



Canadian Automobile Association

2004 Edition

# ***Driving Costs***



## DRIVING COSTS 2004

The Canadian Automobile Association's *Driving Costs* brochure can help you calculate how much it costs to own and operate your vehicle each year. The national averages and approximate driving costs provided will help you understand what factors affect the cost of driving.

The information contained in this brochure is not intended to calculate the cost of operating business vehicles. Organizations operating a fleet of vehicles or paying employees an allowance for personal vehicles should contact **Runzheimer International** for information regarding their services.

All figures reflect average costs of a vehicle operating primarily under stop-and-go driving conditions. Costs are weighted by the population of each province, in order to establish a nationwide composite average value. **All costs are calculated on figures available as of December 2003.**

## VEHICLE EXPENSES

Costs can be broken down into two categories:

**Operating Costs:** These are variable costs — they may change depending on where you live, how you drive, how much you drive, and what you spend on service and repairs.

**Ownership Costs:** These are fixed costs such as insurance, licence fees, registration fees, taxes, finance costs, and depreciation. Fixed costs may differ from vehicle to vehicle and place to place, but they change little with the amount and type of driving.

## NATIONAL AVERAGE COSTS

The following chart provides a breakdown of the average costs to operate a vehicle in Canada. To calculate these national figures, we've used a 2004 Chevrolet Cavalier Z24 four-door sedan — 2.4 litre 4 cylinder, as well as a 2004 Dodge Caravan — 3.3 litre 6 cylinder. Both vehicles are equipped with standard and optional accessories, including automatic transmission, power steering, power disc brakes, AM/FM stereo, rear window defroster, speed control, tilt steering wheel, engine block heater, and heavy-duty battery. We have assumed an annual driving distance of 18,000 kilometres.

AVERAGE ANNUAL OPERATING COSTS PER KILOMETRE based on 18,000 km driven annually		
Operating Costs ( <i>variable</i> )	Average per Km	
	Cavalier Z24	Caravan
Fuel*	7.31¢	8.51¢
Maintenance	2.59¢	3.01¢
Tires	1.65¢	1.43¢
<b>TOTAL</b>	<b>11.50¢</b>	<b>12.95¢</b>

\* Gasoline costs are based on the national average gas price (as of December 2003) of 74.4¢ per litre. The fuel costs reflect the purchase of no-lead, regular-grade gasoline, based on 100% self-service gasoline prices.

AVERAGE ANNUAL OWNERSHIP COSTS based on 18,000 km driven annually		
Ownership Costs ( <i>fixed</i> )	Cost per Year	
	Cavalier Z24	Caravan
Insurance*	\$1,618.00	\$1,496.00
License and Registration	\$114.00	\$116.00
Depreciation**	\$4,370.00	\$4,762.00
Finance Expense (Car Loan)***	\$891.00	\$1,104.00
<b>ANNUAL TOTAL</b>	<b>\$6,993.00</b>	<b>\$7,479.00</b>
<b>AMOUNT PER DAY</b>	<b>\$19.17</b>	<b>\$20.49</b>

\* Insurance Costs are based on a "commutation" category or typical example of insurance coverage — vehicle driven less than 16 kilometres per day, to and from work, with no young driver.

- \$250 Deductible Comprehensive
  - \$500 Deductible Collision
  - \$1,000,000 Inclusive Third Party Liability (total insurance cost)
- Please consult with your insurance professional for other options.

\*\* For kilometrage in excess of 18,000 kilometres annually, an additional depreciation allowance of \$135.00 for the Cavalier Z24 and \$113.00 for the Caravan per thousand should be added to the fixed costs.

The depreciation factors of \$4,370.00 for the Cavalier Z24 and \$4,762.00 for the Caravan are average annual figures predicated on car trade-in values of these vehicles at the end of four years with 72,000 kilometres on the odometer.

\*\*\* Based on 7.25 interest; 10% down payment, four-year loan.

## ANNUAL DRIVING COSTS

The amount of driving has a direct relationship to the cost per kilometre of driving. Using the Runzheimer figures in the preceding table, you can expect the following approximate costs, based on the number of kilometres driven:

ANNUAL DRIVING COSTS based on the Cavalier Z24				
Kilometres Driven per Year	Annual Operating Costs ( <i>variable</i> )	Annual Ownership Costs ( <i>fixed</i> )	Total Cost	Cost per Kilometre
12,000 km	\$1,380.00	\$6,997.05	\$8,377.05	69.8¢
16,000 km	\$1,840.00	\$6,997.05	\$8,837.05	55.2¢
18,000 km	\$2,070.00	\$6,997.05	\$9,067.05	50.4¢
24,000 km	\$2,760.00	\$7,807.05	\$10,567.05	44.0¢
32,000 km	\$3,680.00	\$8,887.05	\$12,567.05	39.3¢

ANNUAL DRIVING COSTS based on the Caravan				
Kilometres Driven per Year	Annual Operating Costs ( <i>variable</i> )	Annual Ownership Costs ( <i>fixed</i> )	Total Cost	Cost per Kilometre
12,000 km	\$1,554.00	\$7,478.85	\$9,032.85	75.3¢
16,000 km	\$2,072.00	\$7,478.85	\$9,550.85	59.7¢
18,000 km	\$2,331.00	\$7,478.85	\$9,809.85	54.5¢
24,000 km	\$3,108.00	\$8,156.85	\$11,264.85	46.9¢
32,000 km	\$4,144.00	\$9,060.85	\$13,204.85	41.3¢

## HOW TO CALCULATE YOUR OWN VEHICLE EXPENSES

### Operating Costs

**Gas:** To determine gas costs, start with a full tank of gas, record the odometer reading, and drive until the tank is almost empty. (It is important to conduct the test under driving conditions you normally encounter.) Then fill up once again. Divide the number of kilometres driven since the start of the test, by the number of litres required to fill the tank. The result... the number of kilometres per litre your car is getting. Repeat the test for greater accuracy.

**Maintenance:** Proper maintenance affects the life of your vehicle, your fuel economy and your safety. Neglecting repairs and maintenance will show up eventually as increased depreciation. The best way to determine your maintenance costs is to keep a record of expenses. If you haven't kept a record, then estimate costs at an average of 2.59 cents per kilometre driven — an average developed for a standard sub-compact (Cavalier Z24) with only routine maintenance (3.01 cents for the Caravan).

**Tires:** How and where you drive has a significant effect on tire costs. High speeds, low tire inflation, hard cornering, rapid acceleration and quick stops all contribute to fast tire wear. The average tire wear and tire cost per kilometre is

about 1.65 cents for the Cavalier Z24 and 1.43 cents for the Caravan. A new set of tires can cost up to \$725. This is an average cost using Cavalier and Caravan tires.

### Ownership Costs

**Insurance:** To determine insurance costs, simply add the premiums of all policies directly related to vehicle operation.

**Licence, Registration & Taxes:** Licence and registration fees are an annual expense. Federal and provincial taxes paid when purchasing a vehicle should also be considered an annual fixed cost. They should be pro-rated over the actual life of the vehicle. For example, if you intend to keep your vehicle for four years, divide the total amount of tax by four in order to determine an annual cost. Taxes paid on leases are paid monthly. To calculate annual leasing taxes, multiply monthly tax by 12.

**Depreciation:** Depreciation is the difference between what you paid for your vehicle and its selling price. To determine your annual depreciation expense, subtract the estimated trade-in value of your car from the purchase price and divide by the number of years you expect to own the car. A good way to estimate trade-in value is to study used car ads.

KEEPING TRACK OF YOUR OWN VEHICLE COSTS (use explanations on previous page to help you fill in chart)		
Expense Item		Cost
Depreciated value of your car	+	
Insurance	+	
Taxes	+	
Licence and registration	+	
Finance charges	+	
<b>Total Fixed Costs</b>	=	
Gas and oil per kilometre		
Number of kilometres driven	×	
Cost per year	=	
Maintenance	+	
Tires	+	
<b>Total variable costs</b>	=	
<b>Total fixed costs</b>		
<b>Total variable costs</b>	+	
Misc. costs (car washes etc.)	+	
<b>Total driving costs</b>	=	
<b>Number of kilometres driven</b>	÷	
<b>TOTAL COST PER KILOMETRE</b> (Total driving costs divided by kilometres driven)	=	

## YOUR VEHICLE AND YOUR BUSINESS

While many firms continue to provide cars to their business travellers, growing numbers have their employees use personally-provided cars on company business.

Companies use three primary methods to reimburse an employee for business use of the personal vehicle.

**Flat kilometrage reimbursement:** Many companies give a flat allowance per kilometre, plus reimbursement for certain other charges, such as tolls and parking. The principal advantage of the flat kilometrage cost system is its simplicity. It involves a minimum of bookkeeping and office control. The major disadvantage is that it is inaccurate and results in overpayment or underpayment compared to the costs actually incurred by the drivers.

**Fixed periodic reimbursement:** Some companies reimburse drivers with a flat dollar factor per day, per week or per month. It, too, is inaccurate and results in overpayment and underpayment compared to actual costs.

**Automobile standard costs:** Some companies such as Runzheimer International provide services to accurately measure costs of transportation, taxes, meals, goods and services, lodging and housing. Under the transportation service, employees receive individualized rates, which are the basis of accurate reimbursement of car expenses.

If you operate your own company and often use your personal vehicle for business purposes, you may be able to write off some of your annual driving costs as business expenses. For complete details on tax deductibility and vehicle use for business purposes, we encourage you to seek the advice of a professional accountant or contact the Canada Customs and Revenue Agency.

CAA bases *Driving Costs* on data provided by **Runzheimer International Inc.**, a management consulting firm dealing in business vehicle allowance programs and fleet consulting services across North America. Founded in 1933, the firm serves more than 1,000 business and government agencies worldwide. The **Runzheimer Plan of Automobile Standard Costs** form the basis for the reimbursement of car expenses to 260,000 client employees. For more information call: **1-800-263-8762** or visit **[www.runzheimer.com](http://www.runzheimer.com)**.

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CAA is a federation of 11 automobile clubs serving over four million members through 130 offices across Canada. CAA provides a wide range of member services, has affiliates in 100 countries and works to improve traveling and motoring conditions at home and around the globe.

### CAA Member Clubs

CAA British Columbia  
Alberta Motor Association  
CAA Saskatchewan  
CAA Manitoba  
CAA Mid-Western Ontario  
CAA North & East Ontario  
CAA Central Ontario  
CAA South Central Ontario  
CAA Niagara  
CAA Québec  
CAA Maritimes

For membership information, please contact your local CAA Club.

Canadian Automobile Association  
National Office  
1145 Hunt Club Road, Suite 200  
Ottawa, Ontario  
K1V 0Y3

Phone: (613) 247-0117  
Fax: (613) 247-0118  
[www.caa.ca](http://www.caa.ca)

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