## PHH Arval

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# Reimbursement for Business <br> Use of Personal Vehicles <br> Model Year 2011 Update 

A Study prepared exclusively for
The National Joint Council of the Public Service of Canada
by PHH Business Analytics
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Operating Cost Update

## Table of Contents

Executive Summary ..... 1
Methodology ..... 1
Evaluation ..... 1
Introduction to Study ..... 2
Cost Component Determination ..... 3
Assumptions ..... 3
Vehicle Selection ..... 3
Ownership Replacement Period ..... 4
Vehicle Utilization ..... 4
Methodology ..... 4
Variable Expense Analysis ..... 4
Fuel ..... 4
Oil Changes ..... 6
Tires ..... 6
Maintenance ..... 6
Fixed Expense Analysis ..... 7
Depreciation ..... 7
Sales Tax ..... 8
Financing ..... 8
Insurance ..... 8
Registration and Licensing Fees ..... 9
Miscellaneous. ..... 9
Operating Cost Summary ..... 10
Policy Recommendations ..... 11
Recommendation Summary ..... 12

## Executive Summary

PHH is pleased to assist in the evaluation of driver reimbursement rates by the National Joint Council. This update evaluates vehicle operating expenses within the framework of our initial study, "Reimbursement for Business Use of Personal Vehicles," dated January 1999. Highlights of this update include:

- model Year 2011 vehicle prices,
- incorporating prevalent manufacturer rebates and interest rates in determining overall depreciation and financing costs,
- updated fuel price data,
- reflection of expense differences for each Province and Territory, and
- recent and upcoming tax rate changes.

This report summarizes key assumptions and values, and presents recommended levels of reimbursement for consideration by the National Joint Council. Our intent is to provide the most up-to-date expense data so that reimbursement rates for 2011 can be appropriately established.

## Methodology

We continue to present our findings in a reimbursement schedule by Province that reflects the operating costs on a straight per-kilometer basis.

The recommendations are developed by deriving costs for three vehicle classes: compact, mid-size, and crossover. Costs are developed assuming an annual driving distance of 20,000 kilometers and for ownership terms of both four and five years. Fixed costs include depreciation, taxes, financing, insurance, licensing and registration, and miscellaneous items. Variable costs cover fuel, oil, tires, and maintenance. Cost variations between Provinces are recognized, including adjustments that recognize the severe weather conditions in the Territories.

## Evaluation

When compared to last year, the nationwide cost to operate an automobile is essentially unchanged at $\$ 0.524$ per kilometer on average. The principal factors keeping rates steady this year are stability in fuel prices and depreciation costs, and only moderate changes in other cost categories.

This year, there was no significant change in fuel pump prices, which has previously been a factor among running expenses. Fuel costs accounted for approximately $21 \%$ of total costs. Gasoline prices were, on average, only $\$ 0.035$ per litre higher for this study than when reviewed for the 2010 update. This is mainly due to steady demand caused by the economy's stabilization since last year. Pump pricing used in the study reflects averages in each location from September through November and ranges from $\$ 0.937$ to $\$ 1.171$ per litre.

Among fixed costs, depreciation costs are up only slightly by $\$ 0.002$ per kilometer, an increase of approximately $1.2 \%$ from the 2010 update. This reflects the effect of steady prices for new vehicles and further stabilization in the used vehicle sales market. Finance, license and insurance costs, taxes, oil changes, and tire costs all increased slightly from last year's levels, while maintenance saw a modest decline.

The National Joint Council has utilized an approach with reimbursement based on a kilometric rate depending upon whether the employer or employee requested that the employee's vehicle be used. Changes to employeerequested rates, referred as the Commuting rate in this report, either decreased by $\$ 0.010$ or $\$ 0.005$ per kilometer all Provinces except Quebec where there was no change. Employer-requested rates, referred to as Travel rates in this report, ranged between $\$ 0.010$ less and $\$ 0.010$ more per kilometer in the Provinces. Higher rates are recommended in the Territories owing to the added costs attributed to the severe weather conditions.

## Introduction to Study

This study updates the vehicle operating costs within the same framework presented in our initial study for the National Joint Council, "Reimbursement for Business Use of Personal Vehicles," dated January 1999. That initial study included:

- an evaluation of the policy in place at the time, as well as the methodology used to develop the levels of reimbursement,
- a Benchmarking Survey of other organizations in Canada to sample the types of policies and levels of reimbursement in common use, and
- a development of our proposed methodology and the resulting recommended levels of reimbursement.

This cost and reimbursement recommendation update utilizes the methodology developed in our initial study. Specifically, we have developed costs for the various components of expense categories that are applicable to the ownership of personal automobiles. Certain costs are considered "fixed" - they are incurred regardless of whether or (within limits) how much a vehicle is driven. These costs include: depreciation (the loss in value of a vehicle over time), financing, insurance, taxes, registration and licensing fees, and other small miscellaneous costs. Other costs are tied to the use of the vehicle. These "variable" costs are primarily for fuel and various maintenance items (preventive and unscheduled maintenance, and tires).

In developing an operating expense analysis, variable expenses are typically calculated on a dollar per kilometer basis reflecting the activity base driving this cost. Fixed expenses are appropriately measured as a monthly or annual expense since these costs are incurred regardless of distance driven. In general, fixed expenses are approximately two-thirds of the total operating cost.

Where applicable, differences in these expenses between individual Provinces and Territories are recognized. Through each step, we have used information available in the public domain as well as internal PHH data, expertise, and procedures. Our results are presented in a straight per-kilometer reimbursement recommendation.

Beginning with the 2003 update, we started to incorporate manufacturers' rebates on new vehicles in order to recognize their wide availability to all purchasers. We continue to track and apply manufacturers' rebates to vehicle suggested retail pricing, an approach that accurately reflects the current marketplace and is a truer benchmark from which to determine market depreciation costs. Note that our approach does not attempt to account for dealer level discounts that might be available or negotiated by individuals.

Periodically, rate updates have been prepared in the past to evaluate the impact of changing pump prices. Such a study was performed last in September 2010. All comparison values in this document refer to the last full update for the 2010 model year.

## Cost Component Determination

In this section, we present the assumptions and step through the methodology for determining the costs of the various expense components required to establish a rate of business use reimbursement. Overall, the basic approach is the same as described in our initial study. Here we identify key changes and differences and summarize our results.

## Assumptions

The three key factors that drive the ultimate rate of reimbursement are the:

- vehicle selection,
- replacement period, and
- distance driven, both annually and over the life of the vehicle.

These factors are the main independent drivers of depreciation, the largest component of total operating costs, and establish key driving components in each of the other expense categories. Essentially, vehicle selection determines the initial cost, while the replacement period and distance driven are the key factors in determining the resale value.

## Vehicle Selection

The type of vehicle assumed as the basis for determining the reimbursement policy will ultimately drive the level of reimbursement more than any other factor. We continue to evaluate costs for the three vehicle classes included in last year's study: compact, mid-size, and crossover class. Final recommended rates are averages of the expenses for these three vehicle classes.

For the current model year, the table below shows the nameplates and retail pricing that we employed. This pricing includes currently available manufacturer rebates.

There have been some additions and deletions in the manufacturers' product offerings since the 2010 model year, and we have made a few small changes to the representative nameplates within each product class to accommodate this and to maintain similar levels of vehicle pricing for each category.

| Product Class | Representative Nameplates | 2011 Model Year Pricing |
| :--- | :--- | :---: |
| Compact | Chevrolet Cruze | $\$ 20,045$ |
|  | Chrysler 200 | $\$ 21,495$ |
|  | Dodge Caliber | $\$ 20,995$ |
|  | Ford Focus | $\$ 19,499$ |
| Mid-size | Chevrolet Malibu | $\$ 24,045$ |
|  | Dodge Avenger | $\$ 21,495$ |
|  | Ford Fusion | $\$ 24,649$ |
| Crossover | Chevrolet Equinox | $\$ 26,545$ |
|  | Dodge Journey | $\$ 27,495$ |
|  | Ford Escape | $\$ 27,099$ |
|  | Jeep Patriot | $\$ 19,395$ |

In the compact class, the Chevrolet Cruze and the Chrysler 200 have replaced the Chevrolet Cobalt and Chrysler Sebring, respectively. We have removed the Pontiac G6 from the mid-size class since GM has discontinued production under this brand. Finally, the Jeep Patriot replaced the Jeep Compass in the crossover class. While
the Cruze nudged the average price up by $3.9 \%$ in the compact class, prices in the mid-size and crossover classes fell by $1.4 \%$ and $2.2 \%$, respectively, so that overall prices reflect a $0.4 \%$ decrease on average from 2010 model year pricing.

## Ownership Replacement Period

We continue to use the average of four- and five-year ownership periods in developing our operating expenses.

## Vehicle Utilization

The final key assumption in making operating cost determinations is the number of kilometers driven annually. We continue to assume an annual vehicle usage of 20,000 kilometers. This equates to odometer readings at trade in of 80,000 kilometers at four years and 100,000 kilometers at five years. We make no distinction between personal travel and vehicle use for business purposes in this annual use assumption.

## Methodology

To review and summarize, our methodology involves determining fixed costs and variable costs for several assumed parameters:

- Vehicles are driven 20,000 kilometers annually.
- Costs are evaluated for ownership periods of both four and five years and for representative nameplates in each of the product classes: compacts, mid-size, and crossovers.
- Depreciation is determined by estimating a residual value (essentially the resale or trade-in amount) for a newly purchased vehicle, based on historic patterns for each vehicle class.
- Financing costs are based upon the net cost of a vehicle, or the purchase price of the new vehicle less the resale value of the vehicle being sold.
- Taxes are determined at prevailing rates by Province on the net vehicle cost, and are amortized over the assumed ownership period.
- Licensing and registration expenses are determined on a Provincial basis and assume annual renewals.
- Insurance expenses are determined by Province, based primarily on the inflationary experience of auto policy premiums applied to policy rates used in previous years.
- Variable costs are based on current costs for fuel, oil change service, tires, and maintenance.
- Operating cost adjustments are made for the Territories, reflecting the severe operating conditions in those locations.

In the following sections, we summarize key thoughts for each cost component and review any significant items and/or changes.

## Variable Expense Analysis

Variable expenses cover fuel, oil, tires, and maintenance. These expenses generally vary with the number of kilometers driven, and in the case of the Territories, the severity of the climate.

## Fuel

Fuel generally represents the second largest expense of operating an automobile. Direct cost of fuel is determined by the cost per litre and the vehicle fuel efficiency, and the operating expense values vary with changes in both fuel economy and gasoline prices. The approach to determining these costs is unchanged from previous years.

In order to account for the severe operating conditions prevalent in the Territories, we have adjusted the vehicle fuel efficiency in computing fuel expenses for these locations. Our computations continue to reflect an $80 \%$ increase in the rate of fuel consumption on a litres-per-100-kilometers basis.

Representative fuel efficiencies for the selected product classes are given on the following table. These values represent fuel economies consistent with changes in motor company product offerings.

| Fuel efficiency <br> (litres per 100 <br> kilometers) | Product Class |  |  |
| :--- | :---: | :---: | :---: |
|  | Compact | Mid Size | Crossover |
| Provinces | 8.6 | 8.9 | 10.3 |
| Territories | 15.4 | 16.0 | 18.5 |

Current representative fuel prices by Province are given in dollars per litre in the following table. These represent pump prices for regular gasoline for September, October, and November 2010. For reference, fuel pricing from previous years and the most recent interim fuel price update is also shown.

| Province/Territory | Current <br> Fuel Price <br> (per litre) | September <br> 2010 Fuel <br> Update price | 2010 <br> Update <br> Price | 2009 <br> Update <br> Price | 2008 <br> Update <br> Price | 2007 <br> Update <br> Price |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Alberta | $\$ 0.937$ | $\$ 0.925$ | $\$ 0.928$ | $\$ 1.133$ | $\$ 0.990$ | $\$ 0.828$ |
| British Columbia | $\$ 1.106$ | $\$ 1.179$ | $\$ 1.054$ | $\$ 1.224$ | $\$ 1.045$ | $\$ 0.948$ |
| Manitoba | $\$ 0.971$ | $\$ 0.957$ | $\$ 0.985$ | $\$ 1.129$ | $\$ 1.014$ | $\$ 0.885$ |
| New Brunswick | $\$ 1.001$ | $\$ 0.989$ | $\$ 0.971$ | $\$ 1.146$ | $\$ 1.011$ | $\$ 0.889$ |
| Newfoundland | $\$ 1.114$ | $\$ 1.103$ | $\$ 1.089$ | $\$ 1.267$ | $\$ 1.116$ | $\$ 1.005$ |
| Northwest/Nunavut | $\$ 1.171$ | $\$ 1.180$ | $\$ 1.169$ | $\$ 1.303$ | $\$ 1.119$ | $\$ 1.005$ |
| Nova Scotia | $\$ 1.072$ | $\$ 1.050$ | $\$ 1.023$ | $\$ 1.166$ | $\$ 1.070$ | $\$ 0.935$ |
| Ontario | $\$ 1.039$ | $\$ 1.027$ | $\$ 0.949$ | $\$ 1.088$ | $\$ 0.973$ | $\$ 0.837$ |
| Prince Edward Is. | $\$ 1.009$ | $\$ 0.995$ | $\$ 0.988$ | $\$ 1.149$ | $\$ 1.013$ | $\$ 0.917$ |
| Quebec | $\$ 1.070$ | $\$ 1.038$ | $\$ 1.015$ | $\$ 1.143$ | $\$ 1.029$ | $\$ 0.894$ |
| Saskatchewan | $\$ 1.016$ | $\$ 0.997$ | $\$ 0.991$ | $\$ 1.168$ | $\$ 1.044$ | $\$ 0.901$ |
| Yukon | $\$ 1.143$ | $\$ 1.146$ | $\$ 1.074$ | $\$ 1.349$ | $\$ 1.187$ | $\$ 1.023$ |

Pump prices have seen some stability over the past year as the global economy and related demand for crude oil have leveled off. Pump prices are essentially unchanged from last year's update in all areas, with differences ranging from $\$ 0.014$ less to $\$ 0.090$ more per litre, with an average increase of $\$ 0.035$.

New tax rates are going into effect on January 1, 2011 in Quebec, and the recommended reimbursement rates are based on current fuel prices restated at the new tax rate. The overall price per litre used for this update in Quebec is $\$ 1.079$.

Total fuel expenses averaged $\$ 0.096$ per kilometer in the Provinces and $\$ 0.192$ per kilometer in the Territories, an increase of $\$ 0.002$ per kilometer in both from 2010. The change in contribution of fuel costs to overall reimbursement ranged from a decrease of $\$ 0.005$ per kilometer to an increase of $\$ 0.005$ per kilometer in all

Provinces. In general, fuel prices must change by approximately $\$ 0.048$ per litre in order to affect a change of $\$ 0.005$ per kilometer in the reimbursement rate.

## Oil Changes

Oil expense is determined on the basis of a service interval of three months or 6,000 kilometers. For the annual usage assumption of 20,000 kilometers, the three-month interval controls. Evaluation of oil change costs across Canada showed a slight increase this year bringing the average price per service to $\$ 41.50$. Geographic price differences are not considered, as they would not have a material effect on the recommended reimbursement rate. The average per-kilometer rate remained at $\$ 0.008$ for all vehicle classes despite the per-service increase.

## Tires

Tire costs continue to be partially based on location as the necessity of utilizing snow tires in the northern climes generally increases tire expenditures in these locations. Under "normal" conditions, we assume a tire replacement interval of 72,500 kilometers. Per-kilometer costs are then increased by $50 \%$ in the Territories and by $25 \%$ in each of the Provinces. This reflects exclusive use of all-season radials in the heavily-populated southern areas of Canada, while allowing for increased use of snow tires to the north.

Beginning with the 2009 update, we increased the per-kilometer costs for Quebec by $50 \%$ to reflect the mandatory winter tire regulation that went into effect in the Province effective December 15, 2008. This regulation mandates that all passenger vehicles' tires need to be replaced with currently available brands of winter tires between December 15 and March 15 from 2008 through 2014. Winter tires purchased by drivers in Quebec under this mandate will most likely be used during the stipulated months and then saved for use over the following year's winter season. Hence, we would not expect this increase to be consistent each year.

Compared to last year's relatively large overall price increase of $12 \%$ from 2009, this year's prices saw a moderate increase of $2.0 \%$. Resulting tire expenses (by location) stayed in line with last year with costs ranging from $\$ 0.009$ to $\$ 0.011$ per kilometer and do not have a material effect on the overall operating cost recommendation.

## Maintenance

We continue to utilize our in-house maintenance database to develop the dollars per kilometer values used in the model. This permits us to develop maintenance costs for the different vehicle classes, and to show how these expenses increase with ownership term. In addition, we are able to make an estimate of the geographic variance in maintenance costs on the basis of the experience of our fleet clients.

The following table shows our experiential costs by product type for four- and five-year ownership periods, as well as the range of per-kilometer costs across the Provinces, used in the analysis.

| Maintenance <br> dollars per <br> kilometer | All Canada Average |  |  | Provincial Range |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Compact | Mid-Size | Crossover | high | low |
| 4-yr ownership | $\$ 0.028$ | $\$ 0.027$ | $\$ 0.032$ | $\$ 0.034$ | $\$ 0.023$ |
| 5-yr ownership | $\$ 0.038$ | $\$ 0.036$ | $\$ 0.043$ | $\$ 0.046$ | $\$ 0.031$ |

On average, maintenance accounts for approximately $\$ 0.034$ per kilometer of the total operating cost for this update compared to $\$ 0.042$ per kilometer for the 2010 update, leading to an overall net impact of less than $\$ 0.008$ per kilometer. Unlike tire costs, overall maintenance costs are moderately lower in 2011 following a slight increase in 2010.

## Fixed Expense Analysis

The fixed expense categories (depreciation, taxes, financing, insurance, registration, and miscellaneous) are calculated on the basis of dividing annual costs by 20,000 kilometers per year to get a dollars per kilometer value.

## Depreciation

As noted in the Introduction, our approach to calculating depreciation expense reflects changes in the nature of vehicle pricing in the consumer marketplace, which currently is relatively stable in terms of both prices for new vehicles and returns on used vehicles. Our approach is summarized as follows:

- For each vehicle class, three to four representative nameplates are chosen.
- For each nameplate, prevailing price information is complied for each of the past five model years. For the 2011 model year, available manufacturer rebates are applied to suggested retail pricing.
- For each nameplate, estimated 4- and 5-year residual value percentages are developed from historic data. These represent the percentage of the original retail price that the vehicle would bring when traded in.
- An average initial cost for each nameplate is calculated for the number of past model years in each ownership period.
- Total depreciation for each nameplate and ownership period is calculated by applying the residual percentage to the average initial cost.
- Depreciation expense in dollars per kilometer is determined for each nameplate and ownership period based on the assumed annual distance driven.
- Kilometric values for each vehicle class and ownership period are the average of the selected nameplates within the class.

Vehicle pricing information is taken from the November 2010 Canadian Red Book and from PHH's vehicle pricing application. Factory suggested retail pricing is used for comparable models year-to-year. Published manufacturer rebates (at the time of the study) have been applied to suggested retail pricing. No attempt is made to quantify any available negotiated discounts.

This approach defines depreciation as "the expected loss in value of a vehicle over its term of ownership." We believe this best captures the actual financial effect of depreciation on the cost of ownership and makes the appropriate distinction of depreciation from the vehicle financing issue. Summary depreciation costs are given in the following table. (For comparison purposes, values from the 2010 update are shown in parentheses.)

| Depreciation <br> dollars per <br> kilometer | All Canada Average |  |  |
| :--- | :---: | :---: | :---: |
|  | Compact | Mid-Size | Crossover |
|  | $\$ 0.191(\$ 0.191)$ | $\$ 0.208(\$ 0.206)$ | $\$ 0.225(\$ 0.218)$ |
| 5-yr ownership | $\$ 0.169(\$ 0.172)$ | $\$ 0.185(\$ 0.184)$ | $\$ 0.200(\$ 0.193)$ |

The overall trend this year shows no significant change in depreciation costs, with some slight variations across each vehicle class and ownership period. New car prices (including effects of motor company rebates) are lower by approximately $0.4 \%$ over the last year, with an average vehicle price decrease of approximately $\$ 85$. Tradein values are moderately lower than last year, decreasing by about $\$ 475$ on average. The overall result of the combined changes is a slight increase in the average annual depreciation cost of about $\$ 48$, equivalent to an increase of $\$ 0.002$ per kilometer.

Depreciation costs account for the largest portion of automobile expenses at approximately $38 \%$ of the total.

## Sales Tax

The sales tax component of vehicle operating costs varies by Province/Territory and depends on the net sale price, the assumed ownership period, and on how the tax rates are applied. While these taxes are paid at time of purchase, they are often rolled into the financing transaction. Our calculation determines the tax on the net purchase price and amortizes the computed sales tax over the total ownership period.

Tax rates are different in the various localities and are applied differently as well. The Federal sales tax (GST) is applied to the net price in all Provinces at the applicable rate. Most Provincial taxes are applied to the price alone; some are stated as individual rates, others as a higher GST rate. Quebec and Prince Edward Island apply their tax rate to the price including the GST. The effective tax rates range from $5.0 \%$ to $15.5 \%$.

New tax rates went into effect in British Columbia, Nova Scotia, and Ontario on July 1, 2010, and Quebec's QST rate will increase effective January 1, 2011. The tax increase in British Columbia does not impact the pump price of fuel, as the provincial portion of the HST is instantly rebated at the time of purchase.

## Financing

Costs to finance are based on the amount financed, rate, and term. As we are considering two ownership terms, the associated financing costs are based on loans of the same duration. Financing costs over the ownership term are summed and then spread evenly over that term. (Actual financing costs decrease over the life of the loan.)

For the amount to finance, we assume that the purchaser finances the difference between the price of the new vehicle and the resale or trade-in value of the replaced vehicle. We also assume an "in-kind" replacement in terms of vehicle class and do not consider geographical differences in financing rates to be significant.

Financing rates are based on an average of thirteen lenders and offerings from two manufacturers. These current new automobile financing rates average $7.4 \%$ for 48 -month loans and $7.6 \%$ for 60 -month loans. These rates are $0.4 \%$ higher than rates used in the 2010 update, reflecting the higher interest rate environment in the current marketplace.

Financing contributes approximately $\$ 0.035$ per kilometer to the total fixed vehicle costs. Overall financing costs increased due to a slight rise in interest rates for car loans as there was little change in new vehicle pricing. Compared to the 2010 model year update, financing costs have increased by $\$ 0.001$ per kilometer, or $4.4 \%$.

## Insurance

Insurance costs continue to have a fairly significant impact on the reimbursement rates, accounting for the third largest portion after depreciation and fuel. Our approach continues to determine insurance premiums on base rates used in the original 1999 study adjusted for the price changes measured by Canadian Consumer Price Index (CPI) for automotive vehicle insurance premiums from Statistics Canada (www.statcan.ca). Using this methodology, insurance cost estimates can vary significantly from one year to the next but are believed to track to accurate averages over time.

During the last twelve months, there was an increase in the average Canadian auto insurance rates between $\$ 25$ and $\$ 150$ in most Provinces except in British Columbia and Saskatchewan where there was no change in rates. Rate increases in the Territories were approximately $\$ 100$ in the Northwest/Nunavut Territory and $\$ 175$ in the Yukon Territory.

For the 2011 update, average insurance costs increased slightly from the last update; however rate changes by location were relatively significant, with the majority of locations seeing an increase in insurance costs. The following table shows the annual premium rates used by location as the base rates for developing operating costs in this update. The dollar changes over previous rates are noted as well.

| Province/Territory | Premium / \$ change | Province/Territory | Premium / \$ change |
| :--- | :---: | :--- | :---: |
| Alberta | $\$ 2700 /+\$ 50$ | Nova Scotia | $\$ 1775 /+\$ 50$ |
| British Columbia | $\$ 1875 /$ no change | Ontario | $\$ 2750 /+\$ 50$ |
| Manitoba | $\$ 1575 /+\$ 25$ | Prince Edward Island | $\$ 1850 /+\$ 75$ |
| New Brunswick | $\$ 1825 /+\$ 50$ | Quebec | $\$ 2775 /+\$ 150$ |
| Newfoundland | $\$ 2150 /+\$ 75$ | Saskatchewan | $\$ 1225 /$ no change |
| North West / Nunavut | $\$ 1625 /+\$ 100$ | Yukon | $\$ 2350 /+\$ 175$ |

Overall, these insurance costs add an average of $\$ 0.100$ per kilometer to the operating cost which is $\$ 0.003$ per kilometer higher than the 2010 update. The contribution of insurance to operating costs ranges by Province from $\$ 0.060$ to $\$ 0.136$ per kilometer. Where rates changed, the impact was between $\$ 0.001$ and $\$ 0.009$ per kilometer.

## Registration and Licensing Fees

Registration and licensing fees are established by each Province and are readily determined from the annual fees listed in the following table:

| Province/Territory | Registration Fees | Province/Territory | Registration Fees |
| :--- | :---: | :--- | :---: |
| Alberta | $\$ 74$ | Nova Scotia | $\$ 159$ |
| British Columbia | $\$ 61$ | Ontario | $\$ 74$ |
| Manitoba | $\$ 119$ | Prince Edward Island | $\$ 135$ |
| New Brunswick | $\$ 129$ | Quebec | $\$ 363$ |
| Newfoundland | $\$ 140$ | Saskatchewan | $\$ 68$ |
| North West / Nunavut | $\$ 126$ | Yukon | $\$ 80$ |

On average, registration contributes $\$ 0.006$ per kilometer to the total reimbursement amount, ranging from $\$ 0.003$ to $\$ 0.018$ per kilometer by location.

## Miscellaneous

Based on our internal expense reporting data for Canadian fleets, we continue to recommend a monthly allowance of $\$ 10$ for miscellaneous vehicle expenses. This translates into a cost of $\$ 0.0005$ per kilometer for each vehicle class, Provincial location, and ownership term. This amount is unchanged from the initial study.

## Operating Cost Summary

Our summary findings on operating costs are shown on the following table. Recommendations and discussion are presented in the following section.

| Operating Cost <br> (dollars per <br> kilometer) | All Canada Average |  |  | Provincial Range |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Compact | Mid-Size | Crossover | high | Low |  |
| -yr ownership | $\$ 0.493$ | $\$ 0.526$ | $\$ 0.570$ | $\$ 0.660$ | $\$ 0.429$ |

The variability in ownership term continues to be quite small, and the variation in product classes remains fairly constant. More significant are the cost differences between geographic locations.

Overall operating costs are about the same as the 2010 update and are reflected in recommended reimbursement rates that are moved very little in general. Relatively stable fuel and depreciation costs were the main factors that led to only a slight change in rates.

Financing, insurance, licensing, oil change, and tire costs increased moderately, while the costs attributed to maintenance saw a modest decrease from the previous update.

## Policy Recommendations

We continue to base our recommended rates on the average operating costs for the compact, mid-size, and crossover product classes and for both four- and five-year ownership periods.

We also continue to recognize the Provincial differences in the operating costs of vehicles. The costs by Province and Territory that we have developed are tabulated below.

The basis of the rates recommended below is an annual driving distance of 20,000 kilometers. The following table lists the per-kilometer reimbursement rates, by Province, that result from our analysis.

We suggest continuing the practice of reimbursing the employee-requested personal vehicle use on the basis of variable expenses only, which is referred to as the Commuting rate in the following table. The Travel rate should be used for employer-requested use of personal vehicle, as it includes both fixed and variable components.

|  |  | 2011 Reimbursement Schedule <br> (dollars per kilometer) |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Location | Commuting | Travel | September 2010 <br> Update Values <br> Commuting / Travel | 2010 Annual Update <br> Values Commuting $/$ <br> Travel |
| Alberta | $\$ 0.135$ | $\$ 0.510$ | $\$ 0.140 / \$ 0.515$ | $\$ 0.140 / \$ 0.515$ |
| British Columbia | $\$ 0.155$ | $\$ 0.505$ | $\$ 0.175 / \$ 0.520$ | $\$ 0.160 / \$ 0.510$ |
| Manitoba | $\$ 0.135$ | $\$ 0.470$ | $\$ 0.140 / \$ 0.475$ | $\$ 0.145 / \$ 0.480$ |
| New Brunswick | $\$ 0.140$ | $\$ 0.495$ | $\$ 0.150 / \$ 0.495$ | $\$ 0.145 / \$ 0.495$ |
| Newfoundland | $\$ 0.160$ | $\$ 0.530$ | $\$ 0.170 / \$ 0.530$ | $\$ 0.165 / \$ 0.530$ |
| Northwest | $\$ 0.245$ | $\$ 0.575$ | $\$ 0.260 / \$ 0.580$ | $\$ 0.260 / \$ 0.575$ |
| Nova Scotia | $\$ 0.155$ | $\$ 0.510$ | $\$ 0.160 / \$ 0.510$ | $\$ 0.160 / \$ 0.505$ |
| Nunavut | $\$ 0.245$ | $\$ 0.575$ | $\$ 0.260 / \$ 0.580$ | $\$ 0.260 / \$ 0.575$ |
| Ontario | $\$ 0.150$ | $\$ 0.545$ | $\$ 0.160 / \$ 0.550$ | $\$ 0.155 / \$ 0.545$ |
| Prince Edward Island | $\$ 0.145$ | $\$ 0.500$ | $\$ 0.150 / \$ 0.500$ | $\$ 0.150 / \$ 0.500$ |
| Quebec | $\$ 0.160$ | $\$ 0.570$ | $\$ 0.165 / \$ 0.565$ | $\$ 0.160 / \$ 0.560$ |
| Saskatchewan | $\$ 0.140$ | $\$ 0.455$ | $\$ 0.150 / \$ 0.460$ | $\$ 0.150 / \$ 0.460$ |
| Yukon | $\$ 0.245$ | $\$ 0.605$ | $\$ 0.260 / \$ 0.605$ | $\$ 0.245 / \$ 0.595$ |

## Recommendation Summary

The Commuting rate covers variable expenses and decreased by $\$ 0.005$ or $\$ 0.010$ per kilometer in most Provinces except in Quebec where the rate did not change. In the Territories, the corresponding rates decreased by $\$ 0.015$ per kilometer in Northwest/Nunavut and there was no change in Yukon. Commuting reimbursement rates had little movement across the board this year mostly due to stable pump prices for fuel.

The Travel rate is derived by adding the fixed costs to the variable expenses. Reimbursement rate changes ranged from a $\$ 0.010$ decrease to a $\$ 0.010$ increase per kilometer in all Provinces with no change in New Brunswick, Newfoundland, Ontario, or Prince Edward Island. These rates did not change in the Northwest and Nunavut Territories and increased by $\$ 0.010$ per kilometer in the Yukon Territory. Travel rates ranged from $\$ 0.455$ to $\$ 0.570$ per kilometer in the Provinces, with higher rates in the Territories.

