

Transportation Data

Monitoring today, for tomorrow.

This issue

Commuter Cycling in Calgary

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KEY FINDING:

The number of people cycling to downtown has increased since 1991.

The chart below shows the number of cyclists entering the downtown during a 16-hour period. Over the years, there has been a steady increase in the number of cyclists traveling to downtown. Since 1991, the number of cyclists has increased more than four times to 9,500 in 2008.

During the same period, the length of pathways and bikeways (off-street and on-street facilities, respectively) increased by approximately three times to 1,040 kilometers.





Note: Cyclists count data was not collected in 1993, 2003, 2004 and 2005



KEY FINDING

The number of people who cycle is dependant on the weather.

A new secure bike parking facility (the "bike cage") was opened for City employees at the Municipal Building in 2008. All City employees with an access card can use the bike cage. This, in combination with weather records offered a wealth of information on how weather affects a person's decision to cycle to work.

The chart below shows clearly that the temperature does impact the decision to cycle to work. Most cyclists used the bike cage when the temperature was above 0°C with the highest usage when the temperature was above 20°C.

Once the temperature drops below -10°C, further decreases in temperature do not affect the number of cyclists greatly. Even on a coldest day (-23.8°C) two bicycles were counted in the cage.

Precipitation (e.g., rain, snow, hail) also affected whether people chose to cycle to work. On average the number of people cycling on days with precipitation was 20 per cent lower than on days with no precipitation.

In Calgary, historical data shows that there are 150 days with any precipitation a year. On average 12 days receive more than 10mm of precipitation annually.



Precipitation in Calgary (Canadian Climate Normals 1971-2000)





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DID YOU KNOW?

In 2006, the median one-way commuting distance of workers in Calgary (all modes) was 8.2km. Almost one third commute less than 5 km one-way.

Statistics Canada produced a report *Commuting Patterns and Places of Work of Canadians*, based on 2006 Census. Calgary was among the 25 municipalities that were surveyed.

The proportion of workers who commute less than 5 km is lower in Calgary (30.5 per cent) than the median for 25 Canadian municipalities (35.3 per cent).

In the Calgary 2006 Downtown Commuter Cyclist Survey, the average cycling distance to downtown was 10 km. This would take between 30 and 50 minutes to cycle depending on fitness level and number of stops required along the route. This means that 5 km would take between 15 and 25 minutes to cycle.

.Who is a typical cyclist commuting to downtown?

Typical cyclists commuting to downtown are male (75 per cent), over 35 years of age (65 per cent) and having a personal income of more than \$90,000 a year (45 per cent). They cycle to work nine months of the year for an average commute distance of 10 kilometers (28 minutes) each way.

Their main reason for doing so is exercise. When not riding their bikes, they are most likely to take transit than any other mode. They have access to a car, but choose not to drive it to work.

The majority of downtown commuter cyclists that were surveyed in 2006 live in communities north and west of the downtown core. Reasons for the higher number of cyclists from these areas might include the proximity to and use of the Bow River Pathway, which acts as a non-stop, direct route into downtown. The Bow River Pathway is also cleared of snow in the winter making it an attractive and accessible, year-round facility.







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Conclusion

Although commuting by bicycle still makes up a small proportion of travel within Calgary, it has been growing and has the potential to grow further.

There are several factors that can affect a person's choice to cycle, such as the weather, the lack of bicycle lanes or pathways, the lack of bicycle parking and other supporting facilities (e.g., showers) at one's destination, individual fitness levels, safety or travelling comfort.

Most inner city communities are within a reasonable travel time to the downtown by bicycle, and cycling from some areas is faster than driving a car. This suggests that the primary barrier to wider use of cycling for travel in the city is not travel time.

The City is committed to removing the physical barriers to cycling. Missing links on the off-street pathway are continually being constructed. Twenty kilometers of on-street bicycle routes have been improved with facilities such as bike lanes, shared lanes and bicycle detection at intersections. The land use bylaw has provision for long-term and short-term bicycle parking with most new developments to ensure cyclists have safe and secure storage for their bicycle.

The majority of respondents (62 per cent) in the 2006 Downtown Commuter Cyclist Survey indicated that increased snow clearing would encourage them to ride more in the winter. The City currently clears 110km of off-street pathways as well as all marked on-street bicycle routes (bike lanes and marked shared lanes).



Sources of Information

The number of cyclists entering the downtown was obtained from the Downtown Cordon Count Program. In this program, the number of pedestrians, bicycles and vehicles (trucks, transit and auto) entering the downtown are counted. The program is done every year during the month of May. Cyclists count data were not collected in 1993, 2003, 2004 and 2005.

The number of people using the Municipal Building bike cage was obtained from the automated sign-in system. Data presented here are for the period June 24, 2008 to April 16, 2009. The weather information was accessed from the Environment Canada website, Canadian Climate Normals 1971 – 2000 for Calgary.

The 2006 Downtown Commuter Cyclist Survey was conducted by the City by distributing mail-in surveys at 20 locations where cyclists entered the downtown.

The commuting distance and proportion of workers in relation to commuting distance was obtained from the Statistics Canada, *Commuting Patterns and Places of Work of Canadians*, 2006 Census

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? Vehicle traffic on a road can vary by ten per cent or more from one day to the next. The results presented in this Mobility Monitor suggest that the day to day variability of cycle use is even higher.

A change from one year to the next may be due to some random event, such as the weather, accidents or illness. Therefore 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 just 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 encouraged before making decisions.

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.