

Ownership Costs

Ownership costs (also called fixed costs) usually include depreciation, interest on borrowed money, license and insurance. In some situations you may want to include the cost of housing for the vehicle. Also, you may want to include the cost of operator labor if it is paid on a monthly or annual basis.

Ownership costs are incurred regardless of the number of miles driven. For example, if the annual ownership cost of a car is \$2,000 and you drive it 10,000 miles per year, the cost is 20 cents per mile ($\$2,000 / 10,000 = \$.20$). However, if you only drive it 5,000 miles per year, the cost is 40 cents per mile ($\$2,000 / 5,000 = \$.40$). Conversely, if you drive it 20,000 miles per year, the cost is only 10 cents per mile ($\$2,000 / 20,000 = \$.10$). So the more you drive the vehicle, the lower the ownership cost per mile.

Depreciation

Depreciation is the decline in the value of a motor vehicle due to wear, age and obsolescence. Age and accumulated miles of use are usually the most important factors in determining the remaining value of a machine. Also, the introduction of new technology or a major design change may make a vehicle suddenly obsolete, causing a sharp decline in its remaining value.

Purchase price, years the vehicle will be owned and sale or salvage value of the motor vehicle need to be estimated. The ownership life of a vehicle is the number of years that you expect to own it. It is often less than the motor vehicle's actual life because most people trade-in a motor vehicle before it is completely worn out. Sale or salvage value of the vehicle is what you expect it to be worth when you sell or trade it.

A new pickup that costs \$30,000 that you plan to own for 5 years and then sell for \$15,000 will have an annual depreciation of \$3,000 ($(\$30,000 - \$15,000) / 5 = \$3,000$). If the pickup is expected to have 12,000 miles of use per year, depreciation is 25 cents per mile ($\$3,000 / 12,000 = \$.25$).

If you already own the vehicle and want to know what it is costing you to own and use it, estimate the vehicle's current market value, the number of additional years you expect to own it, and its value at the end of the period. For example, if your car is worth \$10,000 today, you expect to own it for another four years and you estimate its sale value at \$5,000, depreciation is \$1,250 per year ($(\$10,000 - \$5,000) / 4 = \$1,250$). If the car is expected to travel 10,000 miles per year, depreciation is 12.5 cents per mile ($\$1,250 / 10,000 = \$.125$).

For vehicles that are leased, the lease payments will replace depreciation and interest.

Interest

If you borrowed money to purchase the vehicle, you will have an interest cost. The interest cost is the interest rate multiplied by the amount of outstanding debt.

For vehicles that are leased, the lease payments will replace interest and depreciation.

License and insurance

Annual license and insurance costs are usually minor costs when compared to depreciation and interest, but they need to be included. Actual expenditures can be used.

Labor (optional)

In certain business situations you may want to include the costs of the driver of the vehicle. If the operator is paid a fixed amount per month or per year, it can be included as a fixed cost because the same cost will be incurred regardless of the number of miles driven during the time period. However, if the operator is paid per hour or per mile, the cost should be included as a variable or operating cost, as explained earlier.

If the operator is paid \$40,000 per year, of which half of the time is devoted to driving the vehicle, and the annual mileage of the vehicle is 50,000 miles, the operator cost per mile is \$.40 per mile ($\$40,000 / 2 = \$20,000$) ($\$20,000 / 50,000 = \$.40$).

Total ownership cost

The total fixed ownership costs include depreciation, interest, license, insurance and fixed labor.

Total cost

After all costs have been estimated, the total ownership cost per year can be added to the operating cost to calculate total cost to own and operate the machine.

Cash Expenditures (optional)

You may be interested in only the cash expenditures associated with driving the motor vehicle. All of the operating costs are also cash expenditures. In other words you make a cash payment for them every year. The ownership costs are also cash expenditures, except for depreciation which is not included. Conversely, the principal payment on debt is included, although it is not actually a cost.

... and justice for all

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