TO: Standing Committee on Transportation and Traffic
FROM: Greenways and Neighbourhood Transportation Branch
SUBJECT: 2008/2009 Cycling Statistics Update

RECOMMENDATION
THAT Council receive this report for information.

COUNCIL POLICY
The 1997 Transportation Plan, adopted by Council in May 1997, identifies cycling as the second-highest priority transportation mode within the City.

The 1999 Bicycle Plan, adopted by Council, identifies 12 action items to improve cycling in Vancouver, including a network of bicycle routes throughout the City.

In 2003, Council approved implementation of the Downtown Transportation Plan to improve downtown access and liveability by creating a balanced transportation system that includes, among other priorities, creating a network of bike lanes.

In April 2005, Council approved the Community Climate Change Action Plan that identified the critical importance of encouraging and supporting active transportation, if Vancouver is to meet its greenhouse gas reduction target for 2012.

PURPOSE
The purpose of this report is to provide Council with a summary of cycling statistics. This summary provides information and context for reference in future reports, it provides background information for new Councillors, and it will serve as a baseline report against which future bicycle count data can be compared. The report also provides an opportunity to highlight positive results of the City's cycling program in terms of significant bicycle volumes on some major routes, and reinforces the need for ongoing work toward expanding the City's cycling network, providing end of trip facilities and, supporting and promoting cycling in Vancouver.
BACKGROUND
The City of Vancouver Bike Program is aimed at better integrating cyclists into the existing transportation network and promoting and encouraging the use of bicycles as a safe and convenient mode of transportation.

The City’s Bicycle Plan was completed in 1999. At that time, cycling and walking represented approximately 3.3% and 10.7%, respectively, of Mode of Transportation to Work (1996 Census) reported city-wide. In each of the subsequent annual updates to the Bicycle Plan, staff have reported continuous growth in number of cyclists, alongside continuous growth in the City’s cycling infrastructure.

DISCUSSION
Provided in this section is a summary of city-wide cycling statistics, illustrating both spatial and temporal variations in cycling volumes. Data presented in this report is derived from the 2006 Census, the relevant series of which were released in 2008. Information is also presented from data collected in the past year through the City’s Bicycle Count Program.

The 2006 Census provides statistics for Mode of Transportation to Work. The City as a whole reports 3.7% of all trips to work as having been made by bicycle; this is a 12% increase over that reported in the 1996 Census. The data has been further broken down, by census tract (sub-neighbourhood), and is shown in Figure 1. This map shows that percentage of cycling mode share varies across the City from 11.9% to 0.2%. Cycling mode share is highest south of downtown, with census tracts in West Point Grey, Kitsilano and South Cambie neighbourhoods having the highest percentage cycling mode share at 11.9% and 11.8% respectively; Grandview-Woodlands also shows cycling mode share exceeding 11%.

The lowest reported cycling mode share is in the southern and eastern portions of the city, and in the downtown core. Figure 2 examines mode share more closely, showing cycling and walking combined. In the downtown core, combined cycling and walking represents more than 41% of the journey-to-work mode share. In considering future plans for cycling infrastructure expansion, and other support activities toward increased cycling mode share, work aimed at increasing the numbers of cyclists outside of the downtown core is more likely to result in an increase in the city-wide cycling mode share. Completion of the Canada Line bridge; the creation of practical and efficient connections from Canada Line stations to bicycle routes; the addition of new routes in the southern and eastern parts of the City, and; augmentation of cycling support activities will all work toward increasing numbers of cyclists City-wide.
Figure 1 - Journey to Work by Bicycle
Figure 2 - Journey to Work by Walking or Bicycle (combined)

Data from 2006 Census; Statistics Canada
Research & Data Group, City of Vancouver Planning Department, 2009
It is also meaningful to consider Vancouver’s bike and walk mode share in a national context. Table 1 provides a comparison of Vancouver to other major cities in Canada.

Table 1 - Mode of Transportation to Work, Percentage Bike and Walk

<table>
<thead>
<tr>
<th>MODE OF TRANSPORTATION TO WORK</th>
<th>Mode of Transportation to Work as % of Total Trips to Work</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bike</td>
</tr>
<tr>
<td>City of Vancouver - Downtown and West End</td>
<td>3.0</td>
</tr>
<tr>
<td>City of Vancouver</td>
<td>3.3</td>
</tr>
<tr>
<td>Metro Vancouver</td>
<td>1.7</td>
</tr>
<tr>
<td>Other major centres</td>
<td></td>
</tr>
<tr>
<td>Victoria (Capital Regional District)</td>
<td>4.9</td>
</tr>
<tr>
<td>Calgary CMA¹</td>
<td>1.1</td>
</tr>
<tr>
<td>Toronto CMA</td>
<td>0.8</td>
</tr>
<tr>
<td>Montreal CMA</td>
<td>1.0</td>
</tr>
<tr>
<td>Halifax CMA</td>
<td>1.0</td>
</tr>
<tr>
<td>British Columbia</td>
<td>1.9</td>
</tr>
<tr>
<td>Canada</td>
<td>1.1</td>
</tr>
</tbody>
</table>

Source: 1996 and 2006 Census: Statistics Canada (Mode of Transportation to Work)
¹ CMA refers to Census Metropolitan Area

As a percentage, more than twice as many residents of Vancouver cycle or walk to work than in the rest of Metro Vancouver, and Vancouver sees significantly more bike or walk trips to work than in Canada’s other major centres. The exception to this is the greater Victoria region, where the combined bike and walk mode share is 16%; the City of Victoria reports a combined bike and walk mode share of 33%.

Figure 3 shows city-wide summer peak hour cycling volumes on some of the City’s existing and planned cycling routes. Peak hour volumes are highest in the neighbourhoods with highest cycling mode share, as would be expected. However, the map also shows that where established routes exist (e.g. Vivian, Kent, Inverness and Angus), very few residents are choosing to cycle. Further work is required to understand and develop strategies to address the barriers to cycling in these parts of the city.
Figure 3- Afternoon Peak Hour Bicycle Volume (summer)
Baseline count data collected on the future Balaclava, 59th Avenue, 49th Avenue and 29th Avenue routes indicate few cyclists currently using these corridors. The expectation is that with completion of more routes, combined with improved end of trip facilities and support, more people will be encouraged to consider cycling to work and for other trips. Staff look forward to comparing future counts with this baseline data once the planned bicycle facilities are completed.

In addition to Census data and city-wide manual count data, staff have begun analyzing data collected from an automatic bicycle counter installed on the Ontario Bikeway, just north of 11th Avenue. The counter was installed in June, 2008, and provides data in 15 minute increments. Figure 4 shows the monthly variation in average daily bike volume recorded at this location. Figure 5 shows daily bicycle volume for each day in September. What is considered a fairly typical pattern is illustrated on this graph - bicycle volumes reach their peak at mid-week, and fall significantly at the weekend. It is interesting to note that on a rainy September day, mid-week, the total number of cyclists corresponds closely to the average daily volume of cyclists for the month of November; this may suggest that those cyclists committed to riding on a rainy day in Summer or early Fall, may be those who remain committed even when the weather turns cold and rainy later in the year. This is significant, as it offers an opportunity to examine what motivates these committed cyclists, and may offer insight into how to encourage more people to choose cycling.
Bike count data continues to be collected on a regular basis as staff carry out a systematic program of manual and automatic bicycle counts. The objective is to establish City-wide baseline count data, against which future counts may be compared.

**FINANCIAL IMPLICATIONS**

There are no financial implications to this report.

**CONCLUSION**

Cycling mode share in some neighbourhoods exceeds 11%; cycling and walking mode share downtown exceeds 40%. Cycling Program actions are directed at increasing cycling mode share city-wide, with an emphasis on the more southern and eastern neighbourhoods where, despite having some cycling infrastructure in place, only a small percentage of residents are choosing to cycle. The bicycle count program is ongoing, providing information that assists staff in understanding cycling volumes throughout the city. Staff continue to work on development of new facilities and promotional strategies that are aimed at addressing the barriers to cycling throughout the City.

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