



2011 Edition

Driving Costs

*Beyond the price tag:
Understanding your
vehicle's expenses*



CANADIAN AUTOMOBILE ASSOCIATION



The information in this booklet applies to household vehicles, not business use. Organizations operating fleets of vehicles or paying employee allowances for personal vehicles should contact **Runzheimer International** for information regarding their services. www.runzheimer.com

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Driving Costs 2011

Beyond the price tag: Understanding your vehicle's expenses

Whether you buy new or used, there's more to the cost of your vehicle than the purchase price. Fuel, maintenance, depreciation—all kinds of factors add to your total cost of ownership.

Since transportation is an average household's second largest expense, it makes sense to get the full picture of what you're spending each year to keep your vehicle on the road. That's why the Canadian Automobile Association developed this booklet. By giving national averages and approximate figures as guidelines, *Driving Costs* helps you make the calculations you need to build an accurate transportation budget.

VEHICLE EXPENSES

All the average costs we've cited are for vehicles operating under mostly stop-and-go driving conditions. Costs are weighted by the population of each province to establish a nationwide composite average value, and **are calculated using figures available as of December 2010 except for fuel costs which reflect the average price in June 2011.**

There are two main kinds of costs associated with your vehicle:

Operating Costs: These are *variable*, meaning they may change depending on where you live, how you drive, how often you're on the road, and what you spend on service and repairs.

Ownership Costs: These are *fixed*, meaning they are normally stable from month to month. They include 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 shows the average costs of operating a vehicle in Canada. To calculate these national figures, we've used a:

- 2011 Chevrolet Cruze 1LT four-door sedan (1.4 litre 4 cylinder)
- 2011 Dodge Grand Caravan SE four-door passenger van (3.3 litre 6 cylinder)
- 2011 Toyota Prius HEV Premium four-door hatchback (1.8 litre 4 cylinder)

We've selected these three vehicles to represent small sedans, minivans, and hybrids – all of which are leading vehicle classes. Please note that actual costs will vary for other types of vehicles. To calculate another vehicle's costs, please see our chart on page 10.

For our selected vehicles, all are equipped with standard accessories, including air conditioning, anti-lock brakes, cruise control, power door locks and windows, AM/FM stereo with a CD player, rear window defroster, tilt steering wheel, and an automatic transmission.

AVERAGE ANNUAL OPERATING COSTS

AVERAGE ANNUAL OPERATING COSTS PER KILOMETRE – VARIABLE (based on 18,000 km of driving per year)			
	Cruze 1LT	Grand Caravan	Toyota Prius
Fuel	10.10 cents	14.47 cents	4.74 cents
Maintenance	2.43 cents	2.98 cents	2.73 cents
Tires	2.17 cents	2.20 cents	1.73 cents
TOTAL	14.70 cents	19.65 cents	9.20 cents

Gasoline costs are based on a national average gas price of 129.6 cents per litre. These costs reflect the purchase of regular, unleaded gasoline.



AVERAGE ANNUAL OWNERSHIP COSTS

AVERAGE ANNUAL OWNERSHIP COSTS – FIXED (based on 18,000 km of driving per year)			
	Cruze 1LT	Grand Caravan	Toyota Prius
Insurance*	\$1,913	\$1,807	\$1,963
Licence and Registration	\$112	\$115	\$114
Depreciation**	\$3,515	\$5,509	\$4,702
Finance Expense (Car Loan)***	\$699	\$998	\$1,061
ANNUAL TOTAL	\$6,239	\$8,429	\$7,840
Amount per day	\$17.09	\$23.09	\$21.48

*These insurance costs are based on typical insurance coverage (i.e. a vehicle driven less than 16 kilometres per day, to and from work, with no young driver – note: young drivers under 25 usually pay a higher than average premium). This coverage would also include:

- \$250 comprehensive deductible
- \$500 collision deductible
- \$1,000,000 inclusive third-party liability (total insurance cost)

**The depreciation factors given in the table above are average annual figures based on trade-in values for the three vehicle models after four years and 72,000 kilometres. For driving beyond 18,000 kilometres a year, add the following extra depreciation amounts to the fixed costs per thousand kilometres:

- \$28.00 for the Cruze 1LT
- \$33.00 for the Grand Caravan
- \$50.00 for the Toyota Prius

***Based on 6.50%; 10% down payment and a four-year loan.



ANNUAL DRIVING COSTS

The amount you drive has a direct relationship to your costs per kilometre. Using the Runzheimer figures in the preceding table, you can expect the following approximate costs:

ANNUAL DRIVING COSTS – based on the Cruze1LT				
Km driven per year	Annual operating costs (variable)	Annual ownership costs (fixed)	Total cost	Cost per km
12,000 km	\$1,764	\$6,237.85	\$8,001.85	66.7 cents
16,000 km	\$2,352	\$6,237.85	\$8,589.85	53.7 cents
18,000 km	\$2,646	\$6,237.85	\$8,883.85	49.4 cents
24,000 km	\$3,528	\$6,405.85	\$9,933.85	41.4 cents
32,000 km	\$4,704	\$6,629.85	\$11,333.85	35.4 cents

ANNUAL DRIVING COSTS – based on the Grand Caravan				
Km driven per year	Annual operating costs (variable)	Annual ownership costs (fixed)	Total cost	Cost per km
12,000 km	\$2,358	\$8,427.85	\$10,785.85	89.9 cents
16,000 km	\$3,144	\$8,427.85	\$11,571.85	72.3 cents
18,000 km	\$3,537	\$8,427.85	\$11,964.85	66.5 cents
24,000 km	\$4,716	\$8,625.85	\$13,341.85	55.6 cents
32,000 km	\$6,288	\$8,889.85	\$15,177.85	47.4 cents



ANNUAL DRIVING COSTS

ANNUAL DRIVING COSTS – based on the Toyota Prius				
Km driven per year	Annual operating costs (variable)	Annual ownership costs (fixed)	Total cost	Cost per km
12,000 km	\$1,104	\$7,840.20	\$8,944.20	74.5 cents
16,000 km	\$1,472	\$7,840.20	\$9,312.20	58.2 cents
18,000 km	\$1,656	\$7,840.20	\$9,496.20	52.8 cents
24,000 km	\$2,208	\$8,140.20	\$10,348.20	43.1 cents
32,000 km	\$2,944	\$8,540.20	\$11,484.20	35.9 cents



HOW TO CALCULATE YOUR VEHICLE EXPENSES

So how do you calculate your annual vehicle-related costs? The following explains how to arrive at accurate estimates for the various factors you need to consider. Plug these values into the table on page 10 and follow the line-by-line instructions to arrive at your total.

Operating Costs

Gasoline: To determine gas cost per kilometre, fill up your gas tank and take note of the kilometre reading on your odometer. On your next fill-up (be sure you refuel when the tank is close to empty), divide the cost of your fill-up by the distance you have driven. This is your gas cost per kilometre. For example, if it costs you \$50.00 to refuel and you drove 500 kilometres since your last fill-up, your gas cost per kilometre is 10 cents.

Maintenance: Proper maintenance affects the life of your vehicle, your fuel economy and your safety. Avoiding repairs and maintenance will cost you in the form of extra depreciation. The best way to determine your maintenance costs is to keep a record of expenses. If you haven't kept a record, estimate these costs at an average of 2.43 cents per kilometre driven—that's the average for a standard compact (e.g., the Cruze 1LT) with only routine maintenance. (For a vehicle in the class of the Grand Caravan use 2.98 cents; and for the Toyota Prius use 2.73 cents). Winter tires are mandatory in Quebec. For approximate costs, please check with local retailers.

Tires: How and where you drive affects your tire costs significantly. 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 kilometer is about 2.17 cents for the Cruze 1LT, 2.20 cents for the Grand Caravan and 1.73 cents for the Toyota Prius. A new set of tires can cost up to \$957 (this is an average cost using Cruze, Caravan and Prius tires). Winter tires are mandatory in Quebec. You can inquire with a local retailer about the approximate price.





Ownership Costs

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

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

Depreciation: Depreciation is the difference between what you paid for your vehicle and its eventual 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.



HOW TO CALCULATE YOUR VEHICLE EXPENSES

KEEPING TRACK OF YOUR OWN VEHICLE COSTS (use explanations on previous pages to help you fill in the chart)		
EXPENSE ITEM		COST
Depreciated value of your car		\$
Yearly insurance costs	+	\$
Yearly taxes	+	\$
Licence and registration fees	+	\$
Yearly finance charges	+	\$
Total fixed costs	=	\$
Gas per kilometre		\$
Number of kilometres driven per year	x	Km
Gas cost per year	=	\$
Maintenance (Yearly Average)	+	\$
Tires (Yearly Average)	+	\$
Total variable costs	=	\$
Total fixed costs		\$
Total variable costs	+	\$
Miscellaneous costs (car washes, etc.)	+	\$
TOTAL DRIVING COSTS	=	\$
Number of kilometres driven	÷	Km
Total cost per kilometre (Total driving costs divided by kilometres driven)	=	\$



YOUR VEHICLE AND YOUR BUSINESS

While many firms continue to provide cars for business travel, growing numbers have their employees use their own cars for company business. In the latter case, there are three main methods of reimbursement:

Flat Kilometre Reimbursement: Many companies give a flat allowance per kilometre, plus reimbursement for charges such as tolls and parking. The advantage of this system is its simplicity. It requires minimal 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 drivers.

Fixed Periodic Reimbursement: Some companies reimburse drivers with a flat-dollar factor per day, per week or per month. This, too, is inaccurate and results in overpayment or 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 for more accurate reimbursement of car expenses.

If you operate your own company and often use your personal vehicle for business, 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 is a federation of nine automobile clubs serving more than 5.6 million Members through more than 140 offices across Canada. With affiliates in more than 100 countries, CAA provides a wide range of insurance, travel and other services, and maintains a rewards program that provides Members with savings at 160,000 partner locations around the world.

CAA built its reputation providing outstanding emergency roadside assistance. Over the years we have also worked to improve road safety and develop community-based child safety programs. By educating drivers and promoting positive change in auto-related fields, we're helping improve travel and motoring conditions at home and around the globe.

CAA Member Clubs

CAA British Columbia	CAA South Central Ontario
Alberta Motor Association	CAA Niagara
CAA Saskatchewan	CAA-Quebec
CAA Manitoba	CAA Atlantic
CAA North & East Ontario	

For membership information, please contact your local CAA Club.

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This *Driving Costs* booklet is based 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, Runzheimer International serves more than 1,000 business and government agencies worldwide. Some 260,000 client employees are reimbursed for their vehicle expenses based on the **Runzheimer Plan of Automobile Standard Costs**.

www.runzheimer.com

Learn more about your vehicle and the environment

Visit the Office of Energy Efficiency website from Natural Resources Canada for more information on saving money, conserving energy and reducing the environmental impact of your vehicle.

www.oee.nrcan.gc.ca

