

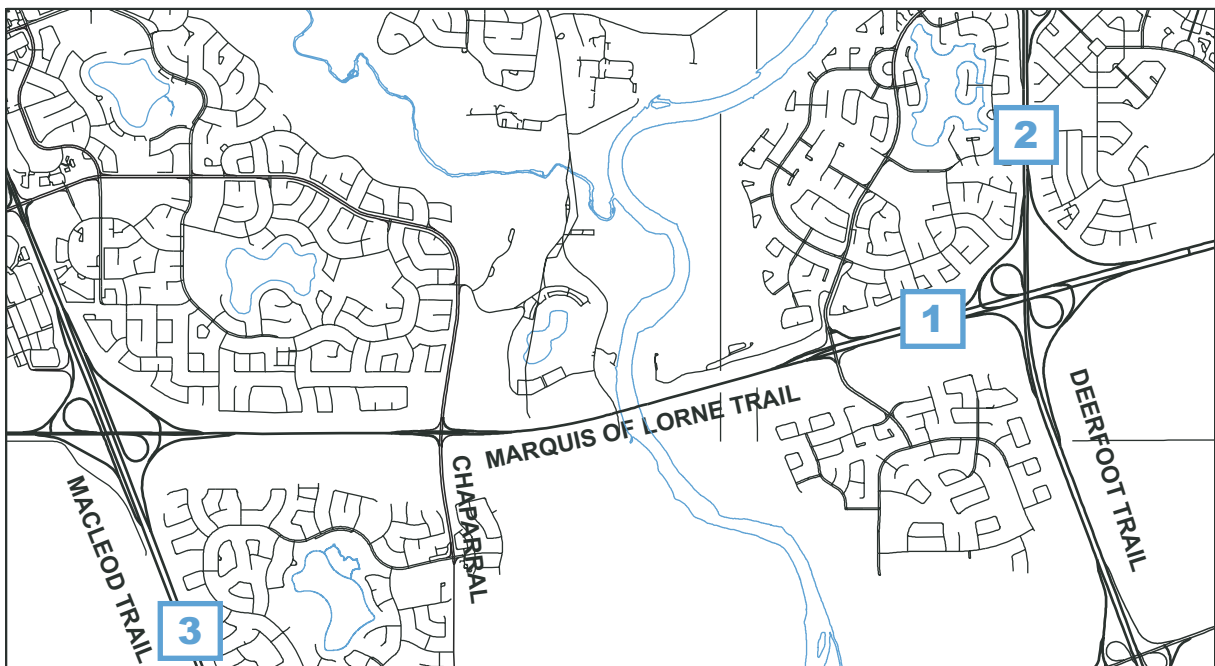


TRAFFIC PATTERN CHANGES AFTER THE OPENING OF THE DEERFOOT TRAIL EXTENSION

In October 2003, the Deerfoot Trail extension from Marquis of Lorne Trail to Highway 2 South was opened. This opening created an opportunity to investigate how the introduction of a new roadway affects the routes that people use to get to their destination. This *Mobility Monitor* will examine the changes in traffic volumes at three locations near the Deerfoot Trail extension.

KEY FINDING

In January 2004 17,600 vehicles per day used the Deerfoot Trail extension.

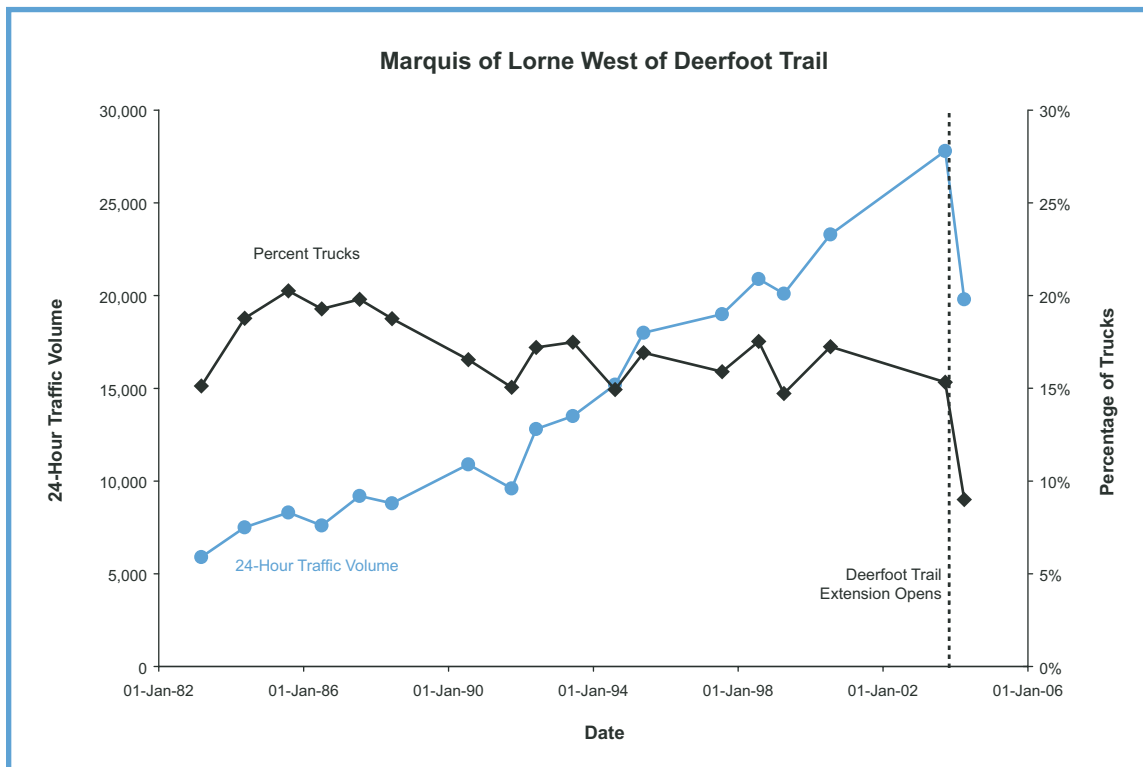


The Transportation Data Section of Transportation Planning produces the *Mobility Monitor* with the goal of making people working in the field of transportation more aware of the information the section can provide. The Transportation Data Section is responsible for collecting information on travel for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

- The Deerfoot Trail is an important part of the CANAMEX (CANada, AMerican, MEXico) Trade Corridor as well as a major transportation corridor within Calgary. The CANAMEX Trade Corridor will improve access for the north-south flow of goods, people and information.
- The Deerfoot Trail extension will provide a south free flow link to Highway 2, and will also help ease traffic congestion on Macleod Trail and Marquis of Lorne Trail.
- After the opening of the extension, about 7% of the traffic using the extension were trucks.

KEY FINDING

The traffic volume on Marquis of Lorne Trail west of Deerfoot Trail (location #1 on the map) dropped from 27,800 vehicles per day to 19,800 vehicles per day after the Deerfoot Trail extension opened.



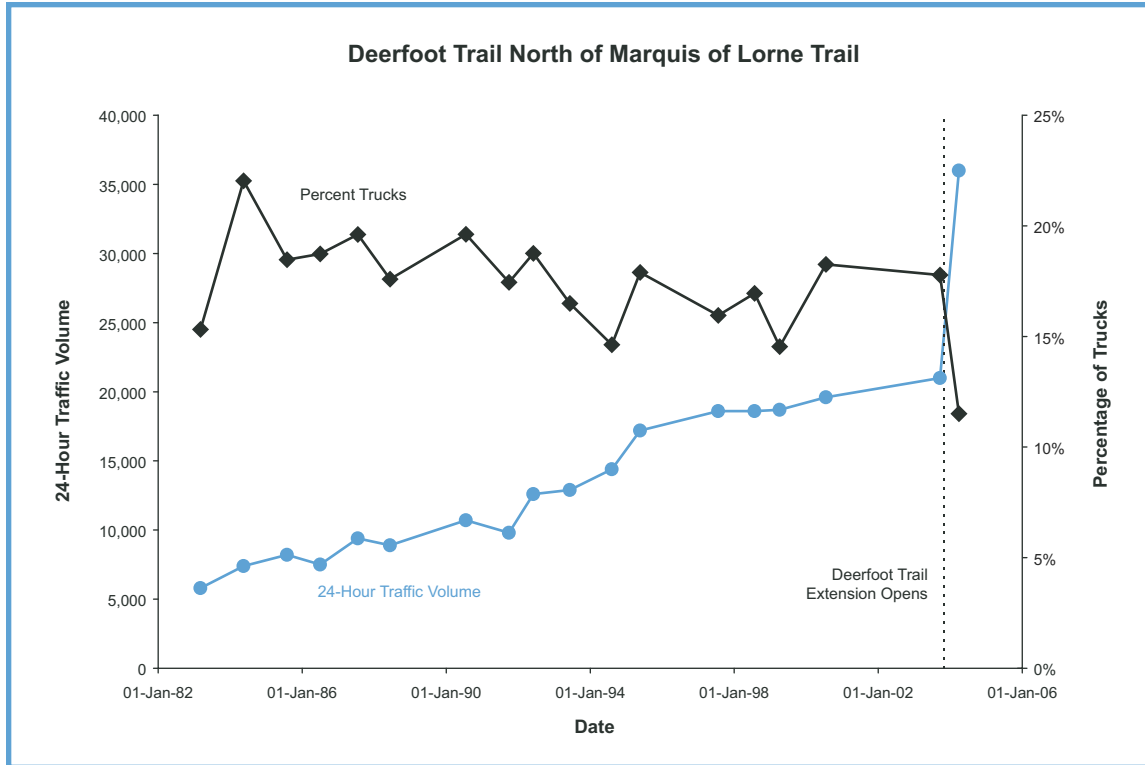
- Between 1983 and 2003, traffic volumes on Marquis of Lorne Trail west of Deerfoot Trail grew steadily at a rate of about 8% per year.
- After the opening of the Deerfoot Trail extension, daily traffic volumes on Marquis of Lorne Trail west of Deerfoot Trail dropped almost 30%.
- From 1984 to 1988, trucks made up about 20% of all traffic on Marquis of Lorne Trail west of Deerfoot Trail. After 1990, trucks made up about 15% of all traffic.
- After the opening of the Deerfoot Trail extension, trucks dropped to 9% of all traffic on Marquis of Lorne Trail west of Deerfoot Trail. The volume of trucks decreased by almost 60%.

Count Data Used to Evaluate the Impact of the Deerfoot Trail Extension Opening

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 six-hour periods. Information from the automatic counts was used to adjust the manual intersection count data to estimate 24-hour volumes.

KEY FINDING

The traffic volume on Deerfoot Trail north of the Marquis of Lorne Trail (location #2 on the map) grew from 21,000 vehicles per day to 36,000 vehicles per day, after the Deerfoot Trail extension was opened.



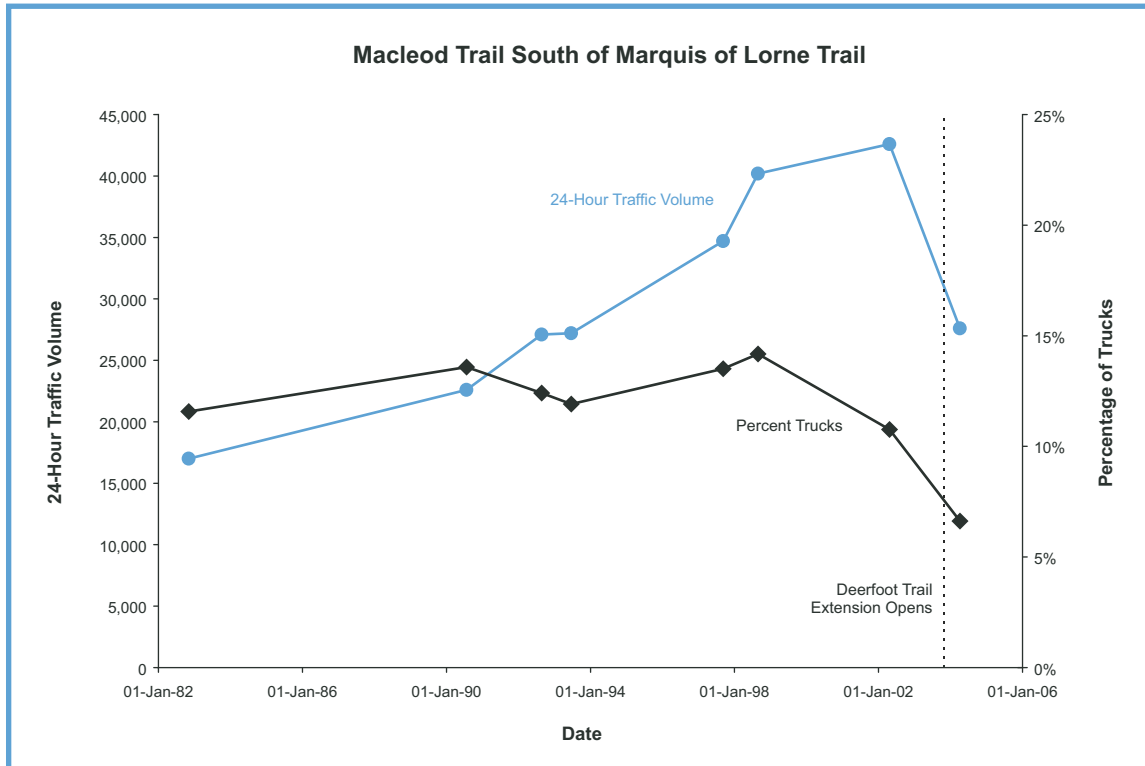
- Between 1984 and 1995, traffic volumes on Deerfoot Trail north of Marquis of Lorne Trail grew from 5,800 vehicles per day to 17,200 vehicles per day. During this period the growth was steady at about 9% per year. Between 1995 and 2003 traffic, volumes on Deerfoot Trail north of Marquis of Lorne Trail grew from 17,200 vehicles per day to 21,000 vehicles per day, or a rate of about 2% per year.
- After the opening of the Deerfoot Trail extension, traffic volumes on Deerfoot Trail north of Marquis of Lorne Trail increased by about 70%.
- Between 1983 and 2003, trucks made up between 15% and 20% of all traffic. After the opening of the Deerfoot Trail extension, trucks dropped to about 12% of all traffic. The volume of trucks increased slightly.

What is a Truck?

Both automatic and manual counts identify the number of trucks. Automatic counts classify a vehicle as a truck or car based on the length of the vehicle. Manual counts classify a vehicle as a truck if it has six wheels or looks like a commercial vehicle, such as a tow truck. Buses and motor homes are classified as trucks. Pickup trucks are classified as cars, even if they have 6 wheels. In this *Mobility Monitor* the manual count data is used for the percentage of trucks.

KEY FINDING

The traffic volume on Macleod Trail south of Marquis of Lorne Trail (location #3 on the map) dropped from 42,000 vehicles per day to 27,600 vehicles per day after the Deerfoot Trail extension was opened.



- Between 1982 and 1998, the traffic volume on Macleod Trail south of Marquis of Lorne Trail grew from 17,000 vehicles per day to 40,200 vehicles per day. This is an annual growth rate of over 5% per year. Between 1998 and 2002, the increase in traffic volume was slower, reaching 42,600 vehicles per day in 2002. This is an annual growth rate of less than 2% per year.
- Between 2002 and 2004, the traffic volume dropped from 42,600 vehicles per day to 27,600 vehicles per day. That is a decrease of 35%. Most of this decrease would be the result of the opening of the extension.
- Between 1982 and 2002, trucks made up between 12% and 15% of all traffic. After the opening of the Deerfoot Trail extension trucks made up less than 7% of all traffic. The volume of trucks decreased by 35%.

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.