

# Mobility monitor

## Transportation Data

Monitoring today,  
for tomorrow.

## This issue

## Telework

September 2008  
Issue #29

### KEY FINDING

**From 1996 to 2006, the number of teleworkers in Calgary grew by 128 per cent.**

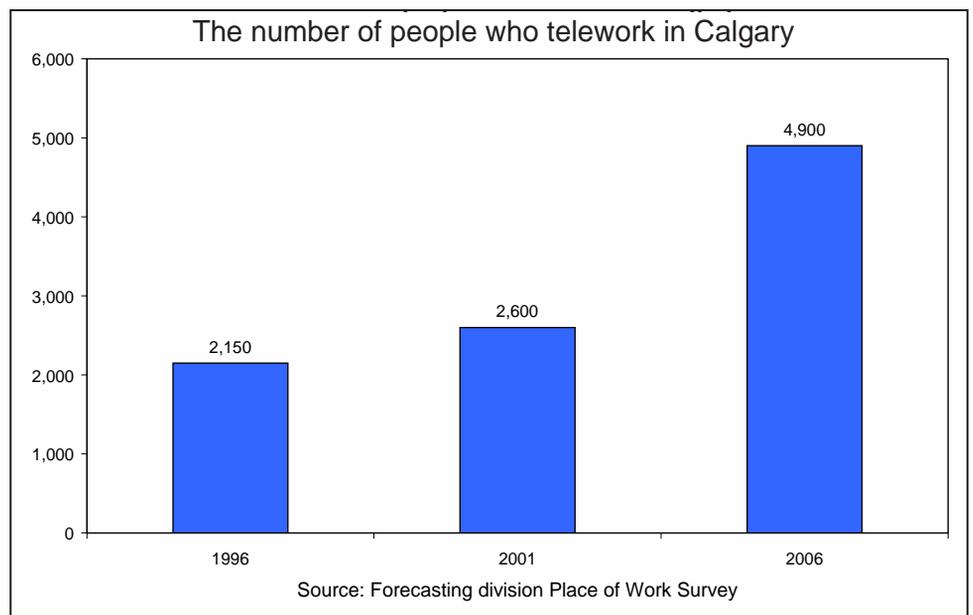
Telework refers to work by an employee performed away from the traditional office; this could be from home, a satellite office or partner site, using telecommunications and computer technology. Telework can be fulltime, occasional or ad-hoc. Most telework takes place one or two days per week.

The number of teleworkers in Calgary increased 88 per cent from 2,600 in 2001 to 4,900 in 2006. This followed an increase of 20 per cent from 2,150 in 1996 to 2,600 in 2001. Overall, the number of teleworkers more than doubled from 1996 to 2006, increasing by 128 per cent.

From 2001 to 2006 telework in Calgary has increased six times faster than the rate of population growth (13 per cent) and out pacing job growth (20 per cent) by four times.

During this same time frame Calgary's growth in teleworkers exceeded the 60 per cent predicted increase in teleworkers forecasted across Canada from 2001 to 2006.

Statistics Canada estimates there are between one million and 1.5 million Canadian employees who telework.



## KEY FINDING

*Teleworkers reported moderate to large decreases in the time they spend commuting.*

### Telework pilot

The City of Calgary launched a four month telework pilot in May 2007. Information was gathered from the teleworkers, their supervisors and co-workers through surveys and interviews to identify the impact of telework. Transportation and environmental impacts were collected using an on-line trip log.

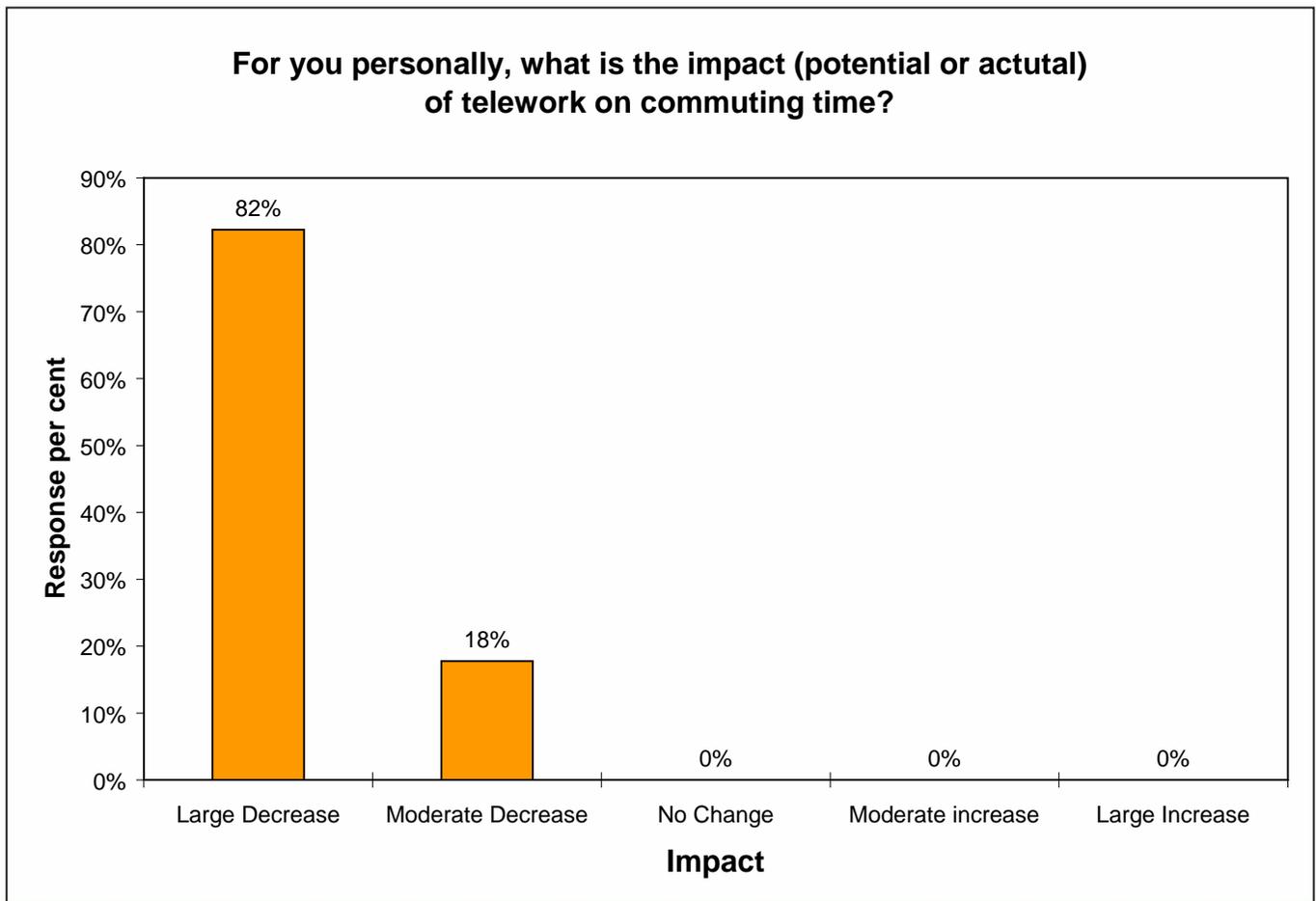
### Transportation and Environmental impact

Over the course of the telework pilot, 100 employees teleworked from home a total of 1,828 days and reduced vehicle kilometres traveled by 80,487 kilometres. In turn this resulted in a reduction of greenhouse gases of 18,366 kilograms and 1,286 kilograms fewer particulate pollutants. On average, the telework pilot participants worked from home one out of four days (25 per cent of the time).

Telework eliminated or reduced a considerable number of commuting trips, especially rush hour trips. Because such trips are a source of pollution and greenhouse gases, telework can be a highly advantageous way to benefit the environment while reducing congestion.

- The overwhelming majority of teleworkers stated that telework resulted in decreased commuting.
- About half of the respondents said telework saved them between 26 and 100 kilometres a day.
- Almost 20 per cent of teleworkers live outside the city and some have very long commutes. One teleworker cited a 175 kilometre decrease per day in commuting due to telework.

Employees indicated they want the flexibility and the freedom from commuting and commute-related expenses such as parking costs. Calgary has the highest cost for downtown parking of any Canadian city.



## KEY FINDING

**Most teleworkers, their colleagues and their supervisors report improved or the same productivity during telecommuting.**

### Quality of work impact

Many employers are reluctant to allow employees to telework because of concerns about negative impacts on productivity.

The City's Telework Pilot addressed this issue. The chart below shows the responses for the quality of work question. Over 88 per cent of all participants felt that telework resulted in the same or increased quality of work. A further 10 percent said they didn't know, and only 2 per cent felt there was a decrease.

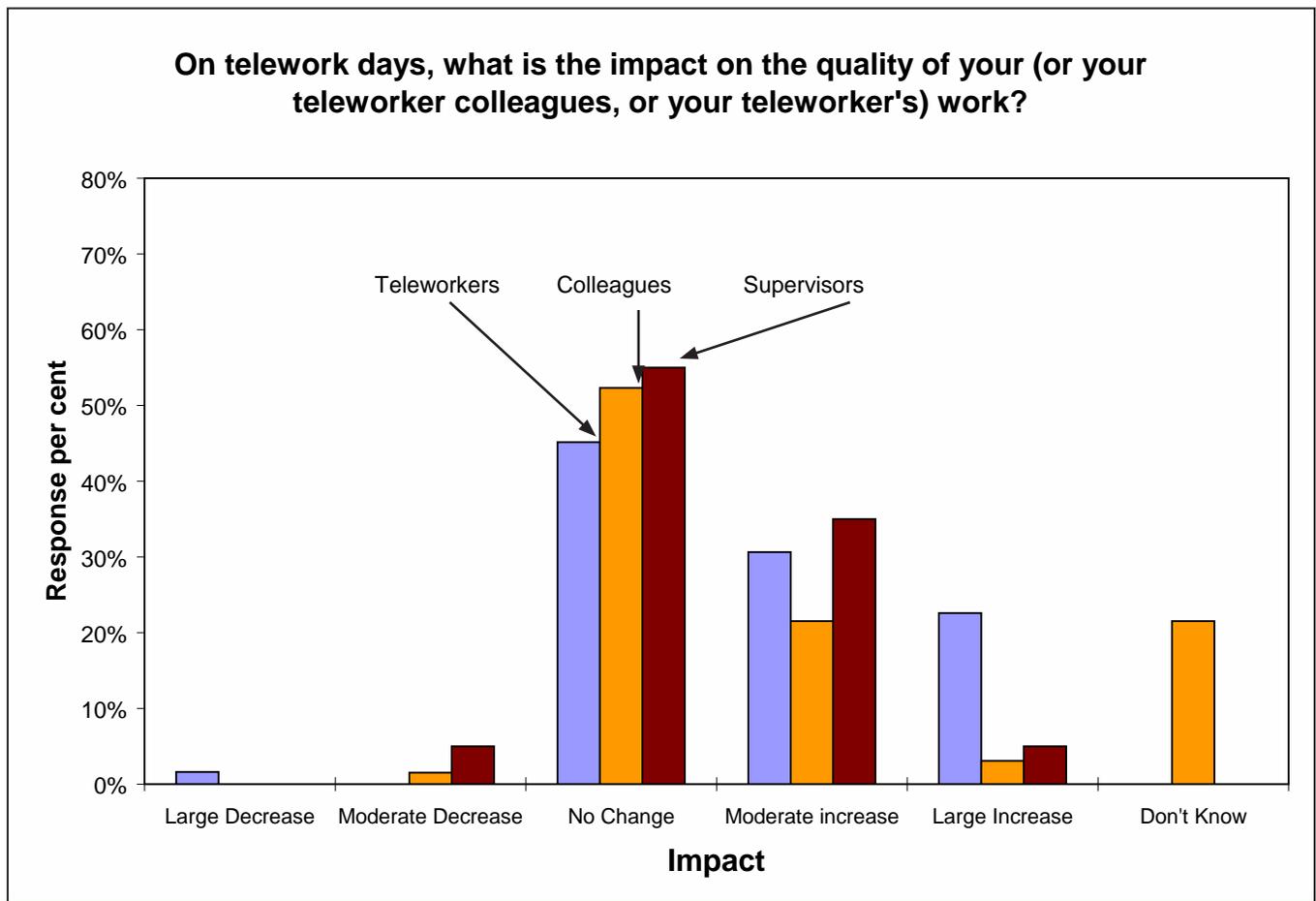
The majority of supervisors stating there was either no change or an increase in quality. Supervisors were more likely to have a positive view of improved quality than colleagues.

Similar results were found for the quantity of work done by teleworkers.

Thirty per cent of teleworkers perceived reductions in absenteeism; the remaining 70 per cent of teleworkers and most co-workers and supervisors felt that telework had no impact on absenteeism.

The small proportion of negative responses suggests that telework may not be suitable in some situations.

The telework pilot follow up survey had 62 responses from people who teleworked, 65 responses from people who worked with teleworkers and 20 responses from people who supervised teleworkers.



## Implications

Calgary is positioned to adopt telework strategies that could mitigate the pressures of continued growth in our city by reducing travel demand during peak periods.

A telework pilot undertaken by the City has demonstrated the benefits of telework. The pilot also suggests that worries about reduced productivity resulting from telework are unfounded.

Telework can be a significant component in a strategy to reduce transportation related greenhouse gas emissions to meet corporate targets or government commitments. Benefits include fewer kilometres travelled and less vehicle tailpipe emissions, greenhouse gases, and other air pollutants.

Social benefits of telework include improved community liveability, increased safety, and improved mobility options.

Telework creates healthier commuters through lower stress and improved job satisfaction and work/life balance.

Economic benefits include reduced employer and employee costs, reduced delays, facility cost savings, consumer savings, lower maintenance costs, and efficient land use.

## Sources of Information

Telework data for Calgary was taken from place of work surveys conducted by the Forecasting division of Transportation Planning with the Civic Census. The place of work surveys are done every 5 years. Population data is taken from the Civic Census. The Canadian telework forecast was published by Gartner Dataquest (June 2004). This and other telework survey information was obtained from the Canadian Telework Association website <http://www.ivc.ca/>. Other data was extracted from The City of Calgary's telework pilot.

## The Mobility Monitor

The Mobility Monitor is part of the Ongoing Monitoring and Implementation Program (OMIP) for the Calgary Transportation Plan (CTP). The purpose of the Mobility Monitor is to report on strategic trends and events that affect the implementation of the CTP, and to recommend future actions. The Mobility Monitor is produced by the Transportation Data division of Transportation Planning.

## How accurate and reliable are these data?

How concerned should you be by the potential for error in the data presented in The Mobility Monitor? A 10 per cent sample of employees in Calgary was used to estimate the number of people who telework. Other surveys had smaller sample sizes. All surveys are subject to uncertainty.

A change from one year to the next may be due to some random event, such as the weather, accidents or illness. This is why it is wise to look at trends, since changes that are consistent over a long period of time are more likely to be real, and not the result of random events.

It must be kept in mind that no one source of information can claim to be infallible. Consideration and appropriate weighting of other sources of information is to be encouraged before making decisions.

