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Reimbursement for Business Use of Personal Vehicles Model Year 2008 Update

A Study prepared exclusively for

The National Joint Council of the Public Service of Canada

by PHH Business Intelligence Solutions

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Operating Cost Update

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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 2008 vehicle prices;
- Incorporating prevalent manufacturer rebates and interest rates in determining overall depreciation and financing costs;
- Updated fuel price data; and,
- Reflection of expense differences for each Province and Territory with two approaches to operating costs: per diem plus per km rate; or straight per km rate.

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 2008 can be appropriately established.

Methodology

We continue to present our findings in two alternative formats for reimbursement. We have recommended that the National Joint Council adopt a reimbursement policy that recognizes the fixed and variable nature of the costs that individuals incur in owning and operating a motor vehicle. This approach has a fixed component that reimburses drivers for each day they use their personal vehicle on organizational travel, and a variable component that would provide reimbursement for the operating cost of each kilometer traveled.

Recognizing that this is a departure from the historic cost per kilometer policy, we have developed a reimbursement schedule, by Province, that reflects the operating costs on a straight per-kilometer basis.

Each approach is developed by deriving costs for four vehicle classes: compact, mid-size, and minivan/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 increased to $0.515 per kilometer on average. The principal factors impacting rates this year are fuel, tires and maintenance with depreciation also having increased slightly. Rates increased fairly uniformly across the country, but were relatively higher in the Territories (owing to higher fuel costs in combination with lower assumed fuel economy). In most Provinces, per diem reimbursement rates rose by $0.005 per kilometer over the 2007 rates.

This year, the increase in fuel costs was most dominant among the other changes in running expenses. Fuel costs accounted for approximately 24% of total costs. Gasoline prices are, on average, $0.129 per litre higher for this study period than when reviewed for the 2007 update mainly due to shortage in North American inventories as well as production cuts from the OPEC. Pump pricing used in the study reflects averages in each location from September through November and ranges from $0.973 to $1.187 per litre.

This year the announced change in the Goods and Services Tax (GST) from 6% to 5% (from January 1, 2008) has led to an overall decrease of approximately 9.5% in tax costs since the last update in 2007. The reduced tax rates do not have a significant impact on maintenance and fuel costs which increased this year; as well as a

negligible impact on other running expenses in some locations. The reduction in GST has also led to a decrease in the Harmonized Sales Tax (HST) in the provinces of New Brunswick, Nova Scotia and Newfoundland.

Depreciation costs are up slightly, by $0.008 per kilometer reflecting an increase of approximately 4.4% over the 2007 update. This reflects the effect of relatively lower trade in prices offset by lower new vehicle pricing due to increased motor company rebates and an introduction of crossover vehicles in place of minivans that are no longer in production.

The decrease in licensing costs and taxes and the increase in depreciation had a balancing effect on the change in fixed costs. Among the other factors evaluated, vehicle maintenance and tire costs increased significantly, pointing out to the shortage of labor and increase in costs of vehicle parts and tires which are a petroleum based product.

The Preferred Recommendation suggests reimbursing for fixed costs on a per diem basis and for operating costs on a kilometric basis. The per diem rates range from $16.50 to $20.75 per day, with companion kilometric reimbursement rates ranging from $0.155 to $0.225 per kilometer. Comparing Provincial rates to last year's recommendations, per diem reimbursement rates increased in all locations except in Manitoba and Saskatchewan where the rates remained unchanged. These rates went up by $0.500 per day in all the territories and most provinces except New Brunswick, Nova Scotia and Prince Edward Island where the rates increased by $0.250.

Variable kilometric rates also increased in all locations due to higher running costs, generally between $0.020 and $0.035 per km in all the provinces compared to the territories where the rates increased by $0.045 per km in the Nunavut and the Northwest territories; and by $0.055 per km in the Yukon territory.

The National Joint Council has preferred the approach taken in the Alternative Recommendation, with reimbursement based on a kilometric rate depending upon whether the employer or employee requested that the employee's vehicle be used. Changes to employee-requested rates referred as the Commuting rate in this report mirror those for the Variable kilometric rate noted above. Employer-requested rates, referred to as Travel rates in this report increased between $0.025 and $0.045 per km in the provinces. Higher rates are recommended in the Territories (owing to the added costs attributed to the severe weather conditions). As in the past, slightly higher rates are noted in Newfoundland and Quebec, and lower rates in Manitoba and Saskatchewan.

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.
- 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 cost 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.

As with our initial study, our results are presented in two alternative approaches to reimbursement: a per diem plus kilometric rate approach; and a straight per kilometer alternative.

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, although currently they are at much reduced levels compared to prior years. The more conservative level of motor company rebates could, in part, be contributing to the stronger resale market evident this fall. This approach 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 2007. All comparison values in this document refer to the last full update for the 2007 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 two vehicle classes included in previous studies: compact and mid-size. For the minivan class, we have added "crossover" vehicles, to account for changes in vehicle offerings by the motor companies. Both GM and Ford have stopped minivan production, and many manufacturers are marketing these crossover vehicles as minivan alternatives. Final recommended rates are averages of the expenses for these vehicle classes.

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

Product Class	Representative Nameplates	2008 Model Year Pricing
Compact	Chevrolet Malibu	$ 23,845
	Chrysler Sebring	$ 22,895
	Saturn/Opel Astra	$ 23,240
	Pontiac G6	$ 24,490
Mid-size	Ford Fusion	$ 24,949
	Chevrolet Impala	$ 26,045
	Pontiac Grand Prix	$ 26,580
	Dodge Charger	$ 27,770
	Saturn Aura	$ 25,590
Minivan/Crossover	Jeep Compass	$ 23,570
	Ford Escape	$ 24,349
	Pontiac Montana	$ 23,260
	Chevrolet Uplander	$ 21,285

The Ford Freestar and Dodge Caravan are no longer in production and we have introduced the "crossover" Ford Escape and Jeep Compass as replacement vehicles in this study. The Chevrolet Uplander and Pontiac Montana are expected to be phased out after model year 2008 as well and it is our recommendation to replace these models with crossovers by the same manufacturer for the purpose of this study. The Saturn ION has been

replaced with the Saturn/Opel Astra in the compact vehicle class. On average, these prices, including relatively substantial manufacturer rebates compared to the previous year, reflect a 2% decrease over 2007 model year pricing, reflecting the current competitive environment for new cars.

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 km at four years and 100,000 km 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 minivans/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; 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. While the approach to determining these costs is unchanged from previous years, the values change with changes in both fuel economy and gasoline prices.

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-kilometer basis.

For the selected product classes, representative fuel efficiencies are given on the following table. These values represent fuel economy values consistent with changes in motor company product offerings.

Fuel efficiency (litres per 100 km)	**Product Class**		
	Compact	**Mid Size**	**Minivan/Crossover**
Provinces	9.8	9.8	10.7
Territories	17.6	17.6	19.2

Current representative fuel prices by Province are given, in cost per litre, on the following table. These represent pump prices for regular gasoline for September, October, and November 2007. For reference, fuel pricing from previous years and the most recent fuel update is also shown.

Province/Territory	**Current Fuel Price**	**September 2007 Fuel Update price**	**2007 Update Price**	**2006 Update Price**	**2005 Update Price**	**2004 Update Price**
Alberta	**$0.990**	$1.074	$0.828	$0.884	$0.759	$0.635
British Columbia	**$1.045**	$1.115	$0.948	$0.977	$0.829	$0.733
Manitoba	**$1.014**	$1.093	$0.885	$0.923	$0.787	$0.625
New Brunswick	**$1.011**	$1.073	$0.889	$0.987	$0.842	$0.769
Newfoundland	**$1.116**	$1.191	$1.005	$1.045	$0.922	$0.822
Northwest/Nunavut	**$1.119**	$1.272	$1.005	$1.080	$0.937	$0.899
Nova Scotia	**$1.070**	$1.122	$0.935	$0.979	$0.840	$0.764
Ontario	**$0.973**	$1.016	$0.837	$0.875	$0.748	$0.690
Prince Edward Is.	**$1.013**	$1.088	$0.917	$0.981	$0.853	$0.707
Quebec	**$1.029**	$1.066	$0.894	$0.931	$0.814	$0.740
Saskatchewan	**$1.044**	$1.117	$0.901	$0.937	$0.802	$0.702
Yukon	**$1.187**	$1.217	$1.023	$1.092	$0.945	$0.791

Fuel pump prices seem relatively higher this year due to increase in prices of crude oil, which have been climbing largely due to worldwide demand increasing faster than new supplies have been brought to market. However, over the last four months, pump prices have fallen slightly due to an increase in gasoline inventories in North America and the end of the driving season. The reduction in GST rates has a relatively small impact on fuel prices.

As a result of this energy market, pump prices are higher than those from last year's update in all areas, ranging from $0.095 to $0.164 per litre. The contribution of fuel costs to overall reimbursement is up in all locations, equating to $0.010 to $0.015 per kilometer in all provinces; $0.020 per kilometer in the Northwest and Nunavut territories and $0.025 per kilometer in the Yukon Territory.

Total fuel expenses averaged $0.104 per km in the Provinces and $0.209 per km in the Territories, an increase of $0.007 and $0.010 per kilometer, respectively. In general, fuel prices must change by approximately $0.047 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 km. For the annual usage assumption of 20,000 km, the three-month interval controls. Evaluation of oil change costs across Canada continues to show an average price of $40 per service. Geographic price differences are not considered, as they would not have a material effect on the recommended reimbursement rate. The average per kilometer rate is $0.008 for all vehicle classes.

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 km; 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.

Our evaluation shows average tire pricing to be around 20% higher than at the time of the 2007 update. Since tire rubber is a petroleum based product, geopolitical uncertainties and financial speculation in raw materials have had a short-term effect on the prices. Resulting tire expenses (by location) are therefore slightly greater, with costs ranging from $0.008 to $0.010 per kilometer. These increased tire costs 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 cost 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. Maintenance costs are impacted by the shortage of automotive technicians as well as the costlier parts needed for modularized components that are increasingly used in the latest models of vehicles.

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 cost per kilometer	All Canada Average			Provincial Range	
	Compact	Mid-Size	Minivan/Crossover	High	low
4-yr ownership	$0.035	$0.037	$0.042	$0.051	$0.039
5-yr ownership	$0.047	$0.049	$0.057	$0.059	$0.045

On average, maintenance accounts for approximately $0.044 per kilometer of the total operating cost, and the derived maintenance costs are approximately 70% higher than the values in last year’s study. This is attributed to higher costs in mostly the 5-yr ownership period as well as the adjustments made to track increase in costs for labor and vehicle parts; leading to an overall net impact of less than $0.002 per kilometer.

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 cost 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. This change involves including manufacturer rebates in determining new vehicle pricing since model year 2003. The prevalence and magnitude of these rebates has lowered the cost of acquiring most vehicle nameplates. These manufacturer incentives have also had the effect of depressing prices for used vehicles (trade-in values) as well. Our approach is summarized as follows:

- For each vehicle class, two to four representative nameplates are chosen.
- For each nameplate, prevailing price information is complied for each of the past five model years. For the 2007 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 cost 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.

Pricing information is taken from the November 2007 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 2007 update are shown in parentheses.)

Depreciation cost per kilometer	**All Canada Average**		
	Compact	**Mid-Size**	**Minivan/Crossover**
4-yr ownership	$0.197 ($0.175)	$0.212 ($0.203)	$0.196 ($0.187)
5-yr ownership	$0.165 ($0.162)	$0.183 ($0.183)	$0.175 ($0.170)

The overall trend this year is a slight increase in depreciation costs, with some variation across each vehicle class and ownership period. New car prices (including effects of motor company rebates) are lower by approximately 2% over the last year, with an average vehicle price decrease of approximately $493. Trade-in values are lower than last year, falling by over $300 on average. The overall result of the combined changes is an increase in the average annual depreciation cost of almost $284, equivalent to a gain of $0.014 per kilometer.

Depreciation costs account for the largest portion of automobile expenses, approximately 37% 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%.

For this model year update, we have accounted for the expected Federal GST from 6% to 5% effective January 1, 2008. The impact of this change was that taxes decreased by approximately 9.5% since the last update, resulting in a slight reduction of $0.002 per kilometer.

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.

As in recent updates, financing rates are based on an average of fourteen lenders and offerings from three manufacturers. These current new automobile financing rates average 7.1% for 48-month loans and 7.3% for 60-month loans. These rates are 0.10% and 0.07%, respectively, higher than rates used in the 2007 update. This reflects the higher interest rate environment in the current market place, as well as the current absence of the aggressive motor companies finance deals that were evident in previous years.

Financing contributes approximately $0.031 per kilometer to the total fixed vehicle costs. Overall financing costs are constant, due to a slight increase in interest rates and a smaller financed balance. Compared to the 2007 model year update, financing costs have increased by just 0.2%, which equates to approximately 1/10 of one cent or $0.0001 per kilometer in additional fixed costs.

Insurance

Insurance costs continue to have a fairly significant impact on the reimbursement rates, accounting for the third largest portion after depreciation and fuel. For the 2008 update, average insurance costs increased slightly from the last update; however rate changes by location were relatively significant, as discussed below, with the majority of locations seeing an increase in insurance costs.

Our approach this year 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.

Owing to the timing of this update, rate changes were evaluated over the last twelve months. During this period, there was an increase in the average Canadian auto insurance rates between $25 and $125 in the provinces while the other provinces saw a decline of $50 to $100. Rate increases in the territories were approximately $75 in the Northwest/Nunavut territory and $125 in the Yukon Territory. 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	$ 2275 / + $75	British Columbia	$ 1775 / + $25
Manitoba	$ 1450 / - $50	Newfoundland	$ 2025 / + $25
New Brunswick	$ 1625 / - $50	Northwest / Nunavut	$ 1375 / + $75
Nova Scotia	$ 1625 / + $25	Ontario	$ 2250 / + $125
Prince Edward Is.	$ 1600 / + $25	Quebec	$ 2450 / + $50
Saskatchewan	$ 1200 / - $100	Yukon	$ 1900 / + $125

Overall, these insurance costs add an average of $0.088 per kilometer to the operating cost which is higher by $0.001 per kilometer higher than the 2007 update. The contribution of insurance to operating costs ranges by Province from $0.059 to $0.120 per kilometer. Where rates changed, the impact was between $0.001 and $0.006 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	$ 61	British Columbia	$ 61
Manitoba	$ 76	Newfoundland	$ 140
New Brunswick	$ 68	Northwest / Nunavut	$ 78
Nova Scotia	$ 74	Ontario	$ 74
Prince Edward Is.	$ 75	Quebec	$ 320
Saskatchewan	$ 87	Yukon	$ 60

On average, registration contributes $0.005 per kilometer to the total reimbursement amount, ranging from $0.003 to $0.016 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 (cost per kilometer)	All Canada Average			Provincial Range	
	Compact	Mid-Size	Minivan/Crossover	High	low
4-yr ownership	$0.508	$0.533	$0.524	$0.625	$0.458
5-yr ownership	$0.489	$0.517	$0.518	$0.621	$0.439

The variability in ownership term continues to be quite small, despite increasing differences in 4-year and 5-year depreciation costs. The variation in product classes is fairly constant, although increasing. More significant are the cost differences between geographic locations.

Overall operating costs are higher over the 2007 update, and are reflected in recommended reimbursement rates that are higher in general, with variances by location. Higher running costs, specifically maintenance, tires and fuel price increases were the main factors that led to the increase in rates and to some extent the slight increase in depreciation costs.

Taxes and licensing costs eased slightly while the costs attributed to financing, insurance and oil changes and miscellaneous expenses were essentially unchanged from the previous update.

Policy Recommendations

Based on the cost category components and our evaluation of their variability, we continue to recommend that the National Joint Council adopt a "Fixed and Variable" Reimbursement Schedule. This approach recognizes that there are fixed costs to operating a personal vehicle that are incurred regardless of the distance traveled, and variable costs that are tied to the number of kilometers a vehicle is driven over a given time period. The essence of this proposed schedule is:

- a fixed per diem rate to reimburse daily fixed costs of owning an automobile; and
- a variable per kilometer rate to reimburse for the cost of operating an automobile.

The details of this recommendation are presented below as our "Preferred Recommendation."

We believe that this recommendation most closely and equitably provides for the reimbursement of the actual costs of operating a vehicle. However, we do recognize that this is a departure from the current per-kilometer method of reimbursement. Indeed, the per-kilometer approach is commonly used by most organizations, as indicated by the results of our survey. Having compiled the expenses for each of the component cost categories, it is possible to develop several viable reimbursement schemes.

Recognizing that there may be a comfort level with the more common per-kilometer approach, we also provide an alternative recommendation on this basis. This is presented as our "Alternative Recommendation."

We continue to base our recommended rates on the average operating costs for the compact, mid-size, and minivan/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 in the following sections.

Preferred Recommendation

We recommend that the National Joint Council adopt a fixed and variable rate of reimbursement policy. This entails establishing, for each Province and Territory, a daily per diem rate and a per kilometer rate. An individual who is requested to use their personal vehicle for company travel would receive the flat per diem reimbursement for each day that they are on travel status. This per diem rate would reimburse the driver for the fixed costs of owning their automobile. In addition, the driver would receive reimbursement at the policy rate for each kilometer of travel that is business related to compensate for the true cost of operating the vehicle.

We recommend that these policy rates be based on:

- the average costs calculated for the compact, mid-size, and minivan/crossover product classes;
- the average of costs calculated for both four- and five-year ownership periods; and
- recognizing the variations in cost from Province to Province, as discussed previously.

We have developed the following reimbursement rate table that shows our recommended per diem and per kilometer rate for each Province and Territory. The per diem rate is derived by dividing the annual fixed expenses by 365. The per-kilometer rate represents the variable expenses as developed for each Province. Per Diem rates are rounded to the nearest $0.250 while per kilometer rates are rounded to the nearest $0.005.

For comparison purposes, the 2007 recommendations are shown as well.

2008 Preferred Reimbursement Schedule

Location	Per Diem (cost per day)	Per Kilometer (cost per km)	2007 Values Per Diem/ Per km
Alberta	**$18.75**	**$0.155**	$18.25 / $0.125
British Columbia	**$18.25**	**$0.170**	$17.75 / $0.140
Manitoba	**$17.25**	**$0.160**	$17.25 / $0.130
New Brunswick	**$18.00**	**$0.155**	$17.75 / $0.130
Newfoundland	**$19.25**	**$0.175**	$18.75 / $0.145
Northwest	**$16.50**	**$0.270**	$16.00 / $0.225
Nova Scotia	**$18.00**	**$0.165**	$17.75 / $0.135
Nunavut	**$16.50**	**$0.270**	$16.00 / $0.225
Ontario	**$19.50**	**$0.165**	$19.00 / $0.130
Prince Edward Island	**$18.00**	**$0.160**	$17.75 / $0.130
Quebec	**$20.75**	**$0.165**	$20.25 / $0.135
Saskatchewan	**$16.50**	**$0.160**	$16.50 / $0.140
Yukon	**$17.75**	**$0.285**	$17.25 / $0.230

In instances where employees request that they be allowed to use their own personal vehicles on organizational business, we recommend that the National Joint Council continue their current practice of reimbursing for

variable expenses by using the per-kilometer rate, by Province, given in the above table, in which case, there would be no per diem reimbursement.

Alternative Recommendation

We do recognize that our fixed and variable recommendation is a departure from the norm of a fixed reimbursement rate. The advantage to developing expense data in the fashion presented here is that the same information can be employed to establish a fixed rate. 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.

As with the preferred recommendation, we suggest continuing the practice of reimbursing the employee-requested personal vehicle use on the basis of variable expenses only. This is referred to as the Commuting rate in the following table.

2008 Alternative Reimbursement Schedule (cost per kilometer)

Location	Commuting	Travel	September 2007 Values Commuting / Travel	2007 Annual Update Values Commuting / Travel
Alberta	**$0.155**	**$0.500**	$0.150 / $0.480	$0.125 / $0.455
British Columbia	**$0.170**	**$0.500**	$0.155 / $0.480	$0.140 / $0.465
Manitoba	**$0.160**	**$0.475**	$0.150 / $0.465	$0.130 / $0.440
New Brunswick	**$0.155**	**$0.485**	$0.150 / $0.470	$0.130 / $0.450
Newfoundland	**$0.175**	**$0.525**	$0.160 / $0.505	$0.145 / $0.485
Northwest	**$0.270**	**$0.570**	$0.275 / $0.565	$0.225 / $0.515
Nova Scotia	**$0.165**	**$0.495**	$0.155 / $0.480	$0.135 / $0.460
Nunavut	**$0.270**	**$0.570**	$0.275 / $0.565	$0.225 / $0.515
Ontario	**$0.165**	**$0.520**	$0.150 / $0.495	$0.130 / $0.475
Prince Edward Island	**$0.160**	**$0.490**	$0.150 / $0.470	$0.130 / $0.455
Quebec	**$0.165**	**$0.545**	$0.150 / $0.525	$0.135 / $0.505
Saskatchewan	**$0.160**	**$0.465**	$0.160 / $0.460	$0.140 / $0.440
Yukon	**$0.285**	**$0.610**	$0.265 / $0.580	$0.230 / $0.545

Recommendation Summary

When evaluating the Preferred Recommendation, the per diem reimbursement rates represent the fixed costs. In general, these rose between $0.250 and $0.500 per day in most provinces with Saskatchewan and Manitoba seeing no change in per diem rates, and an increase by $0.750 in all the territories. The per diem rates range from $16.50 to $20.75 per day. The variable expenses are covered by kilometric rates, and increased between $0.020 and $0.030 per km in all the provinces while the corresponding rates increased by $0.045 per km in the Nunavut and the Northwest territories; and $0.055 per km in the Yukon Territory.

These same variable kilometric rates apply to the Commuting rate under the Alternative Recommendation. The Travel rate is derived by adding the fixed costs to the variable rate. These rates increased between $0.025 and $0.045 per km in all provinces, by $0.055 per km in the Northwest and Nunavut territories and $0.065 per km in the Yukon Territory. Travel rates ranged from $0.465 to $0.545 per km in the Provinces, with higher rates in the territories.