

Board of Commissioners of Public Utilities

2012 Study of the Costs of Supply and Distribution of Maximum Price Regulated Petroleum Products in the Province of Newfoundland and Labrador (Summary Report)

Part B

March 31, 2014

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Restrictions and Limitations

This report is confidential. It was prepared for the Board of Commissioners of Public Utilities (the "Board") in relation to a study of the costs of supply and distribution of maximum price regulated petroleum products in the Province of Newfoundland and Labrador. This report is not to be used for any other purpose, and we specifically disclaim any responsibility for losses or damages incurred through use of this report for a purpose other than as described in this paragraph. This report should not be reproduced in whole or in part without our express written permission, other than as required by the Board in relation to the described purpose.

Our scope of work is as set out in our engagement letter. The procedures undertaken in the course of our study did not constitute an audit of financial information and consequently, we do not express an opinion on any of the financial information contained in this report.

We acknowledge that the Board is bound by the Freedom of Information and Protection of Privacy Act ("Act") and agree that the Board may use its sole discretion in any determination of whether, and if so in what form, this report may be required to be released under this Act.

We reserve the right, but will be under no obligation, to review and/or revise the contents of this report in light of information which becomes known to us after the date of this report.

Terms of Reference

The following terms of reference have been used throughout the report.

- 1. Decimal Precision: two decimals for total allowed mark-ups and regulated motor fuel differentials. One decimal place has been used for heating fuel differentials.
- 2. Percentage Based Model: referred to as "PBM".
- 3. Cents Per Litre: referred to as "CPL".
- 4. 2012 Study of the Costs of Supply and Distribution of Maximum Price Regulated Petroleum Products in the Province of Newfoundland and Labrador (Full Report) Part B: referred to as "Study" and "Part B".
- 2012 Study of the Costs of Supply and Distribution of Maximum Price Regulated Petroleum Products in the Province of Newfoundland and Labrador (Full Report) Part A: referred to as "Part A".
- 6. A Study of Storage and Distribution Costs for Petroleum Products throughout Newfoundland and Labrador: referred to as "2005 Study".
- 7. Grant Thornton LLP: referred to as "Consultant" or "Grant Thornton".

Executive Summary

The Board engaged Grant Thornton to perform a study of the costs of supply and distribution of maximum price regulated petroleum products in the Province of Newfoundland and Labrador. The study consisted of Part A and Part B. Part A of the report determined adjustments for the retail portion of the total allowed mark-ups for heating fuel and propane. The Board reviewed Part A of the report and implemented the adjustments with the May 16, 2013 weekly price adjustments of maximum price regulated petroleum products.

A PBM was developed in Part A. This model uses dollar costs, expressed as a percentage of total costs, combined with price rates of change, to adjust pre-existing mark-ups. The PBM typically produces effective one size fits all model factors that represent diverse industry participants with significantly different business models and CPL costs. The PBM proved to be a dynamic and easily updated model that worked effectively to adjust total allowed mark-ups in Part A. It was applied to the extent practicable in Part B.

Part B of the report gathered data on storage and distribution costs which was used to adjust total allowed mark-ups and differentials for the remaining regulated fuels not studied in Part A. Applying solutions to data collection challenges in Part A, surveys were streamlined to gather data in simplified format that facilitated automatic entry into databases. This was essential given the magnitude of Part B with over 170 adjustment points and nearly 500 potential participants. Surveys were developed for each point of the wholesale and retail supply chain with the goal of obtaining industry participant data useful for PBM adjustments.

While useable response rates from automotive fuel retailers were modest at 31% (37 of 120 participants in the base zone), a data set was obtained to produce a set of factors useful for the PBM. 30 contributors provided data outside of the base zone. Aggregating this data with the base zone produced virtually the same PBM profiles.

Part B has added a change to the PBM at the retail portion of the supply chain that now models a separate mark-up for cost categories excluding credit card transaction fees, as well as a second mark-up tied specifically to transaction fees. Previous PBM processes were not capturing the extent of changes in transaction fees using an inflation assumption or commission rate alone. Transaction fee models now factor credit card usage rates, commission rates and changes in the regulated fuel price. Each of these factors works to directly model transaction fees off of the portion of revenue paid by credit card.

The PBM has calculated an increase of 3.64 CPL in the total allowed mark-up for automotive fuel. 1.16 CPL is for an increase in the wholesale mark-up driven by an increase in storage costs and tractor trailer freight costs to distribute fuel to retailers. 2.48 CPL relates to an increase in the retail mark-up. Excluding transaction fees, wages and salaries are the largest cost driver of retailers at 46% of total costs. These costs have increased by 39% since the 2005 Study and have contributed 1.05 CPL to the retail mark-up adjustment. Transaction fees have contributed 1.15 CPL to the retail mark-up adjustment. Retailers reported 53% of gas sales are paid by credit card with an average commission fee rate of 1.64%. The total allowed mark-up adjustment has been applied to all grades of fuel. Blend premiums have not been factored in PBM adjustments.

Base zone heating fuel retail mark-ups were also updated for new transaction fee models. In addition, the PBM was applied to the wholesale portion of the supply chain which was not adjusted in Part A. An additional total allowed mark-up increase of 1.07 CPL has been calculated for furnace oil. 0.61 CPL of the increase relates to the wholesale mark-up and is driven by an increase in storage costs and tractor trailer freight costs. The retail mark-up has increased by 0.46 CPL due to updated model methods for transaction fees. The stove oil total allowed mark-up has been increased by 0.80 CPL based on similar findings.

Differential adjustments for motor fuel and heating fuel were more challenging than base zone adjustments. While the goal was to apply PBM techniques where possible, in several instances CPL based methodologies were used. Two factors prevented use of the PBM: 1) lack of price rate of change data and 2) opening differentials that were not representative of current supply dynamics. A fundamental requirement of the PBM is to model from a starting point that is comparative to the current supply chain. Changes in supply chains since the 2005 Study created dynamics that were not captured with the PBM using price rates of change alone. In these cases, PBM methods were not practicable. CPL data was determined to be the most accurate alternative source to model adjustments in cases where the PBM could not be used.

A second challenge with differentials was lack of response by industry participants in several zones. To overcome this challenge, adjacent zone data was determined to be the best evidence based data to perform adjustments. Adjacent zone data was applied using either PBM or CPL methods obtained from the nearest zone that provided data.

Tank wagon delivery survey response in heating fuel differential zones was poor. Given the limited data, base zone profiles in Part A were determined to be a more complete cost profile for the PBM. They were also comparable to the Part B information received for the largest cost category. Therefore, Part A PBM cost profiles have been applied to adjust tank wagon differentials.

Propane differential adjustments consisted of adjustments to bulk plants and tractor trailer freight. Supply chains were comparable to the 2005 Study and PBM processes were used. Adjacent zone data was applied, to the extent possible, for differential zones where data was not submitted. Tank wagon delivery differentials were not adjusted. Part A profiles could potentially be applied similar to approaches used in heating fuel. However, without any propane tank wagon operator examples submitted in Part B, comparison to Part A PBM data was not possible. The following differential adjustments were calculated:

Table 1: Differential Zone Adjustments (CPL)

Zone	Description	Motor Fuel	Heating Fuel	Propane
1	Avalon Peninsula	N/A	N/A	0.6
1ANW	Avalon Peninsula Northwest	N/A	0.6	N/A
1AS	Avalon Peninsula South	N/A	0.9	N/A
1a	Bell Island	(0.38)	0.3	0.6
2	Burin Peninsula/Bonavista Peninsula	(0.92)	0.2	N/A
3	Central Newfoundland/Notre Dame Bay East	(0.21)	0.7	0.9
3a	St. Brendan's (Island)	1.50	1.1	N/A
3b	Fogo Island	(1.67)	(1.5)	N/A
3c	Change Islands	(0.94)	(1.0)	N/A
4	Connaigre Peninsula	0.10	(0.8)	0.9
4a	Gaultois/McCallum/Rencontre East	(0.09)	(1.2)	N/A
5	Springdale - Green Bay/Triton/Baie Verte Peninsula	0.28	0.3	0.9
5a	Long Island	1.07	0.4	N/A
5b	Little Bay Islands	1.11	0.5	N/A
6	Deer Lake/Corner Brook/Bay of Islands/Gros Morne	0.08	0.1	0.1
7	Stephenville/Port au Port/Codroy Valley/Port aux Basques	(0.16)	0.0	0.1
7W	Stephenville/Port au Port/Codroy Valley/Port aux Basques	NA	(0.2)	N/A
7SE	Burgeo	NA	(0.9)	N/A
7a	Ramea	(0.96)	(0.0)	N/A
7b	Grey River/François/Grand Bruit/La Poile (Gasoline)	1.33	(1.2)	N/A
7b	Grey River/François/Grand Bruit/La Poile (Diesel)	(0.53)	N/A	N/A
8	Northern Peninsula - Gros Morne National Park to Bellburns	1.14	0.4	0.1
9	Northern Peninsula to Englee and St. Anthony	(0.24)	0.0	0.1

Certain differentials zones have shown large decreases, which appears unusual given industry participants have typically expressed concerns on rising costs. Changes in supply chain dynamics, since the 2005 Study, have shown cases where differential zone costs have decreased relative to the base zone. To protect confidential information, further specifics of these changes cannot be provided.

Differentials in Labrador have not been adjusted. Adjustments were not performed due to lack of industry data to conclude on adjustments.

Storage facilities on the island portion of the province remain mostly consistent with the active facilities noted in the 2005 Study. Three of bulk plants have been decommissioned since the last study and one new bulk facility has been constructed. The Lewisporte marine terminal has changed ownership according to media reports. There is no further information available to determine if the facility is currently used to supply fuel to the region. In Labrador, limited informal information shows several locations have maintained active marine facilities since the 2005 Study. However, no formal or informal information was provided for several other Labrador facilities identified in the 2005 Study.

Most responses to surveys expressed satisfaction with price zone boundaries. Based on the data received, zone boundaries remain as established in 2005 Study.

Purpose and Scope of the Study

Purpose and Scope

The Board engaged Grant Thornton to perform a study of the cost of supply and distribution of maximum price regulated petroleum products in the Province of Newfoundland and Labrador. The Study consists of two parts, Part A and Part B. The following discussion details the purpose and scope of Part B of the Study, which is the focus of this report.

To complete Part B of the Study, Grant Thornton was given the following objectives:

- Determine the costs associated with the supply and distribution of all maximum price regulated petroleum products to a retailer for final sale to a consumer including, where appropriate, heating fuels.
- Develop and apply a costing model to determine the allowed wholesale mark-up and the total allowed mark-up and zone differentials of maximum price regulated petroleum products other than those determined under Part A.
- Review, analyse and comment on the existing pricing zone boundaries, including making recommendations for any changes to existing pricing zones which may better reflect the current method of supply of maximum price regulated petroleum products to the affected zone(s).
- Review, analyse and comment on the existing pricing zone differentials including making recommendations for any revised differentials that more accurately reflect the current cost differences in providing maximum price regulated petroleum products to different zones as recommended above.
- Compile information on storage and distribution capacity and annual throughput by zone for all marine terminals, bulk plants, and other storage depots that operate throughout the province for the holding of all petroleum products whether or not held for sale to wholesalers and retailers as maximum price regulated products. Information complied shall include all active storage operations as well as those classified as inactive but which are still standing and may be re-commissioned in the future.

- Complete information sheets on each storage facility identified during the course of the Study in the format to be determined. This information is to be compared to the same data contained in the 2005 Study and comment made on changes in storage facilities since the completion of the 2005 report.
- Any other observations, comments or recommendations which may improve the current pricing model used by the Board for the determination of maximum prices for regulated petroleum products.

Methodology

Percentage Based Model

The PBM was successfully developed and implemented in Part A of the Study. It resulted in an effective model methodology for adjusting maximum price regulated petroleum product mark-ups that met the Board's objectives of being both dynamic and easily updated. This model continued to be applied in Part B and was used, to the extent practicable, to determine total-mark-ups and differentials for the remaining maximum price regulated petroleum products not studied in Part A. These products consisted of total mark-up for regulated automotive fuel as well as differentials for regulated automotive fuel, heating fuel and propane.

The following points summarize the key concepts of the Part A PBM framework:

- Comparable to prior mark-ups the PBM rebalances and rebuilds previously determined mark-ups that obtained industry stakeholder consensus and acceptance and re-establishes them based on current costs.
- Easily understood the model uses nine easily understood cost categories.
- Consensus representation of a diverse industry average percentage of total cost factors show a more consistent and consensus representation of a diverse industry. While variances will inevitably exist, they are typically less pronounced than they would be using CPL data. The percentage of total cost factors also avoid concluding how and where costs should be incurred within a business.

In addition to the Part A methodology, there are some further procedures that were introduced in Part B which warrant further commentary. Two new processes have been added to the PBM framework:

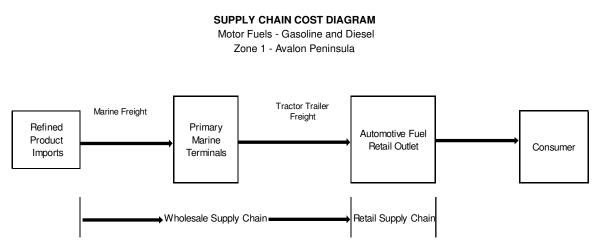
 Transaction Fees. A new separate section has been added to the PBM model that models transaction fees separately. The transaction fee section of the model now considers credit card usage rates, commission rates and changes in the regulated fuel price. Each of these factors works to directly model transaction fees off of the portion of revenue paid by credit card. Allocation of the Total Mark-up and Opening Zone Differentials. These procedures establish specific mark-ups or differentials at each wholesale and retail supply chain point. These allocations are subsequently adjusted with PBM factors.

Further details on transaction fee modelling are presented in pages 16 to 18 of the report. The following section describes the procedures used to allocate opening total mark-ups and differentials.

Base Zone Opening Total Mark-up Allocation - Automotive Fuels

The PBM starts with opening mark-ups at each supply chain point that are subsequently rebalanced using percentage of total cost factors and then adjusted using price rates of change. The opening total mark-up for Zone 1 – Avalon Peninsula (the "base zone"), consisting of a wholesale mark-up and a retail mark-up, was established by the Board in the 2005 Study. To commence PBM modelling, initial allocation of the total mark-up to each point in the supply chain was required to establish opening balances for subsequent model adjustments. The following figure presents the supply chain for the automotive fuel storage and distribution in the base zone:

Figure 1: Supply Chain Zone 1 - Avalon Peninsula



Allocating the opening retail mark-up was straightforward. Given only one point exists on the retail supply chain, the retail mark-up was allocated in total to the automotive fuel retail outlet.

The wholesale mark-up however encompasses multiple supply chain points. A systematic methodology exists to allocate wholesale mark-ups for purposes of the PBM. However the methodology is not disclosed in order to protect confidential information submitted during the Study.

Differential Allocations

Similar to wholesale mark-ups, a systematic methodology exists to allocate differentials, from the 2005 Study, across various supply chain points for the purposes of commencing the PBM. These procedures have not been disclosed in order to protect confidential information submitted during the Study.

With a model methodology now established at the beginning of the Study, surveys could be designed with more proactive planning and features best suited to populating the PBM developed in Part A.

Based on survey administration findings in Part A, surveys were streamlined to gather cost information in a more simplified and efficient manner. First, surveys were refined to request cost information in broader level cost categories versus the more detailed cost information requested in Part A. In addition, surveys were designed to overcome three major efficiency issues experienced in responses from Part A: 1) combination of information across multiple zones and product types, 2) ad hoc schedules submitted as a substitute to completing surveys and 3) commissioned agent costs grouped as a single line cost item. Addressing these issues in advance was essential given the magnitude of the Part B study covering over 170 zone adjustment points and over 500 potential contributors (in comparison Part A consisted of 6 zone adjustment points and 10 potential contributors). With such a large scale study, it was critical to develop surveys that would, to the extent possible, prevent these issues from reoccurring. Extensive time was spent in Part A reconciling and allocating data responses as well as conducting follow up meetings discussing these procedures. Such processes would not be able to be conducted in a cost beneficial manner, given the size of the Part B Study.

Surveys were developed at each of the wholesale and retail points of the supply chain for regulated automotive fuel, heating fuel and propane. Feedback was obtained from staff of the Board and incorporated during the survey development process. In addition, feedback was sought on the automotive retailer surveys from the Atlantic Convenience Store Association and the Canadian Federation of Independent Business. Both organizations expressed concerns on the time period of information being requested noting the timeframes were beyond a point participants would reasonably be required to maintain historical records. In addition, concerns were expressed on the ability of their members to generate responses on portions of the survey forms. In response to the feedback, time periods were adjusted to reflect the time period required by the Canada Revenue Agency to maintain records. Follow up responses by the staff of the Board were also conveyed to these organizations iterating the importance of the structure of the survey in relation to the PBM and requesting them to respond to the survey forms to the best of their ability.

Wholesale Surveys

Two types of surveys were developed to examine the wholesale points of the supply chain: 1) a Marine Terminal Survey and 2) a Bulk Plant Survey.

1) Marine Terminal Survey

The Marine Terminal Survey consisted of six survey forms. Survey Form 1 was designed to gather general contact information as well as storage capacity information. Survey Form 2 was designed to gather average monthly rack pricing data. Survey Form 3 was designed to gather data on bulk plants serviced from the marine terminal. Survey Form 4 was designed to gather throughput data as well as costs of storage and distribution. Survey Form 5 was designed to gather price rate of change data that

occurred since the 2005 Study. Finally, Survey Form 6 was designed to gather price rate of change data specific to the tractor trailer freight portion of the wholesale supply chain.

2) Bulk Plant Survey

The Bulk Plant Survey also consisted of six survey forms. Survey Form 1 was designed to gather general contact information. Survey Form 2 was designed to gather storage capacity information, price zone locations and opinions on the currently designated geographic boundaries of that zone. Survey Form 3 was designed to obtain average monthly rack pricing data. Survey Form 4 was designed to gather throughput data as well as costs of storage and distribution. Survey Form 5 was designed to gather price rate of change data. Finally, Survey Form 6 was designed to gather price rate of change data specific to the tractor trailer freight portion of the wholesale supply chain.

Retail Surveys

Two types of retail supply chain surveys were developed: 1) an Automotive Fuel Retailer Survey and 2) a Tank Wagon Operator Survey. Both types of surveys were similar in appearance and structure and consisted of five survey forms. Survey Form 1 gathered general information for the contributor. Survey Form 2 gathered price zone locations and opinions on the currently designated geographic boundaries of that zone. Survey Form 3 gathered information on wholesale sources of supply to the retailer. Survey Form 4 was designed to gather throughput data as well as costs of storage and distribution. Survey Form 5 was designed to gather price rate of change data (see Appendix for a survey example).

Survey Administration

Sampling was not performed in the survey process. Instead, the survey was sent to all known participants receiving the Board's regulated fuel pricing in order to be inclusive of all industry stakeholders and enhance the chances of obtaining a usable data set for modelling.

Surveys were designed in both electronic format and hard copy format. Surveys (wholesale and retail) were distributed during the week of October $4 - 11^{\text{th}}$, 2013. Responses were requested for a deadline of November 22, 2013. During the response period, the staff of the Board and Grant Thornton worked together to address any questions from participants on completion of the survey forms. In addition, the Atlantic Convenience Store Association encouraged its members to participate in the retail surveys. Despite these gestures, response rates remained low.

Data Analysis, Model Inputs and Results - Base Zone Regulated Automotive Fuel

A. Wholesale Supply Chain

Wholesale costs consisted of a combination of storage facility costs as well as tractor trailer freight costs. In order to protect limited and confidential information provided under non-disclosure agreements, specific wholesale information has not been disclosed in the report.

B. Retail Supply Chain - Automotive Fuel Retailer

Retail survey response was moderate in the base zone. Survey response quality also varied ranging from little or essentially no valuable data, to those with a sufficient amount of data that could be used in developing the retail mark-up model. Cost model data was obtained from Survey Form 4 (the source for percentage of total cost allocation factors) and Survey Form 5 (the source for price rates of change). For the surveys containing a sufficient amount of data, Survey Form 4 was completed with a fair amount of detail in most of the cost categories. However, Survey Form 5 was typically only sporadically completed with useful price examples. The following tables summarize response rates on the retail survey forms:

Category	Amount
Surveys Sent	120
Responses With Sufficient Information	37
Responses With Insufficient Information	4
Total Responses	41
% Total Responses to Surveys Sent	34%
% Responses With Sufficient Information to Surveys Sent	31%

Table 2: Overall Survey Response Rates Zone 1 Avalon Peninsula

The following table summarizes the response statistics for Survey Form 4:

Allocation Category	Respondents Reporting Survey Form 4 Costs	Total Respondents	% of Respondents Survey Form 4
Capital Costs and Depreciation	36	37	97%
Fuel and Vehicle Operating	16	37	43%
Insurance	15	37	41%
Office, Administrative and Other Costs	37	37	100%
Rent	24	37	65%
Repairs and Maintenance	36	37	97%
Transaction Fees	37	37	100%
Utilities and Communications	36	37	97%
Wages and Salaries	37	37	100%

Table 3: Survey Form 4 Response Rates Zone 1 Avalon Peninsula

A portion of total respondents provided data covering the nine major allocation categories. Three notable categories with lower response rates were: Fuel and Vehicle Operating, Insurance and Rent. Fuel and Vehicle Operating and Rent were not a concern given retailers, depending on business models, may not incur such costs. The lower than 100% response rate for Insurance was unusual given it would be logical to conclude that all outlets require insurance to operate.

Survey Form 5 showed lower response rates from participants who provided data on Survey Form 4. Several respondents only partially completed the form with price rate information corresponding to the data provided on Survey Form 4. Several examples submitted showed no comparative information that could be used to determine a price rate of change (this was common in the Capital Costs and Depreciation category). The following table summarizes the response statistics for those providing comparative price rates of change examples for the period 2006 through 2012:

Allocation Category	% of Survey Form 4 Respondents Providing Usable Prices Survey Form 5
Capital Costs and Depreciation	22%
Fuel and Vehicle Operating	0%
Insurance	0%
Office, Administrative and Other Costs	51%
Rent	33%
Repairs and Maintenance	22%
Transaction Fees (discount rate)	92%
Utilities and Communications	22%
Wages and Salaries	84%

Table 4: Survey Form 5 Response Rates Zone 1 Avalon Peninsula

The following graphs present the percentage of total cost and price rate of change profiles for automotive fuel retailers in the base zone:

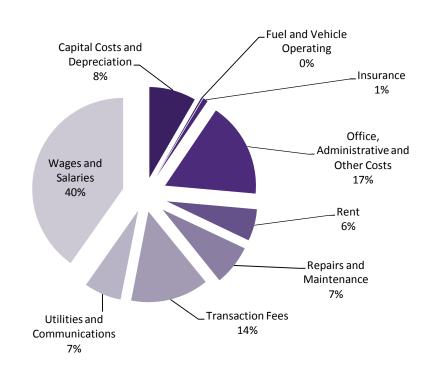
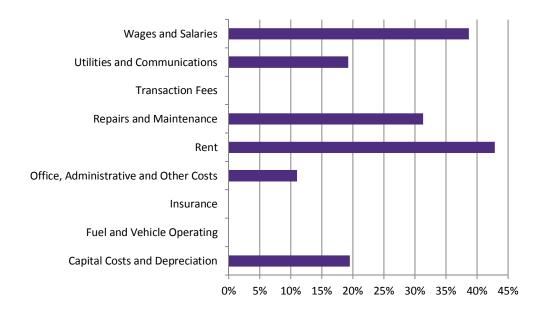




Figure 3: Price Rate of Change 2006 - 2012 Automotive Fuel Retailer Zone 1 (Source Survey Form 5)



As illustrated in the previous figure, three categories show nil rates of change. In the cases of Fuel and Vehicle Operating and Insurance, no cost examples were submitted. These costs make up only 1% of total costs and would have insignificant impact, even if price rates of change had been provided. In the case of transaction fees, a nil rate of change is also presented in the table. Transaction fee models have been modified to consider other factors which will be discussed later in the report. As such, price rate of change formats presented in the figure are no longer relevant to the Transaction Fees category.

Office Administrative and Other Costs price rates of change were a composite of various types of costs such as advertising, environmental compliance, licenses, office supplies, property tax and travel.

For the figures presented the following themes were observed:

- Wages and Salaries was the largest percentage of total cost driver at 40% of total costs. The second largest cost driver was Office Administrative and Other Costs at 17% of total costs. The third largest cost driver was Transaction Fees at 14% of total costs. These cost drivers covered 71% of total costs.
- Rent showed the largest price rate of change over the period 2006 to 2012 at 43%. Wages and Salaries were second at 39%, followed by Repairs and Maintenance at 31%. External sources of information were in line with these statistics. Part A of the study showed external sources of rent information having significantly increased in Newfoundland and Labrador due to a substantial rise in real estate values since 2006. Wages and salaries increases were also in line with external data sources. For example, the minimum wage in Newfoundland and Labrador has increased 48% since December 2006. Repairs and maintenance rates of change were also largely driven by labour. Given the rise in wages reported in Part A for skilled trade workers, this category was consistent with external information.
- As observed in Figure 4, a notable price rate of change not presented is transaction fees. Transaction fees showed some unique factors which are described in the following section.

Transaction Fee Modelling

Transaction fees have been cited as a large factor affecting profitability of automotive fuel retailers in Canada. In review of industry information, the Canadian Convenience Store Association ("CCSA") has cited increased credit card fees as a key factor affecting profitability for automotive fuel retailers, noting in their 2012 State of the Industry Report that 58.3% of auto fuel transactions are processed by credit card.

Further analysis of transaction fees in Part B showed the PBM methodology is not effectively adjusting transaction fees using percentage of total cost factors and price rates of change. There are two primary reasons for this: 1) the nature of the price rate of change used to model credit card fees and 2) the direct variability of credit card fees that occurs in relation to changes in revenue.

Regarding point 1, the price rate of change initially used to model transaction fees was the merchant discount fee, otherwise referred to as the commission rate paid to transaction service providers to cover the use of

credit cards. The underlying problem with this rate of change is that, while this fee can stay stable over time, transaction fees can be affected by factors other than the change in commission rate.

Regarding point 2, credit card fees are completely variable to revenue. In regulated fuel pricing, revenue can fluctuate frequently based on the weekly movement in benchmark fuel prices. The underlying problem with the Part A PBM model is that it does not capture benchmark fluctuation effects on transaction fees.

The following example better illustrates how the current PBM does not properly adjust transaction fee markups.

Supply Chain Type	Retail				
Model Inputs	% of Total Cost	Price Rate of Change	Automotive Fuel Retailer	Total	
Opening Mark-Up			5.00	5.00	
Automotive Fuel Retailer % Inputs:					
Capital Costs and Depreciation	8%	20%	0.08	0.08	
Fuel and Vehicle Operating	0%	0%	0.00	0.00	
Insurance	1%	0%	0.00	0.00	
Office, Administrative and Other Costs	17%	11%	0.09	0.09	
Rent	6%	43%	0.12	0.12	
Repairs and Maintenance	7%	31%	0.11	0.11	
Transaction Fees	14%	-9%	-0.07	-0.07	
Utilities and Communications	7%	19%	0.06	0.06	
Wages and Salaries	40%	39%	0.78	0.78	
2012 Mark-Up Adjustment	2012 Mark-Up Adjustment				
2012 Mark-Up	6.18	6.18			

Table 5: Transaction Fee Mark-Up Using Existing PBM Methodology (CPL)

Cost Category	Opening Mark- Up Allocation 2006	Mark-Up Adjustment 2006 - 2012	Mark-Up 2012
Capital Costs and Depreciation	0.42	0.08	0.50
Fuel and Vehicle Operating	0.01	0.00	0.01
Insurance	0.05	0.00	0.05
Office, Administrative and Other Costs	0.85	0.09	0.94
Rent	0.28	0.12	0.40
Repairs and Maintenance	0.36	0.11	0.47
Transaction Fees	0.69	-0.07	0.63
Utilities and Communications	0.33	0.06	0.40
Wages and Salaries	2.01	0.78	2.79
Total	5.00	1.18	6.18

• An assumption in the above example is that the percentage of total cost profile obtained in 2012 is the same profile that would have existed in 2006.

- Rates of change were determined using information received from respondents in the base zone and show the average merchant discount fee reported in 2012 was 1.64%. Those reporting comparative data for 2006 showed the average merchant discount fee was 1.81%.
- Using this information shows that merchant discount fees have a negative 9.39% rate of change over the period 2006 to 2012.
- As shown in the example, the existing form of the PBM would result in a slight decrease in the markup over the period 2006 to 2012.

Analysing prices for automotive fuel (Unleaded 87) over the same period shows regulated fuel prices have increased from 103.6 CPL to 128.7 CPL. Applying a merchant discount fee at 1.64% to these prices and using industry participant credit card usage statistics shows the following transaction fees:

Category	2006	Change	2012
Regulated Fuel Price	103.6	25.1	128.7
Credit Card Usage	53%	0.00%	53%
Merchant Discount Fee	1.81%	-0.17%	1.64%
Credit Card Fee	0.99	0.12	1.12

Table 6: Transaction Fees Based on Estimated Customer Usage of Credit Cards (CPL)

Comparing this result to the existing PBM model results in Table 5, two shortfalls can be observed. First, the PBM model adjusts the transaction fee mark-up slightly lower based on a negative rate of change in the merchant discount fee. Second, the opening mark-up of 0.69 CPL falls short of the total 2006 transaction fees incurred of 0.99 CPL calculated using actual regulated fuel prices and credit card usage statistics. This further enhances the shortfall, as the PBM adjustment is also based off a deficient opening mark-up. In its current form, the PBM would provide no increase in transaction fees and it falls behind actual credit card fees incurred (based on estimated credit card usage by customers in Table 6) by 0.49 CPL.

In order to more accurately model transaction fees, a specific mark-up should be set that models the fees directly against revenue and the proportion of that revenue paid by credit card. This model methodology requires three inputs 1) the price per litre of regulated fuel, 2) percentage of revenue paid to retailers by credit card and 3) the merchant discount fee paid by retailers.

Modelling transaction fees in this manner continues to be a methodology that is both dynamic and easily updated. This methodology can also be seamlessly applied to the other regulated fuel types, such as heating fuel, given those retailers can provide information on percentage of revenue paid with cards as well as the merchant discount fee on those sales.

On final note, while this example provides a systematic, dynamic and easily updated approach to modelling transaction fee costs, the issue of passing on credit card fees to consumers is a strongly debated topic. While this discussion provides an effective modelling framework, it is not a conclusion that such fees should be charged back to the consumer.

Opening Retail Mark-Up Adjustment

In addition to changes in transaction fee modelling, an opening mark-up adjustment was also performed which allocated the Board's interim retail mark-up increase granted on July 18, 2008 of 1.25 CPL.

The Board's retail mark-up increase was the first granted since the implementation of regulated pricing in 2001 and covered a span of seven years. To begin modelling, an allocation of this increase for the period 2001 to 2006 (5 years) was required in order to have an accurate starting point for the PBM. Preliminary estimates were performed allocating the interim increase evenly across the time span, with 5/7's of the adjustment (0.90 CPL) allocated to 2006 and prior years. Adding this to the existing retail mark-up in 2006 of 5.0 CPL, resulted in a revised mark-up of 5.90 CPL for modelling purposes. 0.35 CPL was estimated to be the remaining interim adjustment covering the period 2006 to 2008.

To support this allocation, an analysis of 2006 CPL costs was performed, extrapolating 2012 average CPL costs back to 2006 using price rates of change for the period. Given the limited response, the specifics of these calculations have not been disclosed to maintain confidentiality. The results of this analysis matched the preliminary interim adjustment allocations and 5.90 CPL was used as the retail starting point for the PBM model.

Comparison of Base Zone Responses to Other Zones

In addition to the 41 survey participants in the base zone, an additional 30 responded outside the base zone. Combining this data with the base zone shows very similar cost profiles as illustrated in the following figure:

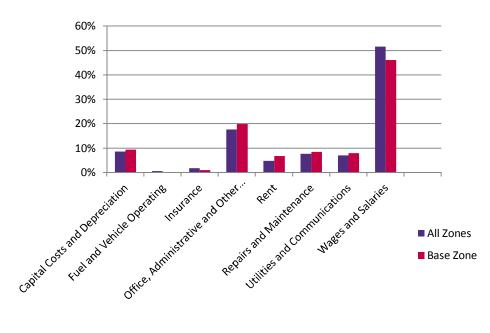


Figure 4: Comparison of Cost Profiles in the Base Zone versus All Zones

Price rates of change were also similar in most categories:

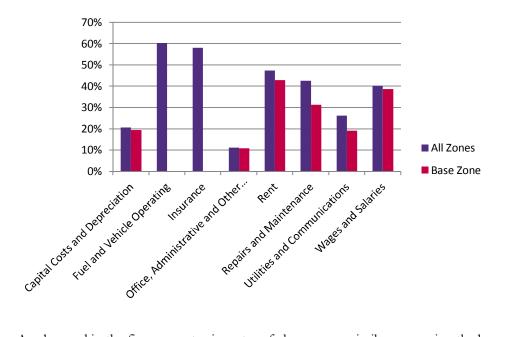


Figure 5: Comparison of Price Rate of Change Profiles in the Base Zone versus All Zones

As observed in the figure, most price rates of change were similar comparing the base zone data to all zones. Fuel and Vehicle Operating and Insurance were outliers, as no base zone information was provided for these categories. However, given the very small percentage allocation in the overall cost profile, these variances have virtually no impact on model adjustments.

The base zone data set was chosen as the most suitable for modelling, as the CPL data proved more useful for purposes of allocating the interim retail mark-up adjustment granted by the Board in 2008. CPL data using total participant data remained highly variable (even after normalizing for the top three high and low outliers). The total zone CPL results did not provide a data set that was useful to allocating the Board's interim mark-up adjustment.

In conclusion, base zone information was determined to be the best overall set of data to use for modelling, as it provided a useful data set for interim mark-up allocation while also providing PBM cost profiles that were quite comparable to all zones. The following section summarizes model inputs and results used for automotive fuel mark-up adjustments.

C. Model Inputs and Results

Wholesale Supply Chain

Wholesale inputs have not been disclosed in order to protect limited confidential information provided under non-disclosure agreements.

Automotive Fuel Retailer Inputs

Integrating new insights on transaction fees into the PBM, mark-ups are now divided into two separate categories at the retail level. The model now calculates a mark-up covering all cost categories before transaction fees, as well as a mark-up tied specifically to transaction fee inputs. The following tables summarize the inputs used to model the automotive fuel retailer mark-up:

Table 7: Automotive Fuel Retailer Model Inputs for Cost Allocation Categories (before Transaction Fees)

Cost Allocation Category	% of Total	Price Rate of
	Cost	Change
Capital Costs and Depreciation	9%	20%
Fuel and Vehicle Operating	0%	0%
Insurance	1%	0%
Office, Administrative and Other Costs	20%	11%
Rent	7%	43%
Repairs and Maintenance	8%	31%
Utilities and Communications	8%	19%
Wages and Salaries	46%	39%

Table 8: Automotive Fuel Retailer Model Inputs for Transaction Fees

Contributor	% Credit	Merchant
Contributor	Card Usage	Discount Fee
Average	53.2%	1.64%

The following table presents the model adjustments for Zone 1 Avalon Peninsula:

Table 9: Motor Fuel Model Results Unleaded 87 (CPL)

Model Inputs % of Total Price Rate of Cost Total Automotive Fuel Retailer Total Total Total Opening Mark-Up (Excluding Transaction Fee Mark-Up) 8.58 5.90 5.90 14.48 Automotive Fuel Retailer % Inputs: Capital Costs and Depreciation 9% 20% 0.11 0.11 0.11 Fuel and Vehicle Operating 0% 0.00 0.00 0.00 0.00 Insurance 0% 0.11 0.11 0.11 0.11 0.11 Office, Administrative and Other Costs 20% 11% 0.00 0.00 0.00 Office, Administrative and Communications 8% 31% 0.16 0.16 0.16 Utilities and Communications 8% 19% 0.09 0.09 0.09 Wholesale Mark-Up 85.58 1.05 1.05 1.05 1.05 Transaction Fees 6.25 6.25 1.12 1.12 1.12 Provincial Gasoline Tax 16.50 6.25 5.3% 5.3% 5.3%	Supply Chain Type			Wholesale	Retai		Total
Automotive Fuel Retailer % Inputs: Capital Costs and Depreciation 9% 20% 0.11 0.11 0.11 Fuel and Vehicle Operating 0% 0.00 0.00 0.00 0.00 Insurance 1% 0.13 0.13 0.13 0.13 Office, Administrative and Other Costs 20% 11% 0.13 0.13 0.13 Rent 7% 43% 0.17 0.17 0.17 0.17 Repairs and Maintenance 8% 31% 0.16 0.16 0.16 Utilities and Communications 8% 19% 0.09 0.09 0.09 Wages and Salaries 46% 39% 1.05 1.05 1.05 Transaction Fees 8 8.58 8 8 1.05 1.05 1.05 Transaction Fee Mark-Up 8 5.25 7 7 14.81 7 1.12 1.12 1.12 Provincial Gasoline Tax 16.50 6.25 113.89 53% 7 1.13 1.12 1.12 1.12 1.12 1.12 1.12 1.1	Model Inputs	Total	Rate of	Total		Total	Total
Capital Costs and Depreciation 9% 20% 0.11 0.11 0.11 Fuel and Vehicle Operating 0% 0.00 0.00 0.00 Insurance 1% 0.00 0.00 0.00 Office, Administrative and Other Costs 20% 11% 0.13 0.13 Rent 7% 43% 0.17 0.17 0.17 Repairs and Maintenance 8% 31% 0.16 0.16 0.16 Utilities and Communications 8% 19% 0.09 0.09 0.09 Wages and Salaries 46% 39% 1.05 1.05 1.05 Transaction Fees 8 8.58 8 8 8 1.05 1.05 1.05 Benchmark Price 72.56 6.25 6.25 5 5 5 1.05 <	Opening Mark-Up (Excluding Transaction F	ee Mar	k-Up)	8.58	5.90	5.90	14.48
Fuel and Vehicle Operating 0% 0.00 0.00 0.00 Insurance 1% 0.00 0.00 0.00 Office, Administrative and Other Costs 20% 11% 0.13 0.13 0.13 Rent 7% 43% 0.17 0.17 0.17 0.17 Repairs and Maintenance 8% 31% 0.16 0.16 0.16 Utilities and Communications 8% 19% 0.09 0.09 0.09 Wages and Salaries 46% 39% 1.05 1.05 1.05 Transaction Fees 72.56 Benchmark Price 72.56 Wholesale Mark-Up 8.58 <	Automotive Fuel Retailer % Inputs:						
Insurance 1% 0.00 0.00 0.00 Office, Administrative and Other Costs 20% 11% 0.13 0.13 0.13 Rent 7% 43% 0.17 0.17 0.17 0.17 Repairs and Maintenance 8% 31% 0.16 0.16 0.16 0.16 Utilities and Communications 8% 19% 0.09 0.09 0.09 Wages and Salaries 46% 39% 1.05 1.05 1.05 Transaction Fees 72.56 <td>Capital Costs and Depreciation</td> <td>9%</td> <td>20%</td> <td></td> <td>0.11</td> <td>0.11</td> <td>0.11</td>	Capital Costs and Depreciation	9%	20%		0.11	0.11	0.11
Office, Administrative and Other Costs 20% 11% 0.13 0.13 0.13 Rent 7% 43% 0.17 0.17 0.17 Repairs and Maintenance 8% 31% 0.16 0.16 0.16 Utilities and Communications 8% 19% 0.09 0.09 0.09 Wages and Salaries 46% 39% 1.05 1.05 1.05 Transaction Fees 72.56 Benchmark Price 72.56 Wholesale Mark-Up 8.58 Retail Mark-Up (Before Transaction Fees) 6.25 Transaction Fee Mark-Up 9 Provincial Gasoline Tax 16.50 Federal Excise Tax 10.00 Total Price Before HST 113.89 HST 14.81 Total Price Estimate A A 128.70 Credit Card Commission Rate B % Credit Card Usage C Transaction Fee Mark-Up (A x B x C) 1.16 2.83 2.83 3.99	Fuel and Vehicle Operating	0%			0.00	0.00	0.00
Rent 7% 43% 0.17 0.17 0.17 Repairs and Maintenance 8% 31% 0.16 0.16 0.16 Utilities and Communications 8% 19% 0.09 0.09 0.09 Wages and Salaries 46% 39% 1.05 1.05 1.05 Transaction Fees 72.56 9% 1.05 1.05 1.05 Benchmark Price 72.56 8.58 8.58 8.58 Retail Mark-Up (Before Transaction Fees) 6.25 6.25 7 Transaction Fee Mark-Up 9% 10.00 113.89 Provincial Gasoline Tax 16.50 113.89 Federal Excise Tax 10.00 113.89 HST 113.89 14.81 Total Price Estimate A 128.70 Credit Card Commission Rate B 1.64% % Credit Card Usage C 53% Transaction Fee Mark-Up (A x B x C) 1.16 2.83 2.83 3.99	Insurance	1%			0.00	0.00	0.00
Repairs and Maintenance 8% 31% 0.16 0.16 0.16 Utilities and Communications 8% 19% 0.09 0.09 0.09 Wages and Salaries 46% 39% 1.05 1.05 1.05 Transaction Fees 8 88 19% 1.05 1.05 1.05 Benchmark Price 72.56 <td>Office, Administrative and Other Costs</td> <td>20%</td> <td>11%</td> <td></td> <td>0.13</td> <td>0.13</td> <td>0.13</td>	Office, Administrative and Other Costs	20%	11%		0.13	0.13	0.13
Utilities and Communications 8% 19% 0.09 0.09 0.09 Wages and Salaries 46% 39% 1.05 1.05 1.05 Transaction Fees 8 8 1.05 1.05 1.05 1.05 Benchmark Price 72.56 72.57 72.57 72.57	Rent	7%	43%		0.17	0.17	0.17
Wages and Salaries 46% 39% 1.05 1.05 1.05 Transaction Fees 72.56 72.57 72.57 72.57 72.57 72.57 72.57 72.57	Repairs and Maintenance	8%	31%		0.16	0.16	0.16
Transaction FeesBenchmark Price72.56Wholesale Mark-Up8.58Retail Mark-Up (Before Transaction Fees)6.25Transaction Fee Mark-Up9Provincial Gasoline Tax16.50Federal Excise Tax10.00Total Price Before HST113.89HST14.81Total Price EstimateA% Credit Card Commission RateB% Credit Card UsageC53%1.12Transaction Fee Mark-Up (A x B x C)1.162012 Mark-Up Adjustment1.162.832.833.99	Utilities and Communications	8%	19%		0.09	0.09	0.09
Benchmark Price72.56Wholesale Mark-Up8.58Retail Mark-Up (Before Transaction Fees)6.25Transaction Fee Mark-UpProvincial Gasoline TaxProvincial Gasoline Tax16.50Federal Excise Tax10.00Total Price Before HST113.89HST14.81Total Price EstimateACredit Card Commission RateB% Credit Card UsageCTransaction Fee Mark-Up (A x B x C)1.162012 Mark-Up Adjustment1.162.832.833.99	Wages and Salaries	46%	39%		1.05	1.05	1.05
Wholesale Mark-Up8.58Retail Mark-Up (Before Transaction Fees)6.25Transaction Fee Mark-UpProvincial Gasoline Tax16.50Federal Excise Tax10.00Total Price Before HST113.89HST14.81Total Price EstimateACredit Card Commission RateB% Credit Card UsageCTransaction Fee Mark-Up (A x B x C)1.162012 Mark-Up Adjustment1.162.832.833.99	Transaction Fees						
Retail Mark-Up (Before Transaction Fees)6.25Transaction Fee Mark-Up	Benchmark Price		72.56				
Transaction Fee Mark-UpImage: Constraint of the system of the	Wholesale Mark-Up		8.58				
Provincial Gasoline Tax 16.50 Federal Excise Tax 10.00 Total Price Before HST 113.89 HST 14.81 Total Price Estimate A Credit Card Commission Rate B % Credit Card Usage C Transaction Fee Mark-Up (A x B x C) 1.16 2012 Mark-Up Adjustment 1.16 2.83 2.83	Retail Mark-Up (Before Transaction Fees)		6.25				
Federal Excise Tax 10.00 Total Price Before HST 113.89 HST 14.81 Total Price Estimate A Credit Card Commission Rate B Model Card Usage C Transaction Fee Mark-Up (A x B x C) 1.16 2012 Mark-Up Adjustment 1.16 2.83 3.99	Transaction Fee Mark-Up						
Total Price Before HST 113.89 HST 14.81 Total Price Estimate A 128.70 Credit Card Commission Rate B 9 1.64% % Credit Card Usage C Transaction Fee Mark-Up (A x B x C) 1.12 2012 Mark-Up Adjustment 1.16 2.83 2.83 3.99	Provincial Gasoline Tax		16.50				
HST 14.81 Total Price Estimate A 128.70 Credit Card Commission Rate B % Credit Card Usage C 53% Transaction Fee Mark-Up (A x B x C) 2012 Mark-Up Adjustment 1.16 2.83 2.83	Federal Excise Tax		10.00				
Total Price EstimateA128.70Credit Card Commission RateB1.64%% Credit Card UsageC53%Transaction Fee Mark-Up (A x B x C)1.121.122012 Mark-Up Adjustment1.162.832.83	Total Price Before HST		113.89				
Credit Card Commission Rate B 1.64% % Credit Card Usage C 53% Transaction Fee Mark-Up (A x B x C) 1.12 1.12 2012 Mark-Up Adjustment 1.16 2.83 2.83 3.99	HST		14.81				
% Credit Card Usage C 53% Transaction Fee Mark-Up (A x B x C) 1.12 1.12 1.12 2012 Mark-Up Adjustment 1.16 2.83 2.83 3.99	Total Price Estimate	А	128.70				
Transaction Fee Mark-Up (A x B x C) 1.12 1.12 1.12 2012 Mark-Up Adjustment 1.16 2.83 2.83 3.99	Credit Card Commission Rate	В	1.64%				
2012 Mark-Up Adjustment 1.16 2.83 2.83 3.99	% Credit Card Usage	С	53%				
	Transaction Fee Mark-Up (A x B x C)				1.12	1.12	1.12
	2012 Mark-Up Adjustment			1.16	2.83	2.83	3.99
	· ·						

Mark-Up Summary:

Differential Type	Wholesale	Retail	Total
Opening Mark-Up (2006)	8.58	5.00	13.58
Opening Mark-Up Adjustment (2008 Interim Allocation)		0.90	0.90
Increase (Decrease) for Survey Period (2006 -2012)	1.16	2.83	3.99
2012 Mark-Up	9.74	8.73	18.47

Mark-Up Increase (Decrease):

Wholesale	Retail	Total
1.16	2.83	3.99
-	(0.35)	(0.35)
1.16	2.48	3.64
	1.16 -	1.16 2.83 - (0.35)

Application of Model Results to Premium Grades of Gasoline and Diesel

For purposes of adjusting the remaining regulated motor fuel mark-ups, the result previously illustrated should be applied equally to each fuel type. The primary reason for this conclusion is that cost data received did not indicate any differences in costs caused by fuel grade.

On the automotive fuel retailer side, survey costs were reported for all grades of gasoline and diesel. Observing the significant reported cost allocation categories (Wages and Salaries, Office Administrative and Other Costs and Transaction Fees), it was not evident that grade of fuel differentiated costs among the regulated motor fuel types. For example, wages for retail fuel attendants should be similar whether administering a litre of gas or a litre of diesel. Transaction fees are now specifically modelled based off of benchmark prices, so any transaction fee effects due to price changes are captured directly in the model.

Given the similarity in costs previously described, each grade should be adjusted consistently with blend premiums considered separately outside the scope of the PBM. The following table illustrates:

Table 10: PBM Results Consistently Applied Removing Grade Factors Unrelated to PBM (CPL)

Fuel	Unleaded 87	Mid-Grade	Premium	Diesel
Current Mark-up	6.25	7.30	8.34	10.00
Less: Grade Factors Unrelated to PBM	0.00	(1.05)	(2.09)	(3.75)
Interim Adjustments During Survey Period	(0.35)	(0.35)	(0.35)	(0.35)
Opening Mark-Up for PBM	5.90	5.90	5.90	5.90
Increase (Decrease) for Survey Period (2006 - 2012)	2.83	2.83	2.83	2.83
Mark-Up Before Grade Factors Unrelated to PBM	8.73	8.73	8.73	8.73
Add: Grade Factors Unrelated to PBM	0	1.05	2.09	3.75
Mark-Up 2012	8.73	9.78	10.82	12.48

Retail Mark-Up (CPL):

Wholesale Mark-Up (CPL):

Fuel	Unleaded 87	Mid-Grade	Premium	Diesel
Current Mark-up	8.58	7.19	5.80	8.00
Add: Grade Factors Unrelated to PBM	0.00	1.39	2.78	0.58
Interim Adjustments During Survey Period	0.00	0.00	0.00	0.00
Opening Mark-Up for PBM	8.58	8.58	8.58	8.58
Increase (Decrease) for Survey Period (2006 - 2012)	1.16	1.16	1.16	1.16
Mark-Up Before Grade Factors Unrelated to PBM	9.74	9.74	9.74	9.74
Less: Grade Factors Unrelated to PBM	0.00	(1.39)	(2.78)	(0.58)
Mark-Up 2012	9.74	8.35	6.96	9.16

As shown in the table, a consistent mark-up increase is produced independent of the effects of blend premiums which are not related to PBM model inputs.

Data Analysis, Model Inputs and Results – Differentials Regulated Automotive Fuel

Note on Differential Methodology

Regulated automotive fuel differentials are comprised of the wholesale points of the supply chain. While the PBM worked well in the base zone, certain limitations of PBM data in differential zones required the use of alternative CPL methodologies. PBM methodologies were used to the extent possible. However, there were two main reasons for a shift to CPL methods: 1) PBM inputs were not provided. In these cases, CPL data was available that was judged to be the best evidence based model alternative to the PBM; and 2) changes in supply chain structures caused a starting point that was not comparable to use PBM techniques. A fundamental concept of the PBM is that it commences from starting point comparable to the current supply chain. In certain cases changes in supply chain dynamics created an incomparable opening differential for the purposes of applying the PBM. In these cases, CPL data provided more logical evidence based model adjustments.

Another model limitation existed where no data was submitted for a zone. In these cases, adjacent zone data was used as the best evidence based data available to perform model adjustments. Depending on the data used in the adjacent zone, either a PBM or CPL methodology was applied.

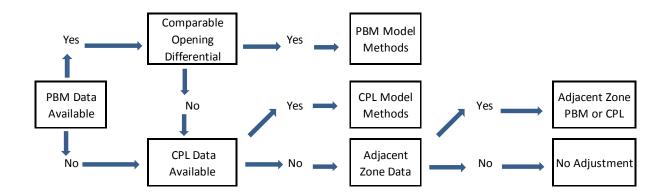


Figure 6: Model Methodology Decision Tree for Differential Zones

Differential Adjustments

Automotive fuel differentials are composed of wholesale supply chain points. Differential adjustments consisted of changes in storage costs and tractor trailer freight relative to costs in the base zone. Specific wholesale differential details have not been disclosed in order to protect confidential information provided under non-disclosure agreements. In addition, zone data was typically too limited to disclose on an aggregate basis while maintaining confidentiality.

The following table summarizes the total zone differential adjustments performed:

Table 11: Motor Fuel Differential Adjustments Summary (CPL)

Zone	Description	Differential 2006	Total Adjustment	Differential 2012
1a	Bell Island	0.48	(0.38)	0.10
2	Burin Peninsula/Bonavista Peninsula	1.61	(0.92)	0.69
3	Central Newfoundland/Notre Dame Bay East	2.18	(0.21)	1.97
3a	St. Brendan's (Island)	5.88	1.50	7.38
3b	Fogo Island	6.32	(1.67)	4.65
3c	Change Islands	9.6	(0.94)	8.66
4	Connaigre Peninsula	5.12	0.10	5.22
4a	Gaultois/McCallum/Rencontre East	8.09	(0.09)	8.00
5	Springdale - Green Bay/Triton/Baie Verte Peninsula	3.42	0.28	3.70
5a	Long Island	6.97	1.07	8.04
5b	Little Bay Islands	7.16	1.11	8.27
6	Deer Lake/Corner Brook/Bay of Islands/Gros Morne	0.62	0.08	0.70
7	Stephenville/Port au Port/Codroy Valley/Port aux Basques	1.39	(0.16)	1.23
7a	Ramea	3.68	(0.96)	2.72
7b	Grey River/François/Grand Bruit/La Poile (Gasoline)	12.06	1.33	13.39
7b	Grey River/François/Grand Bruit/La Poile (Diesel)	9.6	(0.53)	9.07
8	Northern Peninsula - Gros Morne National Park to Bellburns	1.55	1.14	2.69
9	Northern Peninsula to Englee and St. Anthony	3.28	(0.24)	3.04

While certain supply chain points showed increases in costs, changes in supply chain dynamics since the 2005 Study have shown cases where differential zone costs have decreased relative to the base zone. To protect confidential information, further specifics of these changes cannot be provided. However, it should be noted that in these cases, application of the PBM was not practicable due to incomparable starting points. Commencing from a comparable starting point is a key requirement for PBM modelling. Applying price rates of change to incomparable starting points will not produce proper adjustments in the PBM model. As such, PBM adjustments using price rates of change alone were not able to fully capture the changes in supply chains. CPL data provided the best alternative data to capture the effects of changing supply chains. In addition, CPL techniques were applied in cases where limited or no price rates of change were available.

Data Analysis, Model Inputs and Results – Differentials Regulated Heating Fuel

Regulated heating fuel differentials are composed of the wholesale and retail supply chain points. Wholesale supply chain adjustments consisted of changes in storage costs and tractor trailer freight relative to the base zone. Retail differential adjustments were composed of the tank wagon delivery portion of the supply chain.

Wholesale Differential Adjustments

Wholesale adjustments for heating fuel were conducted in a manner similar to the discussion for automotive fuel differentials. To protect confidentiality, specific details of wholesale adjustments have not been disclosed. In the cases of limited or no data, adjacent zone methodologies were applied. In cases where the PBM was not practicable, CPL techniques were applied where possible.

Tank Wagon Differentials

The Tank Wagon Operator Survey was responded with limited information from industry participants. This information was able to be summarized on a PBM basis and was compared to PBM profiles in Part A. The comparison showed similarities in PBM inputs particularly for the largest cost driver.

Given the limited data set provided in Part B, a decision was made to use Part A data as the most diverse and comprehensive data set available that could be used to adjust all tank wagon differentials. The PBM profiles in Part A and B were closely aligned for several of the smaller cost categories, as well as the largest category - Wages and Salaries. Given the similarities, application of Part A data to all differential zones was determined to be a better alternative than no adjustment, or an adjustment to all differential zones effectively dominated by very limited contributors.

The following table presents the tank wagon delivery model inputs used for the base zone in Part A. These inputs were used to adjust tank wagon delivery differentials in Part B:

Table 12: Tank Wagon Delivery Model Inputs Part A

Cost Category	% of Total Cost	Price Rate of Change
Capital Costs and Depreciation	12%	12%
Fuel and Vehicle Operating	6%	30%
Insurance	2%	12%
Office, Administrative and Other Costs	9%	12%
Rent	5%	20%
Repairs and Maintenance	7%	12%
Transaction Fees	4%	N/A
Utilities and Communications	4%	12%
Wages and Salaries	50%	29%

Transaction fee mark-ups are now modelled separately consistent with the updated methodologies used for regulated automotive fuel.

Using the inputs previously described, the following table presents the PBM adjustments for heating fuel differentials:

Table 13: Heating Fuel Differential Adjustments Summary (CPL)

Zone	Description	Differential 2006	Wholesale Adjustment	Tank Wagon Delivery Adjustment	Total Adjustment	2012 Differential
1ANW	Avalon Peninsula Northwest	3.0	0.4	0.2	0.6	3.6
1AS	Avalon Peninsula South	4.3	0.5	0.4	0.9	5.2
1a	Bell Island	1.3	-	0.3	0.3	1.6
2	Burin Peninsula/Bonavista Peninsula	4.3	(0.0)	0.2	0.2	4.5
3	Central Newfoundland/Notre Dame Bay East	4.0	0.5	0.2	0.7	4.7
3a	St. Brendan's (Island)	7.0	0.2	0.9	1.1	8.1
3b	Fogo Island	6.5	(1.6)	0.1	(1.5)	5.0
3c	Change Islands	8.4	(1.6)	0.6	(1.0)	7.4
4	Connaigre Peninsula	7.2	(1.2)	0.4	(0.8)	6.4
4a	Gaultois/McCallum/Rencontre East	17.3	(1.2)	-	(1.2)	16.1
5	Springdale - Green Bay/Triton/Baie Verte Peninsula	4.5	0.1	0.2	0.3	4.8
5a	Long Island	5.0	0.1	0.3	0.4	5.4
5b	Little Bay Islands	5.4	0.1	0.4	0.5	5.9
6	Deer Lake/Corner Brook/Bay of Islands/Gros Morne	0.9	0.1	-	0.1	1.0
7W	Stephenville/Port au Port/Codroy Valley/Port aux Basques	4.3	(0.4)	0.2	(0.2)	4.1
7SE	Burgeo	6.8	(1.2)	0.3	(0.9)	5.9
7a	Ramea	10.4	(1.2)	1.2	(0.0)	10.4
7b	Grey River/François/Grand Bruit/La Poile	16.5	(1.2)	-	(1.2)	15.3
8	Northern Peninsula - Gros Morne National Park to Bellburns	1.9	0.1	0.3	0.4	2.3
9	Northern Peninsula to Englee and St. Anthony	6.5	(0.3)	0.3	0.0	6.5

Part A Update: Base Zone Regulated Heating Fuels

Part A results were updated for the new model methodologies developed in the base zone for regulated automotive fuel. The base zone mark-ups now incorporate the new methodologies to model transaction fees. In addition, PBM techniques have been applied to the wholesale portion of the supply chain consistent with the methods used for automotive fuel.

As with automotive fuel, the retail mark-up now consists of a mark-up covering all cost categories excluding transaction fees, as well as a specific mark-up for transaction fees that directly captures, commission fees, credit card usage, and changing fuel prices.

The following tables summarize the model inputs used to update the Part A total mark-up for regulated heating fuels in base zone 1ANE – Avalon Peninsula North East:

Cost Cotors a	% of Total	Price Rate
Cost Category	Cost	of Change
Capital Costs and Depreciation	12%	12%
Fuel and Vehicle Operating	6%	30%
Insurance	2%	12%
Office, Administrative and Other Costs	9%	12%
Rent	5%	20%
Repairs and Maintenance	8%	12%
Utilities and Communications	4%	12%
Wages and Salaries	53%	29%

Table 14: Tank Wagon Delivery PBM Model Inputs

Table 15: Tank Wagon Delivery Transaction Fee Model Inputs

Category	Rate
Credit Card Commission Rate	1.6%
Credit Card Usage	53.2%

The following furnace fuel adjustments were calculated using the updated methodology:

Table 16: Base Zone 1ANE Update (Furnace Fuel) (CPL)

Supply Chain Type			Wholesale	Ret	tail	Total
Model Inputs	% of Total Cost	Price Rate of Change	Total	Tank Wagon Delivery	Total	Total
Opening Mark-Up (Excluding Transaction Fee Mark-Up)		4.50	13.00	13.00	17.50	
Tank Wagon Delivery % Inputs:						
Capital Costs and Depreciation	12%	12%		0.19	0.19	0.19
Fuel and Vehicle Operating	6%	30%		0.22	0.22	0.22
Insurance	2%	12%		0.04	0.04	0.04
Office, Administrative and Other Costs	9%	12%		0.15	0.15	0.15
Rent	5%	20%		0.15	0.15	0.15
Repairs and Maintenance	8%	12%		0.12	0.12	0.12
Utilities and Communications	4%	12%		0.06	0.06	0.06
Wages and Salaries	53%	29%		1.97	1.97	1.97
Transaction Fees						
Benchmark Price		97.42				
Wholesale Mark-Up		4.50				
Retail Mark-Up (Before Transaction Fee	s)	13.00				
Total Price Before HST		114.92				
HST		14.94				
Total Price Estimate	А	129.86				
Credit Card Commission Rate	В	1.64%				
% Credit Card Usage	С	53%				
Transaction Fee Mark-Up (A x B x C)				1.13	1.13	1.13
2011 Mark-Up Adjustment			0.61	4.02	4.02	4.63
2011 Mark-Up			5.11	17.02	17.02	22.13

Mark-Up Summary:

Mark-Up	Wholesale Mark-Up	Retail Mark- Up ex Transaction Fees	Transaction Fee Mark-Up	Total
Opening Mark-Up	4.50	13.00	0.60	18.10
Increase (Decrease) for Survey Period	0.61	2.89	0.53	4.03
2011 Mark-Up	5.11	15.89	1.13	22.13

Mark-Up Increase (Decrease):

Mark-Up	Wholesale Mark-Up	Retail Mark- Up ex Transaction Fees	Transaction Fee Mark-Up	Total
Increase (Decrease) for Survey Period	0.61	2.89	0.53	4.03
Less: Interim Adjustments 2005-2011	-	(1.00)	-	(1.00)
Less: Adjustment Part A Study	-	(1.89)	(0.07)	(1.96)
Mark-Up Increase (Decrease)	0.61	(0.00)	0.46	1.07

The same adjustments are recommended for stove oil. Stove Oil consisted of a total opening mark-up that was higher than furnace fuel by 3.0 CPL in the wholesale category and 1.5 CPL in the retail category. Consistent with the discussion of automotive fuel grades, these additional amounts have been categorized as blend related and outside of the scope of mark-up adjustments. The following table summarizes the adjusted total mark-up for stove oil.

Table 17: Base Zone 1ANE Update (Stove Oil) (CPL)

Mark-Up Summary:

Mark-Up	Wholesale	Retail Mark- Up ex Transaction Fees	Transaction Fee Mark-Up	Total
Opening Mark-Up	4.50	13.00	0.60	18.10
Increase (Decrease) for Survey Period	0.61	2.89	0.59	4.08
Mark-Up Before Blend Premium	5.11	15.89	1.19	22.18
Blend Premium	3.00	1.50	-	4.50
2011 Mark-Up	8.11	17.39	1.19	26.68

Mark-Up Increase (Decrease):

Mark-Up	Wholesale	Retail Mark- Up ex Transaction Fees	Transaction Fee Mark-Up	Tota
Increase (Decrease) for Survey Period	0.61	2.89	0.59	4.08
Less: Interim Adjustments 2005-2011	-	(1.00)	-	(1.00)
Less: Adjustment Part A Study	-	(2.20)	(0.08)	(2.28)
Mark-Up Increase (Decrease)	0.61	(0.31)	0.51	0.80

Data Analysis, Model Inputs and Results – Differentials Regulated Propane

Regulated propane differentials are composed of the wholesale and retail supply chain points.

Wholesale Differential Adjustments

Wholesale supply chain adjustments consisted of changes in tractor trailer freight and storage costs relative to the base zone. Supply chains were comparable to the 2005 Study and PBM techniques were used. To protect confidentiality of information, the specific details of wholesale adjustments have not been disclosed.

Tank Wagon Delivery

No tank wagon delivery data was submitted in Part B. PBM methods could potentially be applied consistent with the Part A profiles used to adjust heating fuel differentials for tank wagon delivery. However, without any examples submitted, it was not conclusive that Part A data was representative without at least minimal comparison operators in the differential regions. Therefore, no adjustments were made to propane tank wagon delivery differentials.

The following table summarizes differential adjustments for propane:

Table 18: Propane Differential Adjustments (CPL)

Zone	Description	2006 Differential	Total Adjustment	2012 Differential
1	Avalon Peninsula	2.0	0.6	2.6
1A	Bell Island	3.0	0.6	3.6
3	Central Newfoundland/Notre Dame Bay East	2.9	0.9	3.8
4	Connaigre Peninsula	3.7	0.9	4.6
5	Springdale - Green Bay/Triton/Baie Verte Peninsula	3.5	0.9	4.4
6	Deer Lake/Corner Brook/Bay of Islands/Gros Morne	4.6	0.1	4.7
7	Stephenville/Port au Port/Codroy Valley/Port aux Basques	5.9	0.1	6.0
8	Northern Peninsula - Gros Morne National Park to Bellburns	5.7	0.1	5.8
9	Northern Peninsula to Englee and St. Anthony	7.7	0.1	7.8

Storage and Distribution Capacity Results

The following tables present the storage locations for the island portion of the province:

Location	Owner
Aquaforte	Valero
Bonavista	Valero
Gander	Valero
Fogo	Valero
Harbour Breton	Valero
Springdale	Valero
St. Anthony	Valero
Marystown	Valero
Burgeo	Western Petroleum
Lewisporte	Western Petroleum
Stephenville	Western Petroleum
Port Aux Basques	Western Petroleum
Mount Pearl	North Atlantic
Bishop Falls	North Atlantic
Gander	North Atlantic
Pasadena	North Atlantic
Marystown	North Atlantic
Stephenville	North Atlantic
Bonavista	North Atlantic
Harbour Grace	Irving

Table 19: Active Bulk Storage Facilities

The following bulk facilities which were active in the 2005 Study are now reported decommissioned:

Table 20: Decommissioned	Bulk Storage	Facilities
--------------------------	---------------------	------------

Location	Owner
Grand Bank	Irving
English Harbour West	Irving
Stephenville	Irving

The following table identifies the active marine facilities on the island portion of the province:

Table 21: Active Marine Facilities

Location	Owner
St. John's	Irving
Holyrood	Valero
Corner Brook	Valero
St. Barbe	Valero
Corner Brook	Imperial

No information was conveyed on a primary marine terminal in Lewisporte which was identified as active in the 2005 Study (operator Imperial Oil). Media reports indicate the facility has been purchased by Woodward's Oil, but it is not known if the facility is still used to service the region.

Propane

The following active propane bulk storage facilities were identified:

Table 22: Active Propane Bulk Storage Facilities

Location	Owner
Mount Pearl	North Atlantic
Mount Pearl	Irving

No formal or informal information was provided on the status of other facilities identified as active in the 2005 Study. These consisted of bulk storage facilities for Superior Propane (St. John's, Grand Falls and Pasadena) and Irving (Grand Falls and Corner Brook).

Labrador

Limited information from Valero was provided for Labrador, indicating they operate marine facilities in L'Ance au Loup and Goose Bay. No further information was provided by wholesalers on facilities in Labrador. Informal information suggests marine facilities exist in Port Hope Simpson, Cartwright, Black Tickle, Hopeville, Makkovik, Postville and Nain. Each of these facilities was noted active in the 2005 Study.

Other facilities identified as active in the 2005 Study were bulk plants in Charlottetown, Cartwright and Labrador City along with marine facilities in Rigolet and Nataushish. No formal or informal information was provided on these facilities in Part B.

Other Considerations

Rack Pricing

Limited rack pricing was received from survey participants. This information has not been disclosed in order to protect confidential information that was provided under confidentiality and non-disclosure agreements. While rack pricing offers a potential source of modelling data, PBM or CPL data provides a more detailed source of data. Rack pricing may provide a modelling alternative in cases where no PBM or CPL data is available. For purposes of Part B, rack pricing was presented to the Board for information purposes only.

Price Zone Boundaries

Survey Form 2 was used to gather feedback on price zone boundaries. Survey responses mostly expressed satisfaction with the current established price zone boundaries. In isolated cases, concerns were expressed where zones with lower differentials were negatively affecting adjacent zones with higher differentials. Part B adjustments appear to resolve these concerns or support the need to maintain the differential zones as established. Further details cannot be provided in order to maintain confidentiality of information.

Data Limitations

Adjustments in Labrador could not be concluded based on data limitations. Two issues prevented adjustments of differentials in Labrador: 1) absence of survey submissions from major wholesalers in the area and 2) aggregate data that could not be generalized to other regions. Tank wagon delivery information was not submitted for Labrador. PBM methods could potentially be applied consistent with the Part A profiles used to adjust differentials on the island portion of the province. However, with no tank wagon surveys submitted in Labrador, it was not conclusive that Part A data was representative without at least minimal comparison to operators in the region. Therefore, no adjustments were made to tank wagon delivery in Labrador.

Drum delivery information on the island portion of the province was also limited. Data received indicates existing drum delivery differentials should be maintained as currently established.

Conclusions

The following adjustments for total allowed mark-ups and differentials have been determined in Part B:

Table 23: Total Allowed Mark-Up Adjustments (CPL)

Fuel	Wholesale Mark-Up	Retail Mark-Up	Total Allowed Mark-Up
Motor Fuel (All Grades)	1.16	2.48	3.64
Furnace Oil	0.61	0.46	1.07
Stove Oil	0.61	0.19	0.80

Table 24: Differential Zone Adjustments (CPL)

Zone	Description	Motor Fuel	Heating Fuel	Propane
1	Avalon Peninsula	N/A	N/A	0.6
1ANW	Avalon Peninsula Northwest	N/A	0.6	N/A
1AS	Avalon Peninsula South	N/A	0.9	N/A
1a	Bell Island	(0.38)	0.3	0.6
2	Burin Peninsula/Bonavista Peninsula	(0.92)	0.2	N/A
3	Central Newfoundland/Notre Dame Bay East	(0.21)	0.7	0.9
3a	St. Brendan's (Island)	1.50	1.1	N/A
3b	Fogo Island	(1.67)	(1.5)	N/A
3c	Change Islands	(0.94)	(1.0)	N/A
4	Connaigre Peninsula	0.10	(0.8)	0.9
4a	Gaultois/McCallum/Rencontre East	(0.09)	(1.2)	N/A
5	Springdale - Green Bay/Triton/Baie Verte Peninsula	0.28	0.3	0.9
5a	Long Island	1.07	0.4	N/A
5b	Little Bay Islands	1.11	0.5	N/A
6	Deer Lake/Corner Brook/Bay of Islands/Gros Morne	0.08	0.1	0.1
7	Stephenville/Port au Port/Codroy Valley/Port aux Basques	(0.16)	0.0	0.1
7W	Stephenville/Port au Port/Codroy Valley/Port aux Basques	NA	(0.2)	N/A
7SE	Burgeo	NA	(0.9)	N/A
7a	Ramea	(0.96)	(0.0)	N/A
7b	Grey River/François/Grand Bruit/La Poile (Gasoline)	1.33	(1.2)	N/A
7b	Grey River/François/Grand Bruit/La Poile (Diesel)	(0.53)	N/A	N/A
8	Northern Peninsula - Gros Morne National Park to Bellburns	1.14	0.4	0.1
9	Northern Peninsula to Englee and St. Anthony	(0.24)	0.0	0.1

Appendix – Survey Example

Automotive Fuel Retailer Survey

The following presents the electronic Excel version of the Automotive Fuel Retail Outlet Survey. PDF and mail out versions were also tailored from this version of the survey.

Board of Commissioners of Public Utilities Maximum Price Regulated Petroleum Products Information Request Automotive Fuel Retailer Survey		
SURVEY FORM 1: CONTRIBUTOR INFORMATION		
Purpose:		
The purpose of this form is to gathe	r general information of your business operations.	
Instructions to Complete:		
Please provide the following details	of your automotive retail fuel outlet:	
Company/Business Name:		
Year You Commenced Operations:		
Retail Outlet Address:		
Street		
City/Town		
Postal Code		
Company Contact:		
Name		
Company Role		
Telephone		
Email		
Fax		
Survey Form 1 Page 1 of 1		

Board of Commissioners of Public Utilities Maximum Price Regulated Petroleum Products Information Request Automotive Fuel Retailer Survey

SURVEY FORM 2: PRICING ZONE INFORMATION

Purpose:

The purpose of this survey form is to obtain the pricing zone location of your automotive fuel retail outlet. In addition, this form requests your opinions on the current geographic description of your pricing zone.

Instructions to Complete:

Step 1: Complete "Section 1: Price Zone Selection"

Enter the price zone number for your retail outlet (see pages 2-5 of this survey form which provide price zone descriptions and maps).

Step 2: Complete "Section 2: Price Zone Boundary Questionnaire"

Answer Question 1. If your response is "yes" to Question 1, no further information is requested. If you answer "no" to Question 1, please answer Question 2.

Price Zone Number: (select zone number from drop down menu within arev shaded cell)
Price Zone Number: (select zone number from drop down menu within grey shaded cell)
Section 2: Price Zone Boundary Questionnaire
Question 1:
Are you satisfied with the current description of your price zone (yes or no)?
Answer: (select yes or no from the drop down menu within grey shaded cell)
If you answered "Yes" to Question 1, the following question is not applicable and no further response is required. If you have answered "No" to Question 1, please answer Question 2:
Question 2:
How would you change the description of your price zone?

Survey Form 2

Board of Commissioners of Public Utilities Maximum Price Regulated Petroleum Products Information Request Automotive Fuel Retailer Survey

SURVEY FORM 2: PRICING ZONE INFORMATION

Price Zone Descriptions

The following are descriptions of pricing zones in place for maximum regulated pricing of automotive fuels (gasoline and diesel) in Newfoundland and Labrador. In addition, a map detailing each of the zone boundaries is also presented.

Zone 1 - Avalon Peninsula

West along the Trans Canada Highway to the intersection with Little Harbour. Included are all routes established on the Avalon Peninsula, north and south of the Trans - Canada Highway and all communities and service areas contained therein, including Little Harbour.

Zone 1a - Bell Island

Bell Island.

Zone 2 - Burin Peninsula / Bonavista Peninsula

Trans Canada Highway from Little Harbour to boundary of Terra Nova National Park, including all communities along the highway, all of Route 210 (Burin Peninsula Highway), and all routes established on the Burin Peninsula, including all communities and service areas. All points west on the TCH to Clarenville, all of the Clarenville-Random Island-Bonavista Bay areas, including all of the Bonavista Peninsula through to Port Blandford and the eastern boundary of Terra Nova National Park.

Zone 3 - Central Newfoundland / Notre Dame Bay East

All points west along the Trans Canada Highway beginning at the eastern boundary of Terra Nova National Park through to Gullbridge access west of Badger. Included are all communities of the Gander Bay Loop from Gambo around to Gander, and all communities established along the Trans Canada Highway. Also included are all communities located on all routes established in Notre Dame Bay East area from Lewisporte to Twillingate; and all communities west, including the Exploits Valley from Buchans to Leading Tickles and Fortune Harbour.

Zone 3a - St. Brendan's (Island)

St. Brendan's Island.

Zone 3b - Fogo Island

Fogo Island.

Zone 3c - Change Islands

Change Islands.

Zone 4 - Connaigre Peninsula

All communities along Route 360, through to Harbour Breton in the south, including all communities along Route 361 through to St. Alban's, Route 364 to Seal Cove, Fortune Bay, and Routes 362 and 363 to English Harbour West, Belleoram and to Coomb's Cove. All communities and service areas contained therein.

Survey Form 2

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Board of Commissioners of Public Utilities

Maximum Price Regulated Petroleum Products Information Request Automotive Fuel Retailer Survey

SURVEY FORM 2: PRICING ZONE INFORMATION

Price Zone Descriptions

Zone 4a - Gaultois / McCallum/ Rencontre East

Includes the south coast communities of Gaultois and McCallum serviced by marine freight ferry from Hermitage and Rencontre East serviced from Pool's Cove.

Zone 5 - Springdale - Green Bay / Triton / Baie Verte Peninsula

All points along the Trans Canada Highway west of Gullbridge access to Sandy Lake, including Jackson's Arm (Route 420) and Hampden Junction (Route 421). Included are all communities in Springdale and the Green Bay area, and Route 380 to Triton, as well as all communities on the Baie Verte Peninsula.

Zone 5a - Long Island

Long Island.

Zone 5b - Little Bay Islands

Little Bay Islands.

Zone 6 - Deer Lake / Corner Brook / Bay of Islands / Gros Morne

All points along the Trans Canada Highway, from Sandy Lake west to the intersection with Gallants, including Howley, Deer Lake and north along Route 430 to Gros Morne National Park. All of the city of Corner Brook - Bay of Islands region, through to Lark Harbour and Cox's Cove, and all communities and service areas in the region.

Zone 7 - Stephenville / Port au Port / Codroy Valley / Channel - Port aux Basques

All points along the Trans Canada Highway west of Gallants intersection to Port aux Basques, including Stephenville, Port au Port Peninsula, all communities in St. George's Bay, Codroy Valley, and along the southwest coast to Rose Blanche/Harbour La Cou, including Burgeo.

Zone 7a - Ramea

Ramea.

Zone 7b - Grey River / François / Grand Bruit / La Poile

All communities along the South coast, serviced by marine freight ferry from Burgeo (excluding the island of Ramea) including Grey River and François. This zone also includes Grand Bruit and La Poile, which could also be serviced by freight ferry out of Rose Blanche.

Zone 8 - Northern Peninsula - Gros Morne National Park to Bellburns

Route 430 from Gros Morne National Park, north to Bateau Cove, including all communities north within Gros Morne National Park, and then along the coast north to Bellburns.

Zone 9 - Northern Peninsula to Englee and St. Anthony

Remainder of the Northern Peninsula, from River of Ponds north to St. Anthony along Route 430, including all communities and service areas therein, and along Route 432 to Roddickton and Englee.

Survey Form 2

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Board of Commissioners of Public Utilities Maximum Price Regulated Petroleum Products Information Request

Automotive Fuel Retailer Survey

SURVEY FORM 2: PRICING ZONE INFORMATION

Price Zone Descriptions

Zone 10 - Labrador - The Straits to Red Bay

From the Quebec-Labrador border west of L'Anse-au-Clair to Red Bay, and all points on Route 510 therein.

Zone 11 - Labrador South - Lodge Bay / Cartwright

All points on the south Labrador coast connected by road from Lodge Bay to Cartwright.

Zone 11a - Coastal Labrador South - Tanker Supplied

All communities along the coast of Labrador South of the Hamilton Inlet which are not connected to the new Labrador Coast Highway and are currently serviced via marine tanker.

Zone 11b - Coastal Labrador South – Drum Delivery

All communities along the coast of Labrador South of the Hamilton Inlet which are not connected to the new Labrador Coast Highway and are not currently serviced via marine tanker.

Zone 12 - Central Labrador

Central Labrador including Happy Valley-Goose Bay, Mud Lake and North West River and Sheshatshiu.

Zone 13 - Western Labrador

Western Labrador including Labrador City / Wabush.

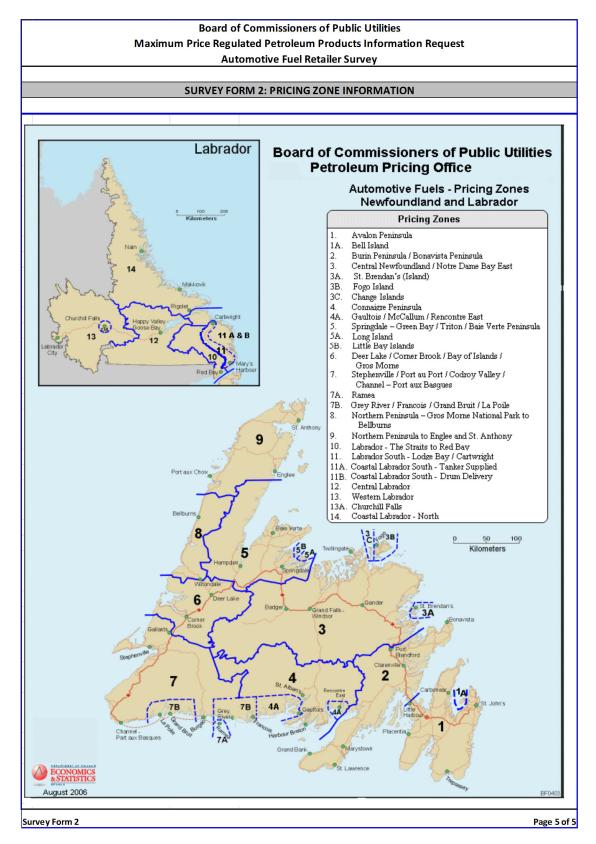
Zone 13a - Churchill Falls

Churchill Falls.

Zone 14 - Coastal Labrador North

All Northern Labrador coastal communities including Rigolet and all those North of the Hamilton inlet to Nain which are currently serviced by marine tanker.

Survey Form 2



Board of Commissioners of Public Utilities Maximum Price Regulated Petroleum Products Information Request Automotive Fuel Retailer Survey		
SURVEY FORM 3: SOURCE OF SUPPLY		
including supply facilities and locations of facilities to Instructions to Complete: For each of the supply chain points listed below, if y	on your source of supply of regulated automotive fuel, that supply your retail operations. You know the supplier source of regulated automotive fuel the supplier names and locations. If not, leave blank.	
1. Refinery: Supplier Name	Location	
2. Marine Terminal or Depot: Supplier Name	Location	
3. Bulk Plant Storage Facility: Supplier Name	Location	
urvey Form 3	Page 1 of 1	

Board of Commissioners of Public Utilities

Maximum Price Regulated Petroleum Products Information Request Automotive Fuel Retailer Survey

SURVEY FORM 4: COSTS OF SUPPLY AND DISTRIBUTION

(INFORMATION REQUESTED FOR YOUR FISCAL YEAR 2012)

Purpose:

The objective of this survey form is to gather the costs of supplying and distributing regulated automotive fuel for your retail outlet for your fiscal year 2012.

Instructions to Complete:

Step 1: Complete 'Section 1: Regulated Automotive Fuel Litres Sold'

Please enter regulated fuel litres sold for gasoline and diesel in the grey shaded boxes. Do not enter any non-regulated automotive fuel litres sold (if part of your operations) in the survey form.

Step 2: Complete 'Section 2: Costs of Regulated Automotive Fuel Litres Sold'

(i) Please enter costs to supply and distribute regulated automotive fuels in the grey shaded boxes in the categories "Operating Costs" and "Office Support & Other Costs".

IMPORTANT POINTS WHEN COMPLETING STEPS 1 AND 2:

This survey form has been designed to gather standardized information over the course of a large province wide study crossing several survey contributors. Therefore, we ask for your cooperation on the following items:

• Please enter only the costs of regulated automotive fuel supply and distribution on the survey form. Costs related to non-regulated fuel sales and other sales, not subject to maximum price regulation, should not be entered on the survey form.

• Examples (but not exclusive to other possibilities) of business activities not subject to maximum price regulation are convenience store operations, restaurant operations, car washes and mechanical vehicle services. Such costs should not be included on the survey form.

• Please enter information only in the grey shaded boxes of the survey form. Information report substitutes such as "see attached" or amounts not entered in the grey shaded boxes of the form will not be accepted.

• Please do not combine cost information for multiple pricing zones. For example, if you operate in Pricing Zone 1 and 2, and have combined business costs between those zones, we should receive two survey forms: a form for Zone 1 (with only portions of the combined costs pertaining to Zone 1) and a survey form for Zone 2 (with only portions of the combined costs pertaining to Zone 2).

Survey Form 4

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Board of Comm	issioners of Public Utilities
	etroleum Products Information Request
-	e Fuel Retailer Survey
	S OF SUPPLY AND DISTRIBUTION
(INFORMATION REQUES	ITED FOR YOUR FISCAL YEAR 2012)
Section 1: Regulate	d Automotive Fuel Litres Sold
(please enter regulated automotive fuel litres sold only)	
<u> </u>	Litres Sold Per
Fuel Type	Year 2012
Gasoline	
Diesel	
Section 2: Costs of Regu	Ilated Automotive Fuel Litres Sold
Costs of Litres Sold:	
(please enter dollar costs for regulated automotive fuel s	upply and distribution activities only)
Cost Category	2012 Cost (\$)
Operating Costs	
Depreciation	
Other Expenses	
Environmental and Regulatory Compliance	
Licenses	
Miscellaneous	
Repairs and Maintenance	
Wages and Salaries	
Total Operating Costs	0
Office Support & Other Costs	
Advertising and Promotion	
Depreciation	
Credit Card Fees	
Communication Costs	
Vehicle Operating (Office/Admin Vehicles)	
Insurance	
Other Expenses	
Interest and Bank Charges	
Miscellaneous	
Office Supplies and Stationary	
Property Tax	
Travel and Accommodation	
Rent	
Repairs and Maintenance	
Utilities	
Wages and Salaries	
Total Office Support & Other Costs	0
Total Cost of Litres Sold	\$ -
urvey Form 4	Page 2 of

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Board of Commissioners of Public Utilities Maximum Price Regulated Petroleum Products Information Request Automotive Fuel Retailer Survey		
SURVEY FORM 5: PRICE INFORMATION		
Purpose: The objective of this survey form is to obtain price examples for the business goods and services used for the supply and distribution of regulated automotive fuel for the years 2012 and 2006, in order to understand the price changes that have occurred during that time period.		
Instructions to Complete: Please provide price examples for the business goods and services listed below. Sources of price information that may be used to complete the survey form include: an invoice, receipt, pay stub, or other supporting document that details the price of a business good/service used in the supply and distribution of regulated automotive fuel. Examples of price support are described below, but are not exclusive of other examples that may be more representative of your operations. We do not require you to send the actual supporting invoices or documents for the prices you disclose at this time.		
In the event you do not have price records as of the year 2006, please provide prices as of the nearest year to 2006 that you have records. A space has been provided to indicate an alternate year to 2006.		
Prices of Business Goods and Services		
(Please enter prices required for supply and distribution of regulated automotive fuels) Price 2006 or Alternate Year (indicate below)		
Price 2012		
Operating Costs:		
1. Purchase price of an asset used in direct operations (e.g. gas pumps, signage, parking areas etc.)		
Asset Description (please describe asset below): Example 1		
Example 2		
Example 3		
2. Environmental compliance price (e.g. compliance rates for assets/operations)		
3. Licenses (e.g. an invoice detailing rates to license operations)		
4. Miscellaneous (e.g. an invoice detailing the price of a common occurring good/service required in direct operations)		
Description (please describe miscellaneous charge below):		
Example 1		
Example 2		
Example 3		
Survey Form 5 Page 1 of 4		

Board of Commissioners of Public Utilities Maximum Price Regulated Petroleum Products Information Request Automotive Fuel Retailer Survey			
	SURVEY FORM 5: PRICE INFORMATION		
	Prices of Business Goods and Services		
	(Please enter prices required for supply and distribution of regulated	automotive fuels)	Price 2006 or Alternate Year
Operating	Costs (Cont'd):	Price 2012	0
5. Repairs and	 Repairs and maintenance price (e.g. an invoice detailing labour rates and component prices to repair operational assets) Description (please describe repair charge below): 		
Example 1			=
a.	Labour rate/hour		
b.	Replacement part price		
Example 2			
a.	Labour rate/hour		
b.	Replacement part price		
Example 3			
a.	Labour rate/hour		
b.	Replacement part price		
6. Wage rate/	hour or average employee salary (e.g. pay stub/T4 or other payroll docur	nent)	
Office Supp	port & Other Costs:		-
1. Purchase pr	rice of an asset used in office support (e.g. printers, faxes, computers etc.)	=
Example 1	Asset Description (please describe asset below)		Ī
Example 2			
Example 3			
2. Advertising	and Promotion (e.g. an invoice detailing prices or rates to advertise)		
3. Credit Card	Fees (e.g. rates and fees detailed on statements from banks or financial	institutions)	
	Commission fee % or fee per dollar of regulated automotive fuel sales		
	Total credit card commission fees paid		
	Total regulated automotive fuel sales revenue		
Survey Form 5			Page 2 of 4

Board of Commissioners of Public Utilities Maximum Price Regulated Petroleum Products Information Request Automotive Fuel Retailer Survey		
SURVEY FORM 5: PRICE INFORMATION		
Prices of Business Goods and Services		
(Please enter prices required for supply and distribution of regulated	l automotive fuels)	
		Price 2006 or Alternate Year
Office Support & Other Costs (Cont'd):	Price 2012	0
4. Telecommunication price (e.g. prices detailed on telephone phone bills or other ver	dors of communicat	ion services)
a. Basic monthly service charge		
b. Long Distance rate per minute		
c. Internet/fax charges		
5. Vehicle operation price (e.g. gas price per litre, oil per quart, fluids per litre etc.)		
6. Insurance price (e.g. an invoice detailing prices or rates to insure assets/operations)		
7. Miscellaneous (e.g. an invoice detailing the price of a common occurring good/serv	ice required for offic	e support)
Description (please describe miscellaneous charge below):		-
Example 1		
Example 2		
Example 3		
8. Office supplies and stationary price (e.g. an invoice with the price of a common offi Description (please describe office supply charge below):	ce supply required fo	or office support)
Example 1		
Example 2		
Example 3		
9. Property Tax Rate (e.g. rates on a property tax assessment)		
10. Rent rate per square foot for spaces rented to supply regulated automotive fuel		
Survey Form 5		Page 3 of 4

Board of Commissioners of Public Utilities Maximum Price Regulated Petroleum Products Information Request Automotive Fuel Retailer Survey			
	SURVEY FORM 5: PRICE INFORMATION		
	Prices of Business Goods and Services		
	(Please enter prices required for supply and distribution of regulated	automotive fuels)	Duise 2000 au
			Price 2006 or Alternate Year
Office Sup	port & Other Costs (Cont'd):	Price 2012	0
11. Repairs and	Maintenance (e.g. an invoice detailing labour rates and component price	es to repair office su	upport assets)
	Description (please describe repair charge below):		-
Example 1			
a.	Labour rate/hour		
b.	Replacement part price		
Example 2			-
a.	Labour rate/hour		
b.	Replacement part price		
Example 3			-
a.	Labour rate/hour		
b.	Replacement part price		
12. Utilities prie	ces (e.g. price per kilowatt hour detailed on a utility bill)		
13. Travel and	Accommodation prices (e.g. hotel or accommodation rates per night)		
14. Wage rate/	hour or average employee salary (e.g. pay stub/T4 or other payroll docu	ment)	_
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