

Mobility Monitor

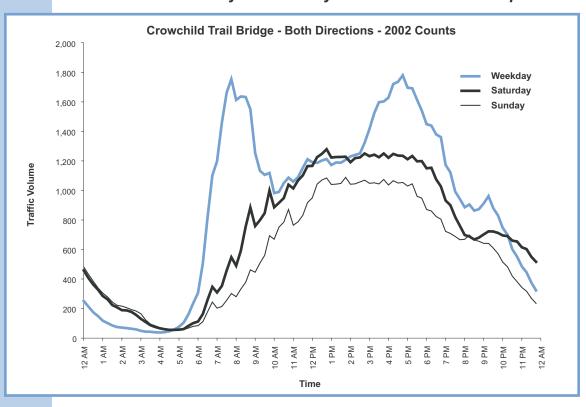
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COMPARISON OF WEEKDAY AND WEEKEND TRAFFIC PATTERNS

Typically in Calgary the heaviest traffic volumes occur during the morning or evening peak hours on weekdays. However, on some roads traffic can be heavier on Saturdays than on the weekdays. This *Mobility Monitor* compares the weekday traffic patterns with weekend traffic patterns at some locations in Calgary.

KEY FINDING

On the Crowchild Trail Bridge weekday traffic shows two distinct peaks, one in the morning and one in the afternoon. Traffic volumes on Saturday and Sunday do not show the same pattern.

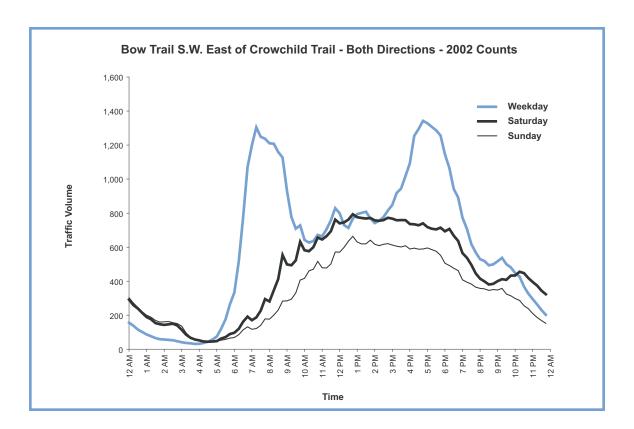


- Traffic volumes on Saturday from midnight to 4 a.m. and again from about 10:30 p.m. to midnight are higher than on weekdays. Saturday traffic volumes during the middle of the day, from about 10 a.m. to about 3 p.m., are about the same as the weekday traffic volumes for the same time period. Traffic volumes on Saturday show a single long peak period from about 12:30 p.m. to about 6 p.m.
- Traffic volumes on Sunday from midnight to 4 a.m. are higher than on weekdays.
 Between about 10 a.m. and 5 p.m., traffic volumes on Sunday are about 15% lower than on Saturday. Traffic volumes on Sunday show a single peak from about 12:30 p.m. to about 5 p.m.
- The high morning and evening peak volumes at this location on weekdays indicate that people commuting to work dominate the traffic.

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.

KEY FINDING

On Bow Trail Southwest, east of Crowchild Trail, weekday traffic shows two distinct peaks, one in the morning and one in the afternoon. Traffic volumes on Saturday and Sunday do not show the same pattern. The weekday peaks are more prominent than those seen on the Crowchild Trail Bridge.



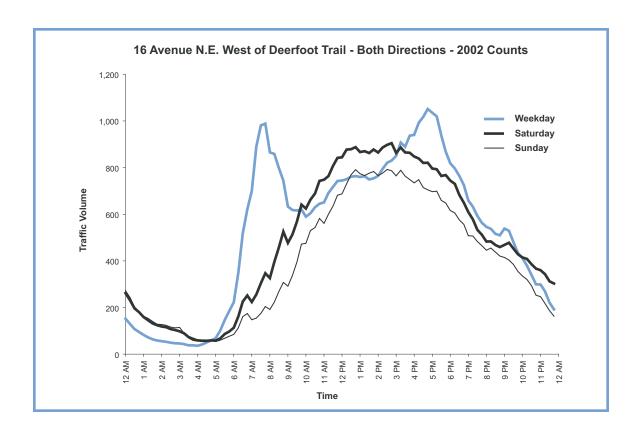
- Traffic volumes on Saturday from midnight to 4:30 a.m. and again from about 10 p.m. to midnight are
 higher than on weekdays. During the middle of the day, from about 10 a.m. to about 2 p.m., the traffic
 volumes on Saturday are about the same as the weekday traffic volumes for the same time period.
 Traffic volumes on Saturday show a single long peak period from about 12:30 p.m. to about 6 p.m.
- Traffic volumes on Sunday from midnight to 4:30 a.m. are higher than on weekdays. Between about 10 a.m. and 5 p.m., traffic volumes on Sunday are about 20% lower than on Saturday. Traffic volumes on Sunday show a single peak from about 12:30 p.m. to about 5 p.m.
- The high morning and evening peak volumes at this location on weekdays indicate that people commuting to work dominate the traffic.

Sources of Information

The data in this Mobility Monitor comes from permanent traffic monitoring stations on The Crowchild Trail Bridge, Bow Trail S.W. and 16 Avenue N.W. Data from a 24-hour, 7-day automatic count done on 162 Avenue S.W. west of MacLeod Trail in July 2003 was also used.

KEY FINDING

On 16 Avenue N.E., west of Deerfoot Trail, Saturday traffic volumes are higher than weekday volumes during the middle of the day.



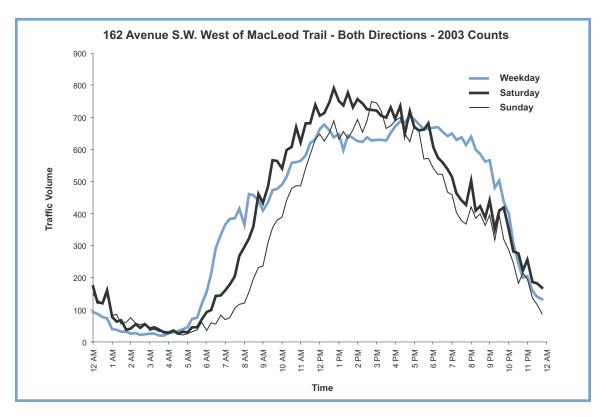
- Traffic volumes on Saturday from midnight to 4:30 a.m., from 9 a.m. to 3 p.m. and again from about 10 p.m. to midnight are higher than on weekdays. Traffic volumes on Saturday show a single long peak period from about 11:30 p.m. to about 3:00 p.m., while traffic volumes on Sunday show a single peak from about 12:30 p.m. to about 3 p.m.
- Traffic volumes on Sunday from midnight to 4:30 a.m. are higher than on weekdays. Between about 12:30 p.m. and 5 p.m., traffic volumes on Sunday are about 10% lower than on Saturday.
- Weekday traffic volumes show two distinct peaks, one in the morning and one in the afternoon. Traffic
 volumes on Saturday and Sunday do not show the same pattern. The weekday peaks are not as
 prominent as those seen on the Crowchild Trail Bridge or on Bow Trail S.W.
- Traffic at this location is dominated by commuter traffic on weekdays, leading to noticeable morning and afternoon peaks.

Automatic Traffic Counters

The City uses automatic traffic counters to collect traffic volumes on a road for periods of 24 hours or more. These machines detect vehicles travelling by using rubber hoses secured to the road surface. As vehicles pass over they compress the air in the hose and the traffic counter uses this to determine how many vehicles have passed by the location. This equipment can also monitor the type of vehicles using the road and the speeds at which they travel.

KEY FINDING

On 162 Avenue S.W. west of Macleod Trail, unlike other locations, the peak traffic volume for the week occurs on Saturday. This location is close to a major commercial shopping area, which usually have more traffic on Saturdays.



- Traffic volumes on Saturday are higher than weekday volumes throughout most of the day. Weekday traffic volumes are higher between 4:30 a.m. and 8:30 a.m. and again from 6 p.m. to 10:30 p.m. Traffic volumes on Saturday show a single long peak period from about 11:30 p.m. to about 5 p.m., with a distinct peak about 12:45 p.m. This is the peak volume for the week as well.
- Traffic volumes on Sunday are higher than weekday volumes from midnight to 4:30 a.m. and again from about 1:30 p.m. to 4:30 p.m. Traffic volumes on Sunday show a single peak from about 11:45 a.m. to about 5:15 p.m. The peak volume on Sunday at about 2:45 p.m. is almost as high as the peak volume for the week on Saturday.
- The weekday traffic patterns at this location differ from the other locations in this Mobility Monitor. There
 are no distinct morning and evening peaks. There is a single peak period running from about noon until
 about 8 p.m.
- The likely explanation for the different patterns seen at this location is the proximity of the commercial shopping area. The pattern of travel to shopping districts has a very different pattern than the commute to work travel that is dominant at most other locations.

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 as much as 10% from one day to the next. In this *Mobility Monitor* most of the data used comes from several days of counts. It is wise to look at the general patterns rather than specific number, since a consistent pattern is more likely to be real, and not just the result of random events.

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