

## Transportation Data

Monitoring today, for tomorrow.

# This issue

Modal split for the trip to work

**April 2008 Issue #24** 

### **KEY FINDING**

Between 2001 and 2006, the proportion of people working in Calgary who chose to drive their cars has dropped.

The two pie charts for 2001 and 2006 show a drop in people who drive to work.

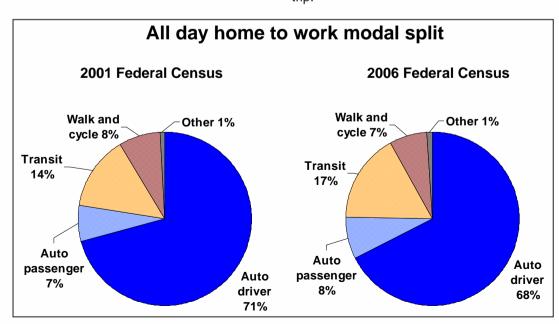
Conversely, people who ride transit to work went up from 2001 to 2006.

More people are travelling to work as automobile passengers, which was unexpected. Mobility Monitor #16 reported that automobile passengers has declined on the downtown cordon.

The proportion of people who walk or cycle to work has gone down. The 2001 data was collected shortly after the 2001 transit strike, which pushed up walking and cycling.

## What do you mean by modal split?

The variety of travel choices, like walking, cycling, transit, automobile passengers and drivers are known as modes. The modal split is the proportion of each mode that is chosen. The modal split can vary widely depending on the time period and type of trip.



Source: Adapted from Statistics Canada Community Profiles website www.statscan.ca



## **KEY FINDING**

## The 2001 to 2006 downward trend in the proportion of Calgarians who use the automobile to travel to work continues a similar trend from 1996 to 2001.

There is a consistent downward trend in automobile drivers and passengers over the last 10 years. Reducing the reliance on the automobile for travel in Calgary was a goal of the Calgary Transportation Plan (CTP) adopted in 1995.

The transit modal split increased from 1996 to 1999, then dropped back slightly in 2001. By 2006 the transit modal split had jumped back up.

Walking and cycling modal split grew slightly from 1996 to 2001. From 2001 to 2006, it fell slightly, but still remains higher than in 1996.

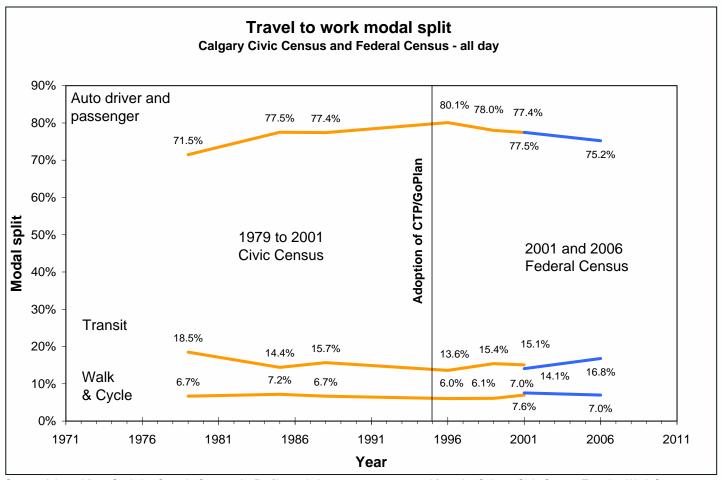
These results support the idea that Calgarians are considering modes other than the automobile to address their travel needs.

## Why do the Civic Census and the Federal Census disagree in 2001?

The Civic Census was done in April 2001 and the Federal Census was done in June 2001. The change in weather between these two surveys could explain the differences. In addition, a transit strike occurred between these two surveys, which may also help explain the change.

The choice of mode question on the Federal Census was asked at 20 per cent of households, while the choice of mode question on the Travel to Work survey was asked at 10 per cent of households.

These survey results cannot be compared to travel forecasts because the forecast represents what people did on a specific day, while the survey represents what people do on a normal day.



Source: Adapted from Statistics Canada Community Profiles website www.statscan.ca and from the Calgary Civic Census Travel to Work Survey

#### **KEY FINDING**

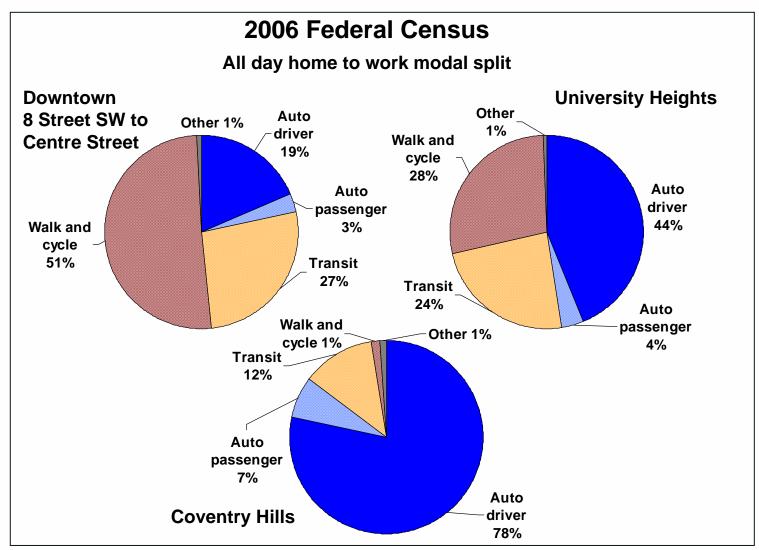
While the number of people who walk to work in Calgary is low compared to travelling by automobile, some areas of the city have more than half the people walking to work.

The first pie chart shows the modal split for a portion of the downtown including Eau Claire, parts of Chinatown and the commercial core. Over half of the people in this area walk to work. Over a quarter use transit and about one in five are drivers or automobile passengers.

The second pie cart shows the modal split for University Heights. This area is located between the University and Foothills Hospital. Again, there is a high proportion of people walking or cycling to work. The area enjoys good transit service and nearly a quarter of people traveling to work take transit. Nearly half report using an automobile.

The third pie chart shows the modal split for Coventry Hills. The automobile dominates the mode choice with over 85 per cent. The transit modal split is half that of University Heights. Walking and Cycling are negligible.

The downward trend in the modal split for walking and cycling noted earlier likely reflects that most of the growth in the city is typically in communities like Coventry Hills, and not communities like the Downtown and University Heights. The people living in University Heights and Downtown have many jobs in close proximity and walking and cycling are important options. The people living in Coventry Hills have very few jobs in close proximity and driving is often the only option.



Source: Adapted from Statistics Canada Community Profiles website www.statscan.ca

## **Implications**

The results of the Federal Census and Civic Census Travel to Work Surveys paint a slightly different picture from the results of the Downtown Cordon (Mobility Monitor #16 – July 2007). They both show increases in transit use.

The Federal Census shows an increase in automobile passengers, while the Downtown Cordon shows a decrease. The Federal Census shows a decrease in walking and cycling, while the Downtown Cordon shows an increase.

These discrepancies could be due to the differences in the two measurements of modal split. The Census surveys look at all people in the City that go to work during the day, while the downtown cordon looks at all people entering the downtown during the peak hour.

As the more detailed look at some of the communities shows, the modal split can vary quite a bit from one part of the city to the other. People in communities in close proximity to jobs are more likely to walk or cycle than people living in communities that are not in close proximity to jobs.

Understanding the reasons behind the wide variations in modal split will be helpful in developing policies to encourage people to walk, cycle and use transit.

Travel to work surveys are a useful and low cost source of information to track the changing demand for transportation in Calgary. However, the value of the travel to work surveys is limited. They only focus on travel to work and simplify the complexities of that kind of travel. The results are not directly comparable to The City's other more detailed travel surveys, or the travel forecasts based on them.

The results presented here tend to support the impression that the people of Calgary are willing to give up their automobiles for other modes of travel. Whether this is a result of the efforts The City has made to encourage this, or if it reflects a more general shift in society is less important than the need for future transportation plans to incorporate this shift.

There is a need for future transportation plans, strategies and actions taken by the Transportation department to reflect the shift happening in choosing non-auto modes of transportation for daily travel.

#### Recommendations

Consider a more in-depth study of the Federal Census data and other travel data available to the City to better understand the characteristics of walk, cycle and transit use in Calgary.

### **Sources of Information**

The information in this Mobility Monitor was obtained from the Federal Census (2001 and 2006) and from the City of Calgary Civic Census Travel to Work Surveys (1996, 1999 and 2001).

The 2006 Federal Census provides information on the travel modes (automobile driver, automobile passenger, transit, walk or cycle) that people used to go to work. The information on choice of mode in the Federal Census comes from 20 per cent sample on the long form. The Federal census is collected in June.

The Travel to Work surveys were done by the Forecasting division of Transportation Planning as part of the Calgary Civic Census. A 10 per cent sample is used. The data is collected in April.

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#### 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? Both the Federal Census and Civic Census have good records for providing high quality data.

Even so, 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 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 to be 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.