



CITY OF VANCOUVER

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ADMINISTRATIVE REPORT

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TO: Standing Committee on Transportation and Traffic
FROM: General Manager of Engineering Services
SUBJECT: Transportation Trends - 2006 Census and Central Business District Counts

INFORMATION

The General Manager of Engineering Services presents this report for information.

COUNCIL POLICY

Vancouver's Transportation Plans and Community Climate Change Action Plan support increasing use of alternatives to vehicle driving, with an emphasis on walking, cycling and transit use.

PURPOSE

The purpose of this report is to inform the Committee of transportation trends based on the federal government's 2006 Census and recent City traffic volume counts for the Downtown Central Business District.

DISCUSSION

2006 CENSUS TRANSPORTATION TRENDS

The federal government released their 2006 Census data on transportation earlier this year. Although the 2001 Census included data on the Journey-to-Work, data in the Metro Vancouver area was spoiled due to impacts from the 2001 transit strike. Transit mode share was under represented while all other modes were over represented. Accordingly, the results discussed below do not include reference to the 2001 Census.

This report provides a summary of the most recent data available that has been analyzed by Engineering and Planning staff. The data on Journey-to-Work mode shares and Commuting Distances shows that overall Vancouver continues to make progress towards its transportation and GHG reduction objectives of reducing single occupant vehicle use. Also encouraging is a high growth in residents who are choosing to work from home, rather than commute.

Figure 1 below shows Journey-to-Work mode shares for Vancouver residents. Vehicle Driver mode share decreased from 55.1% to 51.5% while Vehicle Passenger stayed the same at 6.1%. Walk increased from 10.7% to 12.2%, Bike increased from 3.3% to 3.8% and Transit increased from 23.7% to 25.1%. The number of Vancouver residents who commuted to work increased from 236,695 in 1996 to 280,550 in 2006 (+ 19%), while those who choose to work at home increased from 18,620 in 1996 to 26,845 in 2006 (+ 44%).

Figure 1 - Vancouver Residents Journey-to-Work Mode Shares

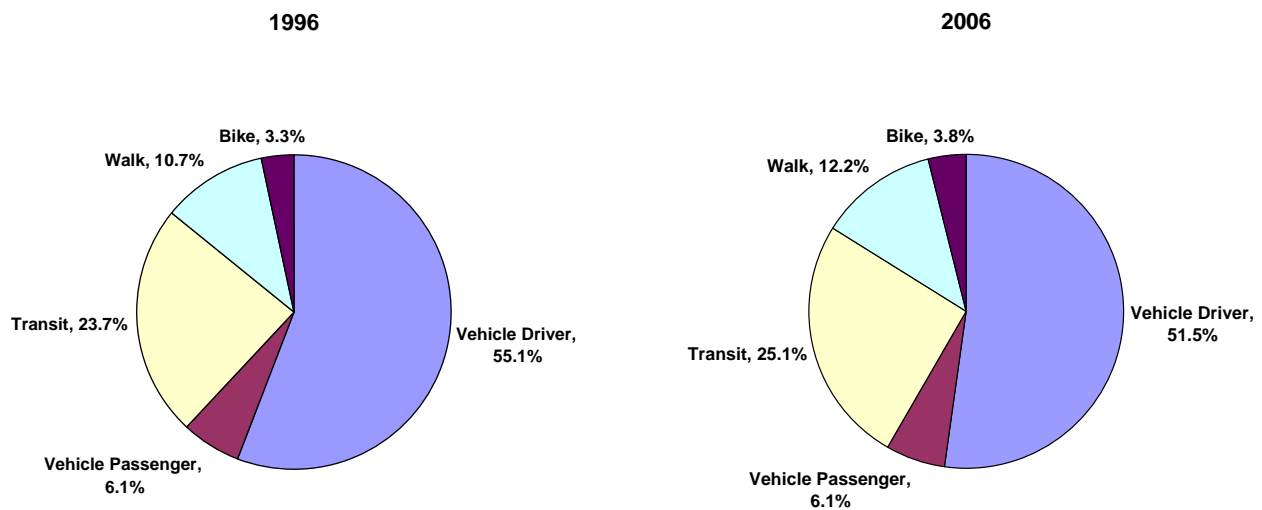


Figure 2 below shows Journey-to-Work mode shares for Downtown residents. Vehicle Driver mode share stayed at 32.7% while Vehicle Passenger increased from 3.10% to 3.30%. Walk increased from 37.7% to 38.8% at the expense of Bike and Transit, which decreased from 3.0% to 2.6% and 21.6% to 20.4% respectively. The number of Downtown residents who commuted to work increased from 31,585 in 1996 to 47,445 in 2006 (+ 50%), while those who choose to work at home increased from 2,595 in 1996 to 5,405 in 2006 (+ 108%).

Figure 2 - Downtown Residents Journey-to-Work Mode Shares

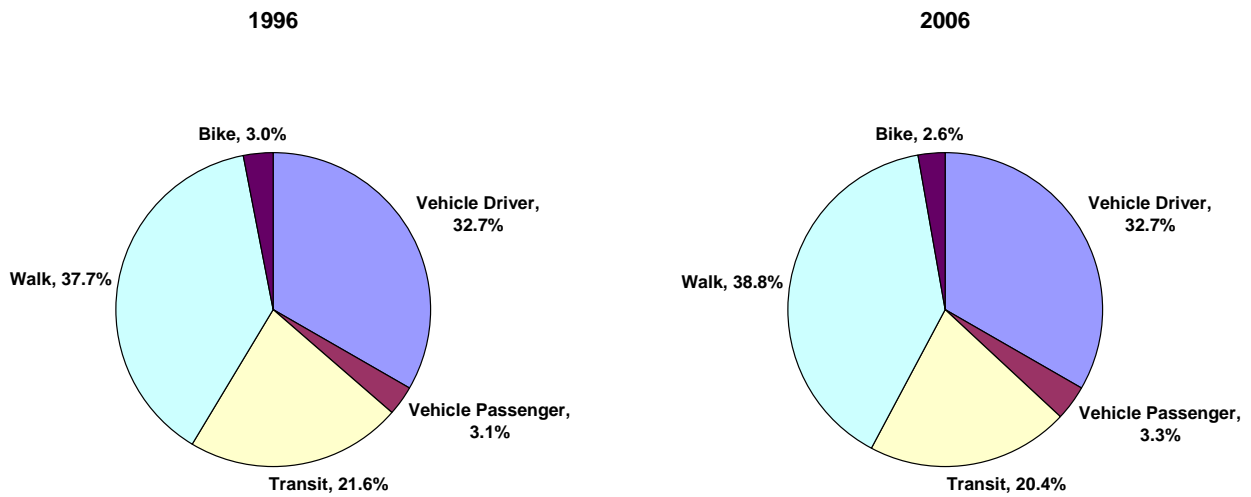


Figure 3 below shows Journey-to-Work mode shares for Central Broadway and the False Creek Flats, which makes up the rest of the Metro Core outside Downtown. Vehicle Driver mode share decreased from 45.8% to 42.1%, while Vehicle Passenger decreased from 5.1% to 3.9%. Walk increased from 16.0% to 16.7%, Bike increased from 4.7% to 6.2% and Transit increased from 27.1% to 29.7%. The number of residents in this area who commuted to work increased from 26,080 in 1996 to 28,735 in 2006 (+ 10%), while those who choose to work at home increased from 1,905 in 1996 to 2,890 in 2006 (+ 52%).

Figure 3 - Central Broadway & False Creek Flats Residents Journey-to-Work Mode Shares

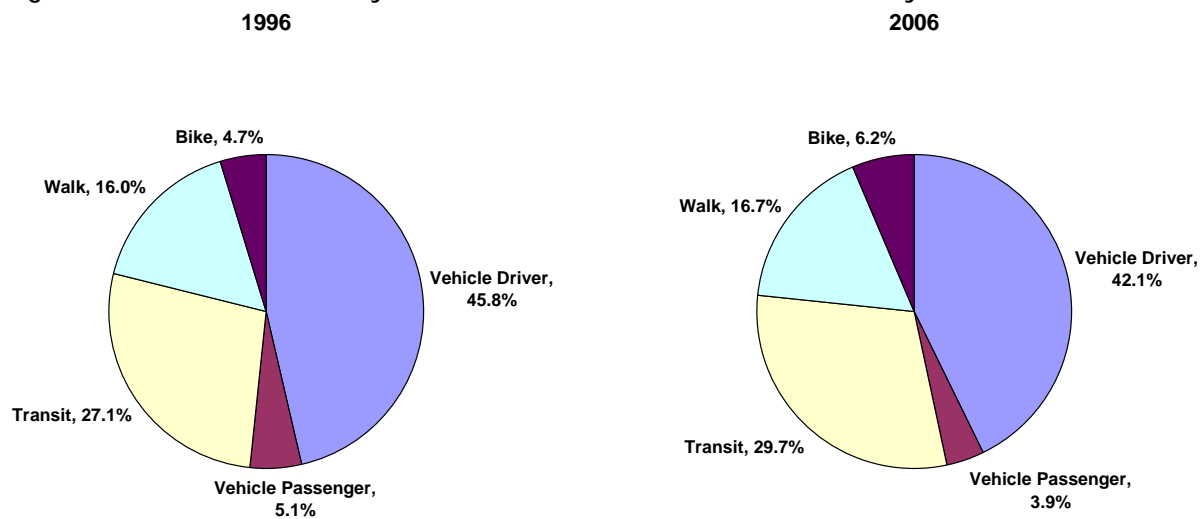
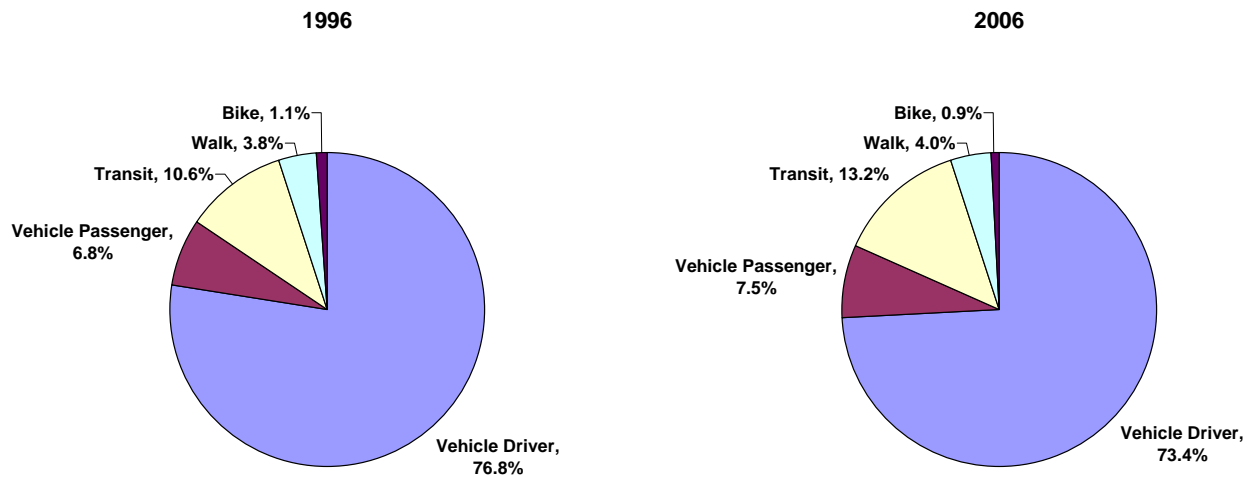


Figure 4 below shows Journey-to-Work Modes shares for the rest of the Metro Vancouver area (i.e. excluding Vancouver) in 1996 and 2006. Vehicle Driver mode share decreased from 76.8% to 73.4%, while Vehicle Passenger increased from 6.8% to 7.5%. Walk increased from 3.8% to 4.0%, Bike decreased from 1.1% to 0.9% and Transit increased from 10.6% to 13.2%.

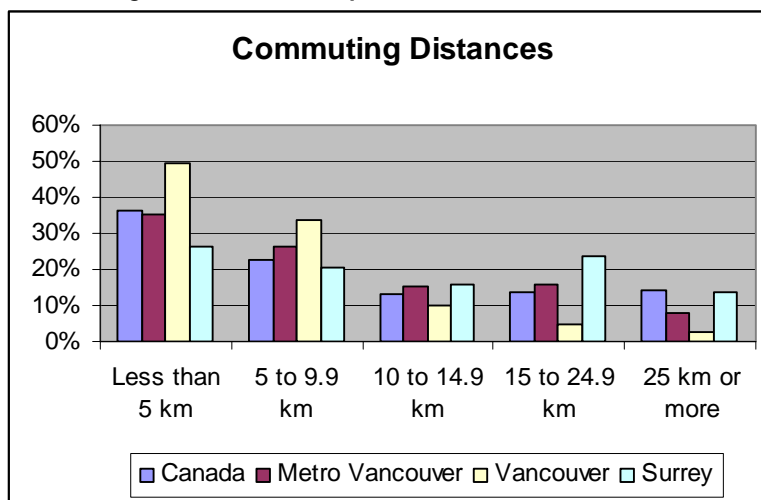
Although trends for the rest of the region move towards less Vehicle Driver mode share, the amount of commuter driving is still significantly higher than for Vancouver (51.5% Vehicle Driver in 2006). The number of Metro Vancouver residents outside Vancouver who commuted to work increased from 594,575 in 1996 to 722,475 in 2006 (+ 22%), while those who choose to work at home increased from 18,275 in 1996 to 64,750 in 2006 (+ 254%).

Figure 4 - Rest of Metro Vancouver Residents Journey-to-Work Mode Shares



For Vancouver residents, commuting distances have remained virtually unchanged from 1996 to 2006, with the median commuting distance staying at 5.0 km. Both the national and Metro Vancouver 2006 median commuting distances are significantly higher at 7.6 km and 7.4 km respectively. Figure 5 below shows a comparison of commuting distances for Canada, Metro Vancouver, Vancouver and Surrey. Almost half of Vancouver residents have a commute that is less than 5 km, about one-third commute between 5 to 9.9 km, and about 18% commute distances 10 km or greater. Vancouver’s short trip proportions are significantly higher than for Canada and Metro Vancouver, as well as for Surrey, the next largest municipality in Metro Vancouver. The significant number of Vancouver residents with commuting distances of less than 5.0 km also indicates Bike mode could be a viable alternative for more Vancouver residents.

Figure 5 - 2006 Commuting Distances Comparison



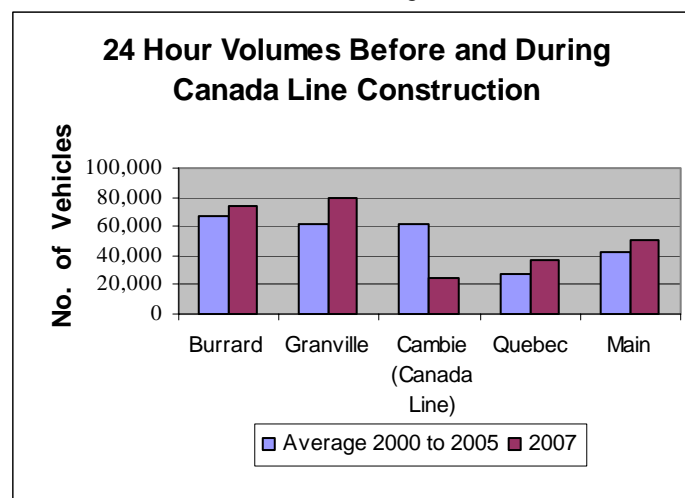
Staff expect to receive further releases of the 2006 Census data in summer 2008, which will include Journey-to-Work destination and Vancouver Local Area information.

CANADA LINE CONSTRUCTION TRAFFIC VOLUME IMPACTS

As part of annual counts of vehicles entering and leaving the Downtown Central Business District (discussed further below), traffic volumes over a 24 hour period are recorded on the Cambie St. corridor, as well as adjacent north-south arterial roads. Comparing data recorded before the start of Canada Line construction, to data compiled during Canada Line construction shows how traffic was redistributed as a result of Canada Line lane closures. Generally the lane closures reduced the number of traffic lanes on Cambie Bridge and Cambie Street north of Broadway from six to two.

The impacts of this reduction in Cambie vehicle capacity is shown in Figure 6 below. Although there was a significant decrease in Cambie Street traffic volume, this traffic was redistributed to adjacent arterial roads.

Figure 6 - 24 Hour Volumes on Cambie St. and Adjacent Arterials



Changes on each of these north-south corridors are summarized in Table 1 below. Cambie Street traffic was reduced by about 60%. As would be expected, the two closest arterials, Granville and Quebec received the largest increases in detouring traffic. Burrard and Main received lesser but still significant increases attributed to re-routing from Cambie. With the more difficult access during Canada Line construction, the recorded 2007 total vehicle volumes increased very slightly by about 1%. Although a slight decrease may have been expected, changes within a few percentage points are within the normal variation for this type of traffic count.

Table 1 - Changes in 24 Hour Volumes - Canada Line Construction

Location	Change	Change %
Burrard Bridge	6,600	10%
Granville Bridge	17,000	27%
Cambie Bridge	-37,100	-60%
Quebec St. South of Prior	9,300	33%
Main St. South of 6th Ave.	8,000	19%
TOTAL	3,800	1%

TREND FOR VEHICLES ENTERING & LEAVING THE CENTRAL BUSINESS DISTRICT

Vancouver's Transportation Plan Progress Reports have reported on the results of monitoring the number of vehicles entering and leaving the Downtown Central Business District. Between 1995 and 2005 the overall trend showed 24 hour volumes declining over time and about 7% lower over the decade. Data to 2007 shows a similar overall trend, with 24 hour volumes declining about 5% over the previous decade. Although volumes have increased slightly from 2006 to 2007, it is not unusual to have some slight fluctuations from year to year. Data to be collected in 2008 will help show whether this fluctuation is random, or is part of a trend that vehicle volumes may be increasing slightly due to higher economic activity.

FINANCIAL IMPLICATIONS

There are no financial implications.

CONCLUSION

The recent transportation data from the 2006 Census and Central Business District traffic counts shows that trends continue to support City objectives to reduce the use of single occupant vehicles. Staff will continue to monitor transportation trends and report back as updated information becomes available.

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