

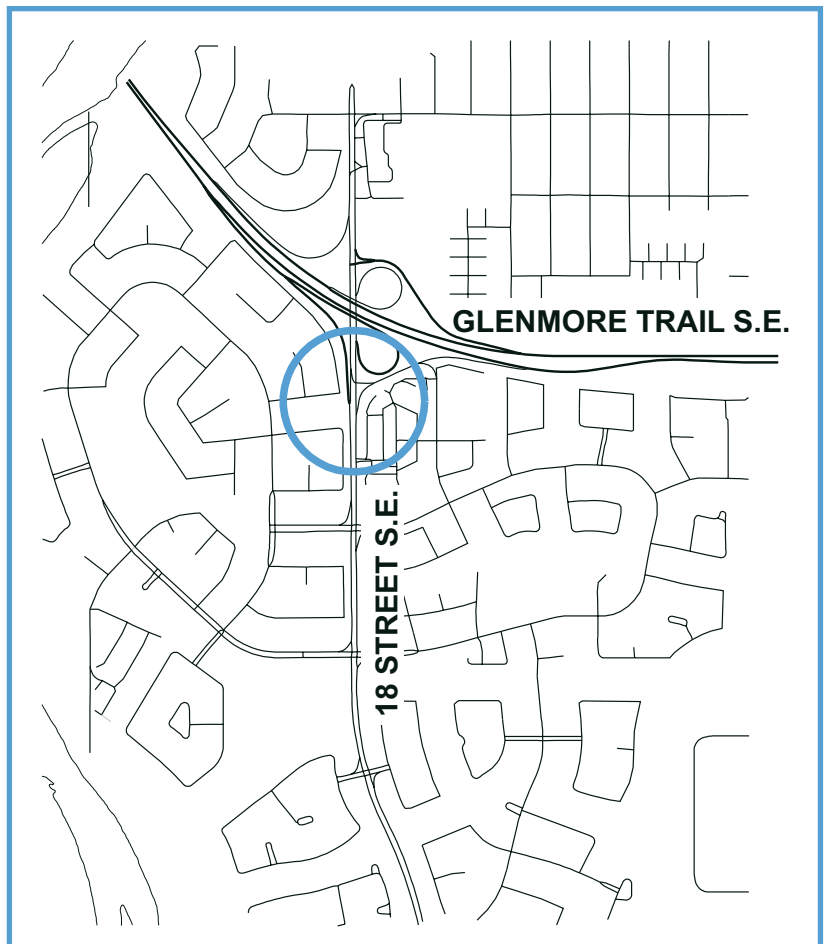


## CHANGING TRAFFIC PATTERNS IN RIVERBEND

The Riverbend Community has only one access point for the people living there. While this has created some problems for the community, it also creates a unique opportunity to study how traffic entering and leaving a community changes over time. This situation will change when 18 Street S.E. is eventually connected to 24 Street S.E.

### KEY FINDING

***In June 2002, there were 29,000 vehicles per day entering and leaving the Riverbend community via 18 Street S.E. This is less than the peak recorded volume of 33,900 vehicles per day in May 1999.***

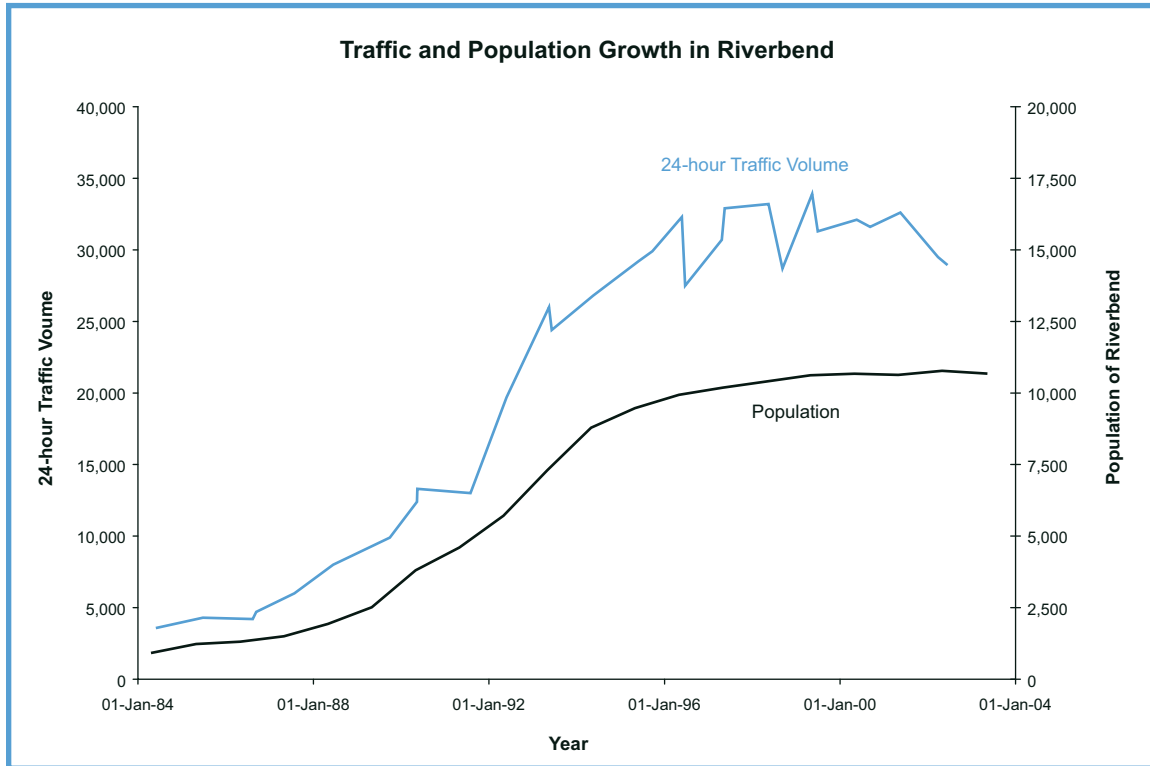


The Transportation Data Section of Transportation Planning produces the *Mobility Monitor* with the goal of making people working in the field of transportation more aware of the information the section can provide. The Transportation Data Section is responsible for collecting information on travel for use in planning and operating the city's roads, transit and pathways.

- The 2003 Civic Census found 10,679 people living in the Riverbend Community. The community began to develop in 1983, when it had a population of 518.
- In 2002, the intersection of Glenmore Trail S.E. and 18 Street S.E. was upgraded to an interchange.

## KEY FINDING

**The traffic volume on 18 Street S.E. grew from 3,600 vehicles per day in 1984, to 33,900 vehicles per day in 1999. The highest period of traffic growth was between 1990 and 1993. The highest period of population growth was at the same time.**



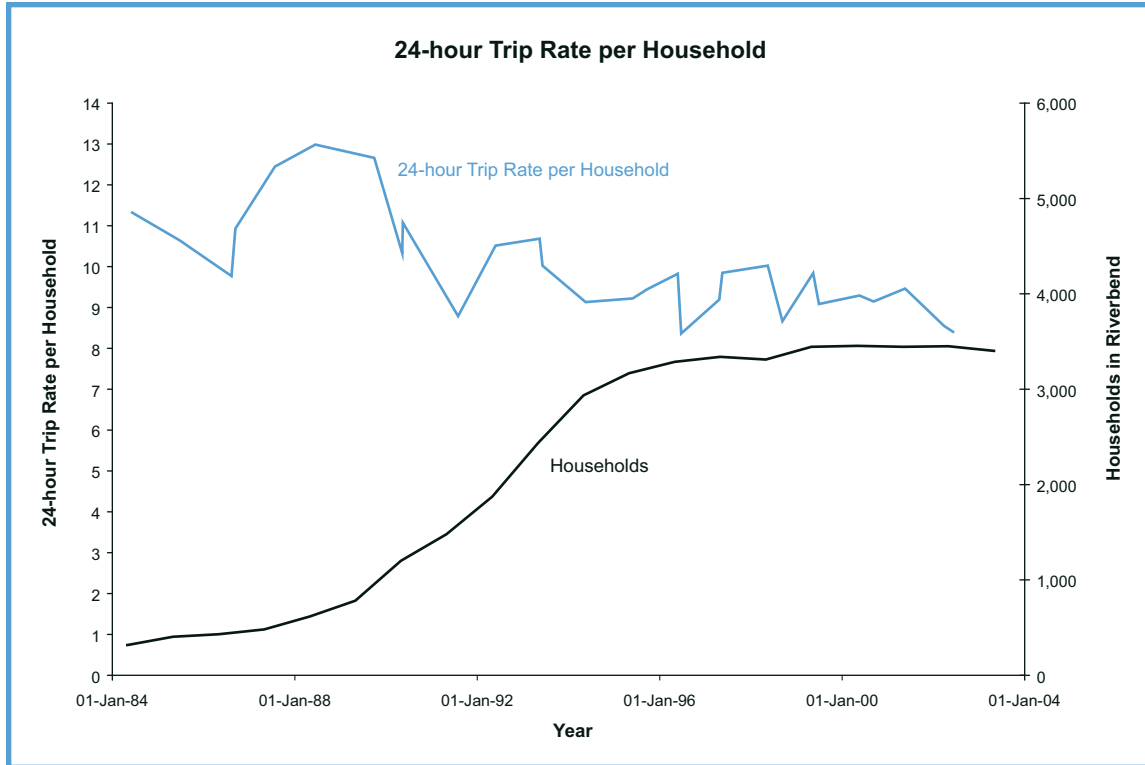
- The traffic volume on 18 Street S.E. varies from one count to the next. Individual counts were done at different times of the year, which explains some of the variation in the traffic volume.
- Traffic volumes have stayed in the 30,000 to 34,000 vehicle per day range from 1996 to 2002. During this period, the population of Riverbend changed very little.
- The population of Riverbend grew slowly until about 1990, when the community began to be developed more extensively and the population began to grow rapidly. By 1995, most of the community was developed and the population growth slowed down. Since 1999, the population had varied by no more than 100 people from the average.

## Count Data Used to Study the Traffic Patterns on 18 Street S.E.

Two types of counts were used for this *Mobility Monitor*. Automatic traffic counters were used to collect estimates of traffic volumes for 24-hour periods. Manual intersection traffic counts collected data for 6-hour periods. Information from the automatic counts was used to adjust the manual intersection count data to estimate 24-hour volumes. The manual counts provided data on the percentage of trucks. The percentage of trucks represents the percentage of trucks during the 6-hour period of the intersection counts (7 a.m. to 9 a.m., 11 a.m. to 1 p.m. and 4 p.m. to 6 p.m.).

## KEY FINDING

The trip rate per household in Riverbend, which is the daily traffic volume on 18 Street S.E. divided by the number of occupied houses in Riverbend, went down between 1984 and 2002. The trip rate varied from 13 vehicles per household in 1988 to 8.5 vehicles per household in 2002.



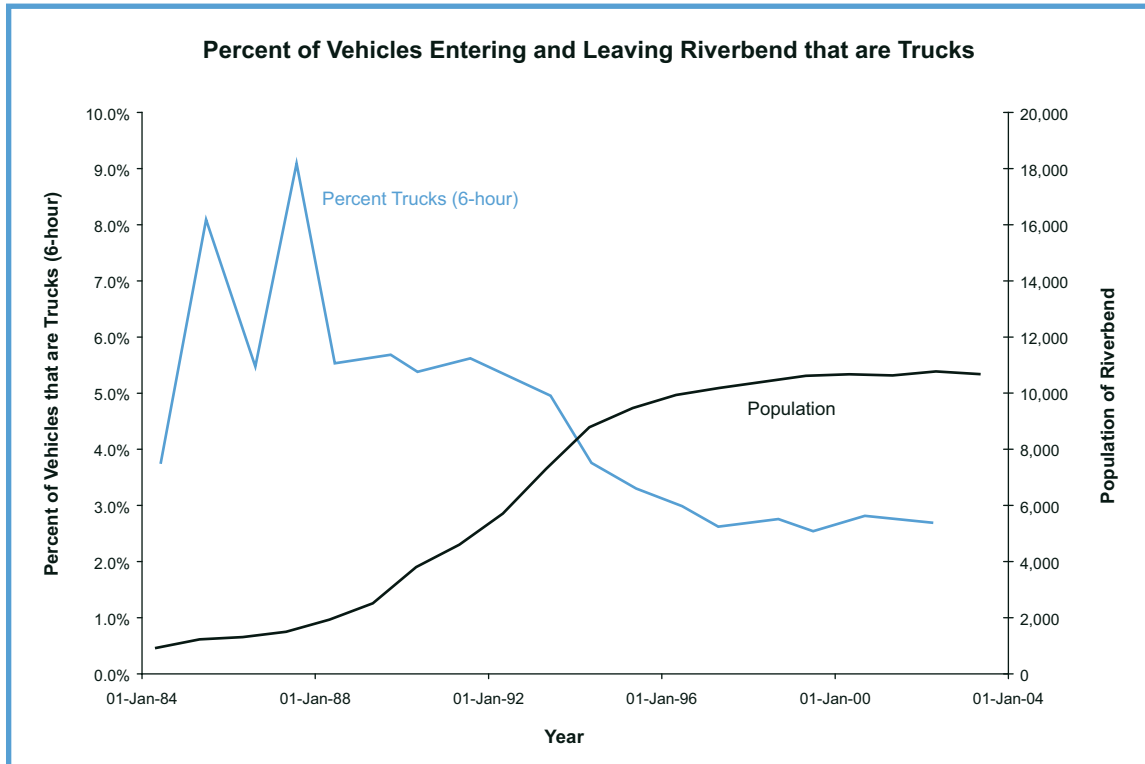
- The decline in the trip rate per household in Riverbend may reflect more than one factor. As traffic on 18 Street S.E. increased, so did delays due to traffic congestion. This may have discouraged people from travelling outside the community.
- As the Riverbend community developed, schools and local shopping centres were built. This created more opportunities for residents to satisfy their needs without leaving the community, and using 18 Street S.E.
- The high trip rate per household between 1986 and 1990 may reflect construction-related traffic. As the houses were built and became occupied, construction related traffic on 18 Street S.E. became less important.

## How Do Traffic Patterns in Communities Typically Change over Time?

That is the question that this *Mobility Monitor* tries to answer. Ideally many different communities should be studied, but this is not always possible or practical. The community of Riverbend provides an opportunity to observe the changes in traffic patterns over time. This will help us see how traffic patterns change, but caution should be used when using this information in other situations.

## KEY FINDING

**The percentage of traffic on 18 Street S.E. that are trucks has declined from more than 5% to less than 3%.**



- Between 1984 and 1988, the percent of vehicles that were trucks was not only higher than after 1993, it also varied greatly from one count to the next.
- The shift from a high percentage of trucks to a lower percentage of trucks happened as the community reached full development. Many of the trucks using 18 Street S.E. during the period of development between 1988 and 1994 were related to the construction of new homes in the community.
- Once the percentage of trucks dropped below 3% it has been stable, with very small variation from count to count.

### How Accurate and Reliable is This Data?

How concerned should you be by the potential for error in the data presented in the *Mobility Monitor*? Traffic on a road can vary by 10% or more from one day to the next. A change from one year to the next may be due to some random event, such as the weather, accidents or illness. For this reason, 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.