# Mobility monitor

## Transportation Data

Monitoring today, for tomorrow.

## This issue

**Peak ridership changes for bus and LRT**

**October 2008**
**Issue #30**

### *Downtown core study area defined*

The LRT and bus maximum load point studies focus on the number of riders entering the downtown core during peak travel periods using the two different modes. For Calgary Transit's purposes, the downtown core is defined as being contained within the boundaries of the Bow River to the north, 17th Avenue S to the South, 11th Street SW to the West, and sixth Street SE to the East. These locations (among others) are studied from 6 a.m. to 9 a.m. for the AM peak study, and from 3 p.m. to 6 p.m. for the PM peak study.

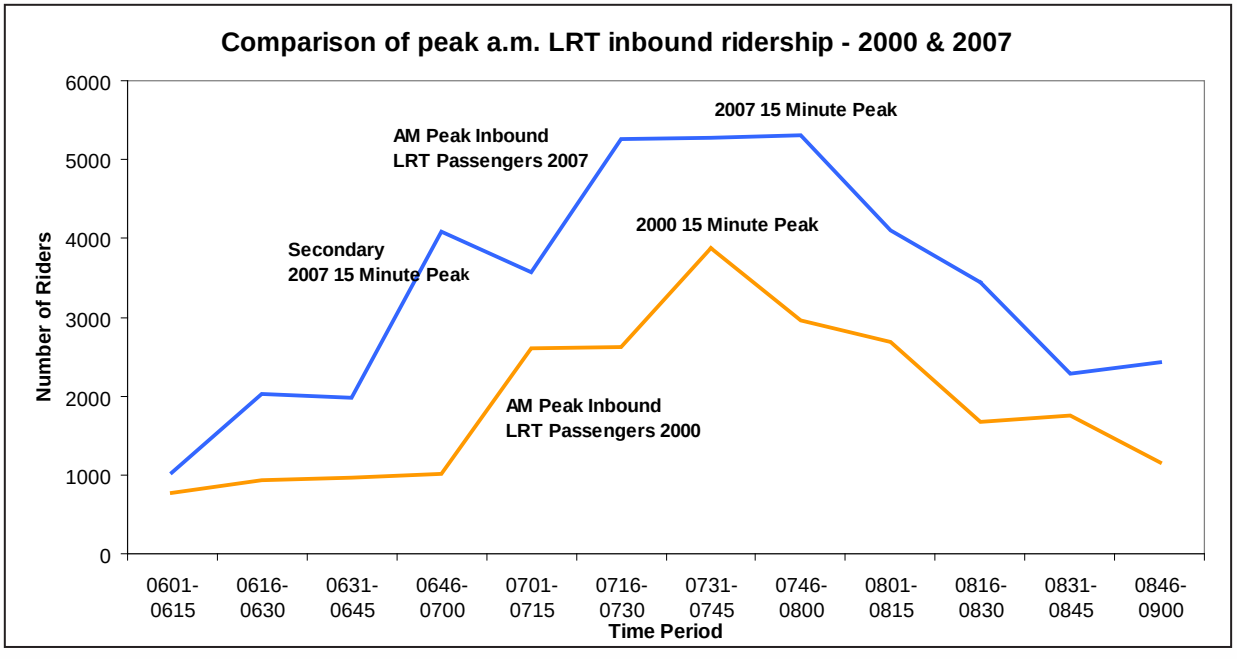
### *Calgary Transit maximum load point study area*

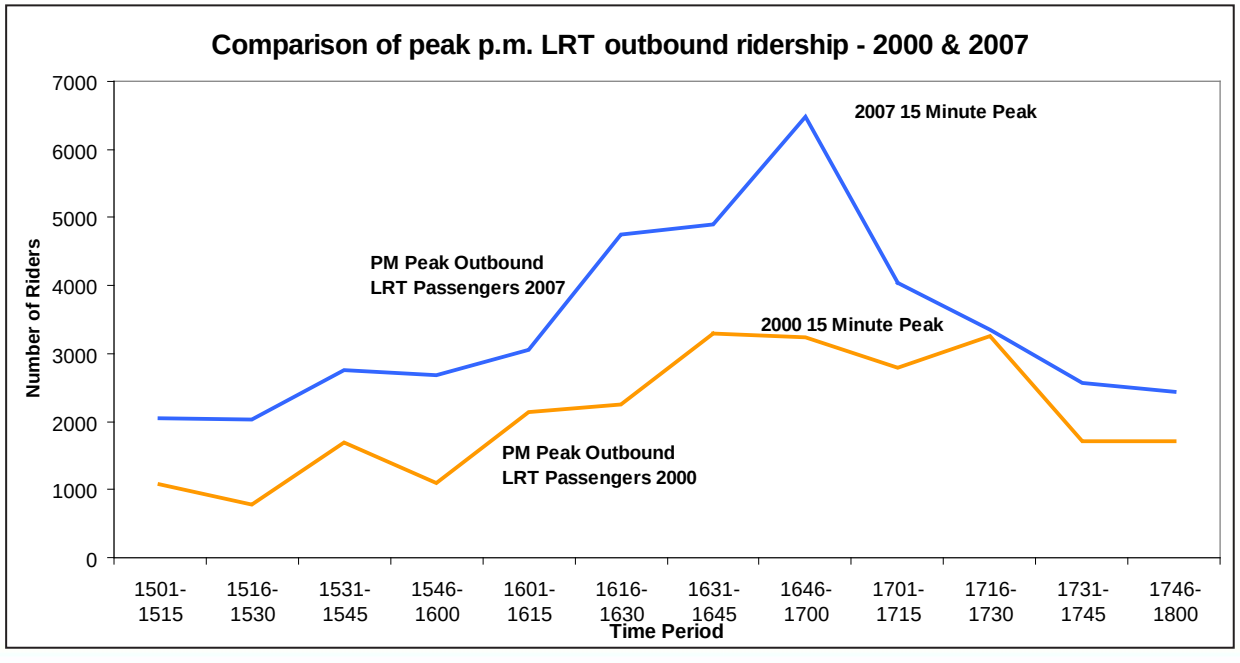
## *KEY FINDING*

### *Comparison of 2000 and 2007 fall LRT data indicates a shift in peak LRT travel time by 15 minutes. A large increase in peak p.m. ridership is also evident.*

When comparing fall a.m. peak ridership during the years 2000 and 2007, a shift in 15 minute peak ridership is noted between 7:45 a.m. and 8 a.m. In 2000, the 15 minute peak ridership time was between 7:30 a.m. and 7:45 a.m. It should also be noted that a secondary peak has formed from 6:45 a.m. to 7 a.m. whereas in 2000, a steady increase in ridership was observed during these times.

When comparing p.m. peak ridership, it is noted that a more substantial 15 minute peak travel time can be observed from 4:45 p.m. to 5 p.m. In 2000, more of a steady peak travel time took place from 4:30 p.m. to 5:30 p.m., with the peak travel time coming in between 4:30 p.m. and 5 p.m. Again, a 15 minute shift in peak travel time is noted between the year 2000 and 2007.

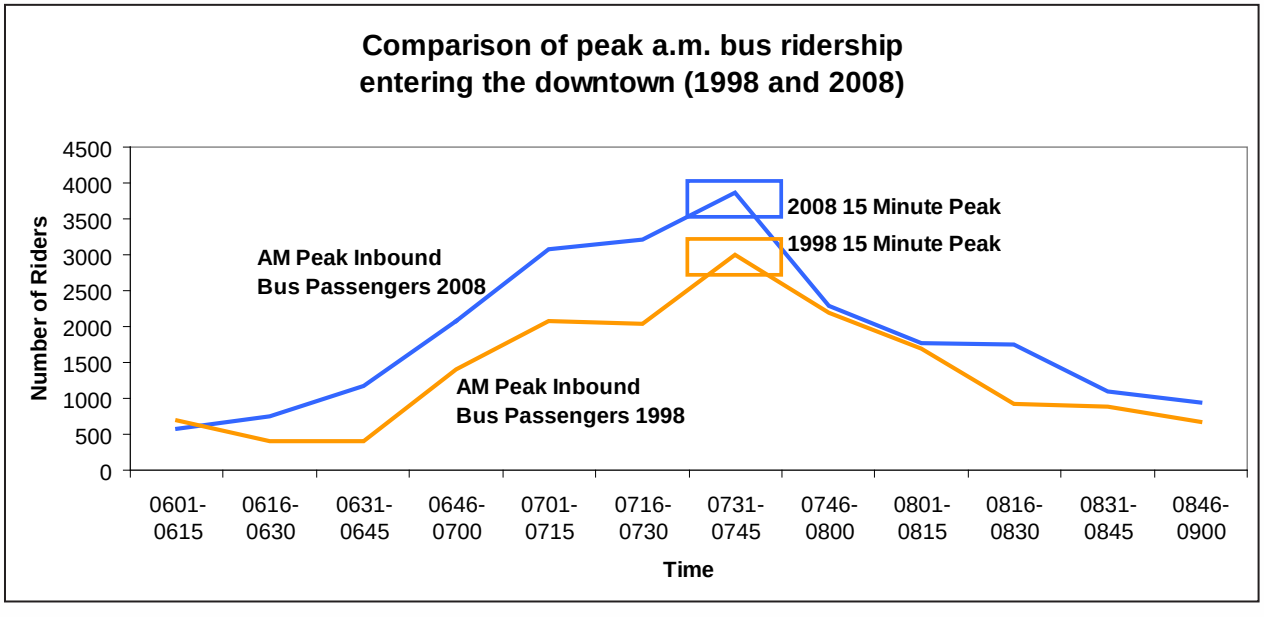


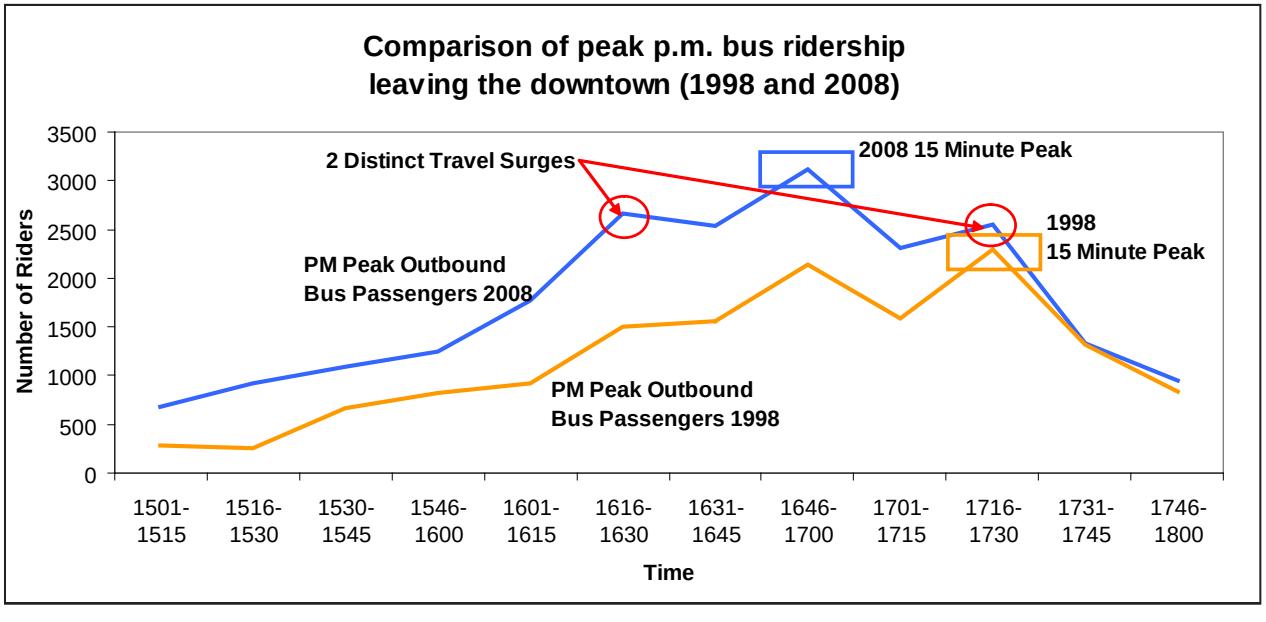



## *KEY FINDING*

### *Comparison of 1998 and 2008 bus maximum load point data indicates a 30 minute shift in peak p.m. bus ridership. In addition, an increased level of ridership and broader peak travels times are indicated.*

Bus ridership data was collected during the fall of 1998 and 2008 and is compared by 15 minute increments in an effort to identify peak travel times. For the a.m. peak comparison, there was no change to the peak travel time of 7:30 a.m. to 7:45 a.m. When comparing the peak travel time for the p.m., the peak travel time has started 30 minutes earlier when compared to 1998 data. It is also interesting to note the two distinct travel surges between 4:15 p.m. to 4:30 p.m. and 5:15 p.m. to 5:30 p.m. when compared to the actual 4:45 p.m. to 5 p.m. travel peak.



## Implications

All of the comparison data indicates large increases in ridership.

Along with the high growth in transit ridership, the peaks are becoming broader. This is likely due to rearranged work schedules in downtown Calgary. This may also explain the development of multiple peaks.

The broader peaks allow for service outside of the traditional peak to help accommodate the overall increase in ridership.

## Sources of Information

All the data collected for this Mobility Monitor report was obtained from the Transit Studies group within Calgary Transit, Business Strategies.

Maximum load point study locations for bus studies are determined by the corridors used by Calgary Transit bus traffic to enter the downtown core. Maximum load point locations for LRT studies are set at each end of the 201 and 202 lines as they enter and leave the downtown core.

For Calgary Transit's purposes, a downtown maximum load point study is made up of specific locations at which an imaginary line or barrier around each location is determined and all in-service Calgary Transit vehicles crossing this boundary with passengers on board are counted.

Calgary Transit has been collecting maximum load point data manually and will continue to do so, although the inclusion of automated ridership counting technology findings, such as Automatic Passenger Counting (APC), may be integrated into maximum load point counts in the near future.

Maximum load point counts are attempted to be completed every year however the program has been suspended periodically due to financial constraints and shifts in data collection priorities.

## 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. 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? Transit usage can vary by ten per cent or more from one day to the next and from season to season. The Calgary Transit, Transit Studies team tries to minimize the variation by conducting studies around the same time every year.

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.