest into Volume Cluster 2, etc. and the largest Depots into Volume Cluster 20.

Some Exempt Depots were excluded from this analysis as they may not have a full year of volume data. Other Depots were excluded as the population data was not provided by the urban centre the Depot operates in, but rather by the Municipality (e.g. Municipal District). Most Depots not included in this analysis were Small. A total of 179 Depots (out of 216 total) were analyzed and hence the Volume Clusters each contain 9 to 10 Depots.

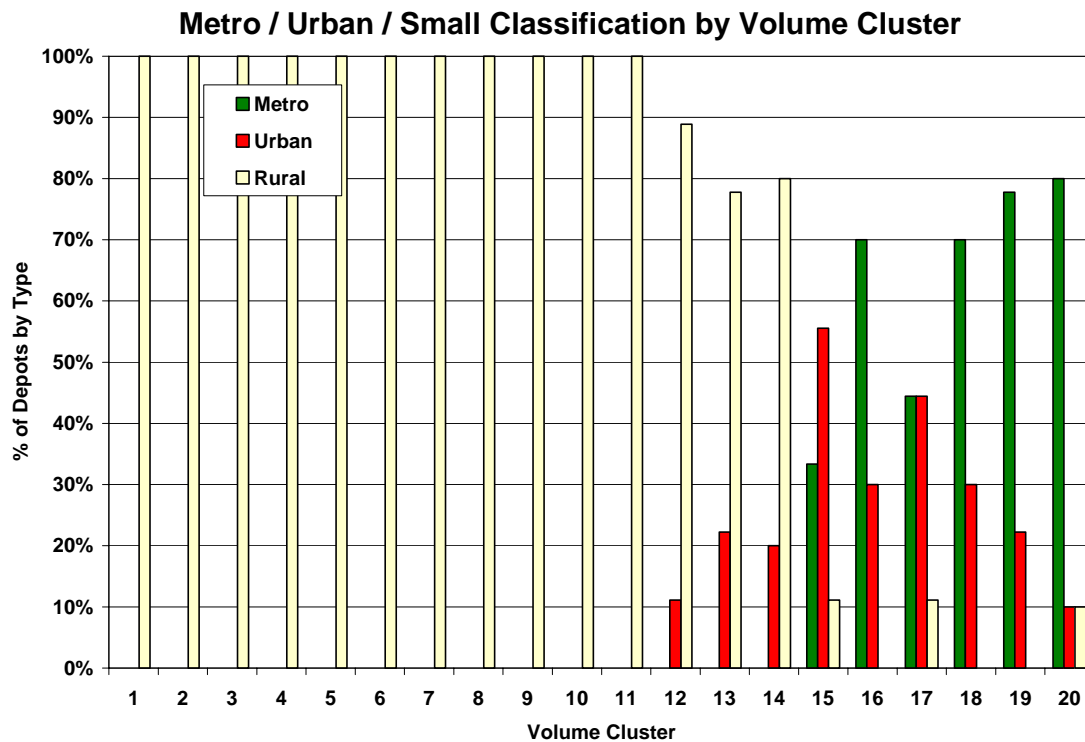
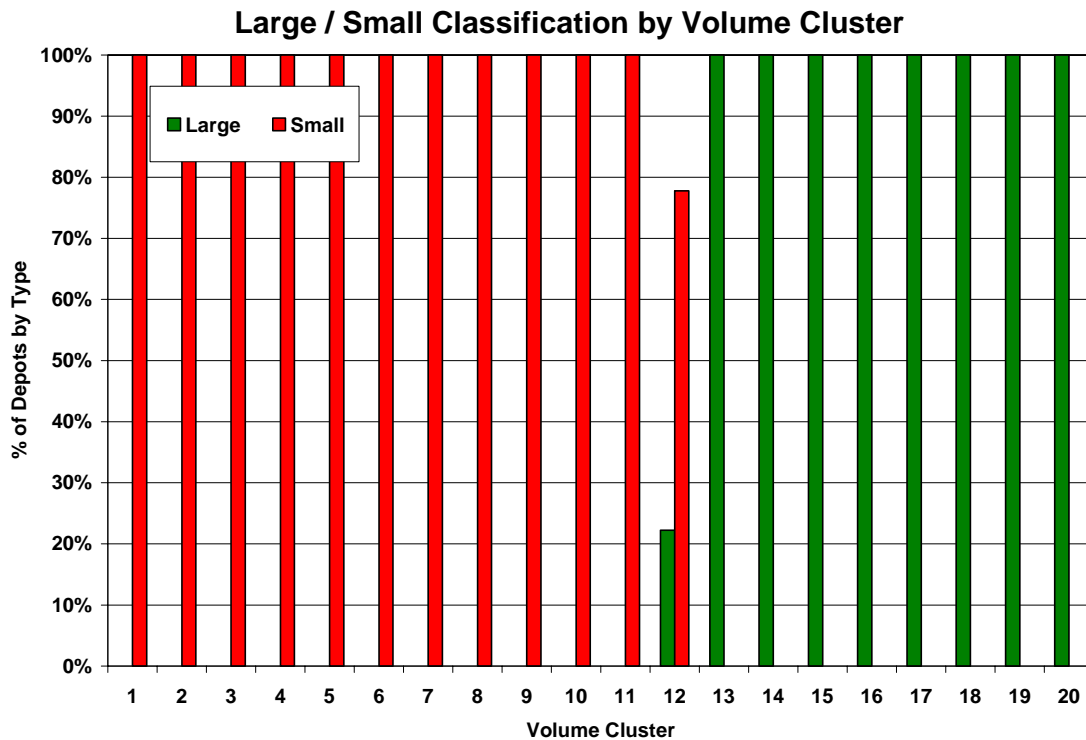
The following chart shows the average 2005 return volume by Volume Cluster:

²³ Doc 01-031

²⁴ Doc 10-006 from http://www.municipalaffairs.gov.ab.ca/ms_official_pop_lists.htm



- 1 The next two charts show the proportion of Depots in each Volume Cluster by the Small/Large
- 2 and Metro/Urban/Rural classifications.



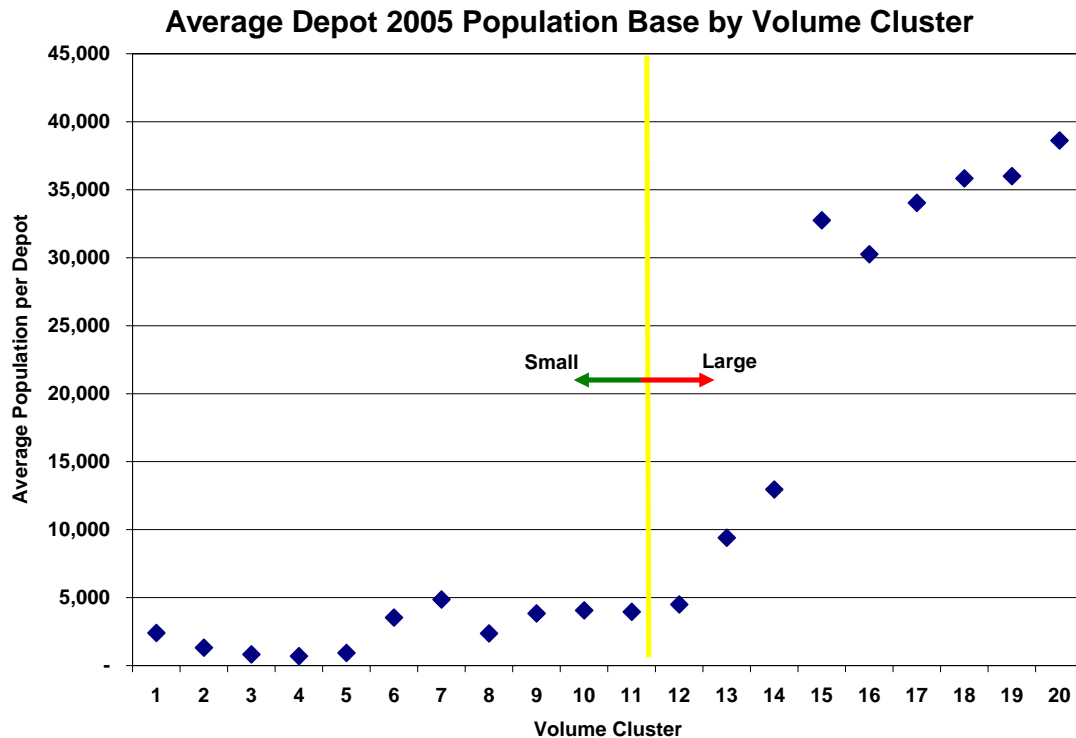
- 1 The next chart shows the average Depot return volume by Volume Cluster vs. the average
- 2 population size for the community the Depot operates within, as per the Alberta government
- 3 population data noted above. The average population size was determined by dividing the

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- 1 average population for the Depots in the Volume Cluster by the number of Depots in the Volume
- 2 Cluster:



- 3 The above chart shows that Depots in Volume Clusters 15 to 20 (about 25% of the Depots)
- 4 operate in areas where the Depots serve a population base of about 40,000 or more. The DCA
- 5 understands that the BCMB typically will issue one permit per 40,000 population base for Metro
- 6 Depots. For the Large Depots in Volume Clusters 12 to 14, the majority are in urban centres
- 7 where more than one Depot resides or are located in close proximity to an urban centre and
- 8 could draw beverage containers from the adjacent urban centre (for example, a Depot in a
- 9 suburb or town next to a large city).

10 From this analysis we conclude that:

- 11 1. Almost all Large Depots are in or adjacent to Urban centres where more than 1 Depot
- 12 resides.
- 13 2. Almost all Large Depots are in or adjacent to Urban centres where they may have to
- 14 compete for return volumes with other Depots.

15 These conclusions lead us to believe that the Small/Large classification is appropriate for

16 reporting purposes and for some of the labour determinations made under Sections 4.4, 4.5 &

17 4.6.

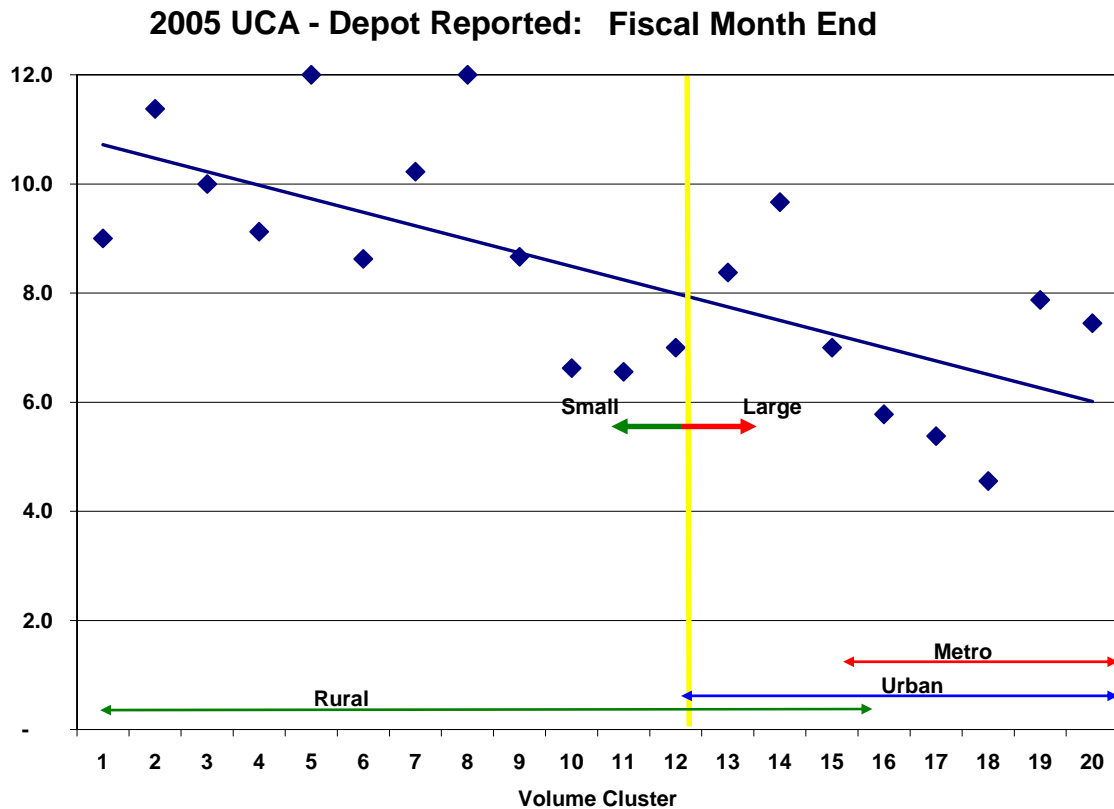
1 **3.2.2 Fiscal Year Ends**

2 Note that the Volume Clusters in this and the following sections relate to a different sample sets
3 of Depots than those presented above – these Volume Clusters are for the 169 Depots who
4 completed Table 1 (the 165 Depots in the Study System plus a few Exempt Depots who
5 completed only Table 1).

6 Each Depot was asked to provide information for their fiscal year that ended in 2005. For about
7 40% of the Depots, their fiscal year end coincided with the calendar year end (December 31,
8 2005). For the remaining Depots, data was provided for a 12-month period in 2004 and 2005
9 ending with their fiscal year end. In a few cases where a Depot was new or recently sold, the
10 DCA accepted the 2005 UCA where the fiscal year end was in early 2006.

11 The 40% of the Depots had a December 31 year-end primarily resulted primarily from smaller
12 sole-proprietorship Depots who reported Depot earnings on their personal tax return. Depots
13 with a non-calendar year-end collect most of the system volume. On an average basis, the 165
14 UCAs utilized had a fiscal year end of September 20, 2005.

15 The following chart shows that smaller Depots tend to have Fiscal year ends near the end of the
16 year, again primarily due to sole-proprietors claiming their Depot related income on their
17 personal tax returns. The implication for the 2006 Revenue Requirement is that the costs for
18 the Large Depots will, on average, be escalated over a longer time period than for Small
19 Depots.



- 1 The y-axis values relate to the fiscal year end month in 2005, e.g. 1 relates to Depots with a
- 2 January 31, 2005 fiscal year end and 12 relates to Depots with a December 31, 2005 fiscal year
- 3 end.

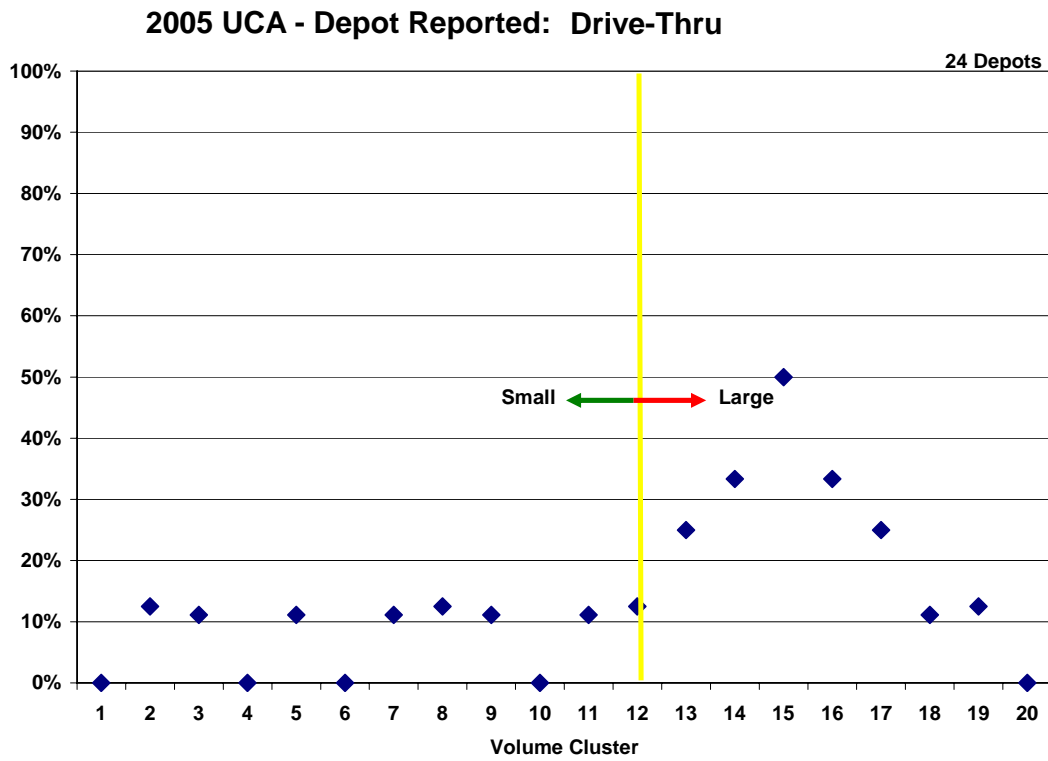
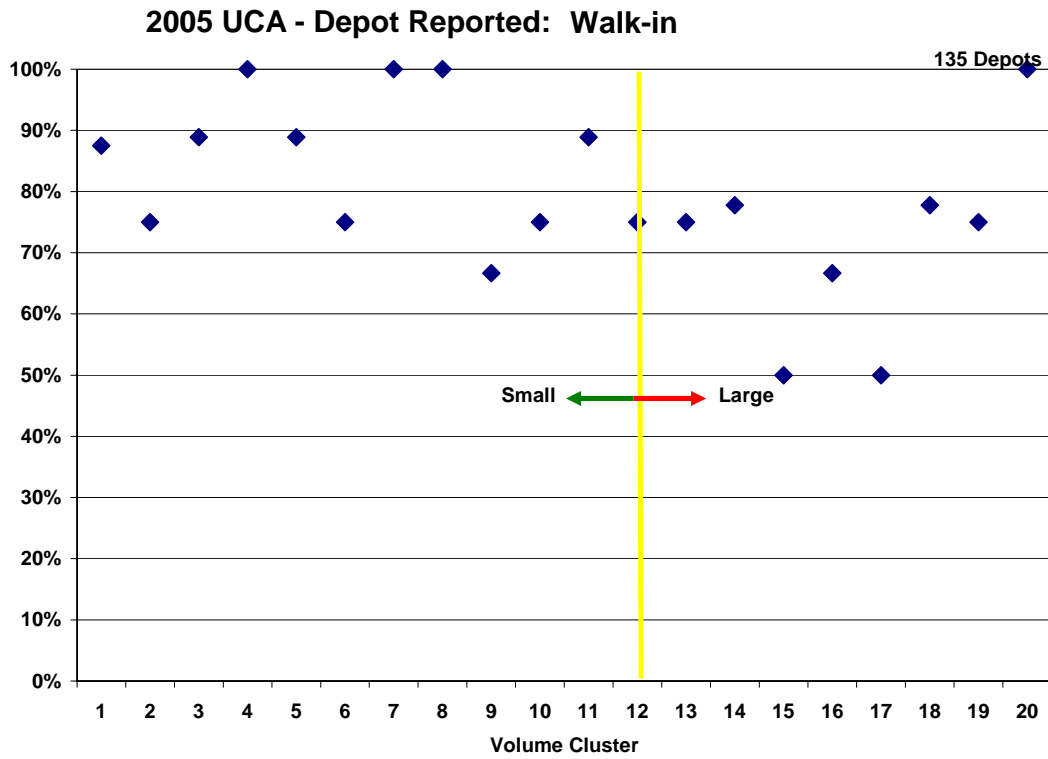
4 3.2.3 Depot Type

- 5 The next two charts show the percentage of Depots who reported being a Walk-In (Customers
- 6 enter the Depot to present their empty containers) or a Drive-Thru (Customers drive vehicles to
- 7 a window or ramp to present their empty containers) as reported on lines 125 and 127 of the
- 8 2005 UCA. These statistics suggest that the majority of Depots are Walk-In.

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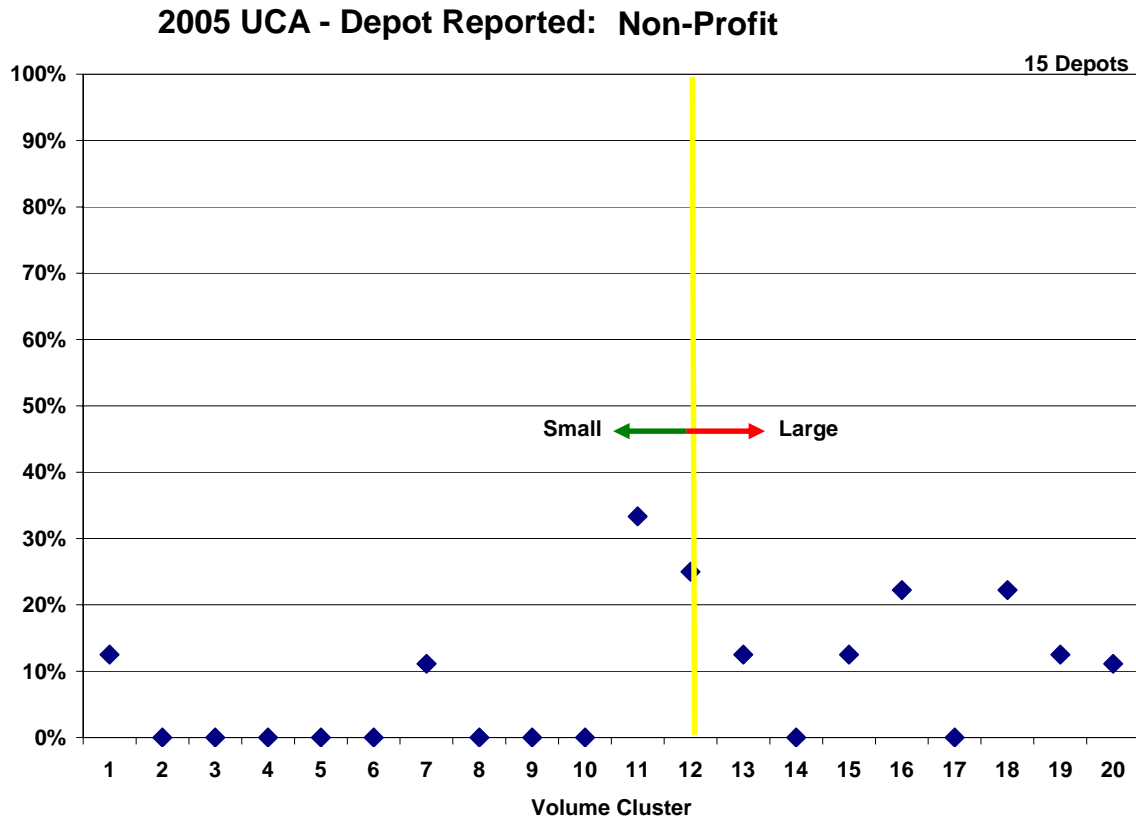


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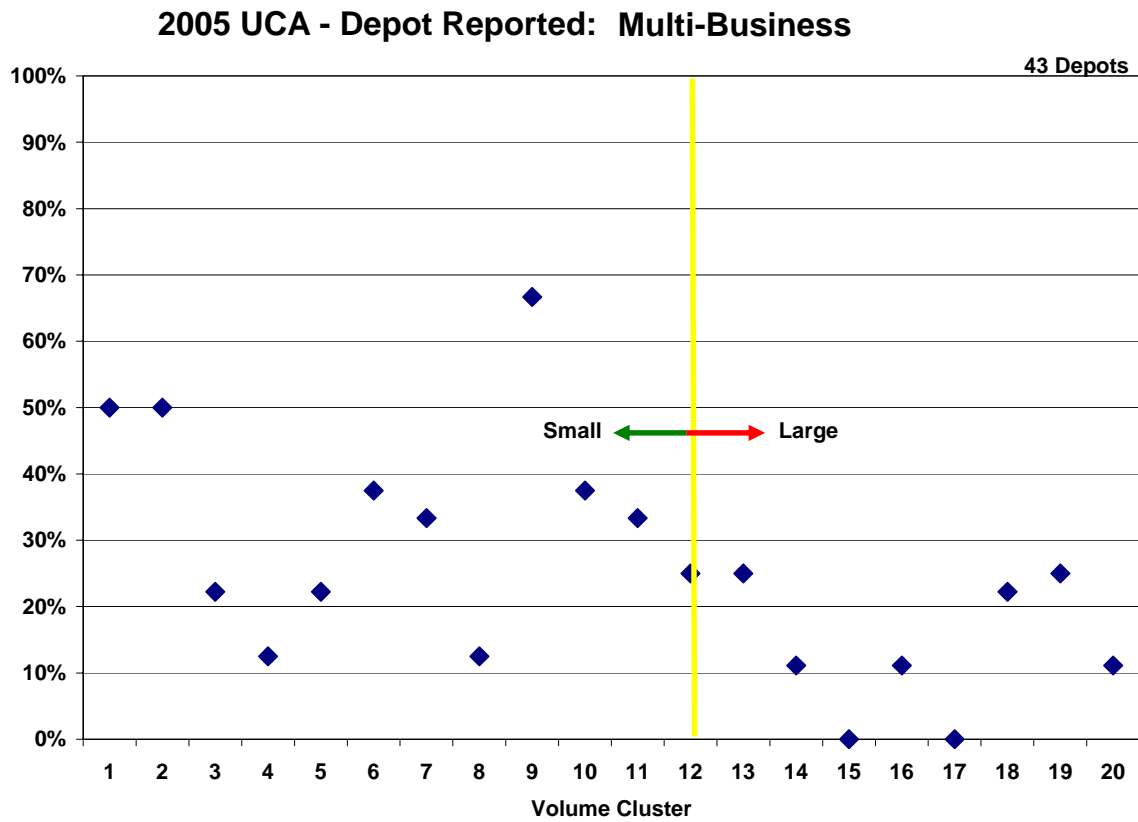
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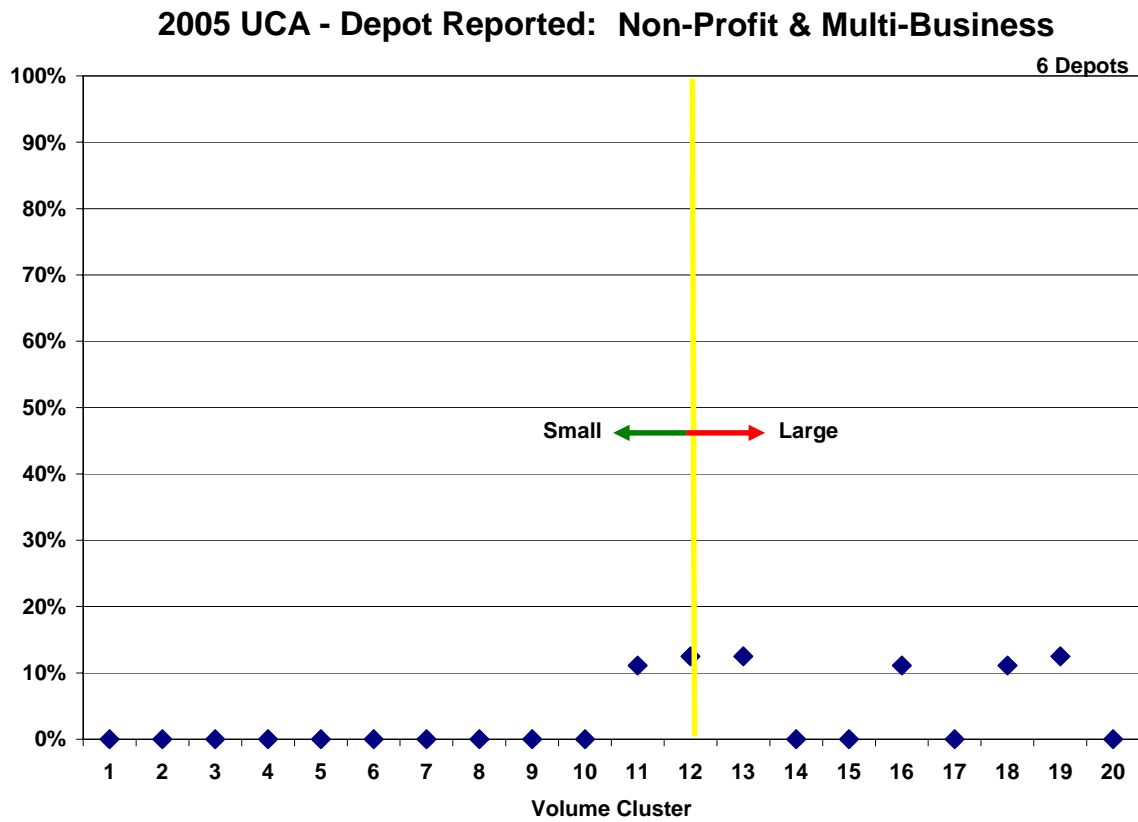
- 1 Most Depots that reported stated they were For-Profit. The 15 Non-Profit Depots tend to be in
- 2 the higher range of the Small Depots and throughout the range of the Large Depots. The
- 3 average volume for all 169 Depots is about 6.8 million containers per year, whereas the 15 Non-
- 4 Profit Depots had an average volume of 6.4 million per year (about 6% lower).



- 5 A total of 43 Depots reported being Multi-Business. The Multi-Business Depots (additional
- 6 business at same location, e.g. gas station, store, car wash, etc.) do tend to have smaller
- 7 Volumes, which is consistent with the DCA's understanding of historical policies that required
- 8 small rural Depots to have a second source of income in order to obtain a permit to operate.
- 9 The average volume for all 169 Depots is about 6.8 million containers per year, whereas the 43
- 10 Multi-Business Depots had an average volume of 4.4 million containers per year (about 36%
- 11 lower).



- 1 A total of six Depots reported being both Non-Profit and Multi-Business. These Depots tended
- 2 to be either large Small Depots or Large Depots.



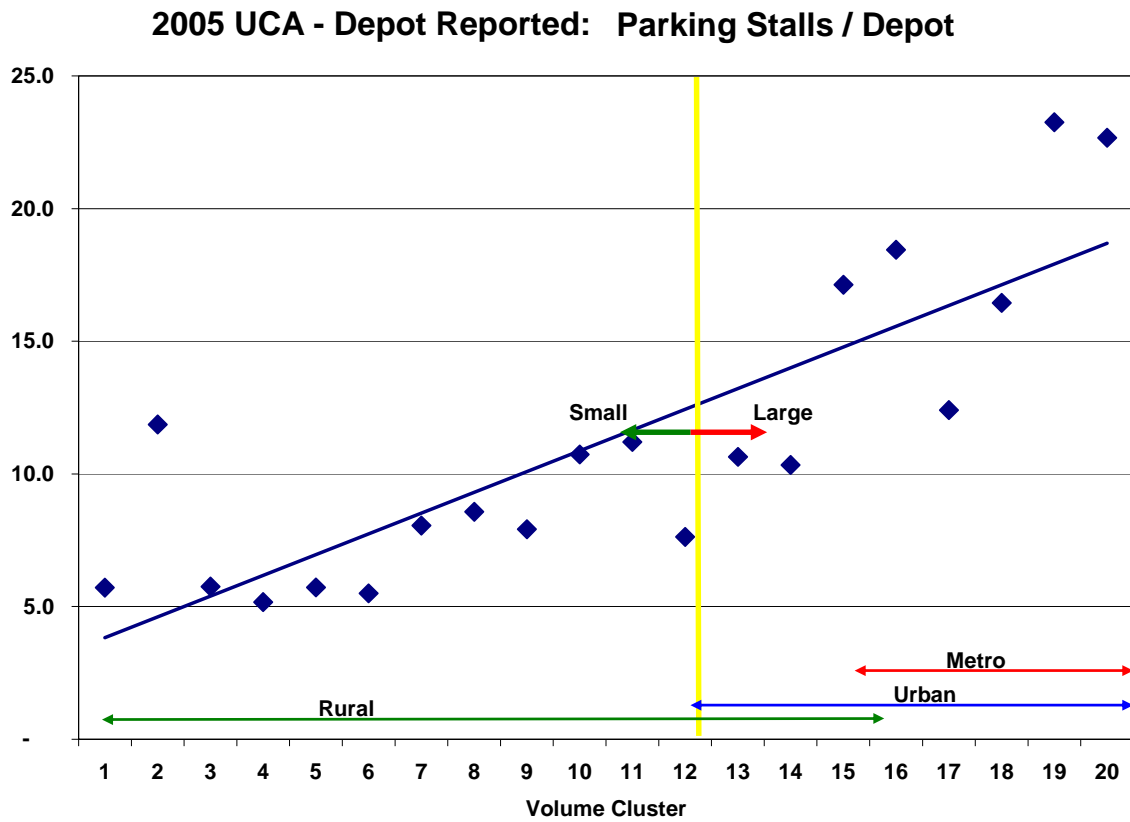
- 1 The following four charts show additional statistical information collected on Table 1.
- 2 As may be expected, the number of parking stalls available for Customers tends to increase
- 3 with volume. Of the 169 Depots that completed Table 1, 157 reported on the number of parking
- 4 stalls. The data tends to suggest that larger Depots are in compliance with the BCMB's policy
- 5 regarding the number of required parking stalls.²⁵ A total of 14 Single-Business Small Depots
- 6 reported having less than 5 parking stalls.

²⁵Beverage Container Depot Criteria

APPLICATION AND OPERATION CRITERIA FOR BEVERAGE CONTAINER DEPOTS

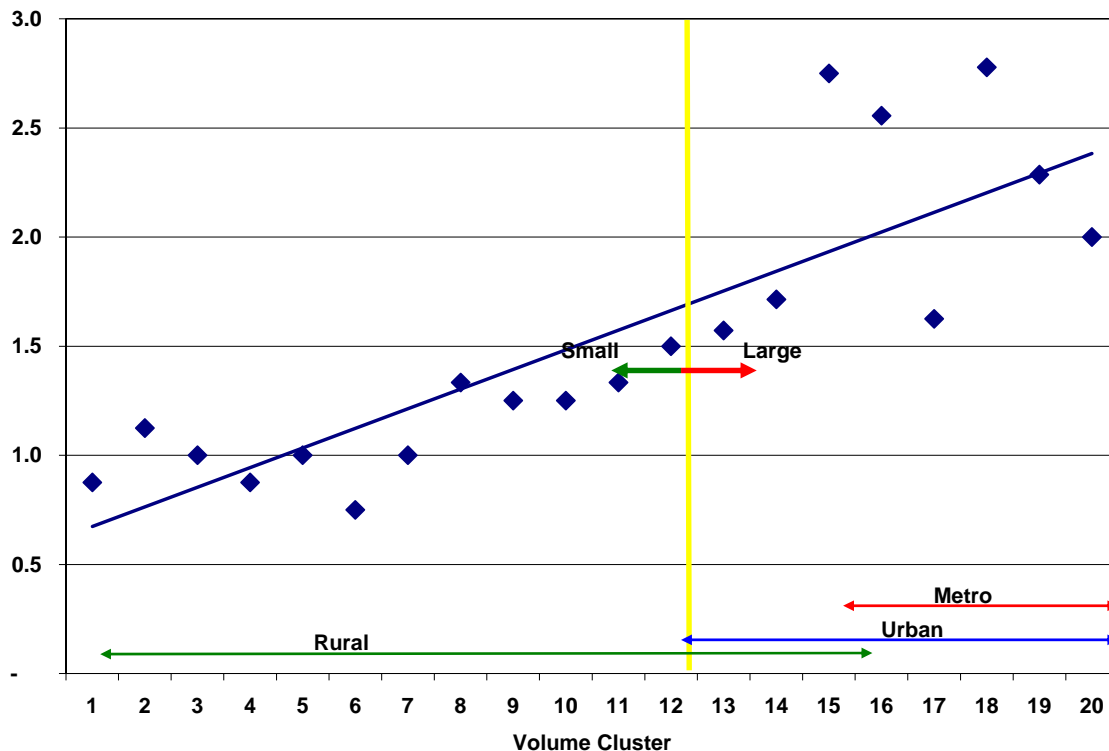
E. Yard and Premises Requirements

1. In Metro Areas, a Depot must have designated Customer parking for a minimum of twelve (12) vehicles.
2. In Urban Areas, a Depot must have designated Customer parking for a minimum of ten (10) vehicles.
3. In Rural Areas, a Depot must have designated Customer parking for a minimum of five (5) vehicles.



- 1 Most smaller Depots have a single cash register to provide refunds to Customers, whereas the
- 2 larger Depots may have 2 or 3 cash registers on average.

2005 UCA - Depot Reported: Cash Registers / Depot



1 Similarly for the number of buying stations (individual counters where Depot staff receive
 2 containers from Customers), the larger the Depot, the greater the number Buying Stations and
 3 the number of staff that can serve multiple Customers at the same time. The BCMB has
 4 guidelines on the number of buying stations (or counting/sorting stations).²⁶ Of the 169 Depots
 5 that completed Table 1, 161 reported on the number of buying stations. The data tends to
 6 suggest that most Depots are in compliance with the BCMB's policy, however, the DCA notes
 7 that some Depots may have been grandfathered, as there are several Depots that do not meet
 8 the BCMB criteria (for example, nine Urban Depots reported have fewer than 4 buying stations
 9 and 10 Metro Depots reported have fewer than 4 buying stations).

²⁶ Beverage Container Depot Criteria

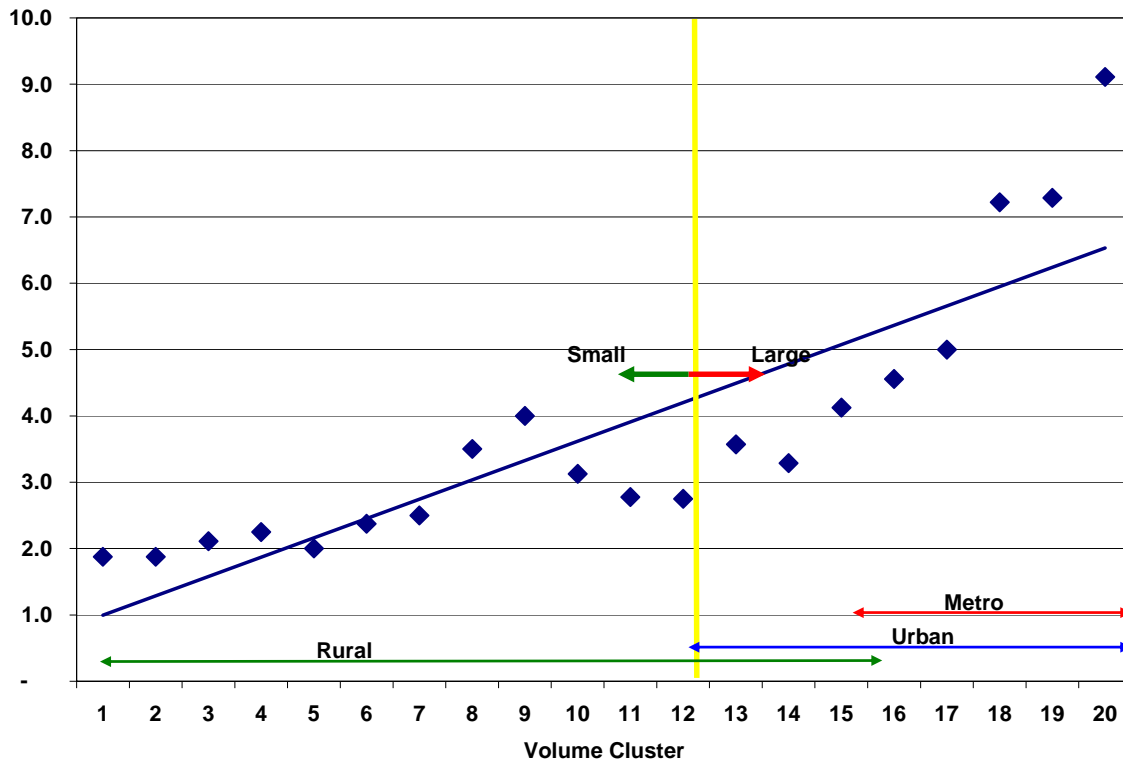
APPLICATION AND OPERATION CRITERIA FOR BEVERAGE CONTAINER DEPOTS

Facility Requirements

1. In Metro Areas, the interior space of a Depot must be a minimum of 5,000 square feet, with a minimum of 5 counting/sorting stations.**
2. In Urban Areas, the interior space of a Depot must be a minimum of 3,000 square feet, with a minimum of 4 counting/ sorting stations.**
3. In Rural Areas, the interior space of a Depot must be a minimum of 1,500 square feet, with a minimum of 2 counting/sorting stations.**
4. Counting/sorting stations are defined as an outside window for receiving containers, or 1.5 lineal metres of counter space within a Depot.

** Existing Depots have been grandfathered, and in their current locations are not required to meet size requirements at this time. Relocations of existing permits will require compliance with all facets of these criteria. Future changes may require Depots to upgrade the sizes of their Depots.

2005 UCA - Depot Reported: Buying Stations / Depot



- 1 The BCMB has defined the number of operating hours a Depot must be open each week to
- 2 receive containers from Customers.²⁷ The data collected indicates that Depots are generally
- 3 open at least as many or more hours each week than required by the BCMB.

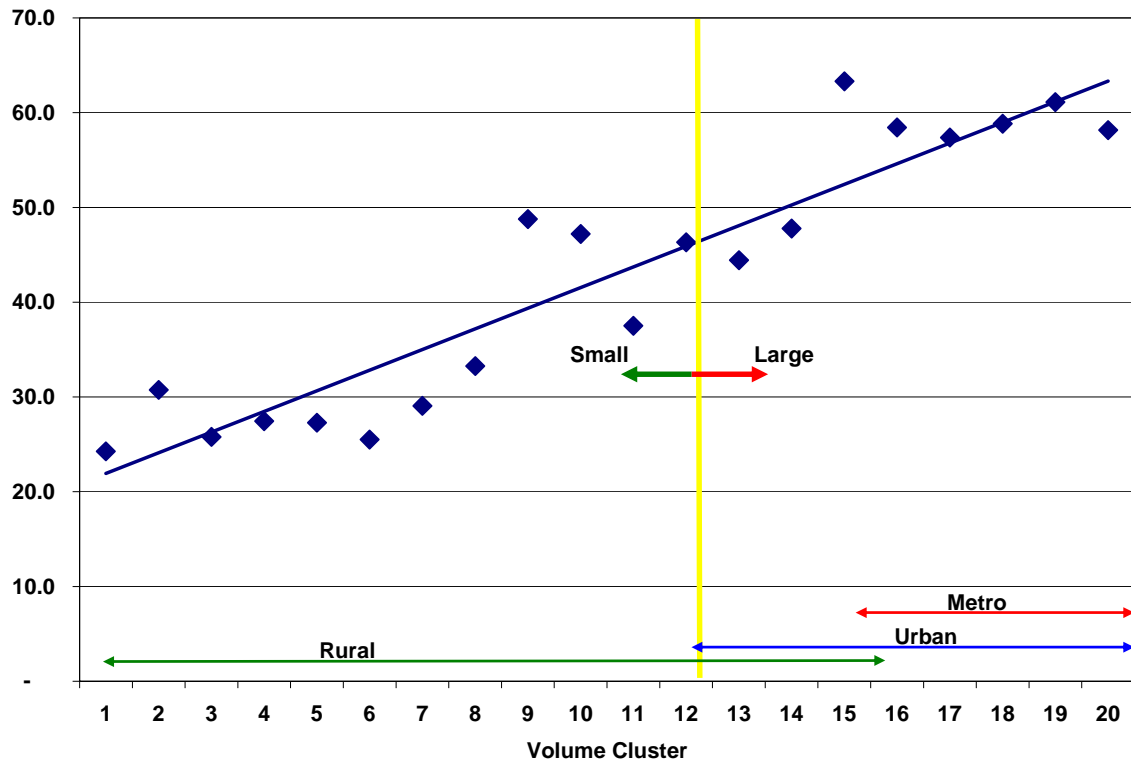
²⁷ Beverage Container Depot Criteria

APPLICATION AND OPERATION CRITERIA FOR BEVERAGE CONTAINER DEPOTS

Operating Requirements

1. Depots in Metro Areas must be open to accept containers no less than 52 hours per week including a minimum of 8 hours on Saturday.
2. Depots in Urban Areas with a population greater than 20, 000 must be open to accept containers no less than 40 hours per week including a minimum of 8 hours on Saturday.
3. Depots in Urban Areas with a population of less than 20, 000 must be open to accept containers no less than 28 hours per week including a minimum of 6 hours on Saturday.
4. Depots in Rural Areas located in towns, villages or hamlets with a population greater than 4,000 must be open to accept containers no less than 28 hours per week including a minimum of 6 hours on Saturday.
5. Depots in Rural Areas located in towns, villages or hamlets with a population less than 4,000 must be open to accept containers no less than 16 hours per week including a minimum of 6 hours on Saturday.
6. All Depots must be capable of staffing all sorting/counting stations during peak volume periods.

2005 UCA - Depot Reported: Depot Operating Hours / Week



4.0 FISCAL YEAR 2005 STUDY SYSTEM COSTS

4.1 OVERVIEW

The DCA performed a review and analysis of the 2005 UCA data collected in four steps:

1. Determine the Fiscal Year 2005 Study System Costs **As Reported** on the 2005 UCA documents. This is the sum of the reported costs over each Depot's fiscal year.
2. Review and analyze the data and provide recommendations to adjust the results in Step 1 to obtain the Fiscal Year 2005 Study System Costs **As Adjusted**.
3. Inflate / escalate the Fiscal Year 2005 Study System Costs As Adjusted to calculate the Calendar 2006 **Study System Costs**.
4. Prorate the Calendar 2005 Study System Costs from the 165 Study System Depots to the 215 Total System Depots to calculate the Calendar 2006 **Total System Revenue Requirement**.

The first two steps are summarized in this section - Fiscal Year 2005 Study System Costs. The Study System consists of 165 Depots who provided completed and verified 2005 UCAs.

4.2 REVENUE FROM CONTAINERS AT CURRENT RATES

The DCA recommends the calculation of the theoretical Revenue for each Depot based on Manufacturers' return volume data, rather than rely on the reported financial statement revenue of each individual Depot. We have observed that some Depots only report the Handling Commission component of Manufacturer receipts as revenue (which may be net of BCMB and ABDA fees), whereas other Depots report revenue as container Handling Commissions plus Deposit refunds and then deduct Purchases (which may include collection costs, overpayments to Customers and/or other costs). Because we have concluded that the Manufacturer reported volumes are correct, we are of the view that the system revenues and costs should properly include both Purchases and gross Revenues as calculated based on Manufacturer reported volumes.

4.2.1 Summary of Reported Revenues - Table 9 Verifications

4.2.1.1 Container Return Volumes

Both the ABCRC and the BDL provided the DCA with monthly shipment volumes by Container Stream for all Depots active in 2005. In the 2005 UCA packages sent to Depots, the DCA provided monthly volume data for 2004 and 2005 (Attachment A) and requested that Depots verify the volumes provided by the Manufacturers on Table 9.

Depots did not report any significant corrections to the volume numbers provided in the 2005 UCA package. A few of Depots indicated that the volumes provided by the DCA were not

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correct, but the difference was either minor or of a timing nature, and the variance reported was, in our view, immaterial. Most Depots do not track volume data separately and rely on the Manufacturers reports.

The DCA considers that the volume data received from the Manufacturers can be utilized for the purposes of deriving the 2006 Handling Commissions. In coming to this conclusion, we are also reassured by the fact that the ABCRC and the ABCC both provide audited financial statements to the BCMB.

4.2.1.2 Handling Commission Revenue

In the 2005 UCA packages sent to Depots, the DCA provided monthly theoretical Handling Commission revenues (derived by multiplying volumes by the Handling Commission for each Container Stream) for 2004 and 2005 (Attachment B) and requested that Depots verify.

For those Depots that reported their Handling Commission revenue most had a small discrepancy from the theoretical values.

Handling Commission Revenue As Reported:

	# Depots Reporting	Total in Study System	% Reporting	Reported Handling Commissions	Calculated Handling Commissions	Difference	Percent Difference
Small	84	95	88.4%	\$6,252,576	\$6,396,584	\$144,008	-2.3%
Large	62	70	88.6%	\$31,347,336	\$32,475,601	\$1,128,265	-3.5%
	146	165	88.5%	\$37,599,912	\$38,872,185	\$1,272,273	-3.3%

As noted in the above table, about 88% of Depots reported their Handling Commission revenue.²⁸ Most Depots' Income Statement report the following:

Revenue	Revenue received from Manufacturers, some net of ABDA and BCMB fees
Cost of Goods Sold or Purchases	Cash paid to Customers – Deposit refunds to Customers = value of containers received (or cash withdrawn from bank)
Gross Income	Revenue less Costs of Good Sold

Many Depots made the assumption that Gross Income was equal to Handling Commissions.

The DCA used 2004 and 2005 actual monthly volume data provided by the Manufactures to calculate Handling Commissions for each Depot in the Study System. As noted in the Table above the difference between the reported and calculated Handling Commissions is about \$1.3 million or 3.3%. The differences are likely primarily due to the following factors:

²⁸ Many Depots did not report these values on Table 9; however, the DCA recorded the values from the Depot's financial statements.

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- 1 1. Depot revenues may contain revenue from other sources (some Miscellaneous Revenue
2 may be included). For Multi-Business Depots, Handling Commission revenues may be
3 an estimate as Depot operations may not be tracked separately.
- 4 2. ABDA and BCMB fees that are subtracted from Handling Commission Revenue by the
5 Manufacturer's agents were not posted as an expense for many Depots (i.e. Depots
6 report revenue net of these fees).
- 7 3. Revenue recognition by the Depots may result in timing differences.
- 8 4. This analysis only includes a portion of the Depots in the Study System that completed
9 Table 9.

10 Considering the results and factors noted above the DCA considers that the 2005 UCA derived
11 theoretical Handling Commission revenue for FY 2005 can be utilized for the purposes of
12 reporting gross Depot Revenue. With adjustments for ABDA and BCMB fees, the difference
13 between the reported and the calculated values are about \$1.2 million.

Revenues

Reported Handling Commissions	\$37,599,912
Calculated Handling Commissions	<u>\$38,872,185</u>
Revenue not Reported	-\$1,272,273
ABDA & BCMB Fees Reported	\$532,844
ABDA & BCMB Fees Calculated	<u>\$651,012</u>
	\$118,169
Unaccounted For Difference	-\$1,154,104

14 To the extent that Calculated Handling Commission revenues are understated, the DCA is of
15 the view that any impact on the 2006 Revenue Requirement should be considered a Depot risk
16 for which consideration is provided in determining the overall Return (see section 4.12).

17 The Calculated Handling Commission revenue for all 165 Depots in the FY 2005 As Reported
18 Study System is \$43.14 million.

4.2.1.3 Purchases

20 In the 2005 UCA packages sent to Depots, the DCA provided monthly theoretical Purchases
21 paid to the Depots (derived by multiplying volumes by the Deposit values for each Container
22 Stream) for 2004 and 2005 (Attachment C) and requested that each Depot verify the calculated
23 values.

Purchases As Reported:

	# Depots Reporting	Total in Study System	% Reporting	Reported Purchases	Calculated Purchases	Difference	Percent Difference
Small	74	95	77.9%	\$11,222,504	\$11,279,052	\$56,548	-0.5%
Large	62	70	88.6%	\$63,398,670	\$62,902,193	-\$496,477	0.8%
	136	165	82.4%	\$74,621,174	\$74,181,245	-\$439,929	0.6%

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- 1 Fewer Small Depots reported their Purchases than their Handling Commissions.
- 2 The DCA used 2004 and 2005 actual monthly volume data provided by the manufacturers to
3 calculate Purchases for each Depot in the Study System. As noted in the table above the
4 difference between the Reported and Calculated Purchases is about \$440 thousand or 0.6%.
5 On lines 923 to 927 of Table 9 the DCA requested the Depots reconcile differences between the
6 calculated Purchases and those reported by the Depot. About one third of the Depots reported
7 adjustments.²⁹

Purchases Adjustments As Reported

	# Depots Reporting	Total in Study System	% Reporting	Reported Collection Adjustments	Reported Shrinkage / Cash Adjustments	Calculated Purchases Study System	Percent Adjustment
Small	14	95	14.7%	\$0	\$40,001	\$13,921,077	0.3%
Large	41	70	58.6%	\$365,355	\$648,705	\$71,160,545	1.4%
	55	165	33.3%	\$365,355	\$688,706	\$85,081,622	1.2%

- 8 The adjustments were categorized as collection related (third party collection costs and Deposit
9 incentives to wholesale Customers) or Shrinkage / Cash related (cash payments from till,
10 shrinkage and other). Total reported adjustments were \$689 thousand.
- 11 Of note, the actual reported adjustments were higher than \$689 thousand. Where it could be
12 identified from the 2005 UCA or the financial statements that the cost was related to specific
13 item, the DCA revised the 2005 UCA accordingly. For example, some Depots paid cash to
14 contractors for the provision of labour and reported these costs on line 926 and their financial
15 statements; in these instances the DCA moved the cost to Table 3 (and attempted to verify with
16 the Depot to determine the number of hours the contractors worked).
- 17 With the adjustments the Purchases can be partially reconciled:

Purchases

Reported Purchases	\$74,621,174
Calculated Purchases	\$74,181,245
Additional Purchases	\$439,929
Reported Collection Adjustments	\$365,355
Reported Shrinkage / Cash Adjustments	\$688,706
	\$1,054,061
Unaccounted For Difference	-\$614,132

- 18 An unaccounted for difference of \$614 thousand exists. The DCA speculates that this
19 difference could be attributed to the following:

²⁹ Many Depots did not report these values on Table 9; however, the DCA recorded the values from the Depot's financial statements.

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1 1. Depot Purchases may contain costs from other sources that may not be tracked
2 separately. The DCA is concerned that these costs may have been paid in cash and are
3 not properly reflected on the Depot's financial statements.

4 2. Cost recognition by the Depots may result in timing differences.

5 3. This analysis only includes a portion of the Depots in the Study System that completed
6 Table 9.

7 To the extent that calculated Purchases plus adjustments are overstated the DCA is of the view
8 that any impact on the 2006 Revenue Requirement should be considered as a Depot risk, which
9 consideration is provided in determining the overall Return (See section 4.12).

10 The Calculated Purchases for all 165 Depots in the Study System is \$83.0 million.

11 **4.2.2 Adjustments Recommended**

12 4.2.2.1 Handling Commission Revenue

13 To calculate the Study System Handling Commission revenue, we determined each Depot's
14 shipments within each individual Depot's fiscal year for each Container Stream and multiplied
15 that volume by each Container Stream's current Handling Commission.³⁰

16 Each Depot provided their fiscal year-end to the DCA on line 127 of Table 1 of their completed
17 UCA booklet, and the number of months in their fiscal year end on line 128. From this
18 information the DCA matched the fiscal year months for each Depot with the volume data
19 provided by the Manufacturer to calculate the Handling Commission by month by Container
20 Stream for each Depot in the Study System.

21 The DCA has set FY 2005 Study System Handling Commission revenue at \$43.1 million.
22 Please see section 4.2.1.2 above and Schedule 9, Appendix I.

23 In order to provide a consistent basis for all costs and revenues, the DCA recommends inflating
24 the FY 2005 Study System Handling Commission revenue for those Depots that reported fiscal
25 years of less than 12 months. Overall, there were 9 Depots in the Study System that reported
26 for fiscal years of less than 12 months (Stub Fiscal Year). For example, the proposed
27 adjustment for a Depot with 8 months in their reported fiscal year is to inflate Handling
28 Commission revenues by $12 / 8$ or 150%.

29 With these adjustments the FY 2005 Study System Handling Commission revenue As Adjusted
30 is \$44.2 million.

31 4.2.2.2 Purchases

32 Purchases (or Deposits paid to Customers) are calculated in a similar fashion to Handling
33 Commission revenues except that the volume is multiplied only by the Deposit amount for each
34 Container Stream.

³⁰ See Appendix III

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1 The DCA has set FY 2005 Study System Purchases at \$83.0 million. Please see section
2 4.2.1.3 above and Schedule 9.

3 In order to provide a consistent basis for all costs and revenues, the DCA recommends inflating
4 the FY 2005 Study System Purchases for those Depots that reported fiscal years of less than 12
5 months. Overall, there were 9 Depots in the Study System that reported for fiscal years of less
6 than 12 months (Stub Fiscal Year). For example, the proposed adjustment for a Depot with 8
7 months in their reported fiscal year is to inflate Purchases by $12 / 8$ or 150%.

8 With these adjustments the FY 2005 Study System Purchases As Adjusted is \$85.1 million.

9 **4.3 MISCELLANEOUS REVENUE**

10 Under Table 7-b of the UCA, Depots were requested to report any Miscellaneous Revenues
11 they had received. Generally, these Miscellaneous Revenues are from non-core activities that
12 are related to the operations of the Depot and whose costs are not tracked separately.

13 Types of Miscellaneous Revenue reported by Depots included sales of crushed cardboard, fees
14 derived from the pick-up of containers, sales of empty containers (e.g. wine bottles) and
15 revenues from other recycling activities.

16 Depots were instructed to include revenues only where the related costs were also included
17 elsewhere in the 2005 UCA. The DCA corrected 2005 UCAs where Miscellaneous Revenues
18 were from another source (e.g. from another operation that was part of a Multi-Business Depot).

19 The following tables shows the reported values:

Miscellaneous Revenue As Reported:

	# Depots Reporting	Total in Study System	% Reporting	Reported Miscellaneous Revenue	Calculated Handling Commissions (Study System)	Percent Misc. Rev. to HC Revenues
Small	20	95	21.1%	\$211,776	\$6,701,826	3.2%
Large	33	70	47.1%	\$181,192	\$36,441,316	0.5%
	53	165	32.1%	\$392,967	\$43,143,142	0.9%

20 **4.3.1 Summary of Reported Miscellaneous Revenues**

21 Generally, Small Depots tended to have a greater portion of Miscellaneous Revenue compared
22 to overall Handling Commission revenue from the Depot. This is primarily due to relatively
23 larger Miscellaneous Revenue amounts from other recycling activities and other sources for
24 Small Depots, as can be seen in the following tables:

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Miscellaneous Revenue As Reported:

	Small	Large	Total
Cardboard Sales	\$12,211	\$29,415	\$41,626
Pick-up Fees	\$1,413	\$57,826	\$59,239
Other Recycling	\$50,409	\$29,847	\$80,256
Bottle Sales	\$3,129	\$3,803	\$6,932
Other Revenue	\$144,614	\$60,300	\$204,914
	\$211,776	\$181,192	\$392,967

Misc. Revenue As % of HC Revenue:

	Small	Large	Total
Cardboard Sales	0.18%	0.08%	0.10%
Pick-up Fees	0.02%	0.16%	0.14%
Other Recycling	0.75%	0.08%	0.19%
Bottle Sales	0.05%	0.01%	0.02%
Other Revenue	2.16%	0.17%	0.47%
	3.16%	0.50%	0.91%

1 The DCA notes that Small Depots, on a percentage of total Handling Commission revenue
2 basis, tend to have over twice the revenue from cardboard sales as Large Depots. We find this
3 to be somewhat counter intuitive as we would have expected larger Depots to have greater
4 Cardboard volumes and equipment (cardboard crushers) to be able to capture cardboard sales
5 revenue.

6 The DCA also notes that large Depots reported, on a percentage of total Handling Commission
7 revenues, a significantly greater portion of revenues from Pick-Up Fees. The DCA is of the view
8 that this is a result of Large Depots competing for containers and the utilization of resources to
9 collect containers from sources outside of the Depot.

10 4.3.2 Adjustments Recommended

11 As noted previously, Depots were instructed to include only those revenues where related costs
12 were also included in the UCA. These revenues must therefore also be included in the
13 determination of 2006 Revenue Requirement.

14 As noted in sections 4.2.1 and 4.9.2.1, the DCA determined that Handling Commission
15 revenues, Purchases and BCMB and ABDA fees should be based volume data from the
16 Manufacturers. The DCA is also of the view that the Value Added Fee (VAF) paid by ABCRC to
17 Depots in the amount of 0.26¢/glass container in Cal 2006 should be calculated based on data
18 from the Manufacturers and included as Miscellaneous Revenue.³¹

19 In order to provide a consistent basis for all costs and revenues, the DCA recommends inflating
20 the FY 2005 Study System Miscellaneous Revenues for those Depots that reported fiscal years
21 of less than 12 months. Overall, there were 9 Depots in the Study System that reported for
22 fiscal years of less than 12 months (Stub Fiscal Year). For example, the proposed adjustment

³¹ The ABCRC has advised the DCA that the VAR paid to Alberta Depots in Cal 2006 was 0.26¢/glass container for a total payment amount of about \$419 thousand.

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- 1 for a Depot with 8 months in their reported fiscal year is to inflate Purchases by 12 / 8 or 150%.
2 This adjustments result in the following:

Miscellaneous Revenue As Adjusted:

	Small	Large	Total
Cardboard Sales	\$12,211	\$29,565	\$41,776
Pick-up Fees	\$1,413	\$57,826	\$59,239
Other Recycling	\$50,409	\$29,847	\$80,256
Bottle Sales	\$3,129	\$3,803	\$6,932
Value Add Fees	\$36,785	\$305,126	\$341,911
Other Revenue	\$144,614	\$60,300	\$204,914
	\$248,560	\$486,468	\$735,028

Misc. Revenue As % of HC Revenue:

	Small	Large	Total
Cardboard Sales	0.18%	0.08%	0.09%
Pick-up Fees	0.02%	0.16%	0.13%
Other Recycling	0.72%	0.08%	0.18%
Bottle Sales	0.04%	0.01%	0.02%
Value Add Fees	0.53%	0.82%	0.77%
Other Revenue	2.08%	0.16%	0.46%
	3.57%	1.31%	1.66%

- 3 The DCA does not recommend any other adjustments to the reported Miscellaneous Revenues.

4.4 DIRECT LABOUR COSTS

- 5 Direct Labour costs are labour costs relating to the primary task of processing beverage
6 containers. The UCA Instruction Manual defined Direct Labour costs as:

- 7 Direct Labour includes staff performing the following functions: Customer interface,
8 cashiers, sorters, collection of containers from outside the Depot, loading trucks, etc.”³²

4.4.1 Summary of Reported Costs

- 10 Schedule 2, Appendix I shows As Reported Direct Labour costs of approximately \$13.9 million
11 dollars for the Study System in FY 2005. Approximately 1.2 million total reported Direct Labour
12 hours were worked over the Study System at an average rate of \$11.80/hour (including all
13 reported employer portion of Benefits³³). Overhead Labour Benefits are also included in this
14 amount. The DCA understands that Depots are unable to split out and report Benefit costs by
15 employee.

- 16 The following table summarizes FY 2005 Study System Direct Labour costs:

³² Doc 010-003, 2005 UCA Instruction Manual, s. 3.3, p. 3.7

³³ These costs are Private Health Care Plan Costs, EI & CPP, and WCB costs reported on Table 2 of the 2005 UCA. Other Benefits were amounts reported on Line 703 of the 2005 UCA.

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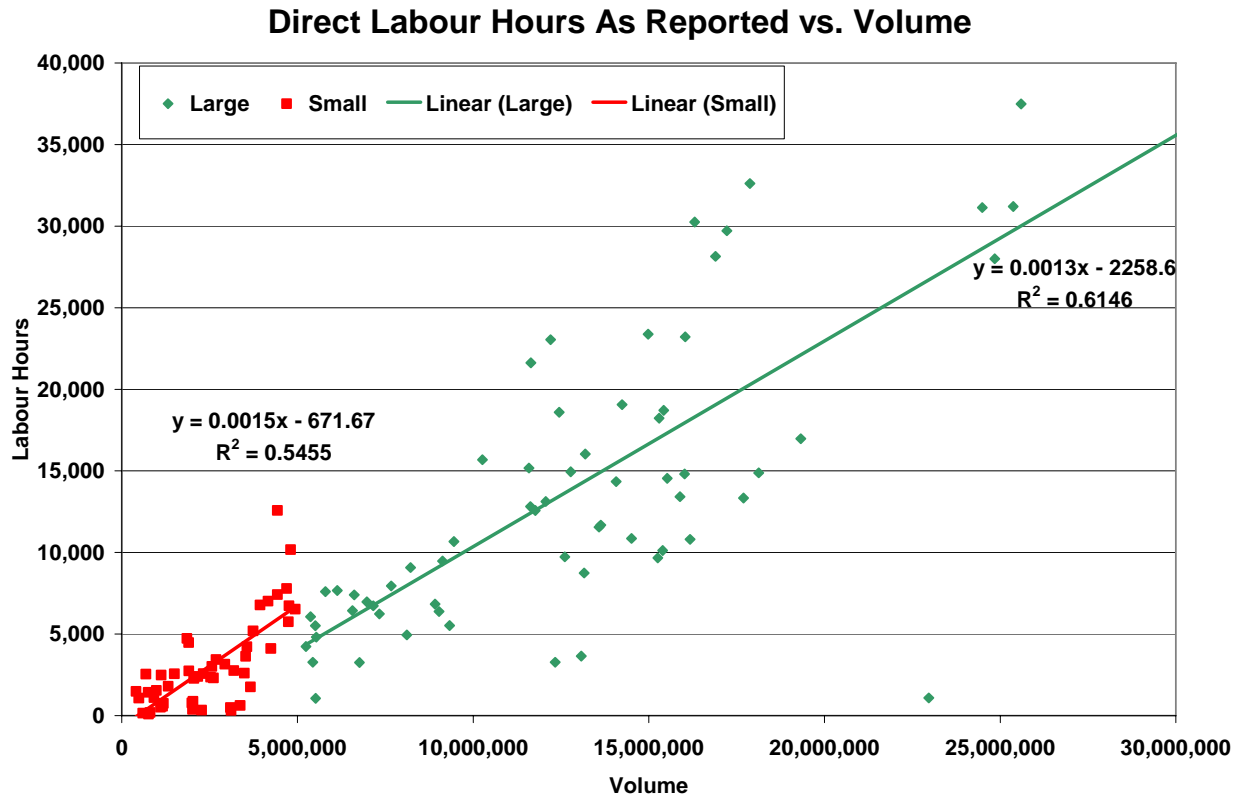
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2005 Fiscal Year as Reported					
	Hours	Benefit Cost	Labour Cost	Total	
Small	153,053	\$186,875	\$1,487,578	\$1,674,453	
Large	1,028,100	\$1,449,340	\$10,816,719	\$12,266,059	
Total	1,181,153	\$1,636,215	\$12,304,297	\$13,940,512	
Benefits	Heath Care	EI & CPP	WCB	Other	Total
Small	\$28,015	\$111,432	\$43,741	\$3,686	\$186,875
Large	\$159,955	\$853,393	\$434,389	\$1,603	\$1,449,340
Total	\$187,970	\$964,826	\$478,130	\$5,289	\$1,636,215
Benefits % of Total	Heath Care	EI & CPP	WCB	Other	Total
Small	1.7%	6.7%	2.6%	0.2%	11.2%
Large	1.3%	7.0%	3.5%	0.0%	11.8%
Total	1.3%	6.9%	3.4%	0.0%	11.7%
Labour	T4 Costs	Bonuses	Total		
Small	\$1,473,103	\$14,475	\$1,487,578		
Large	\$10,759,276	\$57,443	\$10,816,719		
Total	\$12,232,379	\$71,918	\$12,304,297		
Benefits/h	Heath Care	EI & CPP	WCB	Other	Total
Small	\$0.18	\$0.73	\$0.29	\$0.02	\$1.22
Large	\$0.16	\$0.83	\$0.42	\$0.00	\$1.41
Total	\$0.16	\$0.82	\$0.40	\$0.00	\$1.39
Labour/h	T4 Costs	Bonuses	Total		
Small	\$9.62	\$0.09	\$9.72		
Large	\$10.47	\$0.06	\$10.52		
Total	\$10.36	\$0.06	\$10.42		
Total/h	Labour	Benefits	Total		
Small	\$9.72	\$1.20	\$10.92		
Large	\$10.52	\$1.41	\$11.93		
Total	\$10.42	\$1.38	\$11.80		

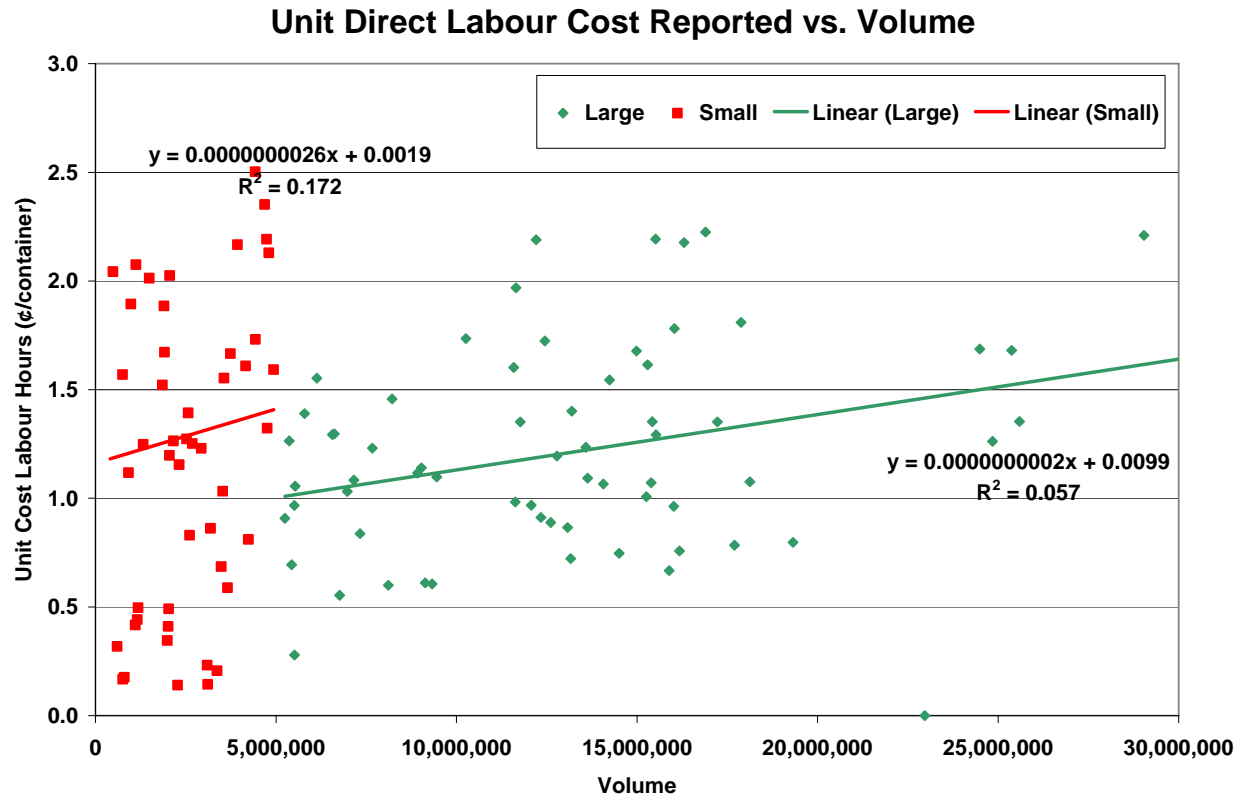
1 4.4.1.1 Direct Labour Efficiency Analysis

2 The DCA studied the relationship between container collection volume and Direct Labour hours.
3 The following chart³⁴ compares labour hours with Depot volume and demonstrates that on a
4 reported basis, there is no significant difference in Direct Labour efficiency over the range of
5 Depot size increases. We conclude this because the slope of the best fit Regression line does
6 not materially change as volume increases. We believe this to be reasonable given that we see
7 no reason why Direct Labour efficiency should change with size, noting that smaller businesses
8 may share labour with other operations, thereby keeping employees utilized.

³⁴ All charts presented by the DCA have the x and y-axis set to a value smaller than the maximum for the data set. For example, the chart on the next page shows on the x-axis volume from 0 to 30 million containers. There are some Depots with volume above 30 million and are not shown to protect Depot confidentially. All data points are including the in analysis, the regression statistics and equations noted on the charts.

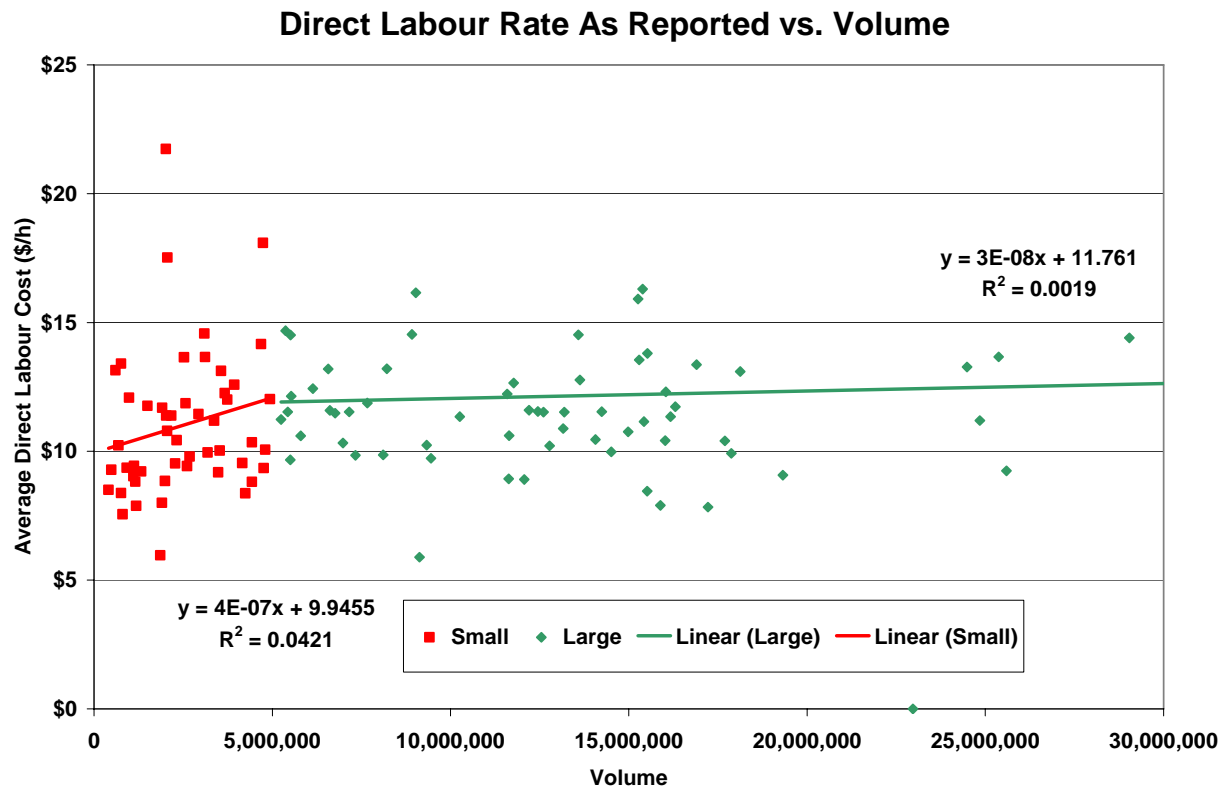


- 1 Note that the R^2 for these Regressions are relatively high at 61% for Large Depots and 55% for
- 2 Small Depots. Please also note that Depots that did not report any Direct Labour hours (45
- 3 Small Depots) are not shown on this chart.
- 4 Further, we have analyzed Unit Direct Labour vs. Volume in the chart below and observe that
- 5 the values reported for Small Depots declines slightly as volume falls. We conclude that this
- 6 result occurs in large part because at small volume levels, labour (which is typically provided by
- 7 the Owner and their family) is likely not properly (or fully) compensated through wages (Direct
- 8 Labour). The zero Direct Labour costs Depots have been excluded from the chart below.

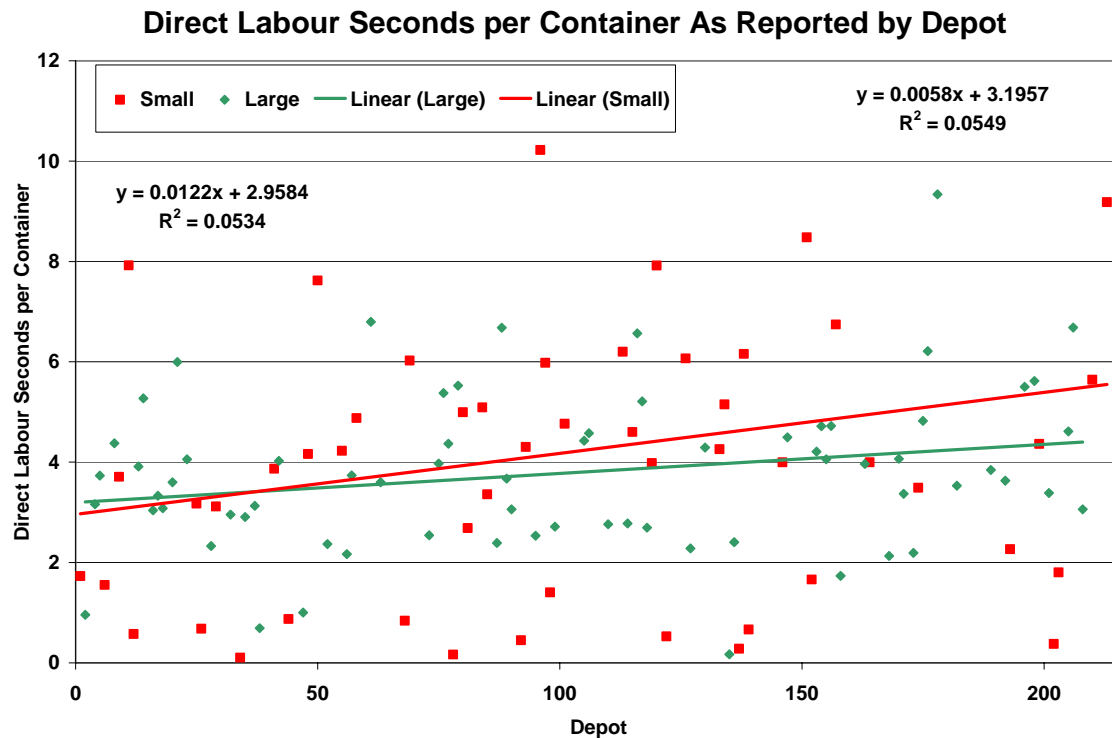


- 1 Note that the correlation between Direct Labour Costs (¢/container) and volume is small with
- 2 low R^2 values.

- 3 As well, the smaller Small Depots who typically utilize Direct Labour (hire employees) have a
- 4 lower average Direct Labour rate (\$/h) than Large Depots. The DCA surmises that this is
- 5 primarily a function of the Small Depots operating in remote centres where part-time employees
- 6 can be obtained for a lower average hourly rate.



- 1 Again, the R^2 values for the above chart show low correlation between the average hourly rate
- 2 and volume.
- 3 The final chart in this section shows the amount of Direct Labour time (in seconds) for each
- 4 container by Depot.



1 The x-axis is the DCA's internal Depot ID number, and hence the slope of the line is
 2 meaningless. However, what can be observed from the chart above is that there is a significant
 3 amount of scatter in the As Reported data across the Study System. The average Direct
 4 Labour Seconds per Container for Small Depots is 4.45 seconds/container (weighted average
 5 4.38 seconds/container), whereas the average Direct Labour Seconds per Container for Large
 6 Depots is 3.74 seconds/container (weighted average 3.92 seconds/container).

7 We note again that several Small Depots (45 in total) reported no Direct Labour expense. In
 8 these instances, the majority of the labour has been reported on Table 4-a Overhead Labour,
 9 which obviously impacts the results demonstrated in the charts above. We have addressed this
 10 issue in our adjustments of Overhead Labour in Section 4.6.2.

11 4.4.1.2 Direct Labour Wage Rate Analysis

12 The DCA calculated the Average and the Weighted Average Wage Rate for Small and Large
 13 Depots. The Average Wage Rate is the simple average of the loaded wage rate for each
 14 Depot. The Weighted Average Wage Rate is the total wage cost divided by the total hours. In
 15 both cases, costs include Benefit related costs.

16 An analysis of the average loaded reported wage rate produced the following results (with
 17 additional statistics as shown in the charts above):

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As Reported Direct Labour Statistics For Depots that Reported Direct Labour Costs

	As Reported	
	Small	Large
# Depots Reporting DL Costs	50	70
% of Total	52.6%	100.0%
Ave. Hourly Rate (\$/h)	\$11.02	\$12.21
Wt. Ave. Hourly Rate (\$/h)	\$10.87	\$11.93
Ave. Cost / Container (¢/cont.)	1.29	1.23
Wt. Ave. Cost / Container (¢/cont.)	1.32	1.30
Ave. Time per Container (s/cont.)	4.45	3.74
Wt Ave. Time per Container (s/cont.)	4.38	3.92

1 As shown above, the Weighted Average Direct Labour wage rate is lower for Small Depots
2 when compared to Large Depots. It may be that Small Depots, who are typically in rural areas,
3 do not face the same level of wage competition as do Depots located in major centres, and
4 therefore pay a lower wage.

5 The DCA procured a copy of the Watson Wyatt ANNUAL CANADIAN SALARY SURVEY,
6 2005/2006 Production & Distribution Report.³⁵ From the report and the on-line queries, the DCA
7 chose five Watson Wyatt Position Titles that best reflect the types of tasks a Direct Labour
8 employee would perform for a Depot.

Wyatt Watson		
Position Code	Position Title	Description
5201	Warehouse Worker	Performs various activities including loading and unloading freight trucks, either manually or using a hand truck, shelving stock, filling orders, moving scrap materials. May assist in packing, shipping and receiving. Works under general supervision.
5203	Order Picker	Selects various products or materials to fill customer order. Responsible for accurate selection to match order. May be required to package order using manual methods including packing and nailing crates, sealing boxes, and attaching labels or stencils as required. May be required to weigh, inspect and record quantity of products being packed. Works under general supervision.
5205	Fork Lift Operator	Moves materials to various areas within plant, warehouse and yard areas, using powered fork lift truck. Loads and unloads trucks or freight vehicles. May be required to perform other activities including picking orders, taking inventory, shipping and receiving. Works under general supervision.
5207	Material Handler	Moves, lifts and piles materials using hand trucks and other equipment as required. Moves material between departments, ensuring that proper routing of material is followed. Keeps elevator and traffic passages clear. Works under general supervision.
5208	General Labourer - Unskilled	Not assigned to any particular production area. Duties may include loading materials into production machines, moving raw and scrap materials, finished products and equipment throughout the facility, either manually or using powered equipment. May sort, pack and unpack raw materials and finished goods.

9 These Position Titles were then given a Position Match percentage to correlate to the types of
10 duties Direct Labour employees would perform. The results show an average hourly rate of
11 \$13.74/hour based on 2,080 hours per year (40 hours per week).

³⁵ Doc 10-012. Also see www.watsonwyatt.com

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Watson Wyatt				Desiderata		Watson Wyatt		Weighted Average	Hourly Rate
Position Code	Position Title	Job Class	Position Title	Position Match	Alberta P50 Base Salary				
5201	Warehouse Worker	HDH	Handler	10%	\$32,500				
5203	Order Picker	HDH	Handler	10%	\$28,000				
5205	Fork Lift Operator	HDH	Handler	10%	\$32,200				
5207	Material Handler	HDH	Handler	10%	\$29,900				
5208	General Labourer - Unskilled	HDH	Handler	60%	\$27,200				
		HDH	Handler	100%		\$28,580	\$13.74		

The Watson Wyatt base date for the salary statistics is May 1, 2005. This date is close the average of the Study System mid-fiscal year ends of March 25, 2005. The Watson Wyatt data does not include employee Benefits, and therefore should be inflated by an average of 11.7%³⁶ to \$15.35/hour to be comparable to the average reported Direct Labour rate of \$11.84/hour.

The DCA is of the view that the Watson Wyatt data, while providing a useful comparison, is not directly comparable to Alberta Depots. The Watson Wyatt data is from a survey of 305 large organizations, of which 18% reported for Alberta. Alberta Depots are more likely to hire staff that, on average, are closer to Watson Wyatt's definition of minimum salary, as opposed to the P50 data noted above:

Salary Range Minimum: the minimum salary in a formal salary range, typically the entry rate for the position where the incumbent has limited or no experience.

P50: 50th percentile or median; one-half of the observations included in the sample are above this amount; one-half are below.

P25: 25th percentile or first quartile; 25% of all observations included in the sample are at or below this amount.

For Alberta based employers, the Watson Wyatt survey does list P25 data, which gives a weighted average hourly rate of \$12.07/hour.

Watson Wyatt				Watson Wyatt		Weighted Average	Hourly Rate
Desiderata			Position	Alberta P25			
Position Code	Position Title	Job Class	Position Title	Match	Base Salary		
5201	Warehouse Worker	HDH	Handler	10%	\$28,700		
5203	Order Picker	HDH	Handler	10%	\$26,000		
5205	Fork Lift Operator	HDH	Handler	10%	\$29,300		
5207	Material Handler	HDH	Handler	10%	\$23,100		
5208	General Labourer - Unskilled	HDH	Handler	60%	\$24,000		
		HDH	Handler	100%		\$25,110	\$12.07

The Watson Wyatt data does not include employee Benefits, and therefore the weighted average P25 value of \$12.07/hour should be inflated by an average of 11.7% to \$13.48/hour, to be comparable with the average reported Direct Labour rate of \$11.84/hour.

The DCA expects that Depots, especially in the urban centres, likely compete with the Watson Wyatt survey companies hire staff and therefore the Watson Wyatt survey can be used as a guide to check the reasonableness of the Depot reported Direct Labour costs. Given that the survey data is primarily based on large companies (some of which are unionized) that may have

³⁶ The average reported Benefit cost from the 2005 UCAs, see section 4.4.1.

1 more stringent labour policies than Depots, the DCA would expect that the Watson Wyatt survey
2 companies would, on average, pay higher wages than Depots.

3 The DCA is of the view that the Reported Direct Labour costs are reasonable and should be
4 incorporated into the 2006 Revenue Requirement.

5 **4.4.2 Adjustments Recommended**

6 In order to provide a consistent basis for all costs and revenues, the DCA recommends inflating
7 the Direct Labour costs for those Depots that reported fiscal years of less than 12 months.

8 Overall, there were 9 Depots in the Study System that reported for fiscal years of less than 12
9 months (Stub Fiscal Year). For example, the proposed adjustment for a Depot with 8 months in
10 their reported fiscal year is to inflate Direct Labour costs and hours by $12 / 8$ or 150%. These
11 adjustments increased reported Direct Labour from \$13.9 million to \$14.3 million.

12 The DCA does not recommend any adjustments to Direct Labour costs of \$13.9 million As
13 Reported on Table 2 of the 2005 UCAs other than the adjustments for Stub Fiscal Years, which
14 increase Direct Labour costs to \$14.3 million.

15 **4.5 CONTRACT LABOUR COSTS**

16 Contract Labour costs are costs for work performed by third parties who are not considered
17 employees of the Depot. These are temporary help, third party contractors, and any other
18 person who is not an employee of the Depot and where the Depot does not remit T-4
19 information to the Canada Revenue Agency. The UCA Instruction Manual defined Contract
20 Labour as:

21 Contract Labour includes any contract or temporary labour used in your last fiscal year.
22 Contract and temporary labour are for human resources that are not included on your T4
23 Summary.³⁷

24 **4.5.1 Summary of Reported Costs**

25 Schedule 3, Appendix I provides details on the Contract Labour costs summarized below:

³⁷ Doc 10-003, 2005 UCA Instruction Manual, s. 3.4, p. 3.8

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2005 Fiscal Year as Reported			
Job Class	Hours	(\$)	(\$/h)
Small			
COL	2,129	\$14,705	\$6.91
HND & LDH	24,533	\$229,935	\$9.37
MGR	3,186	\$25,238	\$7.92
OWN	-	\$0	
	29,848	\$269,878	\$9.04
Large			
COL	9,121	\$125,032	\$13.71
HND & LDH	88,854	\$1,128,159	\$12.70
MGR	-	\$0	
OWN	-	\$0	
	97,975	\$1,253,191	\$12.79
	127,823	\$1,523,068	\$11.92

1 The DCA notes that unlike As Reported Direct Labour rates, the average Contract Labour rates
2 for Small Depots is significantly lower than for Large Depots.

3 Some Depots reported OWN costs on the 2005 UCAs. The DCA moved these costs to Table 4
4 to be consistent with other Depots.

5 Based on the analysis noted above for Direct Labour, the DCA is of the view that the Contract
6 Labour rates are reasonable and \$1.5 million in Contract Labour costs should be incorporated
7 into the 2006 Revenue Requirement.

8 4.5.2 Adjustments Recommended

9 In order to provide a consistent basis for all costs and revenues, the DCA recommends inflating
10 the Contract Labour costs for those Depots that reported fiscal years of less than 12 months.
11 Overall, there were 9 Depots in the Study System that reported for fiscal years of less than 12
12 months (Stub Fiscal Years). For example, the proposed adjustment for a Depot with 8 months
13 in their reported fiscal year is to inflate Purchases by $12 / 8$ or 150%. These adjustments
14 increased reported Contact Labour by about \$5,000.

15 As shown in Schedule 3, Appendix I, all costs for contract employees labeled as COL, HDL and
16 LDH have been moved to Direct Labour to reflect the Direct Labour nature of these costs.
17 Therefore, no Contract Labour costs exist in the FY 2005 Contract Labour Costs As Adjusted.

18 4.6 OVERHEAD LABOUR COSTS

19 The Owner (OWN) and manager (MGR) Job Classes of Overhead Labour are the category of
20 costs that reflect the management of the Depot operations. In the Alberta beverage container
21 industry, Overhead Labour costs is a complex issue. There are a myriad of managerial
22 structures that we have observed that have been developed by individual Depot Owners in
23 response to each Depot's individual circumstance. By our observations, these structures are
24 impacted primarily by Depot volume, Depot profitability, Depot Ownership structure, and the
25 level of family ownership. As well, tax planning impacts the range of these Overhead Labour

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costs. For proper rate making it is imperative to obtain a proper split between the compensation for **owning** the business compared to the compensation for **managing** the business.

Depots that have higher volumes typically require more management than smaller Depots. Management of a low volume Depot may be minimal, as in the case of a one-person proprietorship where the Owner performs all tasks and management is limited. A higher volume Depot which requires several employees and therefore more personnel management as well as time spent on other managerial issues that are not typically faced in a smaller Depot may require higher Overhead Labour.

We have observed a link between Depot profitability and reported Overhead Labour – particularly for smaller Depots. In those instances, the Owner generally takes the profits of the Depot either in salary or drawings. This compensation has no observable link to hours worked or proper compensation for performance of similar tasks by a third party. As well, in larger Depots in many instances Owners or related parties are paid salaries that are not reflective of market values.³⁸

Tax planning is a major source of volatility in the determination of Overhead Labour costs. Regulation is not generally intended to impact how a regulated business Owner operates in terms of efficient tax planning. However, in this instance Overhead Labour costs, particularly those associated with compensation to Owners, can be materially different from Depot to Depot simply as a result of the way that Owners choose to compensate themselves.

Owners' compensation ranges from \$0 to over \$100,000/annum per Owner. The Owners paying themselves nothing (or very little) choose to retain earnings in their business. Paying no salary acts to increase observed net income in the business, and may be beneficial to the Owner for tax minimization purposes, however it acts to understate the UCA reported Depot cost level. Conversely, another Owner may find it beneficial to pay himself a high salary that is above market for the services rendered. This would overstate the 2005 UCA reported Depot cost level and under-report net income.

Generally, the smallest Small Depots are typically one or two person operations. As the operation size increases, employees are added (either third parties or other family members), however marginally higher volume does not typically result in significantly more management effort. In some cases, employees are brought in on a temporary seasonal basis to help with the collection volume peaks (e.g. summer periods). If these smaller Depots are stand-alone operations, they operate on reduced hours, which limits the managerial time and acts to increase labour efficiency. Otherwise, the Small Depot may be operated during hours dictated by the operations of the related or affiliated business(es).

As the size of the Depot increases to a Large Depot, an Owner may hire a manager as the Depot hours of operation increase to accommodate the higher volumes and Customer expectations. At this level of return volume the Depot requires more regular employees, which implies higher management time in terms of scheduling and employee management as well as payroll management and bookkeeping.

³⁸ The variance may be high or low relative to fair market value.

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1 For the 2005 UCAs, the DCA was consistent in only allowing costs that were recorded on a
2 Depots financial statement and/or tax return to be including as an As Reported cost. Depots
3 that compensated Owners via dividends or after tax cash payments were not removed on Table
4 4-a.

5 4.6.1 Summary of Reported Costs

6 Overhead Labour costs are summarized by employee classification on Schedule 4. Of the
7 Depots studied, the following hours and costs (not including Benefits) were reported³⁹:

Overhead Labour by Job Class

2005 Fiscal Year as Reported			
Job Class	Hours	(\$)	(\$/h)
Small			
BK	1,843	\$27,976	\$15.18
COL	310	\$0	\$0.00
HND & LHD	6,286	\$24,268	\$3.86
MGR	12,740	\$145,228	\$11.40
OWN	135,575	\$1,051,425	\$7.76
	156,754	\$1,248,897	\$7.97
Large			
BK	12,922	\$152,799	\$11.82
COL	3,228	\$40,774	\$12.63
HND & LHD	33,170	\$466,663	\$14.07
MGR	65,296	\$1,564,087	\$23.95
OWN	187,561	\$4,355,230	\$23.22
	302,177	\$6,579,552	\$21.77
	458,931	\$7,828,449	\$17.06

8 On Table 4-a of the 2005 UCA Depots were asked to allocate the time spent by each employee
9 as MGR, LDH, HND, BK or DRV in columns k to o. Very few Depots provided this allocation for
10 any Job Class other than OWN. Allocating the OWN hours and costs by the percentages
11 provided in col k to o provides the following redistribution of hours and costs.

³⁹ Employee classifications are as defined in the UCA Instruction Manual: BK-Bookkeeper, DRV – Driver (or collector of containers from outside the Depot), HND – Handler, LDH – Lead Hand, MGR – Third Party Manager (not related to shareowners), OWN – Manager who is also a shareowner.

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Overhead Labour by Job Class - With OWN Allocated

2005 Fiscal Year as Reported			
Job Class	Hours	(\$)	(\$/h)
Small			
BK	14,121	\$114,104	\$8.08
DRV	310	\$0	\$0.00
HND & LHD	66,224	\$536,716	\$8.10
MGR	57,790	\$452,918	\$7.84
Not Allocated	18,308	\$145,159	\$7.93
	156,754	\$1,248,897	\$7.97
Large			
BK	24,938	\$476,582	\$19.11
DRV	3,228	\$40,774	\$12.63
HND & LHD	83,329	\$1,248,485	\$14.98
MGR	172,758	\$4,418,614	\$25.58
Not Allocated	17,924	\$395,097	\$22.04
	302,177	\$6,579,552	\$21.77
	458,931	\$7,828,449	\$17.06

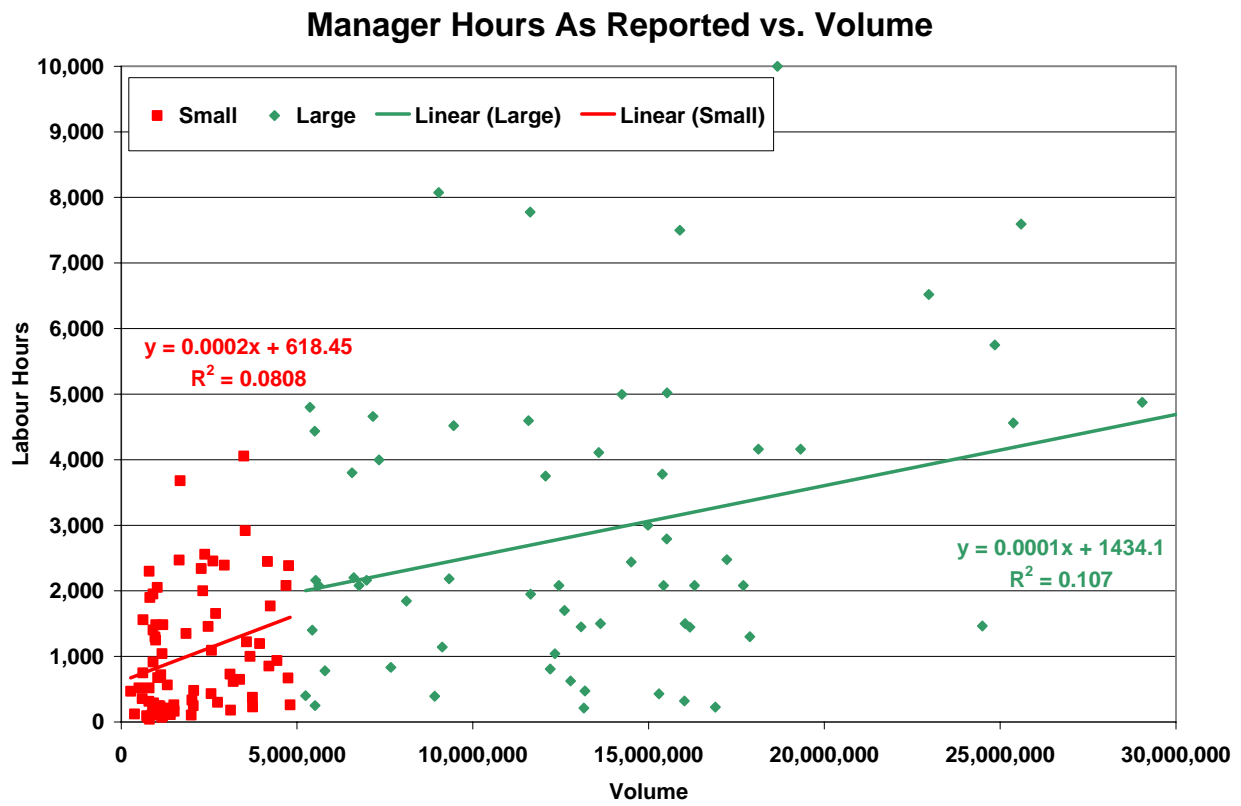
1 Note that 35 Small Depots (35% of total) and 15 Large Depots (21% of total) did not provide the
2 allocations under columns k to o as requested and are noted as Not Allocated in the table
3 above.

4 The average hourly rates noted in the above two tables for Small Depots are low due to many
5 Small Depots reporting labour hours with no or reduced costs. This is primarily the case for
6 where the sole proprietor(s) do not pay themselves a salary – any Depot profit is recorded as
7 personal income on their personal tax reruns.

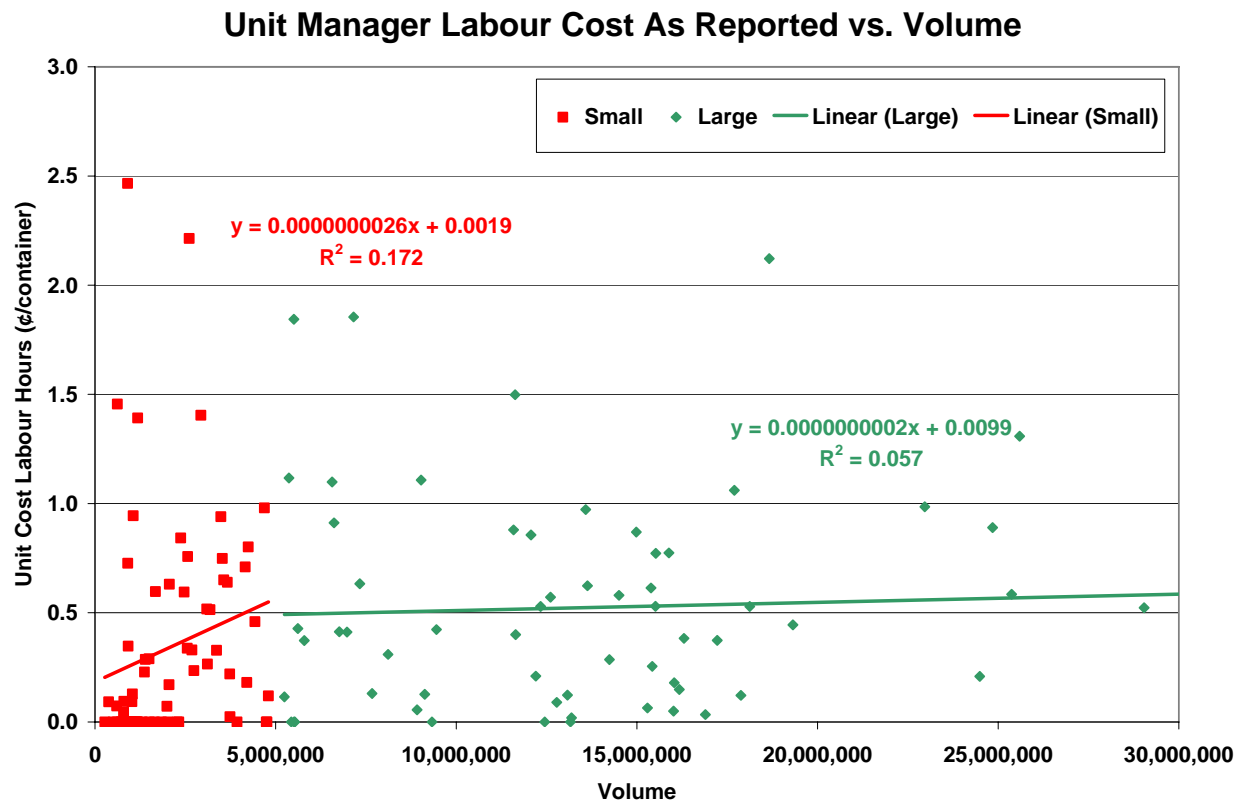
8 4.6.1.1 Manager Labour Analysis

9 For this section, the DCA assumed As Reported Manager Hours were equal to the MGR hours
10 reported above plus the Not Allocated hours noted in the table above. The assumption is that
11 for Depots that did not provide an allocation of OWN hours by Job Class the Owner was
12 providing all his/her time as a Manager.

13 The DCA studied the relationship between container collection volume and Manager labour
14 hours. The following chart compares Manager labour hours with Depot volume and
15 demonstrates that on a reported basis, there is a difference in Manager labour efficiency over
16 the range of Depot sizes. We conclude this because the slope of the trend line is different
17 between Small and Large Depots. However, the DCA notes that the R² statistics show poor
18 correlation between Manager hours and Depot Volume.

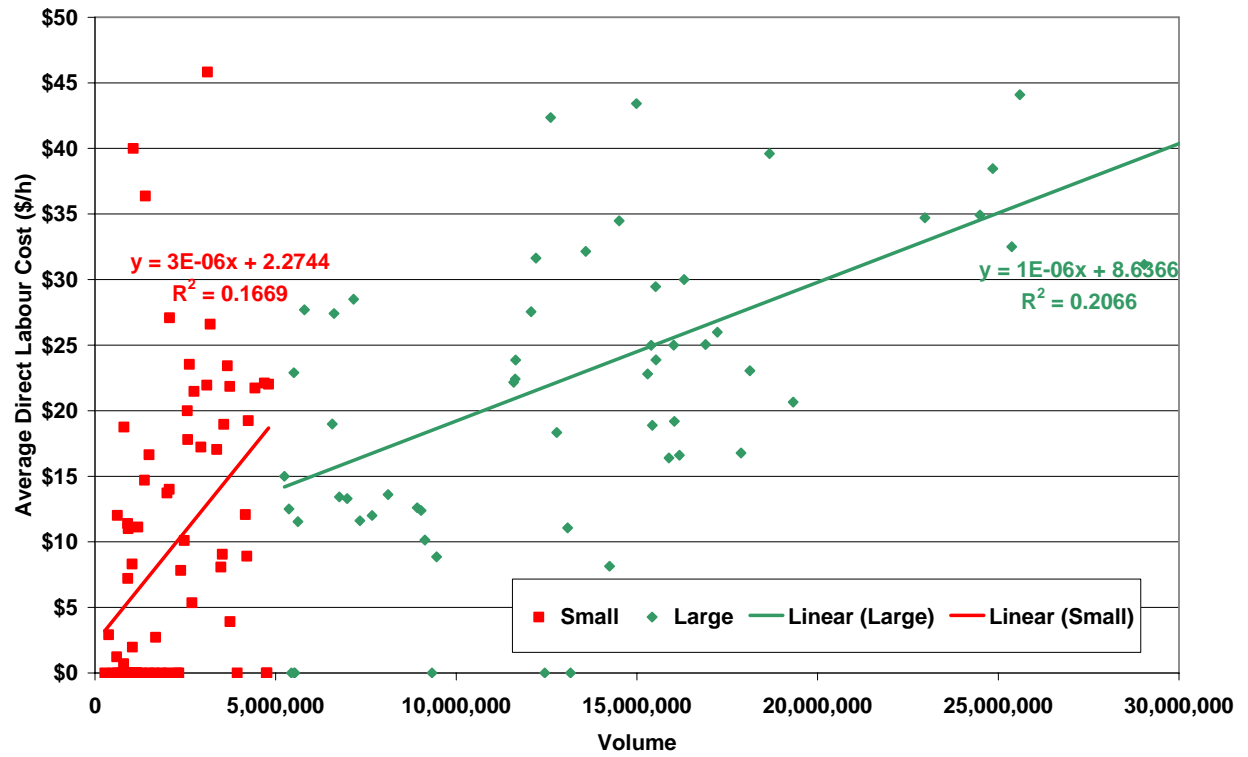


- 1 Unlike Direct Labour, note that the R^2 values for these Regressions are relatively low. The
- 2 amount of Manager hours reported appears to have little correlation to the volume of containers
- 3 processed.
- 4 Further, we have analyzed the Unit Manager Labour cost ($\text{\$/container}$) vs. Volume in the chart
- 5 below and observe that the values reported for Small Depots decrease as volume falls. We
- 6 conclude that this result occurs in large part because at small volume levels, Manager labour
- 7 (which is typically provided by the Owner and their family) was likely not properly (or fully)
- 8 compensated nor reported on the 2005 UCAs.



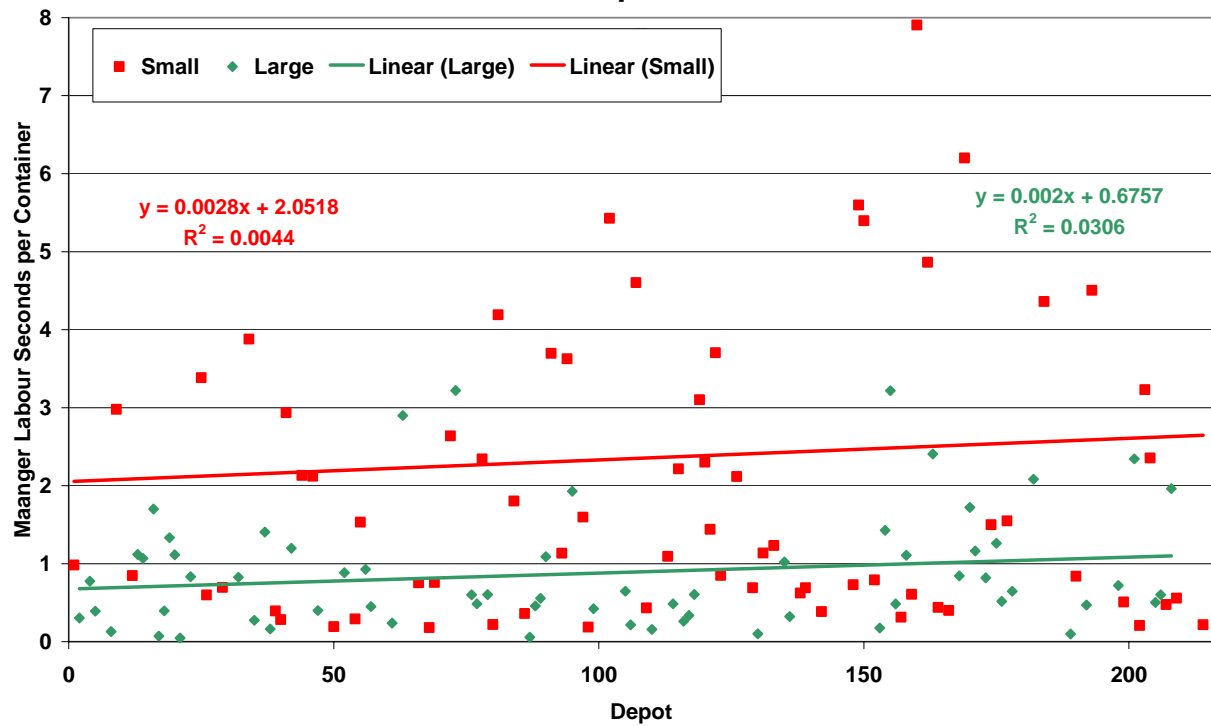
- 1 Note that the correlation between Unit Manager Labour cost (¢/container) and volume is quite
- 2 small with lower R^2 values.
- 3 As well, the smaller Small Depots who typically utilize Owners to provide management services
- 4 have a lower average Manager Labour rate (\$/h) than Large Depots, who may have an
- 5 employee who provides management services.

Manager Rate As Reported vs. Volume



- 1 The final chart in this section shows the amount of Manager Labour time (in seconds) for each
- 2 container by Depot.

Manager Labour Seconds per Container As Reported by Depot



- 1 The x-axis is the DCA's internal Depot ID number, and hence the slope of the line is
- 2 meaningless. The number of reported Manager hours per container for Small Depots is higher
- 3 than for Large Depots. This result is expected as Small Depots do not operate at capacity due
- 4 to the number of containers that are returned in their geographical area. Like Direct Labour,
- 5 there is a significant amount of scatter in the (As Reported) values across the Study System.
- 6 An analysis of the average reported MGR wage rate produced the following results (with
- 7 additional statistics as shown in the charts above):

As Reported Manager Labour Statistics For Depots that Reported Manager Labour Costs

	As Reported	
	Small	Large
# Depots Reporting MGR Costs	74	65
% of Total	77.9%	92.9%
Ave. Hourly Rate (\$/h)	\$9.16	\$23.24
Wt. Ave. Hourly Rate (\$/h)	\$7.86	\$25.25
Ave. Cost / Container (¢/cont.)	0.58	0.58
Wt. Ave. Cost / Container (¢/cont.)	0.40	0.54
Ave. Time per Container (s/cont.)	2.37	0.88
Wt. Ave. Time per Container (s/cont.)	1.84	0.76

4.6.2 Adjustments Recommended

A proper split between the cost associated with managing a business and the profit from investing in a business is required to provide a proper representation of the cost structure of the industry. We believe that the only way to achieve this is by adjusting the reported Overhead Labour costs to a value reflective of market value, regardless of the value reported in the UCAs.

It is imperative to determine a reasonable split between the profit that an investor receives for **owning** the business (that business' net income) and the money an Owner will receive for **managing** the business (Overhead Labour costs). Several Owners are actively involved in the management of their Depots, and structure their compensation in the most tax-advantageous way. This may result in a reported salary above or below market value.

Individual Depots have a number of managerial structures and compensation policies. Anecdotally, there are several small Depots that are structured as sole proprietorships where either one or two people (the latter being typically a husband and wife team) run the full operation and receive all proceeds as drawings from the business. In this case, no direct wage cost is reported on the 2005 UCA or the tax return.

At the other end of the spectrum are the structures of the Large Depots who also have their own unique compensation arrangements. Some Depots are nearly completely owned passively (i.e. the Owners are not involved in the day to day operations of the business), and this is contrasted with probably the most extreme case where a number of Owners are employed full time at the Depot each earning significantly above average levels of direct compensation. In most observed cases, Owners are materially involved in the day-to-day operations of the Depot.

Given the multitude of managerial structures and compensation policies of the Depots in the study, we are of the view that a deemed level of managerial time at a determined rate should be applied to each Depot, irrespective of the actual level of time and cost reported. This analysis is important because a proper reporting of management time for each Depot is vital to determining whether or not each Depot is getting proper compensation for managing their Depot, and that Manufacturers are paying the proper amounts for compensation that does not reflect personal or corporate tax planning.

4.6.2.1 Reclassification of Non-Management Employees

The DCA re-allocated all Overhead Labour hours associated with employees classified as LDH (Lead Hand), HND (Handler) and COL / DRV (collector) to Direct Labour. For non-OWN reported individuals, a total of 42,994 hours were transferred to Direct Labour.

This re-allocation included the portion of OWN hours (110,098) that were reported to be related to the HND, LHD and COL. The following Table shows the OWN hours As Reported and allocated to the Job Classes:

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Overhead Labour by Job Class - OWN Allocations

2005 Fiscal Year as Reported			
Job Class	Hours	(\$)	(\$/h)
Small			
BK	12,278	\$86,128	\$7.01
DRV	-	\$0	
HND & LHD	59,939	\$512,448	\$8.55
MGR	63,358	\$452,848	\$7.15
	135,575	\$1,051,425	\$7.76
Large			
BK	12,016	\$323,783	\$26.95
DRV	-	\$0	
HND & LHD	50,159	\$781,822	\$15.59
MGR	125,386	\$3,249,624	\$25.92
	187,561	\$4,355,230	\$23.22
	323,136	\$5,406,654	\$16.73

- 1 The DCA determined that the BK and MGR hours should remain as Overhead Labour.
- 2 The following table shows the reallocation of hours, with the associated As Reported costs &
- 3 hours adjusted for Stub Fiscal Year:

Overhead Labour by Job Class - With OWN Allocated

2005 Fiscal Year As Adjusted			
Job Class	Hours	(\$)	(\$/h)
Small			
BK	14,490	\$119,957	\$7.01
DRV	1,240	\$0	
HND & LHD	71,344	\$592,302	\$8.55
MGR	78,330	\$624,983	\$7.15
	165,403	\$1,337,241	\$8.08
Large			
BK	24,938	\$476,582	\$26.95
DRV	3,228	\$40,774	
HND & LHD	86,318	\$1,286,259	\$15.59
MGR	196,811	\$4,901,486	\$25.92
	311,296	\$6,705,101	\$21.54
	476,699	\$8,042,343	\$16.87

- 4 The DCA notes that for Small Depots the hourly rate is low, again due to Small Depot Owners
- 5 not reporting full costs associated with the provision of Overhead Labour.

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The next step was to determine an appropriate hourly rate for these Overhead related hours to be valued at for the purposes of setting the 2006 Revenue Requirement. The DCA is of the view that an appropriate hourly rate for Overhead Labour allocated to Direct Labour is an equivalent rate for a Lead Hand. The rationale for Small Depots is that an Owner is typically providing services as handler, lead hand and manager, in various ratios depending on the size of the Depot. The DCA is of the view that if the Owner was not providing the services, an employee could be hired who would demand an hourly rate similar to a lead hand.

In order to determine an appropriate lead hand hourly rate, the DCA looked to the Watson Wyatt survey. The first step was to find Position Codes that generally relate to the duties a Lead Hand would perform.

Wyatt Watson		
Position Code	Position Title	Description
5001	Lead Hand	A working position that does not include direct supervision or discipline of other employees. May be assigned an area or equipment as the senior operator? may train other operators and set up or adjust equipment and support the assigned crew? advises foreperson or supervisor of any problems.
5002	Foreperson	First line supervisory position with responsibility for an assigned area. Does not work directly on tools or equipment except in training or emergency. Responsible for scheduling, safety, attendance, and discipline. Reports to Shift Supervisor or General Foreperson.
5003	Shift Supervisor	Usually responsible for running a shift involving a number of operations and usually the evening or night shifts which may be smaller than day shift. Reports to General Foreperson or Production Superintendent, occasionally to Plant Manager.
5013	Shipper-Receiver	Responsible for scheduling and controlling shipments to customers or distributors, ensuring adequate and timely transport. In larger plants, may interface with Traffic Coordinator, Warehouse Manager or others. May also be responsible for receiving and checking incoming supplies and materials.

The following table shows the Wyatt Watson Position Codes used and their relative weighted Position Match as determined by the DCA:

Watson Wyatt		DCA		Position Match	Alberta P25 Base Salary	Weighted Average	Hourly Rate
Position Code	Position Title	Job Class	Position Title				
5001	Lead Hand	LDH	Lead Hand	50%	\$34,200		
5002	Foreperson	LDH	Lead Hand	20%	\$46,100		
5003	Shift Supervisor	LDH	Lead Hand	20%	\$39,800		
5013	Shipper-Receiver	LDH	Lead Hand	10%	\$28,000		
		LDH	Lead Hand	100%		\$37,080	\$17.83

This analysis gives a weighted average hourly rate of \$17.83/h, based on the P25 Wyatt Watson survey data.

As noted in section 4.4.1.2 above, the Wyatt Watson survey data does not include Benefits. In addition, the DCA previously determined that the Wyatt Watson survey data results were at a higher level than the Depot industry due to the nature of the larger companies used for the survey. To adjust for these two factors, the DCA used the average As Reported Direct Labour HDL rate and Benefits rate to determine the two adjustment factors:

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Job Class	DCA	\$/h	Watson Wyatt	\$/h
HDL	As Reported Ave Rate	\$10.42	Wt Ave HDL Rate	\$12.07
HDL	As Reported Ave Benefits	\$1.38	Calculated Benefits	\$1.60
HDL		\$11.80		\$13.67
HDL	Benefits as % of Total	11.7%	Benefits as % of Total	11.7%
HDL	% Ave Reported Rate	100.0%		115.9%

1 The As Reported Direct Labour HDL rate As Reported was \$10.42/h plus 11.7% for Benefits.
 2 The equivalent Wyatt Watson rate was \$12.07, of which Benefits of 11.7% or \$1.60/h were
 3 added to give an equivalent rate of \$13.67. This rate is 15.9% higher than the equivalent 2005
 4 DCA reported HND rate. The DCA is of the view that an average adjustment factor of 115.9%
 5 can be used to equate Wyatt Watson survey data to the Alberta Depot industry.

6 Applying these factors to the Lead Hand Wyatt Watson rate of \$17.83/h gives an Alberta Depot
 7 industry Head Hand rate of \$17.42/h (\$15.38/h plus \$2.04/h Benefits):

Job Class	DCA	\$/h	Watson Wyatt	\$/h
LDH	Adjusted Ave Rate	\$15.38	Wt Ave LDH Rate	\$17.83
LDH	Adjusted Ave Benefits	\$2.04	Calculated Benefits	\$2.36
LDH		\$17.42		\$20.19
LDH	Benefits as % of Total	11.7%	Benefits as % of Total	11.7%
LDH	% Ave Adjusted Rate	100.0%		115.9%

8 The DCA is of the view that the \$17.42/h rate is an appropriate rate for a Lead Hand who is
 9 capable of supervising HND employees and managing a Depot when a MGR is not present, and
 10 for Depot Owners who elect to provide these services themselves.

11 For BK (bookkeeper, including Owners providing this service) about 39,059 hours were reported
 12 at an average hourly rate of \$8.08/h for Small Depots and \$19.11/h for Large Depots. Given the
 13 relatively small number of bookkeeper related hours, the DCA is of the view that appropriate
 14 compensation for rate making purposes would be to value all BK hours (39,428 As Adjusted) at
 15 the Lead Hand of \$17.42/h derived above. The rate is equivalent to \$36,250/y based on a
 16 standard 2,080 hours per year (40h/week). The DCA is of the view this rate is appropriate for
 17 an office assistant who has bookkeeping training, and for Depot Owners who elect to provide
 18 this service themselves.

19 The DCA is of the view that the 2005 UCA reported MGR rate and hour amounts are not
 20 representative of the System Cost that should be included for rate making purposes
 21 (determination of Handling Commissions) as it relates to compensation paid to MGR classified
 22 services. From a system perspective, it is not reasonable for a manager to be paid well over
 23 \$100,000, nor is it reasonable for a manager to be paid nothing for their labour (both of these
 24 instances have been reported in the 2005 UCA packages). From a cost causation perspective,
 25 it is important to properly functionalize the costs associated with the **management** of the
 26 business (manager salaries) from the costs associated with the **ownership** of the business (net
 27 income or return).

28 The DCA is of the view that it is appropriate to differentiate between Small and Large Depots for
 29 the proper determination of MGR related costs.

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1 For Small Depots, many are sole proprietors and with the Owner(s) not reporting costs for the
2 provision of the services they provide to the Depot. The DCA was vigilant in requesting the
3 number of hours Depot Owners provide for their 2005 UCAs, even if there was no associated
4 compensation. From the 2005 UCA review, it appears that there are very few, if any, Small
5 Depots Owners who are passive – Small Depot Owners are active in their businesses. The
6 DCA is of the view that the Small Depot MGR hours As Reported are appropriate and should be
7 accepted.

8 Similar to the analysis noted above, the DCA is also of the view that Small Depot Owners costs
9 should be adjusted based on the \$17.42/h Lead Hand rate noted above. Many Small Depots
10 Owners provide a variety of functions in the operation of a Depot. An equivalent annual
11 compensation of about \$36,000/year is felt to be reasonable given the tasks performed.

12 The DCA recommends that the average As Reported MGR rate of \$7.15/h be increased to
13 \$17.42/h As Adjusted for Small Depots.

14 For Large Depots, the DCA is of the view that some Owners are passive and do not provide
15 managerial related services for every hour reported on the 2005 UCA. For example, some
16 Large Depots reported over 10,000 MGR hours for their fiscal year, even though the Depot is
17 operated for less than 3,000 hours per year. This would suggest that some Large Depots
18 require more than three full time managers at all times the Depot is open. The DCA does not
19 accept this as reasonable. The DCA is of the view that some of these reported hours relate to
20 passive Owners who may spend time at a Depot, but are not providing managerial related
21 services that should be included in the Revenue Requirement.

22 The DCA recommends that the number of MGR hours for each Large Depot be capped at the
23 number of annual operating hours. The premise is that for Large Depots, the equivalent of one
24 full time manager is required at all times the Depot is open. This adjustment reduced the
25 number of Large Depot MGR hours from 196,811 to 130,784 or a 34% reduction.

26 The average reported Large Depot MGR rate was \$25.92/h. The DCA tested this rate with the
27 Waytt Watson survey data by determining Position Codes that reflect the duties a Large Depot
28 MGR could perform:

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Wyatt Watson		
Position Code	Position Title	Description
5004	General Foreperson	Responsible for number of production areas with several unit Forepersons. In small operation, may handle all day shift and be responsible for overall administration of the operation. Usually reports to the Production Superintendent or directly to the Plant Manager.
5010	Plant Manager	Manages plant operations by directing and coordinating subordinate staff in the achievement of production objectives at lowest cost consistent with prescribed quality standards. Typically achieves objectives by coordinating the effective utilization of materials, equipment, plant facilities and manpower? developing and maintaining a competent team engaged in production planning and control, scheduling, materials control, facilities maintenance and quality control activities? playing an active role in personnel matters and employee relations throughout the plant. Normally reports to the Top Manufacturing Executive or General Manager
5025	Warehouse Manager	Manages the handling and warehousing of production materials and finished goods. Typically responsible for receiving and inspecting incoming goods? maintaining and security of physical storage and handling systems in the warehouse? order filling and shipment of product? maintaining accurate receiving, inventory and shipping records? monitoring warehouse labour productivity. Typically reports to the Top Distribution Manager, Top Logistics Executive or Plant Manager.

- 1 With the DCA assigned weightings, the weighted average rate was \$27.18/h.

Watson Wyatt			DCA		Position Match	Alberta P25 Base Salary	Weighted Average	Hourly Rate
Position Code	Position Title	Job Class	Position Title					
5004	General Foreperson	MGR	Manager		45%	\$59,300		
5010	Plant Manager	MGR	Manager		5%	\$76,000		
5025	Warehouse Manager	MGR	Manager		50%	\$52,100		
		MGR	Manager		100%		\$56,535	\$27.18

- 2 The DCA is of the view that this rate should be adjusted in the same manner as the Lead Hand
- 3 rate as described above:

Job Class	DCA	\$/h	Watson Wyatt	\$/h
MGR	Adjusted Ave Rate	\$23.45	Wt Ave LDH Rate	\$27.18
MGR	Adjusted Ave Benefits	\$3.11	Calculated Benefits	\$3.60
MGR		\$26.56		\$30.78
MGR	Benefits as % of Total	11.7%	Benefits as % of Total	11.7%
MGR	% Ave Adjusted Rate	100.0%		115.9%

- 4 The DCA recommends that the average Large Depot As Reported MGR rate of \$25.92/h be
- 5 increased to \$26.56/h As Adjusted.
- 6 The Overhead Labour adjustments described above are summarized in the table below:

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OWN Allocations As Adjusted

2005 Fiscal Year As Adjusted Overhead Labour Adjustments				
Job Class	Hours	(\$)	(\$/h)	Adjustments Made
Small				
BK	14,490	\$252,440	\$17.42	Adj Watson Wyatt LHD Rate P25
DRV	1,240	\$21,603	\$17.42	Adj Watson Wyatt LHD Rate P25
HND & LHD	71,344	\$1,242,957	\$17.42	Adj Watson Wyatt LHD Rate P25
MGR	78,330	\$1,364,673	\$17.42	Adj Watson Wyatt LHD Rate P25
	165,403	\$2,881,673	\$17.42	
Large				
BK	24,938	\$434,474	\$17.42	Adj Watson Wyatt LHD Rate P25
DRV	3,228	\$56,239	\$17.42	Adj Watson Wyatt LHD Rate P25
HND & LHD	86,318	\$1,503,849	\$17.42	Adj Watson Wyatt LHD Rate P25
MGR	130,784	\$3,474,014	\$26.56	Adj Watson Wyatt MGR Rate P25, hours maximum Operating Hours
	245,268	\$5,468,576	\$22.30	
	410,671	\$8,350,249	\$20.33	

1 The net result of these adjustments related to Owners is an Overhead Labour 2005 FY As
2 Adjusted increase in Overhead Labour of \$307 thousand or 3.8%. Importantly, Small Depot
3 Owner related Overhead Costs were increased by 116%, whereas large Depot Overhead costs
4 were reduced by 18%. The DCA is of the view that these adjustments are appropriate to reflect
5 proper recognition of the costs of providing services for Small Depots and a reduction of costs
6 reported for Large Depot Owners who are being compensated via taxable business expenses
7 but are not providing services to the Depot.

8 Overall Overhead Labour Costs decreased by 29% or 23¢/conmtainer from As reported to As
9 Adjusted.

10 4.6.3 ALL LABOUR COSTS

11 Schedules 4-a and 4-b, Appendix I show a summary of the As Reported and As Adjusted labour
12 costs, respectively.

13 The analysis of the labour statistics for As Reported Direct Labour and Manager Labour was
14 presented in sections 4.4.1.1 and 4.6.1.1, respectively. For each, a total of four charts were
15 prepared that showed:

- 16 • Total Hours vs. Volume
- 17 • Labour cost per container (¢/container) vs. Volume
- 18 • Labour rate (\$/hour) vs. Volume
- 19 • Labour Efficiency (seconds/container) vs. Volume

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Corresponding charts for As Adjusted labour statistics were developed for Direct Labour and Manager Labour. In addition, these same four charts were prepared for all labour costs (Direct, Contract and Overhead Labour), both As Reported and As Adjusted. These charts, 24 in total, and the accompanying summary tables, are available in Doc 10-014.

Schedules 4-c and 4-d, Appendix I provide a reconsolidation of the As Reported to As Adjusted Direct and Overhead Labour costs, respectively.

4.7 BUILDING COSTS

4.7.1 General Observations

Building costs are reported on Schedule 5, Appendix I.

Under Table 5-a of the 2005 UCA, Depots were requested to advise if the building that housed the Depot operation were owned or leased. The size of the space utilized and annual utilities costs were collected. If the building was owned, the book value, depreciation and related costs were also collected, including any mortgages or loans on the building or the building's improvements. All 165 Depots in the Study System provided the size of their Depot in square feet.⁴⁰

Under Table 5-b an allocation of the total building area was requested between the following categories:

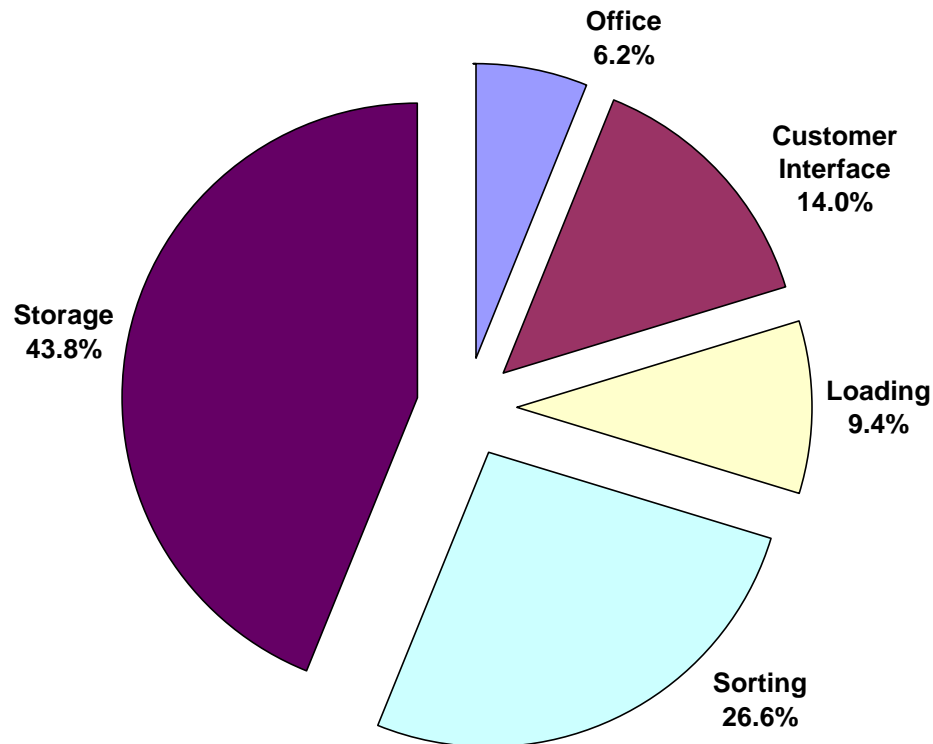
- Office / Administration Space
- Customer Interface
- Loading area
- Sorting area
- Storage area

For the 147 UCAs that completed Table 5-b,⁴¹ the reported allocation of the space was as follows for the Study System:

⁴⁰ A few Depots did not report Depot size on the 2005 UCA, however, these Depots did report on their 2004 UCA and the DCA utilized the 2004 UCA value.

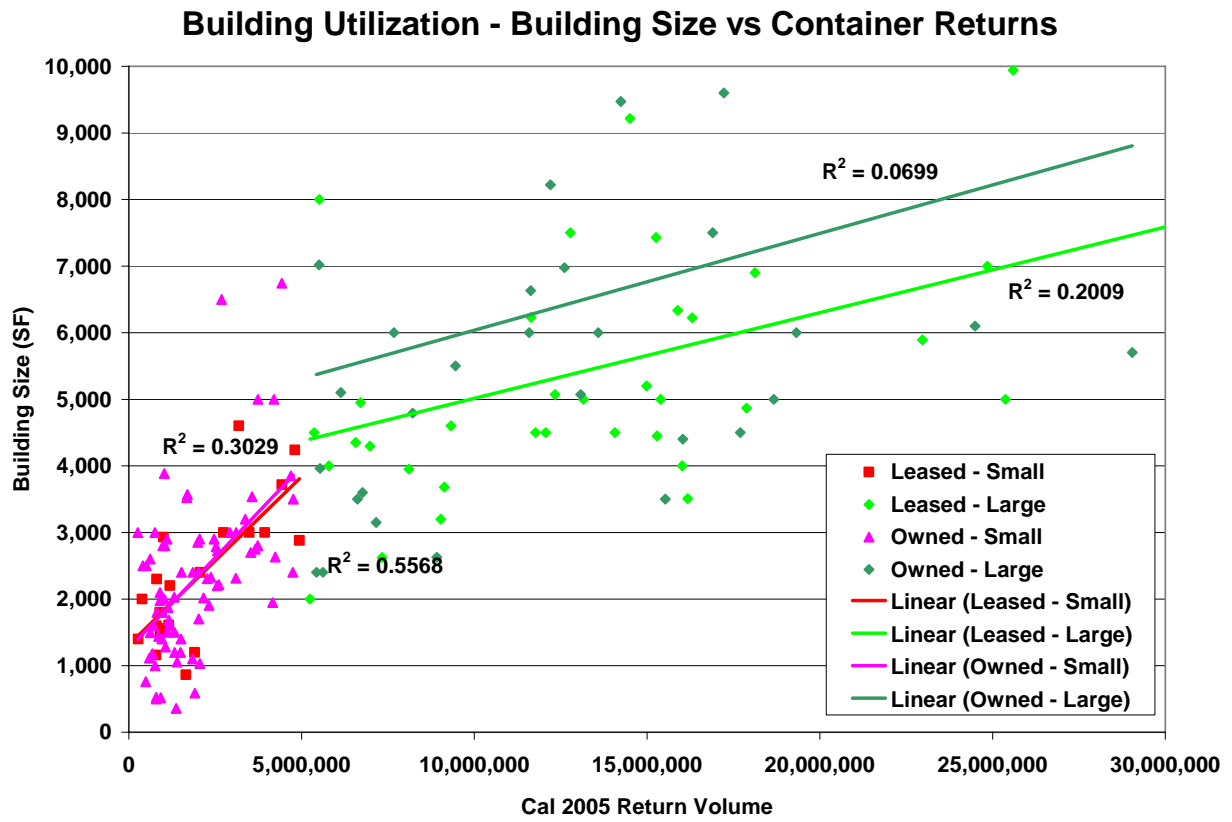
⁴¹ 89% of Depots that filed completed 2005 UCAs provided the allocation information. On a volume basis, 91% of the total building area contained allocation-by-type space information. The DCA requested that Depots provide a plan view sketch showing the layout of the Depot to assist with developing and verifying these statistics.

Reported Use of Depot Building Space

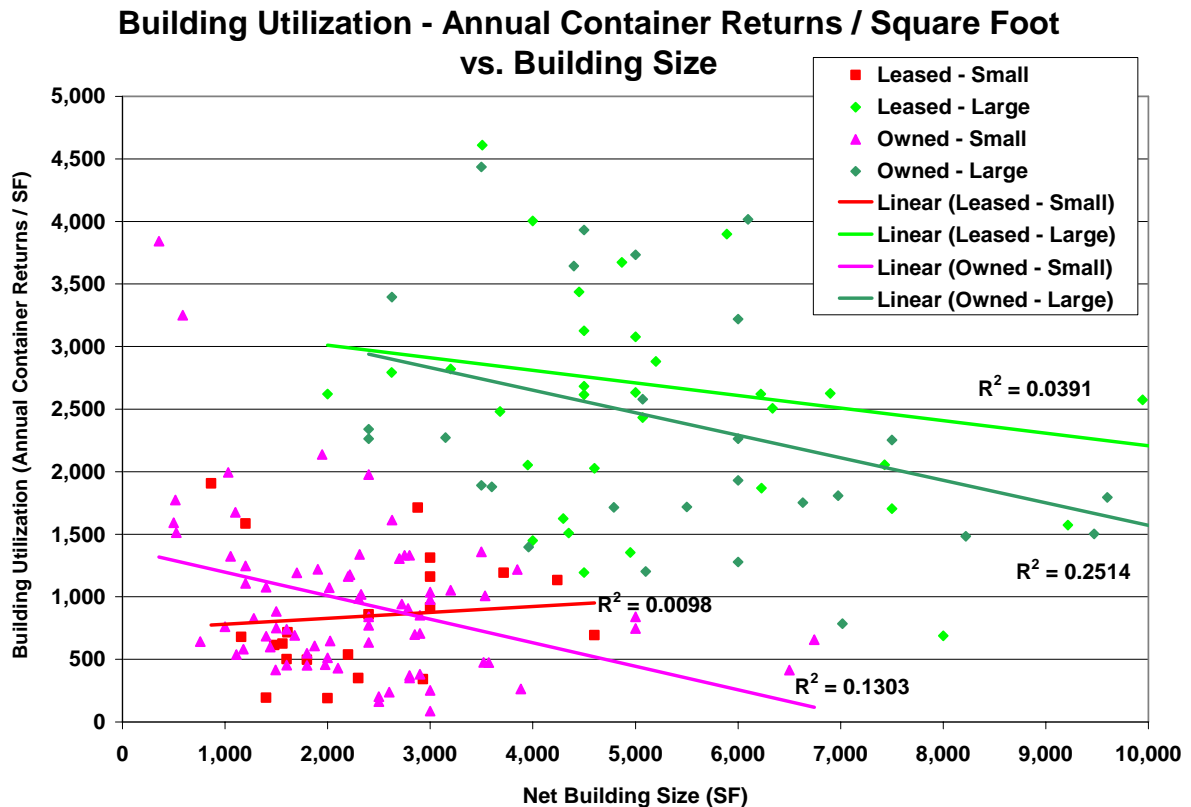


- 1 The information gathered on the used building space was not used in the development of the
- 2 2006 Revenue Requirement. The results are presented to the BCMB for information only.⁴²
- 3 From the data collected, the DCA notes that Depots utilize buildings that vary in size
- 4 considerably. There is some correlation between the size of the building used and the volume
- 5 of containers collected.

⁴² This information will assist the DCA with the Phase II Handling Commission determination process.



- 1 In general, the correlation between building size and return volumes was greater for the Small
- 2 Depots, as measured by the larger R^2 statistics. Of note, the larger Large Depots tend to have
- 3 owned buildings that are larger. Depot Owners who elect to own their buildings may tend to
- 4 make longer-term investments and own larger buildings to accommodate future growth,
- 5 whereas Depots that lease buildings may have a shorter term and a more cost-conscious focus.
- 6 The utilization of the buildings can be measured by dividing the total annual container returns by
- 7 the size of the building. In essence, the more containers processed per square foot of building
- 8 space, the more efficiently the building is being utilized. The following chart shows building
- 9 utilizations plotted against building size:



1 Note that the utilization statistics (annual container returns per square foot of building space)
 2 were random and varied from a few hundred for some Small Depots to nearly 5,000 containers
 3 per year per square foot (SF) for some Large Depots. There is little correlation between the
 4 utilization statistics and the size of the building, as can be noted from the low R^2 statistics from
 5 the best fit Regression lines. However, the owned buildings do show a stronger correlation than
 6 leased buildings.

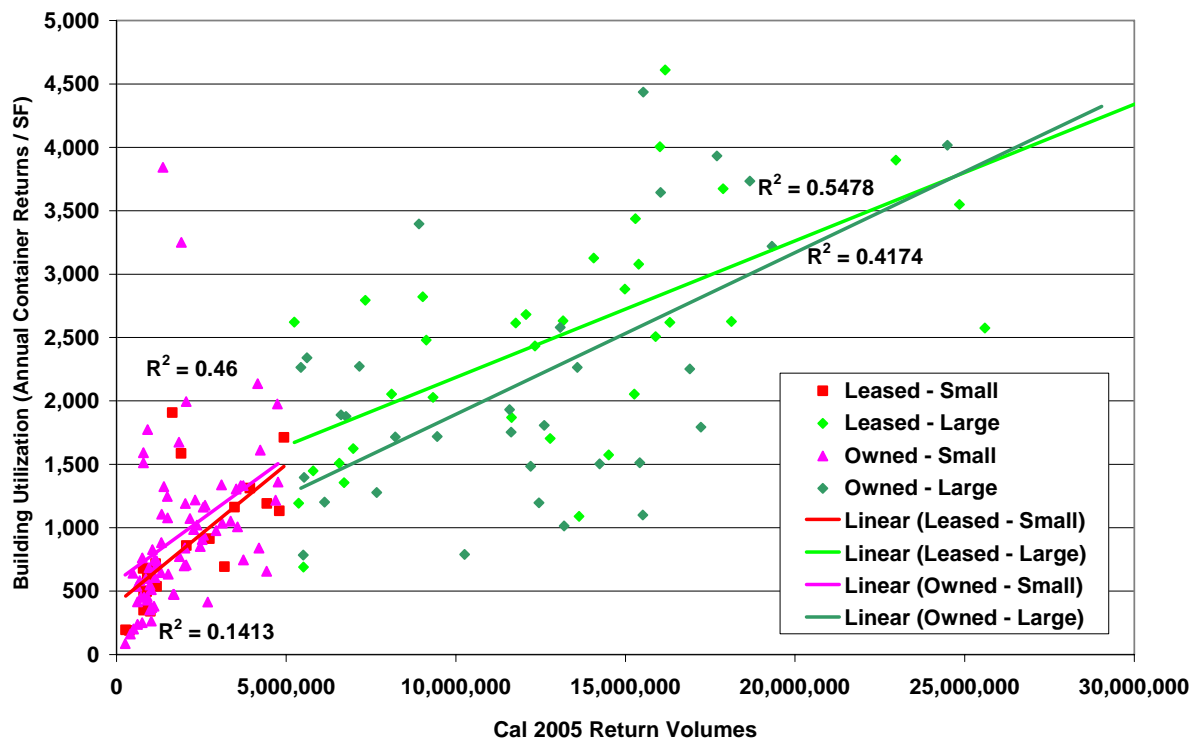
7 For Small Depots, there may be insufficient annual volumes to fully utilize their buildings. We
 8 note that a minimum size of building is required for proper Customer interface, storage, etc.

9 For Large Depots, the more efficient buildings tend to be in the size range of 4,000 to 7,000 SF
 10 with utilization rates over 1,500 containers/SF. This tends to correlate with the BCMB's
 11 requirement for new Metro Depots⁴³ to have a minimum size of 5,000 SF.

12 If the utilization statistics are plotted against annual return volumes, the correlations are higher:

⁴³ Metro Depots as defined by the BCMB are located in Calgary & Edmonton.

Building Utilization - Annual Container Returns / Square Foot vs. Annual Returns

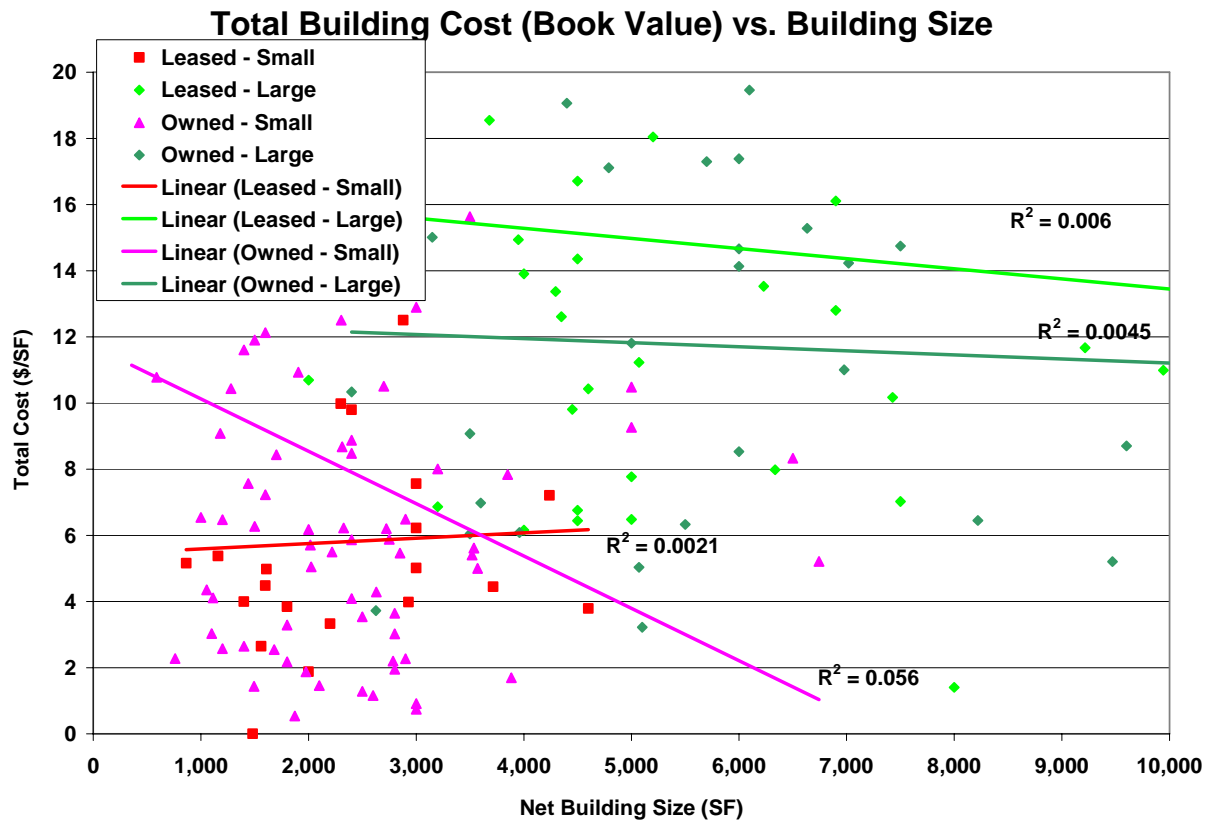


1 Note that the R^2 statistics range from 14% to 55%, indicating a more positive correlation
 2 between building utilization and annual return volumes. This makes intuitive sense as one
 3 would expect Depots with higher annual returns to be able to process more containers in their
 4 fixed building size.

5 There is still a considerable amount of variation in the building utilization statistic, indicating that
 6 some Depots are much more efficient at utilizing their buildings than others. For example, for
 7 Large Depots that process around 15 million containers per year, we note building utilization
 8 statistics from 1,000 to over 4,000, indicating that some Depots are over 4 times more efficient
 9 at utilizing their space than others.

10 There was also little correlation between the total unit cost of the buildings⁴⁴ compared to the
 11 building size, as shown in the next chart:

⁴⁴ The total cost of the buildings includes all building costs reported on UCA Tables 5 and some building related overhead reported under Table 7. These total costs include a deemed return based on reported book value. See next section for more details.



- 1 This result was somewhat surprising as intuitively one might expect larger buildings to have
- 2 lower per square foot (SF) costs (economies of scale). However, larger buildings tend to be in
- 3 more urban locations that may have higher building related costs.
- 4 Note that the R^2 correlations are very low for the different categories of buildings. Overall, there
- 5 is little correlation between the size of the building and building's unit costs. This suggests that
- 6 total reported costs, on a per SF basis, vary considerably and no definable correlation to
- 7 building size or type was found. This result leads the DCA to question the accuracy, validity and
- 8 usefulness of the building cost data collected via the 2005 UCAs in the setting of the 2006
- 9 Revenue Requirement.

10 4.7.2 Proper Compensation for Owned Buildings

11 During the 2004 UCA development process some Depot Owners expressed concern regarding
 12 the difference between the book value and market value of owned buildings. For some Depots,
 13 the building has been in service for many years and may have a very low or no book value,
 14 having been fully depreciated. However, if the building is still in use it has market value as it
 15 continues to be used, even if fully depreciated.

16 Under Table 5-c the DCA intended to capture the market value of the owned buildings by asking
 17 for a copy of the last tax assessment. In Alberta, all municipalities have moved to a market
 18 based tax assessment methodology, where property taxes are determined by multiplying a
 19 deemed market value by the municipally deemed mill rate.

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Concerns were also expressed that the municipally determined market value may not reflect reality; primarily due to the newness of the market value determination process and that for commercial buildings market values are subject to additional factors that may not be fully considered by a municipality.

The DCA included Table 5-c to capture the assessed market value, either through the last property tax assessment or from a third party appraisal.

The building space utilized by Depots is somewhat of a commodity. In certain locations, the Depot could be moved a few blocks and utilize any number of similar buildings. In other locations, the building and its location have significant value and the location cannot easily be changed without material impacts on the Depot's operation and/or profitability. Determining the appropriate Revenue Requirement for buildings is challenging, given the mix of owned and leased premises and the significant variability in the data reported (as noted above). There were three options that the DCA considered to determine the 2006 Revenue Requirement related to Buildings:

1. As reported - Revenue Requirement equals reported costs; return on building Rate Base equity, lease costs and annual building expenses.
2. Leased Buildings Deemed Rate Base - for leased buildings, determine a deemed rate base, and then the Revenue Requirement equals return on deemed building Rate Base (leased and owned) and annual building expenses.
3. Deemed Building Lease Rate - for all buildings, determined a deemed market lease rate to provide a Revenue Requirement equal to the deemed lease payments (leased and owned) and building expenses.

Option 1 may result in the lowest overall Revenue Requirement and may understate the value of the buildings. The difficult determination will be the evaluation of the appropriate building rate base. In a utility context the Rate Base would be the value of the Owner's equity in the buildings as measured by the net book value. It is possible that due to the recent migration to a cost of service methodology, it may be more appropriate to determine building equity return based on building market values.

If Option 1 were adopted by the BCMB, then we anticipated that some Depot Owners may sell their buildings (and in some cases realize significant capital gains) and then report market based lease costs in future UCAs. In essence, owned buildings would be sold and leased back to the current Owner at some rate. Future UCA building costs would be expected to migrate towards market based lease rates.

Currently, we understand that some Depot buildings are owned by parties related to the Depot business Owner where the Depot reported market based annual lease payments in the 2005 UCA. Again, if Option 1 were used, we anticipate that a building owner could sell the building to arms length or non-arms length entity (himself) and simply charge the Depot at above or below market-based lease rates as the building owner determines.

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We do not believe that Option 1 is sustainable over the longer term. In the long run, we would expect that in future Handling Commission determination processes, buildings that are currently owned would be sold and leased back with overall higher building use costs. Therefore, the DCA has rejected Option 1.

Under Option 2, a deemed capital amount for the current building leases could be determined by using interest rate and term (life) assumptions. For example, if a Depot pays \$10,000/month in building lease payments, then at a 10% lease rate (discount rate) over 30 years, the "value" of the lease could be deemed to be \$570,000.

Applying an average age for existing buildings, a deemed depreciation amount could also be derived. For example, if the building was assumed to be 15 years old, at 50% of its deemed 30 year life, the book value would be deemed to be \$285,000 (using straight line amortization over the deemed life).

Unfortunately, the interest rate, term and life assumptions could result in a wide range of deemed book values. In order to appropriately determine a deemed book value for each lease Depot building, the DCA is of the view that individual building assessments would likely have to be undertaken. As well, depreciation and discount rates would likely be contentious. Given the complexity and ambiguity of this approach, the DCA has rejected this option.

Under Option 3, all buildings would be assigned a deemed annual market based lease rate. Regardless of building ownership, all buildings would be treated in a similar manner to determine the Study System Buildings Cost. This approach would require a defensible forecast of market lease rates by location and building size across Alberta. The DCA is of the view that this is the best option for setting the FY As Adjusted Building Costs.

4.7.3 Summary of Reported Costs

The FY 2005 Building Costs As Reported were approximately \$5.7 million per year,⁴⁵ or about 16% of the total reported costs. After labour, buildings are the next highest single cost to the system.

The following table summarizes the building costs by the major cost components: Building use costs (CCA, lease payments, mortgage interest, property tax, condo fees, etc.), Utilities (natural gas, electricity, water and sewer and garbage) and a Deemed Return on Rate Base equity, broken out by the Small and Large Depots and by owned and leased buildings:⁴⁶

⁴⁵ The DCA notes that As Reported Building s costs increased from 0.34¢/container under the 2004 UCA to 0.53¢/container under the 2005 UCA (about 66% increase).

⁴⁶ Note the definitions of Building Use Costs and Utilities are not that same as used later in this report under sections 4.7.4.6, 4.7.4.7 and 6.7.

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Owened Buildings

	Total	107	Small	74	Large	33
Total SF / Ave SF	381,958	3,570	170,559	2,305	211,399	6,406
	Cost	\$/SF	Cost	\$/SF	Cost	\$/SF
Use Costs	\$1,839,525	\$4.82	\$671,907	\$3.94	\$1,167,618	\$5.52
Utilities	\$633,864	\$1.66	\$232,781	\$1.36	\$401,083	\$1.90
Total Reported Cost	\$2,473,388	\$6.48	\$904,688	\$5.30	\$1,568,701	\$7.42
Rate Base (Market Value)	\$25,465,792		\$8,222,939		\$17,242,854	
Deemed Return 10%	\$2,546,579	\$6.67	\$822,294	\$4.82	\$1,724,285	\$8.16
Total Deemed Cost	\$5,019,968	\$13.14	\$1,726,982	\$10.13	\$3,292,986	\$15.58

Leased Buildings

	Total	58	Small	21	Large	37
Total SF / Ave SF	255,048	4,397	48,938	2,330	206,110	5,571
	Cost	\$/SF	Cost	\$/SF	Cost	\$/SF
Use Costs	\$2,878,632	\$7.54	\$237,040	\$4.84	\$2,641,592	\$12.82
Utilities	\$364,406	\$0.95	\$47,581	\$0.97	\$316,825	\$1.54
Total Reported Cost	\$3,243,038	\$8.49	\$284,622	\$5.82	\$2,958,416	\$14.35
Rate Base (Market Value)	\$882,581		\$214,317		\$668,264	
Deemed Return 10%	\$88,258	\$0.23	\$21,432	\$0.13	\$66,826	\$0.32
Total Deemed Cost	\$3,331,296	\$8.72	\$306,053	\$6.25	\$3,025,242	\$14.68

All Buildings

	Total	165	Small	95	Large	70
Total SF / Ave SF	637,006	3,861	219,497	2,310	417,509	5,964
	Cost	\$/SF	Cost	\$/SF	Cost	\$/SF
Use Costs	\$4,718,157	\$7.41	\$908,947	\$4.14	\$3,809,210	\$9.12
Utilities	\$998,269	\$1.57	\$280,362	\$1.28	\$717,907	\$1.72
Total Reported Cost	\$5,716,426	\$8.97	\$1,189,309	\$5.42	\$4,527,117	\$10.84
Rate Base (Market Value)	\$26,348,374		\$8,437,256		\$17,911,118	
Deemed Return 10%	\$2,634,837	\$6.90	\$843,726	\$4.95	\$1,791,112	\$8.47
Total Deemed Cost	\$8,351,263	\$13.11	\$2,033,035	\$9.26	\$6,318,228	\$15.13

1 Of the 165 UCAs that completed Table 5-a, 107 of the buildings were owned (65%),
 2 representing a total of 381,958 square feet (60% of the total). A total of 58 buildings were
 3 leased (35%), representing a total of 255,048 square feet (40% of the total). On average,
 4 slightly more of the larger buildings tended to be owned.

5 The average reported cost was \$8.97 per square foot (SF) (total costs of \$13.11/SF less
 6 deemed return – see below). However, the Small Depots had a much lower average cost at
 7 \$5.42/SF, compared to the Large Depots at \$10.84/SF.

8 Leased buildings had higher reported annual costs (\$8.49/SF vs. \$6.48/SF for owned buildings).
 9 The primary reason is that the reported costs exclude any return on capital invested in the
 10 asset. As noted above, to compare leased and owned buildings equitably, some evaluation of
 11 the capital invested in the buildings (NBV or market value) should be considered.

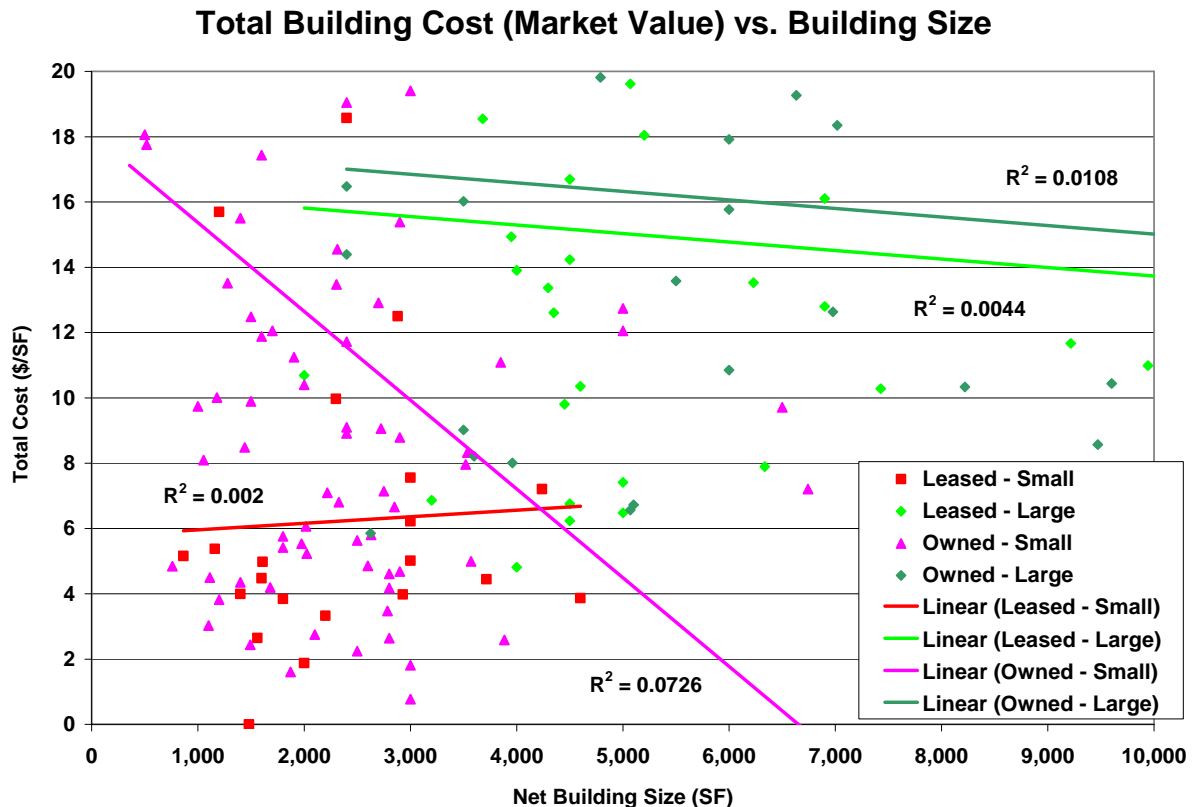
12 In an effort to analyze the value of invested capital in owned buildings, the DCA determined a
 13 Deemed Return that was set equal to a notional Return on Rate Base of 10% less mortgage

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- 1 interest costs for owned buildings. For owned buildings with a mortgage, subtracting the
2 mortgage payments from the book value return is appropriate since the book value would
3 contain the value of the debt covered by the mortgage.⁴⁷ A similar deemed equity was
4 performed for leased buildings with leasehold improvements (equity).
- 5 With the deemed Return based on book values, the total building annual costs, on a square
6 footage basis, are slightly better aligned for leased and owned buildings (\$13.14/SF vs.
7 \$8.72/SF). The following chart shows the data by Depot:



- 8 Generally, the Large Depot buildings have average annual costs of over \$10/SF, whereas the
9 Small Depots buildings have average annual costs across the range of costs per square foot.
10 Note however that the linear Regression lines of best fit have low R^2 statistics under 8%,
11 suggesting considerable variability in the data and little correlation. The above scatter diagram
12 shows the variability in the data collected.

- 13 For the owned buildings, most Depots reported both a book value and a market value (property
14 tax assessment or third party appraisal) for their buildings. In the following two charts, the Book

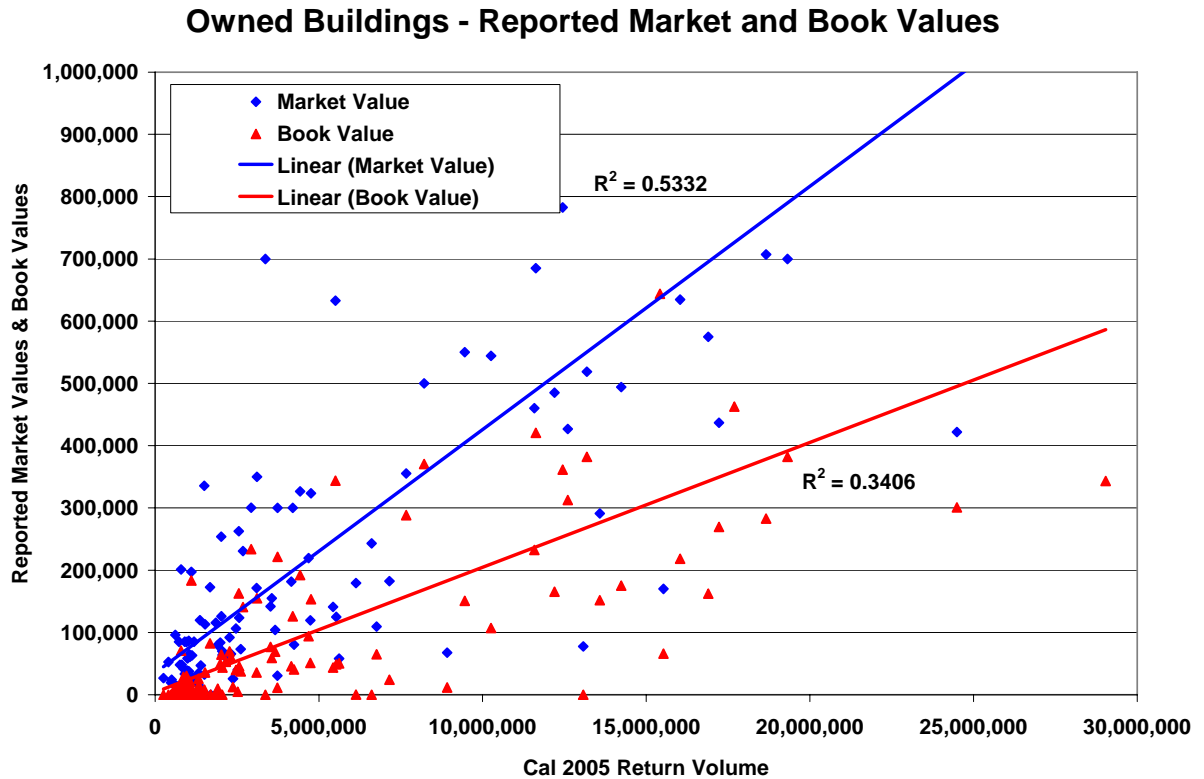
⁴⁷ In a utility context Return is paid on equity invested. The deemed Return is based on the assets less the liability (debt), which is equal to equity.

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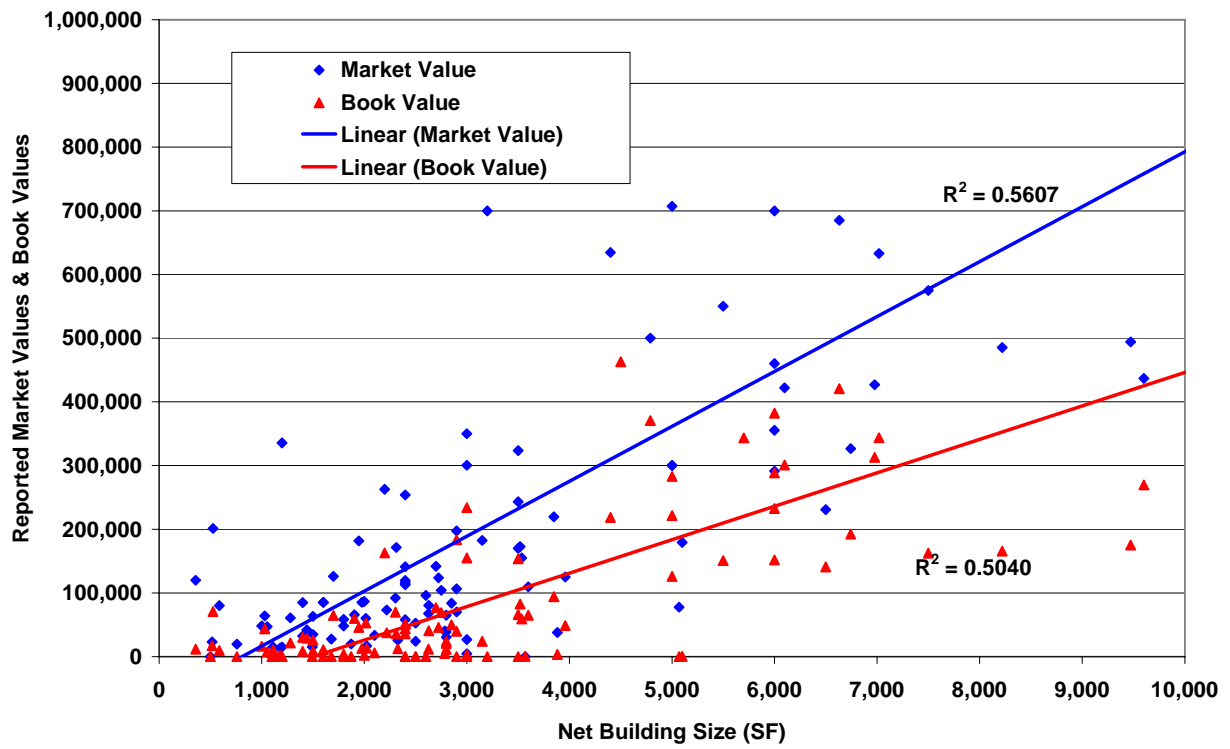
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- 1 and Market values are plotted against annual return volumes and against building size. If a
- 2 market value was not reported the market value was set equal to the book value.⁴⁸

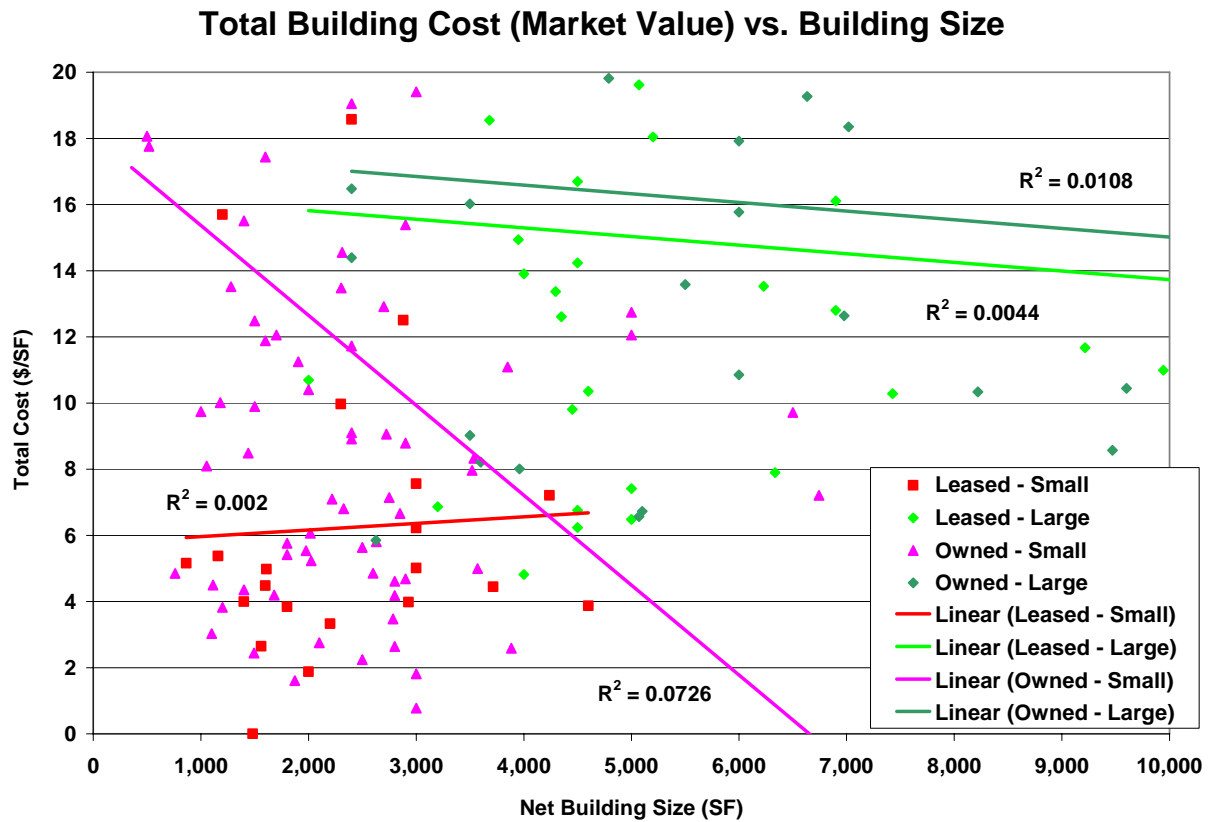


⁴⁸ Of the 108 Depots who reported owning their buildings, 4 Depots did not provide a market value in their UCA response.

Owned Buildings - Reported Market and Book Values

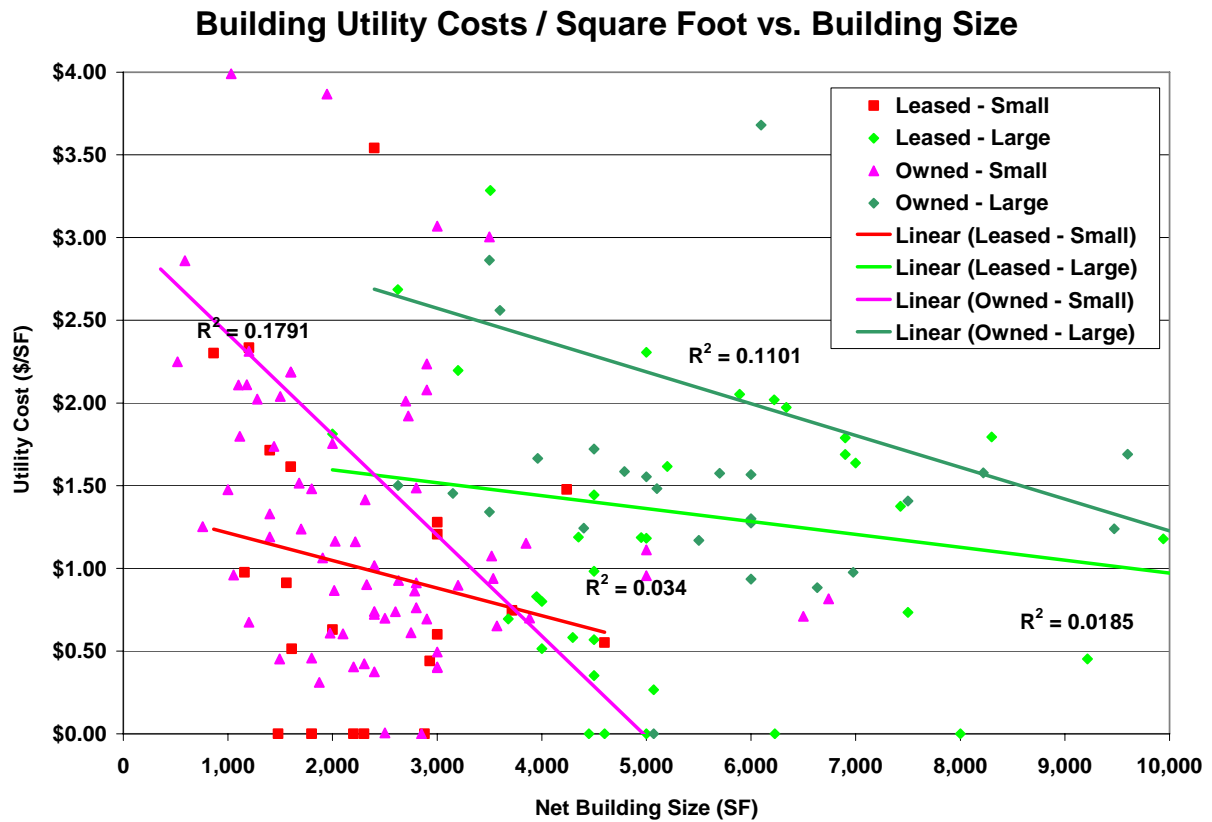


- 1 The reported market values tended to have higher correlations (as measured by the R^2
- 2 statistics), than the book values when compared to container return volumes and building sizes.
- 3 If the Deemed Return for buildings is determined based on reported market values for owned
- 4 buildings (as opposed to reported book values), the owned buildings have a higher unit cost
- 5 than the leased buildings.



- 1 As can be seen from the above chart, using reported market values vs. reported book values
- 2 increased the deemed return for owned buildings by about \$2/SF for Large Depots and by about
- 3 \$1/SF for Small Depots. Note the considerable randomness of the data and the small R^2
- 4 statistics.

- 5 The variability in the reported cost data exists for Utilities Costs as well. For example, the DCA
- 6 would have expected that utility costs, on a per square foot basis, would have shown a
- 7 reasonable level of consistency across the province:



1 While every building is somewhat different (size, location, construction methods, hours of
 2 operation, etc), it was anticipated that buildings of similar size would have had reasonably
 3 similar cost of utilities. The above chart shows that there is very little correlation with R^2
 4 statistics under 18%. Generally, there is a bit more correlation for the owned buildings. For
 5 leased buildings, some Depots did not report any utility costs,⁴⁹ which undoubtedly is skewing
 6 the data and the best-fit lines.

7 4.7.4 Adjustments Recommended

8 Overall, the reported cost data for buildings is not considered to be consistent between Depots.
 9 The key areas of concern the DCA has are:

- 10 • Some owned buildings appear to have been (or are being) depreciated aggressively to
- 11 reduce taxable income. Owned buildings book values may not be reflective of the
- 12 remaining equity invested (in quantitative terms, the book value may not be reflective of
- 13 a utility-type rate base).

⁴⁹ Typically utility costs are not included in lease rates for commercial properties. For Depots with affiliated operations, utility costs may not have been allocated to the Depot operation in the UCA response.

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- 1 • Many buildings are used for multiple purposes / businesses. From the DCA's review of
2 the reported data it is not clear that all Depots properly allocated building costs to Depot
3 operations.
- 4 • Many Depots did not or could not provide costs for each building cost category, or
5 dissimilar costs into one cost category. For example, some Depots reported aggregate
6 utility costs and did not break out natural gas, electricity and water & sewer costs as
7 requested.

8 Overall, the DCA is concerned that the reported UCA costs will not appropriately reflect actual
9 costs for housing Depot operations. An analysis of the three options for determining building
10 costs noted above in section 4.7.2 is provided below:

11 4.7.4.1 As reported

- 12 1. As reported - Revenue Requirement equals reported costs; return on building Rate Base
13 equity, lease costs and annual building expenses.

14 The average As Reported cost for the building use was \$7.41/SF plus \$1.57/SF for utilities, for a
15 total report cost of \$8.97/SF. The Deemed Return added \$6.90/SF based on reported market
16 values (buildings plus land). Therefore total buildings costs are \$13.11/SF based on reported
17 market values.

18 4.7.4.2 Leased Buildings Deemed Rate Base

- 19 2. Leased Buildings Deemed Rate Base - for leased buildings, determine a deemed rate
20 base, and then the Revenue Requirement equals return on deemed building Rate Base
21 (leased and owned) and annual building expenses.

22 As noted above, deemed capital and depreciation amounts could be determined for the UCA
23 reported leased buildings. As noted above, the DCA is of the view that this approach would
24 result in arbitrary building Rate Base values that would not be defensible and therefore the
25 DCA does not recommend this approach.

26 4.7.4.3 Buildings Deemed Lease Rate

- 27 3. Deemed Building Lease Rate - for all buildings, determined a deemed market lease rate
28 to provide a Revenue Requirement equal to the deemed lease payments (leased and
29 owned) and building expenses.

30 Under the third option a deemed market lease rate would be applied to all buildings to
31 determine the FY 2005 Buildings Cost As Adjusted. In order to utilize this option, deemed
32 market lease rates for all buildings would be required. The DCA recommends this approach.

33 4.7.4.4 Market Based Deemed Building Lease Rate

34 For the 2005 Phase I Report the DCA retained Royal LePage Commercial Inc. (LePage) to
35 perform a market lease rate survey for larger commercial centres in Alberta.⁵⁰ LePage

⁵⁰ Doc 010-026b (2005 Phase I Report), Appendix II

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1 contacted commercial real estate professionals in several centres around Alberta to determine
2 current market lease rates for buildings that could be used for Depot operations. The criterion
3 used was to seek current market prices for buildings that could house a Depot operation.

4 The building lease rates provided to LePage are likely higher than the actual costs a Depot
5 would pay. It is anticipated that a negotiated lease rate would be lower than the quoted rate.
6 Depot operations, with a permit from the BCMB, are relatively stable operations, which may
7 accommodate a longer-term lease at a lower rate.

8 LePage provided the DCA with a table of the results of their survey. A total of over 150 different
9 quotes provided to LePage were analyzed by the DCA and used to determine average lease
10 rates for buildings that could house Depots.

11 The 2005 UCA building size data can be summarized as follows:

As Reported Depot Size

	Number	Total SF	Ave. SF
Small	95	219,497	2,310
Large	70	417,509	5,964
	165	637,006	3,861

12 The 2005 LePage data can be summarized as follows, assuming any potential building with an
13 average size of less than 2,550 SF was deemed to be used by a Small Depot and any larger as
14 deemed to be a Large Depot:

2005 LePage Data

	Count	Sum SF Size	Ave SF Size	Ave. Lease (\$/SF)
Small1	27	34,400	1,274	\$7.74
Large1	74	354,526	4,791	\$7.10
	101	388,926	3,851	\$7.27

15 In general, the average building sizes surveyed by LePage were smaller, however, most lease
16 quotes were for a range of building sizes. Interestingly, the average lease rates were not
17 significantly different for the Small and Large Depot categories.

18 Given that there was no appreciable difference in lease rates by building size, the DCA
19 analyzed the LePage data by location and derived the following average lease rate by
20 geographic location:

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DCA 2005 Analysis:

City	Count	Sum Size	Ave Size	Ave Lease (\$/SF)	Sector
Airdrie	2	5,000	2,500	\$10.00	
Banff	2	5,600	2,800	\$5.33	South
Bonnyville	3	12,500	4,167	\$8.87	North
Brooks	1	1,250	1,250	\$4.80	South
Calgary	2	5,000	2,500	\$8.00	
Camrose	4	14,061	3,515	\$5.17	South
Canmore	1	1,000	1,000	\$10.50	
Coaldale	2	6,104	3,052	\$7.10	South
Cochrane	2	9,315	4,658	\$10.00	South
Cold Lake	2	6,700	3,350	\$4.50	North
Crowsnest Pass	1	24,000	24,000	\$1.38	South
Devon	2	5,000	2,500	\$8.25	South
Drayton Valley	1	5,000	5,000	\$7.00	South
Drumheller	2	5,500	2,750	\$9.50	South
Edmonton	3	12,000	4,000	\$7.00	
Edson	2	4,750	2,375	\$8.43	South
Ft Saskatchewan	1	1,000	1,000	\$5.50	South
Grande Prairie	2	5,250	2,625	\$13.00	
High River	1	2,400	2,400	\$8.00	North
Hinton	1	5,000	5,000	\$11.00	North
Lacombe	1	1,200	1,200	\$3.95	South
Leduc	1	4,500	4,500	\$8.50	
Lethbridge	3	14,400	4,800	\$5.61	
Lloydminster	5	25,070	5,014	\$8.40	
Medicine Hat	8	30,132	3,767	\$8.27	
Morinville	1	16,000	16,000	\$5.00	North
Okotoks	3	4,699	1,566	\$8.92	South
Olds	1	5,000	5,000	\$6.50	South
Peace River	1	5,000	5,000	\$7.25	North
Red Deer	4	16,000	4,000	\$9.31	
Slave Lake	1	2,400	2,400	\$10.00	North
Spruce Grove	2	5,000	2,500	\$7.00	South
St Albert	2	5,145	2,573	\$2.92	
St Paul	2	5,000	2,500	\$4.38	South
Stettler	1	5,000	5,000	\$8.00	South
Stony Plain	3	8,600	2,867	\$5.00	South
Sylvan Lake	1	5,000	5,000	\$9.00	South
Taber	1	5,000	5,000	\$3.75	South
Vegreville	1	5,000	5,000	\$5.75	North
Wainwright	1	5,000	5,000	\$5.00	North
Whitecourt	3	7,400	2,467	\$8.83	North
North	10		5,078	\$7.42	
South	20		4,177	\$6.45	

- 1 For each town and city that has a Depot operation, the DCA applied the average lease rate from
- 2 the table above to the reported size of each Depot where the locations matched.⁵¹ For example,
- 3 if a Calgary Depot reported a building size of 5,000 SF, a deemed annual 2006 lease cost of
- 4 5,000 SF x \$8.00/SF = \$40,000 per year.

⁵¹ As noted in the next section, the DCA has adjusted As Reported building sizes

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For smaller centres that have a Depot in a region with no market survey information, the DCA determined an average North and South lease rate as shown in the last two lines of the above table. For example, for the 20 towns and smaller centre locations in southern Alberta (roughly Edmonton south) an average lease rate of \$6.45/SF was determined. This lease rate was then applied to each Depot in southern Alberta where a market rate was not obtained from LePage (e.g. Beaumont and Turner Valley). Similarly for north locations, the average lease rate of \$7.42/SF was applied to the reported size of each northern Depot where market information was not obtained (e.g. Fairview and Smoky Lake).

About 66% of the total square footage of Depot buildings were assigned a lease rate for the location that corresponded to the location information was obtained from LePage. The remaining 33% of the buildings were assigned a market lease rate based on North and South averages noted above.

The DCA is of the view that the LePage market lease rates, as summarized by the DCA, reflect average lease costs for comparable Depot buildings in Alberta. There are undoubtedly locations that have market lease rates that are higher or lower than the deemed lease rate. In some smaller centres, good building locations may be at a premium and command lease rates in excess of \$20/SF or more. In other smaller centres, that may be somewhat economically depressed, lease rates under \$5/SF can be obtained.

With the assignment of the deemed lease rate the following costs were obtained:

FY 2005 As Adjusted Deemed Lease Costs

	Lease Costs	Unit Cost (\$/SF)
Small	\$1,393,111	\$6.94
Large	\$2,485,530	\$7.46
Total:	\$3,878,641	\$7.27

In summary, the DCA recommends that 2005 FY As Adjusted deemed lease rate be set at \$7.27/SF.⁵² This cost would include all building costs with the exception of some building use costs and utilities. Under normal commercial lease arrangements, the Depot would pay a monthly lease rate that includes all costs for use of the building including occupancy costs (leasehold improvements), property taxes, etc. This is often called Triple Net in the commercial leasing industry. Utilities, content and liability insurance, building and landscape maintenance and garbage collection costs would normally be paid directly by the Depot.

4.7.4.5 Market Based Deemed Building Size

In the 2005 Phase I Report the DCA accepted the As Reported building size As Reported by each Depot. The DCA has reconsidered this determination and is of the view that, for rate making purposes, excessively sized building costs should not be included in the Revenue Requirement based on a deemed lease cost per square foot.

⁵²Unit Cost based on As Adjusted Deemed Building Size – see next section.

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- 1 The DCA notes that the BCMB has set minimum building sizes for Depots.⁵³ The DCA
2 understands that these standards are applied for new Depots requesting a permit to operate,
3 with established Depots grandfathered. The DCA is of the view that the maximum Depot size,
4 to be used for the determination of the maximum building cost per Depot, should be based on
5 the following:

BCMB Classification	BCMB Minimum Size (SF)	DCA Maximum Size (SF)
Metro	5,000	7,500
Urban	3,000	7,500
Rural	1,500	3,000

- 6 Applying these criteria, there are 39 Depots that reported a Depot size that is greater than the
7 DCA maximum size.⁵⁴

⁵³ Beverage Container Depot Criteria

APPLICATION AND OPERATION CRITERIA FOR BEVERAGE CONTAINER DEPOTS

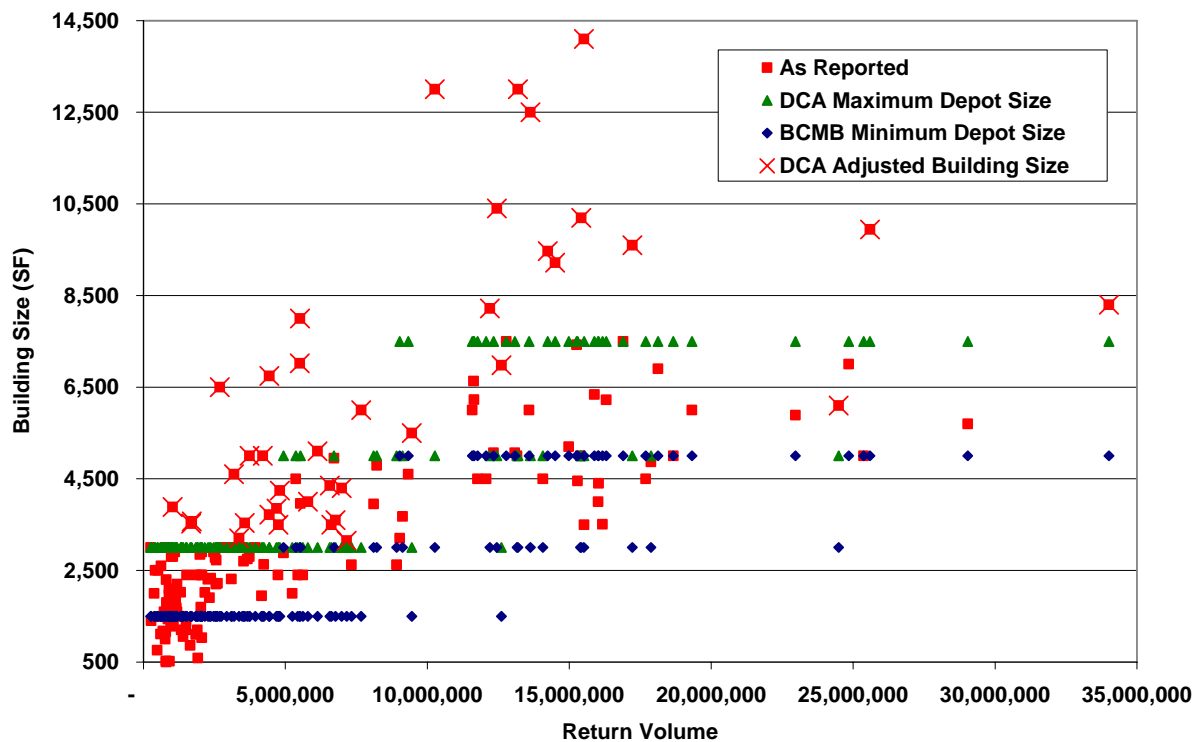
Facility Requirements

1. In Metro Areas, the interior space of a Depot must be a minimum of 5,000 square feet, with a minimum of 5 counting/sorting stations.**
2. In Urban Areas, the interior space of a Depot must be a minimum of 3,000 square feet, with a minimum of 4 counting/ sorting stations.**
3. In Rural Areas, the interior space of a Depot must be a minimum of 1,500 square feet, with a minimum of 2 counting/sorting stations.**
4. Counting/sorting stations are defined as an outside window for receiving containers, or 1.5 lineal metres of counter space within a Depot.

** Existing Depots have been grandfathered, and in their current locations are not required to meet size requirements at this time. Relocations of existing permits will require compliance with all facets of these criteria. Future changes may require Depots to upgrade the sizes of their Depots.

⁵⁴ Note that the reported Depot size has been adjusted to reflect the portion of the building that is dedicated to Depot operations as reported on line 1015 of the 2005 UCA.

DCA Building Size Analysis



- 1 The As Reported Depot size statistics are as follows:

As Reported Depot Size

	Number	Total SF	Ave. SF
Metro	34	201,665	5,931
Urban	21	147,810	7,039
Rural	110	287,531	2,614
	165	637,006	3,861

	Number	Total SF	Ave. SF
Small	95	219,497	2,310
Large	70	417,509	5,964
	165	637,006	3,861

- 2 The As Adjusted Depot size statistics are as follows:

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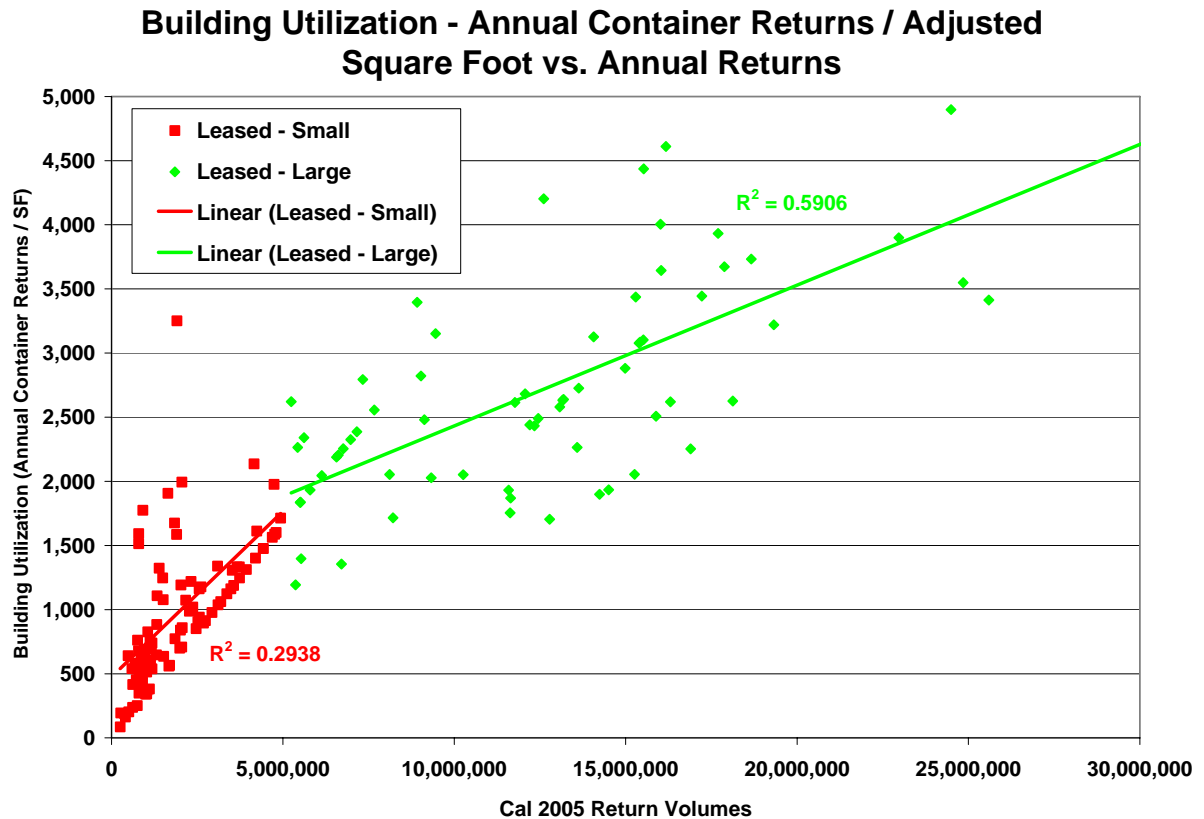
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As Adjusted Depot Size

	Number	Total SF	Ave. SF
Metro	34	194,736	5,728
Urban	21	95,704	4,557
Rural	110	243,183	2,211
	165	533,623	3,234

	Number	Total SF	Ave. SF
Small	95	200,639	2,112
Large	70	332,984	4,757
	165	533,623	3,234

- 1 The recommended building size adjustments result in a slight improvement in the building
- 2 utilization statistics as can be seen on the chart below:



4.7.4.6 Utility Costs

- 4 Since utility costs are not typically included in lease rates, the DCA is of the view that utility
- 5 costs should be added to the Revenue Requirement. On Table 5(a) Depots were asked to
- 6 provide utility costs for three types of utilities:

- 7
 - Natural gas
- 8
 - Electricity

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- Water and sewer

The reported amounts were as follows:

2005 UCA - As Reported Utility Costs

	Count	Sum Size (SF)	Utility Costs	Unit Cost (\$/SF)
Small-U	89	205,987	\$256,600	\$1.25
Large-U	64	384,160	\$605,277	\$1.58
Total	153	590,147	\$861,877	\$1.46

Of the 165 Depots that completed 2005 UCAs, 153 provided utility cost data. For some Depots, reported utility costs were lumped into one category.

In order to provide a consistent basis for all costs, the DCA recommends inflating the FY 2005 utility costs for those Depots that reported fiscal years of less than 12 months. Overall, there were 9 Depots in the Study System that reported for fiscal years of less than 12 months (Stub Fiscal Years). For example, the proposed adjustment for a Depot with 8 months in their reported fiscal year is to inflate utility costs by $12 / 8$ or 150%.

The DCA also recommends that the 2005 UCA reported utility costs be adjusted to reflect the 165 Depots that completed 2005 UCAs. In the absence of any better data, the DCA prorated the utility costs upward by the square footage (As Adjusted) of the Depots that did not provide utility cost data:

2005 UCA Data - Study System - As Adjusted

	Count	Sum Size (SF)	Utility Costs	Unit Cost (\$/SF)
Small	95	200,639	\$260,830	\$1.30
Large	70	332,984	\$536,104	\$1.61
Total	165	533,623	\$796,934	\$1.50

The DCA recommends that the FY 2005 adjusted cost for building utilities be deemed to be \$797 thousand, a reduction of \$201 thousand over the Reported amount. This adjustment is primarily due to the reduction in building sizes the DCA recommends.

4.7.4.7 Building Use Costs

The DCA has classified building and landscape maintenance, garbage removal and other building costs⁵⁵ as additional costs that would not typically be included in the deemed lease rate.

In order to provide a consistent basis for all costs, the DCA recommends inflating the FY 2005 other building use costs for those Depots that reported fiscal years of less than 12 months. Overall, there were 9 Depots in the Study System that reported for fiscal years of less than 12 months (Stub Fiscal Years). For example, the proposed adjustment for a Depot with 8 months in their reported fiscal year is to inflate other building use costs by $12 / 8$ or 150%.

These As Reported and As Adjusted Building use costs are as follows:

⁵⁵ Lines 720, 721 and 722, respectively, from Table 7-a of the 2005 UCA

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As Reported Building Use Costs (addition to lease payment)

	<u>Small</u>	<u>Large</u>	<u>Total</u>
Property Insurance	\$97,335	\$208,867	\$306,202
Manintenance	\$114,473	\$415,384	\$529,857
Garbage	\$22,077	\$94,806	\$116,883
Other	\$21,635	\$11,265	\$32,900
	<u>\$255,520</u>	<u>\$730,322</u>	<u>\$985,842</u>
As Adjusted	\$261,846	\$738,846	\$1,000,692

1 4.7.5 Adjustments Summary

2 The DCA recommends that all buildings be assigned an average deemed lease rate for their
3 geographic location. The recommended deemed lease rates are thought to be an appropriate
4 average of lease rates for existing buildings and new buildings for Depots that move or are
5 added to the system.

6 The DCA further recommends that costs related to oversize Depots be excluded from the
7 Revenue Requirement. The DCA recommends a maximum Depot size be used in the
8 calculation of the deemed lease cost per Depot.

9 The DCA recognizes that the above two recommendations result in both an increase and
10 decrease in As Adjusted building costs. The utilization of a deemed lease rate will tend to
11 overstate actual costs since many Depot buildings are currently being leased at values below
12 market rates, or the actual cost for an owned building is lower than current market rates. The
13 DCA is of the view that Depot Owners that own their buildings can, over time, modify their
14 ownership structure such that future UCAs will collect building cost information at market lease
15 rates, which would be at a higher reported cost.

16 Reducing the deemed size of Depot buildings for the determination of deemed lease costs will
17 decrease the Revenue Requirement. It is anticipate that, over time, Depot Owners will also
18 rationalize their operations and choose building sizes that allow them to be more efficient. The
19 DCA is of the view that utilization of deemed lease rates and deemed building sizes is an
20 appropriate trade-off and will result in an appropriate Cal 2006 Revenue Requirement.

21 The DCA also noted that an inherent assumption is that all leasehold improvements are
22 included in the deemed lease rate for all buildings. In reality, some leasehold improvements are
23 included in the lease rate when the landlord makes or provides capital for the leasehold
24 improvements, whereas the landlord may not provide other types of leasehold improvements or
25 financial incentives. Again, the DCA is of the view that the adjustments made provide an
26 appropriate trade-off and will lead to a reasonable 2006 Revenue Requirement.

27 Reported utility costs are recommended to be adjusted for Depots that did not provide utility
28 cost information. The DCA is of the opinion that the pro-rata adjustment made to the reported
29 costs may be overstated as some Depots may not have utility costs (provided by affiliate

organization or included in lease rate). However, the adjustment for the deemed building size provided an appropriate balance for the 2006 Revenue Requirement.

Building use costs that are typically not included in a deemed lease rate should also be added to the Revenue Requirement. These costs As Adjusted are about \$1 million.

Please see Schedule 5, Appendix I for a summary of the adjustments made.

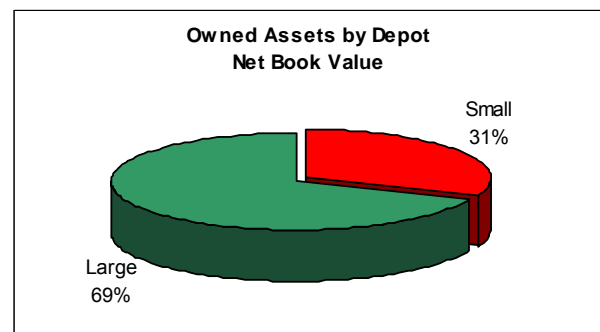
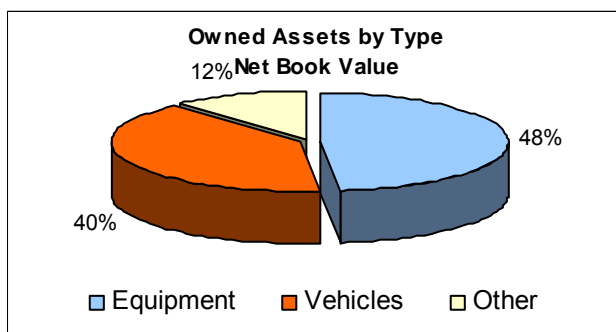
4.8 VEHICLE / EQUIPMENT COSTS

Equipment costs are reported on Schedule 6, Appendix I.

On Table 6 of the UCA, Depots were requested to advise whether vehicle/equipment used in the Depot operations was owned or leased. If the vehicle/equipment was owned, the acquisition value, depreciation costs and undepreciated capital cost (book value) were collected. Any loans used to acquire the equipment were also collected for all owned assets. If the equipment was leased, the total annual lease payments were collected along with the lease expiry date and the percentage of the asset's use attributable to Depot operations (if shared).

4.8.1 Summary of Reported Costs

The undepreciated capital cost or net book value (NBV) for owned vehicles and equipment is \$6.2 million. Equipment is comprised of a variety of assets including conveyors, forklifts, pallet jacks, cardboard compactors/balers, cash registers etc. As would be expected, Large Depots accounted for the vast majority of equipment costs. Overall, Large Depots reported owning Equipment NBV of \$1.8 million compared to only \$0.8 million owned by Small Depots. The charts below depict these comparisons with applicable percentages.



The needs and operating models of Depots varies widely therefore the equipment owned by Depots varies accordingly. The DCA did not find any equipment costs that seemed unusually out of line or requiring adjustment. Viewed on a per Depot basis, the average book value for equipment is approximately \$22 thousand (\$10.2 thousand for Small Depots, \$37.2 thousand for Large Depots), reasonable amounts in our opinion.

Financing costs related to vehicles and equipment were also collected in Table 6. These included depreciation (CCA), lease payments and any interest on related loans. The total of

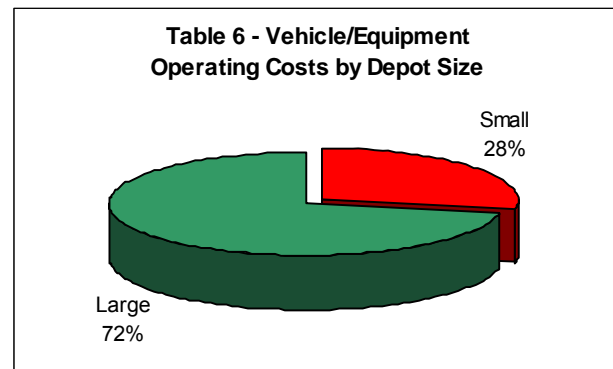
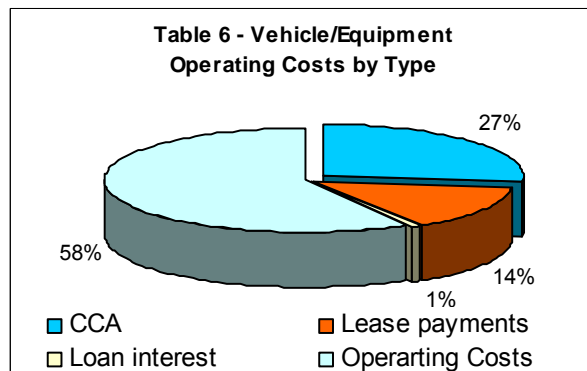
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1 these costs reported in Table 6 were \$0.6 million. The largest component of the financing costs
2 comes from CCA.

3 Reported vehicle and equipment operating costs were \$1.3 million, with the majority of these
4 costs (67%) related to vehicles. Again, the Large Depots reported the majority of these costs
5 (73%). The following charts depict the vehicle/equipment operating costs by type of cost and
6 split between Small Depots and Large Depots.



7 4.8.2 Adjustments Recommended

8 4.8.2.1 Goodwill

9 Goodwill is an asset reflecting a premium paid above book value for the acquisition of a
10 business. In a regulatory environment, Goodwill is not an allowable Rate Base asset for
11 purposes of calculating return. Similarly, any amortization costs relating to Goodwill are not an
12 allowable Revenue Requirement cost. The reasoning for this is that Goodwill is a discretionary
13 decision of the purchaser with no tangible related asset of benefit to Customers. It would be
14 unfair to upwardly adjust rates to Customers to recover discretionary costs that provide no
15 tangible value to the system.

16 Typically a business Owner recaptures Goodwill when the business is re-sold. In a regulatory
17 context, Goodwill is typically not included in the derivation of tariffs; however, any increase in
18 the value of Goodwill is captured by the utility when the asset is sold.⁵⁶

19 The DCA did not capture Goodwill in the 2005 UCAs. While some Depots reported depreciation
20 costs related to Goodwill, the DCA disallowed these costs and did not incorporate them into the
21 As Reported amounts. As noted in section 2.1, there were many inconsistencies in the way
22 Goodwill was Reported by Depots, which lead the DCA to exclude these costs in their entirety.

23 4.8.2.2 Vehicles

24 It is our view that a portion of vehicle related costs As Reported are not wholly a proper system
25 cost as these costs could be related to personal use of vehicles, especially for Small Depots.
26 However, the vehicle related costs included in the As Reported numbers were verified to be
27 included on each Depot's financial statement and/or tax return.

⁵⁶ In some instances where Customers have contributed to the increase in value of "Goodwill", the gain in value is shared with Customers on disposition.

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1 As part of the 2005 Phase I Report, the DCA determined that vehicle costs relating to daily bank
2 trips to obtain cash for Deposit returns were a reasonable system expense.

3 For the 2006 Phase I Report, the DCA has determined that collection related costs, As
4 Reported, should be included in the 2006 Revenue Requirement (see section 4.9). To the
5 extent vehicle related costs may be overstated, the DCA is of the view that some use of
6 personal vehicles for banking or related Depot business is an appropriate system cost.

7 4.8.2.3 Stub Fiscal Years

8 In order to provide a consistent basis for all costs, the DCA recommends inflating the FY 2005
9 vehicle/equipment operating costs for those Depots that reported fiscal years of less than 12
10 months. Overall, there were 9 Depots in the Study System that reported for fiscal years of less
11 than 12 months (Stub Fiscal Years). For example, the proposed adjustment for a Depot with 8
12 months in their reported fiscal year is to inflate vehicle/equipment operating costs by $12 / 8$ or
13 150%.

14 The following table shows the As Adjusted Equipment Costs for FY 2005:

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2005 As Reported			FY 2005 As Adjusted	
<u>Equipment Owned</u>				
Small				
CCA Class	CCA	Interest	CCA	Interest
1	\$63	\$0	\$65	\$0
6	\$381	\$0	\$391	\$0
8	\$76,616	\$1,297	\$78,491	\$1,329
10	\$120,742	\$3,894	\$123,697	\$3,989
17	\$359	\$0	\$368	\$0
other	\$24,769	\$0	\$25,375	\$0
Sub-Total	\$222,931	\$5,191	\$228,386	\$5,318
Large				
CCA Class	CCA	Interest	CCA	Interest
1	\$4,714	\$0	\$4,829	\$0
6	\$1,742	\$0	\$1,785	\$0
8	\$187,200	\$702	\$191,781	\$719
10	\$183,627	\$3,922	\$188,121	\$4,018
17	\$6,117	\$0	\$6,267	\$0
other	\$31,156	\$17,152	\$31,918	\$17,572
Sub-Total	\$414,556	\$21,776	\$424,701	\$22,308
<u>Equipment Leased</u>				
	Vehicle	Equipment	Vehicle	Equipment
Small	\$34,047	\$4,339	\$35,169	\$4,482
Large	\$39,224	\$247,194	\$40,518	\$255,346
Subtotal	\$73,271	\$251,533	\$75,687	\$259,828
<u>Operating Costs</u>				
	Vehicle	Equipment	Vehicle	Equipment
Small	\$344,366	\$29,933	\$358,682	\$31,718
Large	\$821,564	\$176,031	\$831,575	\$180,034
Subtotal	\$1,165,930	\$205,964	\$1,190,257	\$211,752
Total	\$2,361,150		\$2,418,238	

1 4.9 OVERHEAD COSTS

2 Overhead Costs are summarized on Schedule 7, Appendix I.

3 Table 7-a of the UCA collected the overhead costs of each Depot. As discussed in the
 4 preceding section, financing and operating costs such as utilities, amortization expense and
 5 mortgage/loan interest, were instead collected with buildings and equipment on Tables 5 and 6.
 6 Overhead Costs related to Buildings and Vehicles/Equipment were discussed in sections 4.7 &
 7 4.8, respectively.

8 The costs recorded in Table 7-a include a combination of operating and administration costs
 9 such as maintenance, licenses, fees and taxes (property and business), insurance, advertising
 10 and general office and shop expenses. Overall, the reported costs in Schedule 7-a were found

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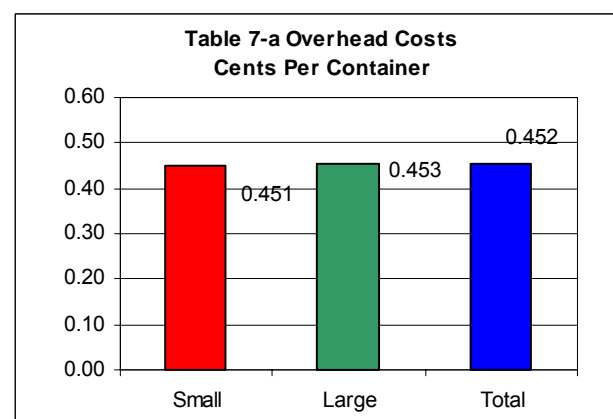
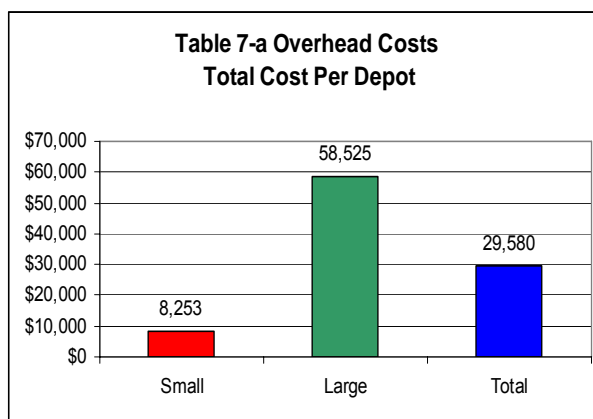
to be reasonable within an acceptable tolerance given the size of Depot (Small or Large) reporting as well as in aggregate. Exceptions were ABDA and BCMB fees and charity expenses.

For the 2005 UCA, Table 7-a was re-designed to try and incorporate all Depot expenses. The rationale was that all expenses on a Depot's income statement should be reported on Table 7-a and hence line 769 should equal a Depot's total expenses. For the most part this revision was successful and assisted Depots with completing the 2005 UCA and the DCA with verification.

4.9.1 Summary of Reported Costs

The total overhead costs reported by 165 Depots were \$4.9 million, which represents 13% of Total System costs.⁵⁷ Individually, the largest single overhead cost category is collection costs of about \$1.5 million.

Compared on a total cost per Depot, the annual overhead cost per Depot for a Large Depot (\$58 thousand) is roughly 7 times that of the Small Depots (\$8 thousand). However, on a per container basis, it can be seen in the graph below that overhead costs are nearly equivalent.



Overall, overhead costs are approximately 0.45 ¢/container.

The following is a table providing a line-by-line breakdown of the overhead costs reported along with some analysis of these costs. The final three columns in the Table below provide a good indicator of the reasonableness of the reported costs by comparing the average line item cost on a Depot size basis. A review of the average costs reported per Depot indicates no line items that are unusually low or high, other than ABDA & BCMB fees, which are addressed in Section 4.9.2.

⁵⁷ In the 2005 Phase I Report Overhead costs including costs related to building, vehicles and equipment, whereas in the 2005 UCA these costs were segregated on Table 7-a. Therefore the reported Collection costs in this 2006 Phase I Report are significantly lower than in the 2005 Phase I report.

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Table 7-a Overhead Costs As Reported	a			b			c			d			Average Cost per Depot			Unit Cost (cents) per Container		
	Small Depots			Large Depots														
		% of total line	% of total Small		% of total line	% of total Large	Total	Diff	Small	Large	Total	Small	Large	Total				
	\$			\$			\$	b - d										
Office Expenses	\$76,070	22%	10%	\$266,879	78%	7%	\$342,949	3%	\$801	\$3,813	2,078	0.04	0.03	0.03				
Shop Supplies	\$77,023	21%	10%	\$295,041	79%	7%	\$372,065	3%	\$811	\$4,215	2,255	0.04	0.03	0.03				
Telephone	\$119,100	29%	15%	\$285,047	71%	7%	\$404,147	8%	\$1,254	\$4,072	2,449	0.07	0.03	0.04				
Charitable Donations	\$9,303	21%	1%	\$34,522	79%	1%	\$43,825	0%	\$98	\$493	266	0.01	0.00	0.00				
Internet	\$3,424	33%	0%	\$6,919	67%	0%	\$10,344	0%	\$36	\$99	63	0.00	0.00	0.00				
Bank Charges	\$77,377	36%	10%	\$137,073	64%	3%	\$214,450	7%	\$814	\$1,958	1,300	0.04	0.02	0.02				
Professional Fees																		
(Accounting/Legal)	\$77,454	-	10%	\$332,066	81%	8%	\$409,520	2%	\$815	\$4,744	2,482	0.04	0.04	0.04				
Training Courses (3rd Party)	\$4,714	31%	1%	\$10,273	69%	0%	\$14,986	0%	\$50	\$147	91	0.00	0.00	0.00				
Marketing and Promotions	\$22,722	13%	3%	\$153,236	87%	4%	\$175,958	-1%	\$239	\$2,189	1,066	0.01	0.02	0.02				
Advertising	\$50,628	16%	6%	\$264,336	84%	6%	\$314,964	0%	\$533	\$3,776	1,909	0.03	0.03	0.03				
Other Insurance (non-	\$47,256	21%	6%	\$182,318	79%	4%	\$229,574	2%	\$497	\$2,605	1,391	0.03	0.02	0.02				
Municipal Taxes & License																		
Fees	\$30,497	16%	4%	\$163,701	84%	4%	\$194,197	0%	\$321	\$2,339	1,177	0.02	0.02	0.02				
BCMB Fees	\$49,886	15%	6%	\$288,112	85%	7%	\$337,998	-1%	\$525	\$4,116	2,048	0.03	0.03	0.03				
ABDA Fees	\$25,874	13%	3%	\$168,972	87%	4%	\$194,846	-1%	\$272	\$2,414	1,181	0.01	0.02	0.02				
Other Office costs	\$18,902	14%	2%	\$113,634	86%	3%	\$132,536	0%	\$199	\$1,623	803	0.01	0.01	0.01				
Non-labour collection costs																		
(e.g. contractors)	\$1,655	6%	0%	\$24,134	94%	1%	\$25,789	0%	\$17	\$345	156	0.00	0.00	0.00				
Deposit incentives	\$0	0%	0%	\$8,845	100%	0%	\$8,845	0%	\$0	\$126	54	-	0.00	0.00				
Shrinkage	\$17,161	13%	2%	\$113,461	87%	3%	\$130,622	-1%	\$181	\$1,621	792	0.01	0.01	0.01				
Other costs	\$34,943	13%	4%	\$234,090	87%	6%	\$269,032	-1%	\$368	\$3,344	1,630	0.02	0.03	0.02				
Table 9 Collections costs	\$0	0%	0%	\$365,355	100%	9%	\$365,355	-9%	\$0	\$5,219	2,214	-	0.04	0.03				
Table 9 Cash & Shrinkage	\$40,001	6%	5%	\$648,705	94%	16%	\$688,706	-11%	\$421	\$9,267	4,174	0.02	0.07	0.06				
	\$783,991	16%	100%	\$4,096,718	84%	100%	\$4,880,709		\$8,253	\$58,525	29,580	0.45	0.45	0.45				

1 The “% of total line” columns a & b provides insight into the proportion of total costs for each line
2 item reported by Small and Large Depots. The “% of total Small/Large” columns b & d indicate
3 the proportion of total costs for each Depot size that the respective line item accounted for. The
4 “Diff” column simply subtracts column c from b and provides an indicator of where certain line
5 items may impact Depot types differently.

6 It is interesting to note that, generally speaking, line item costs as a percentage of total
7 overhead costs are fairly comparable between Depot sizes. For the most part, the “Diff” column
8 shows a variance of +/-3%. This indicates that Depots expend a similar portion of their overall
9 costs on similar expense items, regardless of Depot size. The exceptions to this were Table 9
10 Collection costs (-9% & -11%), Telephone (8%) and Bank Charges (7%).

11 Higher collection costs for Large Depots is expected as more Large Depots compete for
12 container volumes and retrieve containers from outside the Depot. Telephone and Bank
13 Charges are somewhat fixed and therefore it is expected that these expenses would be a
14 greater portion of the total Overhead costs from Small Depots.

15 Collection costs are an activity much more prevalent among Large Depots. Not surprisingly,
16 these costs consumed 26% of total Large Depot overhead costs compared to only 5% for Small
17 Depots.

4.9.1.1 Collection Costs

There are three main types of collection costs:

1. Labour – manpower to collect containers from outside the Depot

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- 1 2. Vehicles – use of vehicles to collect containers from outside the Depot
- 2 3. Overheads – payments to contractors, Deposit incentives, etc. paid to either collect
- 3 containers from outside the Depot or incentives to third parties to collect containers on
- 4 behalf of the Depots
- 5 The As Reported Collection costs are:

As Reported Collection Costs

	Small	Large	Total
Labour			
Direct Labour	?	?	?
Contract Labour	\$14,705	\$125,032	\$139,737
Overhead Labour	\$0	\$40,774	\$40,774
	<u>\$14,705</u>	<u>\$165,806</u>	<u>\$180,511</u>
Vehicles			
CCA	\$120,742	\$183,627	\$304,369
Loan Interest	\$3,894	\$3,922	\$7,816
Lease Payments	\$34,047	\$39,224	\$73,271
Operating Costs	<u>\$344,366</u>	<u>\$821,564</u>	<u>\$1,165,930</u>
	\$503,048	\$1,048,337	\$1,551,385
Overheads			
Non-labour collection costs	\$1,655	\$24,134	\$25,789
Deposit incentives	\$0	\$8,845	\$8,845
Table 9 Collections costs	\$0	\$365,355	\$365,355
Table 9 Cash & Shrinkage	<u>\$40,001</u>	<u>\$648,705</u>	<u>\$688,706</u>
	\$41,656	\$1,047,039	\$1,088,695
Total	\$559,409	\$2,261,182	\$2,820,591

- 6 As noted in section 2.1, the DCA is of the view that these collection costs are understated.
- 7 For Labour, it is felt that some Depots utilize Direct Labour employees for the collection of
- 8 containers from outside the Depot. These costs were not captured as collection costs in the
- 9 2005 UCA. Under Contract and Overhead Labour, the DCA is of the view that collection related
- 10 costs were not properly categorized for all Depots. For example, in the 2004 UCA process
- 11 reported Contract Labour collection related costs were nearly \$300 thousand,⁵⁸ whereas for the
- 12 2005 UCA reported costs were only \$11 thousand.⁵⁹ Similarly, in the 2004 UCA process Depots
- 13 reported collection Overhead Labour costs of \$88 thousand (excluding Owners), whereas for
- 14 the 2005 UCA reported costs were only \$41 thousand including an allocation of Owner's
- 15 reported labour costs. It appears to the DCA that some Depots were aware of the
- 16 determinations in the 2005 Phase I Report to exclude collection costs.
- 17 For Vehicles, the \$1.5 million noted above is overstated as all being related to collection costs.
- 18 The DCA is of the view that some vehicle related costs are required to operate a Depot. In the
- 19 2005 Phase I Report the DCA recommended vehicle costs of about \$592 thousand for the 2004

⁵⁸ Appendix I, Schedule 3, col b, line 1 + line 7

⁵⁹ Appendix I, Schedule 4, col c, line 2 + line 9

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1 FY Study System based on a calculation of the costs Depots may incur to travel 32 km per day
2 for 5 days per week.⁶⁰

3 For Overheads, the largest portion of the collection costs comes from the Depot reconciliation of
4 Purchases on Table 9 of the 2005 UCA. As noted in section 4.2.1, the Table 9 reconciliation of
5 the calculated Purchases and the Reported Purchases resulting in some unaccounted for
6 differences.

7 As part of the 2005 Phase I Report review process, the following response to ABDA-Stantec-34
8 was provided related to the determination to exclude collection costs from the recommended
9 2005 Revenue Requirement:

10 Stantec's rationale for removing collection costs was provided on page 57, line 24:

11 *Collection costs are a discretionary cost made by certain Depots*
12 *to increase return volumes to their Depots. Including these costs*
13 *in overall system cost would be akin to paying Customers to bring*
14 *their containers in to a Depot. We are of the view that the Deposit*
15 *refund should be the only incentive provided to the public to return*
16 *containers included in the system cost.*

17 Stantec is of the view that Collection services are not mandated as a condition of the
18 Depot permit, and therefore the costs are not properly a part of the costs of providing
19 utility service. Stantec's rationale is supported by the following:

20 1. The Beverage Container Recycling Regulation states the following:

21 1(1) In this Regulation,

22 (h) "Depot" means a place operated as a business for the collection of empty
23 containers;

24 (i) "Depot operator" means the owner or operator of a Depot and
25 includes a person acting or purporting to act on behalf of the owner or
26 operator, but does not include a retailer;

27 10(1) When a person presents to a Depot operator an empty registered
28 container that is reasonably identifiable as having contained a beverage, the
29 Depot operator shall

30 (a) accept the container, and

31 (b) pay to the person a cash refund of not less than

32 (i) 5¢ for each container with a capacity of one litre or less, and

33 (ii) 20¢ for each container with a capacity greater than one litre.

34 While not purporting to provide a legal opinion, we interpret this to mean that the
35 Customer must present the empty beverage container to the Depot operator at the
36 Depot in order to obtain a cash refund. We note that Depot permits issued by the
37 BCMB specify a specific location for the Depot, and that if the Depot is moved to a
38 new location, the permit must be revised.

⁶⁰ Doc 010-0026b, Phase I Report, p. 53

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In our view, the regulation does not comport with the practice of collecting containers from Customer's premises, sorting and counting the containers at the Customer's premises (or back at the Depot) and providing the Customers with a full or partial refund at the Customer's premise during the next pickup or at some later date based on the containers counted.

Again, we are of the view that the above excerpts from the Regulation **do not suggest** that it is mandated that Depot operators **must** collect containers from Customers at other locations as a condition of their permit or to otherwise comply with the Regulation.⁶¹

Given the data collected from the 2005 UCAs the DCA is of the view that an appropriate approximation of collection costs is not possible. As noted above, collection costs related to labour are thought to be understated, collection costs related to vehicles are thought to be overstated and collection costs relate to cash payments are not fully reconcilable (and not verifiable).

The DCA recommends that all collection costs, As Reported, be included in the 2006 Revenue Requirement. The DCA is also of the view that return determination should take into consideration the practice of collecting containers from outside the Depot and the associated collection costs.

4.9.2 Adjustments Recommended

A number of adjustments are recommended for Overhead cost items.

4.9.2.1 ABDA / BCMB Fees

A calculation of expected ABDA and BCMB fees was prepared using the actual container volumes provided by the Manufacturers. This analysis detected that many Depots had under-reported their fees on the 2005 UCA. The Manufacturers withhold these fees directly in their payments to the Depots.⁶²

The DCA's inquiries indicated that Depots typically report the net payment from the Manufacturers as total revenue (or gross margin, as the case may be), rather than explicitly accounting for these costs that are netted against the payments received by Manufacturers (see section 4.2.1). Therefore, many Depots could not provide a value for these costs, or in some cases only provided an estimate. An explicit documentation of these fees on financial statements or tax returns was an exception.

The DCA requested that the BCMB and ABDA provide the DCA with their fee structure. The BCMB charges a fee of \$0.00045/container. The ABDA charges a fee of \$0.0006/aluminum pop can to a maximum of \$2,000 per Depot per year.

The DCA's performed a system analysis of the expected fees based on actual container volumes with the following results.

⁶¹ Doc 01-027b, p. 38

⁶² DCA has been advised by the ABDA that 8 Depots make payments for ABDA fees directly to the ABDA.

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As Reported and As Adjusted ABDA & BCMB Fees

	Small	Large	Total
ABDA Fees			
As Reported	\$25,874	\$168,972	\$194,846
DCA Calculation	\$33,125	\$120,289	\$153,414
Difference	\$7,251	-\$48,683	-\$41,432
% Difference	28.0%	-28.8%	-21.3%
BCMB Fees			
As Reported	\$49,886	\$288,112	\$337,998
DCA Calculation	\$81,291	\$416,404	\$497,695
Difference	\$31,405	\$128,292	\$159,697
% Difference	63.0%	44.5%	47.2%
Total			
As Reported	\$75,760	\$457,083	\$532,844
DCA Calculation	\$114,416	\$536,692	\$651,109
Difference	\$38,656	\$79,609	\$118,265
% Difference	51.0%	17.4%	22.2%

1 To equate the forecast FY 2005 ABDA and BCMB fees to the calculated amounts, the DCA
2 recommends that these fees be increased by \$119 thousand or 22%.

3 4.9.2.2 Charitable Donations

4 Regulatory precedent⁶³ dictates that Charitable Donations are a shareholder expense, therefore
5 the DCA recommends removing these amounts from the Revenue Requirement.

6 The DCA recommends that the Charitable Donations of \$44 thousand be excluded from the
7 2006 Revenue Requirement.

8 4.9.2.3 Stub Fiscal Years

9 In order to provide a consistent basis for all costs, the DCA recommends inflating the FY 2005
10 Overhead Costs for those Depots that reported fiscal years of less than 12 months. Overall,
11 there were 9 Depots in the Study System that reported for fiscal years of less than 12 months
12 (Stub Fiscal Years). For example, the proposed adjustment for a Depot with 8 months in their
13 reported fiscal year is to inflate overhead costs by 12 / 8 or 150%.

14 4.9.2.4 Regulatory Costs

15 The DCA has not forecast any costs for the Depots to participate in the Handling Commission
16 review process.

17 4.9.2.5 Summary of Recommendations

18 Following is a summary of the above recommendations for overhead costs:

⁶³ For example, AEUB Decision U97065, p. 421

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	2005 Fiscal Year as Reported			2005 Fiscal Year as Adjusted		
	Small (a)	Large (b)	Total (c)	Small (d)	Large (e)	Total (f)
Overhead - Office						
Office Expenses	\$76,070	\$266,879	\$342,949	\$81,192	\$272,572	\$353,764
Shop Supplies	\$77,023	\$295,041	\$372,065	\$81,066	\$295,999	\$377,065
Telephone	\$119,100	\$285,047	\$404,147	\$125,183	\$306,637	\$431,819
Charitable Donations	\$9,303	\$34,522	\$43,825	\$0	\$0	\$0
Internet	\$3,424	\$6,919	\$10,344	\$3,424	\$7,399	\$10,824
Bank Charges	\$77,377	\$137,073	\$214,450	\$86,863	\$148,531	\$235,394
(Accounting/Legal)	\$77,454	\$332,066	\$409,520	\$83,755	\$347,842	\$431,596
Training Courses (3rd Party)	\$4,714	\$10,273	\$14,986	\$4,714	\$10,273	\$14,986
Marketing and Promotions	\$22,722	\$153,236	\$175,958	\$23,288	\$155,574	\$178,862
Advertising	\$50,628	\$264,336	\$314,964	\$51,429	\$264,606	\$316,035
Other Insurance (non-property)	\$47,256	\$182,318	\$229,574	\$55,102	\$187,495	\$242,597
Municipal Taxes & License Fees	\$30,497	\$163,701	\$194,197	\$30,845	\$169,336	\$200,182
Other Office costs	\$18,902	\$113,634	\$132,536	\$19,489	\$116,899	\$136,389
	\$614,471	\$2,245,045	\$2,859,516	\$646,348	\$2,283,164	\$2,929,512
Overhead - Fees						
BCMB Fees	\$49,886	\$288,112	\$337,998	\$81,291	\$416,404	\$497,695
ABDA Fees	\$25,874	\$168,972	\$194,846	\$33,125	\$120,289	\$153,414
	\$75,760	\$457,083	\$532,844	\$114,416	\$536,692	\$651,109
Overhead - Other						
Non-labour collection costs (e.g. contractors)	\$1,655	\$24,134	\$25,789	\$1,655	\$24,134	\$25,789
Deposit incentives	\$0	\$8,845	\$8,845	\$0	\$10,405	\$10,405
Shrinkage	\$17,161	\$113,461	\$130,622	\$17,161	\$120,082	\$137,243
Other costs	\$34,943	\$234,090	\$269,032	\$34,943	\$248,218	\$283,160
	\$53,759	\$380,529	\$434,288	\$53,759	\$402,838	\$456,597
Overhead - Table 9						
Table 9 Collections costs	\$0	\$365,355	\$365,355	\$0	\$365,355	\$365,355
Table 9 Cash & Shrinkage	\$40,001	\$648,705	\$688,706	\$42,218	\$663,072	\$705,290
	\$40,001	\$1,014,060	\$1,054,061	\$42,218	\$1,028,428	\$1,070,645
Total	\$783,991	\$4,096,718	\$4,880,709	\$856,741	\$4,251,123	\$5,107,864
Collection Related Costs	\$41,656	\$1,047,039	\$1,088,695	\$43,873	\$1,062,966	\$1,106,839

1 4.10 WORKING CAPITAL STUDY

2 The DCA analyzed the Working Capital requirement of the Study System on the basis of the FY
3 2005 Study System Costs and Revenues both As Reported and As Adjusted. We performed a
4 study referred to in utility applications as a Lead/Lag study. This study quantifies the amount of
5 Working Capital required by a utility by analyzing the lead or lag in days between cash outflows
6 and cash inflows. Once the Working Capital is quantified for a utility, it is included in Rate Base
7 and is compensated for at the utility's approved Cost of Capital and approved Capital Structure.

8 The analysis compares the average timing and quantum of revenues earned and expenses
9 paid. A "Lead" occurs when revenues are collected in advance of when expenses are paid.
10 "Lag", which is more common, represents the number of days following the provision of services
11 that payments are received, or the number of days following purchases that payment is
12 required. Multiplying the average lead or lag days by each applicable revenue or expenditure
13 derives the impact on Working Capital.

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If the calculated lag involved in the collection of revenues is greater, on average, than the lag available to delay payments for expenditures, shareholders (Depots) must provide the necessary Working Capital to bridge this gap, and an addition to Rate Base is appropriate. Conversely, if the lag required for the collection of revenues is less than that available to delay expenditures, the ratepayers (Manufacturers) are deemed to have funded the deficit, and a reduction from Rate Base is appropriate.

Appendix II to this report contains the schedules underpinning the analysis discussed below.

4.10.1 Summary of As Reported Values

We analyzed the revenue lag and calculated that a Large Depot in Cal 2005, on average, had a shipment of containers from their Depot to ABCRC on average every 3.64 days compared to 9.19 days for a Small Depot.⁶⁴ This implies that, with a 3-day lag between shipment and payment, the revenue lag for Large Depots is 6.6 days, whereas a Small Depot faces a longer revenue lag at 12.2 days, on average.

We also note a discrepancy between Small and Large Depots' Working Capital requirements in terms of the number of days between shipments. Both classes of Depots must pay Deposits to the public on demand, however because Small Depots have less average daily volume, it takes Small Depots longer to fill a truck to ship to the Manufacturers. The result of this is a greater average revenue lag for Small Depots when compared to Large Depots.

Schedule A, Appendix II presents the assumed lead/lag days and cost/revenue values that we have used to determine the Working Capital requirements of the Study System. We have calculated that the total Working Capital for FY 2005 As Reported is approximately \$0.7 million. This means that, on average, Depots required about \$0.7 million of Working Capital over the Study System on the basis of the costs and revenues reported.

A primary source of Working Capital is GST payments on the Handling Commissions. Handling Commission payments are made three days after the Manufacturers receive the shipment of beverage containers.⁶⁵ These payments include GST, which is due to be paid to the CRA in quarterly installments throughout the year.⁶⁶ Depots have access to this capital from the time it is paid to them until it must be remitted to the CRA. The above analysis assumes that all Depots pay GST. In cases where Depots, for whatever reason,⁶⁷ do not remit GST, this money would simply accrue to the Depot as additional profit.

⁶⁴ As shipping data from BDL was summarized by month, the DCA used ABCRC daily shipping data as a proxy from BDL shipments.

⁶⁵ The DCA notes an error in the 2005 Phase I Report Lead/Lag study where the GST payments were overstated.

⁶⁶ The DCA has assumed all Depots remit GST filings quarterly. Some Depots may remit annually. For 2006, an average GST rate of 6.5% was used.

⁶⁷ For example sole proprietors who earn less than \$30,000 per year and are not GST registrants may not remit GST.

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1 The primary requirement for Working Capital is the lag between payment of deposits to
2 Customers and re-imbursement from the Manufacturers.

3 The DCA has also calculated the potential value of the positive Working Capital by assuming
4 interest at a rate of bank prime less 2% (Line 21 of Schedule A, Appendix II). Given the relative
5 magnitude of the Interest⁶⁸ on working Capital (FY 2005 As Reported about \$29,000) and the
6 cash nature of Purchases, the DCA has not included these amounts in the 2006 Revenue
7 Requirement determinations.

8 The following table summarizes the FY 2005 Working Capital Surplus⁶⁹ by Depot classification:

FY 2005 Study System Working Capital as Reported	Small	Large	Total
Working Capital Surplus	\$ (277,635)	\$ (401,637)	\$ (679,272)

9 4.10.2 Summary of Adjusted Values

10 Using the same methodology outlined above, we have calculated the FY 2005 Study System
11 Working Capital As Adjusted. The conclusions outlined in Section 4.10.1 are not materially
12 altered by our adjustments to aggregate cost levels. The variation from the As Reported values
13 is primarily due the determinations related to deemed building lease rates and to changes in
14 cost levels, which acts to increase/decrease the Working Capital deficit when compared to the
15 As Reported values.

16 The following table summarizes the FY 2005 Study System Working Capital As Adjusted:

FY 2005 Study System Working Capital as Adjusted	Small	Large	Total
Working Capital Surplus	\$ (319,338)	\$ (507,946)	\$ (827,284)

17 4.11 RATE BASE / CAPITAL STRUCTURE

18 4.11.1 Summary of Reported Values

19 Schedule 10 provides a breakdown of the FY 2005 Study System Rate Base amounts between
20 Small and Large Depots. The FY 2005 Study System Rate Base was obtained by considering
21 the values reported in Tables 5, 6 and 7 of the 2005 UCA booklet. Each of these tables
22 requested that Depots provide, for each CCA asset class, Original Cost, Ending UCC Values,
23 and any Loans/Mortgages attributable to that asset class.

⁶⁸ Interest on Working Capital is derived at a forecast Cal 2006 Bank rate of 4.2% from a Statistics Canada index.

⁶⁹ "Working Capital Surplus" implies that Working Capital is supplied by the Manufacturers/federal government

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1 We have made the assumption that the sum over all Depots of Ending UCC values would equal
2 Rate Base for regulatory purposes and that the sum of all liabilities would provide the liabilities
3 to determine an estimate of capital structure.

4 We are of the view that the Ending UCC value reported above is reasonably equivalent to a Net
5 Rate Base value for purposes of calculating capital structure.

6 We note that a capital structure of 34% debt to 66% equity is the result of the comparison of the
7 levels of assets and liabilities reported in the Study System. Total Rate Base of \$20.7 million
8 less liabilities of \$7.1 million equals total equity of \$13.6 million. The DCA notes that Small
9 Depots reported a lower proportion of equity (45%) as compared to Large Depots (74%). This
10 result is not surprising given the overall lack of profitability of Small Depots.

11 **4.11.2 Adjustments Recommended**

12 We have adjusted the FY 2005 Study System Rate Base to adjust those costs that we have
13 varied throughout section 4 of this report. Therefore, Rate Base values relating to Buildings
14 (Class 1 – Buildings CCA , Class 17 CCA – Property Improvements, Leaseholds, Land and
15 Buildings) have been removed. The FY 2005 Study System Rate Base As Adjusted is shown
16 on the table below.

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	2005 As Reported			2005 As Adjusted		
	Assets		Liabilities	Assets		Liabilities
Small						
Equipment						
	Gross Book Value	Net Book Value		Gross Book Value	Net Book Value	
CCA Class						
1	\$630	\$599	\$0			
6	\$4,960	\$3,627	\$0	\$4,960	\$3,627	\$0
8	\$583,048	\$361,125	\$21,225	\$583,048	\$361,125	\$21,225
10	\$956,675	\$415,161	\$122,866	\$956,675	\$415,161	\$122,866
17	\$9,508	\$7,233	\$0			
Working Capital	n/a	\$277,635		n/a	\$319,338	
Sub-total	\$ 1,554,821	\$ 1,065,380	\$144,091	\$ 1,544,682	\$ 1,099,252	\$144,091
Leaseholds	\$4,064	\$410	\$0			
Land	\$1,601,393	\$1,601,393				
Buildings	\$4,127,446	\$3,018,833	\$2,973,460			
Subtotal	\$ 5,732,903	\$ 4,620,635	\$2,973,460	\$ -	\$ -	\$0
Total Small	\$ 7,287,724	\$ 5,686,015	\$3,117,551	\$ 1,544,682	\$ 1,099,252	\$144,091
Owners' Equity			\$2,568,464			\$955,161
Total		\$ 5,686,015	\$5,686,015		\$ 1,099,252	\$1,099,252
	Debt 54.8%	Equity 45.2%		Debt 13.1%	Equity 86.9%	
Large						
Equipment						
	Gross Book Value	Net Book Value		Gross Book Value	Net Book Value	
CCA Class						
1	\$182,510	\$140,478	\$0			
6	\$18,121	\$12,697	\$0	\$18,121	\$12,697	\$0
8	\$2,209,771	\$869,839	\$46,767	\$2,209,771	\$869,839	\$46,767
10	\$2,127,202	\$603,266	\$31,673	\$2,127,202	\$603,266	\$31,673
17	\$76,203	\$73,845	\$0			
99	\$552	\$56,274	\$0	\$552	\$56,274	\$0
Working Capital	n/a	\$401,637	\$0	n/a	\$ 507,946	
Sub-total	\$ 4,614,360	\$ 2,158,035	\$78,440	\$ 4,355,647	\$ 2,050,022	\$78,440
Leaseholds	\$338,952	\$208,783	\$616,479			
Land	\$4,148,543	\$4,148,543				
Buildings	\$11,165,610	\$8,786,882	\$3,269,395			
Subtotal	\$ 15,653,106	\$ 13,144,208	\$3,885,873	\$ -	\$ -	\$0
Total	\$ 20,267,465	\$ 15,302,243	\$3,964,313	\$ 4,355,647	\$ 2,050,022	\$78,440
Owners' Equity			\$11,337,930			\$1,971,581
Total Large		\$ 15,302,243	\$15,302,243		\$ 2,050,022	\$2,050,022
	Debt 25.9%	Equity 74.1%		Debt 3.8%	Equity 96.2%	
Total		\$ 20,710,624	\$ 20,710,624		\$ 3,149,273	\$ 3,149,273
	Debt 34.2%	Equity 65.8%		Debt 7.1%	Equity 92.9%	

1 4.12 RETURN & INCOME TAX

2 4.12.1 Background

3 In the 2005 Phase I Report, the DCA was not tasked with making a recommendation on the
4 appropriate level of Return to Depots Owners that should be included in the 2005 Revenue
5 Requirement. Consequently the DCA simply reported the estimated EBT with Revenues
6 calculated using current Handling Commissions and Deposit levels and costs as determined by
7 the DCA.

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For this 2006 Phase I Report, the BCMB requested that the DCA provide a recommendation for the appropriate level of Return to be including in the 2006 Revenue Requirement. The inclusion of a Return study was requested by the HCRP.⁷⁰

In her report, Madame Justice Bielby suggested that a traditional Return on Rate Base model should be used to compensate Owners for investments made in their businesses:

An acceptable method of setting those commissions is to have the Board obtain and apply the information needed to calculate the following:

operating costs of bottle depots + rate of return currently available in industries or on investments bearing similar business risk to that of bottle depots × amount of capital invested in depots by their owners = total Handling Commissions for all containers

and from that calculate the Handling Commission per beer bottle or can which may reflect disproportionately high handling costs associated with certain types of containers.⁷¹

Notwithstanding, the DCA made the following determinations in the 2005 Phase I Report with respect to the “amount of capital invested in Depots by their Owners” or rate base:

1. Buildings – the appropriate contribution to the Revenue Requirement for buildings should be based on a deemed lease rate for both owned and leased buildings. This determination was primarily based on:

- the mixture of owned and leased buildings and issues related to determination of a deemed Rate Base for leased buildings
- regulatory precedent that land is not depreciated and appreciation on sale typically accrues to the utility (Owner) rather than the Customer at the end of the useful life
- some buildings appear to be have been depreciated aggressively to minimize tax, whereas under a regulatory regime depreciation rates would have been approved by the regulator

In making the determination that all building related costs should be based on a deemed lease rate, the DCA eliminated any rate base for buildings.

2. Working Capital – the prompt payment by the Manufacturers to the Depots resulted in no need for Working Capital. In fact, Depots receive revenues in advance of the payment for related costs (negative Working Capital).

3. Equipment – the book value of the equipment used by the Depots is relatively small at under \$3 million for the Study System.

These determinations resulted in a net Rate Base for the 2006 Study System of \$2.5 million.

⁷⁰ Doc 10-011 - HCRP Return Memo to BCMB, July 25 2006

⁷¹ Doc 01-014, WBA Management Society v. Beverage Container Management Board, ABQB 551, par. 1

1 The DCA provided the following conclusion to the BCMB in its 2005 Phase I Report:

2 With respect, Stantec concludes that the Return on Rate Base model that Madam
3 Justice Bielby directed be used is not the optimal model for the beverage container
4 return industry in Alberta. Cost of service models tend to be used in industries that are
5 capital intensive (e.g. utilities, pipelines, railways, etc.). The data collected by the DCA
6 suggests that the Alberta system is not capital intensive (the largest assets are buildings,
7 which only about two-third of the Depots own). Rather, Depots in Alberta are akin to
8 service industry businesses – large variable labour costs and the requirement for
9 efficient labour utilization to maintain profitability.⁷²

10 The DCA continues to be of the view that a Return on Rate Base model is not appropriate for
11 the bottle Depot industry in Alberta. However, the DCA is mindful of the principles set out by
12 Madame Justice Bielby, in particular that Alberta Depots should be compensated based of utility
13 regulatory principles, and in particular on “the provision of Depot operators with a **fair return** to
14 maintain a viable Depot network across the province will be balanced with the need for the
15 lowest possible cost to Customers.”⁷³ Madame Justice Bielby provided the following in
16 paragraphs 45 to 47 of her Decision:

17 The phrase “fair return” has been the subject of judicial interpretation by the Supreme
18 Court of Canada in **Northwestern Utilities Ltd. v. Edmonton (City)**, [1929] S.C.R. 186
19 at 193:

20 By a fair return is meant that the company will be allowed as large a return on the
21 capital invested in its enterprise...as it would receive if it were investing the same
22 amount in other securities possessing an attractiveness, stability and certainty
23 equal to that of the company’s enterprise.

24 Further, Lamont J. stated at 190:

25 In order to fix just and reasonable rates, which it was the duty of the Board to fix,
26 the Board had to consider certain elements which must always be taken into
27 account in fixing a rate which is fair and reasonable to the consumer and to the
28 company. One of these is the rate base, by which is meant the amount which the
29 Board considers the owner of the utility has invested in the enterprise and on
30 which he is entitled to a fair return. Another is the percentage to be allowed as a
31 fair return.

32 From this one may conclude that where a legislative draftsman uses the phrase “fair
33 return” the intention is to import the concept of first determining the amount the owner of
34 a bottle Depot, in this case, has invested in that Depot. From that one can determine the
35 amount of income via Handling Commissions the owner must receive to achieve a rate
36 of return on that investment similar to the rate of return he or she would earn from a
37 business or security with a similar degree of business risk. Implicit in this is a
38 determination of the owner’s operating costs because Handling Commissions must also
39 be of a size sufficient to cover overhead, to ensure the bottle Depot remains in business.

⁷² Doc 01-026b, p. 93, line 24-31

⁷³ Doc 01-014, p 13, par. 44, when quoting the s. 4.3 of the BCMB’s Administrative Bylaw.

1 The DCA is of the view that there are other methodologies for determining Return to Depot
2 Owners other than Return on Rate Base that will meet the "fair return" standard Madame
3 Justice Bielby has applied.

4 **4.12.2 Rate of Return Regulation Objectives**

5 The DCA submits that the most relevant legal precedent, as noted by Madame Justice Bielby, is
6 Mr. Justice Lamont's definition of a fair rate of return as enunciated in the Northwestern Utilities
7 Limited v. City of Edmonton ([1929] S.C.R. 186) decision that:

8 By a fair return is meant that the company will be allowed as large a return on the capital
9 invested in its enterprise (which will be net to the company) as it would receive if it were
10 investing the same amount in other securities possessing an attractiveness stability and
11 certainty to that of the company's enterprise.

12 Mr. Justice Lamont's definition embodies what a financial economist would call a risk-adjusted
13 rate of return or "opportunity cost."

14 What this means is that once a dollar has been invested in a regulated utility, the investor has to
15 be given the opportunity to earn what he could earn in the market on other equivalent
16 investments, if he still had the dollar to invest.

17 In essence, the above implies that there are two objectives in rate of return regulation of public
18 utilities – ensuring that the utility doesn't make exorbitant profits, and also to ensure that the
19 utility makes enough money.

20 Ensuring that the utility doesn't make exorbitant profits basically reflects the monopolistic nature
21 of the business. It is well known that unfettered monopolies will raise prices and discriminate
22 against Customers on both price and commercial terms to their advantage if rates and terms of
23 service are not controlled because of the lack of any substitute service providers. Generally, the
24 regulator attempts to ensure that prices reasonably reflect what would have resulted given the
25 presence of competition (such prices would provide a fair Return given the risk faced by the
26 utility).

27 In terms of ensuring the utility makes enough money, primarily, the main concern of the
28 regulator from a public policy perspective is to ensure that regulated companies can attract the
29 capital necessary to invest in infrastructure such that all Customers can obtain service
30 economically. The capital attraction test is one of the main tests used to determine whether the
31 regulated company is making too little money. If a utility does not make "enough" money, the
32 value of their shares will decline below book value, resulting in economic harm to existing
33 shareholders when the company raises more money. Dilution of the value of existing
34 shareholders investment is not generally held to be appropriate. In these instances, the utility
35 may not invest in infrastructure, which is generally not in the public interest.

36 For the beverage container return industry in Alberta , if Depots are not allowed to make a
37 reasonable Return then there may not be entrepreneurs who are willing to obtain a new permit
38 from the BCMB and open a new Depot, which would not be in the public interest. Anecdotally,
39 the DCA understands that there is significant competition for new Depot permits in urban

centres and an active re-sale market for existing Depots. However, the DCA also notes that in areas where return volumes are low Depots are closing, either temporarily or permanently.

The nature of the investment in utility assets has a bearing on the issue of ensuring reasonable profitability. Utility assets are generally fixed, sunk, and non-transferable. By this we mean that basically once the investment in assets is made by a utility, due to the nature of the assets, they cannot be transferred to any other useful purpose. By making investments in assets of this nature, utilities' investments must be protected from abnormally low returns because the assets cannot typically be redeployed elsewhere.

The beverage container return industry in Alberta has unique characteristics that are unlike those typically found in a utility. Each of the Depots is a stand-alone business, with some Owners (shareholders) owning multiple Depots. The quantum of capital employed by each Depot is an individual Owner's choice, with some Owners choosing to own assets and others choosing to lease, or in many cases, a combination of own and lease. Most Depot assets are not unique to the beverage container return industry in Alberta, unlike a typically utility most assets could be employed in other business (e.g. buildings, fork lifts, etc.). In addition, Depot Owners would not be expected to access funds from capital markets. These small businesses would be expected to fund capital assets through Owner's equity and conventional banking instruments (loans, mortgages, lines of credit, etc.).

Overall, the Depots operating within the beverage container return industry in Alberta are not as capital intensive as public utilities. This fact, coupled with the differences noted above, make the utilization of utility return on rate base models to the Depots operating within the beverage container return industry in Alberta a challenging proposition.

The next section reviews alternative Return approaches that could be used for the beverage container return industry in Alberta.

4.12.3 Return Options / Models

The DCA has identified four utility Return models that could be applied to the beverage container return industry in Alberta:

1. Comparable Earnings
2. Risk Premium
3. Discounted Cash Flow
4. Return Margin

4.12.3.1 Comparable Earnings

In the Comparable Earnings Model, high grade industrial companies are studied to determine the average rates of return they are earning on their invested capital. After adjustment are made for the relative riskiness of the comparable companies, that rate of return can then be applied to the Rate Base of the utility to determine an after-tax profit level.

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1 This model assumes that returns obtained from high-grade industrial companies should be
2 comparable to Returns that utilities should be able to generate (with adjustments for risk levels).
3 If they are not, utilities will not be able to raise capital to fund investment in infrastructure without
4 a loss of value to existing shareholders.

5 However, large utility corporations are clearly less risky than industrials, and the adjustments for
6 the relative risk levels are generally subjective and controversial. Typically, in times where the
7 economy is not performing well, utility rate of return experts will discount the Comparable
8 Earnings methodology due to the general state of the economy and the impact lower corporate
9 earnings have on the resulting rate of return. Of course, when the earnings of industrials are
10 high, the utility return experts attempt to place more relevance on the Comparable Earnings
11 methodology citing issues relating to the inability of the utility to attract capital given the high
12 returns currently obtainable in other investments.

13 In the bottle depot industry context, a Comparable Earnings study might look at the system as a
14 whole, and compare the profitability of similar sized service companies with \$50-75 million in
15 Revenue, and determine an equivalent level of earnings for the system. Alternatively, a study
16 could be undertaken of small service businesses with between \$20,000 and \$1.5 million in
17 Revenue to determine comparable profitability levels for those companies.

18 4.12.3.2 Equity Risk Premium

19 The Equity Risk Premium (ERP) Test estimates the cost of equity capital for utility companies
20 with respect to other publicly traded investment opportunities that are available to investors.
21 The test attempts to find the risk-adjusted "opportunity cost" for investing in the shares of utility
22 companies. This cost is based on the gross rate of return required by equity investors; i.e., the
23 rate of return required by equity investors before trade costs and taxes.

24 The Risk Premium methodology uses financial theory to attempt to determine an appropriate
25 rate of return on equity for utilities. The Risk Premium model uses a model called the Security
26 Market Line (SML) of the Capital Asset Pricing Model (CAPM), which suggests simply that a
27 stock's required rate of return is a linear function of its riskiness relative to the market's risk, the
28 return of the market, and the return on the risk-free asset.

29 The SML states that any investment's required Return is a function firstly of what "risk-free"
30 investments return. These are generally short-term government bonds, but in utility rate
31 hearings they typically use the 10-year government bond to reflect the long life of the utility
32 assets. The SML then considers the Return of the market as indicative of what the market
33 Return is for the market risk level, and then calculates the relative riskiness of the company
34 relative to the market represented by the stock's Beta (β). The formula looks like the following:

$$35 \quad ER(s) = ER(f) + \beta(ER(m) - ER(f))$$

36 Where:

37 $ER(s)$ = Expected return of the stock

38 $ER(f)$ = Expected return of the risk free asset

1 $ER_{(m)} =$ Expected return of the broader market

2 The Beta term in the above equation essentially ranks the stock's risk to that of the market,
3 where the market risk = 1, and a stock Beta of 1.2 implies that the stock is 20% more risky than
4 the market. The $ER_{(m)} - ER_{(f)}$ term is the risk differential between an investment in the market
5 and a risk free investment.

6 To determine a utility return, experts forecast the variables in the equation and determine a
7 recommendation for the Return. This percentage is then applied to the Rate Base to determine
8 utility profit.

9 In the bottle depot industry context, we do not believe this test to be particularly useful, as there
10 are no tradable bottle depot securities that could be used to determine depot riskiness relative
11 to the broader stock market.

12 4.12.3.3 Discounted Cash Flow

13 The Discounted Cash Flow (DCF) test employs historical and future estimates of dividend
14 growth rates for the market proxy, and with comparisons of the long-term return expectations of
15 buy-side and sell-side investment professionals for equities and bonds.

16 The required rate of return in the constant growth Dividend Discount Model (DDM) (or Gordon
17 model) is given by:

$$18 \quad k = \frac{D_1}{P_0} + g$$

19 where:

- 20 • k is the required rate of return
- 21 • D_1 is the expected dividend in the next period, or $D_0 (1 + g)$;
- 22 • P_0 is the current price or level of the stock or index; and
- 23 • g is the growth rate in dividends, which is assumed to be constant until the end of time.

24 In this version of the model, the growth rates in dividends, earnings, book value and share price
25 are all assumed to be equal.

26 In the two-stage DDM, dividends are assumed to grow at a fixed rate g_1 for an initial period
27 (herein deemed to be the first five years), and then to grow at a different fixed rate g_2 thereafter.
28 In this version of the DDM, the implied required rate of return is found by solving for k in:

$$29 \quad P_0 = \sum_{t=1}^5 \frac{D_0(1+g_1)^t}{(1+k)^t} + \left(\frac{D_6}{k-g_2} \right)$$

30 where:

$$31 \quad D_6 = D_0(1+g_1)^5(1+g_2)$$

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1 The implied equity risk premium (IERP) is then obtained by subtracting the current yield on long-
2 term government bonds from the estimate of k derived from the above models.

3 In the bottle depot industry context, this model could be used, presuming that dividend levels
4 and dividend growth rates could be determined. Unfortunately, this level of financial data was
5 not collected in the UCA documents, and it is expected that only a sub-set of Depots actually
6 provide Owner compensation in the form of dividends.

7 This model might be more appropriate to apply to the system as a whole, rather than to
8 individual Depots.

9 If we presumed the following:

10 Depots assets equal \$18.9 million (2004 FY As Reported)⁷⁴

11 100% earnings payout

12 2.5% earnings growth per year (estimated as average container volume growth rate less
13 average 5% inflation)

14 FY 2004 As Reported earnings of \$6.1 million at existing rates⁷⁵

15 The formula would be as follows:

16
$$k = \frac{\$6.1}{\$18.9} + 2.5\% = 32.2\% + 2.5\% = 34.7\%$$

17

18 Based on the 2005 UCAs As Reported:

19
$$k = \frac{\$5.1}{\$20.7} + 2.5\% = 24.63\% + 2.5\% = 27.1\%$$

20

21 The lack of capital assets makes the application of this model suspect and the results it
22 produces are likely not appropriate for the Alberta Depot industry. The DCA notes that with the
23 recommended adjustments to Rate Base the calculated required rate of return would be several
24 hundred percent.

25 4.12.3.4 Return Margin

26 The Return Margin methodology determines profit in cases generally where utility investment is
27 low or in cases where traditional rate of return methodologies would not yield an acceptable
28 result. The Return Margin is a percentage multiplier on costs where:

29
$$\text{Revenue} = \text{Operating Costs} \times (1 + \text{Return Margin } \%)$$

⁷⁴ Doc 01-026b, 2005 Phase I Report, Schedule 10, col b, line 17

⁷⁵ Doc 01-026b, 2005 Phase I Report, Schedule 1, col a, line 19

⁷⁶ Schedule 1, col a, line 19 divided by Schedule 10, col b, line 17

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In essence, the Return Margin is akin to the Comparable Earnings methodology, because in determining the Return Margin percentage, the experts study profit levels in other comparable industries to determine an appropriate Return level. Historically, when this methodology has been accepted in Alberta, there have been reasonably comparable businesses to obtain a reasonable estimate of Return.

In the context of the Alberta Bottle Depot industry, the Return Margin forecast for Cal 2005 from the 2005 Phase I report is roughly 7.7% before income tax. This is calculated by the following from our Phase I Report assuming Cal 2005 Total System amounts:

$$\text{Return Margin} = 1 - \frac{\text{Revenue}}{\text{Operating Costs}} = 1 - \frac{\$159.5 \text{ million}}{\$148.1 \text{ million}} = 7.7\%^{77}$$

If Revenue excludes Purchases:

$$\text{Return Margin} = 1 - \frac{\text{Revenue}}{\text{Operating Costs}} = 1 - \frac{\$54.4 \text{ million}}{\$43.0 \text{ million}} = 26.5\%^{78}$$

From this 2006 Phase I Report using Cal 2006 Total System amounts and current rates, the return margin is about 2.5%.

$$\text{Return Margin} = 1 - \frac{\text{Revenue}}{\text{Operating Costs}} = 1 - \frac{\$167.6 \text{ million}}{\$163.6 \text{ million}} = 2.5\%^{79}$$

If Revenue excludes Purchases:

$$\text{Return Margin} = 1 - \frac{\text{Revenue}}{\text{Operating Costs}} = 1 - \frac{\$58.8 \text{ million}}{\$54.8 \text{ million}} = 7.3\%^{80}$$

4.12.3.5 Return Options / Models Conclusions

The Comparable Earnings test, the Equity Risk Premium test, and the Discounted Cash Flow test are the primary methodologies used to determine a reasonable rate of return for utilities under regulation. In special circumstances, the Return Margin methodology has been employed.

The DCA is of the view that the Equity Risk Premium test is not appropriate for the Alberta Depot industry as there are no tradable comparable securities that could be utilized.

Similarly, the Discounted Cash Flow test requires an assumption regarding the current price or level of the stock or index. Using a Depot's asset base as a proxy is not appropriate given the

⁷⁷ From 2005 Phase I Report, Schedule 1, column g Cal 2005 Total System Forecast, Revenue = Revenue + Misc. Revenue, Operating Costs = Purchases + Total Operating Expenses. Revenues derived at current rates.

⁷⁸ From 2005 Phase I Report, Schedule 1, column g Cal 2005 Total System Forecast, Revenue = Total Margin, Operating Costs = Total Operating Expenses. Revenues derived at current rates.

⁷⁹ From 2006 Phase I Report, Schedule 1, column g Cal 2006 Total System Forecast, Revenue = Revenue + Misc. Revenue, Operating Costs = Purchases + Total Operating Expenses. Revenues derived at current rates.

⁸⁰ From 2006 Phase I Report, Schedule 1, column g Cal 2006 Total System Forecast, Revenue = Total Margin, Operating Costs = Total Operating Expenses. Revenues derived at current rates.

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1 concerns the DCA has with evaluating each Depots assets (or Rate Base), as noted in section
2 4.12.1 above.

3 The Comparable Earnings Model has some appeal if earnings data on a relevant sample of
4 similar companies could be found. The DCA is of the view that this approach has merit.

5 The DCA is of the view that the Return Margin methodology could also be applied to the Depot
6 industry in Alberta. In viewing the Alberta Depot industry as a regulated business with minimal
7 capital assets, the Return Margin methodology could be applicable similarly to its application to
8 other utility operations that are essentially service oriented.

9 **4.12.4 DCA Analysis**

10 The DCA attempted to determine if the Comparable Earnings Model and or the Return Margin
11 methodology could be applied to provide an appropriate Return amount to be included the 2006
12 Revenue Requirement for Alberta Depots.

13 The first step in testing the use of the Comparable Earnings Model is to find comparable
14 businesses of similar size and business risk where reliable financial information is available,
15 including profitability information.

16 Unfortunately, since most businesses of similar size to Alberta Depots are private, reliable
17 financial information is not readily available.

18 The DCA postulated that financial information may be available for franchise businesses that
19 could be comparable in size to Alberta Depots. In addition, some franchise businesses are
20 service related and could provide similar business risks to Alberta Depots. The DCA contracted
21 with FRANdata,⁸¹ a US based organization that sells information related to franchises.
22 FRANdata was tasked with searching through their databases for companies in service related
23 industries that are offering franchises for sale to franchisees.⁸² Further, FRANdata was to
24 isolate franchisors that provided anticipated Returns for potential franchises. The DCA was
25 concerned that franchisors would publish optimistic profit levels for their franchise businesses,
26 notwithstanding potential lawsuits from disgruntled franchisees.

27 To test the feasibility of this premise, the DCA retained FRANdata to perform an initial study to
28 determine the type of data available and expected results before committing to a larger study.
29 The results show that an approximate EBITDAR (earnings before interest taxes, depreciation,
30 amortization and real estate) could be in the range of 32% for the five service base franchises
31 investigated.⁸³

32 The DCA is of the view that this information is not of a quality that could be solely relied upon to
33 determine a level of Return for the Alberta Depot industry. The Operating Contribution listed

⁸¹ www.frandata.com

⁸² The DCA discussed its requirements with FRANdata verbally and requested a proposal from FRANdata.
See Doc 10-010a.

⁸³ Doc 10-010

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1 excludes several key cost elements, including “real estate costs (rent, interest, financing),
2 advertising, depreciation of property, taxes, and initial fees or organizational costs.” For Alberta
3 Depots, these excluded elements are significant cost components.

4 The DCA is of the view that based on its research and the preliminary study performed by
5 FRANData, including discussions with the FRANData researchers, that compatible financial
6 information for franchise operations that could be of similar size and comparable operations to
7 Alberta Depots is not readily available.

8 The Return Margin methodology has several regulatory precedents in Alberta. During the first
9 six years of electricity retail deregulation the Alberta government mandated that distribution
10 utilities (Direct Energy, ENMAX, EPCOR and ATCO Electric) provide retailing services to
11 residential and small commercial customers who elected to not procure electricity from a
12 competitive supplier (called default supply, or Regulated Rate Option (RRO)). In essence, the
13 regulated utilities were by legislation required to provide an equivalent to non-regulated
14 (competitive) service.

15 These distribution utilities were required to file applications with the Alberta Energy and Utilities
16 Board (AEUB) in order to collect their forecast costs for providing these services. Some of
17 these distribution utilities proposed a return margin methodology as the required default supply
18 offerings were service based and did not require the deployment of significant capital assets.⁸⁴

19 Since 2000 the AEUB has approved numerous utility applications and negotiated settlements
20 with Return based on return margins.⁸⁵ While the DCA has only limited knowledge of these
21 proceedings, it is the DCA’s understanding that the AEUB has approved return margins in a
22 range of about 1% to 7% for both retail services and the provision of electric energy. The return
23 margin approved was a function of the risk the utility was under and the services provided. In
24 some instances, the return margin amount was set via confidential negotiated settlements.

25 The DCA is of the view that the quantum of the return margins awarded to Alberta electric utility
26 distribution companies is not germane to the beverage container return industry in Alberta.
27 Depots are much smaller entities with different risk profiles from distribution utilities providing a
28 legislated service.

29 However, the DCA is of the view that the return margin methodology could be used to arrive at a
30 determination of a reasonable profit levels for the bottle depot industry. The fact that a well-
31 respected regulator has employed this methodology over several years to determine Return
32 levels for regulated service providers is a strong precedent that the BCMB can rely upon for
33 the determination of a Return amount for Alberta Depots. In summary, the DCA is of the view

⁸⁴ Limited assets were required (e.g. utility billing systems); however, the return on these limited assets was deemed by the some utilities to be insufficient Return for the services provided.

⁸⁵ For example, AEUB Decisions 2000-89, 2001-087, 2001-112, 2001-113, 2002-052, 2002-075, 2002-076, 2002-112, 2003-031, 2003-074, 2003-086, 2003-087, 2003-095, 2004-037, 2004-040, 2004-065, 2004-041, 2004-074, 2005-004, 2005-145, 2006-001, 2006-043 - available at http://www.eub.ca/portal/server.pt/gateway/PTARGS_0_0_268_228_0_43/http%3B/extcontent%3B80/publish_edcontent/publish/eub_home/industry_zone/decisions/decisions_utility_issues/

1 that the return margin methodology meets the fair return standard posed by Madame Justice
2 Bielby.

3 Having made this determination, the DCA then addressed the appropriate quantum of a return
4 margin for Alberta Depots. The DCA notes that ENMAX and Direct Energy (DERS) retained Dr.
5 Charles J. Cicchetti of Pacific Economics Group, LLC (PEG) to undertake a study of return
6 margins from non-regulated companies in order to provide a benchmark for an appropriate
7 return margin for the distribution utilities. Direct Energy filed Dr. Cicchetti's evidence with the
8 AEUB under application 1467065.⁸⁶ The Dr. Cicchetti's evidence stated in part:

9 With the restructuring of retail energy services in Alberta, new regulatory approaches are
10 necessary to fill the void left by the inapplicability of original cost less depreciation cost-
11 of-service regulation for RRO providers. Two factors help make this task more
12 manageable. First, there is historical precedent for how to regulate utilities without using
13 Rate Base as the cornerstone. What sometimes seems to be forgotten is that Rate
14 Base measured in original cost dollars less accumulated depreciation as set under
15 regulation has not always been the centerpiece of utility regulation and is not the only
16 way to regulate a utility. Managing regulatory change is not new. In fact, the emergence
17 of Rate Base was itself the result of a significant paradigm shift in regulation.

18 Alberta has experienced just such a paradigm shift through legislative changes
19 governing the RRO services provided by DERS. My understanding is that the new
20 legislation requires the Alberta Energy and Utilities Board (Board) to permit the RRO
21 providers to:

- 22 1. approve for recovery, as part of an RRO provider's prudent costs and
23 expenses, an explicit "risk margin" that takes into account the inherent cost of
24 financial risks associated with providing RRO service; and
- 25 2. establish a "reasonable return" for RRO providers.

26 The purpose of my evidence is to quantify a reasonable Return (or retail margin) that
27 would be added to both the direct purchase and other operating costs of services sold by
28 RRO providers. The inherent risk of supply and other anticipated risks are intended to
29 be included in the authorized cost recovery, which is equivalent to the cost of goods
30 sold, just as unregulated firms typically attempt to do. Retail margins are added to the
31 cost of goods sold to reflect the fact that unregulated or competitive businesses do not
32 operate to achieve a break-even result. Instead, unregulated firms mark up the cost of
33 goods and services sold to secure a Return to the enterprise and to be compensated for
34 skills, expertise, and entrepreneurial talent.

35 Competitive retail firms internalize various risks in the purchase price and supply
36 contracts that they utilize to secure the wholesale goods they sell at retail. For example,
37 in a prior hearing, the Board permitted EEC to recover explicit risks in the authorized
38 cost of service, which is virtually identical to the "cost of goods sold" concept that
39 unregulated firms use.

40 No competitive business expects or plans to operate at a zero mark up (*i.e.*, no retail
41 margin). To a considerable degree, unregulated firms internalize many elements of risk
42 in the cost of goods sold. There is, nonetheless, an additional mark up or margin to
43 reflect a combination of enterprise value, return on entrepreneurial or successful

⁸⁶ Doc 10-015 Direct Energy AEUB Application

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1 business activity, and any unanticipated risks or uncertainty that have not been fully
2 internalized in the cost of goods sold. The purpose of my evidence is to analyze
3 unregulated firms in the retail/services industries that have some significant degree of
4 similarity to regulated energy service providers.⁸⁷

5 Dr. Cicchetti's evidence suggests that a Turnover Ratio (TOR) for traditional capital intensive
6 utilities has a value of 0.3 to 0.6, whereas entities providing primarily a service have a much
7 higher TOR at 2.0 or more.⁸⁸

8 Based on the 2004 UCA As Reported values, the Alberta Depots have a TOR of about 6.4.

$$\text{TOR} = \frac{\text{Total Annual Sales}}{\text{Total Assets}} = \frac{\$120.7 \text{ million}}{\$18.9 \text{ million}} = 6.4^{89}$$

9 Based on the 2005 UCA As Reported values, the Alberta Depots have a TOR of about 6.1.

$$\text{TOR} = \frac{\text{Total Annual Sales}}{\text{Total Assets}} = \frac{\$126.5 \text{ million}}{\$20.7 \text{ million}} = 6.1^{90}$$

10 As Dr. Cicchetti stated in his evidence, a TOR greater than 2.0 signifies a non-capital intensive
11 industry. This supports the DCA's determination that Return on Rate Base is not the
12 appropriate regulatory Return model for Alberta Depots.

13 In their analysis for Direct Energy, PEG performed a study of US based companies using
14 *ValueLine* data to determine return margins for various types of service related industries. The
15 results show a return margin (or retail margin) of about 4% to 5% after tax.⁹¹ Dr. Cicchetti stated
16 in his DERS evidence:

17 The retail margins shown in this data suggest a 2.0% to 6.0% range for retail margins,
18 with a mid-point of about 4%. The Board has typically recognized that specific
19 components of risks should be quantified and explicitly recovered in tariffs based on
20 specific cost-of-service recovery. This approach eliminates anticipated risk. Other
21 industries do similar things to internalize risks. The high end of the retail range (4.0% to
22 6.0%) may be too high for regulated energy service providers because not all firms can
23 internalize risks to the extent the Board would likely permit. I conclude that the current
24 regulatory paradigm in Alberta suggests a reasonable range for regulated energy service
25 providers' retail margin in the 2.0% to 4.0% range, with 2.0% as the floor and an
26 authorized midpoint margin of 3%.

27 To the extent that RRO providers cannot fully or reasonably internalize their anticipated
28 risks, I would urge the Board to increase the retail margin to more than the 3% I propose
29 under current conditions. If the Board subsequently reduces explicit adders for risk

⁸⁷ Doc 10-016

⁸⁸ Doc 10-016, p. 16-17

⁸⁹ 2005 Phase I Report, Total Annual Revenue = Revenue + Misc. Revenue = \$120.3 + \$0.4 = \$120.7 million
(Schedule 1, col a). Total As Reported Assets = \$18.9 million, Schedule 10, line 25.

⁹⁰ 2006 Phase I Report, Total Annual Revenue = Revenue + Misc. Revenue = \$126.1 + \$0.4 = \$126.5 million
(Schedule 1, col a). Total As Reported Assets = \$20.7 million, Schedule 10, line 25.

⁹¹ Doc 10-016, p. 18-22

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1 recovery or causes increased DERS risk through policy changes, a higher retail margin
2 would be necessary. Nevertheless, I propose that a 3% authorized margin be added to
3 DERS' cost of goods sold, including the approved cost for explicit risk recovery, as the
4 retail margin necessary to recover reasonable profit expectations and any remaining,
5 otherwise unanticipated and not internalized risks due to regulation, politics, inherent
6 business risks, and all sorts of residual market uncertainty.

7 The EUB issued its Decision on November 1, 2006 regarding the application made by Direct
8 Energy that utilized the Dr. Cicchetti's evidence.⁹² From this decision it is clear that the EUB
9 relied on the comparable approach recommended by Dr. Cicchetti to determine a return margin
10 for Direct Energy, as noted at page 47 of Decision 2007-107:

11 The Board notes the description provided by Dr. Cicchetti of the process he utilized in
12 coming to his recommendations, a process which weighed and assessed the various
13 data and information before him and employed his expertise and judgement in arriving at
14 a reasonable outcome. The Board has employed a similar process in its deliberations in
15 conjunction with the parameters imposed by the legislation.

16 The DCA is of the view that the comparative approach taken by Dr. Cicchetti's to determine an
17 appropriate return margin has merit. In order to substantiate the DCA's determination, the DCA
18 retained Dr. Cicchetti and Colin Long of PEG to perform a high level review of the Alberta
19 beverage container return industry and provide its views on an appropriate return margin level.
20 The instructions the DCA provided to PEG were as follows:

21 Please consider an initial assignment of using the work and analysis you did for Direct &
22 ENMAX to prepare for us a memo that could discuss:

- 23 • Use of comparables for setting return margins in regulated industries
- 24 • The work you did for Direct & ENMAX (and potentially others)
- 25 • Applicability of your research (esp. the Stats Can analysis) to the Alberta Bottle
26 Depot industry (small vs. large companies)
- 27 • Review of the initial franchise information we are buying
- 28 • Your initial thoughts on the return margin range⁹³

29 In their memo⁹⁴ to the DCA, PEG used both industry level and individual firms for their
30 *ValueLine* comparables. PEG also researched Statistics Canada information and concluded
31 that a reasonable return margin for Alberta Depots would be 4.64% and 4.81% (average after
32 tax). Excluding grocery stores and medical services, the average margin was 3.83% to 5%.
33 While PEG recommended grossing up to a before tax value using the large corporate tax rate of
34 47%, the DCA is of the view that the small corporation tax rate (for taxable income up to
35 \$300,000) of 26.52%⁹⁵ is more appropriate. This gives an average return margin of 5.2% to
36 6.8% before tax.⁹⁶

⁹² Doc 10-018

⁹³ Extract from e-mail from DCA to Pacific Economics dated August 28, 2006

⁹⁴ Doc 10-017

⁹⁵ The following are the 2005 tax rates for Federal and Provincial taxes, with references to the Income Tax Act and Alberta Finance:

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- 1 As noted in PEG's memo, the risks firms face should be taken into consideration in setting the
- 2 return margin. The DCA has attempted to compare the risks of the *ValueLine* and the CANSIM
- 3 data PEG used to the risks of the Alberta Depots:

Risk	Alberta Depots	ValueLine Type Companies
Revenue – Price Certainty	Prices fixed by BCMB – little risk	Sales prices subject to market and economic forces – higher risk
Revenue – Volume Certainty	Some protection from competitors via geographic based BCMB permits; some beverage containers not as susceptible to economic conditions (e.g. juice) – lower risk	Subject to competition and economic conditions – higher risk
Collections	Manufacturers obligated to pay for all containers shipped – no risk	Some products or services may not be sold – higher risk
Bad debt / theft / shrinkage	Nature of business (cash Deposit refunds) makes Depots susceptible to theft / fraud – higher risk Some containers are breakable – some risk of loss – medium risk Shrinkage can occur from low count rates – medium risk	Modern point of sale systems have reduced risk of shrinkage & theft, however, retail / services business subject to both employee and Customer theft – lower risk
Labour	Difficult to hire and maintain relatively unskilled labour force, especially in good economic times – medium risk	Retail service businesses also find it difficult to hire and maintain relatively unskilled labour force, especially in good economic times, however, these businesses likely offer a better working environment – lower risk

- 4 Based on this high level risk assessment, the DCA is of the view that Depots have significantly
- 5 lower risk related to revenue certainty, primarily due to the pass through of Purchases
- 6 (Customer Deposit refunds) from the Manufactures to Customers and the legislated requirement
- 7 for Manufacturers to pay Depots the Handling Commissions. The DCA does note that Depots
- 8 have some risk in the management of the cash Purchases (e.g. theft). Further, the DCA is of
- 9 the view that Depots have a legislated obligation to return Deposits to Customers and that
- 10 Depots should receive a Return for the provision of this service.
- 11 With respect to Purchases, the DCA is of the view that the return margin should be at the low
- 12 end of the spectrum for comparable businesses. If the only task a Depot had was to return

		Reference
Federal Part 1 Tax	38.00%	www.cra-arc.gc.ca/E/pgb/tf/t2/t2-04e.pdf (p.7)
Add: Corporate Surtax (4% of Part 1)	1.52%	www.cra-arc.gc.ca/E/pub/tg/t4012/t4012-04e.pdf (p.56)
	39.52%	
Less: Small Business deduction	-16.00%	www.cra-arc.gc.ca/E/pgb/tf/t2/t2-04e.pdf (p.4)
Effective Federal Small Business rate	23.52%	
Alberta Small Business rate	3.00%	www.finance.gov.ab.ca/publications/tax_rebates/corporate/overview.html
Combined Small Business rate	26.52%	

⁹⁶ return margin before tax = return margin after tax / (1 - tax rate)

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1 Deposit refunds to Customers, the operation would be a very low risk business. In reviewing
2 the *ValueLine* data PEG used, the DCA notes that Grocery Stores have the lowest after tax
3 return margin at about 1.7%.⁹⁷ From the CANSIM data, there are a few retail operations that
4 have sales margins under 3% (New Car Dealers, Vehicle Parts & Convenience and Specialty
5 Food Stores).⁹⁸ The DCA is of the view that each of these comparable operations would have a
6 greater operational risk than the return of Deposit refunds to Customers portion of a Depot's
7 operation.

8 The DCA is of the view that a return margin after tax of 1.0% (return margin before tax of
9 1.36%) on Purchases will provide an appropriate Return for Depot operators to fulfill their
10 legislated obligations to return Deposits refunds to Customers.

11 With respect to the collection, sorting and shipping aspects a Depots business, the DCA is of
12 the view that the risks are much higher and are is or slightly more risky than the comparable
13 *ValueLine* and CANSIM companies referenced in PEG's evidence.

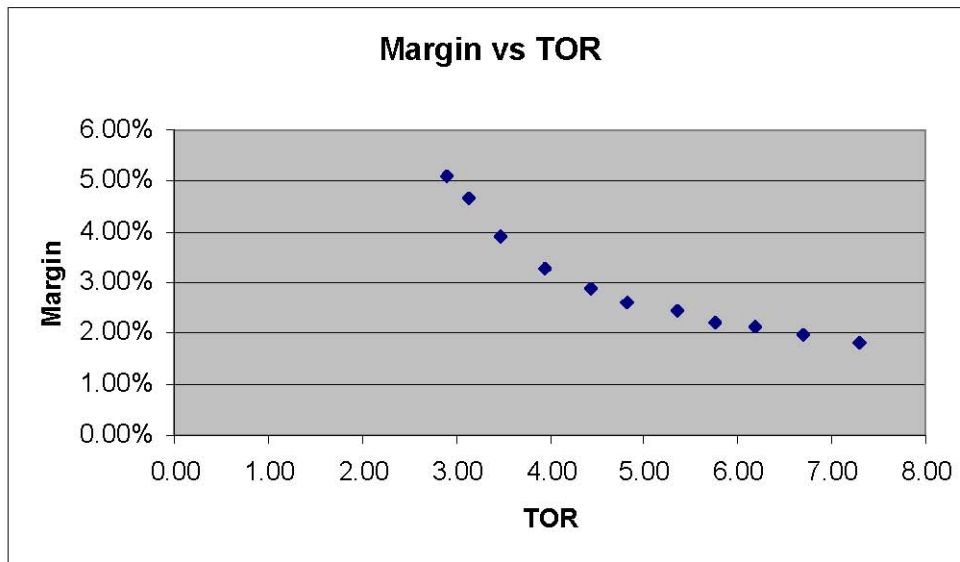
14 However, as noted earlier in this report, the DCA has determined the collection related costs
15 should be included in the 2006 Revenue Requirement. The DCA is of the view that allowing all
16 collection costs into the 2006 Revenue Requirement reduces Depot risks and affords Depots
17 the opportunity to collect containers from outside the Depot to secure additional revenue. The
18 incremental containers collected from outside the Depot may have a higher margin than the
19 base volume of containers that are brought to the Depots by Customers.

20 The DCA has relied heavily on the PEG's reports and recommends a return margin of 4.0%
21 after tax for the operational portion of a Depot's business. The DCA has used the lower end of
22 "the average margin range between 3.83% and 5.0%", with the two industry outliers (grocery
23 stores and medical services) removed.

24 The DCA notes that the EUB determined that there is an inverse relationship between TOR and
25 margin as noted on page 23 of Decision 2007-107:

⁹⁷ Doc 10-017, Tables 2 & 3, p. 4 & 5

⁹⁸ Doc 10-017, Tables 4, p. 6



1 The DCA is of the view that the EUB's determination is consistent with the DCA's determination
 2 that the return margin related to purchases should be lower than the return margin related to
 3 remainder of the Depot's operation.

4 4.12.4.1 Summary of DCA Analysis

5 The DCA recommends the following with respect to the inclusion of a fair return in the 2006
 6 Revenue Requirement for Alberta Depots:

- 7 1. The application of a Return Margin is a proven regulatory precedent that meets the fair
 8 return standard
- 9 2. Utilization of comparable non-regulated businesses as the basis for determining an
 10 appropriate return margin has received regulatory approval and can be used for the
 11 beverage container return industry in Alberta
- 12 3. The return margin for the portion of the Alberta Depot's revenue related to Purchases
 13 should attract a Return based on a return margin of 1% after tax (1.36% before tax).
- 14 4. The return margin for the portion of the Alberta Depot's Handling Commission revenue
 15 should attract a Return based on a return margin of 4.0% after tax (5.44% before tax).

16 For the derivation of the Return related to Purchases:

17 $(1 + \text{return margin}) \times \text{operating costs} = \text{revenue}$

18 $(1 + \text{RM}_P) \times \text{Purchases} = \text{Revenue Requirement related to purchase}$

19 $(1 + \text{RM}_P) \times \text{Purchases} = \text{Purchases} + \text{Return}_P$

20 $\text{Return}_P = \text{RM}_P \times \text{Purchases}$

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1 Where P denotes Purchases. Therefore, the fair return related to Depot Purchases is equal to
2 the return margin related to Purchases (1.36% before tax) times the quantum of Purchases.
3 Please see Schedule 11, line 17.

4 For the derivation of the Return related to Depot operations:

5 $(1 + \text{return margin}) \times \text{operating costs} = \text{revenue}$

6 $(1 + RM_O) \times \text{operating costs} = \text{Revenue Requirement related to operations}$

7 $(1 + RM_O) \times \text{operating expenses} = \text{Handling Commission revenues} - \text{Miscellaneous}$
8 $\text{Revenue} + \text{Return}_O$

9 $(1 + RM_O) \times \text{operating expenses} = \text{operating expenses} + \text{Return}_O$

10 $\text{Return}_O = RM_O \times \text{operating expenses}$

11 Where O denotes operations. Therefore, the fair return related to Depot operations is equal to
12 the return margin related to operations (5.44% before tax) times the total operating expenses.
13 Please see Schedule 11, line 19.

14 The DCA recommends that the 2006 Revenue Requirement be determined as Total Operating
15 Expenses less Miscellaneous Revenue plus Return plus Income Tax. Since the costs to
16 produce the Miscellaneous Revenue are included in the Total Operating Expenses, the DCA is
17 of the view that Miscellaneous Revenue should be deducted in the determination of the Revenue
18 Requirement. From Schedule 11, Appendix 1 this equates to a 2006 Revenue Requirement of
19 \$59.2 million.

20 4.12.5 Income Tax

21 In our income tax calculation we assume that all Depots are taxable, however 15 Depots
22 reported on their 2005 UCA that their operations are Non-Profit, representing approximately 130
23 million returned containers (about 10% of Study System volume).

24 Regulatory precedent is that if a utility is not taxable (Non-Profit), then income tax costs should
25 not normally be included in the Revenue Requirement to be paid by Customers. However, in
26 this instance, we do not believe that there exists a fair mechanism to reflect the Non-Profit
27 nature of these Depots' different cost structure due to their non-taxability.

28 If we take into consideration the Non-Profit Depots' tax-exempt status in the calculation of Study
29 System income tax costs, the result will be a reduction in Study System tax costs and an
30 increase in Study System net income. The result of this will be slightly lower per unit net income
31 for all taxable Depots (due to higher actual cash taxes), and only a small reduction in net
32 income for all Non-Profit Depots. Alternatively, the Handling Commission derivation could

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1 assume that all Depots are taxable, and the Non-Profit Depots would then directly refund a
2 deemed income tax cost to Manufacturers directly.⁹⁹

3 While the second option can be implemented, we suspect that this may not be desirable from a
4 social policy perspective. The DCA recommends that all Non-Profit Depots be treated as if they
5 were taxable. In essence, the recommended 2006 Revenue Requirement includes deemed
6 income taxes for Non-Profit Depots. We have addressed Non-Profit operations in greater detail
7 in Section 4.13.

8 The DCA understands that the non-taxability of Depot operations not-for-profit organizations is
9 under review. Pending legislation will likely require not-for-profit Depots to place their for-profit
10 Depot operations into a separate taxable entity. Failure to do so could result in all the not-for-
11 profit Revenues becoming taxable. Many Non-Profit Depots are a division of a larger charity
12 organization. It is anticipated that not-for-profit organizations with Depot operations will be
13 required to re-structure and to have the Depot operations in a separate, taxable entity
14 (corporation). Given these developments, the DCA believes that treating all Depots as taxable
15 for the 2006 Revenue Requirement is appropriate.

16 A number of small Depots are sole proprietorships where the entire earnings of the Depot are
17 taxed directly in the hands of the Owner as personal income. In this case the sole proprietor
18 avoids the taxation of earnings at the corporate level. We had considered whether or not sole
19 proprietorships should receive a different deemed income tax rate on this basis.¹⁰⁰ We believe it
20 is reasonable to treat these Depots as standard corporations for ratemaking purposes, and
21 recommend no further adjustments.

22 Finally, when calculating income taxes at a system level, the DCA has assumed that all Depots
23 are taxed at the lower Canadian Controlled Private Corporation (CCPC) rate, when some
24 Depots in fact have net incomes higher than the CCPC \$300,000 threshold. This could
25 especially be true for Multi-Business Depots where the Depot operations are a small component
26 of a much larger corporation.

27 Taxable income above \$300,000 attracts a higher income tax rate. Where the DCA has
28 calculated income tax on a Depot basis, the DCA has used the higher corporate tax rate for net
29 income (taxable income) above \$300,000 per year.

⁹⁹ This concept has a precedent in utility regulation. Non-taxable utilities are in some instances required to make what is referred to as a Payment In Lieu Of Taxes (PILOT). The PILOT is required to address competitive issues when a non-taxable entity competes with a taxable one. The PILOT is a fee structured in a similar manner to the taxes that would have been payable if the non-taxable entity was taxable. The PILOT payment is typically returned to Customers in a manner that does not influence competitive markets. In the case of the Alberta beverage container return industry, a refund to Manufacturers, who fund the system, may be an appropriate mechanism.

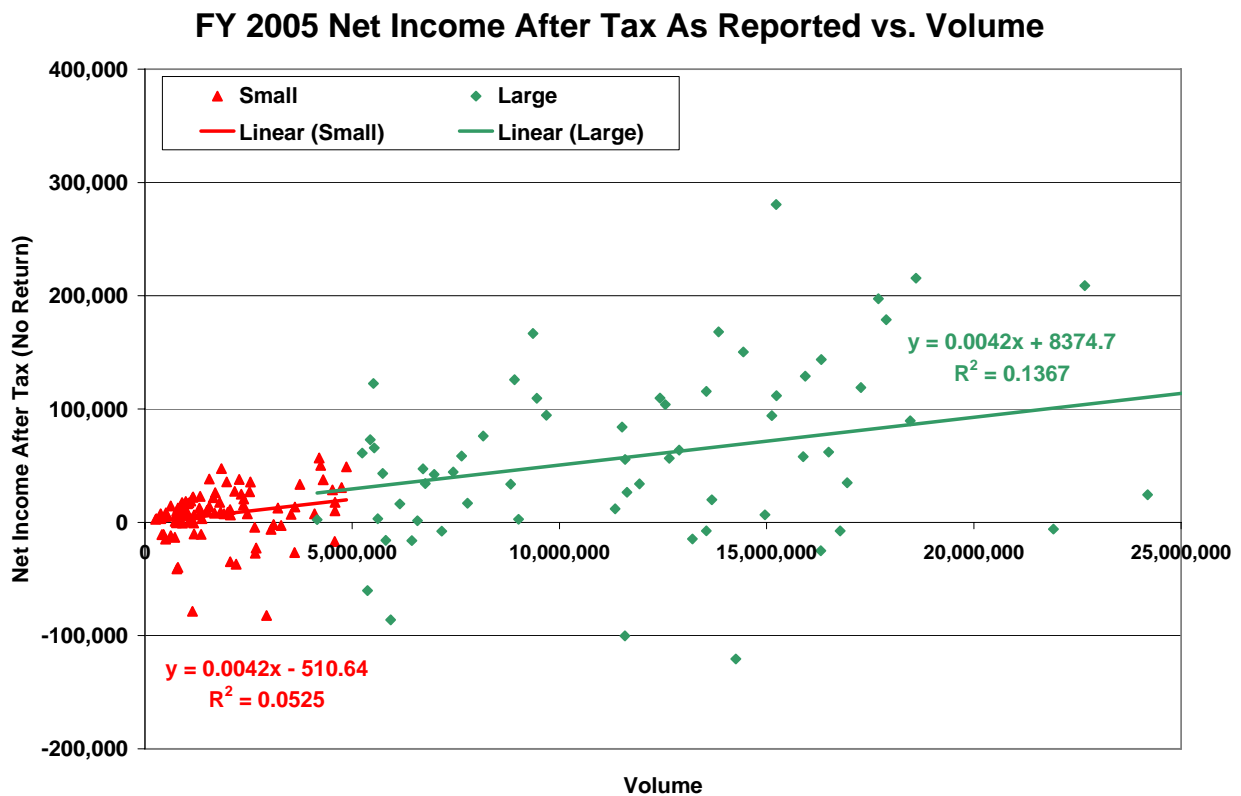
¹⁰⁰ We consider that the alternatives to address this problem would be either:

1. Deemed taxation at the personal rate to reflect the rate actually paid (which will vary depending on the level of personal taxable income),
2. Deemed taxation at 0% to reflect that employee income taxes are not a direct system cost, and
3. Deemed taxation at the relevant corporate tax rate.

4.12.6 Summary of Net Income After Tax – 2005 FY As Reported

The calculated FY 2005 EBT As Reported for the Study System is approximately \$7.3 million, or 0.68¢/container, based on revenue derived from current Handling Commissions and Deposit levels. We have assumed an income tax rate of 26.52% for income below \$300,000, and income above \$300,000 was taxed at the normal corporate rate of 39.52%. Calculated income tax amounts to \$2.2 million, or approximately 0.20¢/container. Net income reported over the Study System is then \$5.1 million, or 0.47¢/container.

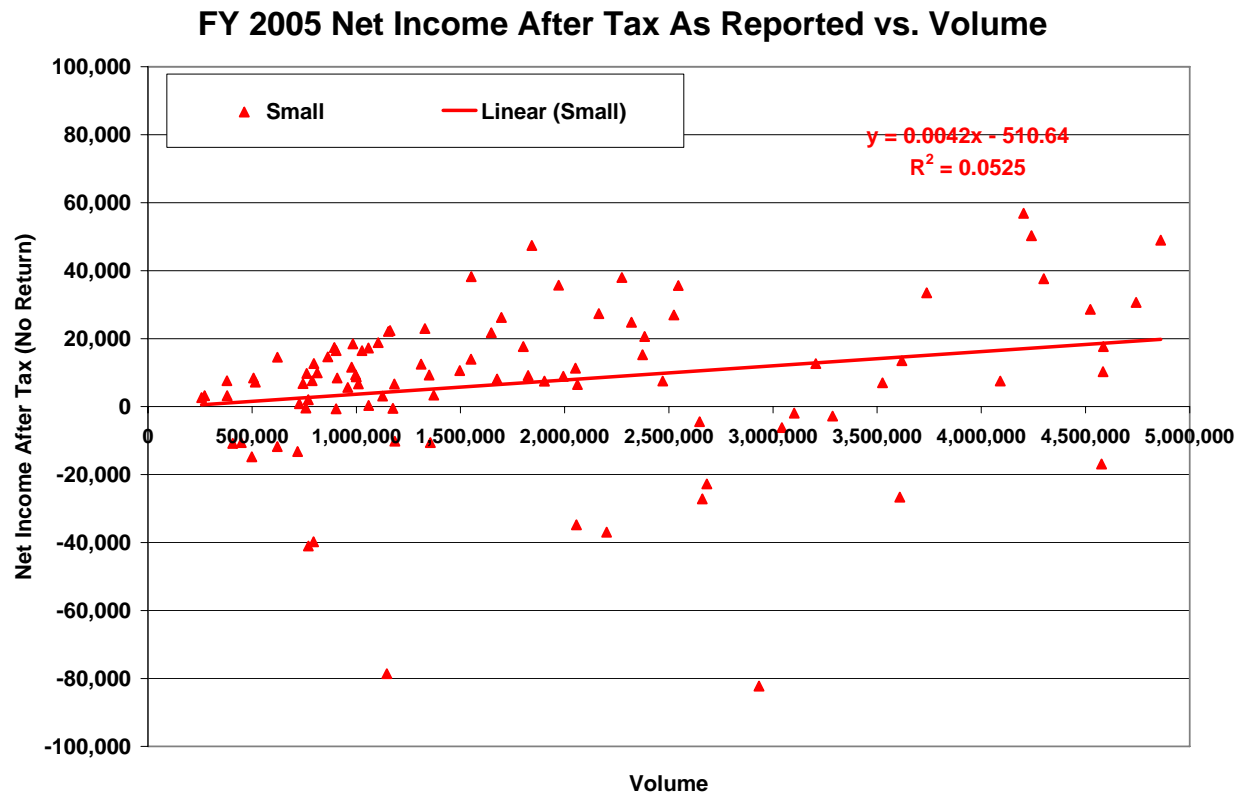
The following chart compares net income after tax As Reported to volume:



The primary source of variability in the above results by Depot arises from the following variables:

1. Whether the building is owned (and for how long the building has been owned), or if the premises are leased.
2. Depot operational efficiency
3. Whether Owners' compensation is paid as a direct expense or retained in the business as higher earnings
4. Return volumes

- 1 We observe that a number of Depots are currently unprofitable – particularly Small Depots.



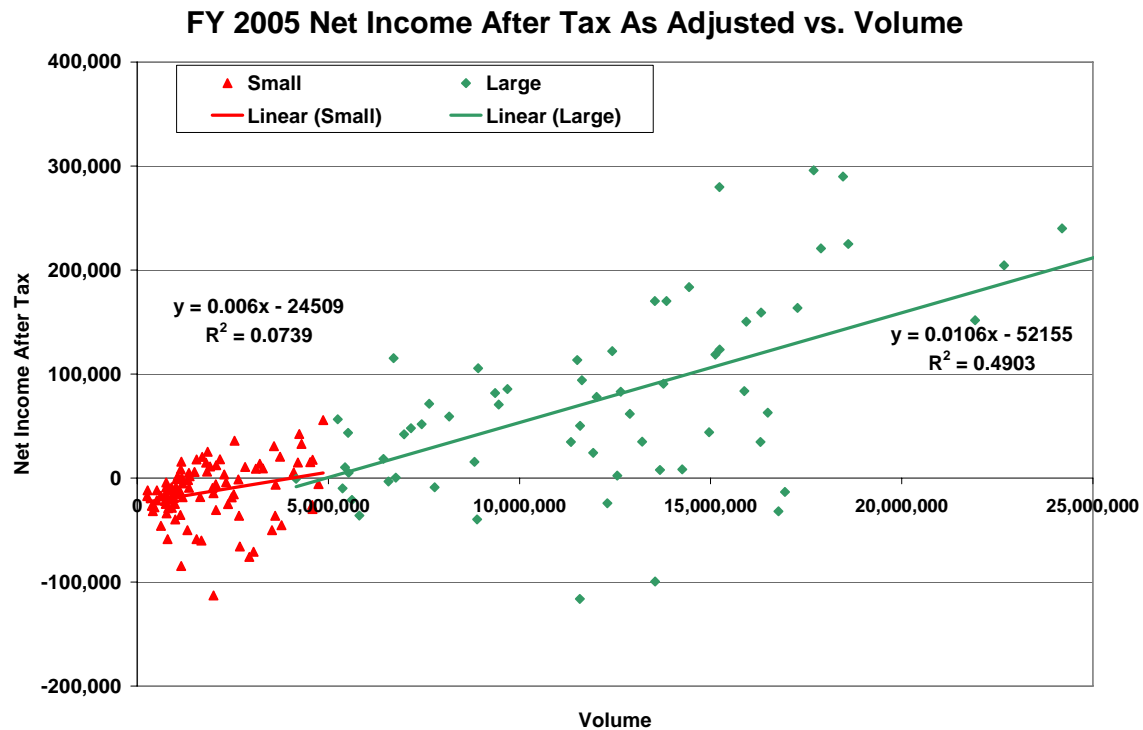
- 2 This is a concern, as we believe that a healthy industry would not experience this phenomenon.
- 3 It should be noted that for many of these Small Depots, the Owner's labour costs have not been
- 4 reported, either due to inadequate profits to pay the Owner a salary or the Owner is a sole
- 5 proprietor and any Owner compensation was not reported on the 2005 UCA.

- 6 Please also note that the above charts do not include a Return component.

7 **4.12.7 Summary of Net Income After Tax – 2005 FY As Adjusted**

- 8 The calculated FY 2005 EBT As Adjusted for the Study System is approximately \$7.5 million, or
- 9 0.68¢/container, based on revenue derived from current Handling Commissions and Deposit
- 10 levels. We have assumed an income tax rate of 26.52% for income below \$300,000, and the
- 11 normal corporate rate of 39.52% on taxable income above \$300,000. Calculated income tax
- 12 amounts to \$2.7 million, or approximately 0.24¢/container. Note that the total income tax from
- 13 As Reported to As Adjusted increases due the DCA adjustments that make some Large Depots
- 14 more profitable. Net income reported over the Study System is then \$4.9 million, or
- 15 0.44¢/container.

- 16 The following chart compares net income As Adjusted to volume:



1 The DCA notes that with the adjustments made, more Small Depots are unprofitable and more
2 Large Depots become more profitable. This is thought to be primarily due to:

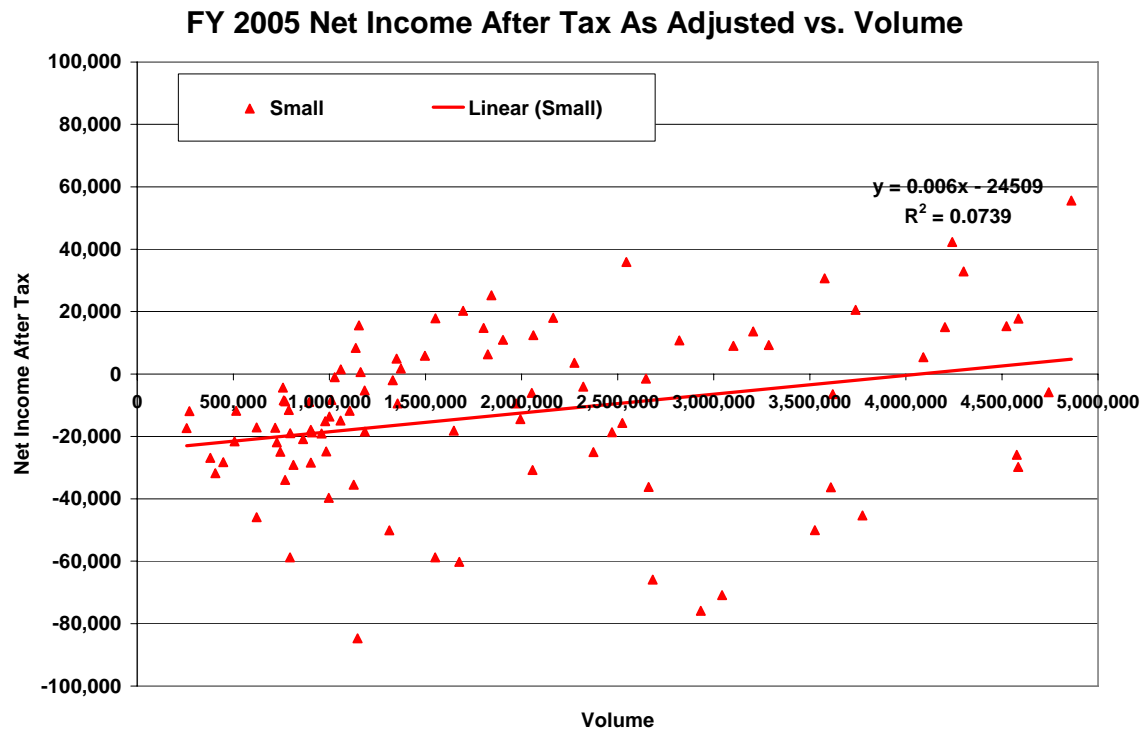
- 3 1. Recognizing adequate compensation for Small Owners via deemed managerial wage
4 rate.
- 5 2. Removing reported Owner costs for Large Depots that, in the DCA's view, are not costs
6 related to operating the Depot, but rather compensation to Owners.
- 7 3. Utilization of a deemed lease rate and deemed building size for all Depots changes the
8 profitability for some Depots. For example, a Depot may in actuality have a high lease
9 rate due to the actual location, whereas the DCA has assumed an average deemed
10 lease rate based on geographic location.

11 These observations are significant because the profitability of the industry as a whole when
12 compared to individual Depot profitability depends on whether or not the Depot is, to a large
13 extent, a high or low volume Depot. Higher-volume Depots have above-average profitability,
14 and lower-volume Depots have below-average profitability. In fact, on average, Small Depots
15 are generally unprofitable ventures (total Small Depot As Adjusted Net Income is \$1.2 million
16 loss).

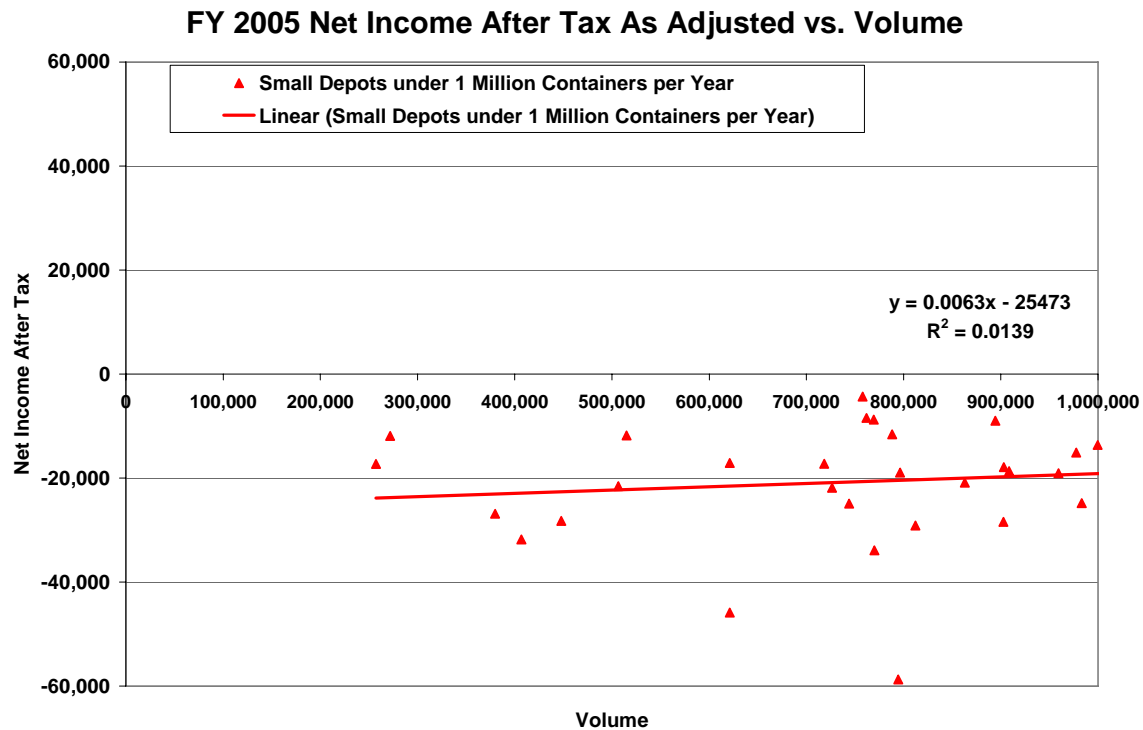
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- 1 Of particular concern is that no Depot with an annual volume of under 1 million containers is
- 2 profitable.



1 Again, please also note that the above charts do not include a Return component.

2 **4.13 SUMMARY OF 2005 UCA REPORTED AND ADJUSTED COSTS**

3 Appendix I contains schedules of all reported and adjusted costs. Schedule 1-a contains a
4 summary of adjustments made by the DCA.

5 The net impact of the DCA's recommended As Reported to As Adjusted adjustments is a 3.2%
6 increase in Revenue and a 3.1% increase in Total Operating Cost, which results in a 4.1%
7 decrease in Net Income After Tax. More importantly, the adjustments made to Labour and
8 Building costs, primarily, results in a reduction of Small Depot Net Income After Tax of almost
9 \$2 million (from \$0.7 million profit to \$1.2 million loss), whereas Large Depots Net Income After
10 Tax increases by \$1.7 million (from \$4.4 million to \$6.1 million).

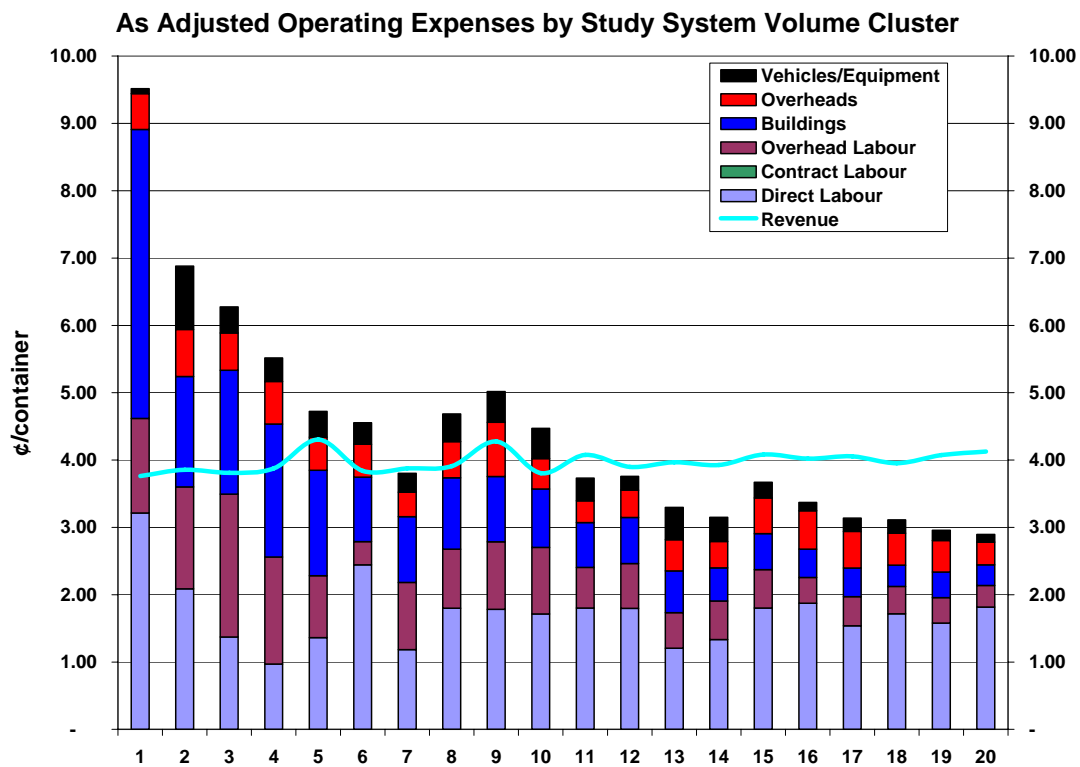
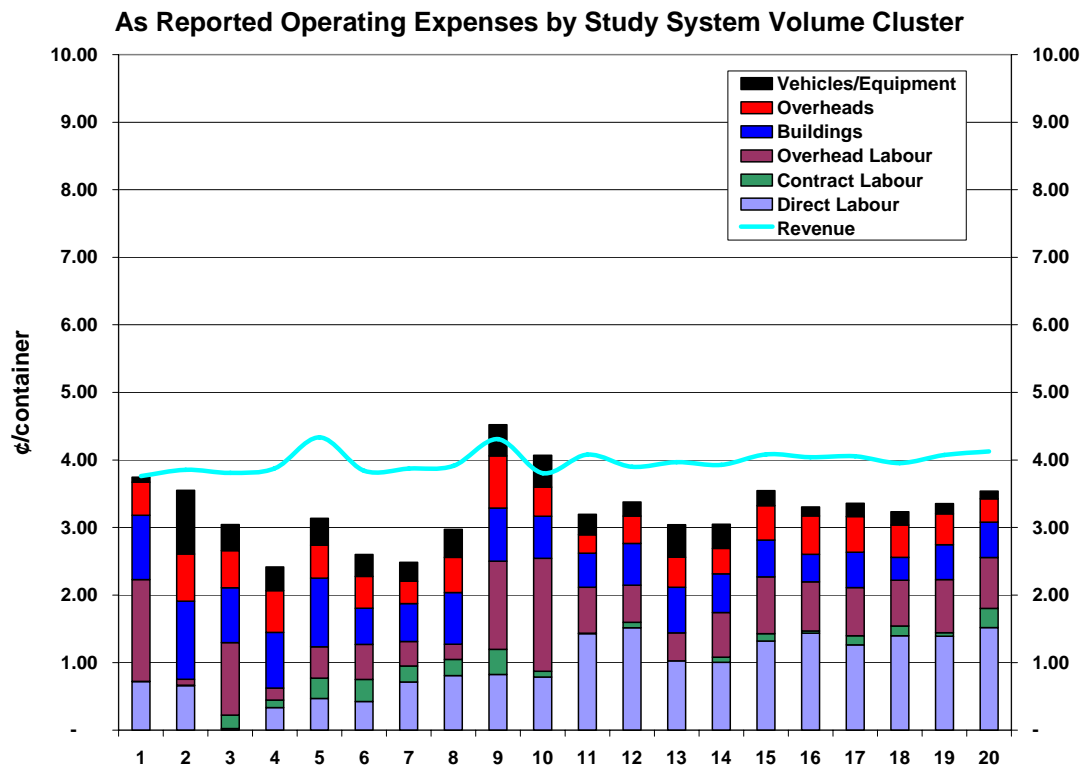
11 The adjustments made to operating expenses have the greatest impact on the smallest Depots.
12 By valuing the labour provided, the unit cost per container of both Direct and Overhead Labour
13 increase significantly for the smallest Depots. Similarly, valuing Building costs based on
14 deemed lease rates increases the unit cost per container significantly for the smallest Depots.

15 The following two charts show the effect. The DCA has grouped Depots by size into Volume
16 Clusters, with about 8 or 9 Depots in each cluster, with Volume Cluster 1 containing the 8 or 9
17 smallest Depots, and Volume Cluster 20 containing the 8 or 9 largest Depots.

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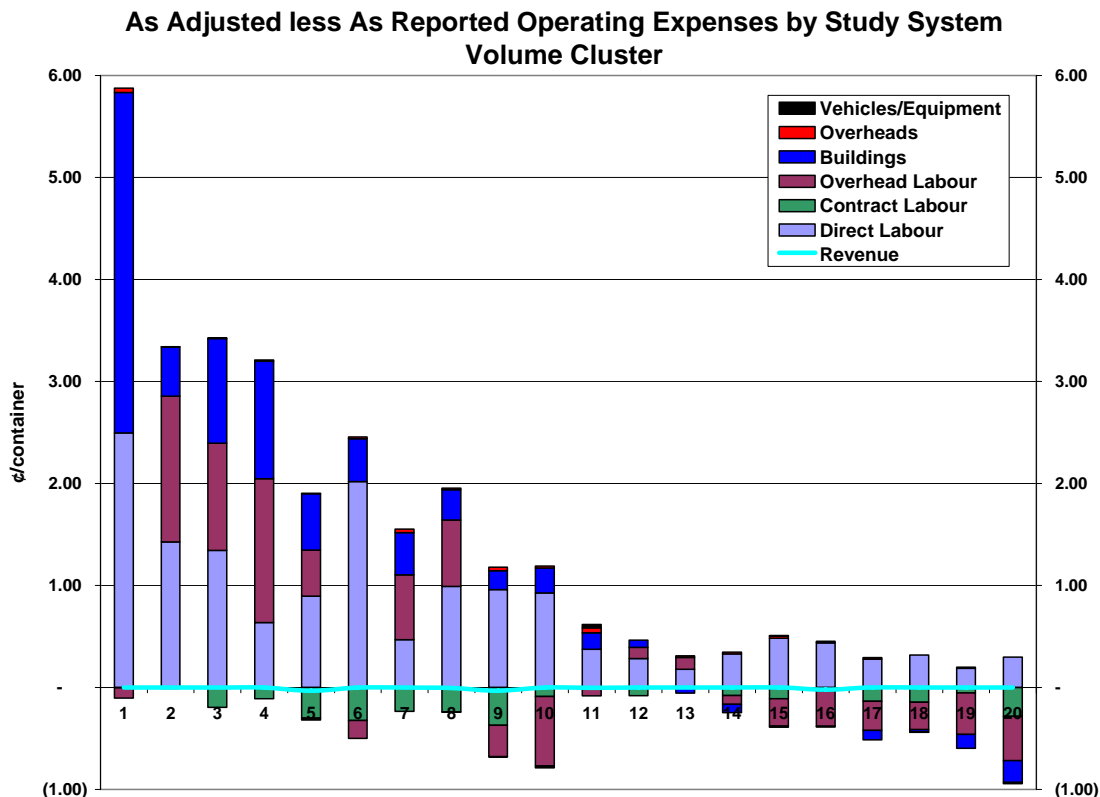


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- 1 The next chart shows the difference, by volume cluster:



- 2 The increases in Direct Labour costs resulting from wage and volume escalation impacts all
3 Volume Clusters, albeit, the smaller Depots see a larger increase on a per container basis. For
4 Contract Labour, all Depots see a reduction as all Contract Labour costs was assigned to Direct
5 Labour. Overhead Labour generally increases for Small Depots due to the recognition of the
6 value provided (deemed labour rate), however, for Larger depots the DCA's determination to
7 limit MGR hours for Owners results a reduction in per container Overhead Labour costs.
- 8 Revenues (light blue line) show as a slight reduction for some Volume Clusters. This result is
9 from the net impact of increases to Miscellaneous Revenue for Stub Fiscal Year Depots offset
10 by higher volumes for Stub Fiscal Year Depots.
- 11 The DCA is of the view that Depots have tended to report costs based on their current mode of
12 operation that includes the level of revenue the Handling Commissions provide. As noted,
13 many Small Depots did not report Labour and/or Building costs. Over the long term, there is no
14 benefit to having expenses greater than income on personal or corporate tax returns. The DCA
15 is reminded of a saying from an accounting professor: "Price to market, cost to profit". For
16 Depots, they do not have the ability to change the price and the revenue they received. The
17 DCA is of the view that smaller Depots have adjusted their costs in order to make a profit, or to
18 at least break even. For the smallest Depots, this has resulted in Owners compensating
19 themselves at rates below market.

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1 Based on the As Reported values, it would appear that the beverage container return industry in
2 Alberta is healthy. In the following two charts, the DCA has calculated and plotted revenue to
3 cost ratios, which are defined as Depot Revenue (Handling Commissions + Miscellaneous
4 Revenue or Total Margin) divide by Operating Expenses. The revenue to cost ratios are for the
5 most part over 100%, suggesting that the beverage container return industry is, on average,
6 making a profit.

7 After having reviewed each 2005 UCA, the DCA is of the view that the beverage container
8 return industry in Alberta, especially for the smaller Depots, is not healthy. In many instances
9 sole proprietors are not being adequately compensated for their efforts, as is evident from their
10 personal tax returns. The DCA has made adjustments, primarily to Labour and Buildings, to
11 determine an appropriate 2006 Revenue Requirement.

12 Note that on the following two charts the left y-axis is a logarithmic scale. Each grid line
13 between \$10,000 and \$100,000 is a \$10,000 increment, i.e., the y-axis scaling is not
14 proportional. Similarly, each grid line between \$100,000 and \$1,000,000 is a \$100,000
15 increment.

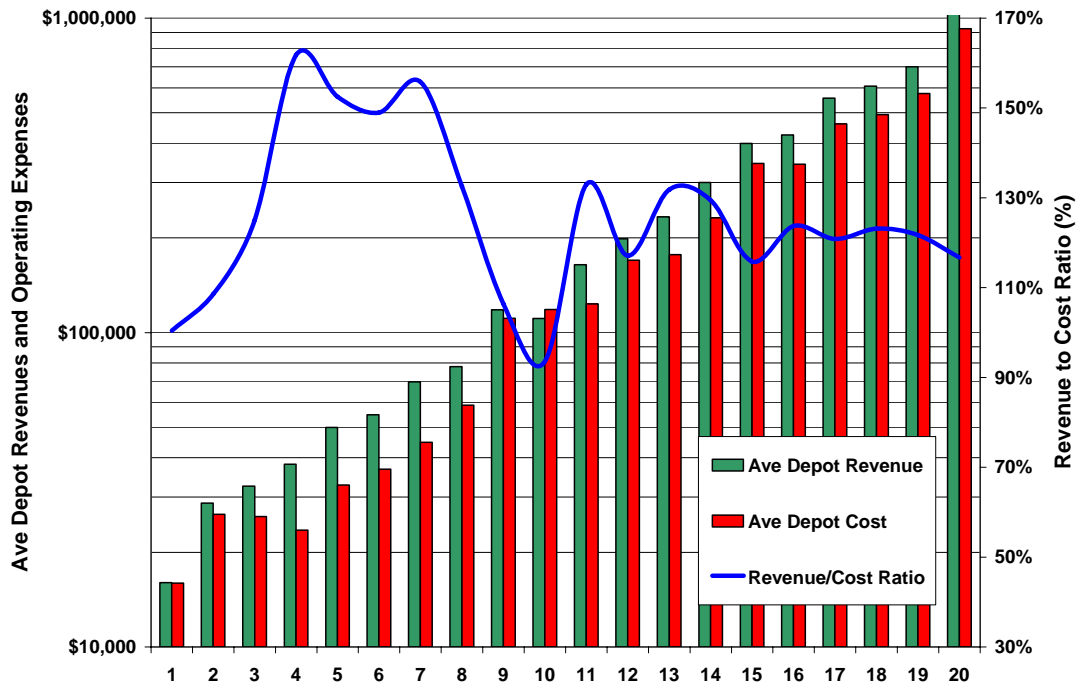
16 With the adjustments, the As Adjusted costs are significantly higher for the smaller Depots,
17 resulting in revenue to cost ratios under 50% (volume Cluster 1 & 2). The Large Depots
18 (Volume Cluster 12 to 20), still have revenue to cost ratios over 100%.

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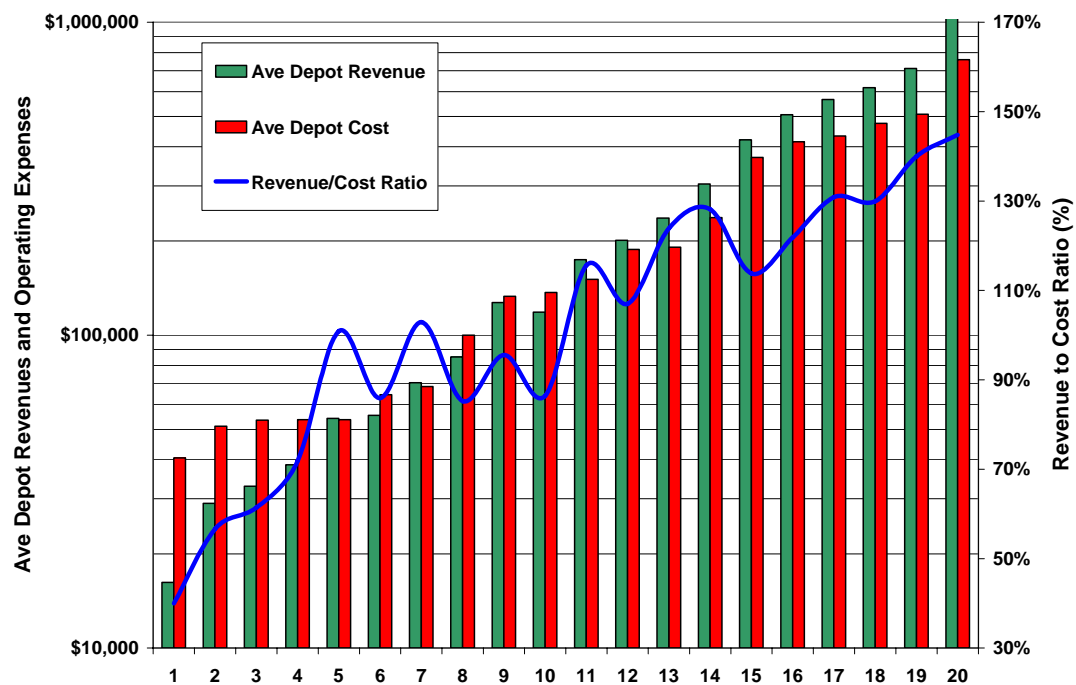
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As Reported Average Depot Costs and Revenues and Revenue to Cost Ratio by Volume Cluster



As Adjusted Average Depot Costs and Revenues and Revenue to Cost Ratio by Volume Cluster



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4.14 NON-PROFIT DEPOTS

During the 2004 UCA process the DCA confirmed with the BCMB that 15 Depots in the Total System were Non-Profit Depots. In the 2005 UCA Study System 14 Depots reported that they were Non-Profit. These 14 Depots collect about 10% of the Study System volumes.

4.14.1 As Reported

The cost structure of the Non-Profits Depots As Reported is materially different, on a per container returned basis, from the For-Profit Depots, as shown in the following table:

BEVERAGE CONTAINER MANAGEMENT BOARD 2006 PHASE I FORECAST NON-PROFIT DEPOT COMPARISON AS REPORTED						
Line No.	Report Volume	949,614,923 or 73% Total System	129,563,516 or 10% Total System	Report Depots	151 or 70% Total System	14 or 06% Total System
	For-Profit Depots 2005 Fiscal Year As Reported		Non-Profit Depots 2005 Fiscal Year As Reported		Difference	Percent Difference
	\$	¢ per container	\$	¢ per container	¢ per container	
	(a)	(b)	(c)	(d)	(f)	(g)
Revenue						
3 Revenue	\$111,056,845	11.69	\$15,069,434	11.63	(0.06)	-0.5%
4 Less Purchases	\$73,005,005	7.69	\$9,978,131	7.70	0.01	0.2%
5 Gross Margin (HC)	\$38,051,839	4.01	\$5,091,303	3.93	(0.08)	-1.9%
6 Misc Revenue	\$305,155	0.03	\$87,812	0.07	0.04	110.9%
7 Total Margin	\$38,356,994	4.04	\$5,179,115	4.00	(0.04)	-1.0%
Expenses						
8 Direct Labour	\$11,539,114	1.22	\$2,401,398	1.85	0.64	52.5%
9 Contract Labour	\$1,475,703	0.16	\$47,365	0.04	(0.12)	-76.5%
10 Overhead Labour	\$6,970,061	0.73	\$858,388	0.66	(0.07)	-9.7%
11 Labour Subtotal	\$19,984,878	2.10	\$3,307,151	2.55	0.45	21.3%
12 Building	\$5,069,654	0.53	\$646,772	0.50	(0.03)	-6.5%
13 Equipment	\$2,198,755	0.23	\$162,395	0.13	(0.11)	-45.9%
14 Overhead (Ex-Collections)	\$3,403,281	0.36	\$388,732	0.30	(0.06)	-16.3%
15 Collections	\$938,244	0.10	\$150,451	0.12	0.02	17.5%
16 Total Operating Expenses	\$31,594,812	3.33	\$4,655,501	3.59	0.27	8.0%
17 Earnings before taxes	\$6,762,182	0.71	\$523,614	0.40	(0.31)	-43.2%
18 Income Taxes	\$2,014,486	0.21	\$188,754	0.15	(0.07)	-31.3%
19 Net Income	\$4,747,696	0.50	\$334,860	0.26	(0.24)	-48.3%
20 Net Income - Small	\$613,456	0.40	\$65,418	0.32	(0.08)	-18.9%
21 Net Income - Large	\$4,134,240	0.52	\$269,442	0.25	(0.27)	-52.6%
Net Income - Total	\$4,747,696	0.50	\$334,860	0.26	(0.24)	-48.3%
20 Return Margin - Small	3.5%		2.8%			
21 Return Margin - Large	4.4%		2.1%			
22 Return Margin - Total	4.3%		2.2%			

From the above table, we note the following:

- Total margin per container is about 1% lower for Non-Profit Depots. We speculate that this is primarily due to wage subsidies received by Depots As Reported in Miscellaneous Revenue, which is 111% higher on a per container basis.
- Direct Labour costs per container for Non-Profit Depots were about 0.64¢/container higher than For-Profit Depots. We speculate that although Non-Profit Depots may utilize lower wage rate labour as part of their mandate to provide employment, overall the

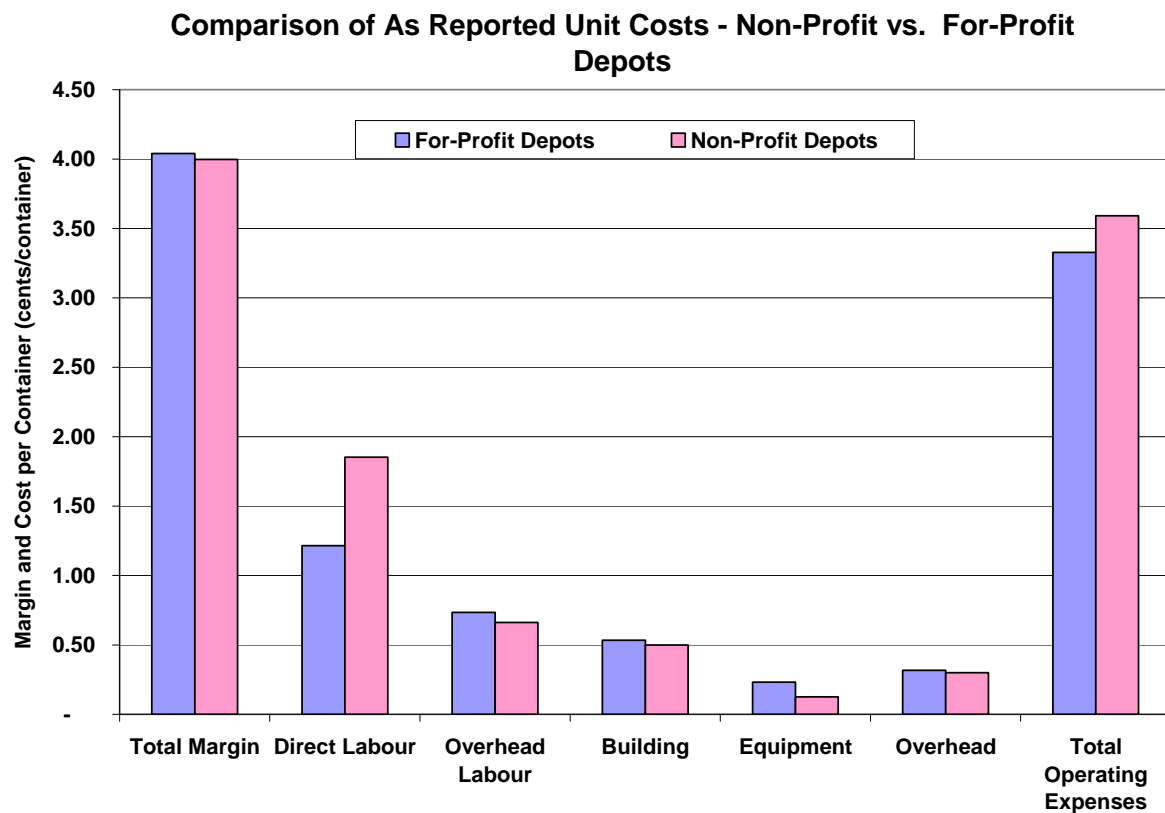
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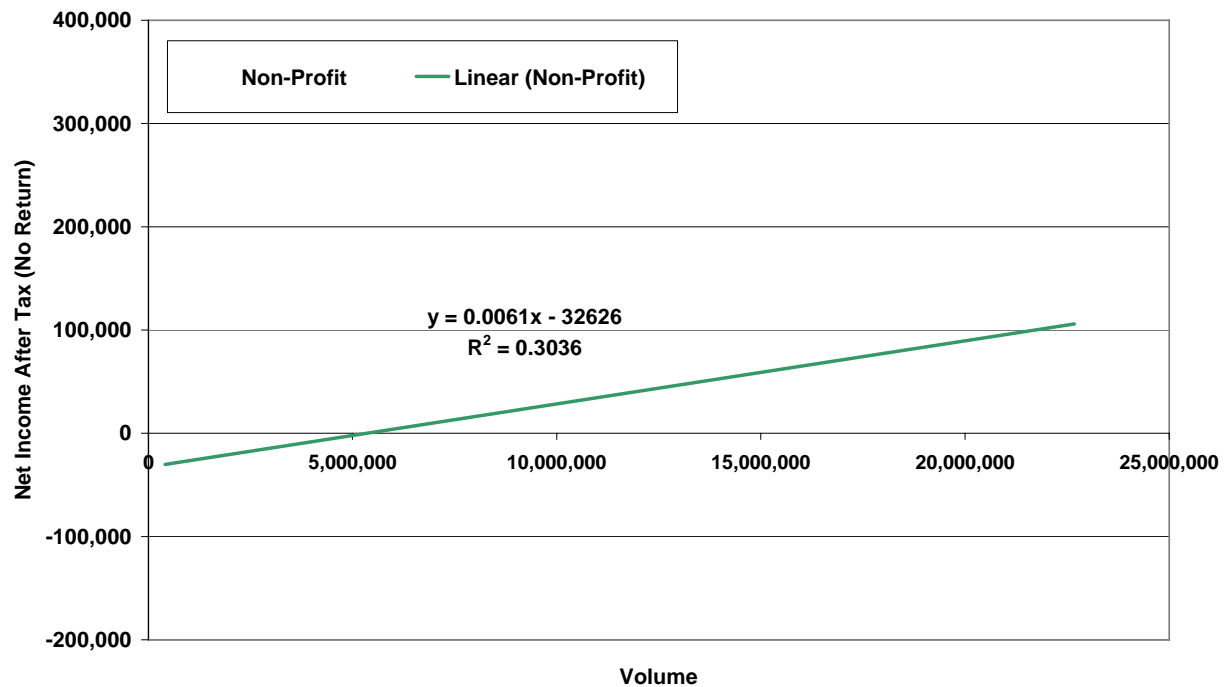
- 1 productivity and/or efficiency levels are lower resulting per container Direct Labour costs
2 that were 53% higher.
- 3 • Contract and Overhead Labour costs As Reported were lower on a per container basis
4 for Non-Profit Depots, however, the net result is that Non-Profit Depot labour costs are
5 21% higher.
- 6 • Non-Profit overhead costs were 24% lower than For-Profit Depots. Non-Profit Depots
7 have significantly lower equipment and collection costs.
- 8 • The earnings before taxes (EBT) for Non-Profit Depots were 0.31¢/container or 43%
9 lower than the For-Profit Depots.

10 The key differences in unit costs are shown graphically on the following chart:



- 11 The following chart shows the Net Income After Tax As Reported for the Non-Profit Depots.
12 Note that the DCA has removed the individual Depot data points to ensure Depot confidentiality.
13 This chart can be compared with the chart on page 116 for all Depots.

Non-Profit FY 2005 Net Income After Tax As Reported vs. Volume



- 1 The next two charts show the unit costs and Revenues by Volume Cluster. For the 14 Non-
- 2 Profit Depots in the Study System, the DCA has grouped the Non-Profit Depots into four
- 3 Volume Clusters. The average size of the Depots in each of the four Volume Clusters is as
- 4 follows:

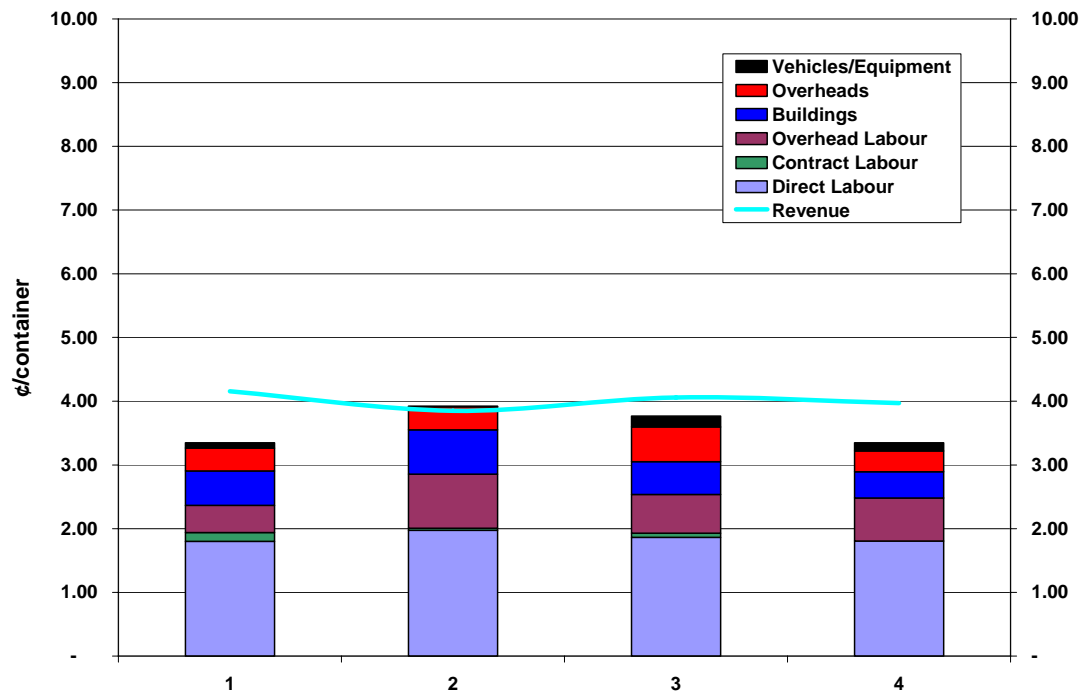
Volume Cluster	Ave Volume / Non-Profit Depot
1	2,176,991
2	4,764,131
3	12,349,216
4	18,193,051

Alberta Bottle Depot System - Data Collection Agent 2006 Phase I Report (Rev 1)

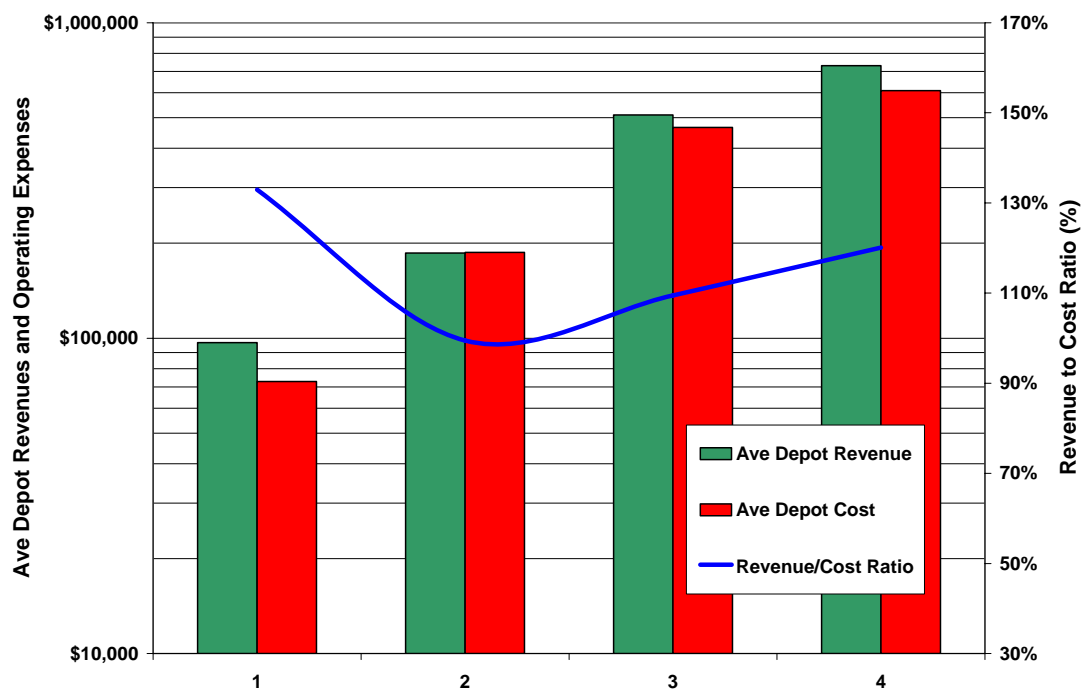
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Non-Profit Depots As Reported Operating Expenses by Study System Volume Cluster



Non-Profit Depots As Reported Average Depot Costs and Revenues and Revenue to Cost Ratio by Volume Cluster



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4.14.2 As Adjusted

The cost structure of the Non-Profit Depots As Adjusted is shown in the following table:

BEVERAGE CONTAINER MANAGEMENT BOARD 2006 PHASE I FORECAST NON-PROFIT DEPOT COMPARISON AS ADJUSTED						
Line No.						
1	Report Volume	976,425,126 or 75% Total System	129,563,516 or 10% Total System			
2	Report Depots	151 or 70% Total System	14 or 06% Total System			
		For-Profit Depots 2005 Fiscal Year As Adjusted	Non-Profit Depots 2005 Fiscal Year As Adjusted		Difference	Percent Difference
		\$	¢ per container	\$	¢ per container	
		(a)	(b)	(c)	(d)	(f) (g)
	Revenue					
3	Revenue	\$114,208,580	11.70	\$15,069,434	11.63	(0.07) -0.6%
4	Less Purchases	\$75,103,491	7.69	\$9,978,131	7.70	0.01 0.1%
5	Gross Margin (HC)	\$39,105,090	4.00	\$5,091,303	3.93	(0.08) -1.9%
6	Misc Revenue	\$612,806	0.06	\$122,222	0.09	0.03 50.3%
7	Total Margin	\$39,717,896	4.07	\$5,213,525	4.02	(0.04) -1.1%
	Expenses					
8	Direct Labour	\$15,873,373	1.63	\$2,787,402	2.15	0.53 32.3%
9	Contract Labour	\$0	-	\$0	-	- -
10	Overhead Labour	\$4,854,878	0.50	\$670,724	0.52	0.02 4.1%
11	Labour Subtotal	\$20,728,251	2.12	\$3,458,125	2.67	0.55 25.7%
12	Building	\$4,947,230	0.51	\$729,037	0.56	0.06 11.1%
13	Equipment	\$2,255,843	0.23	\$162,395	0.13	(0.11) -45.7%
14	Overhead (Ex-Collections)	\$3,609,026	0.37	\$391,999	0.30	(0.07) -18.1%
15	Collections	\$956,388	0.10	\$150,451	0.12	0.02 18.6%
16	Total Operating Expenses	\$32,496,739	3.33	\$4,892,006	3.78	0.45 13.4%
17	Earnings before taxes	\$7,221,157	0.74	\$321,519	0.25	(0.49) -66.4%
18	Income Taxes	\$2,529,637	0.26	\$137,556	0.11	(0.15) -59.0%
19	Net Income	\$4,691,520	0.48	\$183,963	0.14	(0.34) -70.4%
20	Net Income - Small	-\$1,254,317	(0.78)	\$14,492	0.07	0.85 -109.2%
21	Net Income - Large	\$5,945,837	0.73	\$169,471	0.15	(0.57) -78.7%
	Net Income - Total	\$4,691,520	0.48	\$183,963	0.14	(0.34) -70.4%
20	Return Margin - Small	-7.1%		0.6%		
21	Return Margin - Large	6.2%		1.3%		
22	Return Margin - Total	4.1%		1.2%		

From the above table, we note the following:

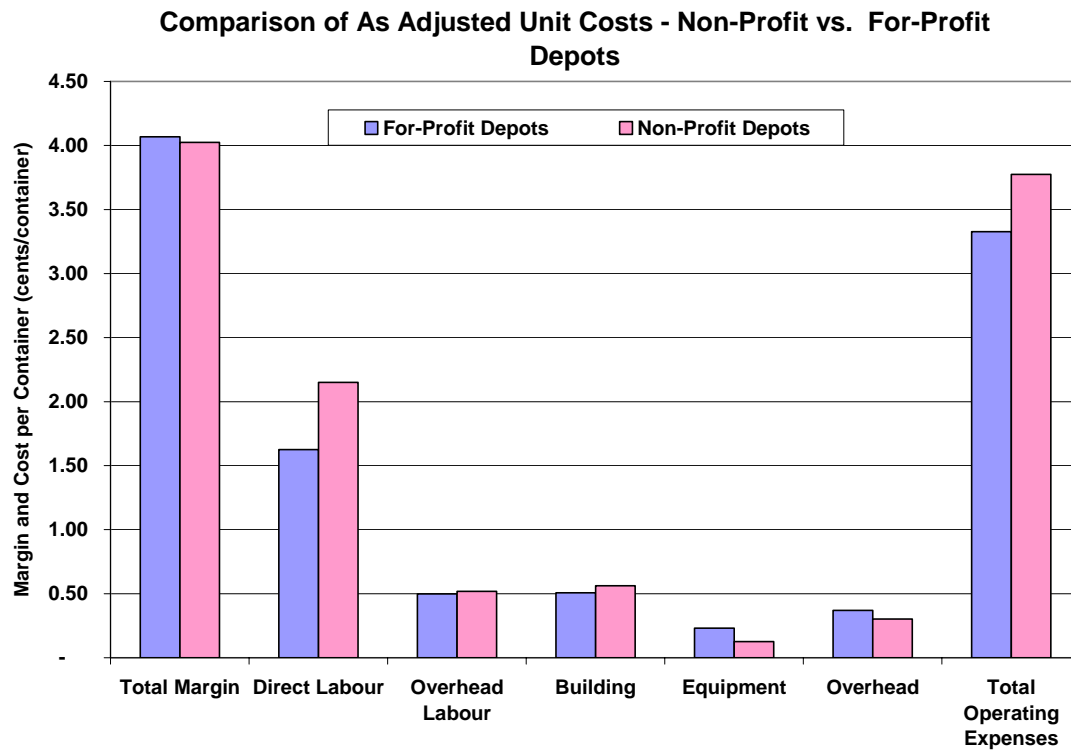
- Direct Labour costs per container for Non-Profit Depots were about 0.53¢/container or 32% higher than For-Profit Depots.
- Non-Profit overhead costs were 18% lower than For-Profit Depots.
- The earnings before taxes (EBT) for Non-Profit Depots were 0.25¢/container or 66% lower than the For-Profit Depots.

The key differences in unit costs are shown graphically on the following chart:

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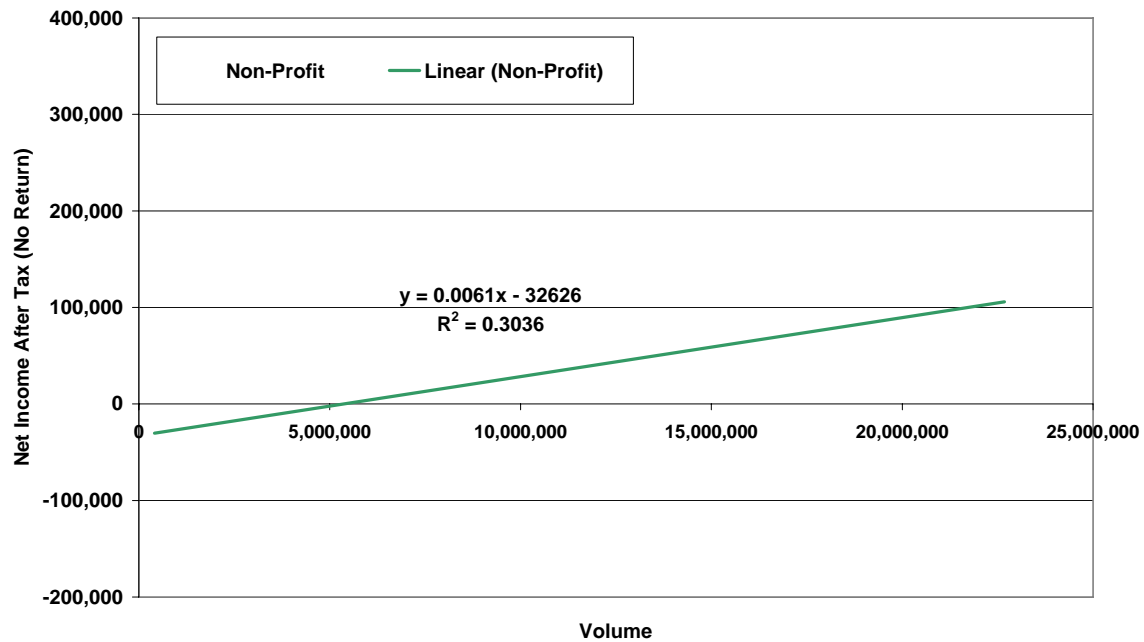
FISCAL YEAR 2005 STUDY SYSTEM COSTS

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- 1 The following chart shows the Net Income After Tax As adjusted for the Non-Profit Depots.
- 2 Note that the DCA has removed the individual Depot data points to ensure Depot confidentiality.
- 3 This chart can be compared with the chart on page 118 for all Depots.

Non-Profit FY 2005 Net Income After Tax As Reported vs. Volume

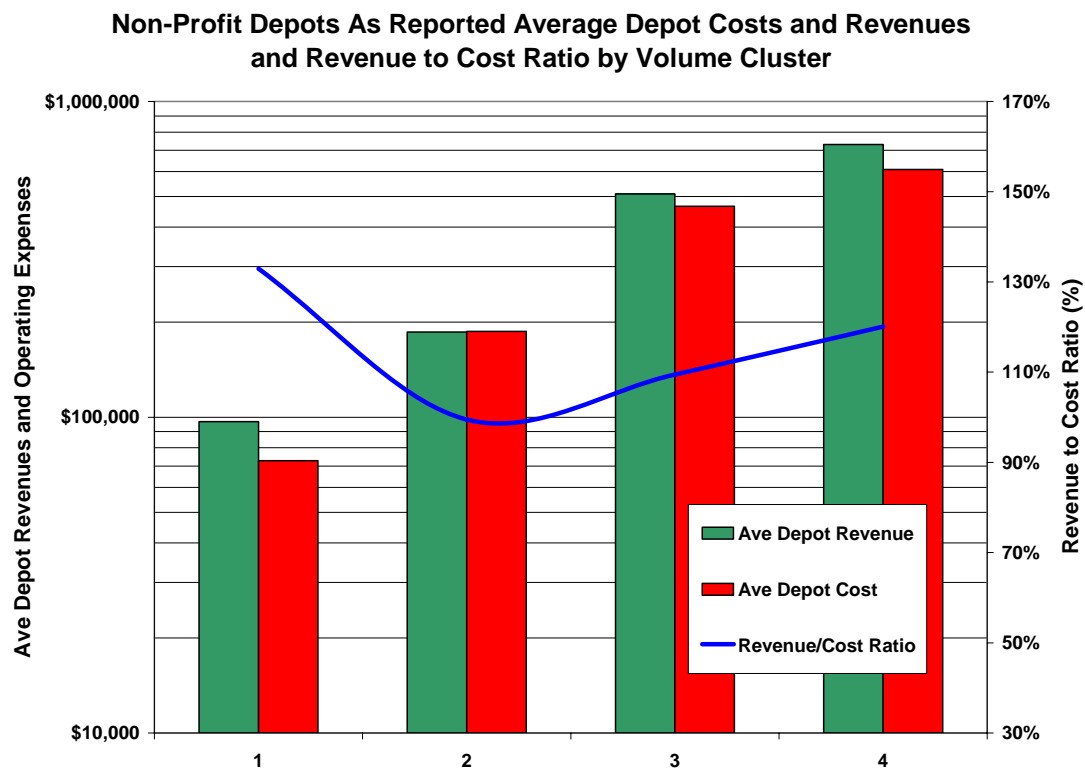
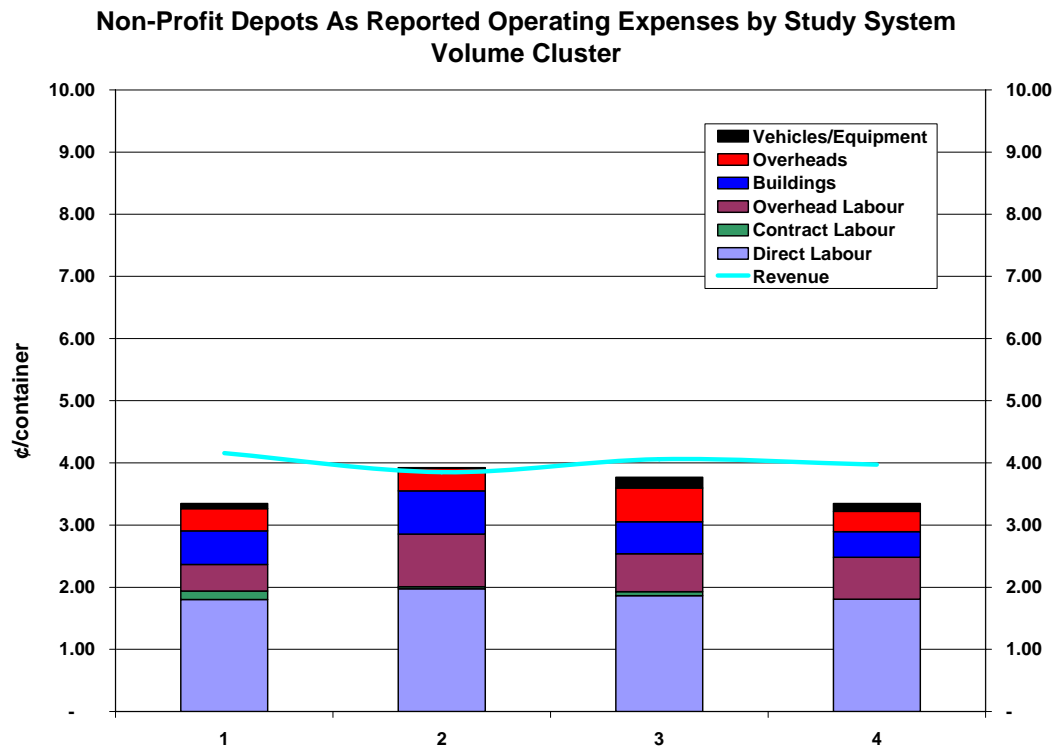


- 1 The next two charts show the unit costs and Revenues by Volume Cluster. Note that since the
- 2 smallest Non-Profit Depots are of an average size over 2 million containers per year, the
- 3 smallest Non-Profit Depots do not have average per container unit costs approaching 10
- 4 ¢/container, as was the case for all Depots in the Study System.

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4.14.3 Non-Profit Summary

While the Non-Profit Depots undoubtedly provide a valuable service to their respective communities, their cost structure is materially higher than the For-Profit Depots. For example, if the Non-Profit Depots had the same FY 2005 cost per container as the For-Profit Depots, their adjusted total costs would be reduced by about \$580 thousand (about 1% of the recommended 2006 Revenue Requirement).

The DCA cannot determine conclusively if the Non-Profit Depot's net higher cost structure is due to differences in operations or simply due to the Non-Profit Depots being on the more costly side of average and/or on the smaller size of average.

The DCA has included Non-Profit Depots in the Study System to incorporate as much volume and cost data in this study as possible. However, in future Handling Commission processes, the BCMB may wish to consider excluding Non-Profit Depots from the Handling Commission setting process; that is, treat Non-Profit Depots as "price takers", and remove them from the Study System.

4.15 MULTI-BUSINESS DEPOTS

In the 2005 UCA Study System, 42 Depots reported that they were Multi-Business.¹⁰¹ These 42 Depots collect about 14% of the Study System volumes.

In addition, 13 of the 42 Multi-Business Depots reported that they track their costs separately.¹⁰² For the 29 Multi-Business Depots that did not track their costs separately, the DCA utilized the values reported on Table 10 column b to allocate costs between the Depot operations and the other businesses.

Note that 6 Depots reported being both Non-Profit and Multi-Business.

The DCA questions the accuracy of the reporting related to the number of Multi-Business Depots. For example, some Non-Profit Depots are owned by charities that provide other services, however, these Depots did not report that they were Multi-Business. In addition, many Small Depot Owners may supplement their personal income from other sources, however, they may not have reported their Depot as Multi-Business. The DCA recommends that future UCAs could collect additional information in this area if the BCMB and/or the HCRP determine that the nature of the business should have a bearing on Handling Commissions.

4.15.1 As Reported

The cost structure of the Multi-Business Depots As Reported is materially different, on a per container returned basis, from the Single-Business Depots, as shown in the following table:

¹⁰¹ Line 125 of 2005 UCA

¹⁰² Line 126 of 2005 UCA

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BEVERAGE CONTAINER MANAGEMENT BOARD 2006 PHASE I FORECAST MULTI-BUSINESS DEPOT COMPARISON AS REPORTED

Line No.							
1	Report Volume	898,081,652	or 69% Total System	181,096,787	or 14% Total System		
2	Report Depots	123	or 57% Total System	42	or 19% Total System		
		Single-Business Depots 2005 Fiscal Year As Reported		Multi-Business Depots 2005 Fiscal Year As Reported		Difference	Percent Difference
		\$	¢ per container	\$	¢ per container	¢ per container	
		(a)	(b)	(c)	(d)	(f)	(g)
Revenue							
3	Revenue	\$105,115,364	11.70	\$21,010,915	11.60	(0.10)	-0.9%
4	Less Purchases	\$69,070,778	7.69	\$13,912,358	7.68	(0.01)	-0.1%
5	Gross Margin (HC)	\$36,044,585	4.01	\$7,098,557	3.92	(0.09)	-2.3%
6	Misc Revenue	\$207,713	0.02	\$185,255	0.10	0.08	342.3%
7	Total Margin	\$36,252,298	4.04	\$7,283,812	4.02	(0.01)	-0.4%
Expenses							
8	Direct Labour	\$11,356,438	1.26	\$2,584,074	1.43	0.16	12.8%
9	Contract Labour	\$1,416,877	0.16	\$106,192	0.06	(0.10)	-62.8%
10	Overhead Labour	\$6,389,185	0.71	\$1,439,264	0.79	0.08	11.7%
11	Labour Subtotal	\$19,162,500	2.13	\$4,129,529	2.28	0.15	6.9%
12	Building	\$4,744,660	0.53	\$971,766	0.54	0.01	1.6%
13	Equipment	\$1,991,099	0.22	\$370,051	0.20	(0.02)	-7.8%
14	Overhead (Ex-Collections)	\$2,771,642	0.31	\$620,717	0.34	0.03	11.1%
15	Collections	\$1,268,358	0.14	\$219,992	0.12	(0.02)	-14.0%
16	Total Operating Expenses	\$29,938,259	3.33	\$6,312,055	3.49	0.15	4.6%
17	Earnings before taxes	\$6,314,039	0.70	\$971,757	0.54	(0.17)	-23.7%
18	Taxes	\$1,858,230	0.21	\$345,010	0.19	(0.02)	-7.9%
19	Net Income	\$4,455,809	0.50	\$626,747	0.35	(0.15)	-30.2%
20	Net Income - Small	\$572,579	0.33	\$106,295	0.18	(0.15)	-46.1%
21	Net Income - Large	\$3,883,230	0.43	\$520,452	0.44	0.01	2.1%
	Net Income - Total	\$4,455,809	0.50	\$626,747	0.35	(0.15)	-30.2%
20	Return Margin - Small	2.8%		1.5%			
21	Return Margin - Large	3.7%		3.8%			
22	Return Margin - Total	4.2%		3.0%			

1 From the above table, we note the following:

- 2 • Direct Labour costs per container for Multi-Business Depots were about 0.16¢/container
- 3 or 13% higher than Single-Business Depots.
- 4 • Total labour costs for Multi-Business Depots were 0.15¢/container or 7% higher than
- 5 Single-Business Depots.
- 6 • Multi-Business Overhead Labour costs were 17% lower than Multi-Business Depots.
- 7 Multi-Business Depots have lower equipment and collection costs.
- 8 • The earnings before taxes (EBT) for Non-Profit Depots were 0.17¢/container or 24%
- 9 lower than the Single-Business Depots.

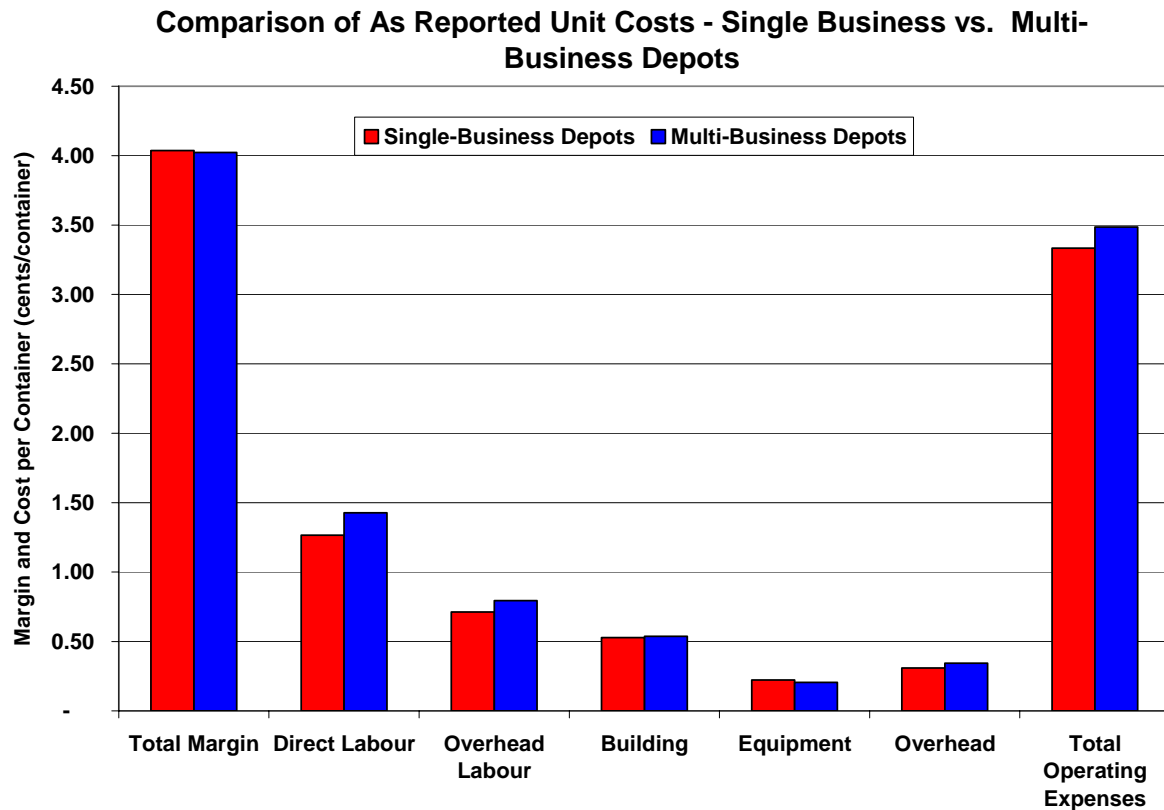
10 The DCA speculates that Multi-Business Depots are less profitable than the Single-Business
11 Depots due to the fact that Multi-Business Depots are, on average, 36% smaller by volume and

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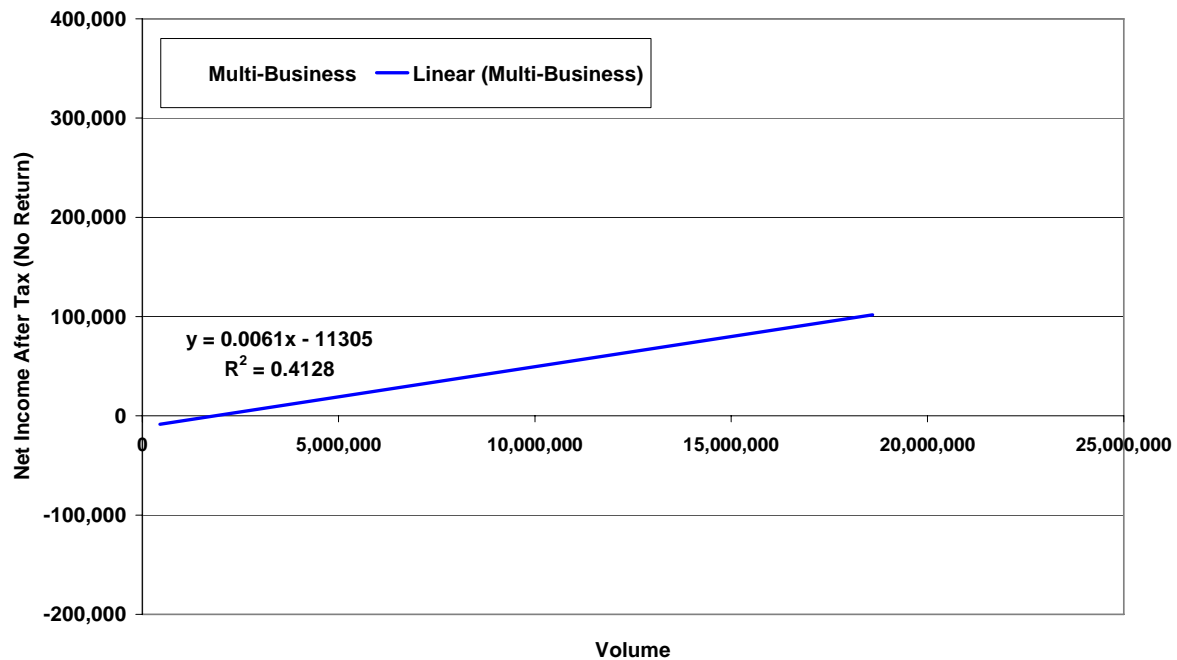
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- 1 that there are no reported Multi-Business Depots with an annual volume of over 20 million
- 2 containers.
- 3 The key differences in unit costs are shown graphically on the following chart:



- 4 The following chart shows the Net Income After Tax As Reported for the Multi-Business Depots.
- 5 Note that the DCA has removed the individual Depot data points to ensure Depot confidentiality.
- 6 This chart can be compared with the chart on page 116 for all Depots.

Multi-Business FY 2005 Net Income After Tax As Reported vs. Volume



- 1 The next two charts show the unit costs and Revenues by Volume Cluster. For the 42 Multi-
- 2 Business Depots in the Study System, the DCA has grouped the Multi-Business Depots into ten
- 3 Volume Clusters. The average size of the Depots in each of the ten Volume Clusters is as
- 4 follows:

Volume Cluster	Multi-Business	Study System
1	522,606	584,746
2	714,725	913,576
3	954,438	1,229,232
4	1,344,970	1,886,518
5	2,107,077	2,683,885
6	2,730,974	4,443,967
7	3,369,023	6,708,839
8	4,610,648	10,060,672
9	7,638,191	14,492,283
10	16,603,822	21,661,731

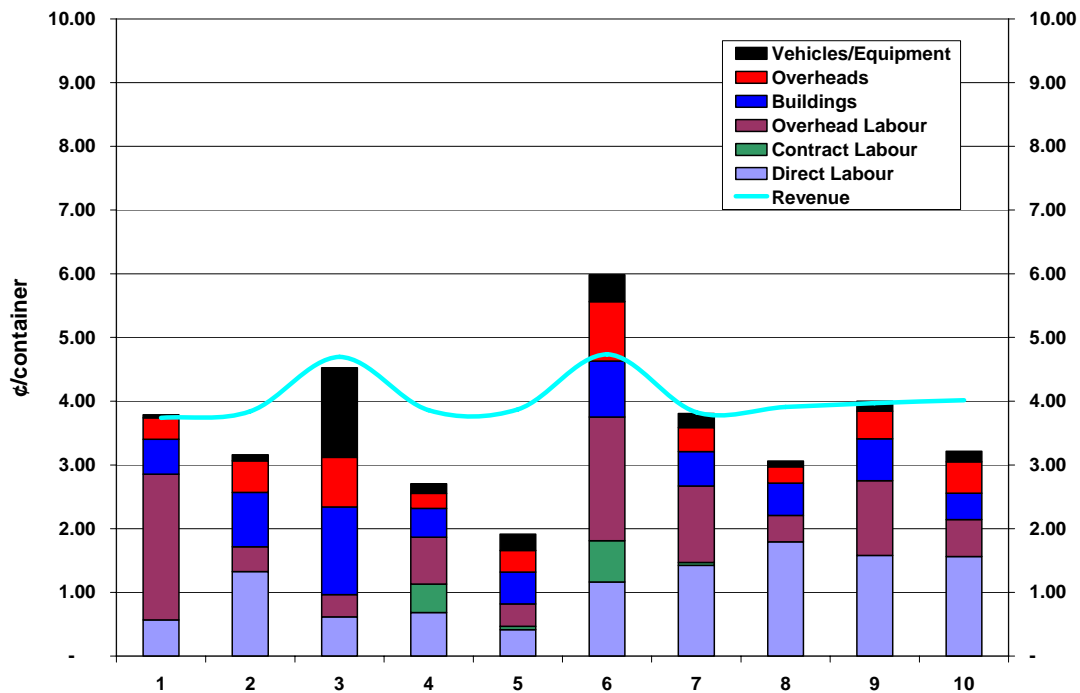
- 5 Note that if the Study System Depots were categorized into 10 Volume Groups, one could see
- 6 that the size composition of the Multi-Business Depots is similar to the Study System for smaller
- 7 Depots, however there are fewer Large Multi-Business Depots.

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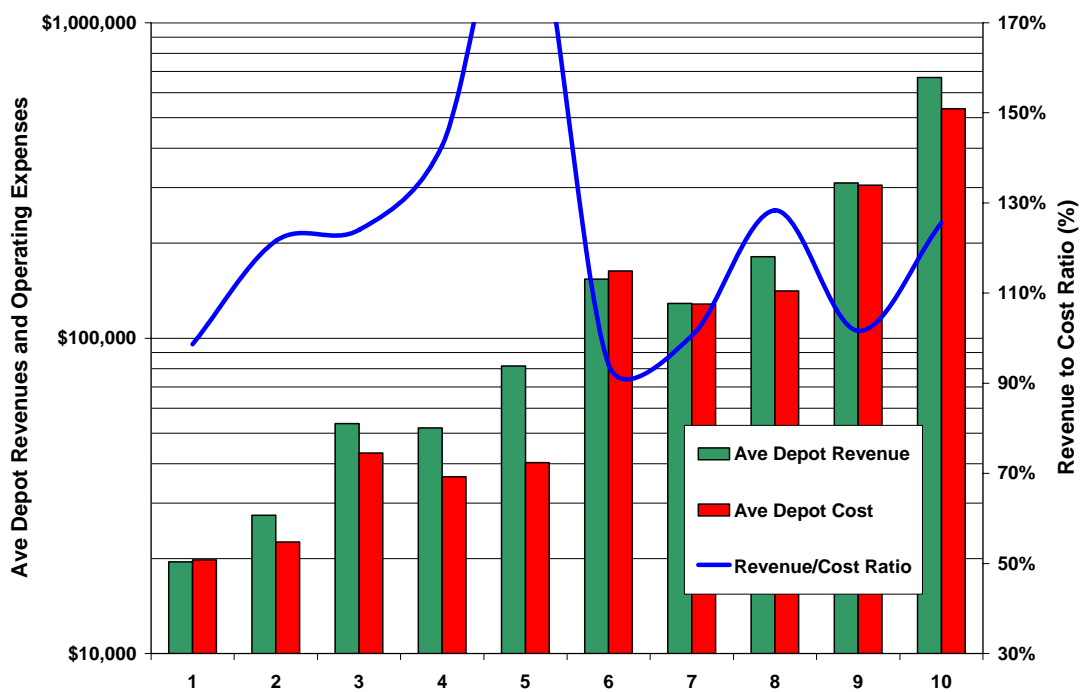
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Multi-Business Depots As Reported Operating Expenses by Study System Volume Cluster



Multi-Business Depots As Reported Average Depot Costs and Revenues and Revenue to Cost Ratio by Volume Cluster



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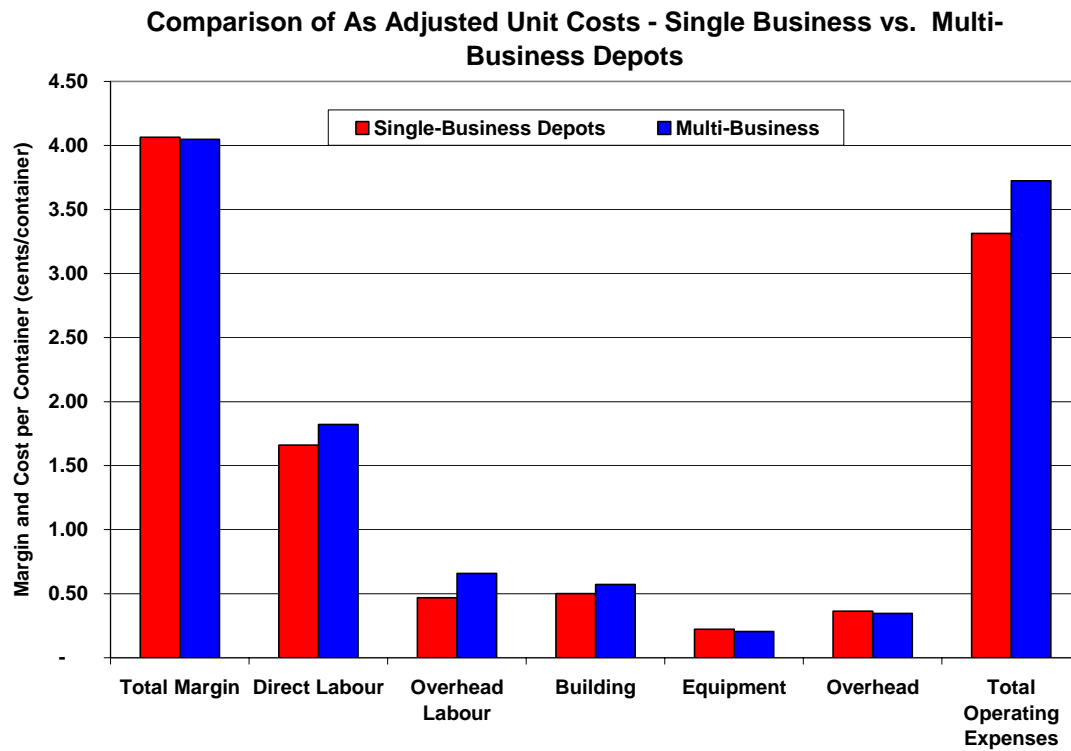
January 31, 2007

1 4.15.2 As Adjusted

2 The cost structure of the Multi-Business Depots As Adjusted is shown in the following table:

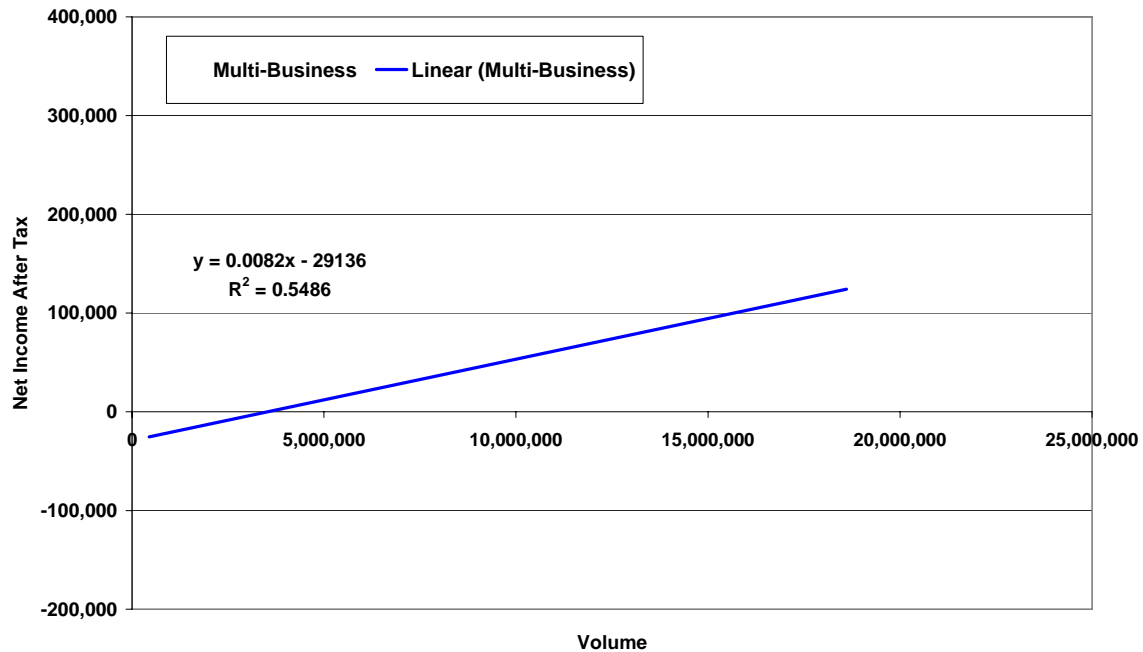
BEVERAGE CONTAINER MANAGEMENT BOARD 2006 PHASE I FORECAST MULTI-BUSINESS DEPOT COMPARISON AS ADJUSTED						
Line No.						
1	Report Volume	924,891,855 or 71% Total System	181,096,787 or 14% Total System			
2	Report Depots	123 or 57% Total System	42 or 19% Total System			
		Single-Business Depots 2005 Fiscal Year As Adjusted		Multi-Business Depots 2005 Fiscal Year As Adjusted		Difference
		\$		¢ per container		Percent Difference
		(a)	(b)	(c)	(d)	(f) (g)
	Revenue					
3	Revenue	\$108,267,099	11.71	\$21,010,915	11.60	(0.10) -0.9%
4	Less Purchases	\$71,169,264	7.69	\$13,912,358	7.68	(0.01) -0.2%
5	Gross Margin (HC)	\$37,097,836	4.01	\$7,098,557	3.92	(0.09) -2.3%
6	Misc Revenue	\$504,532	0.05	\$230,496	0.13	0.07 133.3%
7	Total Margin	\$37,602,368	4.07	\$7,329,053	4.05	(0.02) -0.5%
	Expenses					
8	Direct Labour	\$15,362,518	1.66	\$3,298,257	1.82	0.16 9.6%
9	Contract Labour	\$0	-	\$0	-	- -
10	Overhead Labour	\$4,332,649	0.47	\$1,192,952	0.66	0.19 40.6%
11	Labour Subtotal	\$19,695,167	2.13	\$4,491,210	2.48	0.35 16.5%
12	Building	\$4,639,453	0.50	\$1,036,814	0.57	0.07 14.1%
13	Equipment	\$2,048,187	0.22	\$370,051	0.20	(0.02) -7.7%
14	Overhead (Ex-Collections)	\$3,373,307	0.36	\$627,718	0.35	(0.02) -5.0%
15	Collections	\$886,847	0.10	\$219,992	0.12	0.03 26.7%
16	Total Operating Expenses	\$30,642,961	3.31	\$6,745,784	3.72	0.41 12.4%
17	Earnings before taxes	\$6,959,407	0.75	\$583,268	0.32	(0.43) -57.2%
18	Income Taxes	\$2,351,714	0.25	\$315,478	0.17	(0.08) -31.5%
19	Net Income	\$4,607,693	0.50	\$267,790	0.15	(0.35) -70.3%
20	Net Income - Small	-\$801,772	(0.68)	-\$438,053	(0.70)	(0.03) 3.8%
21	Net Income - Large	\$5,409,465	0.67	\$705,843	0.59	(0.08) -11.4%
	Net Income - Total	\$4,607,693	0.50	\$267,790	0.15	(0.35) -70.3%
20	Return Margin - Small	-6.2%		-6.1%		
21	Return Margin - Large	5.7%		5.1%		
22	Return Margin - Total	4.2%		1.3%		

3 The key differences in unit costs are shown graphically on the following chart:



- 1 The following chart shows the Net Income After Tax As Adjusted for the Non-Profit Depots.
- 2 Note that the DCA has removed the individual Depot data points to ensure Depot confidentiality.
- 3 This chart can be compared with the chart on page 118 for all Depots.

Multi-Business FY 2005 Net Income After Tax As Adjusted vs. Volume



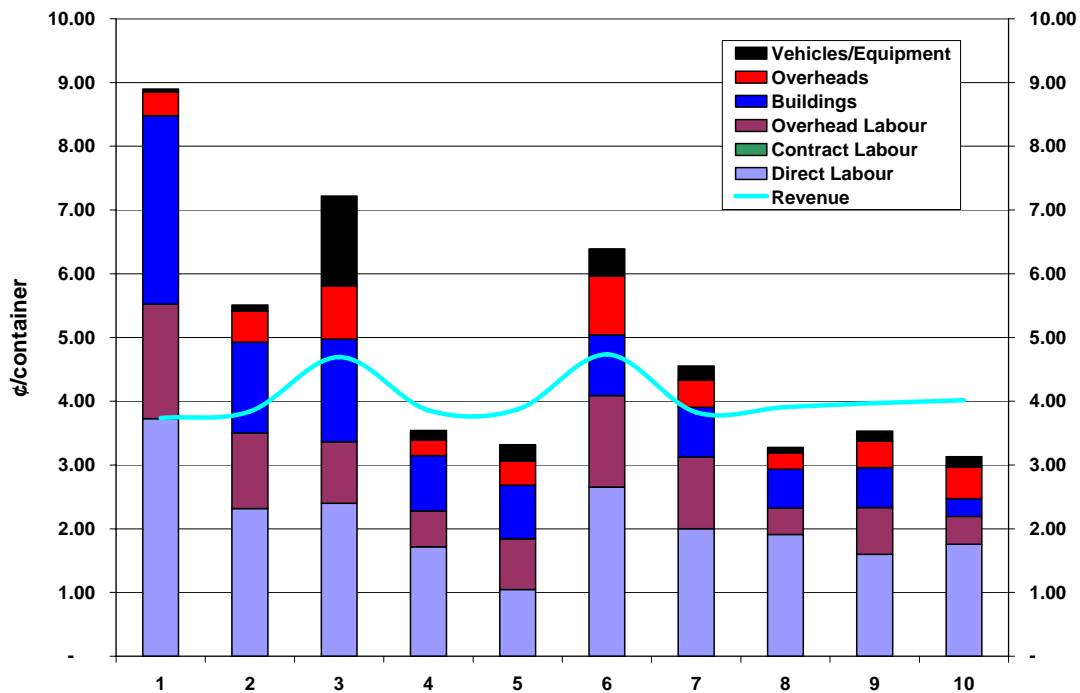
- 1 The next two charts show the unit costs and Revenues by Volume Cluster. Note that since the
- 2 smallest Multi-Business Depots in Volume Clusters 1 to 3 are of an average size under 1 million
- 3 containers per year, the smallest Multi-Business Depots have average per container unit costs
- 4 approaching 10 ¢/container, as was the case for all Depots in the Study System.

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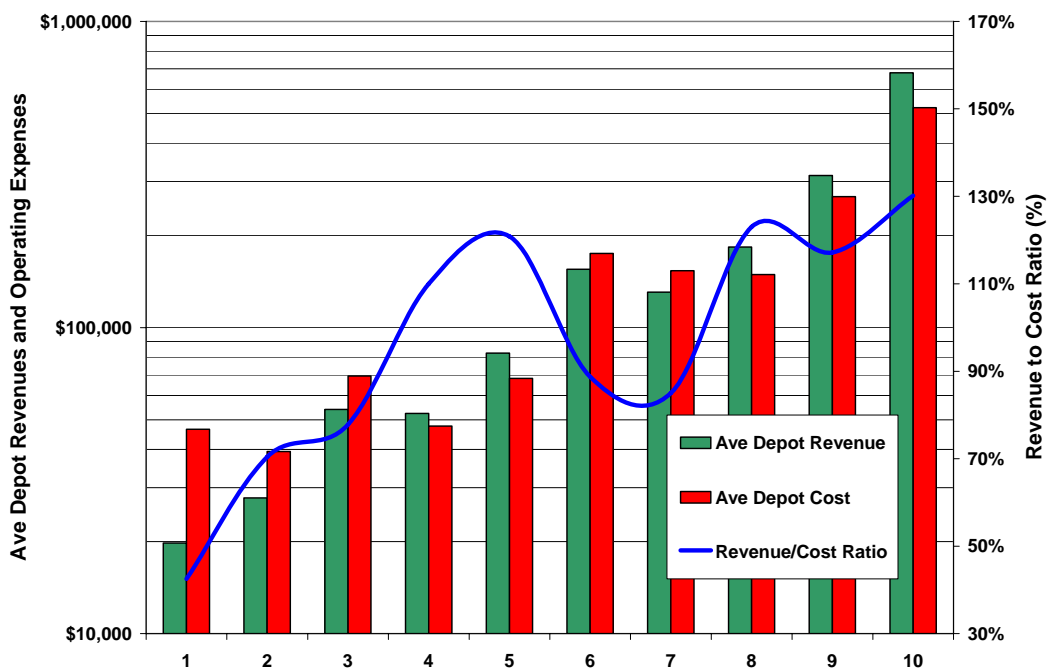
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Mutil-Business Depots As Adjusted Operating Expenses by Study System Volume Cluster



Multi-Business Depots As Adjusted Average Depot Costs and Revenues and Revenue to Cost Ratio by Volume Cluster



1 **4.15.3 Multi-Business Depot Summary**

2 The DCA understands that there was a history of granting permits to rural Depots that had
3 additional businesses to ensure the Depot operation would be viable. For the smaller volume
4 Multi-Business Depots especially, the quality of the UCA data collected is considered to be not
5 as good as costs that are based on proper accounting records as opposed to estimated
6 allocations.

7 The DCA has included Multi-Business Depots in the Study System to incorporate as much
8 volume and cost data in this study as possible. The DCA believes that these Multi-Business
9 Depots are an integral part of the beverage container collection industry in Alberta. In addition,
10 there are likely more Multi-Business Depots than have been reported on the 2005 UCAs. The
11 DCA does not believe that Multi-Business should be excluded from the 2006 Revenue
12 Requirement determination process.

5.0 2006 CONTAINER RETURN FORECAST

5.1 INTRODUCTION – 2005 VOLUME FORECAST

For the 2005 Phase I Report¹⁰³ the DCA developed a forecast of returns by Container Stream for the last six months of 2005. Coupled with actual return data for the first 6 months of 2005, container return volumes for each major Container Stream were forecast. As noted in the response to HCRP-Desiderata-14,¹⁰⁴ the volume data provide to the DCA by BDL for the first six months of 2005 contained additional volumes that were not related to the Total System.

In order to verify the 2005 forecast model, corrected 2005 volume data from BDL for the first six months of 2005 was input onto the 2005 forecast model to obtain an updated forecast for the last six months of 2005. The results were as follows:¹⁰⁵

2005 Forecast Model Results as Per Phase 1 Report (Doc 001-26b)

	Agency	Forecast Volume (millions)	Actual Volume (millions)	Difference (millions)	% Difference
Total Beer	BDL	515.74	490.01	25.73	5.25%
Total Non - Beer	ABCRC	838.94	838.35	0.60	0.07%
All Containers		1,354.68	1,328.35	26.33	1.98%

2005 Forecast Model Results with Updated Jan to Jun 2005 Data

	Agency	Forecast Volume (millions)	Actual Volume (millions)	Difference (millions)	% Difference
Total Beer	BDL	492.45	490.01	2.44	0.50%
Total Non - Beer	ABCRC	838.94	838.35	0.60	0.07%
All Containers		1,331.39	1,328.35	3.04	0.23%

Based on this analysis the DCA believes that the forecast methodology used for the 2005 volume forecast is appropriate and yielded acceptable results with a relatively small variance. Further, the DCA concludes that the same forecast methodology is appropriate for the 2006 volume forecast. With the historical data from Jan 2002 to June 2006 the DCA believes that the forecast results will be accurate, especially for the larger volume Container Streams.

5.2 2006 AGGREGATE VOLUME FORECAST

The 2006 Container Return Forecast is an integral part of the Phase I process. This forecast was used for both the determination of the forecast of costs for Cal 2006 Revenue Requirement

¹⁰³ Doc 001-26b

¹⁰⁴ Doc 001-031

¹⁰⁵ Doc 010-007 provided tables that show the results by Container Stream in the same format as HCRP-Desiderata-14.

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2006 CONTAINER RETURN FORECAST

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and in the 2006 Phase II Handling Commission rate-setting process in the respective 2006 Phase I Rev 0 and 2006 Phase II Rev 0 Reports. For the 2006 Phase I Rev 1 and 2006 Phase II Rev 1 Reports 2006 actual volumes provided by the Manufacturers were utilized (see section 5.4).

5.2.1 Methodology

The methodology for calculating the revenue forecast consists of two parts. First, we forecast the aggregate volume by container groups. Then, we calculate each Depot's share of the aggregate volume forecasted in 2006. Actual monthly return volumes for the months from January 2002 to June 2006 were obtained from the Manufacturers. This historic data was used to forecast monthly volumes by Container Stream for the period July to December 2006. Finally, the aggregate monthly volumes for 2006 were allocated to each Depot.

5.2.2 Analysis

For each Container Stream, the DCA received daily shipment data for the months from January 2002 to June 2006 from both the ABCRC and BDL. The DCA imported the data received into a Microsoft Access database. The database allows all types of queries on aggregate volumes, Depot-specific volumes, container-specific volumes, and volumes within a certain time period all based on the daily shipment data provided by the Manufacturers.

The DCA created a query that provides monthly volumes for the calendar period Jan 2002 to June 2006. The DCA created 28 Forecast Groups to combine Container Streams that had small volumes to create statistically valid samples.¹⁰⁶ For example, the DCA combined the ISB volumes with the Big Rock bottle volumes due to the fact that these volumes would reasonably be considered as ISB volumes going forward. The follow table shows the Forecast Groups:

¹⁰⁶ The DCA used 27 Forecast Group for the various combinations of container steams plus Forecast Group 28 for all containers.

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ProductID	ProdName	Container Stream	Cal 2005	Forecast Group	Forecast Group Name
1	Pop Cans 0 - 1 L	Aluminum 0 - 1 L	385,452,301	1	Pop Cans
26	Beer Cans	Beer Cans	301,871,712	2	Beer Cans
16	PET 0 - 1 L	PET 0 - 1 L	193,660,040	3	PET 1 to 1 l
33	Industry Standard Bottles	ISB	137,024,148	4	Beer Bottles
23	Big Rock Bottles	Big Rock	432	4	Beer Bottles
8	Glass 0 - 500 ml	Glass 0 - 500 ml	57,411,148	5	Glass 0 to 1 l
9	Glass 501 - 1 Litre	Glass 501 - 1 Litre	36,070,353	5	Glass 0 to 1 l
41	Glass 0 - 1 Litre	Glass 0-1 Litre	1,065,871	5	Glass 0 to 1 l
21	Tetra Brik 0 - 1 L	Tetra Brik 0 - 1 L	75,844,206	6	Tetra 0 to 1 l
17	PET Plastics Over 1 Litre	PET Plastics Over 1 Litre	55,470,412	7	PET Over 1 l
35	Import Beer Bottles	Import Beer Bottles	44,787,598	8	Import Beer
10	Glass Over 1 Litre	Glass Over 1 Litre	7,931,292	9	Glass Over 1 l
0	Gable Top Over 1L	Gable Top Over 1L	7,358,275	10	Gable 0 to 1 l
5	Drink Pouch 0 - 1 L	Drink Pouch 0 - 1 L	5,751,733	11	Drink Pouch
12	HDPE Plastics Over 1 Litre	HDPE Plastics Over 1 Litre	3,254,748	12	HDPE Over 1 l
18	Polycups 0-500ml	Polycups 0-500ml	2,631,445	13	Polycups
3	Bi Metal 0 - 1 L	Bi Metal 0 - 1 L	2,704,999	14	Bi Metal 0 to 1 l
11	HDPE 0 - 1 L	HDPE 0 - 1 L	1,595,032	15	HDPE 0 to 1 l
4	Bi-Metal Cans Over 1 Litre	Bi-Metal Cans Over 1 Litre	889,680	16	Bi Metal Over 1 l
7	Gable Top 0 -1 L	Gable Top 0 -1 L	670,763	17	Gable Over 1 l
2	Bag in Box Over 1 L	Bag in Box Over 1 L	220,801	18	Bag in Box
34	Tetra Brik Over 1 Litre	Tetra Brik Over 1 Litre	175,377	19	Tetra Over 1 l
20	PVC Plastics Over 1 Litre	PVC Plastics Over 1 Litre	80,837	20	PVC Over 1 l
37	Polypropylene	Polypropylene	92,587	21	Polypropylene
19	PVC 0 - 1 L	PVC 0 - 1 L	13,072	22	PVC 0 to 1 l
15	Liq/Wine Ceramics	Liq/Wine Ceramics	1,124	23	Other
36	Aerosol 0 - 1 Litre	Aerosol 0 - 1 Litre	-	23	Other
32	Sleemans Bottles	Sleemans	6,270,552	24	Sleemans
14	Import Beer PET 0 - 1 Litre	Import Beer PET 0 - 1 Litre	5,307	25	Import Beer PET 0 to 1 l
13	Import Beer Cans (Bi-Metal)	Import Beer Cans (Bi-Metal)	41,268	26	Import Beer (Bi-Metal)
27	Imports Under 1 Litre	Imports under 1 litre	6,960	27	Imports 0 to 1 l
24	Beer Cans - Deposit Only				
25	Unusable ISBs				
30	Molson Obsolete				
31	Over 1 Litre Bottles				
Total			1,328,354,073		

1 The Product ID is a DCA assigned value and the Product Name is a DCA assigned name.
 2 Unfortunately, the naming conventions for Container Streams is not consistent between the
 3 ABCRC, BDL and the BCMB. Note that all glass containers under 1 litre were combined into a
 4 single Container Stream effective January 1, 2006. In other instances where Container Streams
 5 were combined into a Forecast Group, the volume of containers combined with a large volume
 6 Container Stream were relatively small (e.g. Big Rock combined with Industry Standard Bottles).

7 The four Container Streams at the bottom of the table had no reported volumes in calendar
 8 2005 and were not including in the 2006 forecast.

9 The DCA calculated a line of best-fit linear Regression for each Forecast Group based on each
 10 group's monthly volume for the period January 2002 to June 2006. This line of best fit was then
 11 used to forecast monthly volumes for 2006.

12 The DCA also undertook a statistical procedure called Deseasonalization¹⁰⁷ to attempt to
 13 remove the seasonality from the monthly volumes. A Regression line of best fit was also fitted

¹⁰⁷ This procedure is outlined in detail in Mason, Robert D. and Douglas A. Lind, Statistical Techniques in Business and Economics, 9th Edition, pp.745-756

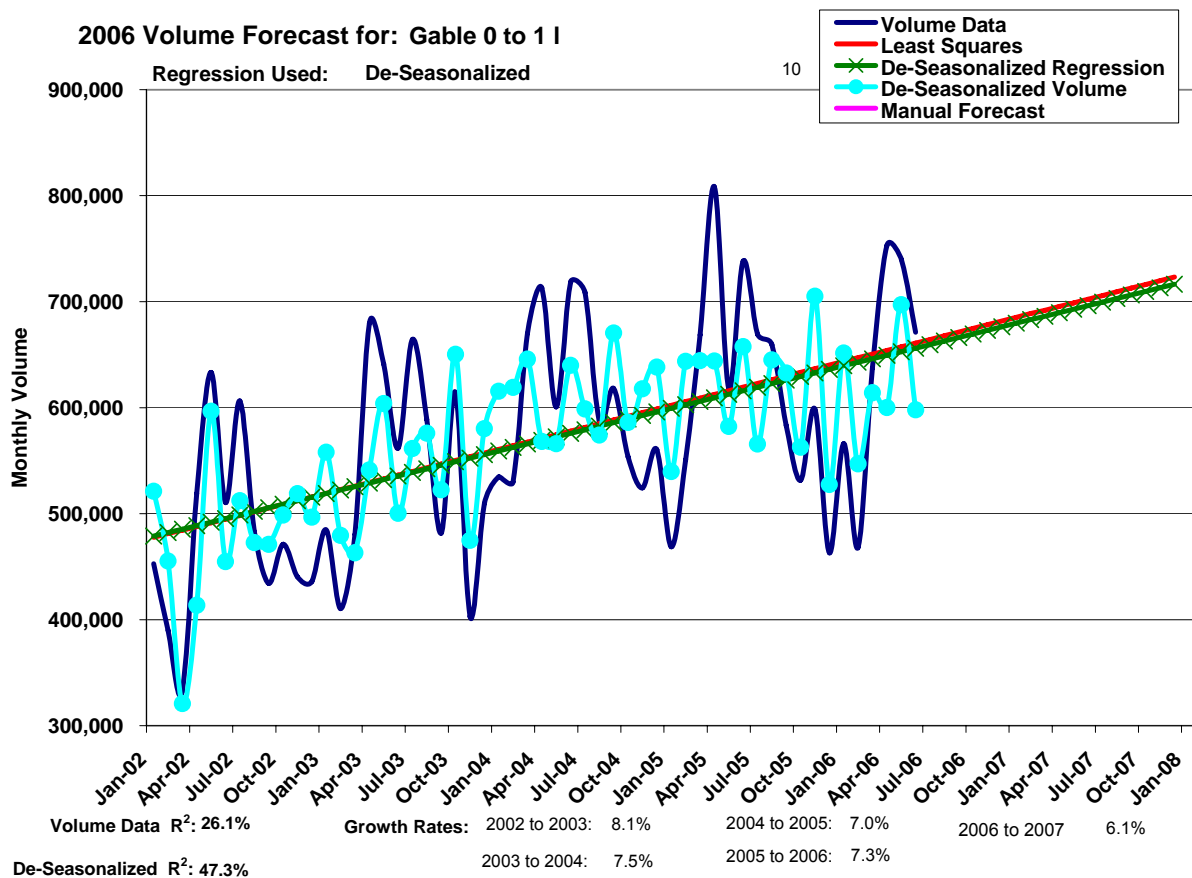
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1 to the deseasonalized data for each Container Stream. The DCA used the best Regression line
2 for each major Container Stream to determine the 2006 Container Stream forecast, using the
3 Regression line that had the higher R^2 statistic.

4 The following chart shows the Regressions for the Gable Top over one litre (> 1 L) Container
5 Stream (Forecast Group 10):



6 The returns for this container category is growing quite rapidly, with an annual growth rate of
7 over 7% from 2002 to 2005, and a forecast growth rate for 2006 over 2005 of 7.3%.

8 Like most Container Streams, return volumes are higher in the summer months and lower in the
9 winter months. In the above chart, the dark blue line shows the actual recorded total Alberta
10 collections by month for the period January 2002 to June 2006.

11 Monthly variations in the recorded data are also due to the timing of collections by ABCRC and
12 BDL from the Depots and when the collection information is dated in the Manufacturers'
13 computer systems. Other factors, like the number of working days per month, long weekends,
14 holidays, etc. can also result in return volume variances from month to month.

15 The straight red line (upper straight line on the right side) is the best fit least squared linear
16 Regression line though the recorded containers volume data, plus an 18 month projection to

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1 December 2007. For this data, the best-fit least squared linear Regression line has an R^2
2 statistic of 26%. The R^2 statistic can vary between $R^2 = 0$ representing no correlation in the
3 data, $R^2 = 1$ representing perfect correlation in the data.

4 The least squares correlation methodology minimizes the square of the distance (values) from
5 each data point to the best-fit line. The seasonality and monthly variations in the data results in
6 an R^2 value that is relatively low at 26%.

7 The deseasonalized data is shown in light blue, with data points marked with circles. As can be
8 seen from the chart, the deseasonalization process reduces some of the seasonal variations in
9 the data, although the process does not fully compensate for the monthly variations.

10 The straight green line with x's (lower straight line on the right side) is the best-fit least squared
11 linear Regression line though the deseasonalized volume data, plus an 18 month projection to
12 December 2007. For this data, the best fit least squared linear Regression line has an R^2
13 statistic of 47%.

14 For this Forecast Group, the deseasonalization process resulted in a higher R^2 statistic and
15 therefore the DCA used the deseasonalized data Regressions line for the volume data, plus an
16 18-month forecast from July 2006 to December 2007.

17 Note that the two Regression lines are almost identical, which is the case for most of the
18 Container Streams analyzed. The results obtained suggest that while there is a definite
19 seasonality in the data, wide fluctuations from month to month can occur. While Customers
20 may purchase greater numbers of certain types of containers each year, it is suspected that
21 some time lag exists between purchase and return. This time lag may vary by Container
22 Stream, season or even from year to year.

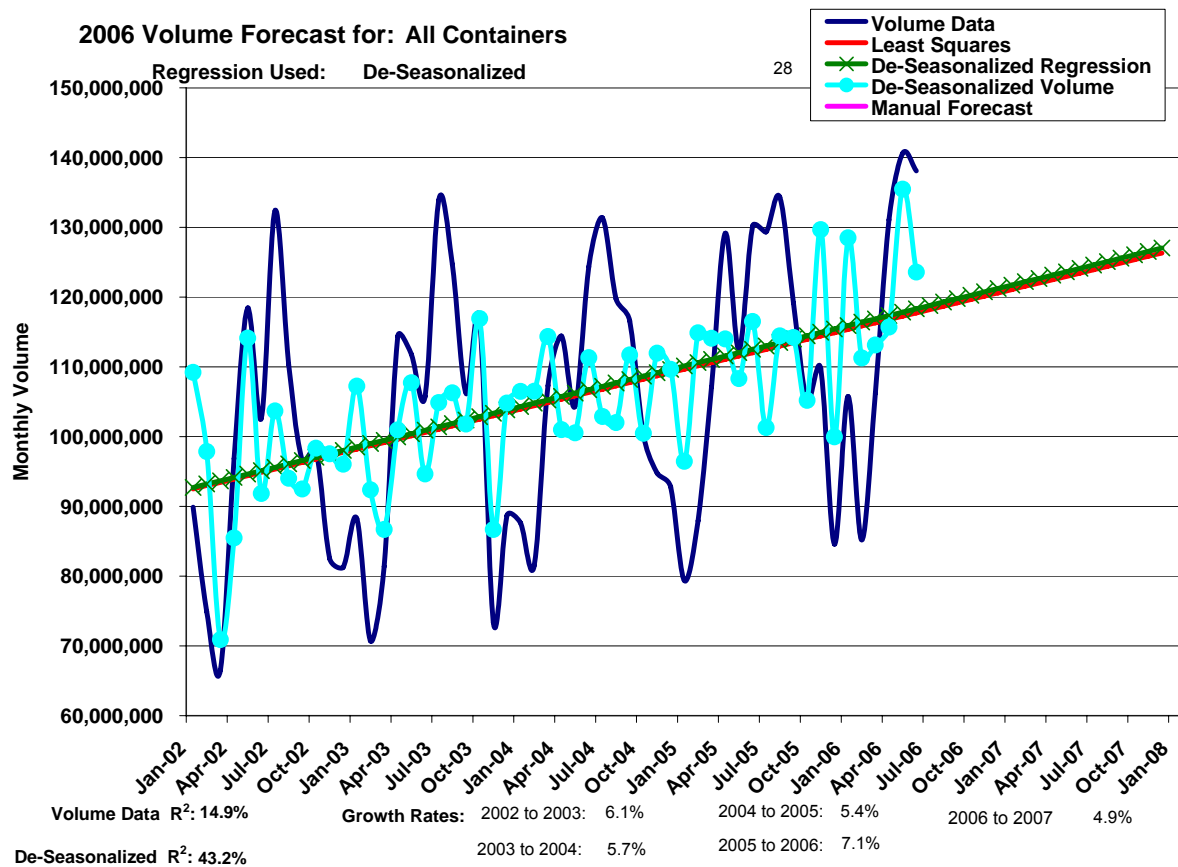
23 Similar analysis as presented above was performed for each Forecast Group to generate a
24 series of container return forecasts. These forecasts are presented in Doc 10-019.

25 The following chart shows the forecast for Forecast Group 28, all containers in aggregate.

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1 While the DCA will not use the aggregate forecast, this chart does show that overall system
2 volumes during peak summer months are nearly twice the volumes during the lowest volume
3 months in the winter. This fact highlights the seasonal nature of the beverage container return
4 industry in Alberta. This chart above also shows that continual growth in container return
5 volumes occurs over time.

6 Other types of forecast methodologies were investigated and dismissed. Even if a more
7 sophisticated forecast methodology could be found and utilized, the DCA is of the view that the
8 results would not be materially different from those obtained using linear Regression
9 techniques. In addition, as noted above, the accuracy of the forecasts for setting Handling
10 Commissions is not as critical as other industries that have a higher portion of fixed costs and
11 profits that are, therefore, more sensitive to variations in sales.

12 5.2.3 Results

13 For the 35 Container Streams contained in the data received from ABCRC and BDL, a total of
14 28 Regression forecasts were prepared (plus one Regression for all containers as a
15 comparison). As noted above, some Container Streams that are no longer in use or with small
16 volumes were combined with similar Container Streams into Forecast Groups.

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- 1 Overall, the DCA is forecasting that a total of 1.431 billion containers will be collected in 2006,
- 2 an increase of 7.7% over 2005. The following table shows the forecasts for the eight highest
- 3 volume Container Streams:

Annual Collection Volumes (millions)

Actuals to June 2006, Forecast July 2006 to December 2007

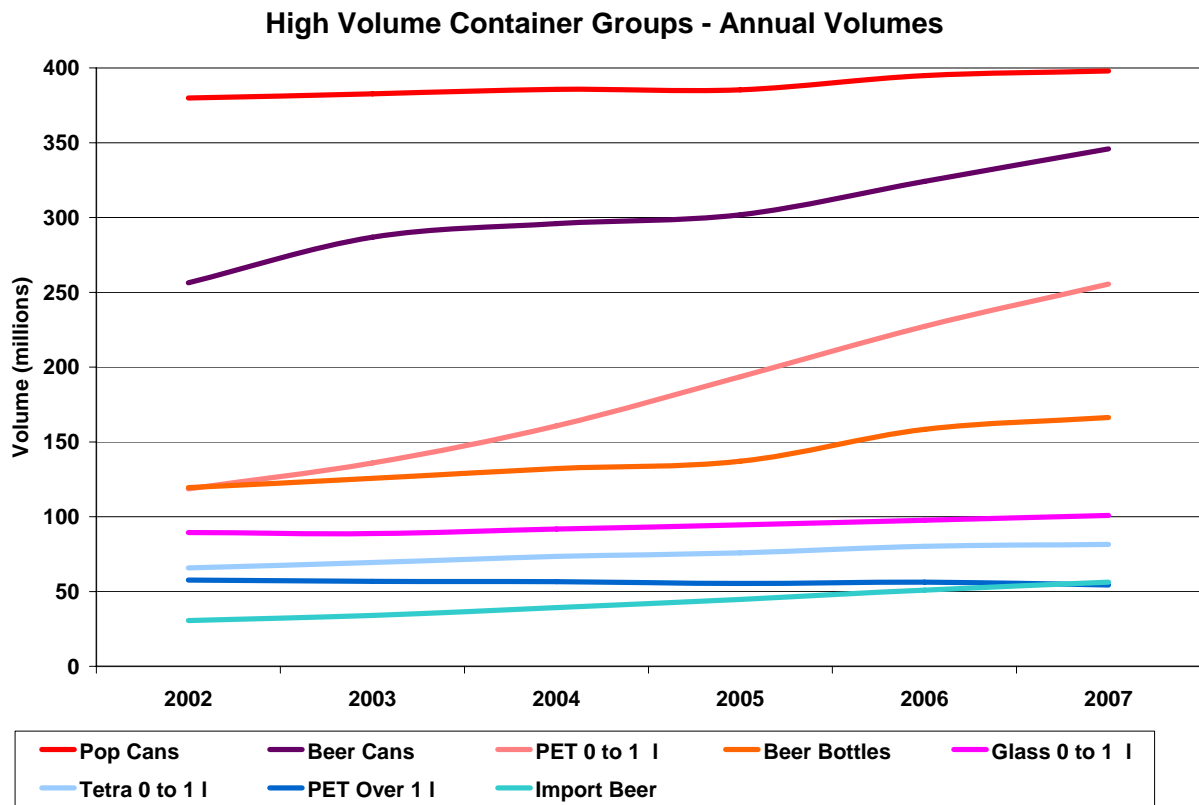
	Group Name	2002	2003	2004	2005	2006	2007	% of 2006 Total
1	Pop Cans	379.9	382.6	385.7	385.5	395.0	397.9	27.6%
2	Beer Cans	256.4	286.8	295.9	301.9	324.3	345.9	22.7%
3	PET 0 to 1 l	118.7	136.0	160.8	193.7	227.3	255.6	15.9%
4	Beer Bottles	119.5	125.6	132.1	137.0	158.4	166.4	11.1%
5	Glass 0 to 1 l	89.4	88.8	91.8	94.5	97.8	100.9	6.8%
6	Tetra 0 to 1 l	65.8	69.4	73.5	75.8	80.2	81.5	5.6%
7	PET Over 1 l	57.7	56.9	56.5	55.5	56.3	54.3	3.9%
8	Import Beer	30.6	34.1	39.3	44.8	51.0	56.3	3.6%
9	Other types	32.7	35.7	39.5	39.7	40.8	42.3	2.9%
10	Total	1,150.6	1,215.9	1,275.2	1,328.4	1,431.0	1,501.1	100.0%
11	All Containers	1,150.6	1,215.9	1,275.2	1,328.4	1,423.4	1,484.3	99.5%
	Agency	2002	2003	2004	2005	2006	2007	% of 2006 Total
12	ABCRC	770.4	798.6	841.1	883.1	941.4	981.0	65.8%
13	BDL	380.1	417.3	434.1	445.2	489.7	520.1	34.2%
14	Both	-	-	-	-	-	-	0.0%
15	Total	1,150.6	1,215.9	1,275.2	1,328.4	1,431.0	1,501.1	100.0%

- 4 Note that over 50% of the forecast volume is aluminum cans and that the eight highest volume
- 5 containers account for over 97% of the total forecast 2006 volume. The following chart shows
- 6 the forecasts for the eight highest volume Forecast Groups:

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- The following table shows the growth rates for the highest volume Container Streams:

Annual Collection Volume Growth Rates

Actuals to June 2006, Forecast July 2006 to December 2007

	Group Name	2002 to 2003	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007
1	Pop Cans	0.7%	0.8%	-0.1%	2.5%	0.7%
2	Beer Cans	11.9%	3.2%	2.0%	7.4%	6.7%
3	PET 0 to 1 L	14.6%	18.2%	20.4%	17.4%	12.4%
4	Beer Bottles	5.2%	5.2%	3.7%	15.6%	5.0%
5	Glass 0 to 1 L	-0.7%	3.4%	3.0%	3.4%	3.2%
6	Tetra 0 to 1 L	5.5%	6.0%	3.2%	5.8%	1.6%
7	PET Over 1 L	-1.4%	-0.8%	-1.8%	1.5%	-3.5%
8	Import Beer	11.5%	15.4%	14.0%	13.8%	10.5%
9	Total	5.7%	4.9%	4.2%	7.7%	4.9%
10	All Containers	5.7%	4.9%	4.2%	7.2%	4.3%
	Agency	2002 to 2003	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007
11	ABCRC	3.7%	5.3%	5.0%	6.6%	4.2%
12	BDL	9.8%	4.0%	2.6%	10.0%	6.2%
13	Both	0.0%	0.0%	0.0%	0.0%	0.0%
14	Total	5.7%	4.9%	4.2%	7.7%	4.9%

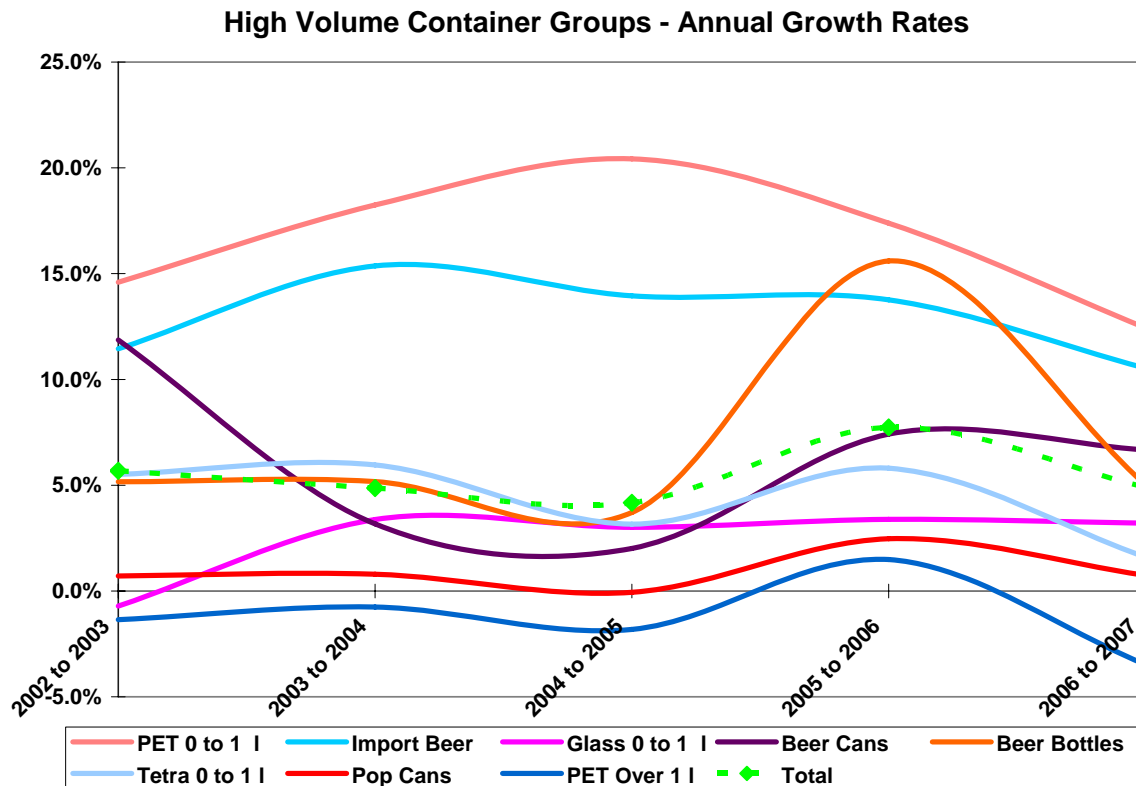
- Overall, forecast container volume is expected to increase by over 7.7% from 2005 to 2006.
- Note that certain Container Streams have much higher growth rates than others. The PET 0-1
- L Container Stream growth is thought to be the result of the growing demand for smaller clear

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- 1 plastic water bottles. Other Container Streams have annual growth rates that are fairly flat, or
2 even negative. The DCA submits that due to the different growth rates, its approach to
3 forecasting the Forecast Groups individually will lead to a more accurate forecast. The growth
4 rates for the major Container Streams are shown graphically in the following chart:

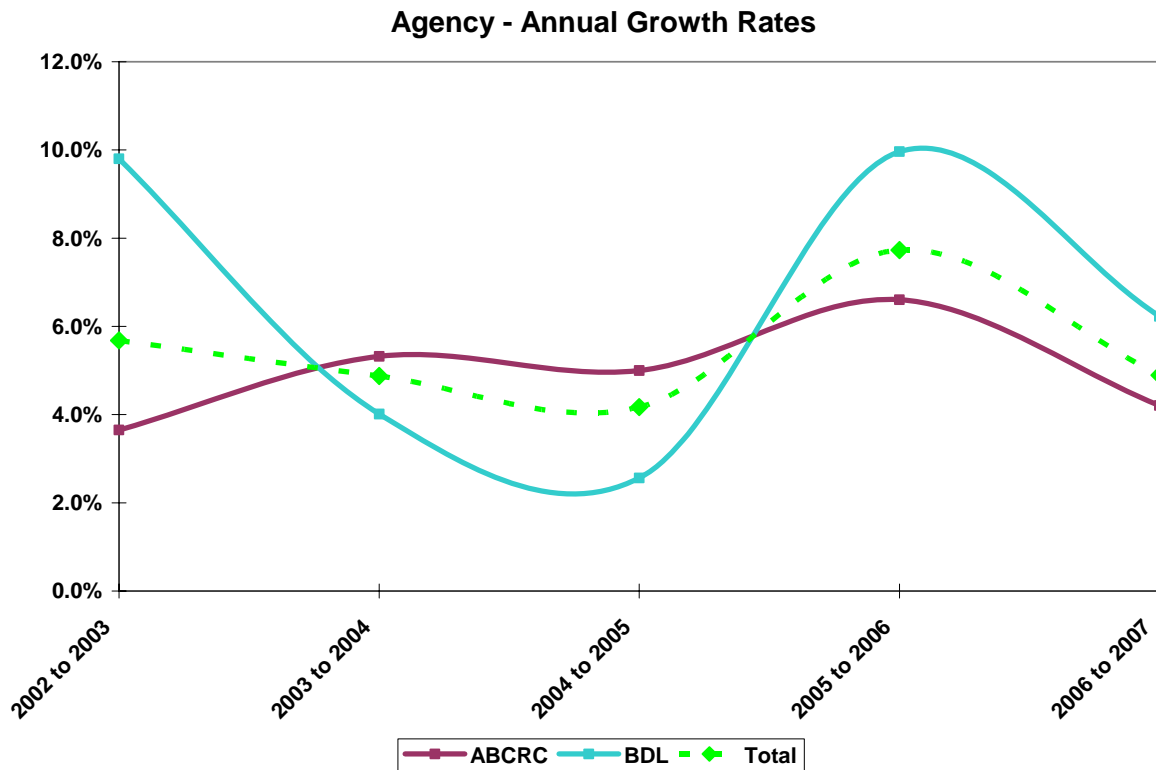


- 5 The next chart shows the growth rates by Manufacturers.

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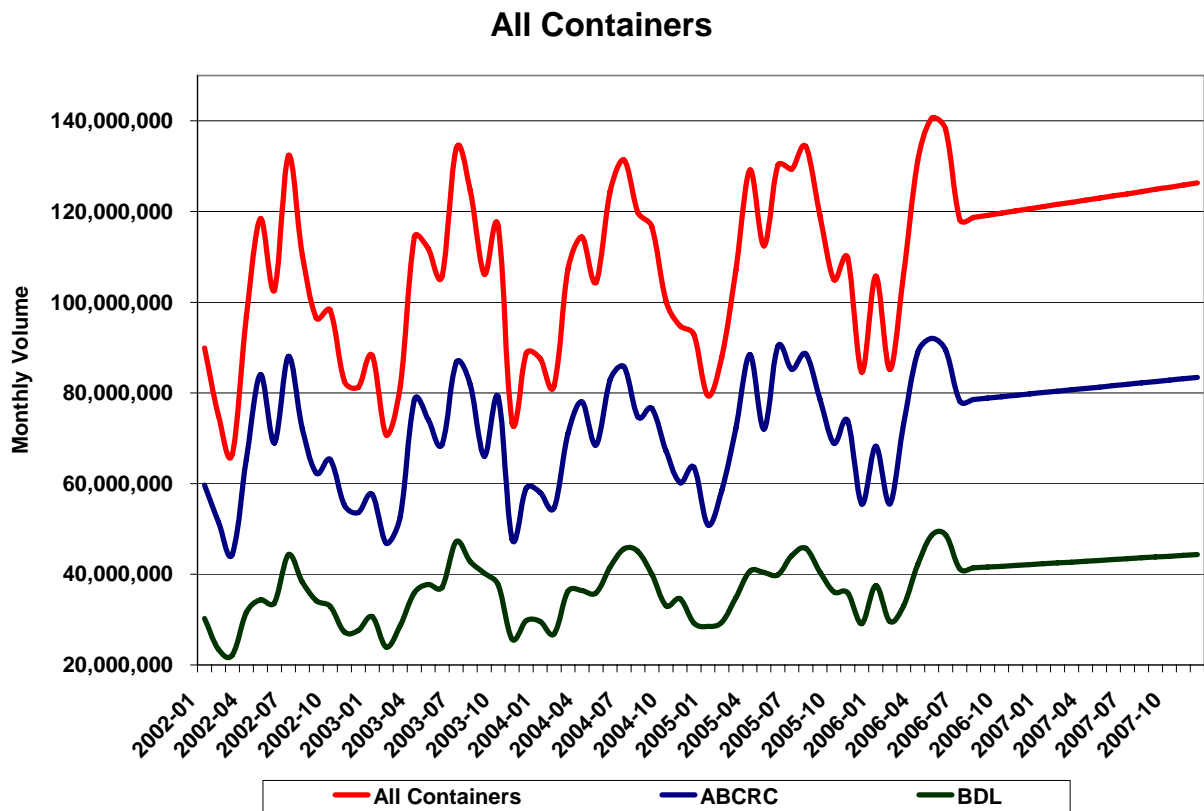
- 1 The DCA has utilized the aggregate volume forecasts by Forecast Group to forecast 2006 costs
- 2 and intends to use the same forecast to determine 2006 Handling Commission as part of our
- 3 Phase II process.

- 4 The following chart shows historical data from January 2002 and the DCA's forecast to the end
- 5 of 2007. Again, note the significant volume range between the winter and summer months.

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- 1 The table on the next pages shows the Cal 2006 forecast by Forecast Group, along with actual
- 2 Cal 2004 and Cal 2005 volumes.

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1 Fiscal year ending April 30, 2004 110 Z containers
2 Since the DCA was able to retrieve 2002 to 2005 calendar year data by Container Stream
3 by Depot, it was able to determine the 2003 and 2005 fiscal year end volumes for every
4 Depot.

5 For our example, the fiscal 2004 to 2005 growth rate for Container Stream Z was 10%,
6 which was applied to determine forecast 2005 and 2006 fiscal year volumes.

7 Forecast fiscal year end April 30, 2005 $110 \times 10\% = 121$ Z containers

8 Forecast fiscal year end April 30, 2006 $121 \times 10\% = 133$ Z containers

9 These forecasts were then used to determine a forecast volume for Calendar 2005. For
10 Depot A and Container Stream Z, the 2005 forecast would be:

11 $121 \text{ containers} \times 4/12 + 133 \text{ containers} \times 8/12 = 129$ Z containers

12 The forecast of 129 containers would be used to forecast Depot A's 2005 variable costs.

13 Using the methodology noted above, a few challenges arise from the results of the data query.
14 First, some Container Stream show extraordinary percentage increases or decreases year over
15 year. This is typically seen when one year has a very small volume. To correct this deficiency,
16 we implemented a ceiling annual container volume growth rate of 140%.

17 Secondly, an issue arises when certain Container Stream volume occurs in one year, but not in
18 the other. Using the methodology described above, a growth rate of -100% or an undefined
19 growth rate results if there is a volume reported in one year but none in the other. In either
20 case, we simply applied the volume of the year with volume reported as the forecast for 2006 for
21 that Forecast Group and Depot.

22 Finally, once this exercise is complete, it is obvious that the sum of the Depot volume forecasts
23 by Forecast Group will not match the aggregate container forecast for each stream, given the
24 different methodologies used to obtain these forecasts and the fact that the Study system has
25 fewer Depots than the Total System. The DCA has addressed this issue by determining the
26 proportion that the total aggregate Depot volumes, by Forecast Group, is different from the
27 aggregate stream forecast. This value is a shift factor, and the DCA multiplied each Depot's un-
28 shifted Calendar 2006 volume forecast by Forecast Group by each Forecast Group's shift factor
29 such that the total aggregate Depot shifted container forecast equals the aggregate forecast.

30 For example, the aggregate volume forecast was for 1.431 billion containers in 2006. This
31 forecast represents the entire collection system in Alberta, i.e. all Depots. However, the DCA
32 received completed UCAs from Depots that represent about 83% of the Total System volume.
33 For each Container Stream, the 2006 aggregate volume forecast was reduced to 83%. Then,
34 that value was compared to the sum of the Depot specific forecast by Forecast Group to
35 determine a shift factor by Forecast Group that would make the Depot specific forecast equal to
36 the reduced aggregate forecast.

37 5.3.1 Methodology Discussion

38 One could characterize the DCA's chosen volume forecast methodology as a "top-down"
39 approach (calculating aggregate Cal 2006 Total System volumes), combined with a "bottom-up"
40 approach (calculating each Depot's growth rate in Container Stream volumes).

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The DCA believes that the top-down approach should dominate, because we believe that more accuracy exists in the aggregate forecast, because it is inherently easier to calculate system forecasts than to calculate individual Depot forecasts. However, the bottom-up methodology does allow the DCA to recognize that each Depot has its own growth pattern for each Forecast Group (growth rates within communities in Alberta are not expected to be similar) and the bottom up approach allows a more refined result than, for example, to apply the aggregate volume growth rate to each Depot's volume.

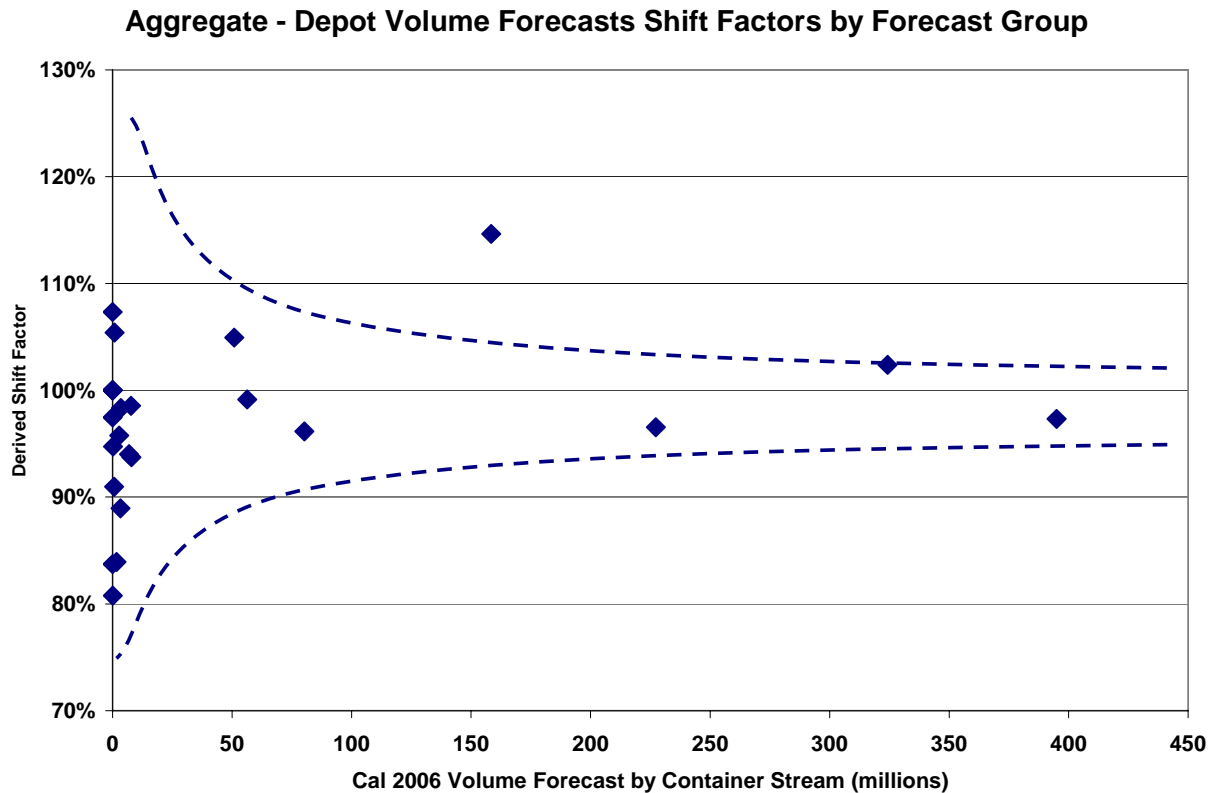
In the latter case, each Depot's volume would be adjusted by the aggregate volume growth rate, which would make no allowance for the fact that each Depot may have higher or lower growth rates than the Total System in aggregate.

5.3.2 Results

The following table shows the aggregate and sum of Depot container volume forecasts by Forecast Group.

ProductID	ProdName	FY 2004	FY 2005	Current HC	Current Deposit	Cal 2006 Volume Forecast All Depots	Cal 2006 Shifted Study System
0	Gable Top Over 1L	6,044,223	6,371,130	\$0.080	\$0.200	7,842,926	6,470,883
1	Pop Cans 0 - 1 L	327,755,992	331,578,869	\$0.028	\$0.050	394,970,798	325,874,670
2	Bag in Box Over 1 L	209,809	199,070	\$0.080	\$0.200	221,918	183,091
3	Bi Metal 0 - 1 L	1,694,852	2,237,936	\$0.080	\$0.050	3,307,116	2,728,569
4	Bi-Metal Cans Over 1 Litre	827,043	745,960	\$0.080	\$0.200	859,351	709,013
5	Drink Pouch 0 - 1 L	5,488,662	5,645,555	\$0.080	\$0.050	4,867,277	4,015,794
7	Gable Top 0 -1 L	588,632	586,525	\$0.080	\$0.050	657,515	542,490
8	Glass 0 - 500 ml	47,963,055	48,648,136	\$0.075	\$0.050	-	-
9	Glass 501 - 1 Litre	28,021,455	30,017,642	\$0.075	\$0.050	-	-
10	Glass Over 1 Litre	6,360,002	6,421,220	\$0.080	\$0.200	7,747,372	6,392,048
11	HDPE 0 - 1 L	1,031,092	1,255,992	\$0.080	\$0.050	1,630,550	1,345,303
12	HDPE Plastics Over 1 Litre	2,549,030	2,713,380	\$0.080	\$0.200	3,490,127	2,879,566
13	Import Beer Cans (Bi-Metal)	36,540	35,508	\$0.028	\$0.100	43,189	35,631
14	Import Beer PET 0 - 1 Litre	8,616	4,731	\$0.028	\$0.100	5,095	4,202
15	Liq/Wine Ceramics	1,524	1,436	\$0.080	\$0.050	847	697
16	PET 0 - 1 L	127,584,683	152,787,760	\$0.055	\$0.050	227,325,480	187,557,199
17	PET Plastics Over 1 Litre	48,522,707	47,966,410	\$0.075	\$0.200	56,296,069	46,447,641
18	Polycups 0-500ml	2,721,958	2,430,378	\$0.080	\$0.050	2,755,156	2,273,169
19	PVC 0 - 1 L	14,747	12,858	\$0.080	\$0.050	35,685	29,440
20	PVC Plastics Over 1 Litre	68,980	67,141	\$0.080	\$0.200	67,223	55,464
21	Tetra Brik 0 - 1 L	61,230,991	64,339,674	\$0.053	\$0.050	80,249,143	66,210,368
23	Big Rock Bottles	54,684	2,148	\$0.028	\$0.100	-	-
24	Beer Cans - Deposit Only	55,128		\$0.028	\$0.100	-	-
25	Unusable ISBs	16,632		\$0.028	\$0.100	-	-
26	Beer Cans	246,462,168	253,176,912	\$0.028	\$0.100	324,255,049	267,529,919
27	Imports Under 1 Litre	7,308	3,408	\$0.028	\$0.100	130,022	107,276
30	Molson Obsolete	528		\$0.028	\$0.100	-	-
31	Over 1 Litre Bottles	14		\$0.080	\$0.200	-	-
32	Sleemans Bottles	4,833,048	5,277,312	\$0.028	\$0.100	6,844,517	5,647,139
33	Industry Standard Bottles	105,141,852	108,782,520	\$0.028	\$0.100	158,406,675	130,695,036
34	Tetra Brik Over 1 Litre	216,290	224,278	\$0.080	\$0.200	32,303	26,651
35	Import Beer Bottles	30,569,700	34,235,458	\$0.028	\$0.100	50,951,155	42,037,766
36	Aerosol 0 - 1 Litre	-	96	\$0.080	\$0.050	-	-
37	Polypropylene	48	43,338	\$0.080	\$0.050	300,432	247,870
41	Glass 0 - 1 Litre		175,861	\$0.075	\$0.050	97,751,649	80,650,993
Total		1,056,081,993	1,105,988,642			1,431,044,640	1,180,697,888

- 1 The following chart shows the shift factors by Container Stream that were used to match the
- 2 Depot specific forecast with the aggregate forecast:



- 3 Note that the shift factors are closer to 100% for the Forecast Groups with higher volumes (the
- 4 blue curved lines tend to suggest that the larger the volume the closer the shift factor is to
- 5 100%). The smaller volume Container Streams have shift factors between 80% and 130%,
- 6 primarily due to large positive and negative growth rates for newer Container Streams and for
- 7 obsolete Container Streams.

- 8 Due to the commercially sensitive nature of the Depot-specific forecasts, these results are
- 9 confidential and will not be disclosed.

5.4 2006 ACTUAL VOLUMES

With the passage of time 2006 actual volume information from the Manufacturers is now available. The 2006 Aggregate Volume Forecast of 1,431.0 million containers was 0.1% higher than actual volume of 1,429.0 million containers.¹⁰⁹ The 2006 Study System Depot Volume Forecast of 1,181.0 million containers was 1.9% lower than actual volume of 1,202.9 million containers. The DCA has utilized 2006 actual volumes throughout the 2006 Phase I Report Rev 1 and the 2006 Phase II Report Rev 1.

¹⁰⁹ See HCRP-DCA-2007-20

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5.5 2007 AGGREGATE VOLUME FORECAST

The DCA has prepared an aggregate volume forecast for the calendar year 2007 based on actual values from 2002 to 2006 and using the process discussed in section 5.2.¹¹⁰

ProductID	ProdName	Current HC Rate	Proposed HC Variable Rate	Deposit Rate	Cal 2007 Total System Volume	Cal 2007 Purchases	Cal 2007 Gross Margin (Proposed HC)	Cal 2007 Gross Margin (Current HC)
0	Gable Top Over 1L	\$0.0800	\$0.0600	\$0.2000	8,231,091	\$1,646,218	\$493,865	\$658,487
1	Pop Cans 0 - 1 L	\$0.0280	\$0.0396	\$0.0500	394,698,617	\$19,734,931	\$15,638,930	\$11,051,561
2	Bag in Box Over 1 L	\$0.0800	\$0.1000	\$0.2000	215,919	\$43,184	\$21,592	\$17,274
3	Bi Metal 0 - 1 L	\$0.0800	\$0.0600	\$0.0500	4,343,400	\$217,170	\$260,604	\$347,472
4	Bi-Metal Cans Over 1 Litre	\$0.0800	\$0.0600	\$0.2000	819,687	\$163,937	\$49,181	\$65,575
5	Drink Pouch 0 - 1 L	\$0.0800	\$0.0600	\$0.0500	5,892,000	\$294,600	\$353,520	\$471,360
7	Gable Top 0 - 1 L	\$0.0800	\$0.0600	\$0.0500	626,893	\$31,345	\$37,614	\$50,151
8	Glass 0 - 500 ml	\$0.0750	\$0.0435	\$0.0500	100,852,527	\$5,042,626	\$4,387,487	\$7,563,940
9	Glass 501 - 1 Litre	\$0.0750	\$0.0435	\$0.0500	-	\$0	\$0	\$0
10	Glass Over 1 Litre	\$0.0800	\$0.0600	\$0.2000	7,508,825	\$1,501,765	\$450,529	\$600,706
11	HDPE 0 - 1 L	\$0.0800	\$0.0600	\$0.0500	1,632,000	\$81,600	\$97,920	\$130,560
12	HDPE Plastics Over 1 Litre	\$0.0800	\$0.0800	\$0.2000	3,404,645	\$680,929	\$272,372	\$272,372
13	Import Beer Cans (Bi-Metal)	\$0.0283	\$0.0600	\$0.1000	125,850	\$12,585	\$7,551	\$3,562
14	Import Beer PET 0 - 1 Litre	\$0.0283	\$0.0600	\$0.1000	4,800	\$480	\$288	\$136
15	Liq/Wine Ceramics	\$0.0800	\$0.1000	\$0.0500	840	\$42	\$84	\$67
16	PET 0 - 1 L	\$0.0554	\$0.0446	\$0.0500	264,299,596	\$13,214,980	\$11,789,421	\$14,642,198
17	PET Plastics Over 1 Litre	\$0.0750	\$0.0537	\$0.2000	53,510,795	\$10,702,159	\$2,874,841	\$4,013,310
18	Polycups 0-500ml	\$0.0800	\$0.0600	\$0.0500	2,762,927	\$138,146	\$165,776	\$221,034
19	PVC 0 - 1 L	\$0.0800	\$0.0600	\$0.0500	44,400	\$2,220	\$2,664	\$3,552
20	PVC Plastics Over 1 Litre	\$0.0800	\$0.1000	\$0.2000	67,218	\$13,444	\$6,722	\$5,377
21	Tetra Brik 0 - 1 L	\$0.0530	\$0.0401	\$0.0500	78,083,404	\$3,904,170	\$3,127,389	\$4,138,420
23	Big Rock Bottles	\$0.0283	\$0.0383	\$0.1000	-	\$0	\$0	\$0
24	Beer Cans - Deposit Only	\$0.0283	\$0.1000	\$0.1000	-	\$0	\$0	\$0
25	Unusable ISBs	\$0.0283	\$0.1000	\$0.1000	-	\$0	\$0	\$0
26	Beer Cans	\$0.0283	\$0.0395	\$0.1000	331,990,150	\$33,199,015	\$13,109,866	\$9,395,321
27	Imports Under 1 Litre	\$0.0283	\$0.0600	\$0.1000	14,400	\$1,440	\$864	\$408
30	Molson Obsolete	\$0.0283	\$0.1000	\$0.1000	-	\$0	\$0	\$0
31	Over 1 Litre Bottles	\$0.0800	\$0.1000	\$0.2000	-	\$0	\$0	\$0
32	Sleemans Bottles	\$0.0283	\$0.0600	\$0.1000	7,106,597	\$710,660	\$426,396	\$201,117
33	Industry Standard Bottles	\$0.0283	\$0.0383	\$0.1000	155,301,308	\$15,530,131	\$5,945,795	\$4,395,027
34	Tetra Brik Over 1 Litre	\$0.0800	\$0.0600	\$0.2000	36,000	\$7,200	\$2,160	\$2,880
35	Import Beer Bottles	\$0.0283	\$0.0457	\$0.1000	57,426,288	\$5,742,629	\$2,626,473	\$1,625,164
36	Aerosol 0 - 1 Litre	\$0.0800	\$0.1000	\$0.0500	-	\$0	\$0	\$0
37	Polypropylene	\$0.0800	\$0.0600	\$0.0500	505,620	\$25,281	\$30,337	\$40,450
41	Glass 0 - 1 Litre	\$0.0750	\$0.0435	\$0.0500	-	\$0	\$0	\$0
Totals					1,479,505,797	\$112,642,887	\$62,180,241	\$59,917,480

4

¹¹⁰ See Doc 10-035 2007 Volume Forecast Charts for forecasts by Forecast Group.

1 6.0 CALENDAR 2005 STUDY SYSTEM COST FORECAST

2 6.1 ADJUSTMENT PROCESS

3 The Calendar 2006 Study System cost forecast is based upon the FY 2005 values As Adjusted.
 4 To obtain the Calendar 2006 forecast of costs, we have escalated the As Adjusted costs for
 5 each Depot by various escalation factors by the number of months from each Depot's Fiscal
 6 Year End to December 31, 2006. On average, Depot As Adjusted costs were escalated by
 7 15.57 months.

8 For example, assume two Depots with an April 30th and a September 30th, 2005 fiscal year end
 9 with a \$100 to be cost escalated each year 3% for inflation. The formula for each Depot's
 10 Calendar 2005 cost is as follows:

$$11 \quad \text{Cal 2006} = \text{FY 2005} \times (1 + E/12 \times N)$$

12 Where N = Months from the Depot fiscal year end to December 31, 2006 and E is the escalation
 13 factor:

	FY End	FY 2005 Cost	N (months)	E (per eyar)	Cal 2006 Cost
Depot 1	30-Apr-05	\$100.00	20.04	3%	\$105.01
Depot 2	30-Sep-05	\$100.00	15.01	3%	\$103.75

14 In the above instance, the total Cal 2006 cost is the sum of each Depot's cost (\$208.76). In
 15 arriving at the Cal 2005, this methodology ("the Escalation Methodology") is used for both costs
 16 (e.g. overhead costs) and cost rates (e.g. wage rates).

17 6.2 CAL 2006 REVENUE FROM CONTAINERS AT CURRENT RATES

18 The following table shows the Handling Commission and Purchases revenue at current rates
 19 based on the Cal 2006 actuals for the Study System.

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ProductID	ProdName	Handling Commission Rate	Deposit Rate	Cal 2006 Study System Volume	Cal 2006 Revenue	Cal 2006 Purchases	Cal 2006 Gross Margin (HC)
0	Gable Top Over 1L	\$0.0800	\$0.2000	6,464,207	\$1,809,978	\$1,292,841	\$517,137
1	Pop Cans 0 - 1 L	\$0.0280	\$0.0500	336,095,710	\$26,215,465	\$16,804,786	\$9,410,680
2	Bag in Box Over 1 L	\$0.0800	\$0.2000	209,026	\$58,527	\$41,805	\$16,722
3	Bi Metal 0 - 1 L	\$0.0800	\$0.0500	2,980,030	\$387,404	\$149,002	\$238,402
4	Bi-Metal Cans Over 1 Litre	\$0.0800	\$0.2000	692,679	\$193,950	\$138,536	\$55,414
5	Drink Pouch 0 - 1 L	\$0.0800	\$0.0500	4,374,512	\$568,687	\$218,726	\$349,961
7	Gable Top 0 -1 L	\$0.0800	\$0.0500	547,304	\$71,150	\$27,365	\$43,784
8	Glass 0 - 500 ml	\$0.0750	\$0.0500	-	\$0	\$0	\$0
9	Glass 501 - 1 Litre	\$0.0750	\$0.0500	-	\$0	\$0	\$0
10	Glass Over 1 Litre	\$0.0800	\$0.2000	6,229,278	\$1,744,198	\$1,245,856	\$498,342
11	HDPE 0 - 1 L	\$0.0800	\$0.0500	1,415,995	\$184,079	\$70,800	\$113,280
12	HDPE Plastics Over 1 Litre	\$0.0800	\$0.2000	2,922,253	\$818,231	\$584,451	\$233,780
13	Import Beer Cans (Bi-Metal)	\$0.0283	\$0.1000	61,516	\$7,893	\$6,152	\$1,741
14	Import Beer PET 0 - 1 Litre	\$0.0283	\$0.1000	4,584	\$588	\$458	\$130
15	Liq/Wine Ceramics	\$0.0800	\$0.0500	517	\$67	\$26	\$41
16	PET 0 - 1 L	\$0.0554	\$0.0500	210,685,651	\$22,206,268	\$10,534,283	\$11,671,985
17	PET Plastics Over 1 Litre	\$0.0750	\$0.2000	46,513,673	\$12,791,260	\$9,302,735	\$3,488,525
18	Polycups 0-500ml	\$0.0800	\$0.0500	2,731,980	\$355,157	\$136,599	\$218,558
19	PVC 0 - 1 L	\$0.0800	\$0.0500	43,248	\$5,622	\$2,162	\$3,460
20	PVC Plastics Over 1 Litre	\$0.0800	\$0.2000	58,864	\$16,482	\$11,773	\$4,709
21	Tetra Brik 0 - 1 L	\$0.0530	\$0.0500	62,988,166	\$6,487,781	\$3,149,408	\$3,338,373
23	Big Rock Bottles	\$0.0283	\$0.1000	3,564	\$457	\$356	\$101
24	Beer Cans - Deposit Only	\$0.0283	\$0.1000	-	\$0	\$0	\$0
25	Unusable ISBs	\$0.0283	\$0.1000	-	\$0	\$0	\$0
26	Beer Cans	\$0.0283	\$0.1000	265,529,124	\$34,067,387	\$26,552,912	\$7,514,474
27	Imports Under 1 Litre	\$0.0283	\$0.1000	10,368	\$1,330	\$1,037	\$293
30	Molson Obsolete	\$0.0283	\$0.1000	-	\$0	\$0	\$0
31	Over 1 Litre Bottles	\$0.0800	\$0.2000	-	\$0	\$0	\$0
32	Sleemans Bottles	\$0.0283	\$0.1000	5,322,732	\$682,907	\$532,273	\$150,633
33	Industry Standard Bottles	\$0.0283	\$0.1000	120,063,612	\$15,404,161	\$12,006,361	\$3,397,800
34	Tetra Brik Over 1 Litre	\$0.0800	\$0.2000	30,736	\$8,606	\$6,147	\$2,459
35	Import Beer Bottles	\$0.0283	\$0.1000	43,610,370	\$5,595,210	\$4,361,037	\$1,234,173
36	Aerosol 0 - 1 Litre	\$0.0800	\$0.0500	-	\$0	\$0	\$0
37	Polypropylene	\$0.0800	\$0.0500	253,284	\$32,927	\$12,664	\$20,263
41	Glass 0 - 1 Litre	\$0.0750	\$0.0500	83,024,089	\$10,378,011	\$4,151,204	\$6,226,807
Totals				1,202,867,072	\$140,093,784	\$91,341,755	\$48,752,029

6.3 MISCELLANEOUS REVENUE

The DCA is of the view that Miscellaneous Revenue should directly track container return volumes. The DCA adjusted Miscellaneous Revenue from the reported FY 2005 values to the Cal 2006 values on the basis of the volume change by Depot from FY 2005 to Cal 2006. We believe this to be appropriate given that cardboard sales are likely a function of volume, wage subsidies to Non-Profit Depots will also likely be a function of volume (indirectly through the labour hours required to process the volume) and the VAF is directly proportional to ABCRC glass container volumes.¹¹¹

The following is a table outlining the results:

¹¹¹ The DCA understands that cardboard is a commodity and prices change based on market factors. The DCA has not investigated or tried to forecast cardboard prices as it is thought the change from the proposed escalation method would not be material.

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Miscellaneous Revenue

	Ave. FY 2005 As Adjusted	FY 2005 Volume As Adjusted	Cal 2006 Volume	Cal 2006 Cost	Increase
Small	\$248,560	180,647,234	200,362,975	\$289,682	16.5%
Large	\$486,468	925,341,408	1,002,504,097	\$521,647	7.2%
	\$735,028	1,105,988,642	1,202,867,072	\$811,330	10.4%

6.4 DIRECT LABOUR

The Direct Labour forecast is a function of both the hourly rate of each Depot and the change in volume by Depot from their FY 2005 As Adjusted results.

6.4.1 Direct Labour Hours

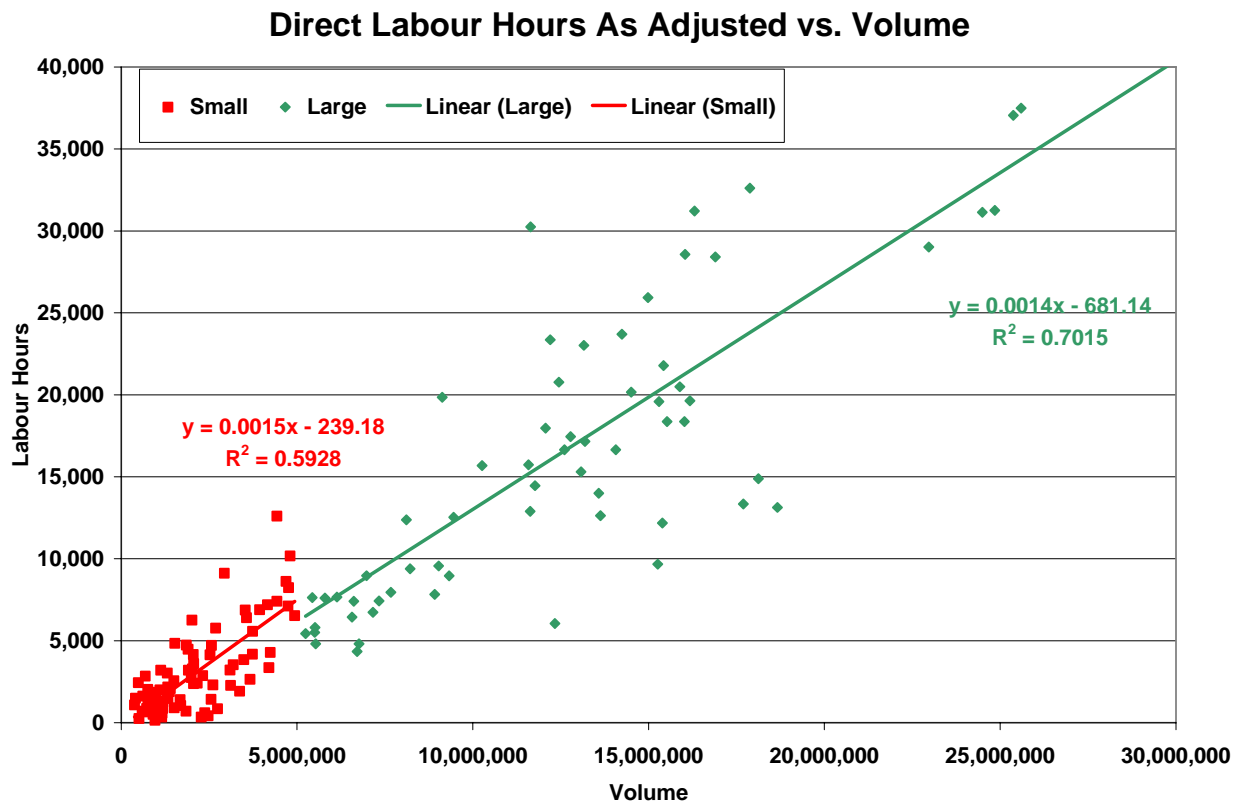
For each Depot, we divided their As Adjusted FY 2005 Direct Labour hours by their total FY 2005 volume As Adjusted to provide each Depot's Direct Labour hour/container efficiency rate (seconds/container). We then multiplied each Depot's FY 2005 Direct Labour hour/container efficiency rate by the forecast Cal 2006 volume. The resulting values provide Direct Labour hours for Cal 2006 for each Depot.

Cal 2006 Direct Labour Hours Determination

	FY 2005 Volume As Adjusted	FY 2005 Direct Labour Hours As Adjusted	Ave. FY 2005 Direct Labour Efficiency (s/container)	Cal 2006 Volume	Cal 2006 Direct Labour Hours	check (won't be exact)
Small	180,647,234	254,552	5.07	200,362,975	284,432	282,334
Large	925,341,408	1,238,409	4.82	1,002,504,097	1,341,933	1,341,678
	1,105,988,642	1,492,961	4.86	1,202,867,072	1,626,365	1,624,012

The DCA is of the view that escalating Direct Labour hours by volume is appropriate as we have previously concluded that there is a linear relationship between Direct Labour hours and volume.¹¹²

¹¹² The DCA notes that the statistics in the table above are based on FY 2005 volumes whereas the chart on the next page and the charts in Doc 10-014 are all based on Cal 2005 volumes by Depot.



1 6.4.2 Direct Labour Rate

2 The next step was to increase the As Adjusted Direct Labour rate by Depot for inflation. The
 3 DCA recognizes that there has been considerable wage inflation over the study period. The
 4 DCA is of the view that Statistics Canada indices are an appropriate benchmark to use to
 5 escalate Direct Labour costs.

6 Unfortunately, there is no single Statistics Canada index that properly reflects the nature of
 7 Direct Labour personnel. The DCA used a combination of 10 Statistics Canada indices for
 8 Alberta labour as shown in the following table:

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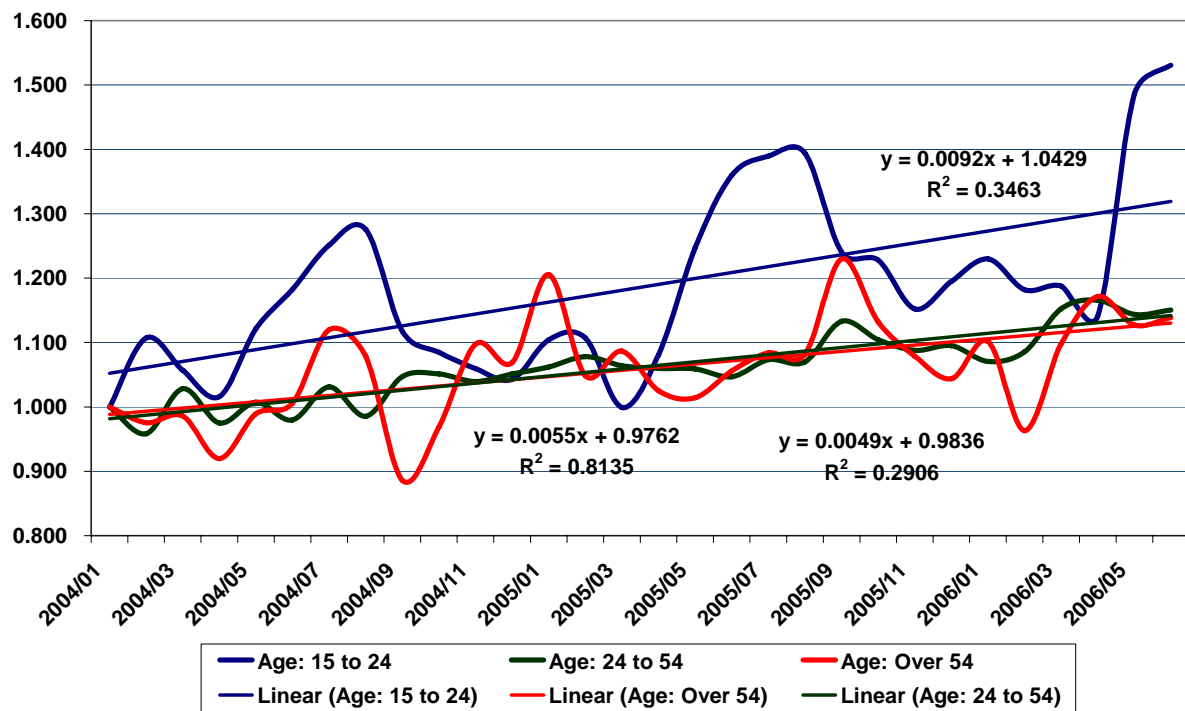
January 31, 2007

Salary and Wage Increases

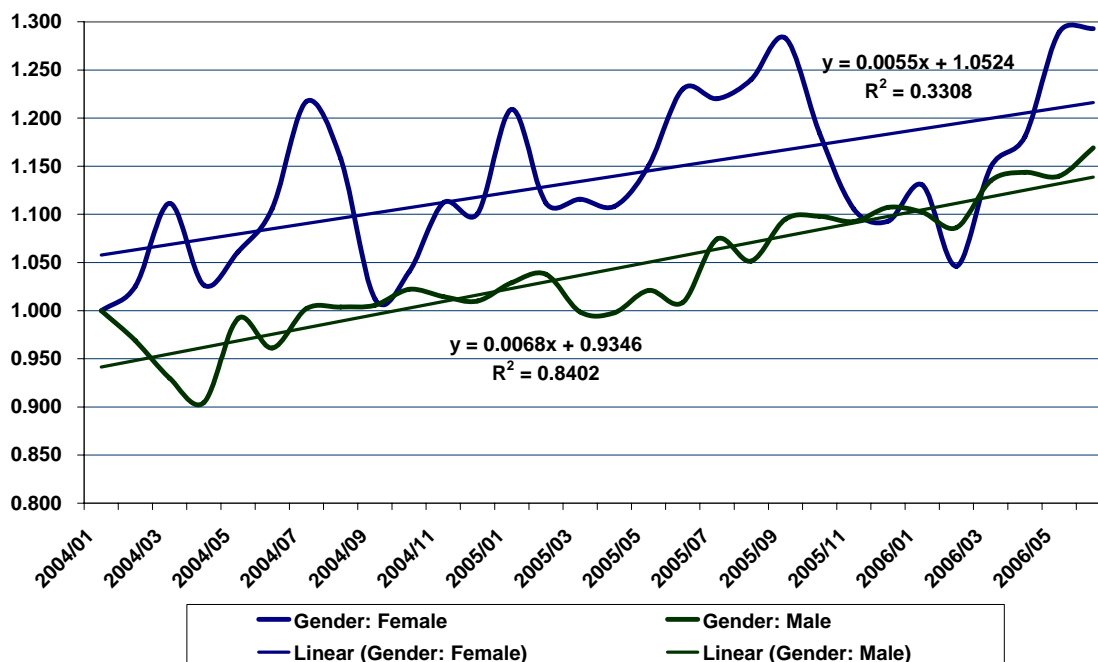
				Depot Job Classes				
				Approximate Employee Mix (%)				
Area	Category:	Ave. Annual	Data Stream	Direct Labour				Overhead labour
				HDH	COL	LDH	Average	MGR
		Jan 1/04-Jun 30/06		70%	10%	20%	100%	
1	Age:							
	15 to 24	11.05%	1	70%	70%	10%	58%	0%
	24 to 54	6.63%	2	30%	30%	80%	40%	70%
2	Gender:							
	Male	8.17%	4	65%	80%	80%	70%	80%
	Female	6.55%	5	35%	20%	20%	31%	20%
3	Status:							
	Labourer	7.51%	6	100%	100%	60%	92%	0%
	Management:	6.81%	7	0%	0%	40%	8%	100%
4								
	Permanent	9.87%	8	100%	100%	100%	100%	100%
	Temporary	5.95%	9	70%	50%	90%	72%	100%
5								
	Non-Union	8.24%	10	30%	50%	10%	28%	0%
	Union	8.24%	11	100%	100%	100%	100%	100%
Average - unweighted		7.72%		100%	100%	100%	100%	100%
				500%	500%	500%	500%	500%
Weighted Average Annual increase due to job/employee characteristics								
Jan 1 2004 - Jun 30 2006				8.4%	8.2%	8.0%	8.3%	7.8%

- 1 Based on the data available, the DCA identified five Areas or main labour attributes under the
- 2 Categories of Age, Gender and Status. For each Area, the DCA obtained 1 to 3 Statistics
- 3 Canada indices noted as Data Streams. Each Data Stream was assigned an Approximate
- 4 Employee Mix percentage for each Area by Job Class.
- 5 For example, for HND (handler) the DCA estimated that, on average, 70% of Depot handlers
- 6 are in the 15 to 24 years Age Category, with 30% in the 24 to 54 years Age Category. Similarly,
- 7 for each Category, the DCA estimated the attributes of HND personnel against each Category.
- 8 A similar process was followed for COL and LHD personnel.
- 9 The DCA then estimated the portion of Direct Labour personnel from each of the HND, COL and
- 10 LHD Job Classes to be 70%, 10% and 20%, respectively. Since the 2005 UCA did not collect
- 11 Job Class information on Table 2, the DCA does not have data to provide an allocation of Job
- 12 Classes within Direct Labour.
- 13 For each Data Stream, the Average Annual increase was taken to be the slope of the best fit
- 14 linear Regression line through the Data Stream index data over the period Jan 2004 to Sep
- 15 2006, a period that is representative of the 2005 UCA data collection period and the Cal 2006
- 16 forecast. For example, the DCA considers it is appropriate to escalate Depot costs from the
- 17 mid-point of their Fiscal Year (6 months prior to the Fiscal Year End) to June 30, 2006.
- 18 The following charts show the Statistics Canada index data for each Area and the
- 19 corresponding best fit regression line:

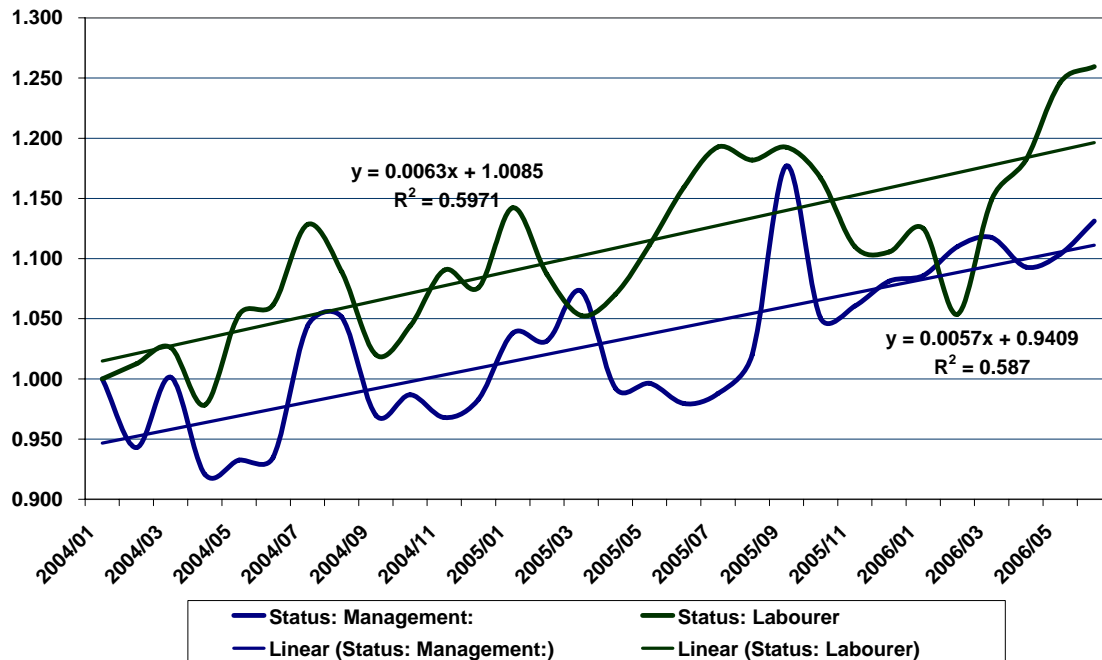
Average Normalized Labour Escalation Indices: Area 1 - Age



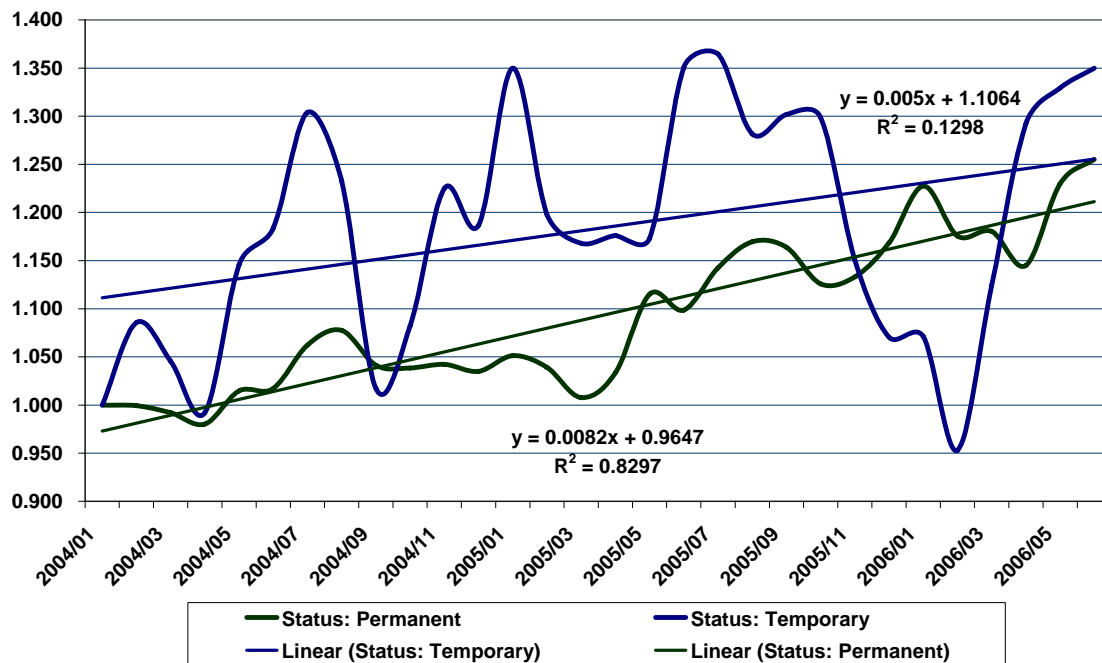
Average Normalized Labour Escalation Indices: Area 2 - Gender

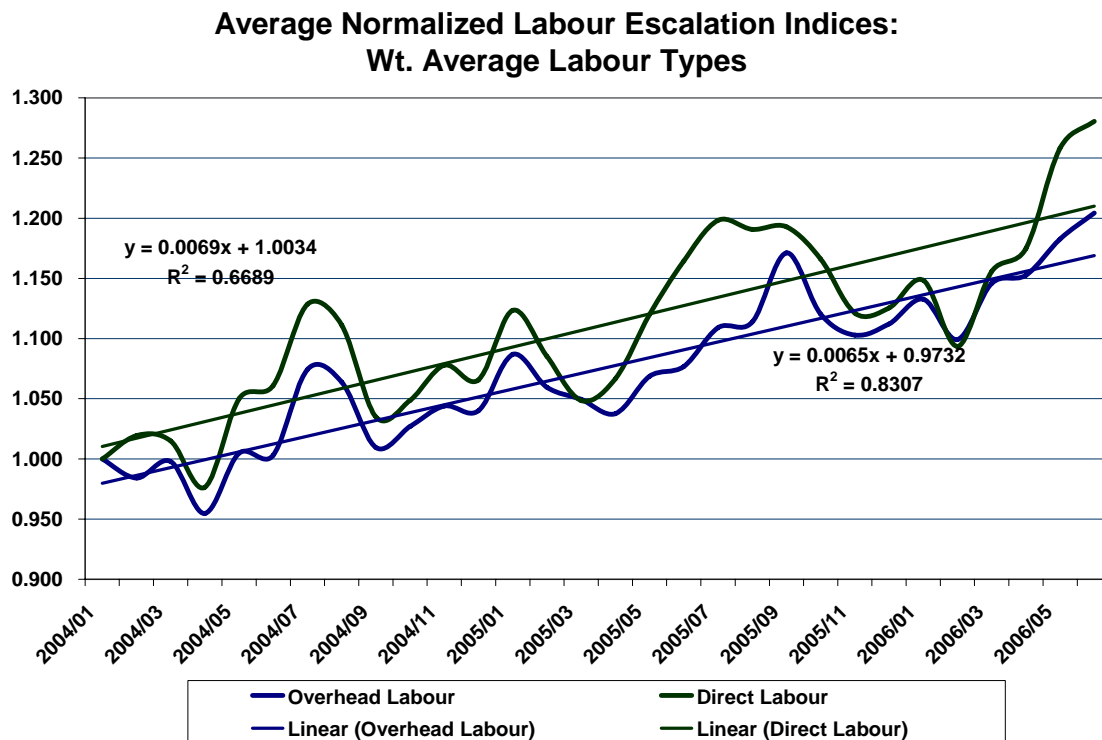


Average Normalized Labour Escalation Indices: Area 3 - Labourer / Management



Average Normalized Labour Escalation Indices: Area 4 - Temporary / Permanent





1 The Average Annual wage rate increase, based on the best fit regression line slope, for each
 2 Data Stream is show in the third column of the table above.¹¹³ These values were then weighed
 3 by the percentages for each Job Class to derive an average annual wage increase of 8.4%,
 4 8.2% and 8.0% for the HDH, COL and LDH Job Classes, respectively. Finally, using the
 5 allocation of Job Classes within Direct Labour, an average Direct Labour wage escalation rate
 6 of 8.3% was derived. This value is the E variable used as per the formula noted in section 6.1
 7 above.

8 **6.4.3 Direct Labour Benefits**

9 The DCA included all reported Benefits from the As Reported data to derive an As Reported
 10 wage rate. The derived wage rate was used to derive the As Adjusted values. Therefore, all
 11 Benefits costs are included in the As Adjusted Direct Labour costs. Escalating the As Adjusted
 12 Direct Labour rate assumed that Direct Labour Benefits increase in the same proportion. The
 13 DCA is of the view that this is a reasonable assumption.

14 **6.4.4 Total Direct Labour Cost**

15 Once we calculated the Cal 2006 Direct Labour hours for each Depot, we then multiplied that
 16 value by each Depot's Cal 2006 Direct Labour rate to obtain the Cal 2006 Direct Labour Cost by
 17 Depot. The sum over each Depot then provides the Study System Cal 2006 Direct Labour cost.

¹¹³ For example, for Data Stream 10, Union Labour, the best fit regression line slope is 0.0069/month or 8.3%/year.

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Cal 2006 Direct Labour Cost Determination

	Ave. FY 2005 Direct Labour Rate (\$/h)	Ave. # months Escalation to Cal 2006	Escalation Rate	Cal 2006 Direct Labour Rate (\$/h)	Cal 2006 Direct Labour Cost
Small	\$12.66	14.57	8.3%	\$14.03	\$3,991,487
Large	\$12.47	16.93	8.3%	\$13.92	\$18,679,670
	\$12.50	15.57		\$13.94	\$22,671,157

- 1 The increase in Direct Labour costs from FY 2005 to Cal 2006 is summarized below:

Cal 2006 Direct Labour Cost

	FY 2005 Direct Labour Cost	Cal 2006 Direct Labour Cost	Increase	Hours Increase	Rate Increase	Compound Increase
Small	\$3,221,757	\$3,991,487	23.9%	11.7%	10.9%	23.9%
Large	\$15,439,018	\$18,679,670	21.0%	8.4%	11.7%	21.0%
	\$18,660,775	\$22,671,157	21.5%	8.9%	11.5%	21.5%

- 2 We analyzed the causes of the total Cal 2006 Direct Labour hours increase from the FY 2005
3 As Adjusted level. The Cal 2006 Direct Labour hours are 6.9% higher than FY 2005 Direct
4 Labour As Adjusted due to processing of incremental forecast volumes. In addition, the labour
5 wage rate was increased by 12% to reflect the significant inflation experiences in labour rates in
6 Alberta over the past two years. Combining these two factors gives a compound Direct Labour
7 cost increase of 19% over the average escalation period of 15.57 months.

8 6.5 CONTRACT LABOUR

- 9 All Contract Labour costs were assigned to Direct Labour. There are no Cal 2006 Contract
10 Labour costs.

11 6.6 OVERHEAD LABOUR

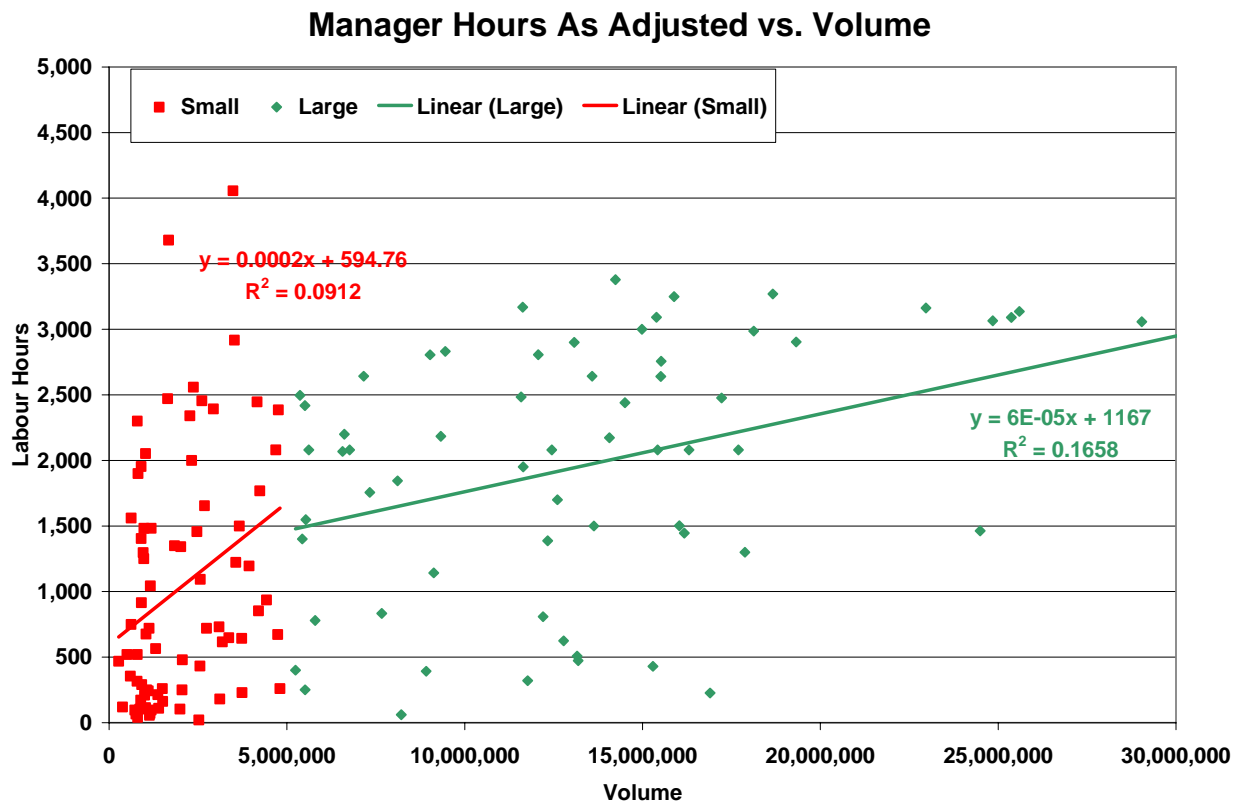
- 12 The DCA is of the view that Overhead Labour hours need not be adjusted from FY 2005 to Cal
13 2006. The rationale for this determination are:

- 14 1. Unlike Direct Labour, there is poor correlation between MGR hours and volume.

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- 1 2. The DCA made the determination in section 4.6.2 that MGR hours should be capped to
- 2 the number of hours a Depot is open each year for Large Depots.

- 3 3. Adding additional volume from FY 2005 to Cal 2006 should not materially increase the
- 4 need for additional MGR or BK hours.

- 5 Using the same methodology and as described in section 6.4.2 above for Direct Labour the
- 6 DCA has calculated an average annual rate increase of 7.8% for MGR. The DCA is of the view
- 7 that this same rate increase can reasonably be applied to BK related costs. The following table
- 8 summarizes the results:

Cal 2006 Overhead Labour Cost Determination

	Ave. FY 2005 Overhead Labour Rate (\$/h)	Ave. # months Escalation to Cal 2006	Escalation Rate	Cal 2006 Overhead Labour Rate (\$/h)	Cal 2006 Overhead Labour Cost
Small	\$17.42	14.57	7.8%	\$19.06	\$1,769,021
Large	\$25.10	16.93	7.8%	\$27.93	\$4,349,801
	\$22.23	15.57		\$24.62	\$6,118,822

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Cal 2006 Overhead Labour Cost

	FY 2005 Overhead Labour Cost	Cal 2006 Overhead Labour Cost	Increase	Hours Increase	Rate Increase	Compound Increase
Small	\$1,617,113	\$1,769,021	9.4%	0.0%	9.4%	9.4%
Large	\$3,908,489	\$4,349,801	11.3%	0.0%	11.3%	11.3%
	\$5,525,602	\$6,118,822	10.7%	0.0%	10.7%	10.7%

6.6.1 Total Labour

Adding Direct Labour and Overhead Labour together, the total Cal 2006 Labour costs are forecast to be \$28.4 million. This represents an increase of 22% from the As Reported values and 17% from the As Adjusted values:

Total Labour Costs

	FY 2005 As Reported	FY 2005 As Adjusted	Increase As Reported to As Adjusted	Cal 2006	Increase As Reported to Cal 2006	Increase As Adjusted to Cal 2006
Small	\$3,193,227	\$4,838,870	51.5%	\$5,760,507	80.4%	19.0%
Large	\$20,098,802	\$19,347,506	-3.7%	\$23,029,471	14.6%	19.0%
	\$23,292,029	\$24,186,377	3.8%	\$28,789,978	23.6%	19.0%

Schedules 2, 3 and 4, Appendix I show the total recommended labour costs for Cal 2006.

6.7 BUILDINGS

6.7.1 Building Lease Costs

As noted in Section 4.7.4.4, the DCA recommends that a portion of the building lease costs be derived by using market based lease rates as provided by LePage and applied to each reported Depot based on their geographic area in the province. Since the LePage survey was conducted in July and August 2005 the DCA is of the view that the deemed market based lease rates is reflective of average FY 2005 building occupancy costs.

In August 2006 the DCA retained Cushman & Wakefield LePage Inc. (LePage)¹¹⁴ to perform a market lease rate survey for larger commercial centres in Alberta. LePage contacted commercial real estate professionals in several centres around Alberta to determine current market lease rates for buildings that could be used for Depot operations. The criterion used was to seek current market prices for buildings that could house a Depot operation.

The building lease rates provided to LePage are likely higher than the actual costs a Depot would pay. It is anticipated that a negotiated lease rate would be lower than the quoted rate. Depot operations, with a permit from the BCMB, are relatively stable operations, which may accommodate a longer-term lease at a lower rate.

LePage provided the DCA with a table of the results of their survey¹¹⁵. A total of over 180 different quotes provided to LePage were analyzed by the DCA and used to determine average lease rates for buildings that could house Depots.

¹¹⁴ The DCA retained the same individuals to perform the survey for both the 2005 and 2006 Phase I Reports.

¹¹⁵ Doc 10-013

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- 1 The 2005 UCA As Adjusted building size data can be summarized as follows:

As Adjusted Deemed Building Sizes

	Number	Deemed SF Size	Ave SF Size
Small	95	200,639	2,112
Large	70	332,984	4,757
	165	533,623	3,234

- 2 The 2006 LePage data can be summarized as follows, assuming any potential building with an
3 average size of less than 2,550 SF was deemed to be used by a Small Depot and any larger as
4 deemed to be Large Depot:

2006 LePage Data

	Count	Sum SF Size	Ave SF Size	Ave Lease (\$/SF)
Small1	33	38,920	1,179	\$11.53
Large1	148	604,614	4,085	\$11.13
	181	643,534	3,555	\$11.20

- 5 In general, the average building sizes survey by LePage were smaller. Interestingly, the
6 average lease rates were not materially different for the Small and Large Depot categories.¹¹⁶
- 7 Given that there was no appreciable difference in lease rates by building size, the DCA
8 analyzed the LePage data by location and derived the following average lease rate by
9 geographic location:

¹¹⁶ Many of the quotes received by LePage were for a range of building sizes

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DCA 2006 Analysis:

City	Count	Sum Size	Ave Size	Sum Lease	Ave Lease (\$/SF)	Sector
Airdrie	3	9,000	3,000	30	\$10.00	
Banff	1	4,000	4,000	20	\$19.50	South
Beaumont	2	5,000	2,500	46	\$23.00	North
Bonnyville	8	34,000	4,250	96	\$12.00	South
Brooks	5	15,800	3,160	40	\$7.90	
Calgary	20	71,000	3,550	239	\$11.94	
Camrose	1	4,000	4,000	7	\$6.50	
Canmore	3	9,000	3,000	43	\$14.42	South
Chestermere	1	4,000	4,000	29	\$29.00	South
Coaldale	2	5,000	2,500	16	\$7.89	North
Cochrane	1	4,000	4,000	9	\$9.00	South
Cold Lake	2	8,000	4,000	14	\$6.88	South
Crowsnest Pass	1	4,000	4,000	13	\$12.50	South
Drayton Valley	2	5,000	2,500	23	\$11.50	South
Drumheller	1	1,500	1,500	10	\$10.42	South
Edmonton	3	12,000	4,000	24	\$8.12	South
Edson	2	8,000	4,000	24	\$12.00	North
Fort McMurray	3	7,300	2,433	82	\$27.17	
Ft Saskatchewan	5	18,070	3,614	38	\$7.50	North
Grande Prairie	17	66,760	3,927	258	\$15.18	
High River	2	9,280	4,640	21	\$10.50	North
Hinton	4	12,824	3,206	43	\$10.75	North
Innisfail	1	4,000	4,000	8	\$8.00	South
Lacombe	2	6,878	3,439	19	\$9.50	South
Leduc	3	11,000	3,667	28	\$9.25	South
Lethbridge	5	16,100	3,220	37	\$7.32	South
Lloydminster	5	20,826	4,165	51	\$10.18	South
Medicine Hat	12	43,032	3,586	122	\$10.13	North
Morinville	1	4,000	4,000	7	\$6.50	North
Okotoks	1	1,924	1,924	13	\$12.50	South
Olds	6	17,600	2,933	43	\$7.17	South
Peace River	7	28,900	4,129	75	\$10.75	North
Ponoka	2	5,000	2,500	18	\$8.75	South
Red Deer	7	25,000	3,571	77	\$10.96	
Rocky Mtn House	1	4,000	4,000	13	\$12.50	South
Sherwood Park	6	16,800	2,800	71	\$11.75	
Slave Lake	1	4,000	4,000	11	\$11.00	North
Spruce Grove	1	4,000	4,000	5	\$5.25	North
St Albert	5	16,100	3,220	50	\$10.02	North
St Paul	7	30,000	4,286	80	\$11.46	North
Stettler	1	4,000	4,000	9	\$8.50	South
Stony Plain	2	8,000	4,000	15	\$7.50	North
Strathmore	4	15,200	3,800	40	\$9.88	South
Sylvan Lake	4	12,080	3,020	43	\$10.63	North
Taber	2	5,000	2,500	17	\$8.30	South
Vegreville	1	4,000	4,000	14	\$14.00	North
Wainwright	1	4,000	4,000	5	\$4.84	North
Wetaskiwin	2	8,000	4,000	16	\$7.88	
Whitcourt	2	6,560	3,280	24	\$12.00	North
North	18	65,980	3,666		\$10.32	
South	22	75,398	3,427		\$11.14	

- 1 For each town and city that has a Depot operation, the DCA applied the above average lease
- 2 rate to the deemed size of each Depot where the locations matched. For example, if a Calgary

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1 Depot with a deemed building size of 5,000 SF, a deemed annual 2006 lease cost of 5,000 SF x
2 \$11.94/SF = \$59,700 per year.

3 For smaller centres that have a Depot and where no market survey information was obtained,
4 the DCA determined an average North and South lease rate as shown in the last two lines of
5 the above table. For example, for the 22 towns and smaller centre locations in southern Alberta
6 (roughly Edmonton south) an average lease rate of \$11.14/SF was determined. This lease rate
7 was then applied to each Depot in southern Alberta where a market rate was not obtained from
8 LePage (e.g. Beaumont and Turner Valley). Similarly for north locations, the average lease rate
9 of \$10.32/SF was applied to the reported size of each northern Depot where market information
10 was not obtained (e.g. Fairview and Smoky Lake).

11 About 67% of the total deemed square footage of Depot buildings were assigned a lease rate
12 using the available location information obtained from LePage. The remaining 33% of the
13 buildings were assigned a market lease rate based on North and South averages noted above.

14 The DCA is of the view that the LePage market lease rates, as summarized by the DCA, reflect
15 average lease costs for comparable Depot buildings in Alberta. There are undoubtedly
16 locations that have market lease rates that are higher or lower than the deemed lease rate. In
17 some smaller centres, good building locations may be at a premium and command lease rates
18 in excess of \$20/SF or more. In other smaller centres that may be somewhat economically
19 depressed, lease rates under \$5/SF can be obtained.

20 With the assignment of the deemed lease rate the following costs were obtained:¹¹⁷

2006 Forecast Deemed Lease Costs

	Lease Costs	Unit Cost (\$/SF)
Small	2,102,488	\$10.48
Large	3,359,639	\$10.09
Total	5,462,127	\$10.24

21 The reported 2005 UCA values were for periods over 2004 and 2005, whereas the average
22 2006 Deemed Lease Rate of \$10.24/SF is based on current (summer 2006) values. The DCA
23 is of the view that the 2006 LePage data is reflective of Cal 2006 costs.

24 In summary, the DCA recommends that Cal 2006 deemed lease rate be set at \$10.24/SF. This
25 cost would include all building costs with the exception of some building use costs and utilities.
26 Under normal commercial lease arrangements, the Depot would pay a monthly lease rate that
27 includes all costs for use of the building, including occupancy costs (leasehold improvements),
28 property taxes, etc. This is often called Triple Net in the commercial leasing industry. Utilities,
29 content and liability insurance, building and landscape maintenance and garbage collection
30 costs would normally be paid directly by the Depot.

31 The DCA notes that the FY 2005 As Adjusted average deemed lease rate is \$7.27/SF. The Cal
32 2006 lease average deemed lease rate is \$10.24/SF and represents an increase of about 40%

¹¹⁷ The Deemed Lease Cost determination is based on the As Adjusted Deemed building sizes

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in one year. LePage has advised that this significant increase is directly related to the strength of the Alberta economy and the strong demand for commercial warehouse space in Alberta.

6.7.2 Utility Costs

Since utility costs are not typically included in lease rates, the DCA is of the view that utility costs should be added to the 2006 Revenue Requirement. On Table 5(a) Depots were asked to provide costs for three types of utilities:

- Natural gas
- Electricity
- Water and sewer

The As Adjusted utility costs amounts were as follows:

2005 UCA Data - Study System - As Adjusted

	Count	Sum Size (SF)	Utility Costs	Unit Cost (\$/SF)
Small	95	200,639	\$260,830	\$1.30
Large	70	332,984	\$536,104	\$1.61
Total	165	533,623	\$796,934	\$1.50

In consultations with Depots during the 2004 UCA development phase, concerns were expressed over the escalation of utility costs. The concerns are valid given the volatility currently being experienced in energy commodity prices, especially wholesale electricity and natural gas prices.

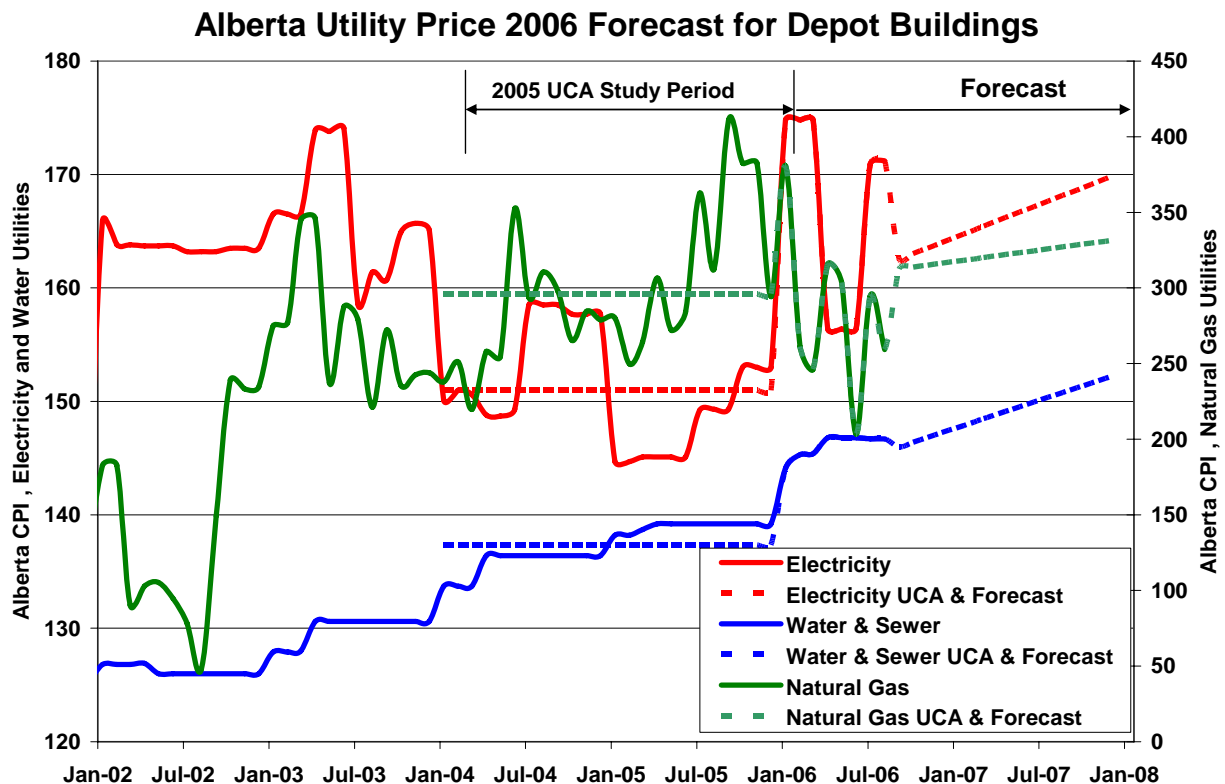
The DCA evaluated a number of potential utility escalation options and elected to utilize Statistics Canada indices. The rationale is the Statistics Canada indices are based on a common data gathering methodology and should provide an accurate escalation estimate over time.

The following chart shows the escalation forecast:

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1 The y-axis above contains the Statistics Canada indices for electricity, natural gas and water
 2 utilities in Alberta. The left scale (120 to 180) shows the monthly index for electricity and water
 3 utilities whereas the right axis shows the monthly index for natural gas utilities.

4 For each utility cost, the DCA took the average index over the 24-month period from January
 5 2004 to December 2005. Our analysis showed that on a volume weighted basis the “average”
 6 UCA reported Depot had a fiscal year end of September 20, 2005. The DCA is of the view that
 7 an average utility index over the 24-month period used is a reasonable baseline for the UCA
 8 reported utility costs.

9 Next, the DCA prepared a forecast of each index for the last six months of 2006. The DCA
 10 used a linear regression equation for the data over the 30 month period from January 2004 to
 11 June 2006 and then extrapolated over the last six months of 2006. The 2006 forecast consists
 12 of six months of actual data and a six month forecast.

13 The results are as follows:

Statistics Canada Indices:

	Natural Gas	Electricity	Water & Sewer
2005 UCA Study Period	296.15	150.99	137.36
2006 Forecast	293.56	166.96	146.25
% change	-0.9%	10.6%	6.5%

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1 The DCA is of the view that the % change in the index over the two time periods is a reasonable
2 estimate for the escalation in utility costs for Cal 2006.

3 For natural gas, the 1% decrease is reasonable considering the reduction in wholesale natural
4 gas prices during the first half of 2006, which are passed through to Customers each month.
5 The 1% decrease also reflects any increases in the utility delivery cost over the two time
6 periods.

7 For electricity, the wholesale price has increased over the two time periods. The 10.6%
8 increase in electricity costs appears reasonable to the DCA.

9 For water and sewer, the 6.5% escalation rate over the two time periods is higher than general
10 inflation and higher than would be expected for regulated water utilities, however, the DCA
11 accepts the result as reasonable.

12 During the 2005 UCA data entry process the DCA observed that many Depots did not provide a
13 break out of their utility costs by natural gas, electricity and water & sewer as requested. Many
14 Depots provided a single amount, both on their 2005 UCA and on the financial statements. The
15 DCA is of the view that a reasonable allocation of utility costs is as follows:

16	Natural Gas	50%
17	Electricity	40%
18	Water & Sewer	10%

19 The derived escalation rates were applied to the FY 2005 As Adjusted costs to derive a Cal
20 2006 utility cost:

Escalation	Natural Gas	Electricity	Water & Sewer
Small	-0.9%	10.6%	6.5%
Large	-0.9%	10.6%	6.5%

Allocated & Escalated	Natural Gas	Electricity	Water & Sewer	Total Escalated	% increase
Small	\$129,275	\$115,371	\$27,772	\$272,418	4.44%
Large	\$265,709	\$237,130	\$57,082	\$559,921	4.44%
Total	\$394,984	\$352,501	\$84,854	\$832,339	4.44%

Cal 2006	As Adjusted Cost	% increase	2006 Unit Cost	Sum Size	2006 Cost
Small	\$1.30	4.44%	\$1.36	200,639	\$272,418
Large	\$1.61	4.44%	\$1.68	332,984	\$559,921
Total	\$1.50	4.44%	\$1.56	533,623	\$832,339

21 The 2005 As Adjusted costs were escalated by an average of 4.4% to derive Cal 2006 forecast
22 utility costs of \$832 thousand. The recommended utility cost adjustments are summarized
23 below:¹¹⁸

¹¹⁸ All Unit Cost values in the table based on the DCA's deemed building sizes.

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Summary Utility Costs

	2005 Fiscal Year as Reported		2005 Fiscal Year as Adjusted		2006 Calendar Year Forecast	
	Cost	Unit Cost (\$/SF)	Cost	Unit Cost (\$/SF)	Cost	Unit Cost (\$/SF)
Small	\$256,600	\$1.28	\$260,830	\$1.30	\$272,418	\$1.36
Large	\$605,277	\$1.82	\$536,104	\$1.61	\$559,921	\$1.68
	\$861,877	\$1.62	\$796,934	\$1.49	\$832,339	\$1.56

- 1 Recall that the unit cost decrease from 2005 FY As Reported to 2005 FY As Adjusted is due to
2 the escalated unit costs for Stub Fiscal Years and due to the adjustments made for deemed
3 building sizes.

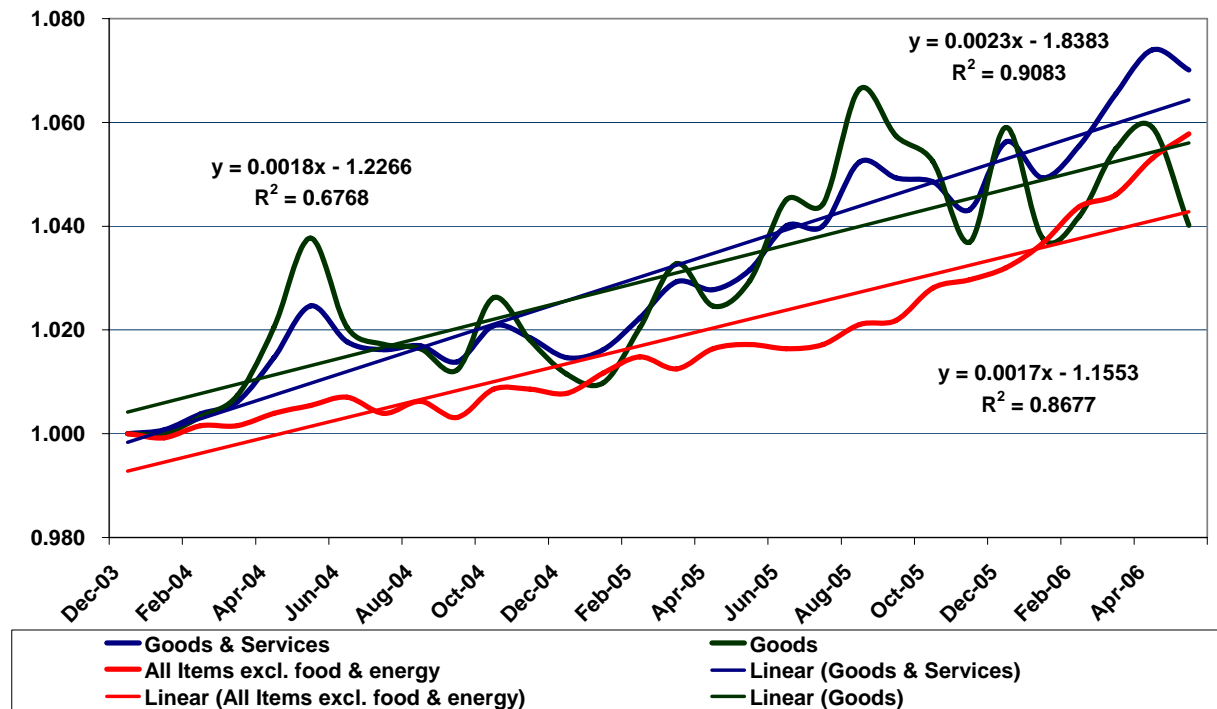
4 6.7.3 Building Use Costs

- 5 The DCA has classified building and landscape maintenance, garbage removal and other
6 building costs¹¹⁹ as additional costs that would not typically be included in the deemed lease
7 rate.

- 8 The DCA is of the view that escalating Building use Cost by a general Statistics Canada Index is
9 appropriate. The DCA utilized three indices that represent goods, goods and services and all
10 items excluding food and fuel. The DCA is of the view that these general indices adequately
11 reflect the types of goods and services the Depots procure related to Overhead items.

¹¹⁹ Lines 720, 721 and 722, respectively, from Table 7-a of the 2005 UCA

Average Normalized Labour Escalation Indices: Overheads



- Given the similarity in the trends for these indices, the DCA determined the slope of each line
- and took the average to derive a general annual escalation rate of 2.3%/year. This escalation
- rate was applied to the Building use Costs:

Cal 2006 Building Use Costs

	Ave. FY 2005 As Adjusted	Ave. # months Escalation to Cal 2006	Escalation Rate	Cal 2006 Cost	Increase
Small	\$261,846	14.57	2.3%	\$269,459	2.9%
Large	\$738,846	16.93	2.3%	\$763,691	3.4%
	\$1,000,692	15.57		\$1,033,151	3.2%

6.7.4 Cal 2006 Building Cost Summary

- The following table shows the recommended building costs:

	2006 Calendar Year Forecast		
	Small	Large	Total
Lease Payments	\$2,102,488	\$3,359,639	\$5,462,127
Use Costs	\$269,459	\$763,691	\$1,033,151
Utilities	\$272,418	\$559,921	\$832,339
	\$2,644,365	\$4,683,252	\$7,327,617

- The DCA recommends that the Cal 2006 Study System Building Costs be set at \$7.3 million.

6.8 EQUIPMENT

To determine Cal 2006 Equipment costs, a forecast of aggregate Capital Expenditures is required, as well as CCA costs for both existing assets and future capital expenditures.

Table 8 of the UCA booklet requested that all Depots report their capital expenditures for their FY 2005. We excluded capital expenditures relating to land, buildings and goodwill, and found that the reported FY 2005 capital expenditures (excluding Goodwill and Buildings) were about \$469 thousand.

The DCA inflated the FY 2005 actual Capex value by 2.3% for 15.57 months¹²⁰ for cost increases in those years. The resulting capital additions for Cal 2006 are forecast to be \$483 thousand, which will attract forecast CCA of \$58 thousand, using the half-rule convention.

Two problems arise from assigning CCA related to capital expenditures by Depot. Capital expenditures are fairly "lumpy" in nature, and a question arises about that the assumption that capital additions will be in the same proportion to CCA classes in Cal 2006 as they were in FY 2005. Secondly, it is unclear which Depot to allocate the forecast capital expenditure to. The former issue may impact Total System cost, and the latter impacts the theoretical individual Depot tax cost and profitability.

Since the DCA is recommending a Total System 2006 Revenue Requirement, the profitability of individual Depots is not paramount in the consideration of total capital expenditures. Further, the forecast CCA from Cal 2006 capital additions is relatively small at \$58 thousand.

To address these issues, the DCA elected to gross up FY 2005 As Adjusted CCA amounts, by Depot, by the incremental CCA from Cal 2006 capital additions. In essence, the DCA is assuming that those Depots that reported CCA expense in FY 2005 would have slightly higher CCA expense in Cal 2006 related to new capital expenditures.

FY 2005 CCA values were also adjusted to Cal 2006 by calculating the CCA amount that would have been expensed between the end of the FY 2005 and January 1, 2006. This amount was used to determine Cal 2006 opening balance by CCA class. The Cal 2006 CCA expenses were then calculated by CCA class.

The following table shows the results:

¹²⁰ The DCA applied the general escalation factor of 2.3% for inflation of capital expenditures over the average number of months from the end of FY 2005 for Depots to December 31, 2006.

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2005 As Reported			FY 2005 As Adjusted		Calendar 2006	
<u>Equipment Owned</u>						
Small						
CCA Class	CCA	Interest	CCA	Interest	CCA	Interest
1	\$63	\$0	\$65	\$0	\$61	\$0
6	\$381	\$0	\$391	\$0	\$1,846	\$0
8	\$76,616	\$1,297	\$78,491	\$1,329	\$81,699	\$1,329
10	\$120,742	\$3,894	\$123,697	\$3,989	\$128,659	\$3,989
17	\$359	\$0	\$368	\$0	\$355	\$0
other	\$24,769	\$0	\$25,375	\$0	\$25,375	\$0
Sub-Total	\$222,931	\$5,191	\$228,386	\$5,318	\$237,996	\$5,318
Large						
CCA Class	CCA	Interest	CCA	Interest	CCA	Interest
1	\$4,714	\$0	\$4,829	\$0	\$4,644	\$0
6	\$1,742	\$0	\$1,785	\$0	\$2,294	\$0
8	\$187,200	\$702	\$191,781	\$719	\$180,402	\$719
10	\$183,627	\$3,922	\$188,121	\$4,018	\$175,144	\$4,018
17	\$6,117	\$0	\$6,267	\$0	\$5,889	\$0
other	\$31,156	\$17,152	\$31,918	\$17,572	\$31,918	\$17,572
Sub-Total	\$414,556	\$21,776	\$424,701	\$22,308	\$400,292	\$22,308

- 1 Note that the DCA has neither adjusted the other CCA class values or the interest expense from
- 2 FY 2005 to Cal 2006.¹²¹ Given the lack of data to support an escalation methodology and the
- 3 relative size of the expenses any adjustments would not be material.
- 4 The vehicle and equipment operating expenses were also escalated to Cal 2006. For
- 5 equipment related operating costs, the DCA is of the view that the same 2.3%/year general
- 6 escalator described above can be used. For vehicle related operating costs, the DCA is of the
- 7 view that a more specific index be used to capture the higher than average inflation rate for
- 8 vehicle fuels. Statistics Canada Operation of Automobile Vehicles and Vehicle Auto Purchase /
- 9 Lease indices were used.

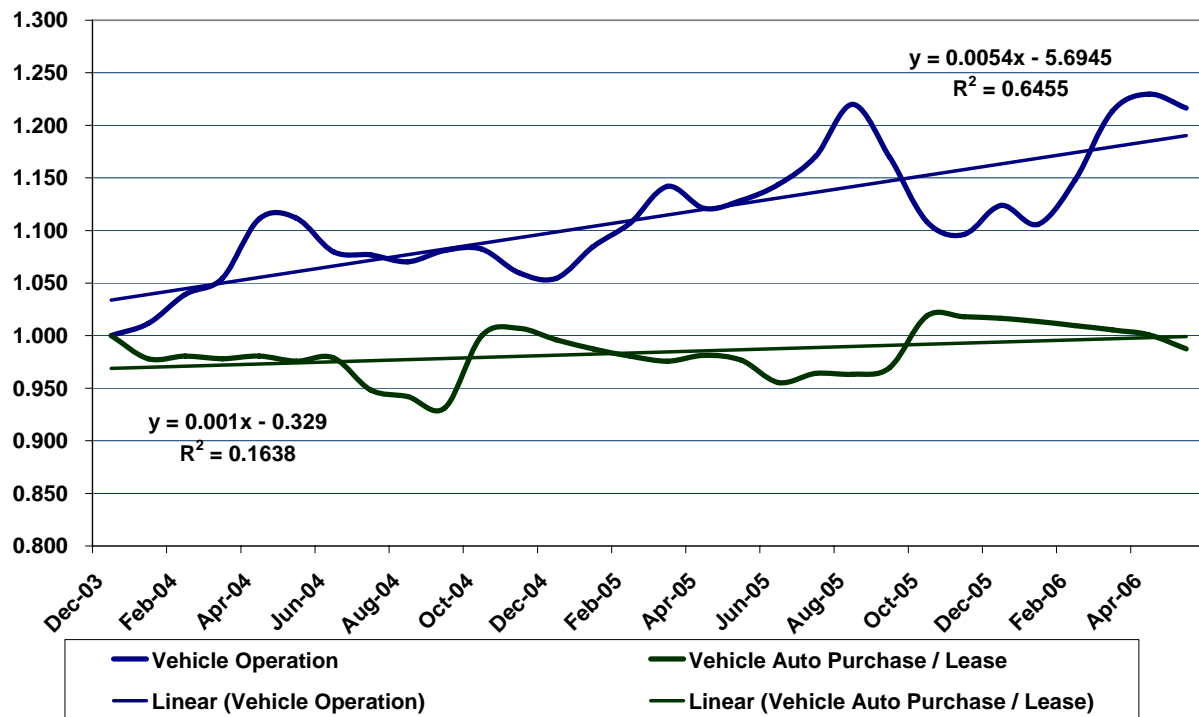
¹²¹ The other CCA class includes small amounts where the DCA could not determine the appropriate CCA class from the 2005 UCA, the Depot's financial statements or the Depot's tax return.

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Average Normalized Labour Escalation Indices: Vehicles



- 1 The slope of the best fit line for the Vehicle Operation index produced an escalation rate of
- 2 6.5%/year. This value was applied to vehicle operating related costs. The Vehicle Auto
- 3 Purchase / Lease index produced an escalation rate of 1.3%/year which was applied against
- 4 vehicle lease payments.
- 5 The following table shows the results.

Equipment Operating Costs

	Ave. FY 2005 As Adjusted	Ave. # months Escalation to Cal 2006	Escalation Rate	Cal 2006 Cost	Increase
Small	\$31,718	14.57	2.3%	\$32,627	2.9%
Large	\$180,034	16.93	2.3%	\$185,779	3.2%
	\$211,752	15.57		\$218,406	3.1%

Vehicle Operating Costs

	Ave. FY 2005 As Adjusted	Ave. # months Escalation to Cal 2006	Escalation Rate	Cal 2006 Cost	Increase
Small	\$358,682	14.57	6.5%	\$386,868	7.9%
Large	\$831,575	16.93	6.5%	\$906,367	9.0%
	\$1,190,257	15.57		\$1,293,235	8.7%

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Lease Payments

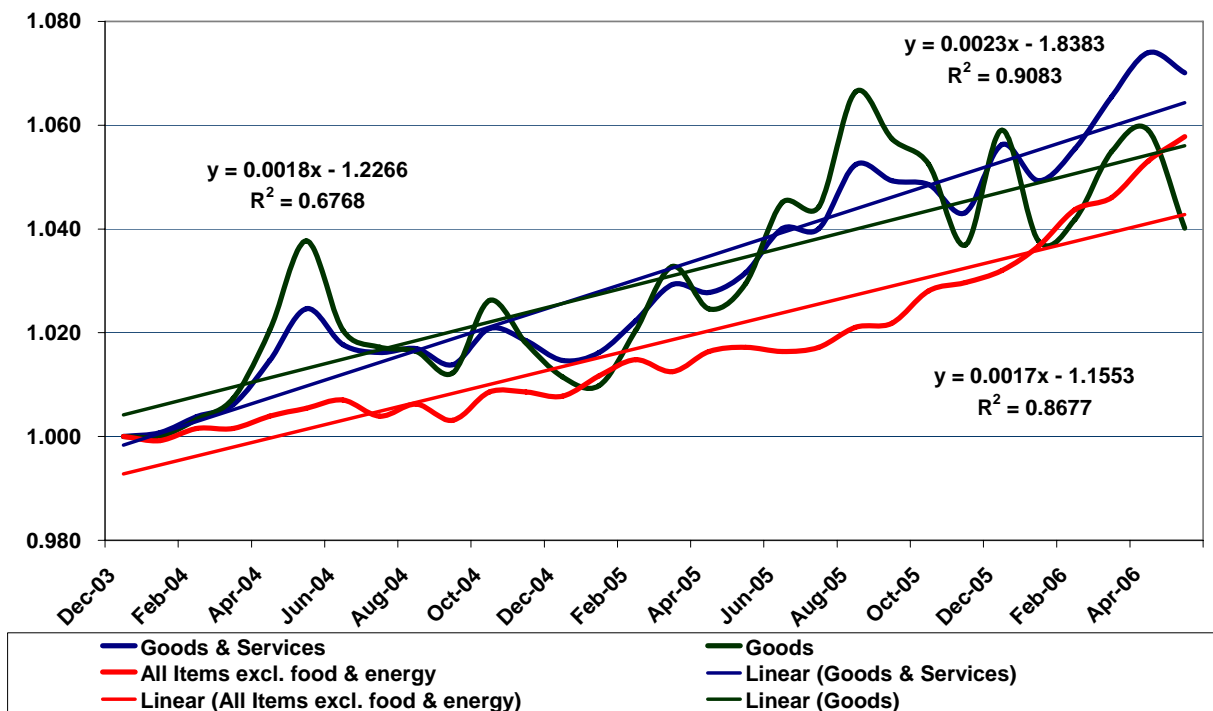
	Ave. FY 2005 As Adjusted	Ave. # months Escalation to Cal 2006	Escalation Rate	Cal 2006 Cost	Increase
Small	\$44,964	14.57	1.3%	\$45,758	1.8%
Large	\$290,551	16.93	1.3%	\$295,413	1.7%
	\$335,515	15.57		\$341,172	1.7%

6.9 OVERHEAD

6.9.1 Overhead - Office

All Office overhead costs were escalated using the escalation methodology noted in section 6.1 above. The DCA sought an average Statistics Canada index that reflected general inflation, without some of the components that have seen dramatic price changes in the recent past, (e.g. energy, food labour). The DCA utilized an average of the three indices shown on the following chart:

**Average Normalized Labour Escalation Indices:
Overheads**



The DCA is of the view that these indices provide an appropriate forecast of price increases for non-labour and non-fuel related items. The average annual percent increase is 2.3%/year, determined as the average slope of the three best fit regression lines.

The FY 2005 Office Overhead items were escalated by Depot to derive the Cal 2006 amounts.

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Office Overhead Costs

	Ave. FY 2005 As Adjusted	Ave. # months Escalation to Cal 2006	Escalation Rate	Cal 2006 Cost	Increase
Small	\$760,592	14.57	2.3%	\$778,870	2.4%
Large	\$2,819,932	16.93	2.3%	\$2,894,078	2.6%
	\$3,580,525	15.57		\$3,672,948	2.6%

6.9.2 Overhead - Fees

The Adjusted FY 2005 ABDA and BCMB fees were calculated based on the fee structure described in Section 4.9.2 using FY 2005 Volumes for each individual Depot in the Study System.

The Cal 2006 ABDA and BCMB fees were calculated on the same fee structure described in Section 4.9.2 using Cal 2006 forecast Volumes for each individual Depot in the Study System.¹²²

The following table shows the results:

ABDA & BCMB Overhead Fees

	Small	Large	Total
ABDA Fees			
As Reported	\$25,874	\$168,972	\$194,846
As Adjusted	\$33,125	\$120,289	\$153,414
% increase	28.0%	-28.8%	-21.3%
Cal 2006	\$34,318	\$121,184	\$155,501
% increase	3.6%	0.7%	1.4%
BCMB Fees			
As Reported	\$49,886	\$288,112	\$337,998
As Adjusted	\$81,291	\$416,404	\$497,695
% increase	63.0%	44.5%	47.2%
Cal 2006	\$91,366	\$457,142	\$548,507
% increase	12.4%	9.8%	10.2%

ABDA fees, which are based on the maximum of total pop can volume times 0.06¢/container and \$2,000 per year, have an average 1.4% increase from FY 2005 to Cal 2006. The lower escalation rate is a function of most Large Depots paying the maximum fee of \$2,000. BCMB fees, which are based on total volume, have an average 10.2% increase from FY 2005 to Cal 2006.

6.9.3 Overhead - Other

The other Overhead costs related primarily to collection costs and shrinkage. The DCA is of the view that these costs are best escalated to Cal 2006 based on the volume increase from FY 2005 to Cal 2006. The following table shows the results:

¹²² Cal 2006 Depot forecast methodology is described in section 5.3

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Other Overhead Costs

	Ave. FY 2005 As Adjusted	FY 2005 Volume As Adjusted	Cal 2006 Volume	Cal 2006 Cost	Increase
Small	\$53,759	180,647,234	200,362,975	\$58,678	9.1%
Large	\$402,838	925,341,408	1,002,504,097	\$438,057	8.7%
	\$456,597	1,105,988,642	1,202,867,072	\$496,735	8.8%

Table 9 Overhead Costs

	Ave. FY 2005 As Adjusted	FY 2005 Volume As Adjusted	Cal 2006 Volume	Cal 2006 Cost	Increase
Small	\$42,218	180,647,234	200,362,975	\$46,055	9.1%
Large	\$1,028,428	925,341,408	1,002,504,097	\$1,115,407	8.5%
	\$1,070,645	1,105,988,642	1,202,867,072	\$1,161,463	8.5%

1 Note that these Overhead costs are escalated on a Depot basis and depending on which
2 Depots reported costs on the 2005 UCA, the percent increases vary with the mix of Depots and
3 their relative volume growth rates from FY 2005 to Cal 2006.

4 Schedule 7, Appendix I, shows all proposed Overhead related costs.

5 6.10 WORKING CAPITAL

6 Using the same methodology as outlined in section 4.10, the DCA has calculated the Cal 2006
7 Study System Working Capital. The variation between the As Adjusted values are directly
8 related to changes in revenue and expense items as noted in the sections 6.2 to 6.9. Please
9 see Schedule C, Appendix II.

10 The following table summarizes the Cal 2006 Study System Working Capital. The interest on
11 this working capital would be about \$40,000 per year.

Cal 2006 Study System Working Capital Forecast	Small	Large	Total
Working Capital Surplus	\$ (379,653)	\$ (549,708)	\$ (929,360)

12 6.11 RATE BASE

13 As noted in section 6.8 above, the DCA added a forecast of additional capital costs for Cal 2006
14 based on the 2005 UCA Table 8 reported values. These additions, less expensed CCA, results
15 in minor changes to the equipment and vehicle related rate base amounts for Cal 2006.

16 In addition, changes to Working Capital also impact the Cal 2006 rate base numbers. The table
17 below shows the results.

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		2005 As Adjusted		Calendar 2006					
		Assets		Liabilities	Assets		Liabilities		
Small									
Equipment									
		Gross Book Value	Net Book Value		Gross Book Value	Net Book Value			
CCA Class									
1					\$0	\$0			
6		\$4,960	\$3,627	\$0	\$19,703	\$18,371	\$0		
8		\$583,048	\$361,125	\$21,225	\$628,807	\$406,884	\$21,225		
10		\$956,675	\$415,161	\$122,866	\$1,009,365	\$467,851	\$122,866		
17					\$0	\$0			
Working Capital		n/a	\$319,338		n/a	\$379,653			
Sub-total		\$ 1,544,682	\$ 1,099,252	\$144,091	\$ 1,657,875	\$ 1,272,758	\$144,091		
Leaseholds									
Land									
Buildings									
Subtotal		\$ -	\$ -	\$0	\$ -	\$ -	\$0		
Total Small		\$ 1,544,682	\$ 1,099,252	\$144,091	\$ 1,657,875	\$ 1,272,758	\$144,091		
Owners' Equity				\$955,161			\$1,128,667		
Total			\$ 1,099,252	\$1,099,252		\$ 1,272,758	\$1,272,758		
		Debt	13.1%	Equity	86.9%	Debt	11.3%	Equity	88.7%
Large									
Equipment									
		Gross Book Value	Net Book Value		Gross Book Value	Net Book Value			
CCA Class									
1					\$0	\$0			
6		\$18,121	\$12,697	\$0	\$24,488	\$19,064	\$0		
8		\$2,209,771	\$869,839	\$46,767	\$2,266,253	\$926,321	\$46,767		
10		\$2,127,202	\$603,266	\$31,673	\$2,192,834	\$668,898	\$31,673		
17					\$0	\$0			
99		\$552	\$56,274	\$0	\$552	\$56,274	\$0		
Working Capital		n/a	\$ 507,946		n/a	\$ 549,708			
Sub-total		\$ 4,355,647	\$ 2,050,022	\$78,440	\$ 4,484,127	\$ 2,220,264	\$78,440		
Leaseholds									
Land									
Buildings									
Subtotal		\$ -	\$ -	\$0	\$ -	\$ -	\$0		
Total		\$ 4,355,647	\$ 2,050,022	\$78,440	\$ 4,484,127	\$ 2,220,264	\$78,440		
Owners' Equity				\$1,971,581			\$2,141,824		
Total Large			\$ 2,050,022	\$2,050,022		\$ 2,220,264	\$2,220,264		
		Debt	3.8%	Equity	96.2%	Debt	3.5%	Equity	96.5%
Total			\$ 3,149,273	\$ 3,149,273		\$ 3,493,022	\$ 3,493,022		
		Debt	7.1%	Equity	92.9%	Debt	6.4%	Equity	93.6%

1 6.12 RETURN & INCOME TAX

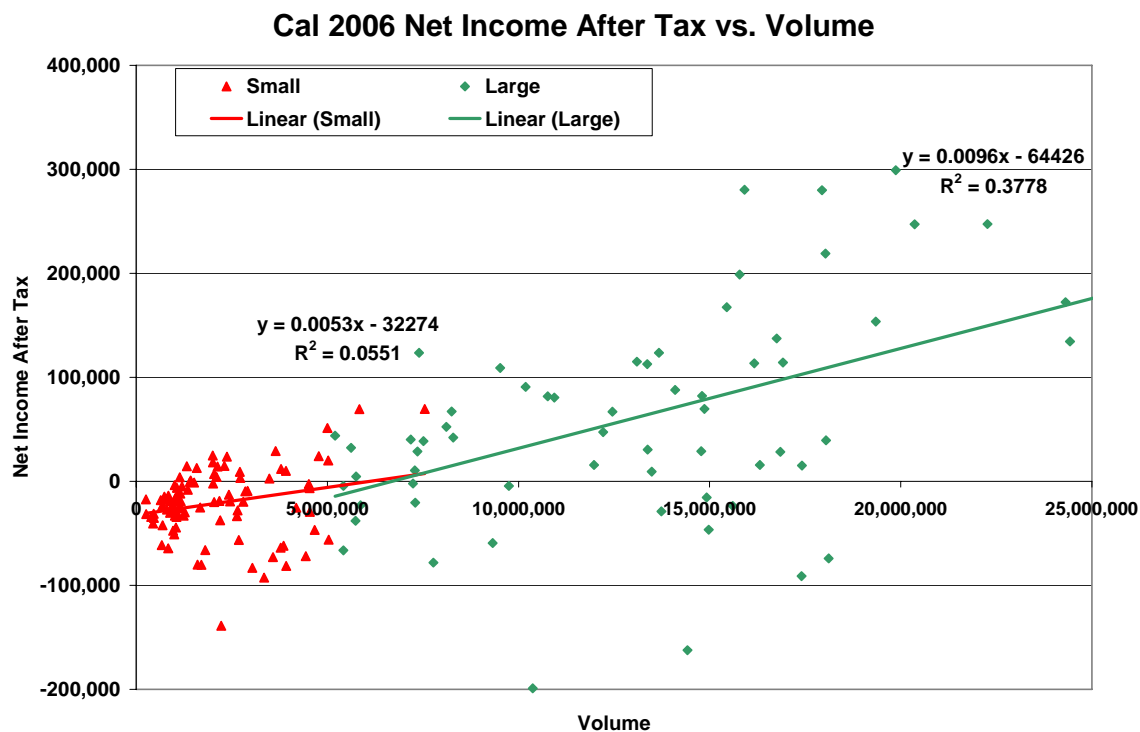
- 2 The DCA did not apply the Return determinations provided in section 4.12 to the Cal 2006
- 3 Study System values to create a Study System Revenue Requirement. See section 7.1 for the
- 4 Cal 2006 Total System Revenue Requirement.

6.12.1 Summary of Cal 2006 Net Income After Tax

The calculated Cal 2006 EBT for the Study System is approximately \$5.6 million, or 0.47¢/container, based on revenue derived from current Handling Commissions and Deposit levels. As with the As Reported and As Adjusted values, we have assumed an income tax rate of 26.52% for income below \$300,000, and the normal corporate rate of 39.52% on income above \$300,000, applied on an individual Depot basis.

Calculated income tax amounts to \$2.5 million, or approximately 0.21¢/container. Note that the total income tax reduced due the DCA cost escalations that make most Depots less profitable, however, income tax is still positive and some Depots are still profitable based on the Cal 2006 forecasts. Net income reported over the Study System is then \$3.1 million, or 0.26¢/container.

The following chart compares Cal 2006 net income after tax to volume:



The DCA notes that with the cost escalation adjustments made, more Small Depots are unprofitable and all Depots are less profitable. This is believed to be primarily due to:

1. The large increase in market lease rates results in significant increases in building costs for Depots with smaller volumes without a corresponding increase in revenue.
2. Higher Direct Labour costs reduce the profitability of all Depots.

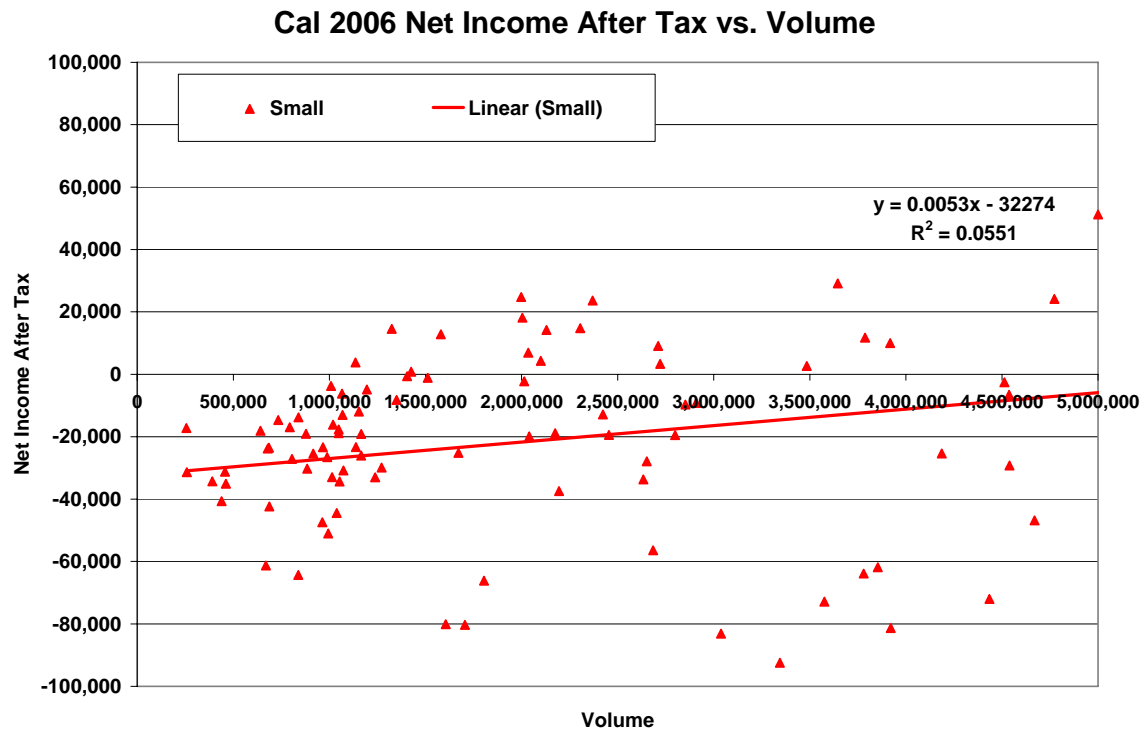
These observations are significant because the profitability of the industry as a whole, when compared to individual Depot profitability, depends on whether or not the Depot is, to a large extent, a high or low volume Depot. On average, Small Depots are generally more unprofitable

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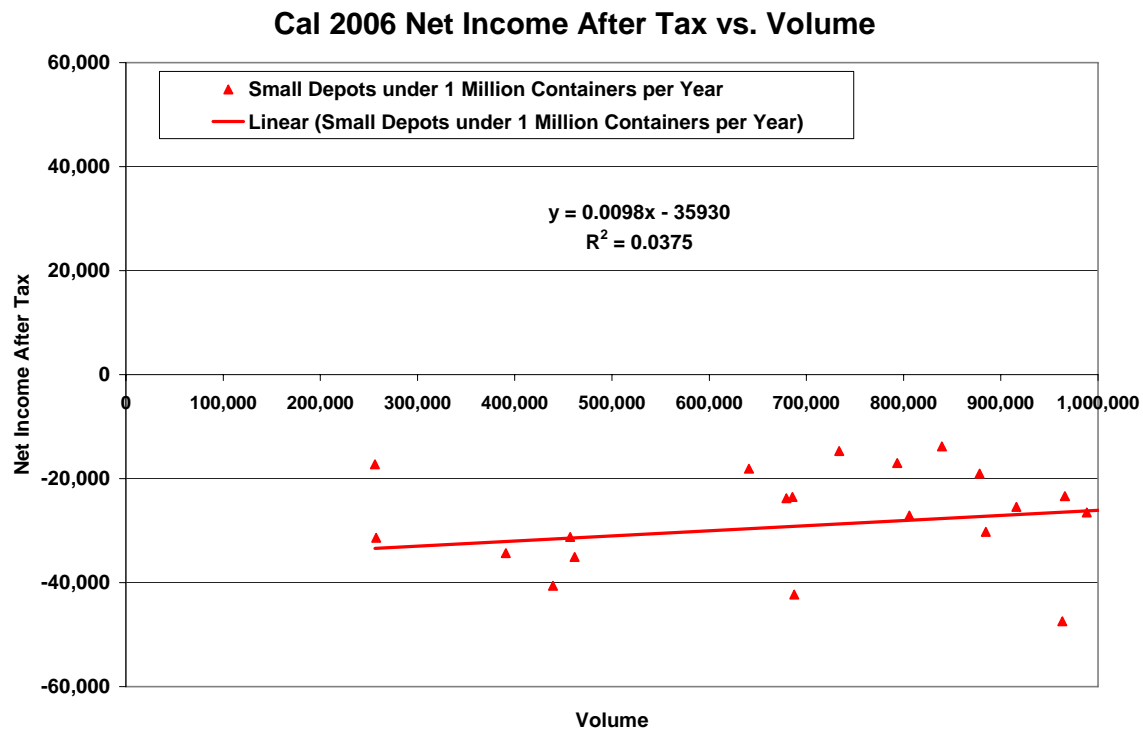
CALENDAR 2005 STUDY SYSTEM COST FORECAST

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- 1 with the Cal 2006 escalation adjustments, moving from a Net Income After Tax As Adjusted loss
- 2 of \$1.2 million to a Cal 2006 Income After Tax loss of \$2.0 million.



- 3 Again, of particular concern is that no Depot with an annual volume of under 1 million containers
- 4 is profitable.



1 Again, please also note that the above charts do not include a Return component.

2 **6.13 SUMMARY OF CAL 2006 COSTS**

3 The net impact of the DCA's recommended Cal 2006 adjustments is a 14% increase in
 4 Revenue and a 21% increase in cost from the As Reported values, which results in a 39%
 5 decrease in net income after tax. Small Depot Net Income After Tax reduces from a \$0.7 million
 6 profit to a \$2.0 million loss, whereas Large Depots Net Income After Tax was increased from a
 7 \$4.4 to \$5.1 million.

8 The net impact of the DCA's recommended Cal 2006 adjustments from the As Adjusted values
 9 is a 10% increase in Revenue and a 18% increase in cost, which results in a 36% decrease in
 10 net income after tax.

11 The Cal 2006 Study System Revenues and Costs are forecast at current Handling Commission
 12 rates as shown under columns e and f of Schedule 1, Appendix 1.¹²³

13 The following two charts show the unit costs and revenues as well as the revenue to cost ratio
 14 by the 20 Volume Clusters over the Study System.

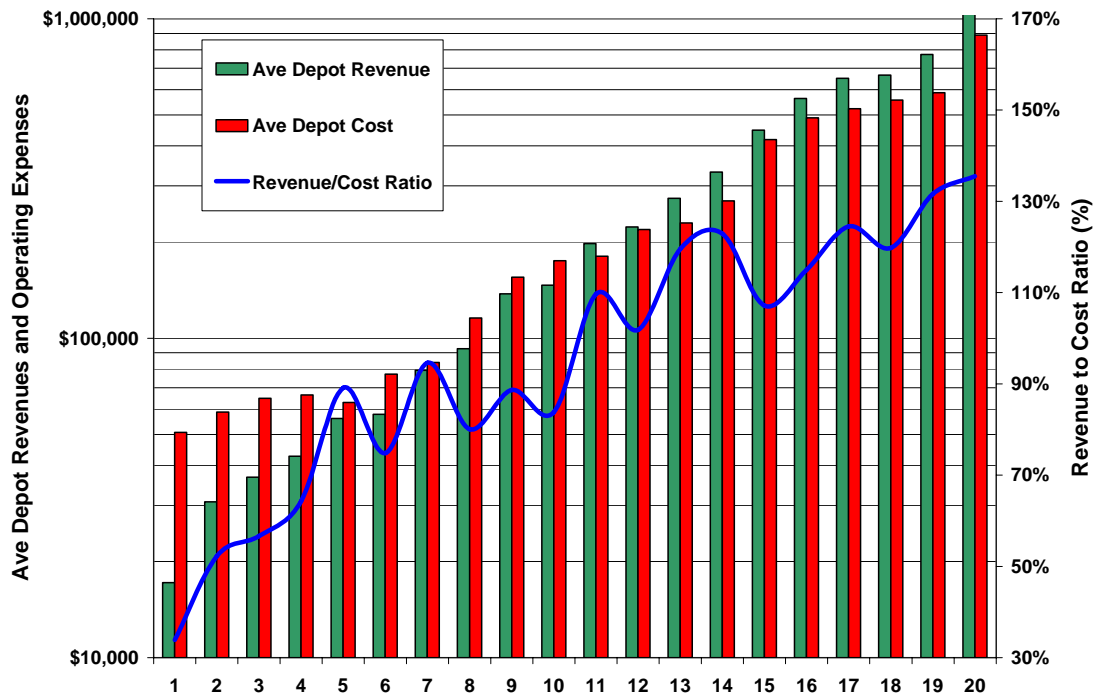
¹²³ Current Handling Commission rates are provided under Appendix III.

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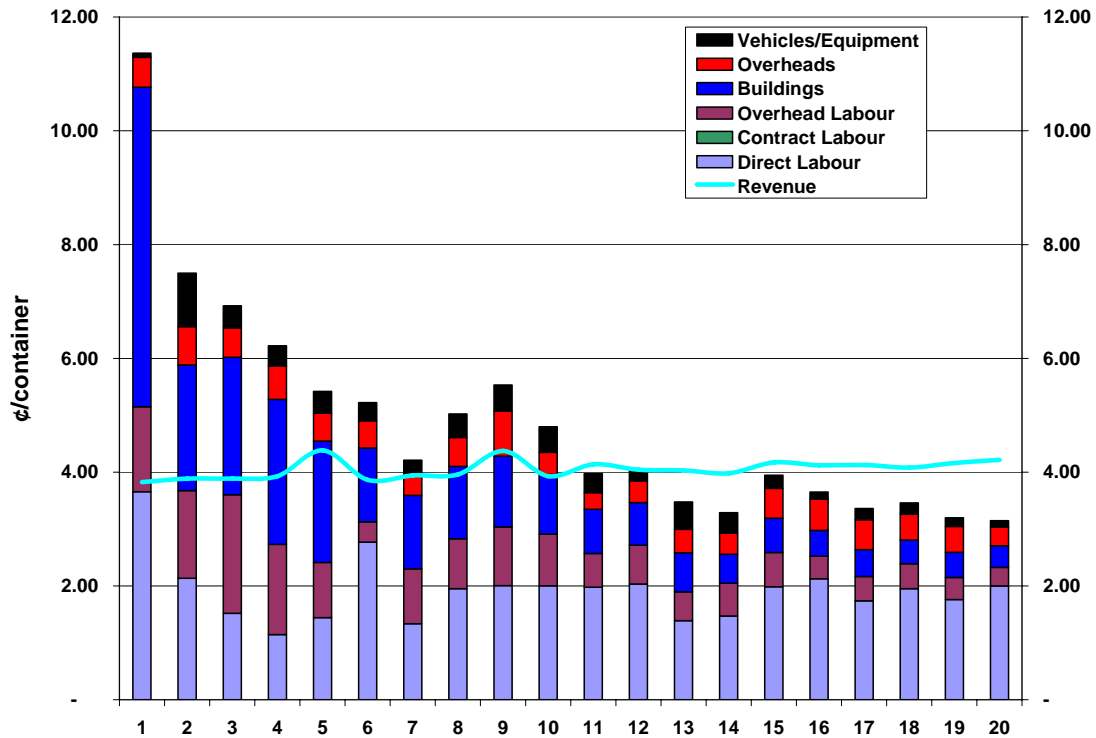
CALENDAR 2005 STUDY SYSTEM COST FORECAST

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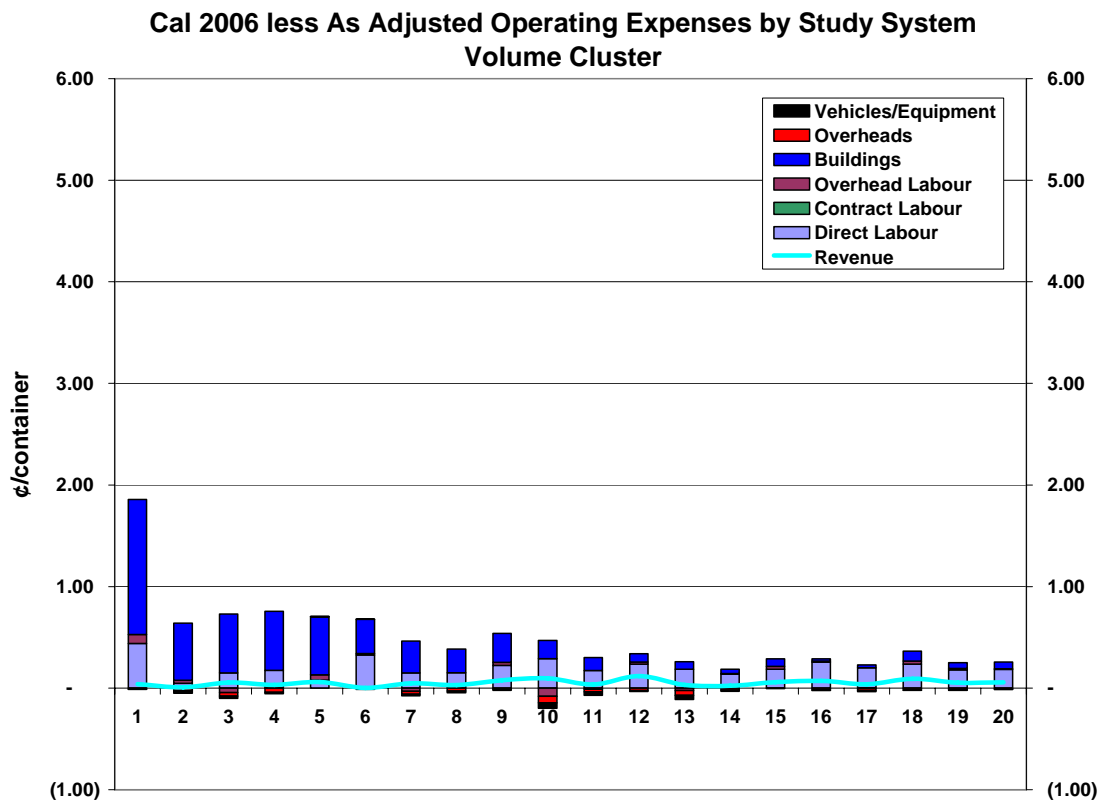
Cal 2006 Average Depot Costs and Revenues and Revenue to Cost Ratio by Volume Cluster



Cal 2006 Operating Expenses by Study System Volume Cluster



- 1 The next chart shows the difference, by volume cluster:



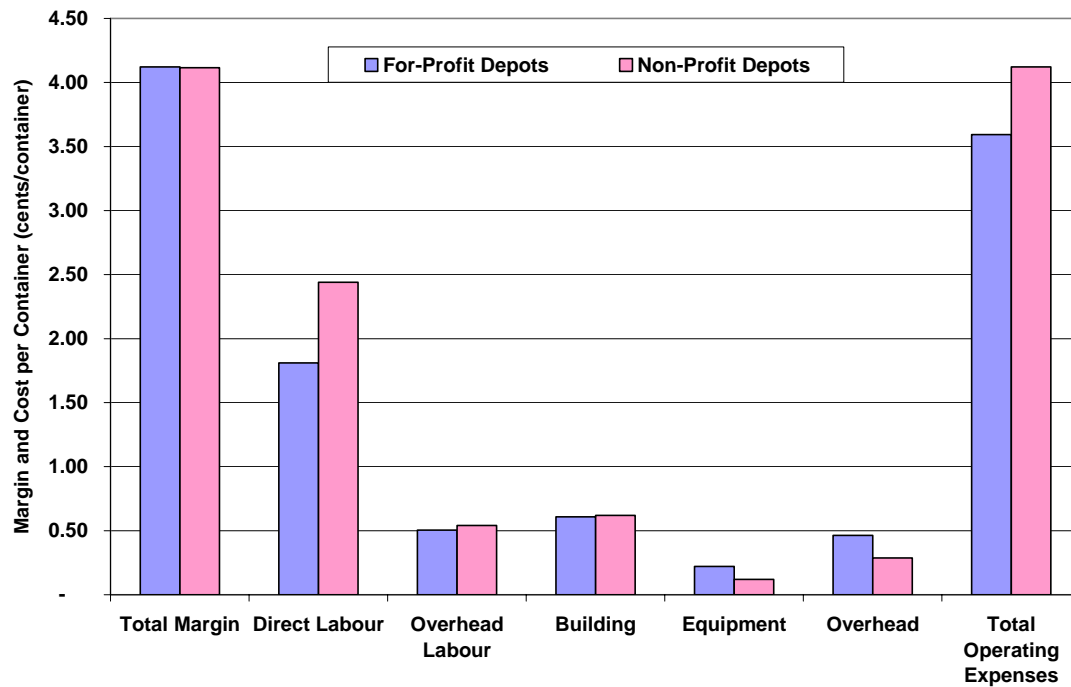
- 2 The increase in deemed lease rates for building has the greatest impact on the adjustments to
- 3 the As Adjusted values to the Cal 2006 values for smaller depots. The significant increase in
- 4 fixed costs increases the unit cost per container for Depots with small annual volumes.

5 **6.14 NON-PROFIT DEPOTS**

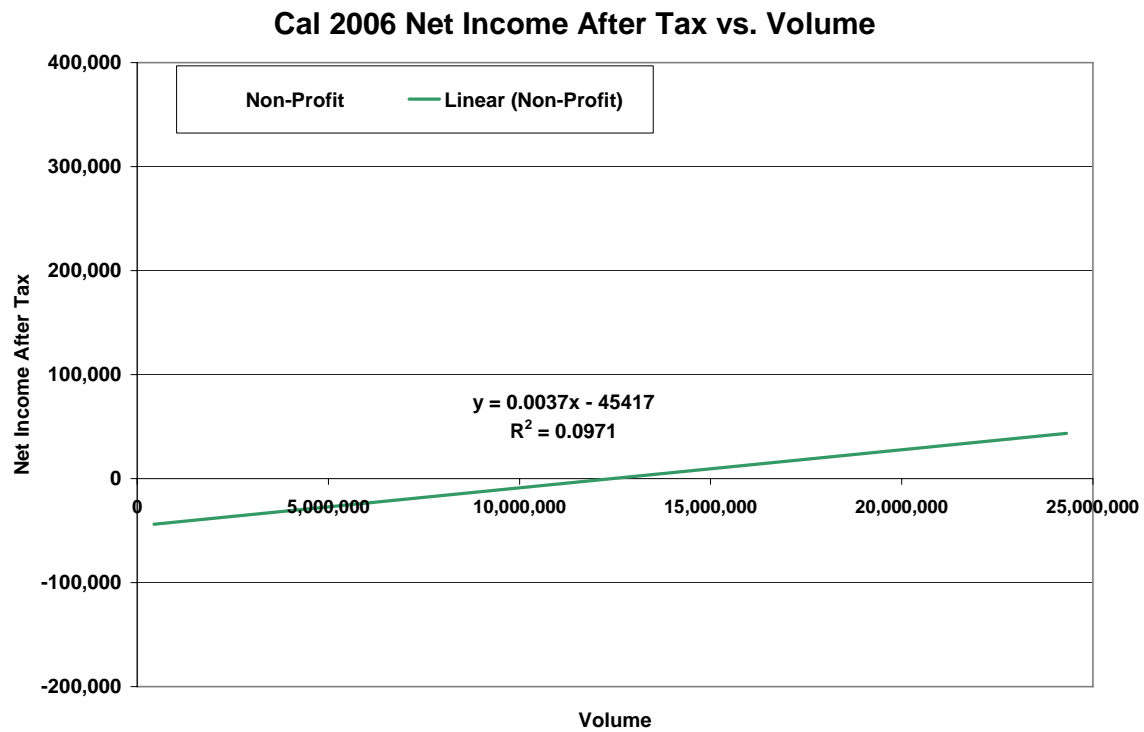
- 6 With the Cal 2006 escalations, the Non-Profits Depots become less profitable, as shown in the
- 7 following table:

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Comparison of Cal 2006 Unit Costs - Non-Profit vs. For-Profit Depots

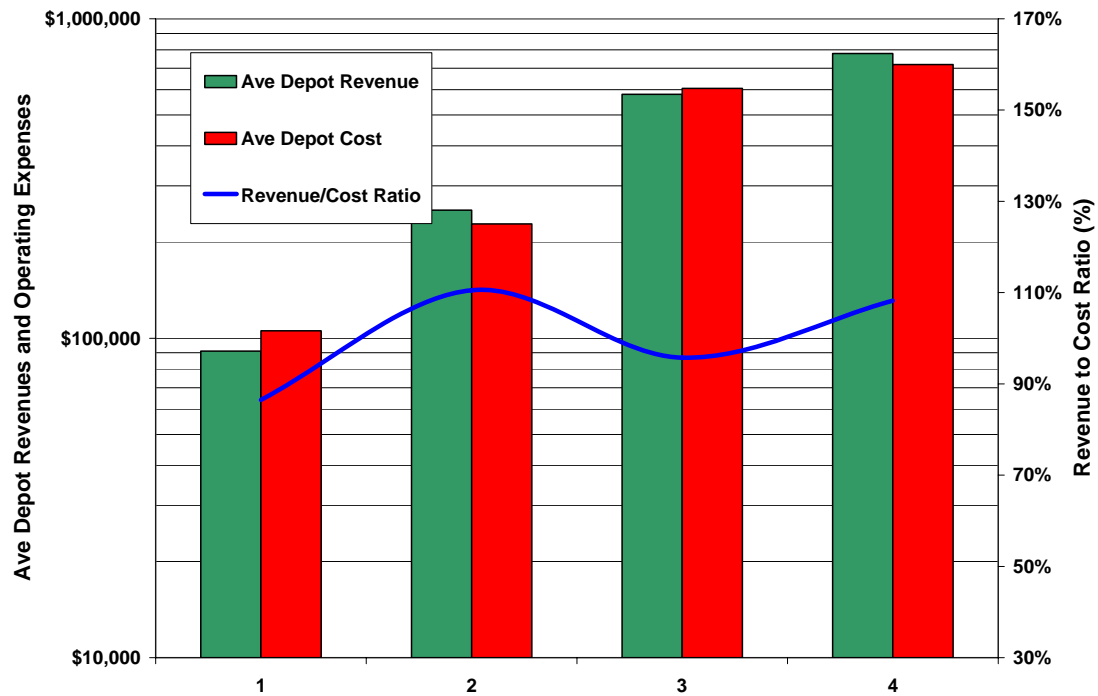


- 1 The following chart shows the Net Income After Tax for the Non-Profit Depots. Note that the
- 2 DCA has removed the individual Depot data points to ensure Depot confidentiality. This chart
- 3 can be compared with the chart on page 185 for all Depots.

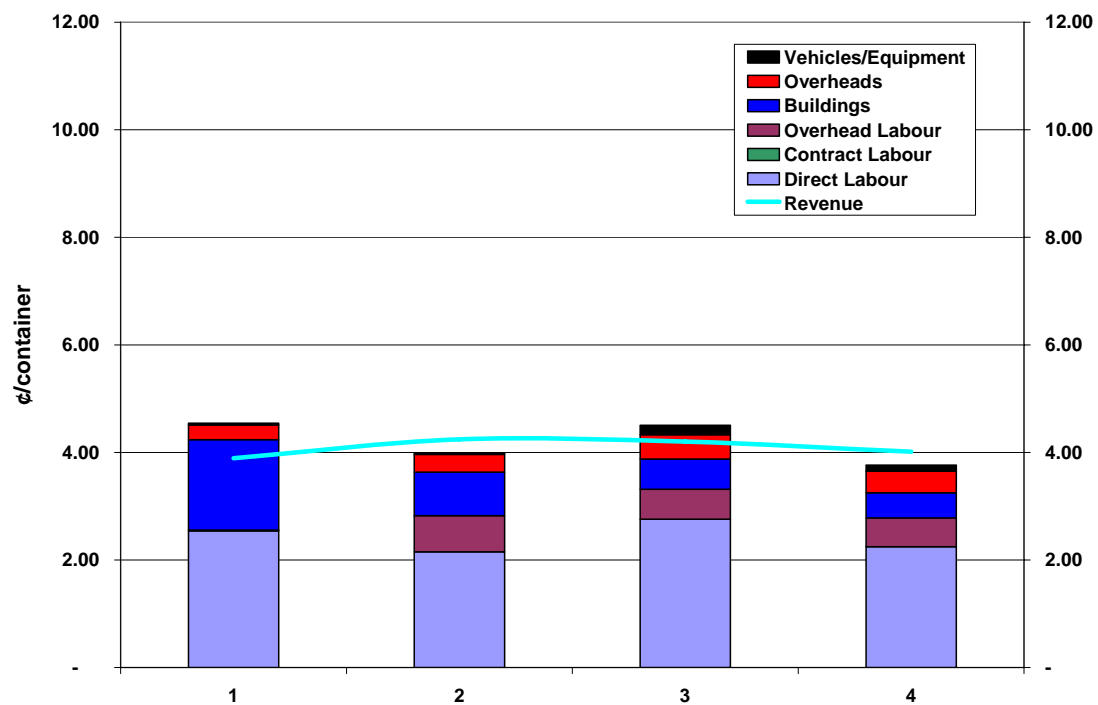


- 1 The Cal 2006 total revenues and costs and revenue to cost ratios by Volume Cluster and the
- 2 unit costs and revenues by Volume Cluster are shown in the following two charts.

Non-Profit Depots Cal 2006 Average Depot Costs and Revenues and Revenue to Cost Ratio by Volume Cluster



Non-Profit Depots Cal 2006 Operating Expenses by Study System Volume Cluster



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CALENDAR 2005 STUDY SYSTEM COST FORECAST

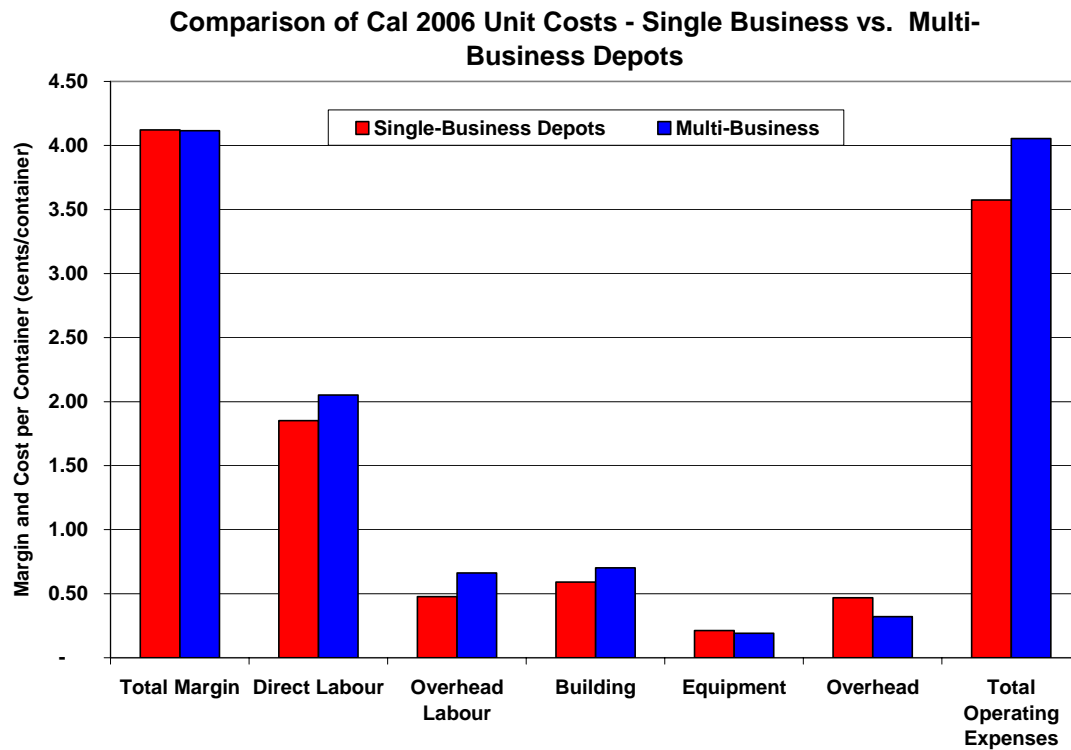
January 31, 2007

1 6.15 MULTI-BUSINESS DEPOTS

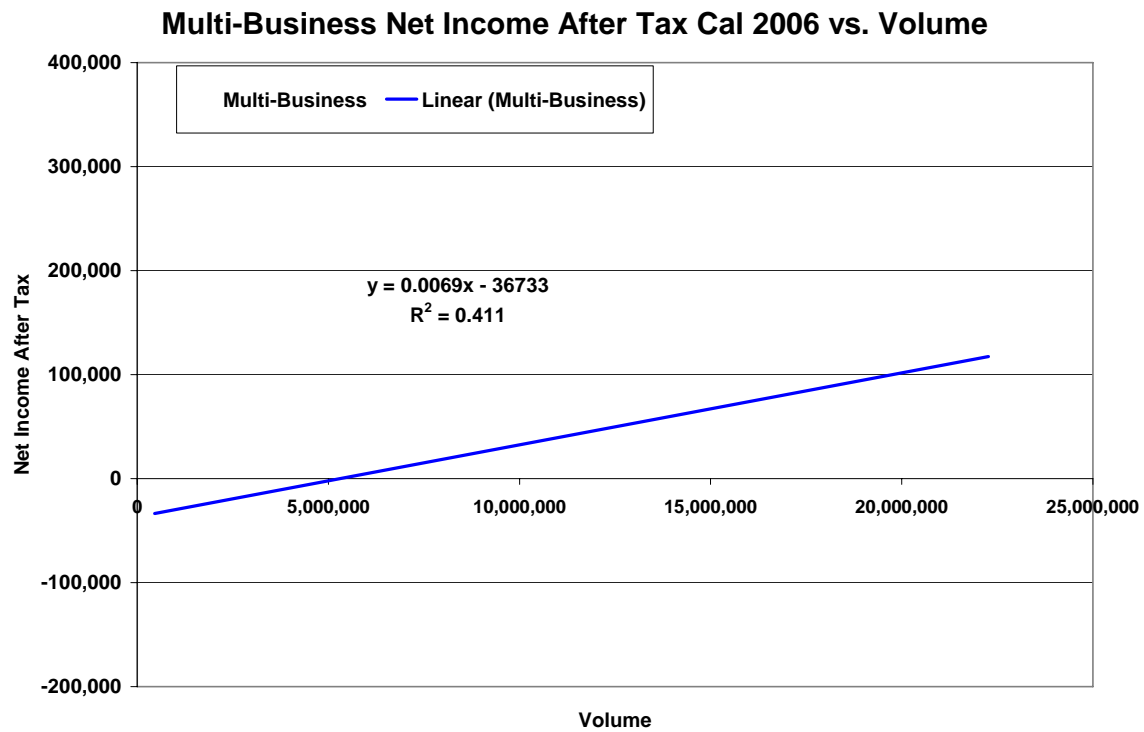
2 The cost structure of the Multi-Business Depots for Cal 2006 is shown in the following table:

BEVERAGE CONTAINER MANAGEMENT BOARD 2006 PHASE I FORECAST MULTI-BUSINESS DEPOT COMPARISON CAL 2006						
Line No.						
1	Report Volume	1,002,766,481 or 77% Total System		200,100,591 or 15% Total System		
2	Report Depots	123 or 57% Total System		42 or 19% Total System		
		Single-Business Depots Cal 2006		Multi-Business Depots Cal 2006		Percent Difference
		\$	¢ per container	\$	¢ per container	¢ per container
		(a)	(b)	(c)	(d)	(f) (g)
	Revenue					
3	Revenue	\$116,897,681	11.66	\$23,196,103	11.59	(0.07) -0.6%
4	Less Purchases	\$76,121,746	7.59	\$15,220,009	7.61	0.02 0.2%
5	Gross Margin (HC)	\$40,775,935	4.07	\$7,976,094	3.99	(0.08) -2.0%
6	Misc Revenue	\$552,672	0.06	\$258,657	0.13	0.07 134.5%
7	Total Margin	\$41,328,607	4.12	\$8,234,752	4.12	(0.01) -0.1%
	Expenses					
8	Direct Labour	\$18,564,701	1.85	\$4,106,456	2.05	0.20 10.8%
9	Contract Labour	\$0	-	\$0	-	- -
10	Overhead Labour	\$4,794,652	0.48	\$1,324,170	0.66	0.18 38.4%
11	Labour Subtotal	\$23,359,353	2.33	\$5,430,626	2.71	0.38 16.5%
12	Building	\$5,921,408	0.59	\$1,406,209	0.70	0.11 19.0%
13	Equipment	\$2,136,806	0.21	\$381,921	0.19	(0.02) -10.4%
14	Overhead (Ex-Collections)	\$4,686,794	0.47	\$643,918	0.32	(0.15) -31.1%
15	Collections	-\$248,895	(0.02)	\$248,895	0.12	0.15 -601.1%
16	Total Operating Expenses	\$35,855,466	3.58	\$8,111,568	4.05	0.48 13.4%
17	Earnings before taxes	\$5,473,141	0.55	\$123,184	0.06	(0.48) -88.7%
18	Income Taxes	\$2,199,799	0.22	\$281,917	0.14	(0.08) -35.8%
19	Net Income	\$3,273,342	0.33	-\$158,733	(0.08)	(0.41) -124.3%
20	Net Income - Small	-\$1,322,314	(1.02)	-\$685,106	(0.97)	0.04 -4.2%
21	Net Income - Large	\$4,595,630	0.53	\$526,373	0.41	(0.12) -23.0%
	Net Income - Total	\$3,273,315	0.33	-\$158,733	(0.08)	(0.41) -124.3%
20	Return Margin - Small	-8.8%		-8.4%		
21	Return Margin - Large	4.5%		3.5%		
22	Return Margin - Total	2.8%		-0.7%		

3 The key differences in unit costs are shown graphically on the following chart:

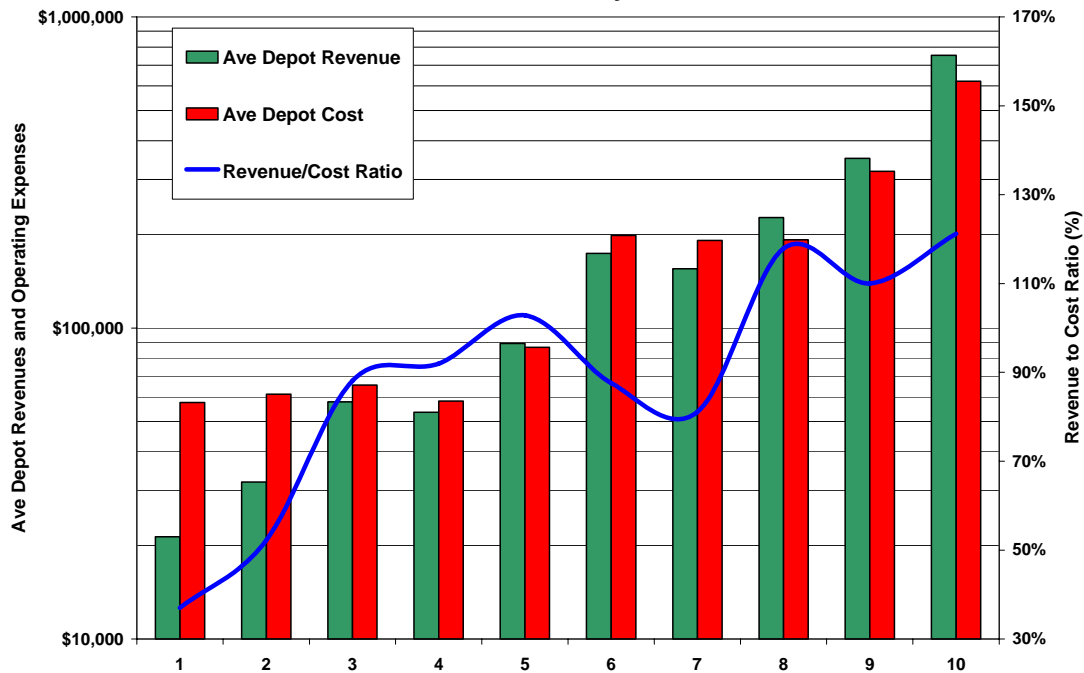


- 1 The following chart shows the Net Income After Tax for the Non-Profit Depots. Note that the
- 2 DCA has removed the individual Depot data points to ensure Depot confidentiality. This chart
- 3 can be compared with the chart on page 185 for all Depots.

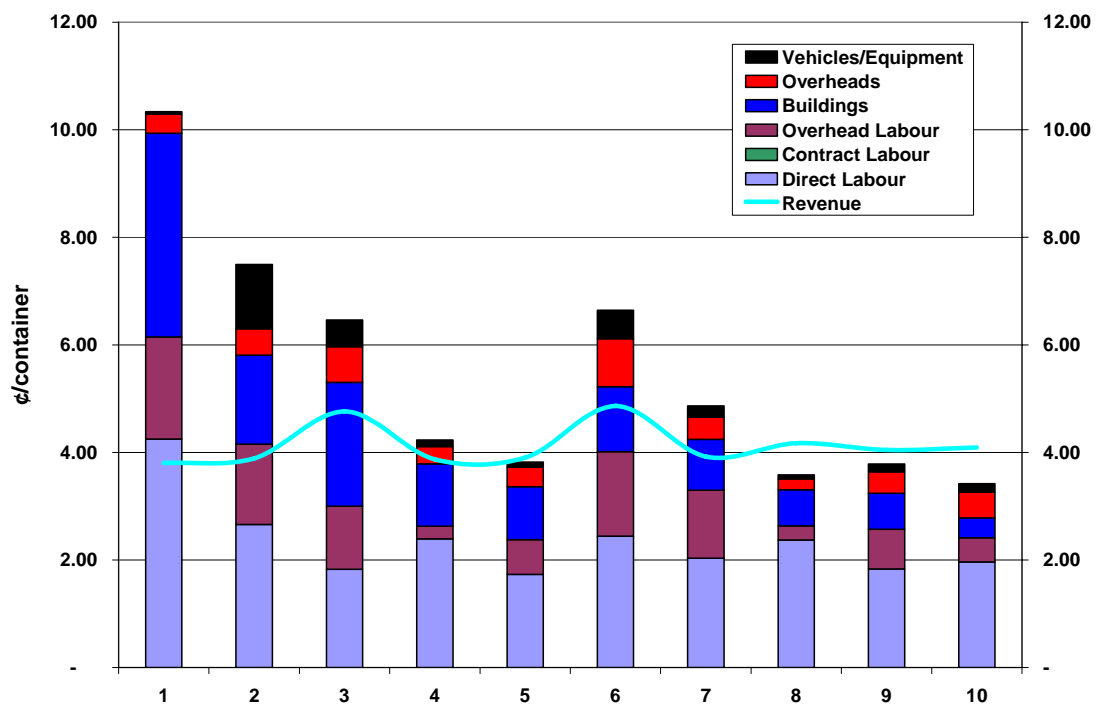


- 1 The Cal 2006 total revenues and costs and revenue to cost ratios by Volume Cluster and the
- 2 unit costs and revenues by Volume Cluster are shown in the following to charts.

Multi-Business Depots Cal 2006 Average Depot Costs and Revenues and Revenue to Cost Ratio by Volume Cluster



Multi-Business Depots Cal 2006 Operating Expenses by Study System Volume Cluster



1 **7.0 CALENDAR 2005 TOTAL SYSTEM PHASE I FORECAST**

2 The final step in determining the Cal 2006 Total System Phase I Forecast is to extrapolate the
3 Total System costs from the Study System results.

4 We believe that the Study System, representing approximately 84% of the actual 2006 Total
5 System volume and approximately 76% of the Total System Depots, provides a fair
6 representation of the average cost of the Total System. We do not believe that average per-unit
7 costs would materially change, or that any other method of escalating costs would be
8 appropriate, if we had 2005 UCA information for all the Depots that were excluded from this
9 study.

10 Therefore, we have utilized the following process to determine the Total System 2006 Revenue
11 Requirement.

12 **7.1 CAL 2006 TOTAL SYSTEM REVENUE**

13 **7.1.1 Container Sales**

14 We calculated Revenue, Purchases, and Total System Gross Margin on the basis of Cal 2006
15 actual volumes as noted in Section 5.4. We used current Handling Commission and proposed
16 2006 Handling Commissions to derive the 2006 Revenue Requirement.

17 The following table summarizes the Cal 2006 Total System Volume, Revenue, Purchases, and
18 Gross Margin:¹²⁴

¹²⁴ The DCA notes that with the proposed 2006 Handling Commissions (including the fixed fee component) the adjustment from Forecast Groups to Container Streams results in a slightly different 2006 Revenue Requirement: Schedule 11 Appendix I, col. h, line 3 = \$60,030,511, line 24 = \$60,016,324, for a difference of \$14,187 or 0.02%.

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ProductID	ProdName	Current HC Rate	Proposed HC Variable	Deposit Rate	Cal 2006 Revenue (Current HC)	Cal 2006 Purchases	Cal 2006 Gross Margin (Current HC)	Cal 2006 Gross Margin (Proposed HC)
0	Gable Top Over 1L	\$0.0800	\$0.0600	\$0.2000	\$2,110,059	\$1,507,185	\$602,874	\$452,155
1	Pop Cans 0 - 1 L	\$0.0280	\$0.0396	\$0.0500	\$30,737,530	\$19,703,545	\$11,033,985	\$15,614,058
2	Bag in Box Over 1 L	\$0.0800	\$0.1000	\$0.2000	\$68,470	\$48,907	\$19,563	\$24,454
3	Bi Metal 0 - 1 L	\$0.0800	\$0.0600	\$0.0500	\$441,214	\$169,698	\$271,516	\$203,637
4	Bi-Metal Cans Over 1 Litre	\$0.0800	\$0.0600	\$0.2000	\$230,236	\$164,454	\$65,782	\$49,336
5	Drink Pouch 0 - 1 L	\$0.0800	\$0.0600	\$0.0500	\$662,479	\$254,800	\$407,680	\$305,760
7	Gable Top 0 -1 L	\$0.0800	\$0.0600	\$0.0500	\$81,565	\$31,371	\$50,194	\$37,645
8	Glass 0 - 500 ml	\$0.0750	\$0.0435	\$0.0500	\$0	\$0	\$0	\$0
9	Glass 501 - 1 Litre	\$0.0750	\$0.0435	\$0.0500	\$0	\$0	\$0	\$0
10	Glass Over 1 Litre	\$0.0800	\$0.0600	\$0.2000	\$2,118,241	\$1,513,029	\$605,212	\$453,909
11	HDPE 0 - 1 L	\$0.0800	\$0.0600	\$0.0500	\$216,107	\$83,118	\$132,989	\$99,742
12	HDPE Plastics Over 1 Litre	\$0.0800	\$0.0800	\$0.2000	\$946,269	\$675,906	\$270,363	\$270,363
13	Import Beer Cans (Bi-Metal)	\$0.0283	\$0.0600	\$0.1000	\$8,528	\$6,647	\$1,881	\$3,988
14	Import Beer PET 0 - 1 Litre	\$0.0283	\$0.0600	\$0.1000	\$610	\$475	\$134	\$285
15	Liq/Wine Ceramics	\$0.0800	\$0.1000	\$0.0500	\$74	\$28	\$45	\$57
16	PET 0 - 1 L	\$0.0554	\$0.0446	\$0.0500	\$26,074,679	\$12,369,392	\$13,705,287	\$11,035,051
17	PET Plastics Over 1 Litre	\$0.0750	\$0.0537	\$0.2000	\$14,949,133	\$10,872,097	\$4,077,036	\$2,920,491
18	Polycups 0-500ml	\$0.0800	\$0.0600	\$0.0500	\$385,505	\$148,271	\$237,234	\$177,925
19	PVC 0 - 1 L	\$0.0800	\$0.0600	\$0.0500	\$5,719	\$2,200	\$3,520	\$2,640
20	PVC Plastics Over 1 Litre	\$0.0800	\$0.1000	\$0.2000	\$19,513	\$13,938	\$5,575	\$6,969
21	Tetra Brik 0 - 1 L	\$0.0530	\$0.0401	\$0.0500	\$7,603,394	\$3,690,968	\$3,912,426	\$2,956,605
23	Big Rock Bottles	\$0.0283	\$0.0383	\$0.1000	\$0	\$0	\$0	\$0
24	Beer Cans - Deposit Only	\$0.0283	\$0.1000	\$0.1000	\$0	\$0	\$0	\$0
25	Unusable ISBs	\$0.0283	\$0.1000	\$0.1000	\$0	\$0	\$0	\$0
26	Beer Cans	\$0.0283	\$0.0395	\$0.1000	\$40,518,494	\$31,581,055	\$8,937,439	\$12,470,954
27	Imports Under 1 Litre	\$0.0283	\$0.0600	\$0.1000	\$1,881	\$1,466	\$415	\$880
30	Molson Obsolete	\$0.0283	\$0.1000	\$0.1000	\$0	\$0	\$0	\$0
31	Over 1 Litre Bottles	\$0.0800	\$0.1000	\$0.2000	\$0	\$0	\$0	\$0
32	Sleemans Bottles	\$0.0283	\$0.0600	\$0.1000	\$793,017	\$618,096	\$174,921	\$370,858
33	Industry Standard Bottles	\$0.0283	\$0.0383	\$0.1000	\$19,283,438	\$15,029,959	\$4,253,478	\$5,754,302
34	Tetra Brik Over 1 Litre	\$0.0800	\$0.0600	\$0.2000	\$10,033	\$7,167	\$2,867	\$2,150
35	Import Beer Bottles	\$0.0283	\$0.0457	\$0.1000	\$6,884,467	\$5,365,913	\$1,518,553	\$2,454,177
36	Aerosol 0 - 1 Litre	\$0.0800	\$0.1000	\$0.0500	\$0	\$0	\$0	\$0
37	Polypropylene	\$0.0800	\$0.0600	\$0.0500	\$36,828	\$14,165	\$22,663	\$16,997
41	Glass 0 - 1 Litre	\$0.0750	\$0.0435	\$0.0500	\$12,444,083	\$4,977,633	\$7,466,450	\$4,330,937
Totals					\$166,631,564	\$108,851,483	\$57,780,080	\$60,016,324

1 7.1.2 Miscellaneous Revenue & Operating Expenses

2 In the 2006 Phase I Report Rev 0 each of the operating expenses and miscellaneous revenue
3 were grossed up by a 121.2% ratio based on the Study System volume (1.18 billion containers)
4 to Total System volume (1.43 billion containers). With the availability of 2006 actual volume
5 results for all Depots, the DCA is of the view that a more accurate method of extrapolating
6 operating expenses and Miscellaneous Revenue from the Study System to the Total System
7 would be to differentiate by Depot Size. The rationale is that there are proportionately fewer
8 smaller volume Depots in the Study System and the smaller Depots tend to have higher fixed
9 and unit costs.

10 The approach used is shown on Schedule 13, Appendix I. The DCA grouped the 215 Depots in
11 the Total System into 20 Total System Volume Clusters (col a) and determined the total Study
12 System volume (col d) and Total System volume (col e) by Volume Cluster.¹²⁵ For each Volume
13 Cluster a Volume Escalator (col f) was determined as the increase in volume from the Study
14 System to the Total System. The Volume Escalators were applied to each of the Study System

¹²⁵ Note that due to the limited number of smaller Depots in the Study System the DCA placed more Depots in Volume Clusters 1 and 2 in order to obtain a more appropriate sample size.

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1 Miscellaneous Revenue and operating costs to derive the Total System values. For example,
2 col f was multiplied by col i to derive col j for Direct Labour.

3 The results of this analyses show that while the average Volume Escalator is 118.8%, the
4 derived Total System Miscellaneous Revenue and operating costs escalation ranged from
5 123% to 128%. The higher overall escalation rates are the result of fewer smaller Depots in the
6 Study System with relatively higher Miscellaneous Revenue and operating costs.¹²⁶

7 The results are also shown under columns g and h of Schedule 1, Appendix I. Schedule 13 a,
8 Appendix I shows Cal 2006 Total System unit and per Depot costs by the same Volume
9 Clusters.

10 **7.2 CAL 2006 TOTAL SYSTEM REVENUE REQUIREMENT**

11 Schedule 11, Appendix I outlines the Cal 2006 Total System Revenue Requirement based on
12 the Return determinations outlined under section 4.12, under both the Current Handling
13 Commissions and the proposed 2006 Handling Commissions.

14 Cal 2006 Total System theoretical taxes are based on the calculated Income Tax for the Study
15 System Depots using current and proposed 2006 Handling Commissions, and then grossed up
16 to the Total System using the same method as described in section 7.2.1 above. The following
17 table shows the results.

¹²⁶ This approach is an enhancement to the response provided to HCRP-DCA-2006-1 b).

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Line No.	Total System Volume Cluster	Volume Escalator	Income Tax (current HC)		Income Tax (Proposed HC)	
			Study System	Total System	Study System	Total System
	(a)	(c)	(b)	(d)	(e)	(f)
1	1	140.9%	\$0	\$0	\$0	\$0
2	2	108.8%	\$0	\$0	\$3,567	\$3,879
3	3	127.2%	\$0	\$0	\$717	\$912
4	4	140.7%	\$0	\$0	\$9,000	\$12,659
5	5	113.3%	\$6,634	\$7,517	\$29,757	\$33,718
6	6	142.5%	\$4,923	\$7,016	\$31,252	\$44,542
7	7	149.3%	\$23,113	\$34,514	\$57,972	\$86,566
8	8	146.0%	\$10,139	\$14,806	\$37,715	\$55,075
9	9	125.8%	\$9,717	\$12,222	\$30,736	\$38,660
10	10	163.3%	\$15,716	\$25,664	\$40,451	\$66,056
11	11	130.1%	\$44,594	\$58,023	\$76,724	\$99,828
12	12	126.8%	\$59,437	\$75,353	\$73,901	\$93,691
13	13	183.6%	\$100,008	\$183,598	\$128,811	\$236,475
14	14	110.8%	\$143,770	\$159,357	\$168,250	\$186,491
15	15	183.6%	\$120,121	\$220,492	\$124,472	\$228,479
16	16	123.9%	\$173,330	\$214,793	\$169,660	\$210,244
17	17	112.0%	\$320,257	\$358,563	\$302,645	\$338,844
18	18	100.0%	\$217,135	\$217,135	\$205,429	\$205,429
19	19	100.0%	\$456,844	\$456,844	\$396,404	\$396,404
20	20	109.8%	\$775,977	\$851,757	\$585,934	\$643,155
21		118.8%	\$2,481,716	\$2,897,655	\$2,473,396	\$2,981,108
22				116.8%		120.5%

1 The DCA recommends that the 2006 Revenue Requirement be set at \$60.0 million. The DCA is
2 of the view that this level of Revenue Requirement provides and appropriate balance between
3 the ability of Depots to earn a fair return and the desire to minimize costs to Customers and
4 Manufacturers.

5 7.3 ESTIMATED CAL 2007 TOTAL SYSTEM REVENUE REQUIREMENT

6 The DCA has provided some analysis of the potential level of Handling Fees for Cal 2007.
7 From Schedule 11, Appendix I, the DCA notes that a rate increase of 2.1% to the existing
8 Handling Commissions is required for the recommended Cal 2006 Revenue Requirement to be
9 achieved (see col g, line 26).

10 Schedule 12 a, Appendix I, shows that if the recommended Cal 2006 Handling Commission rate
11 increase of 2.1% is implemented, and applied against the DCA's 2007 volume forecast, no rate
12 increase for Cal 2007 will be required if Miscellaneous Revenues and operating expenses
13 increase from Cal 2006 to Cal 2007 by 1.8%. Put another way, if inflation is about 1.8% and the
14 Cal 2007 volume forecast is accurate, another Handling Commission increase or decrease for
15 Cal 2007 should not be required. This of course assumes that the DCA's recommendations are
16 implemented. The DCA is of the view that Miscellaneous Revenues and operating expenses
17 will likely increase from Cal 2006 to Cal 2007 at a rate greater than 1.8%.

18 Schedule 12 b, Appendix I, shows that if the current Handling Commissions are applied against
19 the DCA's 2007 volume forecast, no rate increase for Cal 2007 will be required if Miscellaneous
20 Revenues and operating expenses decrease from Cal 2006 to Cal 2007 by 2.1%. Put another

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- 1 way, if deflation is about 2.1% and the Cal 2007 volume forecast is accurate, a Handling
- 2 Commission increase or decrease from current rates should not be required. The DCA is of the
- 3 view that Miscellaneous Revenues and operating expenses will likely increase from Cal 2006 to
- 4 Cal 2007, and not decrease.

- 5 This analysis suggests that if the proposed 2006 Handling Commission are implemented Depot
- 6 revenues in 2007 are forecast to be less than the 2007 Revenue Requirement.

8.0 CONCLUSIONS AND RECOMMENDATIONS

8.1 CONCLUSIONS

From the experience gained by the DCA as DCA over the past 31 months we note the following conclusions from the 2005 UCA data gathering and analysis process:

1. The DCA is comfortable that the 2005 UCA cost data collected is representative and sufficient for setting the 2006 Revenue Requirement. Overall, the 2004 UCA and data collection process employed by the DCA in 2005 (in collecting 2004 UCA data) was a “good first step”, which was significantly improved upon during the 2005 UCA data collection and review process in 2006. However, the DCA is still of the view that the quality of the data reported was generally poor (compared to utility regulatory processes) and there is room for continuous improvement. While some 2005 UCAs were obviously completed with a great deal of care and attention, many were incomplete, not completed as requested, and were not submitted within the timeline prescribed by the BCMB or not completed with much attention to detail.
2. The DCA believes the quality of container volume data received from the Manufacturers and used in the development of the 2006 container return forecast is appropriate for use in the derivation of the 2006 Revenue Requirement.
3. Of concern to the DCA is the observed disparity in profitability of Small and Large Depots. While there may be opportunities for some Small Depots to improve their efficiency and hence their profitability, there appears to be a systemic issue with the inability of Small Depots to provide the services required under their permit and receive a reasonable profit.
4. With respect, the DCA concludes that the Return on Rate Base model that Madam Justice Bielby directed to be used is not the optimal model for the beverage container return industry in Alberta. Cost of service models tend to be used in industries that are capital intensive (e.g. utilities, pipelines, railways, etc.). The data collected by the DCA suggests that the Alberta system is not capital intensive (the largest assets are buildings, which only about two-third of the Depots own). Rather, Depots in Alberta are akin to service industry businesses – large variable labour costs and the requirement for efficient labour utilization to maintain profitability. The DCA recommends a Return Margin methodology to provide an appropriate level of Return in the 2006 Revenue Requirement. Further, the DCA is of the view that the Return Margin methodology utilized by the DCA meets the “fair return” standard set by Madam Justice Bielby.
5. The DCA is of the view that the collection of actual operational costs from Depots as directed by Madam Justice Bielby¹²⁷ will serve the Alberta beverage container collection industry well and provide appropriate economic discipline and signals to improve the system over time. Depots with poor productivity and/or profit levels will have the economic incentive to improve or change locations. Conversely, successful Depots

¹²⁷ Doc 01-014, par. 80

- 1 have the opportunity for attractive economic returns as reward for their efforts. However,
2 for smaller population density service areas some Depots provide an essential service
3 that may not fit a competitive pricing model, as the number of containers that can be
4 collected within their geographic area may be limited.
- 5 6. The Non-Profit Depots appear to have on average a higher cost structure than For-Profit
6 Depots on a per container basis. While labour costs are higher for Non-Profit Depots,
7 overhead and collection costs tend to be lower.
- 8 7. The Multi-Business Depots appear to have on average a higher cost structure than
9 Single-Business Depots on a per container basis. The DCA has concluded this is likely
10 due to the fact that Multi-Business Depots on average have lower container return
11 volumes.
- 12 8. The DCA believes that the lag between 2005 UCA reporting and 2006 Handling
13 Commission rate implementation will be too long. We suspect that by the time the 2006
14 Handling Commissions are implemented the underlying data may be several years old.
15 Regulatory lag is a concern in many regulated industries, however, the BCMB should
16 continue to work on improving the Handling Commission setting process.

8.2 RECOMMENDATIONS / SUGGESTIONS FOR IMPROVEMENT

8.2.1 UCA Modifications

19 The lessons and experiences gained from the 2004 and 2005 UCA processes should be
20 incorporated into future UCA processes to improve the quality and quantity of data collected. In
21 addition, tighter timelines should be imposed to reduce regulatory lag and ensure Handling
22 Commissions remain current and representative of system costs.

23 Directions from the BCMB and/or the HCRP, on the recommendations made by the DCA, will
24 undoubtedly shape the form of future UCAs. It is suggested that the BCMB and/or the HCRP
25 provide sufficient direction to allow the DCA to modify future UCAs to collect the data required.

26 For example, if the BCMB accepts the DCA's recommendation to base building use costs on
27 deemed market lease rates, future UCAs need only to collect location and building size
28 information (and not collect information related to mortgages, property book and market values,
29 leasehold improvements, etc.). Clear directions from the BCMB and/or the HCRP could
30 significantly streamline the UCA collection process making it easier for Depots to comply and
31 reduce costs to Depots and Customers.

8.2.2 UCA Education and Enforcement

33 Despite the significant efforts of the BCMB, the ABDA and the DCA to educate Depots on the
34 importance of the UCA process and the quality of data to be reported, significant barriers were
35 encountered in the data collection process. UCA education should continue to be a high priority
36 for the BCMB and the ABDA.

37 The DCA is especially disappointed in the delays from many Depots in submitting the 2005
38 UCAs. The DCA would have expected that after the 2004 UCA process the Depots would have
39 been able to respond in a timelier manner in the submission of the 2005 UCAs.

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1 The DCA recommends that a significantly more robust data collection enforcement policy be
2 implemented and communicated to all Depots. We believe a paradigm shift in the attitude of
3 some Depots from resisting the UCA process to the realization that cooperative efforts will
4 enhance the Alberta beverage container collection system for their and their customers' benefit.

5 **8.2.3 Standards for Record Keeping**

6 The DCA recommends that the BCMB impose a minimum standard for record keeping. The
7 standard should recognize the requirement for Depots to file UCAs and ensure that records are
8 properly maintained to allow for full UCA compliance in a timely manner.

9 For example, the BCMB could impose a standard chart of accounts for all Depots to use. While
10 this will result in short term costs to implement, it could greatly simplify future Handling
11 Commission review processes to the benefit of all parties.

12 The DCA also recommends that the BCMB consider a program to have all Depots implement
13 computer based financial systems. We observed that most larger Depots have a computer,
14 however, several (including some very large Depots) still employ manual hand-written financial
15 ledger systems. This recommendation would improve the quality, accuracy and reliability of the
16 data collected. We also believe that electronic bookkeeping would help Depot managers control
17 their costs and would more easily show cost misalignments that may result in increased Depot
18 profitability. This recommendation would also facilitate the electronic filing of future UCA
19 documents.

20 Along with the recommendation above, we believe detailed asset schedules would be helpful,
21 as well as more specific guidelines for reporting assets shared with affiliated businesses.

22 We are of the view that all Depots should report Revenue and Purchases, rather than simply
23 Handling Commission fees, on their financial statements. Purchases should only include
24 payments for containers. Any fees paid for freight-in, collection or other costs (including
25 overpayments of Deposits and BCMB & ABDA fees) should be accounted for separately.

26 The DCA is of the view that, in future years, the Depot's accountants should review and sign-off
27 on the filed UCA document. This should be a requirement for Depots of a certain size (e.g. all
28 Large Depots).

29 The DCA recommends that acceptable standards of record keeping, including electronic
30 bookkeeping, should be a requirement of obtaining and maintaining a Depot permit.

31 The BCMB may also wish to further study the level of cash expenses that Depots incur (which
32 the DCA views as excessive for some Depots and likely non-compliant with tax laws and
33 GAAP). We believe that materially all expenditures besides Purchases should be made by
34 cheque to provide a standard audit trail as an industry best practice. Bank statements could be
35 requested to review compliance if the BCMB or DCA feels that this issue is significant.

36 A small percentage of Depots submitted accounting records that were somewhat suspect. The
37 DCA recommends that the BCMB also consider a program where accounting professionals with

1 Depot related experience could be made available to Depots to assist with the implementation
2 of the above recommendations.

3 Finally, any additional costs that these recommendations impose on Depots should be
4 considered a valid expense and included in the determination of future Handling Commissions.

5 The DCA acknowledges that these recommendation will impose incremental costs on Depots,
6 especially the smaller Depots. The DCA is of the view that if the fixed fee portion of the
7 Handling Commissions as proposed by the DCA is implemented more revenue will flow to these
8 smaller Depots that could offset the additional costs.

9 **8.2.4 UCA Filing on Sale or Material Change**

10 A significant portion of the Total System volume was not captured in the 2005 UCA process due
11 to the sale of the Depot businesses and/or the re-stating of fiscal year ends. The DCA
12 recommends that the BCMB impose, as a condition of maintaining or transferring a Depot
13 permit, the filing of a UCA for the applicable Stub Fiscal Year ends. This recommendation will
14 require the development of a standard UCA that will be maintained over time.

15 The DCA submits that with the imposition of a requirement for the UCA to be filed on Depot
16 permit transfer or restating fiscal year ends, closer to 100% of the system costs could be
17 captured though the UCA filing process.

18 **8.2.5 Non-Profit Depots**

19 The mandate of a Non-Profit Depot may be materially different from For-Profit Depots, resulting
20 in significantly different cost structures. The DCA recommends that in the future, Non-Profit
21 Depot costs could be excluded from setting Handling Commissions. In effect, Non-Profit Depots
22 would become "price takers" and receive the average Handling Commission as set by the For-
23 Profit Depots. However, Non-Profit Depots should still be required to complete and file UCAs to
24 allow the BCMB to monitor overall system costs.

25 **8.2.6 Multi-Business Depots**

26 Multi-Business Depots are an integral part of the beverage container collection industry in
27 Alberta and the DCA recommends that their costs be incorporated in the setting to the 2006
28 Revenue Requirement.

29 The DCA also recommends that Multi-Business Depots of a certain size (perhaps over 1 million
30 containers per year or about \$110 thousand per year in Revenue) be required, as a condition of
31 their BCMB permit, to track all Depots related revenues and costs separately from their other
32 businesses.

33 **8.2.7 Small Volume Depots**

34 The ability of the smallest Depots (generally under 0.5 million containers processed per year) to
35 complete UCAs with the level of information requested is difficult. The DCA notes that of the 16
36 Depots with return volumes under 0.5 million containers in Cal 2005, 69% were exempted from

1 filing the 2005 UCA by the BCMB. The DCA recommends that in the future, the smallest
2 volume Depots costs could be excluded from setting Handling Commissions. In effect, these
3 Depots would become “price takers” and receive the average Handling Commission as set by
4 the remaining Depots. However, small volume Depots should still be required to complete and
5 file Table 1 of the UCA to collect statistical information that may be of assistance to the BCMB.

6 The DCA notes that if its recommended monthly fixed fee portion of the Handling Commissions
7 are implemented the BCMB could require these smallest Depots to invest in training and
8 systems to allow them to properly track and monitor their revenues and costs and be in a
9 position, in the near future, to comply with the requirement to complete UCAs.

10 **8.2.8 Collection Costs**

11 The DCA’s understanding of the beverage container collection system in Alberta is that
12 Customers are provided with an incentive to return their beverage containers to a Depot through
13 the return of the Deposits paid. Notwithstanding, the quality of the data collected during the
14 2005 UCA process lead the DCA to determine that collection related costs should be included in
15 the 2006 Revenue Requirement.

16 The DCA recommends that the BCMB review this issue and develop a policy on the practice of
17 collecting containers from outside a Depot and the inclusion or exclusion of collection related
18 costs in the development of Revenue Requirements.

19 **8.2.9 Additional Product Streams**

20 We believe that this study can provide a framework to properly integrate additional product
21 streams (e.g. small batteries) and help determine whether such integration would be in the
22 public’s interest. The DCA notes that higher return volumes from additional product streams
23 should make smaller Depots more profitable and increase the efficiency and utilization of the
24 existing return system. Additional product streams should also put downward pressure on
25 Handling Commissions to the benefit of both Customers and Manufacturers.

26 **8.2.10 Confidentiality**

27 We are of the view that BCMB staff in charge of enforcement of BCMB regulations should have
28 complete and unfettered access to Depot financial information, including UCA information
29 collected by the DCA. We do not believe that restricting implementing agencies and/or
30 regulators from receiving financial information from companies that they are regulating is in the
31 public interest.

32 With the BCMB operating as a stakeholder Board, arrangements should be made to ensure that
33 BCMB directors do not have access to confidential Depot information.

34 The DCA has endeavored to maintain all UCA data collected in the strictest confidence and has
35 not released any individual Depot information to anyone other than the DCA’s staff and
36 consultants, and then only the information needed for these individuals to perform the tasks
37 requested by the DCA. No individual financial Depot information has been released to BCMB
38 staff.

APPENDIX I – SCHEDULES

**BEVERAGE CONTAINER MANAGEMENT BOARD
2006 PHASE I FORECAST
SUMMARY - REVENUE AT EXISTING RATES**

Line No.		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1	Report Volume	1,079,178,439	or ~ 83% Total System	1,105,988,642	or ~ 85% Total System	1,202,867,072	or 84% Total System	1,428,953,298	or 100% Total System
2	Report Depots	165	or 76% Total System	165	or 76% Total System	165	or 76% Total System	216	or 100% Total System
		2005 Fiscal Year as Reported		2005 Fiscal Year as Adjusted		Cal 2006 Study System Forecast		Cal 2006 Total System Forecast	
		\$	¢ per container	\$	¢ per container	\$	¢ per container	\$	¢ per container
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Revenue									
3	Revenue	\$126,126,279	11.69	\$129,278,014	11.69	\$140,093,784	11.65	\$166,631,564	11.66
4	Less Purchases	\$82,983,136	7.69	\$85,081,622	7.69	\$91,341,755	7.59	\$108,851,483	7.62
5	Gross Margin (HC)	\$43,143,142	4.00	\$44,196,393	4.00	\$48,752,029	4.05	\$57,780,080	4.04
6	Misc Revenue	\$392,967	0.04	\$735,028	0.07	\$811,330	0.07	\$1,012,495	0.07
7	Total Margin	\$43,536,110	4.03	\$44,931,421	4.06	\$49,563,359	4.12	\$58,792,575	4.11
Expenses									
8	Direct Labour	\$13,940,512	1.29	\$18,660,775	1.69	\$22,671,157	1.88	\$27,742,427	1.94
9	Contract Labour	\$1,523,068	0.14	\$0	0.00	\$0	0.00	\$0	0.00
10	Overhead Labour	\$7,828,449	0.73	\$5,525,602	0.50	\$6,118,822	0.51	\$7,779,143	0.54
11	Labour Subtotal	\$23,292,029	2.16	\$24,186,377	2.19	\$28,789,978	2.39	\$35,521,570	2.49
12	Building	\$5,716,426	0.53	\$5,676,267	0.51	\$7,327,617	0.61	\$9,402,541	0.66
13	Equipment	\$2,361,150	0.22	\$2,418,238	0.22	\$2,518,727	0.21	\$3,258,430	0.23
14	Overhead (Ex-Collections)	\$3,792,014	0.35	\$4,001,025	0.36	\$5,330,711	0.44	\$6,585,917	0.46
15	Collections	\$1,088,695	0.10	\$1,106,839	0.10				
16	Total Operating Expenses	\$36,250,314	3.36	\$37,388,745	3.38	\$43,967,034	3.66	\$54,768,458	3.83
17	Earnings before taxes	\$7,285,796	0.68	\$7,542,676	0.68	\$5,596,325	0.47	\$4,024,117	0.28
18	Income Taxes (By Depot)	\$2,203,240	0.20	\$2,667,193	0.24	\$2,481,716	0.21	\$2,897,655	0.20
19	Net Income	\$5,082,556	0.47	\$4,875,483	0.44	\$3,114,609	0.26	\$1,126,462	0.08
20	Net Income - Small	\$678,874	0.39	(\$1,239,825)	(0.69)	(\$2,007,420)	(1.00)		
21	Net Income - Large	\$4,403,683	0.49	\$6,115,308	0.66	\$5,122,003	0.51		
	Net Income - Total	\$5,082,556	0.47	\$4,875,483	0.44	\$3,114,582	0.26	\$1,126,462	0.08

**BEVERAGE CONTAINER MANAGEMENT BOARD
2006 PHASE I REPORT REV 1
ADJUSTMENTS CONTINUITY SCHEDULE**

Line No.		2005 Fiscal Year as Reported	Adjustments Increase (Decrease)	2005 Fiscal Year as Adjusted	Percent Change	Report Reference	Comments
		\$	\$	\$			
		(a)	(b)	(d)	(e)	(f)	(g)
	Revenue						
3	Revenue	\$126,126,279	\$3,151,736	\$129,278,014	2.5%	Sec.	Calculated from manufacture's data, adjust for stub fiscal years
4	Less Purchases	\$82,983,136	\$2,098,485	\$85,081,622	2.5%	Sec.	Calculated from manufacture's data, adjust for stub fiscal years
5	Gross Margin (HC)	\$43,143,142	\$1,053,251	\$44,196,393	2.4%	Sec.	Calculated from manufacture's data, adjust for stub fiscal years
6	Misc Revenue	\$392,967	\$342,061	\$735,028	87.0%	Sec. 4.3.2	Adjust for stub fiscal years
7	Total Margin	\$43,536,110	\$1,395,311	\$44,931,421	3.2%		
	Expenses						
8	Direct Labour	\$13,940,512	\$4,720,263	\$18,660,775	33.9%	Sec. 4.4.2	See Schedule 4-c
9	Contract Labour	\$1,523,068	-\$1,523,068	\$0	-100.0%	Sec. 4.5.2	Assigned to Direct Labour
10	Overhead Labour	\$7,828,449	-\$2,302,847	\$5,525,602	-29.4%	Sec. 4.6.2	See Schedule 4-d
11	Labour Subtotal	\$23,292,029	\$894,348	\$24,186,377	3.8%		
12	Building	\$5,716,426	-\$40,159	\$5,676,267	-0.7%	Sec. 4.7.4	See Schedule 5-a
13	Equipment	\$2,361,150	\$57,087	\$2,418,238	2.4%	Sec. 4.8.2	Adjust for stub fiscal years
14	Overhead (Ex-Collections)	\$3,792,014	\$209,011	\$4,001,025	5.5%	Sec. 4.9.2	Adjust for stub fiscal years, remove charity, calculate fees
15	Collections	\$1,088,695	\$18,144	\$1,106,839	1.7%	Sec. 4.9.2	Adjust for stub fiscal years
16	Total Operating Expenses	\$36,250,314	\$1,138,431	\$37,388,745	3.1%		
17	Earnings before taxes	\$7,285,796	\$256,880	\$7,542,676	3.5%		
18	Taxes	\$2,203,240	\$463,953	\$2,667,193	21.1%	Sec. 4.12.6	
19	Net Income	\$5,082,556	-\$207,073	\$4,875,483	-4.1%		
20	Net Income - Small	\$678,874	-\$1,918,698	-\$1,239,825	-282.6%		
21	Net Income - Large	\$4,403,683	\$1,711,625	\$6,115,308	38.9%		
22	Net Income - Total	\$5,082,556	-\$207,073	\$4,875,483	-4.1%		

**BEVERAGE CONTAINER MANAGEMENT BOARD
2006 PHASE I REPORT REV 1
DIRECT LABOR**

Line
No.

	2005 Fiscal Year as Reported				2005 Fiscal Year as Adjusted				Cal 2006 Study System Forecast			
	Hours	Salary & Wages	Benefits*	Total	Hours	Salary & Wages	Benefits	Total	Hours	Salary & Wages	Benefits	Total
	(a)	(c)	(b)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
1 Small	153,053	\$1,487,578	\$186,875	\$1,674,453	254,552	\$3,221,757	incl. in rate	\$3,221,757	284,432	\$3,991,487	incl. in rate	\$3,991,487
2 Large	1,028,100	\$10,816,719	\$1,449,340	\$12,266,059	1,238,409	\$15,439,018	incl. in rate	\$15,439,018	1,341,933	\$18,679,670	incl. in rate	\$18,679,670
3 Total	1,181,153	\$12,304,297	\$1,636,215	\$13,940,512	1,492,961	\$18,660,775	\$0	\$18,660,775	1,626,365	\$22,671,157	\$0	\$22,671,157

* FY 2005 Reported benefits include benefit amounts for both direct labor and overhead labor (Schedule 4).

BEVERAGE CONTAINER MANAGEMENT BOARD
2006 PHASE I REPORT REV 1
CONTRACT LABOR

Line No.	2005 Fiscal Year as Reported			2005 Fiscal Year as Adjusted			2006 Calendar Year Forecast		
	Job Class	Hours	\$	Job Class	Hours	\$	Job Class	Hours	\$
		(a)	(b)		(c)	(d)		(e)	(f)
	Small								
1	COL	2,129	\$14,705	COL			COL		
2	HND & LDH	24,533	\$229,935	HND & LDH			HND & LDH		
3	MGR	3,186	\$25,238	MGR			MGR		
4	OWN	-	\$0	OWN			OWN		
5		29,848	\$269,878		-	-		-	-
	Large								
6	COL	9,121	\$125,032	COL			COL		
7	HND & LDH	88,854	\$1,128,159	HND & LDH			HND & LDH		
8	MGR	-	\$0	MGR			MGR		
9	OWN	-	\$0	OWN			OWN		
10		97,975	\$1,253,191		-	-		-	-
11	Total	127,823	\$1,523,068		-	-		-	-

**BEVERAGE CONTAINER MANAGEMENT BOARD
2006 PHASE I REPORT REV 1
OVERHEAD LABOR**

Line No.	Job Class	2005 Fiscal Year as Reported		2005 Fiscal Year as Adjusted		2006 Calendar Year Forecast	
		Hours	Salary & Wages	Hours	Salary & Wages	Hours	Total
	(a)	(b)	(c)	(e)	(f)	(j)	(m)
Small							
1	BK	1,843	\$27,976	14,490	\$252,440	<i>included in MGR</i>	
2	COL	310	\$0	<i>allocated to Direct Labour</i>			
3	HND & LHD	6,286	\$24,268	<i>allocated to Direct Labour</i>			
4	MGR	12,740	\$145,228	78,330	\$1,364,673	92,820	\$1,769,021
5	OWN	135,575	\$1,051,425	<i>allocated to Direct & Overhead Labour</i>			
6		156,754	\$1,248,897	92,820	\$1,617,113	92,820	\$1,769,021
Large							
7	BK	12,922	\$152,799	24,938	\$434,474	<i>included in MGR</i>	
8	COL	3,228	\$40,774	<i>allocated to Direct Labour</i>			
9	HND & LHD	33,170	\$466,663	<i>allocated to Direct Labour</i>			
10	MGR	65,296	\$1,564,087	130,784	\$3,474,014	155,722	\$4,349,801
11	OWN	187,561	\$4,355,230	<i>allocated to Direct & Overhead Labour</i>			
12		302,177	\$6,579,552	155,722	\$3,908,489	155,722	4,349,801
13	Total	458,931	\$7,828,449	248,541	\$5,525,602	248,541	\$6,118,822

2005 Fiscal Year Reported benefits are included in Direct Labour (Schedule 2)

BEVERAGE CONTAINER MANAGEMENT BOARD
2006 PHASE I REPORT REV 1
SUMMARY OF AS REPORTED LABOUR

2005 Fiscal Year As Reported

Line	Job Class	Direct Labour			Contract Labour			Overhead Labour			Total Labour		
		Hours	(\$)	(\$/h)	Hours	(\$)	(\$/h)	Hours	(\$)	(\$/h)	Hours	(\$)	(\$/h)
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
	<u>Small</u>												
1	BK							1,843	\$27,976	\$15.18	1,843	\$27,976	\$15.18
2	COL				2,129	\$14,705	\$6.91	310	\$0	\$0.00	2,439	\$14,705	\$6.03
3	HND & LHD	153,053	\$1,674,453	\$10.94	24,533	\$229,935	\$9.37	6,286	\$24,268	\$3.86	183,872	\$1,928,656	\$10.49
4	MGR				3,186	\$25,238	\$7.92	12,740	\$145,228	\$11.40	15,926	\$170,466	\$10.70
5	OWN				-	\$0		135,575	\$1,051,425	\$7.76	135,575	\$1,051,425	\$7.76
6	Sub-Total	153,053	\$1,674,453	\$10.94	29,848	\$269,878	\$9.04	156,754	\$1,248,897	\$7.97	339,655	\$3,193,227	\$9.40
	<u>Large</u>												
7	BK							12,922	\$152,799	\$11.82	12,922	\$152,799	\$11.82
8	COL				9,121	\$125,032	\$13.71	3,228	\$40,774	\$12.63	12,349	\$165,806	\$13.43
9	HND & LHD	1,028,100	\$12,266,059	\$11.93	88,854	\$1,128,159	\$12.70	33,170	\$466,663	\$14.07	1,150,124	\$13,860,880	\$12.05
10	MGR				-	\$0		65,296	\$1,564,087	\$23.95	65,296	\$1,564,087	\$23.95
11	OWN				-	\$0		187,561	\$4,355,230	\$23.22	187,561	\$4,355,230	\$23.22
12	Sub-Total	1,028,100	\$12,266,059	\$11.93	97,975	\$1,253,191	\$12.79	302,177	\$6,579,552	\$21.77	1,428,252	\$20,098,802	\$14.07
13	Total	1,181,153	\$13,940,512	\$11.80	127,823	\$1,523,068	\$11.92	458,931	\$7,828,449	\$17.06	1,767,907	\$23,292,029	\$13.17

**BEVERAGE CONTAINER MANAGEMENT BOARD
2006 PHASE I REPORT REV 1
SUMMARY OF AS ADJUSTED LABOUR**

2005 Fiscal Year As Adjusted

Line	Job Class	Direct Labour			Contract Labour			Overhead Labour			Total Labour		
		Hours	(\$)	(\$/h)	Hours	(\$)	(\$/h)	Hours	(\$)	(\$/h)	Hours	(\$)	(\$/h)
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
	<u>Small</u>												
1	BK							14,490	\$252,440	\$17.42	14,490	\$252,440	\$17.42
2	COL	3,369	\$36,308	\$10.78							3,369	\$36,308	\$10.78
3	HND & LHD	251,184	\$3,185,449	\$12.68							251,184	\$3,185,449	\$12.68
4	MGR							78,330	\$1,364,673	\$17.42	78,330	\$1,364,673	\$17.42
5	OWN										-	\$0	
6	Sub-Total	254,552	\$3,221,757	\$12.66	-	\$0		92,820	\$1,617,113	\$17.42	347,372	\$4,838,870	\$13.93
	<u>Large</u>												
7	BK							24,938	\$434,474	\$17.42	24,938	\$434,474	\$17.42
8	COL	12,349	\$181,271	\$14.68							12,349	\$181,271	\$14.68
9	HND & LHD	1,226,060	\$15,257,747	\$12.44							1,226,060	\$15,257,747	\$12.44
10	MGR							130,784	\$3,474,014	\$26.56	130,784	\$3,474,014	\$26.56
11	OWN										-	\$0	
12	Sub-Total	1,238,409	\$15,439,018	\$12.47	-	\$0		155,722	\$3,908,489	\$25.10	1,394,130	\$19,347,506	\$13.88
13	Total	1,492,961	\$18,660,775	\$12.50	-	\$0		248,541	\$5,525,602	\$22.23	1,741,502	\$24,186,377	\$13.89

BEVERAGE CONTAINER MANAGEMENT BOARD
2006 PHASE I REPORT REV 1
DIRECT LABOUR RECONCILIATION

Line	Small			Large			Total		
	(h) (a)	(b)	(\$/h) (c)	hours (d)	(e)	(\$/h) (f)	hours (g)	(h)	(\$/h) (i)
1 As Reported	153,053	\$1,674,453	\$10.94	1,028,100	\$12,266,059	\$11.93	1,181,153	\$13,940,512	\$11.80
2 Stub Year Adjustment	2,023	\$36,419	\$18.00	20,154	\$333,779	\$16.56	22,177	\$370,198	\$16.69
3 Contract Labour COL to DL	2,129	\$14,705	\$6.91	9,121	\$125,032	\$13.71	11,250	\$139,737	\$12.42
4 Stub Year Adjustment*	0	\$0		0	\$0		0	\$0	
5 Contract Labour HND & LHD to DL	24,533	\$229,935	\$9.37	88,854	\$1,128,159	\$12.70	113,387	\$1,358,093	\$11.98
6 Stub Year Adjustment	231	\$1,686	\$7.31	2,633	\$25,902	\$9.84	2,864	\$27,588	\$9.63
7 Overhead COL / DRV to DL	310	\$0	\$0.00	3,228	\$40,774	\$12.63	3,538	\$40,774	\$11.52
8 Stub Year Adjustment*	930	\$0	\$0.00	0	\$0		930	\$0	\$0.00
9 LDH Wage Rate Adjustment		\$21,603	\$17.42		\$15,464	\$17.42	0	\$37,068	\$17.42
10 Overhead Labour HND & LHD to DL	66,224	\$536,716	\$8.10	83,329	\$1,248,485	\$14.98	149,554	\$1,785,201	\$11.94
11 Stub Year Adjustment	5,119	\$55,586	\$10.86	2,989	\$37,775	\$12.64	8,108	\$93,361	\$11.51
12 LDH Wage Rate Adjustment		\$650,654	\$17.42		\$217,589	\$17.42	0	\$868,244	\$17.42
13 As Adjusted	254,552	\$3,221,757	\$12.66	1,238,409	\$15,439,018	\$12.47	1,492,961	\$18,660,775	\$12.50

* No adjustment made as no Depots with Stub Fiscal Years reported costs

BEVERAGE CONTAINER MANAGEMENT BOARD
2006 PHASE I REPORT REV 1
OVERHEAD LABOUR RECONCILIATION

Line	Small			Large			Total		
	(h)		(\$/h)	hours		(\$/h)	hours		(\$/h)
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
1 As Reported	156,754	\$1,248,897	\$7.97	302,177	\$6,579,552	\$21.77	458,931	\$7,828,449	\$17.06
2 Stub Year Adjustment	8,650	\$88,345	\$10.21	9,119	\$125,549	\$13.77	17,768	\$213,894	\$12.04
3 Overhead COL / DRV to DL	(310)	\$0	\$0.00	(3,228)	(\$40,774)	\$12.63	(3,538)	(\$40,774)	\$11.52
4 Stub Year Adjustment*	(930)	\$0	\$0.00	0	\$0		(930)	\$0	\$0.00
5 Overhead Labour HND & LHD to DL	(66,224)	(\$536,716)	\$8.10	(83,329)	(\$1,248,485)	\$14.98	(149,554)	(\$1,785,201)	\$11.94
6 Stub Year Adjustment	(5,119)	(\$55,586)	\$10.86	(2,989)	(\$37,775)	\$12.64	(8,108)	(\$93,361)	\$11.51
7 MGR Wage Rate Adjustment		\$739,691		(66,027)	(\$1,427,471)	\$21.62	(66,027)	(\$687,781)	\$10.42
8 BK Wage Rate Adjustment		\$132,483			(\$42,107)		0	\$90,376	
9 As Adjusted	92,820	\$1,617,113	\$17.42	155,722	\$3,908,489	\$25.10	248,541	\$5,525,602	\$22.23

* No adjustment made as no Depots with Stub Fiscal years reported costs

**BEVERAGE CONTAINER MANAGEMENT BOARD
2006 PHASE I REPORT REV 1
BUILDINGS**

Line
No.

		2005 Fiscal Year as Reported			2005 Fiscal Year as Adjusted			2006 Calendar Year Forecast		
		Small	Large	Total	Small	Large	Total	Small	Large	Total
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Owned Buildings										
1	sq. ft.	170,559	211,399	381,958				-	-	-
2	Building CCA	\$155,912	\$320,966	\$476,879				\$0	\$0	\$0
3	Use Costs incl. Mortgage I	\$537,201	\$901,279	\$1,438,480				\$0	\$0	\$0
4	Utilities	\$211,575	\$346,455	\$558,029				\$0	\$0	\$0
5		\$904,688	\$1,568,701	\$2,473,388	\$0	\$0	\$0	\$0	\$0	\$0
Leased Buildings										
6	sq. ft.	48,938	206,110	255,048	200,639	332,984	533,623	200,639	332,984	533,623
7	Leasehold CCA	\$1,456	\$24,587	\$26,043	\$0	\$0	\$0	\$0	\$0	\$0
8	Lease Payments	\$197,368	\$2,213,005	\$2,410,373	\$1,393,111	\$2,485,530	\$3,878,641	\$2,102,488	\$3,359,639	\$5,462,127
9	Use Costs	\$40,772	\$462,002	\$502,774	\$261,846	\$738,846	\$1,000,692	\$269,459	\$763,691	\$1,033,151
10	Utilities	\$45,026	\$258,822	\$303,848	\$260,830	\$536,104	\$796,934	\$272,418	\$559,921	\$832,339
11		\$284,622	\$2,958,416	\$3,243,038	\$1,915,787	\$3,760,480	\$5,676,267	\$2,644,365	\$4,683,252	\$7,327,617
12	Total	\$1,189,309	\$4,527,117	\$5,716,426	\$1,915,787	\$3,760,480	\$5,676,267	\$2,644,365	\$4,683,252	\$7,327,617

**BEVERAGE CONTAINER MANAGEMENT BOARD
2006 PHASE I REPORT REV 1
BUILDINGS RECONCILIATION**

Line
No.

	Small	Large	Total	Comments
	(a)	(b)	(c)	(d)
1 As Reported	\$1,189,309	\$4,527,117	\$5,716,426	
2 Lease Payments	\$1,195,743	\$272,525	\$1,468,268	deemed lease rate x deemed size for all Depots
3 Building CCA	(\$155,912)	(\$320,966)	(\$476,879)	remove, included in deemed lease rate
4 Use Costs incl. Mortgage Interest	(\$316,127)	(\$624,436)	(\$940,563)	remove items included in deemed lease rate, increase for stub fiscal year
5 Utilities	\$4,230	(\$69,172)	(\$64,942)	increase for stub fiscal year, reduce for deemed size
6 Leasehold CCA	(\$1,456)	(\$24,587)	(\$26,043)	remove, included in deemed lease rate
7 As Adjusted	\$1,915,787	\$3,760,480	\$5,676,267	

**BEVERAGE CONTAINER MANAGEMENT BOARD
2006 PHASE I REPORT REV 1
EQUIPMENT**

Line
No.

		2005 Fiscal Year as Reported			2005 Fiscal Year as Adjusted			2006 Calendar Year Forecast		
		Small	Large	Total	Small	Large	Total	Small	Large	Total
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Equipment										
1	CCA	\$146,315	\$227,356	\$373,671	\$149,895	\$232,920	\$382,815	\$156,297	\$219,890	\$376,186
2	Loan interest	\$3,894	\$21,074	\$24,968	\$3,989	\$21,589	\$25,579	\$3,989	\$21,589	\$25,579
3	Lease payments	\$4,339	\$247,194	\$251,533	\$4,482	\$255,346	\$259,828	\$4,557	\$259,651	\$264,208
4	Operating Costs	\$29,933	\$176,031	\$205,964	\$31,718	\$180,034	\$211,752	\$32,627	\$185,779	\$218,406
5		\$184,480	\$671,655	\$856,135	\$190,084	\$689,889	\$879,974	\$197,470	\$686,909	\$884,379
Vehicle										
6	CCA	\$76,616	\$187,200	\$263,816	\$78,491	\$191,781	\$270,272	\$81,699	\$180,402	\$262,101
7	Loan interest	\$1,297	\$702	\$1,999	\$1,329	\$719	\$2,048	\$1,329	\$719	\$2,048
8	Lease payments	\$34,047	\$39,224	\$73,271	\$35,169	\$40,518	\$75,687	\$35,762	\$41,201	\$76,963
9	Operating Costs	\$344,366	\$821,564	\$1,165,930	\$358,682	\$831,575	\$1,190,257	\$386,868	\$906,367	\$1,293,235
10		\$456,325	\$1,048,690	\$1,505,016	\$473,671	\$1,064,593	\$1,538,264	\$505,658	\$1,128,690	\$1,634,348
11	Total	\$640,805	\$1,720,345	\$2,361,150	\$663,755	\$1,754,483	\$2,418,238	\$703,129	\$1,815,598	\$2,518,727

BEVERAGE CONTAINER MANAGEMENT BOARD
2006 PHASE I REPORT REV 1
OVERHEAD

Line
No.

	2005 Fiscal Year as Reported			2005 Fiscal Year as Adjusted			2006 Calendar Year Forecast		
	Small	Large	Total	Small	Large	Total	Small	Large	Total
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
<u>Overhead - Office</u>									
1 Office Expenses	\$76,070	\$266,879	\$342,949	\$81,192	\$272,572	\$353,764			
2 Shop Supplies	\$77,023	\$295,041	\$372,065	\$81,066	\$295,999	\$377,065			
3 Telephone	\$119,100	\$285,047	\$404,147	\$125,183	\$306,637	\$431,819			
4 Charitable Donations	\$9,303	\$34,522	\$43,825	\$0	\$0	\$0			
5 Internet	\$3,424	\$6,919	\$10,344	\$3,424	\$7,399	\$10,824			
6 Bank Charges	\$77,377	\$137,073	\$214,450	\$86,863	\$148,531	\$235,394			
7 (Accounting/Legal)	\$77,454	\$332,066	\$409,520	\$83,755	\$347,842	\$431,596			
8 Training Courses (3rd Party)	\$4,714	\$10,273	\$14,986	\$4,714	\$10,273	\$14,986			
9 Marketing and Promotions	\$22,722	\$153,236	\$175,958	\$23,288	\$155,574	\$178,862			
10 Advertising	\$50,628	\$264,336	\$314,964	\$51,429	\$264,606	\$316,035			
11 Other Insurance (non-property)	\$47,256	\$182,318	\$229,574	\$55,102	\$187,495	\$242,597			
12 Municipal Taxes & License Fees	\$30,497	\$163,701	\$194,197	\$30,845	\$169,336	\$200,182			
15 Other Office costs	\$18,902	\$113,634	\$132,536	\$19,489	\$116,899	\$136,389			
	\$614,471	\$2,245,045	\$2,859,516	\$646,348	\$2,283,164	\$2,929,512	\$653,185	\$2,315,320	\$2,968,505
<u>Overhead - Fees</u>									
13 BCMB Fees	\$49,886	\$288,112	\$337,998	\$81,291	\$416,404	\$497,695	\$91,366	\$457,142	\$548,507
14 ABDA Fees	\$25,874	\$168,972	\$194,846	\$33,125	\$120,289	\$153,414	\$34,318	\$121,184	\$155,501
	\$75,760	\$457,083	\$532,844	\$114,416	\$536,692	\$651,109	\$125,683	\$578,326	\$704,009
<u>Overhead - Other</u>									
16 Non-labour collection costs (e.g. contractors)	\$1,655	\$24,134	\$25,789	\$1,655	\$24,134	\$25,789			
17 Deposit incentives	\$0	\$8,845	\$8,845	\$0	\$10,405	\$10,405			
18 Shrinkage	\$17,161	\$113,461	\$130,622	\$17,161	\$120,082	\$137,243			
19 Other costs	\$34,943	\$234,090	\$269,032	\$34,943	\$248,218	\$283,160			
	\$53,759	\$380,529	\$434,288	\$53,759	\$402,838	\$456,597	\$58,678	\$438,057	\$496,735
<u>Overhead - Table 9</u>									
20 Table 9 Collections costs	\$0	\$365,355	\$365,355	\$0	\$365,355	\$365,355	\$0	\$404,225	\$404,225
21 Table 9 Cash & Shrinkage	\$40,001	\$648,705	\$688,706	\$42,218	\$663,072	\$705,290	\$46,055	\$711,182	\$757,238
	\$40,001	\$1,014,060	\$1,054,061	\$42,218	\$1,028,428	\$1,070,645	\$46,055	\$1,115,407	\$1,161,463
22 Total	\$783,991	\$4,096,718	\$4,880,709	\$856,741	\$4,251,123	\$5,107,864	\$883,601	\$4,447,110	\$5,330,711

**BEVERAGE CONTAINER MANAGEMENT BOARD
2006 PHASE I REPORT REV 1
MISCELLANEOUS REVENUE**

Line
No.

		2005 Fiscal Year as Reported			2005 Fiscal Year as Adjusted			2006 Calendar Year Forecast		
		Small	Large	Total	Small	Large	Total	Small	Large	Total
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
1	Cardboard Sales	\$12,211	\$29,415	\$41,626	\$12,211	\$29,565	\$41,776			
2	Pick-up Fees	\$1,413	\$57,826	\$59,239	\$1,413	\$57,826	\$59,239			
3	Other Recycling	\$50,409	\$29,847	\$80,256	\$50,409	\$29,847	\$80,256			
4	Wine Bottle Sales	\$3,129	\$3,803	\$6,932	\$3,129	\$3,803	\$6,932			
5	Value Add Fee (VAF)	\$0	\$0	\$0	\$36,785	\$305,126	\$341,911			
6	Other Revenue	\$144,614	\$60,300	\$204,914	\$144,614	\$60,300	\$204,914			
7	Total	\$211,776	\$181,192	\$392,967	\$248,560	\$486,468	\$735,028	\$289,682	\$521,647	\$811,330

BEVERAGE CONTAINER MANAGEMENT BOARD
2006 PHASE I REPORT REV 1
GROSS MARGIN

Line No.		2005 Fiscal Year as Reported			2005 Fiscal Year as Adjusted			Cal 2006 Study System Forecast			Cal 2006 Total System Forecast
		Small	Large	Total	Small	Large	Total	Small	Large	Total	Total
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(h)
1	Volume (000's)	173,983,908	905,194,530	1,079,178,439	180,647,234	925,341,408	1,105,988,642	200,362,975	1,002,504,097	1,202,867,072	1,428,953,298
2	Revenue	\$20,110,312	\$106,015,967	\$126,126,279	\$20,882,774	\$108,395,240	\$129,278,014	\$23,165,273	\$116,928,510	\$140,093,784	\$166,631,564
3	Less : Purchases	\$13,408,486	\$69,574,651	\$82,983,136	\$13,921,077	\$71,160,545	\$85,081,622	\$15,319,328	\$76,022,426	\$91,341,755	\$108,851,483
4	Gross Margin	\$6,701,826	\$36,441,316	\$43,143,142	\$6,961,697	\$37,234,696	\$44,196,393	\$7,845,945	\$40,906,084	\$48,752,029	\$57,780,080
5	Taxes	\$427,396	\$1,775,844	\$2,203,240	\$174,143	\$2,493,050	\$2,667,193	\$158,485	\$2,323,231	\$2,481,716	\$2,897,655

BEVERAGE CONTAINER MANAGEMENT BOARD
2006 PHASE I REPORT REV 1
RATE BASE

Line
No.

		2005 Fiscal Year as Reported			2005 Fiscal Year as Adjusted			2006 Calendar Year Forecast		
		Assets		Liabilities	Assets		Liabilities	Assets		Liabilities
		Original Cost	Net Book Value		Original Cost	Net Book Value		Original Cost	Net Book Value	
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Small										
1	Equipment	1,554,821	787,745	144,091	1,544,682	779,913	144,091	1,657,875	893,106	144,091
2	Leaseholds	4,064	410	-	-	-	-	-	-	-
3	Land	1,601,393	1,601,393	-	-	-	-	-	-	-
4	Buildings	4,127,446	3,018,833	2,973,460	-	-	-	-	-	-
5	Working Capital	n/a	277,635		n/a	319,338		n/a	379,653	
6		7,287,724	5,686,015	3,117,551	1,544,682	1,099,252	144,091	1,657,875	1,272,758	144,091
7	Owners' Equity			2,568,464			955,161			1,128,667
8	Total Small		5,686,015	5,686,015		1,099,252	1,099,252		1,272,758	1,272,758
Large										
9	Equipment	4,614,360	1,756,398	78,440	4,355,647	1,542,076	78,440	4,484,127	1,670,556	78,440
10	Leaseholds	338,952	208,783	616,479	-	-	-	-	-	-
11	Land	4,148,543	4,148,543	-	-	-	-	-	-	-
12	Buildings	11,165,610	8,786,882	3,269,395	-	-	-	-	-	-
13	Working Capital	n/a	401,637	-	n/a	507,946	-	n/a	549,708	-
14		20,267,465	15,302,243	3,964,313	4,355,647	2,050,022	78,440	4,484,127	2,220,264	78,440
15	Owners' Equity			11,337,930			1,971,581			2,141,824
16	Total Large		15,302,243	15,302,243		2,050,022	2,050,022		2,220,264	2,220,264
17	Total		20,988,258	20,988,258		3,149,273	3,149,273		3,493,022	3,493,022

BEVERAGE CONTAINER MANAGEMENT BOARD
2006 PHASE I REPORT REV 1
2006 REVENUE REQUIREMENT

Line
No.

1	Report Volume	1,202,867,072 or 84% Total System	1,428,953,298 or 100% Total System	1,202,867,072 or 84% Total System	1,428,953,298 or 100% Total System
2	Report Depots	165 or 76% Total System	216 or 100% Total System	165 or 76% Total System	216 or 100% Total System
Existing Handling Commissions			Proposed 2006 Handling Commissions		
		Cal 2006 Study System Forecast	Cal 2006 Total System Forecast	Cal 2006 Study System Forecast	Cal 2006 Total System Forecast
		\$	¢ per container	\$	¢ per container
		(a)	(b)	(e)	(f)
3	Revenue	\$140,093,784	11.65	\$166,631,564	11.66
4	Less Purchases	\$91,341,755	7.59	\$108,851,483	7.62
5	Gross Margin (HC)	\$48,752,029	4.05	\$57,780,080	4.04
6	Misc Revenue	\$811,330	0.07	\$1,012,495	0.07
7	Total Margin	\$49,563,359	4.12	\$58,792,575	4.11
Expenses					
8	Direct Labour	\$22,671,157	1.88	\$27,742,427	1.94
9	Contract Labour	\$0	-	\$0	-
10	Overhead Labour	\$6,118,822	0.51	\$7,779,143	0.54
11	Labour Subtotal	\$28,789,978	2.39	\$35,521,570	2.49
12	Building	\$7,327,617	0.61	\$9,402,541	0.66
13	Equipment	\$2,518,727	0.21	\$3,258,430	0.23
14	Overhead (Ex-Collections)	\$5,330,711	0.44	\$6,585,917	0.46
15	Collections	\$0	-	\$0	-
16	Total Operating Expenses	\$43,967,034	3.66	\$54,768,458	3.83
17	Return on Purchases (After Tax)	\$913,418	0.08	\$1,088,515	0.08
18	Return Margin 1.00%				
19	Return on Operations (After Tax)	\$1,758,681	0.15	\$2,190,738	0.15
20	Return Margin 4.00%				
21	Total Return (After Tax)	\$2,672,099	0.22	\$3,279,253	0.23
22	Return Margin 4.14%				
23	Income Taxes (By Depot)	\$2,481,716	0.21	\$2,897,655	0.20
24	Revenue Requirement*	\$48,309,519	4.02	\$59,932,871	4.19
25	Revenue at Current Rates	\$49,563,359	4.12	\$58,792,575	4.11
26	Proposed Rate Increase	-2.5%	1.9%	-2.5%	2.1%

* Revenue Requirement = Total Operating Expenses [line 16] - Miscellaneous Revenue [line 7] + Total Return [line 21] + Income Taxes [line 23]

27

**BEVERAGE CONTAINER MANAGEMENT BOARD
2007 REVENUE REQUIREMENT FORECAST**

Line
No.

1	Report Volume	1,428,953,298	or	100% Total System	1,479,505,797	100% Total System
2	Report Depots	216	or	100% Total System	1.77%	General Escalation Rate

Proposed 2006 Handling Commissions

		Cal 2006 Total System Forecast		Cal 2007 Total System Forecast		
		\$	¢ per container	Escalation Factor	\$	¢ per container
		(a)	(b)	(c)	(d)	(e)
						Comments
3	Revenue	\$168,881,994	11.82		\$174,823,128	11.82
4	Less Purchases	\$108,851,483	7.62		\$112,642,887	7.61
5	Gross Margin (HC)	\$60,030,511	4.20		\$62,180,241	4.20
6	Misc Revenue	\$1,012,495	0.07	1.77%	\$1,030,414	0.07
7	Total Margin	\$61,043,006	4.27		\$63,210,655	4.27
	Expenses					
8	Direct Labour	\$27,742,427	1.94	1.77%	\$28,233,403	1.91
9	Contract Labour	\$0	-		\$0	-
10	Overhead Labour	\$7,779,143	0.54	1.77%	\$7,916,816	0.54
11	Labour Subtotal	\$35,521,570	2.49		\$36,150,219	2.44
12	Building	\$9,402,541	0.66	1.77%	\$9,568,944	0.65
13	Equipment	\$3,258,430	0.23	1.77%	\$3,316,096	0.22
14	Overhead (Ex-Collections)	\$6,585,917	0.46	1.77%	\$6,702,472	0.45
15	Collections	\$0	-	1.77%	\$0	-
16	Total Operating Expenses	\$54,768,458	3.83		\$55,737,731	3.77
17	Return on Purchases (AT)	\$1,088,515	0.08		\$1,126,429	0.08
18	Return Margin 1.00%			1.00%		
19	Return on Operations (AT)	\$2,190,738	0.15		\$2,229,509	0.15
20	Return Margin 4.00%			4.00%		
21	Total Return (After Tax)	\$3,279,253	0.23		\$3,355,938	0.23
22	Return Margin 3.83%			4.44%		
23	Income Taxes (Theoretical)	\$2,981,108	0.21		\$3,086,572	0.21
24	Revenue Requirement	\$60,016,324	4.20		\$62,180,241	4.20
25	Revenue at Proposed Rates	\$61,043,006	4.27		\$62,180,241	4.20
26	Proposed Rate Increase	-1.7%			0.00%	

**BEVERAGE CONTAINER MANAGEMENT BOARD
2007 REVENUE REQUIREMENT FORECAST**

Line
No.

1	Report Volume	1,428,953,298	or	100% Total System	1,479,505,797	100% Total System
2	Report Depots	216	or	100% Total System	-2.05%	General Escalation Rate

Current Handling Commissions

	Cal 2006 Total System Forecast		Cal 2007 Total System Forecast		
	\$	¢ per container	Escalation Factor	\$	¢ per container
	(a)	(b)	(c)	(d)	(e)
3 Revenue	\$166,631,564	11.66		\$172,560,366	11.66
4 Less Purchases	\$108,851,483	7.62		\$112,642,887	7.61
5 Gross Margin (HC)	\$57,780,080	4.04		\$59,917,480	4.05
6 Misc Revenue	\$1,012,495	0.07	-2.05%	\$991,727	0.07
7 Total Margin	\$58,792,575	4.11		\$60,909,207	4.12
Expenses					
8 Direct Labour	\$27,742,427	1.94	-2.05%	\$27,173,392	1.84
9 Contract Labour	\$0	-		\$0	-
10 Overhead Labour	\$7,779,143	0.54	-2.05%	\$7,619,582	0.52
11 Labour Subtotal	\$35,521,570	2.49		\$34,792,974	2.35
12 Building	\$9,402,541	0.66	-2.05%	\$9,209,682	0.62
13 Equipment	\$3,258,430	0.23	-2.05%	\$3,191,595	0.22
14 Overhead (Ex-Collections)	\$6,585,917	0.46	-2.05%	\$6,450,831	0.44
15 Collections	\$0	-	-2.05%	\$0	-
16 Total Operating Expenses	\$54,768,458	3.83		\$53,645,081	3.63
17 Return on Purchases (AT)	\$1,088,515	0.08		\$1,126,429	0.08
18 Return Margin 1.00%			1.00%		
19 Return on Operations (AT)	\$2,190,738	0.15		\$2,145,803	0.15
20 Return Margin 4.00%			4.00%		
21 Total Return (After Tax)	\$3,279,253	0.23		\$3,272,232	0.22
22 Return Margin 2.46%				4.37%	
23 Income Taxes (Theoretical)	\$2,897,655	0.20		\$3,000,166	0.20
24 Revenue Requirement	\$59,932,871	4.19		\$59,917,480	4.05
25 Revenue at Current Rates	\$58,792,575	4.11		\$59,917,480	4.05
26 Proposed Rate Increase	1.9%			0.00%	

BEVERAGE CONTAINER MANAGEMENT BOARD
2006 PHASE I REPORT REV 1
ESCALATION FROM CAL 2006 STUDY SYSTEM TO TOTAL SYSTEM

Line No.	Total System Volume Cluster	Depots in Study System	Depots In Total System	Volume in Study System	Volume in Total System	Volume Escalator	Miscellaneous Revenue		Direct Labour		Overhead Labour		Building		Equipment		Overhead		Total Operating Expense	
							Study System	Total System	Study System	Total System	Study System	Total System	Study System	Total System	Study System	Total System	Study System	Total System	Study System	Total System
	(a)	(c)	(b)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
1	1	14	24	7,957,253	11,215,310	140.9%	\$829	\$1,168	\$130,553	\$184,008	\$53,331	\$75,167	\$200,647	\$282,801	\$2,534	\$3,571	\$18,779	\$26,468	\$405,844	\$572,015
2	2	18	20	17,663,376	19,209,878	108.8%	\$1,321	\$1,436	\$134,232	\$145,984	\$97,172	\$105,680	\$138,662	\$150,802	\$57,647	\$62,694	\$42,499	\$46,220	\$470,211	\$511,380
3	3	7	9	8,090,478	10,292,124	127.2%	\$1,776	\$2,260	\$114,225	\$145,308	\$156,297	\$198,830	\$181,651	\$231,083	\$27,433	\$34,898	\$39,042	\$49,666	\$518,647	\$659,785
4	4	7	10	9,423,352	13,254,751	140.7%	\$5,637	\$7,930	\$110,275	\$155,111	\$153,123	\$215,381	\$245,508	\$345,328	\$32,378	\$45,542	\$56,861	\$79,980	\$598,144	\$841,341
5	5	8	9	14,381,620	16,295,904	113.3%	\$41,158	\$46,636	\$134,083	\$151,930	\$90,143	\$102,141	\$197,854	\$224,190	\$35,362	\$40,069	\$45,936	\$52,050	\$503,377	\$570,380
6	6	7	10	14,895,204	21,229,285	142.5%	\$5,531	\$7,883	\$327,284	\$466,459	\$42,470	\$60,531	\$153,168	\$218,301	\$38,227	\$54,483	\$56,246	\$80,164	\$617,395	\$879,938
7	7	6	9	14,914,531	22,270,811	149.3%	\$3,740	\$5,584	\$213,781	\$319,223	\$154,790	\$231,137	\$206,600	\$308,502	\$42,490	\$63,447	\$53,812	\$80,353	\$671,473	\$1,002,663
8	8	7	10	19,636,260	28,674,859	146.0%	\$9,880	\$14,428	\$406,382	\$593,440	\$182,425	\$266,395	\$265,038	\$387,036	\$81,913	\$119,618	\$106,059	\$154,878	\$1,041,817	\$1,521,367
9	9	7	9	25,536,933	32,120,540	125.8%	\$116,765	\$146,868	\$451,506	\$567,907	\$231,817	\$291,582	\$279,792	\$351,925	\$100,177	\$126,003	\$178,624	\$224,674	\$1,241,916	\$1,562,091
10	10	6	10	25,441,968	41,546,793	163.3%	\$13,634	\$22,265	\$590,494	\$964,278	\$267,454	\$436,753	\$309,410	\$505,267	\$117,577	\$192,003	\$114,420	\$186,849	\$1,399,355	\$2,285,149
11	11	7	9	34,875,062	45,377,498	130.1%	\$67,984	\$88,457	\$724,519	\$942,704	\$217,000	\$282,349	\$283,778	\$369,236	\$110,460	\$143,724	\$107,937	\$140,442	\$1,443,695	\$1,878,456
12	12	8	10	46,571,499	59,042,700	126.8%	\$38,438	\$48,731	\$990,610	\$1,255,882	\$333,260	\$422,502	\$363,717	\$461,115	\$96,428	\$122,251	\$186,470	\$236,403	\$1,970,485	\$2,498,153
13	13	5	9	36,147,442	66,360,502	183.6%	\$40,087	\$73,593	\$742,129	\$1,362,421	\$270,499	\$496,590	\$365,605	\$671,188	\$234,594	\$430,675	\$221,909	\$407,386	\$1,834,736	\$3,368,260
14	14	9	10	74,040,748	82,068,048	110.8%	\$31,799	\$35,246	\$968,329	\$1,073,312	\$378,705	\$419,763	\$335,616	\$372,003	\$226,120	\$250,635	\$246,895	\$273,663	\$2,155,664	\$2,389,376
15	15	5	9	51,345,634	94,249,418	183.6%	\$48,127	\$88,341	\$1,684,641	\$3,092,307	\$508,256	\$932,948	\$511,890	\$939,619	\$197,457	\$362,450	\$444,722	\$816,326	\$3,346,966	\$6,143,649
16	16	8	10	103,717,756	128,528,081	123.9%	\$84,161	\$104,293	\$2,577,906	\$3,194,567	\$477,767	\$592,054	\$546,680	\$677,452	\$140,370	\$173,947	\$667,878	\$827,641	\$4,410,602	\$5,465,662
17	17	8	9	118,269,988	132,416,225	112.0%	\$52,768	\$59,079	\$2,176,221	\$2,436,518	\$532,913	\$596,655	\$592,128	\$662,952	\$230,026	\$257,539	\$657,377	\$736,005	\$4,188,664	\$4,689,669
18	18	10	10	160,327,499	160,327,499	100.0%	\$77,724	\$77,724	\$2,515,455	\$2,515,455	\$562,203	\$562,203	\$537,434	\$537,434	\$252,334	\$252,334	\$583,804	\$583,804	\$4,451,231	\$4,451,231
19	19	9	9	165,244,524	165,244,524	100.0%	\$61,414	\$61,414	\$2,588,494	\$2,588,494	\$576,819	\$576,819	\$651,235	\$651,235	\$215,486	\$215,486	\$666,883	\$666,883	\$4,698,917	\$4,698,917
20	20	9	10	254,385,945	279,228,548	109.8%	\$108,556	\$119,157	\$5,090,040	\$5,587,119	\$832,378	\$913,665	\$961,203	\$1,055,071	\$279,743	\$307,062	\$834,559	\$916,060	\$7,997,923	\$8,778,977
21		165	215	1,202,867,072	1,428,953,298	118.8%	\$811,330	\$1,012,495	\$22,671,157	\$27,742,427	\$6,118,822	\$7,779,143	\$7,327,617	\$9,402,541	\$2,518,753	\$3,258,430	\$5,330,711	\$6,585,917	\$43,967,060	\$54,768,458
22								124.8%		122.4%		127.1%		128.3%		129.4%		123.5%		124.6%

**BEVERAGE CONTAINER MANAGEMENT BOARD
2006 PHASE I REPORT REV 1
UNIT AND PER DEPOT COSTS CAL 2006 TOTAL SYSTEM**

Line No.	Total System Volume	Depots In Total System	Miscellaneous Revenue		Direct Labour		Overhead Labour		Building		Equipment		Overhead		Total Operating Expense	
			Unit Cost	Per Depot Cost	Unit Cost	Per Depot Cost	Unit Cost	Per Depot Cost	Unit Cost	Per Depot Cost	Unit Cost	Per Depot Cost	Unit Cost	Per Depot Cost	Unit Cost	Per Depot Cost
	(a)	(c)	(b)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
1	1	24	0.01	\$49	1.64	\$7,667	0.67	\$3,132	2.52	\$11,783	0.03	\$149	0.24	\$1,103	5.10	\$23,834
2	2	20	0.01	\$72	0.76	\$7,299	0.55	\$5,284	0.79	\$7,540	0.33	\$3,135	0.24	\$2,311	2.66	\$25,569
3	3	9	0.02	\$251	1.41	\$16,145	1.93	\$22,092	2.25	\$25,676	0.34	\$3,878	0.48	\$5,518	6.41	\$73,309
4	4	10	0.06	\$793	1.17	\$15,511	1.62	\$21,538	2.61	\$34,533	0.34	\$4,554	0.60	\$7,998	6.35	\$84,134
5	5	9	0.29	\$5,182	0.93	\$16,881	0.63	\$11,349	1.38	\$24,910	0.25	\$4,452	0.32	\$5,783	3.50	\$63,376
6	6	10	0.04	\$788	2.20	\$46,646	0.29	\$6,053	1.03	\$21,830	0.26	\$5,448	0.38	\$8,016	4.14	\$87,994
7	7	9	0.03	\$620	1.43	\$35,469	1.04	\$25,682	1.39	\$34,278	0.28	\$7,050	0.36	\$8,928	4.50	\$111,407
8	8	10	0.05	\$1,443	2.07	\$59,344	0.93	\$26,640	1.35	\$38,704	0.42	\$11,962	0.54	\$15,488	5.31	\$152,137
9	9	9	0.46	\$16,319	1.77	\$63,101	0.91	\$32,398	1.10	\$39,103	0.39	\$14,000	0.70	\$24,964	4.86	\$173,566
10	10	10	0.05	\$2,226	2.32	\$96,428	1.05	\$43,675	1.22	\$50,527	0.46	\$19,200	0.45	\$18,685	5.50	\$228,515
11	11	9	0.19	\$9,829	2.08	\$104,745	0.62	\$31,372	0.81	\$41,026	0.32	\$15,969	0.31	\$15,605	4.14	\$208,717
12	12	10	0.08	\$4,873	2.13	\$125,588	0.72	\$42,250	0.78	\$46,112	0.21	\$12,225	0.40	\$23,640	4.23	\$249,815
13	13	9	0.11	\$8,177	2.05	\$151,380	0.75	\$55,177	1.01	\$74,576	0.65	\$47,853	0.61	\$45,265	5.08	\$374,251
14	14	10	0.04	\$3,525	1.31	\$107,331	0.51	\$41,976	0.45	\$37,200	0.31	\$25,064	0.33	\$27,366	2.91	\$238,938
15	15	9	0.09	\$9,816	3.28	\$343,590	0.99	\$103,661	1.00	\$104,402	0.38	\$40,272	0.87	\$90,703	6.52	\$682,628
16	16	10	0.08	\$10,429	2.49	\$319,457	0.46	\$59,205	0.53	\$67,745	0.14	\$17,395	0.64	\$82,764	4.25	\$546,566
17	17	9	0.04	\$6,564	1.84	\$270,724	0.45	\$66,295	0.50	\$73,661	0.19	\$28,615	0.56	\$81,778	3.54	\$521,074
18	18	10	0.05	\$7,772	1.57	\$251,546	0.35	\$56,220	0.34	\$53,743	0.16	\$25,233	0.36	\$58,380	2.78	\$445,123
19	19	9	0.04	\$6,824	1.57	\$287,610	0.35	\$64,091	0.39	\$72,359	0.13	\$23,943	0.40	\$74,098	2.84	\$522,102
20	20	10	0.04	\$11,916	2.00	\$558,712	0.33	\$91,367	0.38	\$105,507	0.11	\$30,706	0.33	\$91,606	3.14	\$877,898
21		215	0.07	\$4,709	1.94	\$129,035	0.54	\$36,182	0.66	\$43,733	0.23	\$15,155	0.46	\$30,632	3.83	\$254,737

APPENDIX II – WORKING CAPITAL (LEAD-LAG) CALCULATIONS

BCMB Depot System
Working Capital Lead/Lag Calculation
2005 FY - As Reported

Schedule A

Line No.		# Days Lead (Lag)	Small Depots		Large Depots		All Depots		Assumptions / Comments							
			\$ Inflow (Outflow)	\$ Lead (Lag)	\$ Inflow (Outflow)	\$ Lead (Lag)	\$ Inflow (Outflow)	\$ Lead (Lag)								
			(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
	Receivables															
1	Miscellaneous revenue	(15.00)	\$0	\$0	\$0	\$0	\$0	\$0	Misc. revenue received net 30 days x .5 = 15 days average lag							
2																
3	Payables															
4	GST on 'net revenue'	Various	\$4,885,894	\$48,856	\$28,163,035	\$269,917	\$33,048,929	\$318,772	Net GST is payable quarterly = 90 days x .5 = 45 days average lag							
5																
6	Overhead expenses	(15.00)	(\$783,991)	\$32,219	(\$4,096,718)	\$168,358	(\$4,880,709)	\$200,577	Expenses are paid net 30 days after receipt x.5 = 15 day average lag							
7	Utilities & Building Use	(15.00)	(\$834,573)	\$34,298	(\$1,968,558)	\$80,900	(\$2,803,131)	\$115,197	Expenses are paid net 30 days after receipt x.5 = 15 day average lag							
8	Lease payments	15.00	(\$197,368)	(\$8,111)	(\$2,213,005)	(\$90,945)	(\$2,410,373)	(\$99,056)	Lease payments (monthly) are paid in advance = 30 days x .5 = 15 days lead							
9	Payroll															
10	Labour	(7.50)	(2,766,323)	\$56,842	(\$18,919,339)	\$388,754	(\$21,685,662)	\$445,596	Employees are paid after 15 days x .5 = 7.5 day lag							
11	Benefits	(15.00)	(\$186,875)	\$7,680	(\$1,449,340)	\$59,562	(\$1,636,215)	\$67,242	Employee benefits are remitted 15 days after employees paid = 30 days x .5 = 15 day lag.							
12																
13	Purchases	see col m & n, line 17	(\$13,408,486)	(\$447,627)	(\$69,574,651)	(\$1,265,516)	(\$82,983,136)	(\$1,713,143)	Average days to collect revenue on purchases:							
14																
15	Vehicle/Equipment Financing Charges															
16	Loan Interest	15.00	(\$5,191)	(\$213)	(\$21,776)	(\$895)	(\$26,967)	(\$1,108)	Mortgage and leasehold interest is paid in advance							
17	Lease Payments	15.00	(\$38,385)	(\$1,577)	(\$286,418)	(\$11,771)	(\$324,803)	(\$13,348)	= 30 days x .5 = 15 lead days							
18																
19	NET CASH WORKING CAPITAL		(\$277,635)		(\$401,637)		(\$679,272)									
20																
21				4.26%		4.26%		4.26%	Bank rate = 4.26%							
22																
23	Interest on working capital		(\$11,838)		(\$17,125)		(\$28,962)		(h)	(i)	(j)	(k)		(l)	(m)	(n)
24																
25									Days	Small Large Total			Lead (Lag)			
26	Net revenue for GST													Small	Large	Total
27	Net revenue (margin)	45	\$6,701,826	\$36,441,316	\$43,143,142									\$53,706	\$292,030	\$345,736
28	Misc. revenue	15	\$0	\$0	\$0									\$0	\$0	\$0
29	Less: Overhead expenses	15	-\$783,991	-\$4,096,718	-\$4,880,709									-\$2,094	-\$10,943	-\$13,038
30	Utilities	15	-\$834,573	-\$1,968,558	-\$2,803,131									-\$2,229	-\$5,258	-\$7,488
31	Lease payments	15	-\$197,368	-\$2,213,005	-\$2,410,373									-\$527	-\$5,911	-\$6,439
32			\$4,885,894	\$28,163,035	\$33,048,929									\$48,856	\$269,917	\$318,772

	Small	Large
Days to fill truck	-9.19	-3.64
Days to receive pmt	-3.00	-3.00
Revenue lag days	-12.19	-6.64

		Lead (Lag)		
		Small	Large	Total
Net revenue for GST				
Net revenue (margin)	45	\$6,701,826	\$36,441,316	\$43,143,142
Misc. revenue	15	\$0	\$0	\$0
Less: Overhead expenses	15	-\$783,991	-\$4,096,718	-\$4,880,709
Utilities	15	-\$834,573	-\$1,968,558	-\$2,803,131
Lease payments	15	-\$197,368	-\$2,213,005	-\$2,410,373
		\$4,885,894	\$28,163,035	\$33,048,929

BCMB Depot System
Working Capital Lead/Lag Calculation
2005 FY - As Adjusted

Schedule B

Line No.		# Days Lead (Lag)	Small Depots		Large Depots		All Depots		Assumptions / Comments						
			\$ Inflow (Outflow)	\$ Lead (Lag)	\$ Inflow (Outflow)	\$ Lead (Lag)	\$ Inflow (Outflow)	\$ Lead (Lag)							
			(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
	Receivables														
1	Miscellaneous revenue	(15.00)	\$0	\$0	\$0	\$0	\$0	\$0	Misc. revenue received net 30 days x .5 = 15 days average lag						
2															
3	Payables														
4	GST on 'net revenue'	Various	\$4,189,169	\$48,383	\$29,223,093	\$276,987	\$33,412,262	\$325,370	Net GST is payable quarterly = 90 days x .5 = 45 days average lag						
5															
6	Overhead expenses	(15.00)	(\$856,741)	\$35,209	(\$4,251,123)	\$174,704	(\$5,107,864)	\$209,912	Expenses are paid net 30 days after receipt x.5 = 15 day average lag						
7	Utilities & Building Use	(15.00)	(\$522,676)	\$21,480	(\$1,274,950)	\$52,395	(\$1,797,626)	\$73,875	Expenses are paid net 30 days after receipt x.5 = 15 day average lag						
8	Lease payments	15.00	(\$1,393,111)	(\$57,251)	(\$2,485,530)	(\$102,145)	(\$3,878,641)	(\$159,396)	Lease payments (monthly) are paid in advance = 30 days x .5 = 15 days lead						
9	Payroll														
10	Labour & Benefits	(7.50)	(4,838,870)	\$99,429	(19,347,506)	\$397,552	(\$24,186,377)	\$496,980	Employees are paid after 15 days x .5 = 7.5 day lag						
11															
12															
13	Purchases	see col m & n, line 17	(\$13,921,077)	(\$464,739)	(\$71,160,545)	(\$1,294,362)	(\$85,081,622)	(\$1,759,101)	Average days to collect revenue on purchases:						
14															
15	Vehicle/Equipment Financing Charges														
16	Loan Interest	15.00	(\$5,318)	(\$219)	(\$22,308)	(\$917)	(\$27,627)	(\$1,135)	Mortgage and leasehold interest is paid in advance						
17	Lease Payments	15.00	(\$39,651)	(\$1,629)	(\$295,864)	(\$12,159)	(\$335,515)	(\$13,788)	= 30 days x .5 = 15 lead days						
18															
19	NET CASH WORKING CAPITAL		(\$319,338)		(\$507,946)		(\$827,284)								
20															
21				4.26%		4.26%		4.26%	Bank rate = 4.26%						
22															
23	Interest on working capital loan		(\$13,616)		(\$21,657)		(\$35,273)		(h)	(i)	(j)	(k)	(l)	(m)	(n)
24															
25															
26															
27															
28															
29															
30															
31															
32															
33															

	Small	Large
Days to fill truck	-9.19	-3.64
Days to receive pmt	-3.00	-3.00
Revenue lag days	-12.19	-6.64

	Days	Small	Large	Total
Net revenue for GST				
Net revenue (margin)	45	\$6,961,697	\$37,234,696	\$44,196,393
Misc. revenue	15	\$0	\$0	\$0
Less: Overhead expenses	15	-\$856,741	-\$4,251,123	-\$5,107,864
Utilities	15	-\$522,676	-\$1,274,950	-\$1,797,626
Lease payments	15	-\$1,393,111	-\$2,485,530	-\$3,878,641
		\$4,189,169	\$29,223,093	\$33,412,262

Lead (Lag)		
Small	Large	Total
\$55,789	\$298,388	\$354,177
\$0	\$0	\$0
-\$2,289	-\$11,356	-\$13,644
-\$1,396	-\$3,406	-\$4,802
-\$3,721	-\$6,639	-\$10,361
\$48,383	\$276,987	\$325,370

BCMB Depot System
Working Capital Lead/Lag Calculation
Cal 2006 Forecast

Schedule C

Line No.		# Days Lead (Lag)	Small Depots		Large Depots		All Depots		Assumptions / Comments							
			\$ Inflow (Outflow)	\$ Lead (Lag)	\$ Inflow (Outflow)	\$ Lead (Lag)	\$ Inflow (Outflow)	\$ Lead (Lag)								
			(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
	Receivables															
1	Miscellaneous revenue	(15.00)	\$0	\$0	\$0	\$0	\$0	\$0	Misc. revenue received net 30 days x .5 = 15 days average lag							
2																
3	Payables															
4	GST on 'net revenue'	Various	\$4,587,438	\$54,171	\$32,539,414	\$305,460	\$37,126,851	\$359,631	Net GST is payable quarterly = 90 days x .5 = 45 days average lag							
5																
6	Overhead expenses	(15.00)	(\$883,601)	\$36,312	(\$4,447,110)	\$182,758	(\$5,330,711)	\$219,070	Expenses are paid net 30 days after receipt x.5 = 15 day average lag							
7	Utilities & Building Use	(15.00)	(\$272,418)	\$11,195	(\$559,921)	\$23,010	(\$832,339)	\$34,206	Expenses are paid net 30 days after receipt x.5 = 15 day average lag							
8	Lease payments	15.00	(\$2,102,488)	(\$86,404)	(\$3,359,639)	(\$138,067)	(\$5,462,127)	(\$224,471)	Lease payments (monthly) are paid in advance = 30 days x .5 = 15 days lead							
9	Payroll															
10	Labour & Benefits	(7.50)	(5,760,507)	\$118,367	(23,029,471)	\$473,208	(\$28,789,978)	\$591,575	Employees are paid after 15 days x .5 = 7.5 day lag							
11																
12																
13	Purchases	see col m & n, line 17	(\$15,319,328)	(\$511,418)	(\$76,022,426)	(\$1,382,796)	(\$91,341,755)	(\$1,894,215)	Average days to collect revenue on purchases:							
14																
15	Vehicle/Equipment Financing Charges															
16	Loan Interest	15.00	(\$5,318)	(\$219)	(\$22,308)	(\$917)	(\$27,627)	(\$1,135)	Mortgage and leasehold interest is paid in advance = 30 days x .5 = 15 lead days							
17	Lease Payments	15.00	(\$40,320)	(\$1,657)	(\$300,852)	(\$12,364)	(\$341,172)	(\$14,021)								
18																
19	NET CASH WORKING CAPITAL		(\$379,653)			(\$549,708)		(\$929,360)								
20																
21				4.26%			4.26%		4.26%		Bank rate =	4.26%				
22																
23	Interest on working capital loan		(\$16,187)			(\$23,438)		(\$39,625)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	

	Small	Large
Days to fill truck	-9.19	-3.64
Days to receive pmt	-3.00	-3.00
Revenue lag days	-12.19	-6.64

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					Lead (Lag)		
					Small	Large	Total
					Small	Large	Total
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					Small</		

Lead (Lag)		
Small	Large	Total
\$62,875	\$327,809	\$390,684
\$0	\$0	\$0
-\$2,360	-\$11,879	-\$14,240
-\$728	-\$1,496	-\$2,223
-\$5,616	-\$8,974	-\$14,591
\$54,171	\$305,460	\$359,631

Alberta Bottle Depot System - Data Collection Agent 2006 Phase I Report (Rev 1)

APPENDIX III – CURRENT HANDLING COMMISSION RATES & DEPOSITS

January 31, 2007

APPENDIX III – CURRENT HANDLING COMMISSION RATES & DEPOSITS

Cal 2006 Total System - Current Rates

ID	Container Stream	Current HC Rate	Deposit Rate	Cal 2006 Volume
0	Gable Top Over 1L	\$0.0800	\$0.0600	7,535,924
1	Pop Cans 0 - 1 L	\$0.0280	\$0.0396	394,070,893
2	Bag in Box Over 1 L	\$0.0800	\$0.1000	244,536
3	Bi Metal 0 - 1 L	\$0.0800	\$0.0600	3,393,950
4	Bi-Metal Cans Over 1 Litre	\$0.0800	\$0.0600	822,270
5	Drink Pouch 0 - 1 L	\$0.0800	\$0.0600	5,095,994
7	Gable Top 0 -1 L	\$0.0800	\$0.0600	627,420
8	Glass 0 - 500 ml	\$0.0750	\$0.0435	-
9	Glass 501 - 1 Litre	\$0.0750	\$0.0435	-
10	Glass Over 1 Litre	\$0.0800	\$0.0600	7,565,146
11	HDPE 0 - 1 L	\$0.0800	\$0.0600	1,662,362
12	HDPE Plastics Over 1 Litre	\$0.0800	\$0.0800	3,379,532
13	Import Beer Cans (Bi-Metal)	\$0.0283	\$0.0600	66,472
14	Import Beer PET 0 - 1 Litre	\$0.0283	\$0.0600	4,752
15	Liq/Wine Ceramics	\$0.0800	\$0.1000	566
16	PET 0 - 1 L	\$0.0554	\$0.0446	247,387,848
17	PET Plastics Over 1 Litre	\$0.0750	\$0.0537	54,360,485
18	Polycups 0-500ml	\$0.0800	\$0.0600	2,965,421
19	PVC 0 - 1 L	\$0.0800	\$0.0600	43,996
20	PVC Plastics Over 1 Litre	\$0.0800	\$0.1000	69,688
21	Tetra Brik 0 - 1 L	\$0.0530	\$0.0401	73,819,357
23	Big Rock Bottles	\$0.0283	\$0.0383	-
24	Beer Cans - Deposit Only	\$0.0283	\$0.1000	-
25	Unusable ISBs	\$0.0283	\$0.1000	-
26	Beer Cans	\$0.0283	\$0.0395	315,810,552
27	Imports Under 1 Litre	\$0.0283	\$0.0600	14,664
30	Molson Obsolete	\$0.0283	\$0.1000	-
31	Over 1 Litre Bottles	\$0.0800	\$0.1000	-
32	Sleemans Bottles	\$0.0283	\$0.0600	6,180,960
33	Industry Standard Bottles	\$0.0283	\$0.0383	150,299,592
34	Tetra Brik Over 1 Litre	\$0.0800	\$0.0600	35,833
35	Import Beer Bottles	\$0.0283	\$0.0457	53,659,131
36	Aerosol 0 - 1 Litre	\$0.0800	\$0.1000	-
37	Polypropylene	\$0.0800	\$0.0600	283,290
41	Glass 0 - 1 Litre	\$0.0750	\$0.0435	99,552,664
Total				1,428,953,298

APPENDIX IV – DCA DOCUMENTS¹²⁸

2004 UCA Process – 2005 Phase I and Phase II Reports

Date	Document #	Description
10-Aug-04	01-001	Straw Dog Version 1
3-Sep-04	01-002(a)	Cover Letter
3-Sep-04	01-002(b)	Straw Dog Version 2
3-Sep-04	01-002(c)	Straw Dog Version 1 Comment Matrix
21-Sep-04	01-003	Straw Dog Version 3
21-Sep-04	01-004	Final Approved Straw Dog Report
3-Nov-04	01-005	Process Document Draft 1
3-Nov-04	01-006	UCA Instruction Manual Draft 1
3-Nov-04	01-007	Information Review and Verification Document Draft 1
3-Nov-04	01-008	Uniform Code of Accounts Draft 1
24-Nov-04	01-009(a)	Stantec Comment Matrix Cover Letter
24-Nov-04	01-009(b)	Stantec Comment Matrix
12-Jan-05	01-010(a)	UCA Package Cover Letter
12-Jan-05	01-010(b)	UCA Version II
12-Jan-05	01-010(c)	UCA Instruction Manual Version II
12-Jan-05	01-010(d)	Information Review and Verification Document Version II
12-Jan-05	01-010(e)	Process Document Version II
17-Jan-05	01-011	Confidentiality Memo
25-Jan-05	01-012	Stantec Response to ABDA Value Request
14-Apr-05	01-013	Process Document Version III
7-Sep-05	01-014	Bielby Decision
7-Sep-05	01-015	Acton Report
7-Sep-05	01-016	Sheard Report
8-Sep-05	01-017a	2005 Alberta Bottle Depot System Data Collection Agent Phase I Report Cover Letter
8-Sep-05	01-017b	2005 Alberta Bottle Depot System Data Collection Agent Phase I Report
8-Sep-05	01-017c	Excel Version of Report Schedules
24-Oct-05	01-017d	Excel Version of Lead Lag Study
8-Sep-05	01-018	UCA Return Checklist
8-Sep-05	01-019	Stantec UCA Cover Letter
8-Sep-05	01-020	UCA Instruction Manual
8-Sep-05	01-021	UCA Booklet
8-Sep-05	01-022	BCMB UCA Letter
7-Jul-05	01-023	DCA 2005 07 07 Progress Report Letter to BCMB
8-Sep-05	01-024	UCA Complete Follow-up Letter Sample
30-Aug-05	01-025	DCA 2005 08 30 Process Recommendation Letter to BCMB
1-Nov-05	01-026a	Phase I Report Revision 1 Nov 1 2005 cover
1-Nov-05	01-026b	Phase I Report Revision 1 Nov 1 2005
1-Nov-05	01-026c	Phase I Report Revision 1 black line Nov 1 2005
28-Oct-05	01-027a	Phase I IR Responses Oct 28 2005 cover

¹²⁸ These documents can be viewed by registered users on the BCMB's web site. Please contact the BCMB to obtain access.

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APPENDIX IV – DCA DOCUMENTS

January 31, 2007

Date	Document #	Description
28-Oct-05	01-027b	Phase I ABDA IR Responses Oct 28 2005
28-Oct-05	01-027c	Phase I CNB IR Responses Oct 28 2005
11-Nov-05	01-028	Stantec Regression results
11-Nov-05	01-029a	Phase II Report Nov 11 2005 Cover Letter
11-Nov-05	01-029b	Phase II Report Nov 11 2005 Draft to BCMB
11-Nov-05	01-029c	Excel Version of Phase II Schedules
20-Jan-06	01-030a	CNB-Stantec Phase II IR Responses
20-Jan-06	01-030b	ABDA-Stantec Phase II IR Responses
15-Jun-06	01-031	Desiderata June 15 2006 Response to HCRP IR 1 Jan 25 2006
27-Sep-06	01-032a	2005 Phase II Report Final Sep 27 2006 cover letter
27-Sep-06	01-032b	2005 Phase II Report Final Sep 27 2006
27-Sep-06	01-032c	2005 Phase II Report Final Sep 27 2006 black line from Nov 11 2005 draft

2005 UCA Process – 2006 Phase I Report

Date	Document #	Description
1-Jun-06	10-001	Doc 10-001 2005 UCA mail out cover letter
1-Jun-06	10-002	Doc 10-002 2005 UCA Booklet
1-Jun-06	10-003	Doc 10-003 2005 UCA Instruction Manual Booklet
1-Jun-06	10-004	Doc 10-004 2005 UCA Attachment A B & C for all depots
1-Jun-06	10-005	Doc 10-004 2005 UCA Return Checklist
27-Nov-06	10-006	Doc 10-006 AB 2005 Population from AB Government
27-Nov-06	10-007	Doc 10-007 Updated 2005 Volume Forecast Results
27-Nov-06	10-008	Doc 10-008 2005 UCA BCMB Extension & Exemption Requests Oct 3 2006
27-Nov-06	10-009	Doc 10-009 Final Status of Depots for 2005 UCAs
27-Nov-06	10-010	Doc 10-010 FRANData Preliminary Study Results
27-Nov-06	10-010a	Doc 10-010a FRANData Preliminary Study Proposal
27-Nov-06	10-011	Doc 10-011 HCRP Return Memo to BCMB July 25 2006
27-Nov-06	10-012	Doc 10-012 Watson Wyatt Labour Survey Report 2005 2006
27-Nov-06	10-013	Doc 10-013 LePage 2006 Market Lease Rate Survey
27-Nov-06	10-014	Doc 10-014 Labour Analysis Charts
27-Nov-06	10-015	Doc 10-015 Direct Energy Application IAR_442357_566645
27-Nov-06	10-016	Doc 10-016 Dr C Evidence Attachment A DERS FINAL 060331
27-Nov-06	10-017	Doc 10-017 Pacific Economics Memo to DCA
27-Nov-06	10-018	Doc 10-018 EUB Decision 2006-107
27-Nov-06	10-019	Doc 10-019 2006 Volume Forecast Charts
27-Nov-06	10-020	Doc 10-020 2006 Phase I Report Rev 0
27-Nov-06	10-020a	Doc 10-020 2006 Phase I Report Rev 0 Cover Letter
11-Dec-06	10-021	Doc 10-021 Initial Data Screening Report from Mr. Li
11-Dec-06	10-022	Doc 10-022 Mr. Li Regression Results Scenarios 1 to 8
11-Dec-06	10-023	Doc 10-023 DCA Regression Results Scenarios 1 to 21
11-Dec-06	10-024	Doc 10-024 DCA Regression Results Scenarios 30 to 50
11-Dec-06	10-025	Doc 10-025 DCA Regression Results Scenarios 101 to 118
11-Dec-06	10-026	Doc 10-026 DCA Regression Results Scenarios 120 to 137
11-Dec-06	10-027	Doc 10-027 DCA Regression Results Scenarios 150 to 167
11-Dec-06	10-028	Doc 10-028 2006 Phase II Report Rev 0 Dec 11 2006
11-Dec-06	10-028a	Doc 10-028a 2006 Phase II Report Rev 0 Dec 11 2006 cover
14-Dec-06	10-029	Doc 10-029 DCA Presentation to BCMB Dec 14 06

Alberta Bottle Depot System - Data Collection Agent 2006 Phase I Report (Rev 1)

APPENDIX IV – DCA DOCUMENTS

January 31, 2007

Date	Document #	Description
29-Jan-07	10-030	Doc 10-030 2006 Reports Rev 0 DCA Response to ABCRC IR 1 Jan 29 2007
29-Jan-07	10-031	Doc 10-031 2006 Reports Rev 0 DCA Response to ABDA IR 1 Jan 29 2007
29-Jan-07	10-031a	Doc 10-031a ABDA-DCA-2006-25 Volume Cluster Data
29-Jan-07	10-032	Doc 10-032 2006 Reports Rev 0 DCA Response to CNB IR 1 Jan 29 2007
29-Jan-07	10-032a	Doc 10-032a CNB-DCA-2006-5 a 2002 to 2006 Shipping Data
29-Jan-07	10-033	Doc 10-033 2006 Reports Rev 0 DCA Response to HCRP IR 1 Jan 29 2007
29-Jan-07	10-034	Doc 10-033 2006 Reports Rev 0 DCA Response to HCRP IR 1 Jan 29 2007
31-Jan-07	10-035	Doc 10-035 2007 Volume Forecast Charts
31-Jan-07	10-036	Doc 10-036 2006 Phase I Report Rev 1
31-Jan-07	10-036a	Doc 10-036a 2006 Phase I Report Rev 1 Cover Letter
31-Jan-07	10-036b	Doc 10-036b 2006 Phase I Report blackline Rev 0 to Rev 1
31-Jan-07	10-037	Doc 10-037 2006 Phase II Report Rev 1
31-Jan-07	10-037a	Doc 10-037a 2006 Phase II Report Rev 1 Cover Letter
31-Jan-07	10-037b	Doc 10-037b 2006 Phase II Report blackline Rev 0 to Rev 1
31-Jan-07	10-038	Doc 10-038 DCA Regression Results Scenarios 150 to 190
31-Jan-07	10-039	Doc 10-039 2006 Phase I Report Rev 1 Appendix I spreadsheet
31-Jan-07	10-040	Doc 10-040 2006 Phase I Report Rev 1 Appendix II spreadsheet
31-Jan-07	10-041	Doc 10-041 2006 Phase II Report Rev 1 Appendix I spreadsheet
31-Jan-07	10-042	Doc 10-042 2006 Phase II Report Rev 1 Appendix II spreadsheet