

Transportation Expenditure



Noteworthy:

- Total registered vehicles increased by 427% between 1961 and 2003.
- In 1961, there were 0.46 cars for every Albertan aged 15 years and over.
- In 2003, there were 0.83 cars for every Albertan aged 15 years and over.
- Direct expenditure associated with personal automobile use in Alberta amounted to \$1,279 million (1998\$) in 1961.
- In 2002, direct expenditure associated with personal automobile use was \$8,376 million (1998\$).
- Direct expenditure associated with personal automobile use in Alberta increased by 555% from 1961 to 2002.
- The cost of transportation also includes substantial environmental and social costs (e.g., accidents).
- For every dollar spent on vehicle operating costs (the cost of fuel, etc.), approximately \$2.70 in environmental and social costs are imposed on society.

Transportation in Alberta: How Much?

More and more Albertans are using personal vehicles for transportation. In 1990, average kilometres traveled per passenger in the province was 37,664 km. By 1995, that figure reached 46,039 km and in 2003 it was 50,290 km.

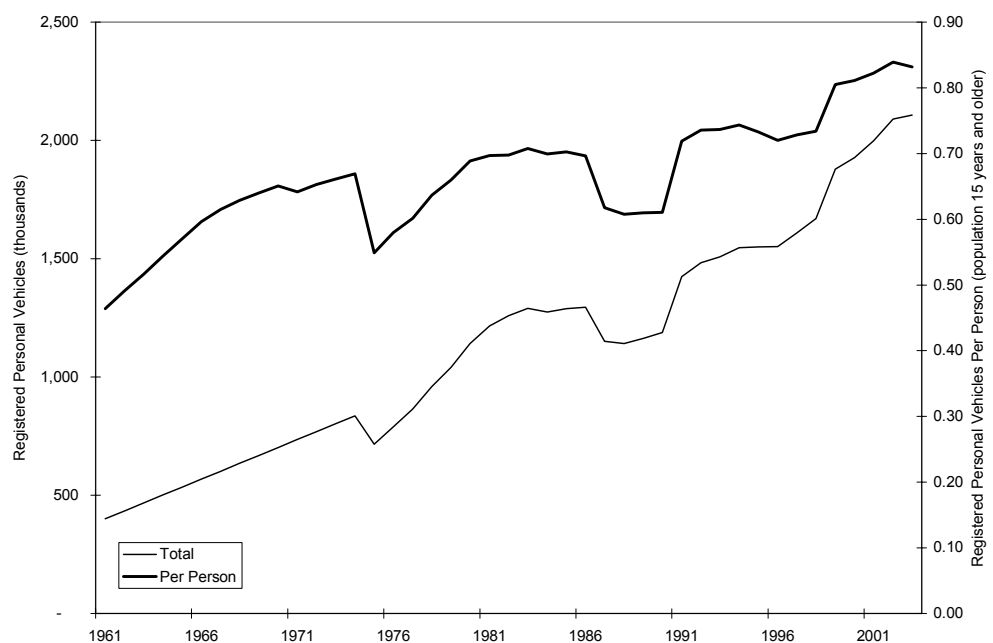
Not only are automobiles traveling further than in the past, but there are more of them than ever before. The

number of vehicles registered in Alberta increased substantially in the last several decades.

The figure below shows that both total registered vehicles and registered vehicles per person (population 15 years and over) have increased since 1961. Total registered vehicles increased by 427% between 1961 and 2003,

while cars per person increased by 79%. In 1961, there were 0.46 cars for every Alberta aged 15 years and over. In 2003, there were 0.83. With the increase in total registered vehicles, comes an increase in transportation expenditure. Direct expenditure associated with personal automobile use increased by a staggering 555% between 1961 and 2002.

Registered Personal Automobiles in Alberta, 1961 to 2003



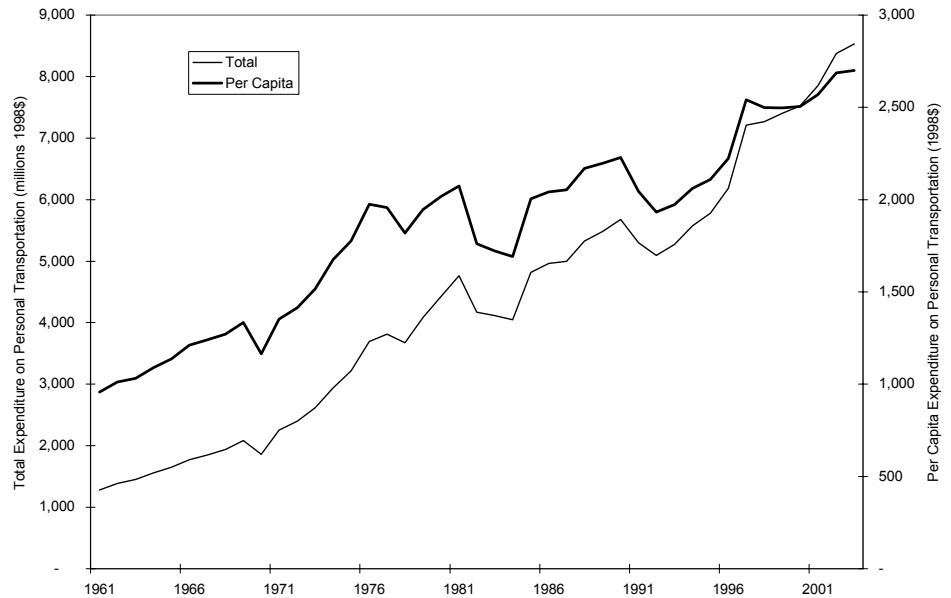
Source: Data from 1975 to 2003 from Statistics Canada CANSIM, other years derived through extrapolation.

So What?

The transportation sector in Alberta is substantial. The figure at the upper right shows the cost of personal automobile use in Alberta. Below, we show the same information as an index, comparing the trend in personal expenditure with that of provincial Gross Domestic Product (GDP). The costs depicted in these figures are merely the financial costs associated with automobile use. The cost of transportation also includes significant environmental and social costs, such as costs due to accidents. Motor vehicles, for example, produce a host of air pollutants, including carbon monoxide, particulates, nitrogen oxides, volatile organic compounds, sulphur oxides, carbon dioxide, methane, road dust, and toxic gases such as benzene. These emissions can cause human illness and death, crop and material damage, global warming, ozone depletion, acid rain and reduced visibility.

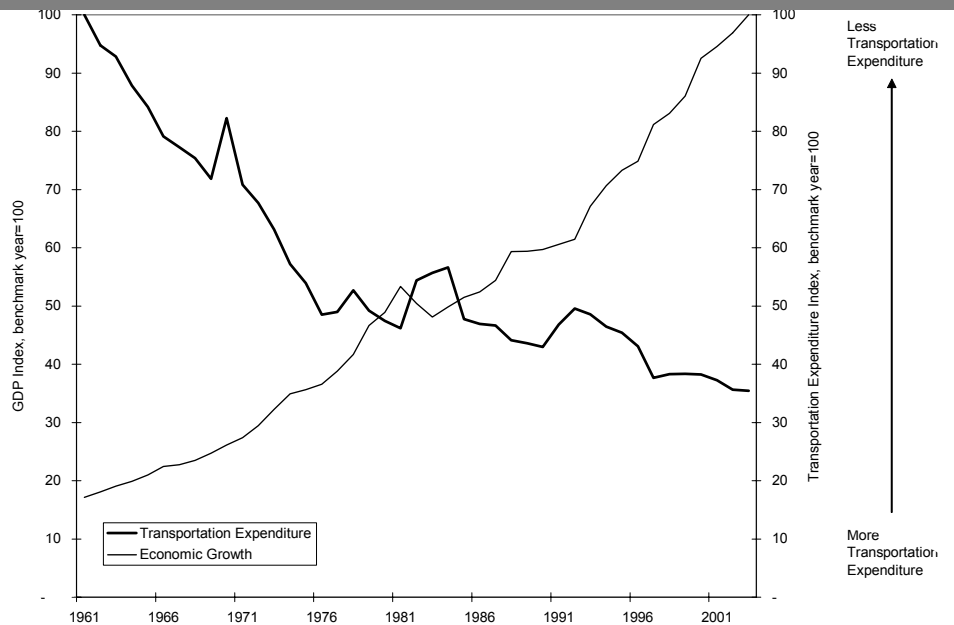
Indeed, the price that individuals pay—whether for personal transport, goods that are shipped by freight or an airplane ticket—is substantially less than the true (full) cost of travel when environmental and social impacts are taken into account. For example, research indicates that for every dollar spent on vehicle operating costs (the cost of fuel, etc.), approximately \$2.70 in costs are imposed on society. Thus a large portion of the true cost of driving is being subsidized by society at large in the form of reduced air quality and risk of injury or death. The same is true for both freight transport and airline travel.

Personal Expenditure on Automobile Use in Alberta



Source: Alberta Economic Accounts for data from 1971 to 2002 (other years extrapolated from trend)

Expenditure on Personal Automobile Use Index



Direct expenditure associated with personal automobile use in Alberta in 2002 was \$8.4 billion (1998\$). That is equal to 6.7% of 2002 GDP.

As an index, direct expenditure on personal automobile use in Alberta in 2002 ranked 36 on a scale where 100 is set equal to the least amount of expenditure between 1961 and 2002 (see figure above).

