

Household Infrastructure



Noteworthy:

- The GDP as a measure of well-being tells us that the more money we spend on consumer products such as household appliances and personal automobiles, the better off we are.
- The GPI attempts to account for the value of services from household infrastructure by measuring the flow of services from the stock of household infrastructure rather than the expenditures on the infrastructure itself.
- The value of services from household infrastructure in Alberta has increased gradually since 1961, from a total of \$1,184 million (1998\$) in 1961 to \$6,542 million (1998 \$) in 2003.
- Some progressive companies are beginning to see themselves as providers of a service based on the products they make, rather than regarding their products as the end point in the consumption process.
- Because the GPI Accounts focus on the services from infrastructure rather than the cost of the infrastructure, the GPI celebrates this kind of innovative thinking by progressive companies.

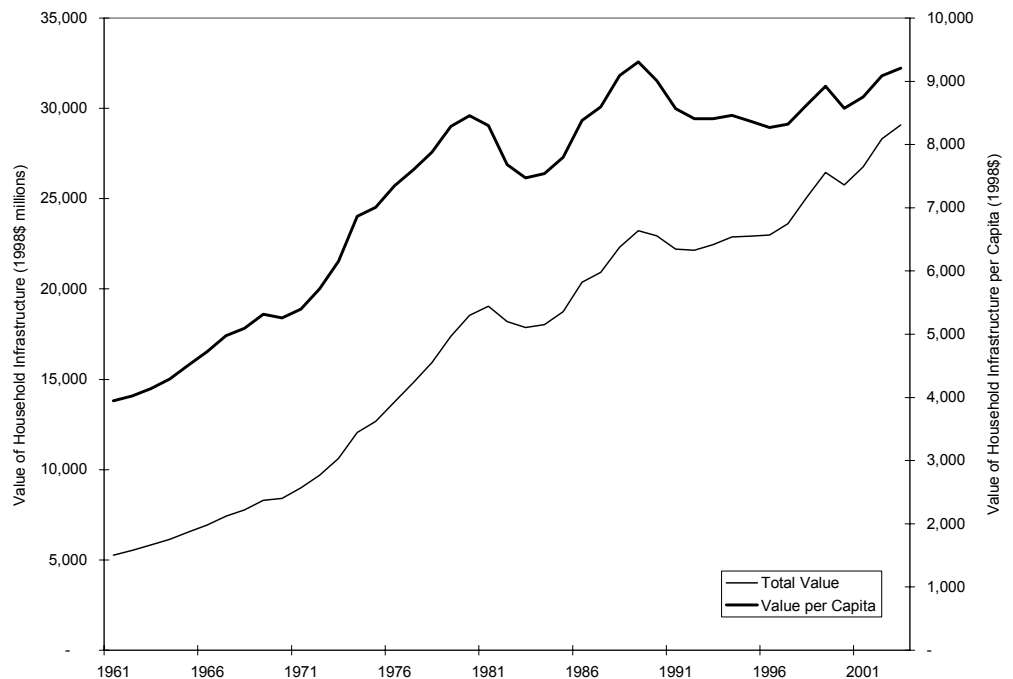
Household Infrastructure in Alberta: How Much?

The Gross Domestic Product (GDP) records economic transactions that take place in the market. When a family invests in a new car, dishwasher or refrigerator, for example, the GDP records these transactions and it increases as a result. The GDP as a measure of well-being therefore, tells us that the more money we spend on consumer

goods such as household appliances and personal automobiles, the better off we are. In other words, the sooner the car or dishwasher breaks down and has to be replaced, the more our well-being increases. However, households actually get more value from the infrastructure if it is made to last longer. The GPI attempts to account for the value of services from household infrastructure by measur-

ing the flow of services from the stock of household infrastructure rather than the expenditures on the infrastructure itself. The figure below shows the value of the stock of household infrastructure in Alberta. It is from this that the service value of infrastructure is measured, assessed at 22.5% of the stock value.

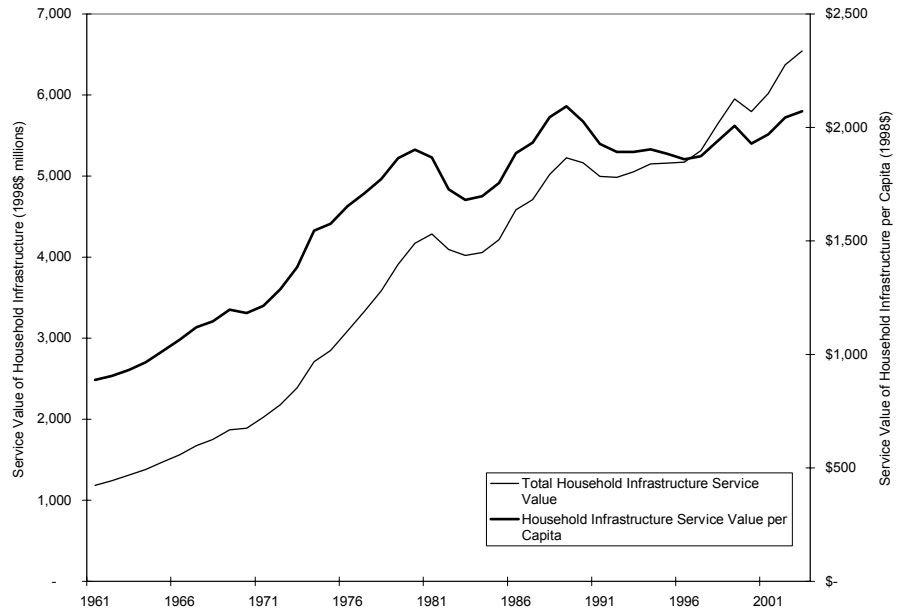
Asset Value of Household Infrastructure in Alberta, 1961 to 2003



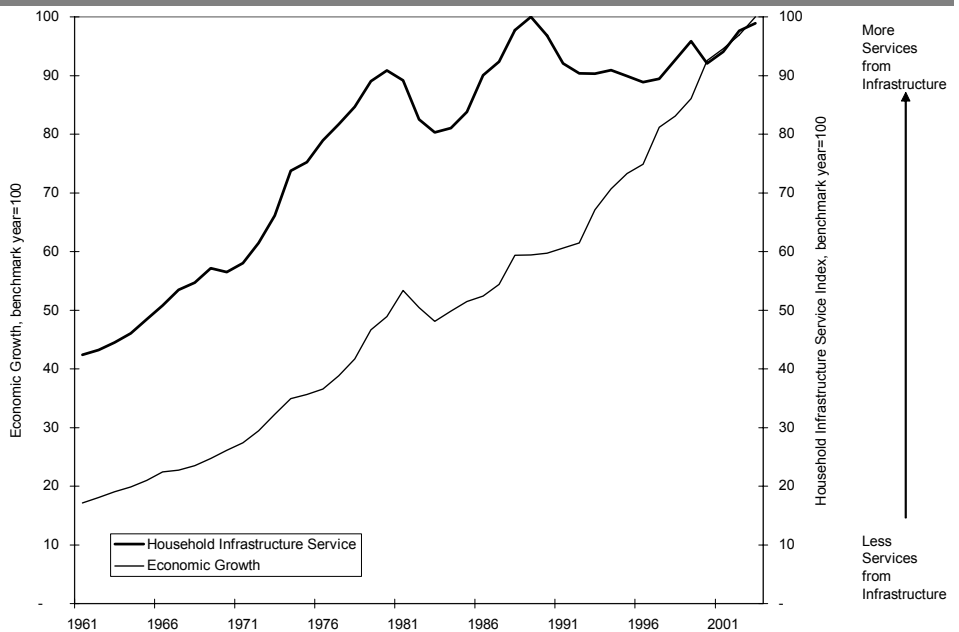
So What?

Some progressive companies like Interface Inc. and IKEA are beginning to regard their product as the “provision of a service” rather than the end point in the consumption process. For example, instead of seeing their product as a carpet that a customer buys, owns and eventually landfills, these companies view their carpets as providing a service to customers who want to cover their floors. Interface has re-engineered its industrial complex and carpets such that they offer “service lease” agreements. Consumers lease the carpet while the company retains ownership of the product from “cradle to grave” (that is, from the plant to the recycling and reuse of materials). Such corporate actions contribute to the well-being of consumers by providing them what they need (service from carpets) while (a) reducing the amount of material that ends up in landfills, and (b) using materials more efficiently. Any measure of the well-being of a region should account for the services received from the infrastructure rather than for the cost of the infrastructure itself. Interface and other companies are moving to what is known as “industrial ecology,” where waste is reduced and products are turned into services. The GPI accounts the outcomes (more efficient and reduced material throughput) of industrial ecology practices as a benefit to well-being. The top figure shows that the value of services from household infrastructure in Alberta has increased gradually since 1961, from \$1,184 million (1998\$) in 1961 to \$6.542 million (1998\$) in 2003. The bottom figure shows the service value of household infrastructure and GDP as indices. For the index, the highest per capita value of services from household infrastructure is set equal to 100, and deviations from that benchmark year are measured as movement towards zero. The per capita value of services peaked in Alberta in 1989.

The Value of Services from Household Infrastructure, Alberta



Household Infrastructure Index: Where are we today?



The service value of household infrastructure in 2003 was equal to \$6.5 billion (1998\$). That is equal to 5% of 2003 GDP.

As an index, services from household infrastructure in Alberta in 2003 ranked 99 on a scale where 100 is equal to the highest service value between 1961 to 2003 (see figure above).

