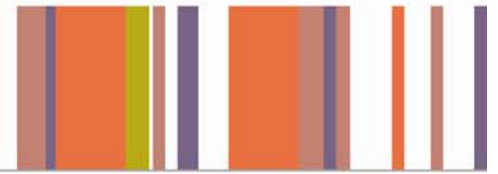




Getting Around



VANCOUVER FOUNDATION'S

VitalSigns

For Metro Vancouver

Digging a little deeper

On our website and in the summary report for Vital Signs, we have provided a number of statistics for each of our areas. Following is much more detailed data and sources for each statistic.

Overview

Trends

Our transit use is growing

Transit use and service have been rising in our region for many years.

- Transit service expanded 32% across our region from 2003 to 2009 to nearly six million service hours, more than double the level in Calgary.
Translink Annual Report 2009 and Calgary Transit
- The Canada Line reached ridership capacity in 2009, the year it opened, and is equivalent to 10 major road lanes.
Translink

Challenges

We still like our cars

- Our region has 6.4 vehicles for every 10 people as of 2009. This number is growing faster than our population, though down slightly from 2008.
Metro Vancouver

Make walking easy

How easy it is to walk around a neighborhood affects how we live. When a neighborhood is walkable, people drive less, take transit more, and are more physically active

The Walkability Index rates our cities in terms of how easy it is to travel by foot.

Most walkable

1. Vancouver
2. New Westminster
3. White Rock

BC Recreation and Parks Association

Progress

Translink has three new rapid transit lines in development

- The UBC Line and the Surrey Line are in the early stages.
- The \$1.4 billion dollar Evergreen Line, which will connect Coquitlam to Port Moody, is expected to be ready in 2015.

Translink

Infrastructure and Capacity

Roads

Increased 5% in our region over two years

2009 [[More](#)]

Average commute

64 minutes to get to and from work, 86 minutes for post-secondary students to get to and from school

2008 [[More](#)]

Cycling routes

Our region has 991 kilometres of cycling routes which make up less than 10% of our roadways

2009 [[More](#)]

Sustainable Transportation

Sustainable commuting

25% of residents walked, cycled or took transit to work

2008 [[More](#)]

Transit passes

1.8 million passes sold in 2009, up from 1.1 million in 2002

2009 [[More](#)]

Ridership

Growing steadily at an average rate of nearly 2.5% a year, faster than our population growth

2009 [[More](#)]

Smart Growth

Walkability

Vancouver, New West and White Rock top walkability list

2009 [[More](#)]

Car clubs

Co-operative Auto Network membership rose 42% in two years to nearly 7,000 members

2010 [[More](#)]

Canada Line

Equal to 10 major road lanes and will last 50 to 100 years

2009 [[More](#)]

GETTING AROUND

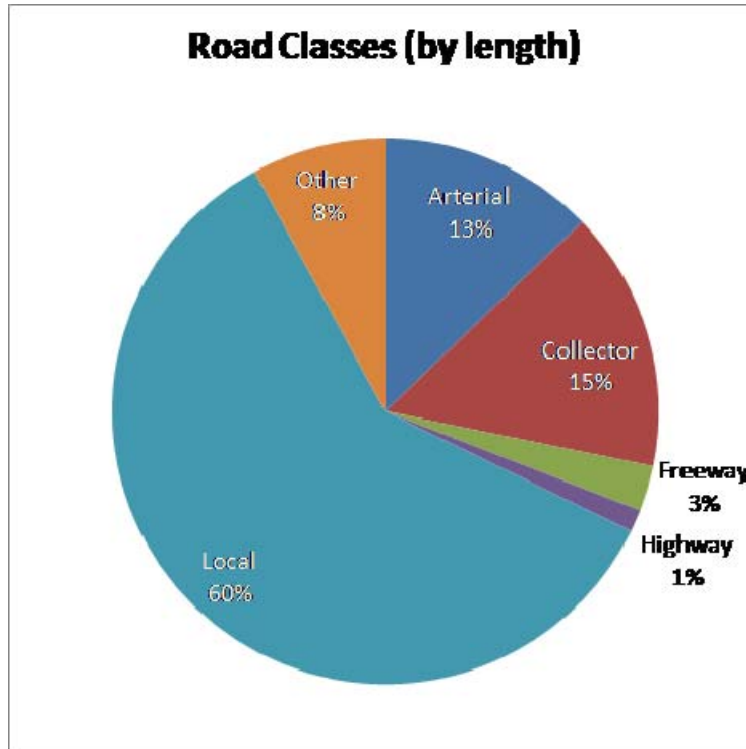
INFRASTRUCTURE AND CAPACITY

Extent of roads
Data Summary
From 2007-2009, the extent of roads in the region increased by almost 5 %, outpacing the region's population growth for this period of about 3.6%. Most of this increase took the form of local roads; the extent of highways and freeways increased by only 0.25%.
Date
2004, 2007, 2009
Geography
Metro Vancouver; Toronto (CMA); Montreal (CMA)
Description

There are over 10,000 km of roads in the Metro Vancouver region. The majority of these roads (60%) are local. Only 13% are major arterials, 1% are highways, and 3% are restricted access freeways.

Extent of Roads by Road Class, 2009

Road Class	Total length (m)
arterial	1,297,288.654
collector	156,4270.83
ferry	50,667.736
freeway	271,472.711
highway	134,191.419
lane	46,395.878
local	6,063,030.694
ramp	160,146.658
recreation	19,734.053
restricted	190,300.114
service	15,928.763
strata	280,727.696
trail	40,195.736
TOTAL	10,134,350.94



As shown in the table below, compared to the regional population growth from 2007-2009 of 3.6%, the growth in road capacity grew more, at 4.9% overall.

Length of selected roads in kilometers

	2004	2007	2009	2009 % Share of Total	% Change 2007-2009
Highways/Freeways (km)	401	405	406	4.0%	+0.25%
Arterials/Collector Roads (km)	2733	2783	2862	28.5%	+2.84%
Lanes/Local Roads/Ramps (km)	5961	6102	6270	62.5%	+2.75%
Recreation/Restricted/Service/Strata Roads (km)	213	284	507	5.0%	+78.52%
Total, Metro Vancouver (km)	9,308	9,574	10,045	100%	4.92%

Comparison

n/a

Data Considerations

None.

Source

Translink by request (using GIS Innovations Digital Road Atlas dataset)

Population: Demographic Analysis Section, BC Stats

Link

n/a

Average Commuting Times and Median Commuting Distance

Data Summary

In 2008, the average commuting time was about 64 minutes to get to work, 86 minutes for post secondary students and 33 minutes for grade school students.

Date

1992-2008

Geography

Canada; B.C.; Metro Vancouver; Toronto (CMA); Montreal (CMA)

Description

Metro Vancouver was unique amongst big Canadian cities in commuting trends, showing a decrease in average commuting time from 70 minutes (round trip) in 1992 to 67 minutes in 2005, whereas the time spent commuting increased for both Canada and B.C. as a whole. Time spent commuting still averages lower for Canada and B.C. as a whole than for the region. Metro Vancouver also uniquely experienced a decrease in commuting distance (-2.6% from 2001-2006), and now the commuting distance is lower than the Canadian average, though still higher than the average for B.C. as a whole.

	Average Commuting Time (min, round trip)			Median Commuting Distance to Work (km)		% Change 2001-2006
	1992	1998	2005	2001	2006	
Canada	54	59	63	7.2	7.6	+5.6
British Columbia	59	61	60	6.4	6.5	+1.6
Metro Vancouver	70	68	67	7.6	7.4	-2.6

Amongst the three different kinds of commuters examined, grade school trips have the lowest commute times, followed by work and finally, post-secondary trips. This is likely to be related to distance, as grade school trips tend to be short and closer to home, whereas post-secondary school trips are longer, as the two main institutions in Metro Vancouver (UBC and SFU) are in relatively isolated areas of the region, requiring longer commute times. Furthermore, many post-secondary students are transit-captives (meaning that they do not have access to a vehicle and are party to the UPass program), so their commuting patterns are biased towards transit, which could result in lengthier commute times.

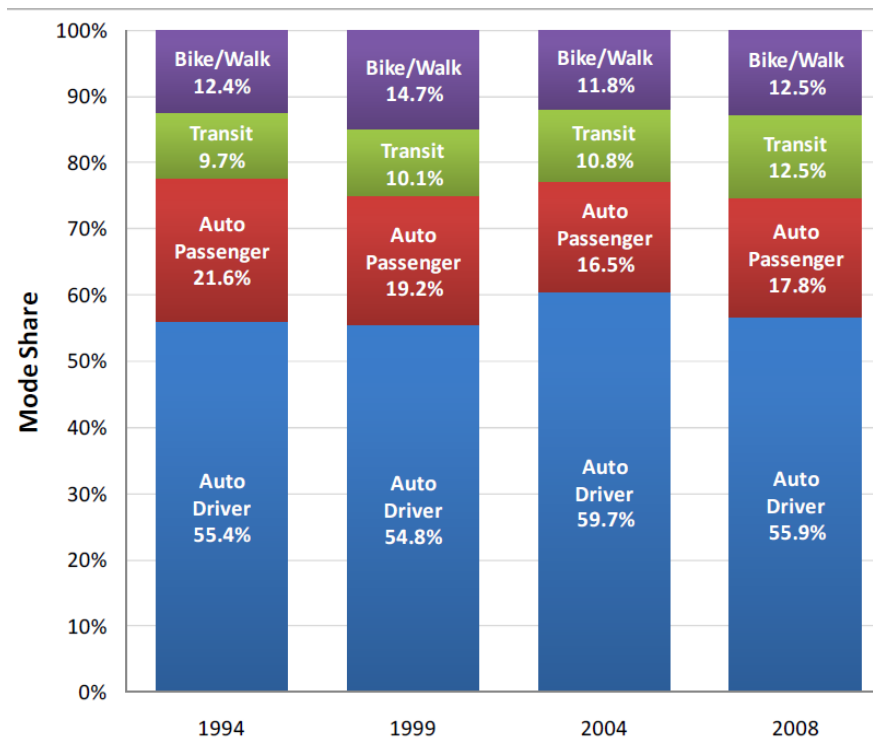
Commuting Trip Times, by Mode and Destination, 2008 (minutes)

Mode	From Grade School	From PS		To Grade School		To PS	To Work	To/From Grade School Round Trip	To/From PS Round Trip	To/From Work Round Trip
		From PS	From Work	To Grade School	To PS					
Auto Driver	18	31	30	17	34	29	35	65	59	

Auto Passenger	14	28	28	12	27	26	26	55	54
Bicycle	14	24	31	15	23	27	29	47	58
Other	29	52	32	30	44	27	59	96	59
Transit	38	56	54	30	51	46	68	107	100
Walk	16	25	17	12	20	15	28	45	32
Average	18	44	33	15	42	31	33	86	64

Mode share trends from 1994-2008 demonstrate that single occupancy vehicles remain the dominant travel mode region-wide (55.9% of all trips in 2008). Transit has increased its share of trips since 1994 by 28.9%.

Mode Share Trends, Metro Vancouver, All Trips



The table below shows that people's commute home from work and/or school tends to be longer than their commute to work

and/or school. Furthermore, in addition to commuting trips, Metro Vancouverites report daily travel of 7.4 km on average for recreation, dining and shopping, and 6.9 km for personal business.

Average Trip Length, by Trip Purpose and Time of Day, 2008 (km)

Trip Purpose	Avg Trip Length (km)		
	AM Peak	PM Peak	24 Hours
	06:31 - 09:30	15:31 - 18:30	
To Work/PS	13.6	10.6	14.1
From Work/PS	10.7	14.4	13.9
During Work	11.8	11.3	11.2
To Grade/Oth Sch	4.5	5.4	4.7
From Grade/Oth Sch	6.9	5.6	4.6
Recreation/Dining/Shop	6.9	7.2	7.4
Personal Business/Oth	6.1	7.0	6.9
Total	9.2	10.1	9.3

Comparison

Metro Vancouver showed commuting trends that were unique amongst big Canadian cities in the early part of the 21st century, with a decline in average commuting time (-1.5% from 1998-2005) and in median commuting distance to work (-2.6% from 2001-2006). Both Toronto and Montreal experienced increases in both these measures over the same time period, particularly noticeably in time spent commuting.

	Average Commuting Time (min, round trip)			% Change 1998-2005	Median Commuting Distance to Work (km)		% Change 2001-2006
	1992	1998	2005		2001	2006	
Metro Vancouver	70	68	67	-1.5	7.6	7.4	-2.6
Metro Toronto	68	76	79	+3.9	9.2	9.4	+2.2
Metro Montreal	62	65	76	+16.9	7.9	8.1	+2.5

Data Considerations

The Trip Diary survey was conducted in a different manner than the GSS, so the numbers may not be directly comparable. Furthermore, the travel times in the Trip Diary are self-reported so there may be some variations in that regard. For the Mode share trends Figure, data come from trip diary reports, various years. The 2004 survey was conducted in the spring; all others were

conducted in the fall.
Source
Statistics Canada. Data for average commuting time based on General Social Survey, 1992, 1998 and 2005. Data for Median Commuting Distance is based on Census 2006, Topic-based Tabulations. Trip Diary Survey from Translink, by request
Link
http://www.statcan.gc.ca/pub/89-622-x/2006001/t/4054733-eng.htm

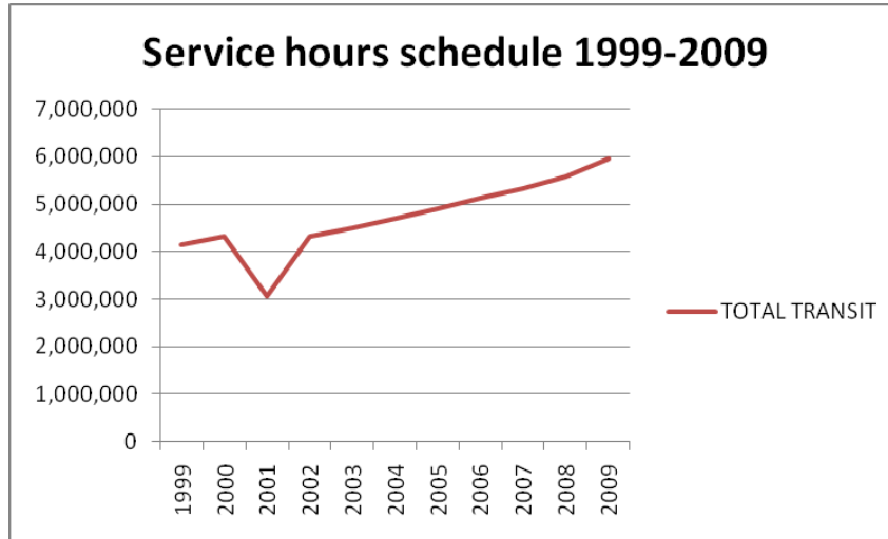
Transit Service Capacity
Data Summary
Almost 6 million hours of transit service were provided to the metro Vancouver population in 2009. It increased by 32 % since 2003, or over three times faster than population growth during this time period.
Date
1999-2009 (selected years)
Geography
Metro Vancouver; Calgary
Description

Transit service has increased steadily across the region since 1999, including strong growth in new community shuttle service (+446%) as well as conventional bus, rapid transit, and sea bus service (+23%).

Annual Service Hours, 1999-2009

	1999	2001	2003	2005	2007	2008	2009	% Change, 2003-2009
CMBC Conventional Bus	3,387,340	2,290,243	3,428,850	3,525,980	3,840,003	4,028,944	4,241,928	24%
West Van Conventional Bus	85,755	105,862	102,739	105,115	115,249	119,245	132,803	29%
SeaBus	10,466	6,851	10,446	10,495	10,679	10,681	10,647	2%
SkyTrain	633,243	630,409	832,183	893,647	866,570	877,437	915,377	10%
WCE Commuter Rail	26,446	29,025	30,528	33,157	32,212	32,311	32,203	5%
WCE TrainBus					2,235	5,470	6,690	n/a
Canada Line							63,104	n/a
Total All Conventional Transit Services	4,143,250	3,062,390	4,404,746	4,568,394	4,866,948	5,074,088	5,402,752	23%
Community Shuttle CMBC		5,603	65,393	271,849	405,450	442,093	466,262	n/a
Community shuttle Contractors	2,646	4,450	35,420	53,214	60,615	72,237	84,539	139%
Total All Community Shuttle Services	2,646	10,053	100,813	325,063	466,065	514,330	550,801	446%

TOTAL TRANSIT	4,145,896	3,072,443	4,505,559	4,893,457	5,333,013	5,588,418	5,953,553	32%
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Comparison

Compared to Calgary, Metro Vancouver has more than double (2.4 times) the annual public transit service hours.

Annual Service hours 2007-2009, in million

	2007	2008	2009
Metro Vancouver	5.33	5.59	5.95
Calgary	2.18	2.31	2.51

Data Considerations

CMBC - Coast Mountain Bus Company

WCE - West Coast Express

The dip in service hours in 2001 is due to a four-month transit strike (April - August).

Source

Translink Annual Report 2009

Calgary Transit

Link

<http://www.translink.ca/en/About-TransLink/Annual-Reports.aspx>

<http://www.calgarytransit.com/html/statistics.html>

Designated Cycling Routes

Data Summary

In 2009, the region had 1421 km of cycling routes, or about 14% of the total extent of the region's roadways.

Date

2009

Geography

Metro Vancouver and municipalities

Description

Designated Cycling Network in Metro Vancouver in 2010

	Lane km	Road km
Shared roadway	517	517
Off-street pathways	514	260
Bicycle lanes	402	402
Paved shoulders	187	187

Marked wide curb lanes	46	46
Cycle tracks	4	4
Total	1675	1421

To put these figures in perspective, there are over 10,000 km of roadways in Metro Vancouver. So the region's cycling routes amount to about 14 % of the extent of roadways.

	Lane km	Road km
Anmore	0	0
Belcarra	0	0
Burnaby	252	200
Coquitlam	46	30
Delta	144	138
Electoral A	0	0
Langley City	5	5
Langley Township	31	31
Maple Ridge	45	42
New Westminister	45	33
North Vancouver City	17	15
North Vancouver District	56	50
Pitt Meadows	47	40
Port Coquitlam	53	29
Port Moody	13	8
Richmond	169	131
Surrey	283	256
Tsawwassen First Nation	3	3
University Endowment Lands (UBC)	32	28
Vancouver	365	321
West Vancouver	51	46
White Rock	6	6
TOTAL	1675	1421

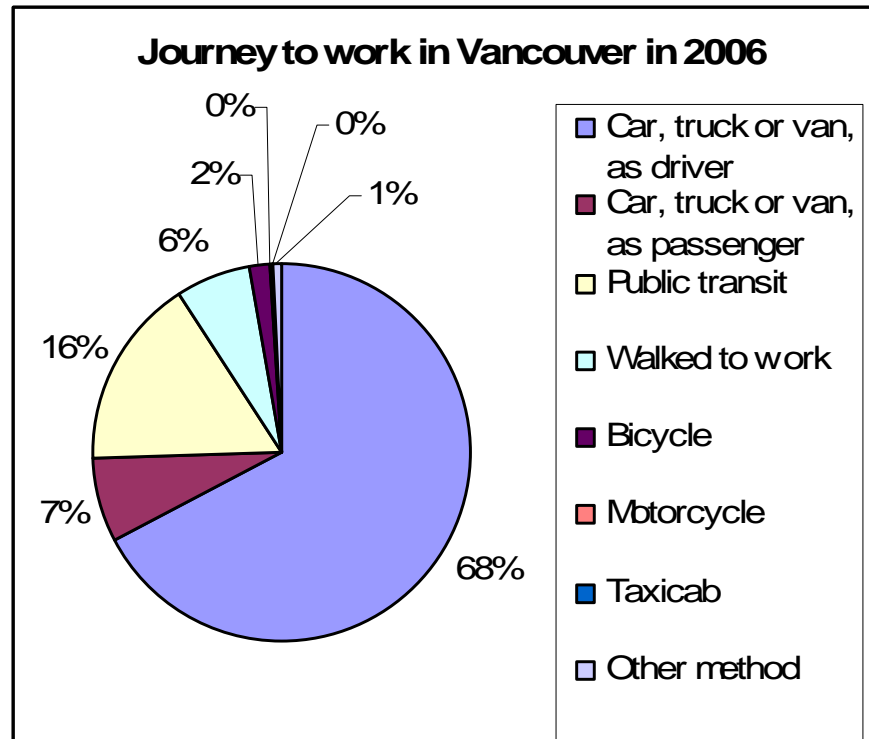
Comparison

N/A

Data Considerations
Lane km differs from Road km in that the figure for lanes includes a count of those roads with cycling paths in both directions. As an example, 1 road km of a two way bike path is reported as 2 lane km of cycling routes. Since the release of Vital Signs 2008, Translink validated its inventory and map database of cycling routes in the region, which resulted in the declassification of routes which did not appear to include adequate signage and pavement markings. As a result, the data presented here for 2009 are not comparable with the data presented in Vital Signs 2008. Translink is currently undertaking another round of changes to the cycling network, which will result in further revisions to these figures.
Source
Translink, by request
Link
N/A

SUSTAINABLE TRANSPORTATION

Sustainable Commuting
Data Summary
As of 2006, 16.5% of workers in Metro Vancouver were using public transit to get to work and 24.5% were commuting via either public transit or active transportation. Between 2001 and 2006, this figure increased by 5%.
Date
1996, 2001, 2006, 2008
Geography
Metro Vancouver, Kelowna, Abbotsford-Mission, Victoria
Description
Almost 25 % of workers were taking public transit, their bicycle or walking to work in 2006. This represents an increase of sustainable transportation mode share from 21.8% in 1996 to 24.5% in 2006. Conversely, vehicle and other modes reduced from 78.2% in 1996 to 75.5% in 2006.



The sustainable transportation mode share, combining commuting trips by public transit and active transportation, increased by 35% over 10 years from 21.8% in 1996 to 24.5% in 2006. Conversely, vehicle and other modes decreased from 78.2% in 1996 to 75.5% in 2006.

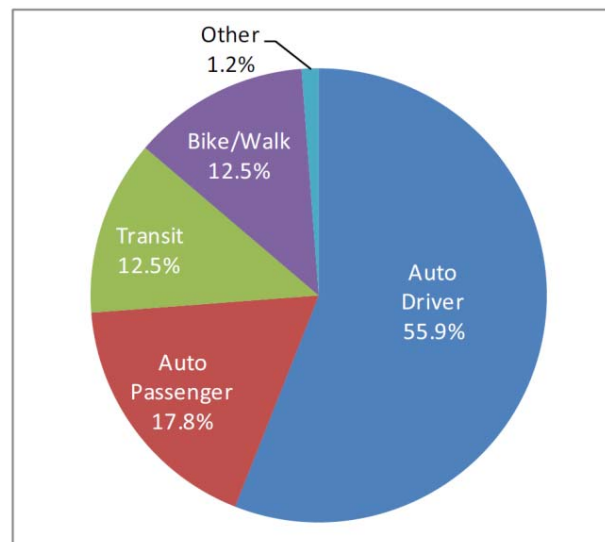
Journey to Work in Metro Vancouver, 1996 and 2006

	1996	Share	2006	Share	% Change
Vehicle Driver	587190	70.6%	675075	67.3%	15.0%
Vehicle Passenger	54465	6.6%	70990	7.1%	30.3%
Transit	119210	14.3%	165435	16.5%	38.8%
Walked	48520	5.8%	63415	6.3%	30.7%
Biked	13720	1.7%	16585	1.7%	20.9%

Other	8175	1.0%	11520	1.1%	40.9%
Total	831280	100.0%	1003020	100.0%	20.7%
Sustainable Transportation	181450	21.8%	245435	24.5%	35.3%

The sustainable mode share for journeys to work is a comparable proportion to the share of trips made by public transit, bicycle, and walking for all trips combined, as shown in the figure below, using 2008 data.

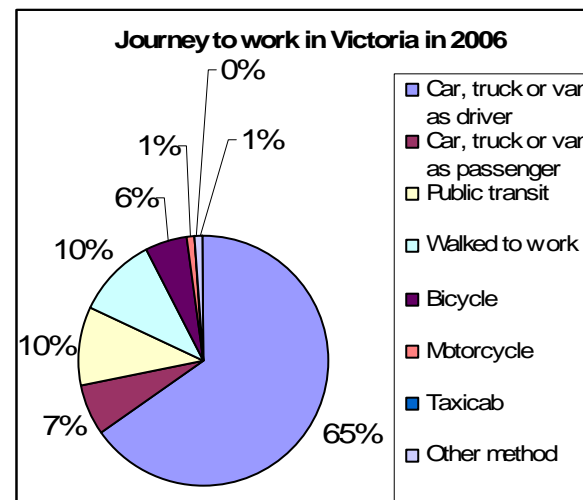
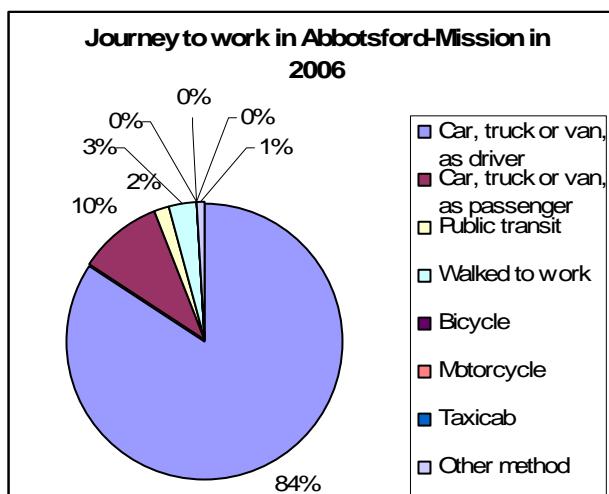
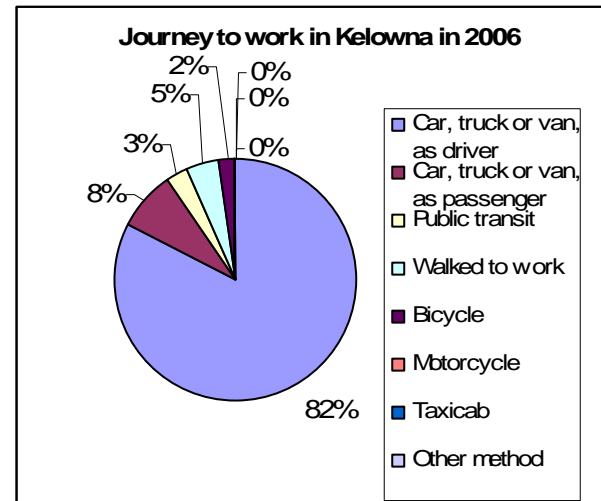
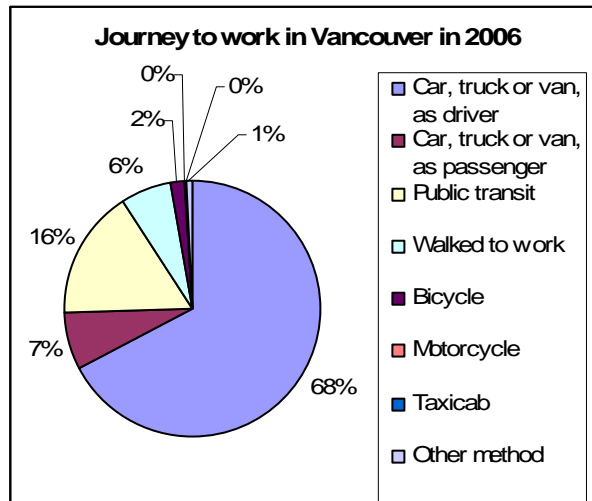
Mode share in Metro Vancouver in 2008, all trips



Comparison

Metro Victoria has a higher proportion (26.3%) of people using public transit or active transportation (walking or bicycling) to commute than Metro Vancouver (24.5%), but less urban communities in the Province are much more automobile dependent for commuting.

	2006			
	Kelowna (B.C.)	Abbotsford -Mission (B.C.)	Metro Vancouver (B.C.)	Metro Victoria (B.C.)
	number			
Total - modes of transportation	73,025	72,280	1,003,020	158,510
Car, truck or van, as driver	59,435	60,140	675,075	102,920
Car, truck or van, as passenger	5,645	7,230	70,990	10,715
Public transit	1,955	1,275	165,435	16,205
Walked to work	3,340	2,295	63,415	16,510
Bicycle	1,550	505	16,585	8,955
Motorcycle	250	190	2,745	1,195
Taxicab	60	60	1,275	230
Other method	785	595	7,495	1,775
% Public transit and active transportation	9.3	5.6	24.5	26.3



Data Considerations

The 2006 data is from the Census and the 2008 data is from the Translink Trip Diary survey. These two data sources are not directly comparable, in part because the Trip Diary survey included all trips within 24 hours whereas the 2006 refers only to journeys to work.

Source
Metro Vancouver <u>2006 Census Bulletin #8 Commuting in Metro Vancouver - Journey to Work</u> Statistics Canada, CANSIM, table (for fee) <u>326-0009</u> and Catalogue no. <u>62-001-X</u> . Translink, by request
Link
http://www.metrovancouver.org/about/publications/Publications/2006_commute_report_30oct2008.pdf http://www40.statcan.ca/I01/cst01/econ152o-eng.htm http://www.translink.ca/~media/Documents/Plans%20and%20Projects/Trip%20Diary/2008%20TransLink%20Trip%20Diary%20Survey%20Report.ashx

Transit Ridership (Transit pass purchases)

Data Summary

Purchase of monthly transit passes in the region leveled off from 2008 - 2009 on a per capita basis, following six years of growth.

Date

2002-2009

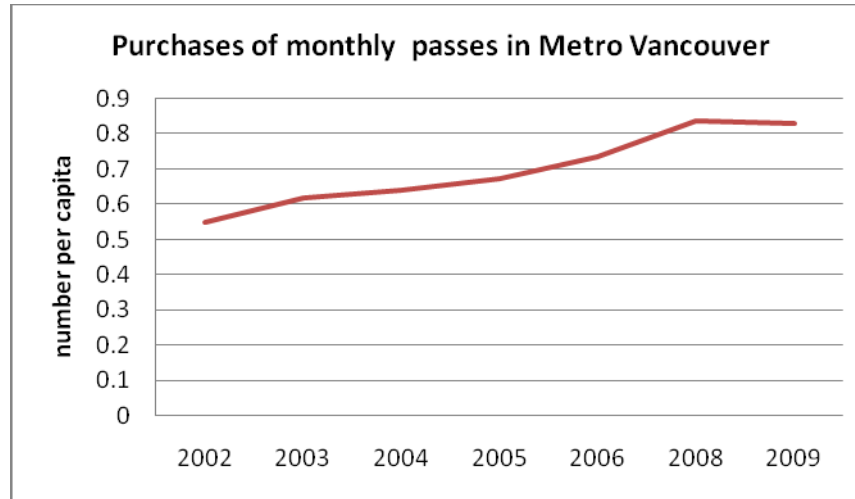
Geography

Metro Vancouver and municipalities

Description

A total of over one and three-quarters million transit passes were sold in 2009.

Number of Monthly Transit Passes Sold, Total and Per Capita (2002-2009)		
Year	Total	Per Capita
2002	1,146,962	0.547
2003	1,303,563	0.616
2004	1,362,641	0.639
2005	1,447,745	0.671
2006	1,603,655	0.735
2008	1,770,000	0.836



Comparison

N/A

Data Considerations

This data on purchases of monthly transit passes does not include UPass, as these passes are purchased from postsecondary student tuition fees.

Source

Translink Annual Report 2009

Link

<http://www.translink.ca/en/About-TransLink/Annual-Reports.aspx>

Transit Ridership (Ridership per capita)

Data Summary

Transit ridership has outpaced population growth in the region. Metro Vancouver residents now average over 80 rides per person.

Date

2004-2009

Geography

Metro Vancouver

Description

Transit ridership (revenue rides) has been growing steadily, exceeding an average of 80 rides per person per year for all of Metro Vancouver. Compared to population growth, transit ridership per capita has been growing at an average rate of 2.5% per year.

	Revenue rides (in thousands)	Rides Per Person	Annual % Change
2009	187,912	81.0	+3.0
2008	178,796	78.7	+2.3
2007	172,070	76.9	+2.5
2006	165,073	75.1	+2.2
2005	159,714	73.5	+1.8
2004	156,840	73.0	

Comparison

N/A

Data Considerations

Revenue rides are the number of people who purchased a ticket and traveled to a destination regardless of the number of transfers made to complete the trip. This indicates the level of use of the transit system. Population numbers used are BC Stats yearly population estimates.

Source

Translink annual reports 2008, 2009

Link

2009 Annual Report (PDF page 13/17) <http://www.translink.ca/~media/documents/about%20translink/annual%20reports/2009%20translink%20annual%20report.as hx>

2008 Annual Report (PDF page 3/16) <http://www.translink.ca/~media/documents/about%20translink/annual%20reports/2008%20translink%20annual%20report.as hx>

Olympic Games Transportation

Data Summary

During the Olympic Games, over 10,000 pedestrians, 5,000 cyclists and 34% fewer cars came into the downtown core each day.

Date

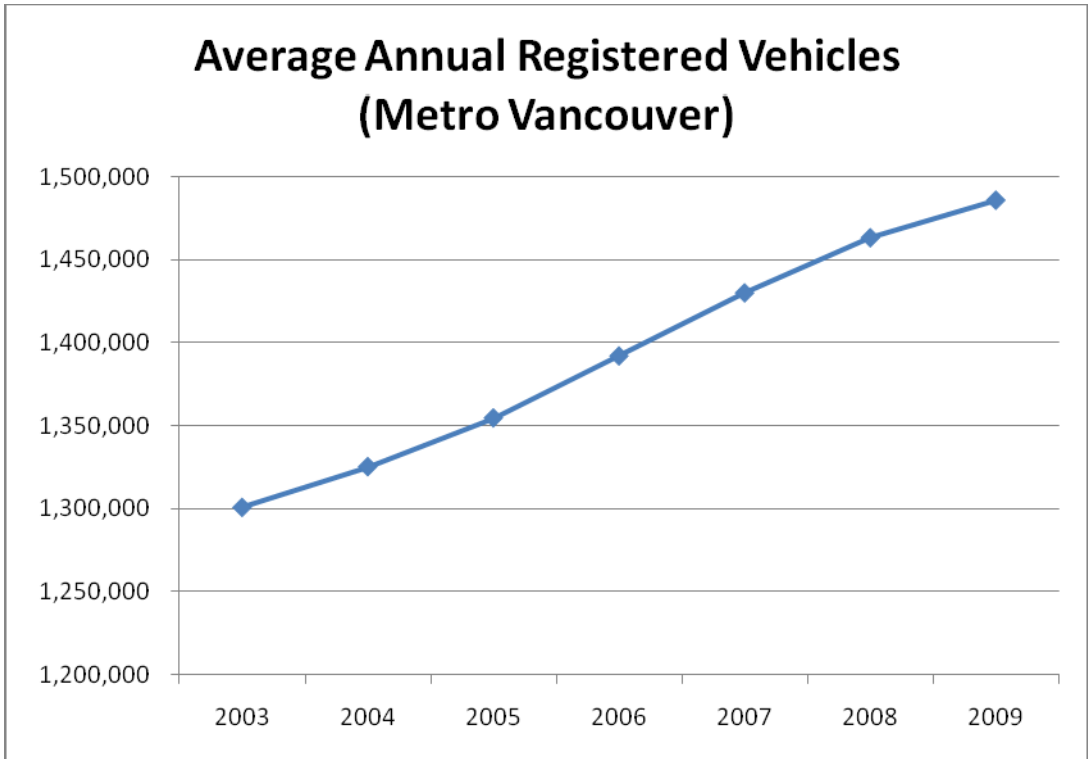
2010

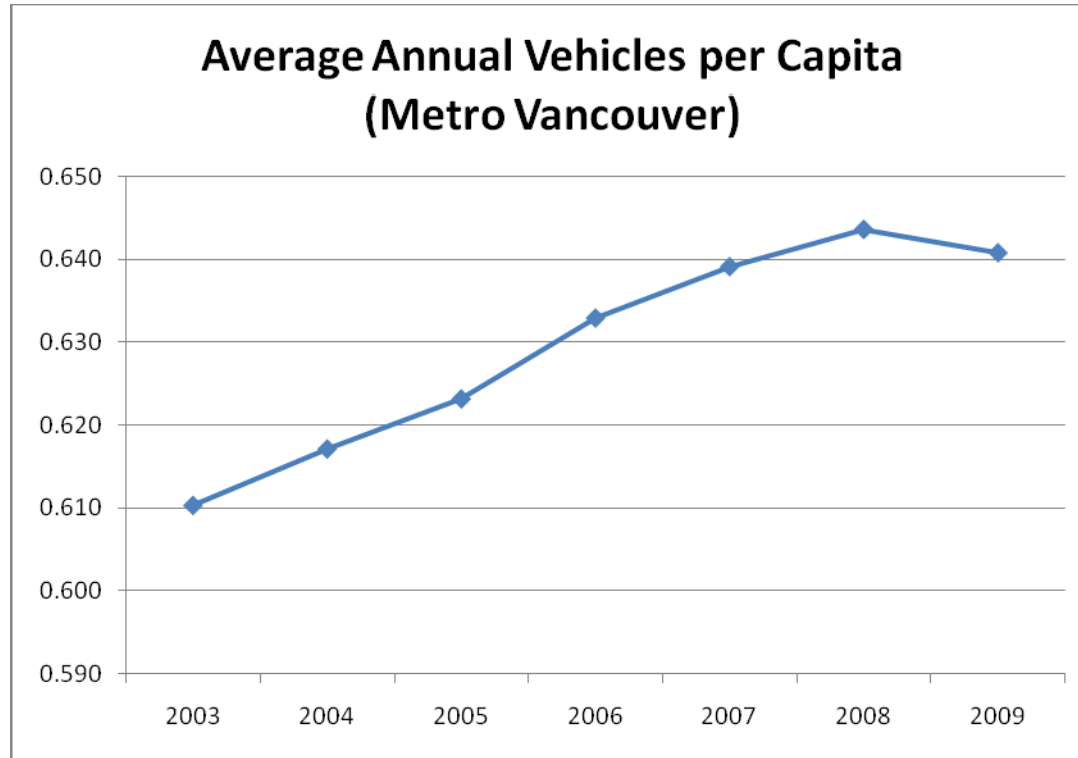
Geography

Metro Vancouver
Description
<p>Overall, the transportation during the 2010 Olympic Winter Games has been regarded as a success. During the 17-day “Games Time” period, 26 million boardings were estimated on the bus, SeaBus, SkyTrain and West Coast Express. Specifically, during an average Olympic weekday, 1,583,775 boardings were observed. This is 31% higher than a typical or normal weekday¹.</p> <p>Compared to a typical weekday morning, vehicular traffic into the downtown during the Games was down by 35 percent². Conversely, cyclist volumes across the Cambie, Granville and Burrard bridges approached summertime levels with an average of 5,000 cyclists riding to and from Downtown Vancouver every day. Over 10,000 pedestrians also came into and out of Downtown Vancouver over the Burrard and Cambie bridges each day³.</p> <p>The observations of the share of people entering and leaving the downtown core on foot, by bike, and on transit, indicate that the goals for the Olympic Transportation plans were achieved, suggesting that the 2010 Winter Games left a legacy of sustainable transportation. This can be regarded as proof that the residents and visitors of metro Vancouver can travel en-masse in a sustainable manner when given convenient alternatives to vehicle travel.</p>
Comparison
N/A
Data Considerations
None
Source
<p>¹ TransLink Media Release, “TransLink tops 26 million riders”, March 23, 2010</p> <p>² City of Vancouver, “Georgia and Dunsmuir Viaducts Study”, Report to Standing Committee on Planning and Environment, June 24, 2010</p> <p>³ City of Vancouver News Release, “Olympic Transportation plan creates sustainable legacy for Vancouver”, February 24, 2010</p>
Link
<p>http://www.translink.ca/en/About-TransLink/Media/2010/March/TransLink-tops-26-million-riders.aspx</p> <p>http://vancouver.ca/ctyclerk/cclerk/20100624/penv2010624ag.htm</p> <p>http://vancouver.ca/mediaroom/news/index.htm</p>

VEHICLES

Registered Vehicles per Capita						
Data Summary						
The average annual number of registered vehicles in Metro Vancouver grew faster than the population growth from 2003-2009, with average vehicles per capita growing from 61 per 100 persons in 2003 to a high of 64.4 per 100 persons in 2008, with a slight tapering down in 2009 at 64.1 per 100 persons.						
Date						
2003-2009						
Geography						
Metro Vancouver						
Description						
Based on monthly data provided to Metro Vancouver from ICBC, the average annual vehicle registrations were calculated between 2003 and 2009.						
Year	Annual Average	Absolute Growth	Growth Rate	Population Estimate	Population Growth Rate	Vehicles per Capita
2003	1,300,572			2,130,980		0.610
2004	1,325,142	24,570	1.9%	2,147,273	0.8%	0.617
2005	1,354,496	29,354	2.2%	2,173,538	1.2%	0.623
2006	1,391,899	37,403	2.8%	2,199,121	1.2%	0.633
2007	1,429,905	38,006	2.7%	2,237,220	1.7%	0.639
2008	1,463,151	33,246	2.3%	2,273,241	1.6%	0.644
2009			1.5%		2.0%	0.641





Number of Vehicles registered in Metro Vancouver in 2009, by type

Type of vehicle	Number of vehicles	% Share
Passenger Vehicles	1,122,955	75.6
Commercial Vehicles	218,411	14.7
Motorcycles	25,906	1.7
Trailers	70,670	4.8
Motorhomes	10,207	0.7
Commercial Trailer	37,620	2.5
Total	1,485,769	100

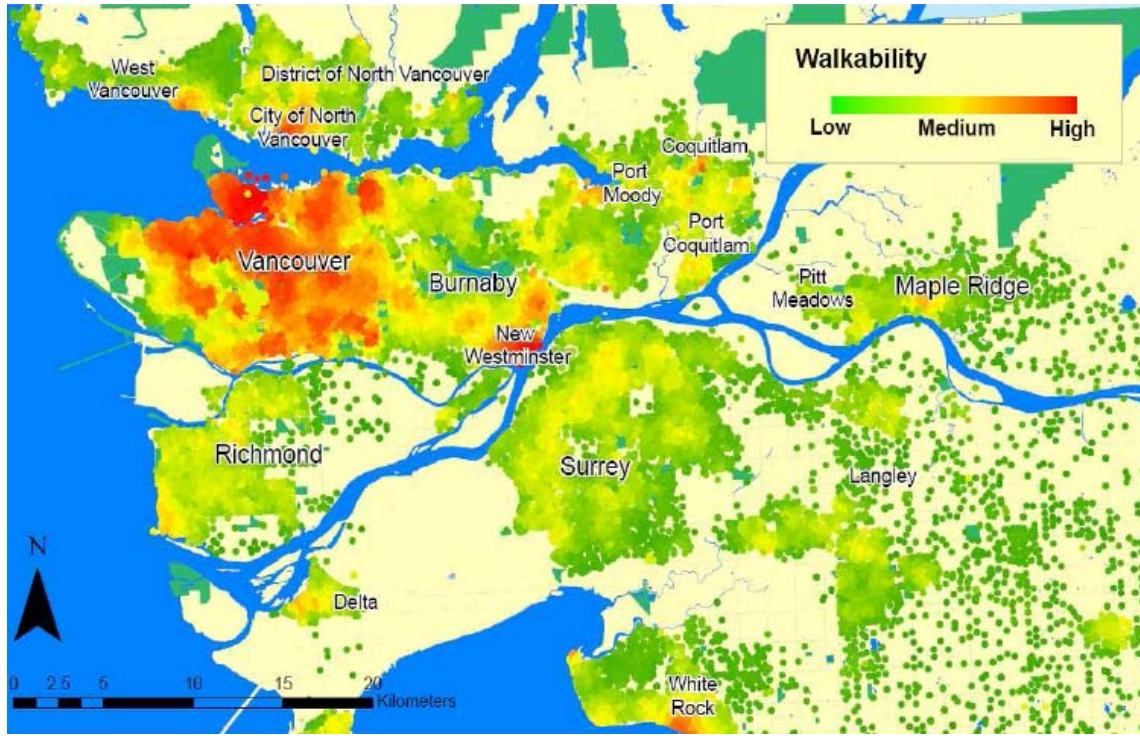
Comparison

N/A

Data Considerations
Data consists of the following vehicle registration types: Type 1: Passenger Vehicles Type 2: Commercial Vehicles Type 3: Motorcycles Type 4: Trailers Type 5: Motorhome Type 6: Commercial trailers
Source
Data provided by Metro Vancouver, original source ICBC
Link
N/A

SMART GROWTH

Walkability of Neighborhoods
Data Summary
The walkability of neighbourhoods around the region varies widely, with the city of Vancouver having the highest average walkability scores and Langley, the lowest.
Date
2009
Geography
Metro Vancouver
Description
The Metro Vancouver Walkability Surface Index was used to measure the characteristics of the built environment within the immediate areas where respondents live. The Walkability Index assesses how walkable a particular streetscape or neighbourhood is based on the measures of four characteristics of the built environment known to relate with walking behaviour into a single, aggregate measure. These characteristics are: land use mix, density of commercial uses, net residential density and street connectivity.
<u>Neighbourhood Walkability Across Metro Vancouver, 2009</u>



Images Demonstrating Walkability Levels for Neighbourhoods



a) **Walkability** \approx **12**; Homer Street and Pender Street, Vancouver



b) **Walkability** \approx **6**; West Broadway and Macdonald Street, Vancouver

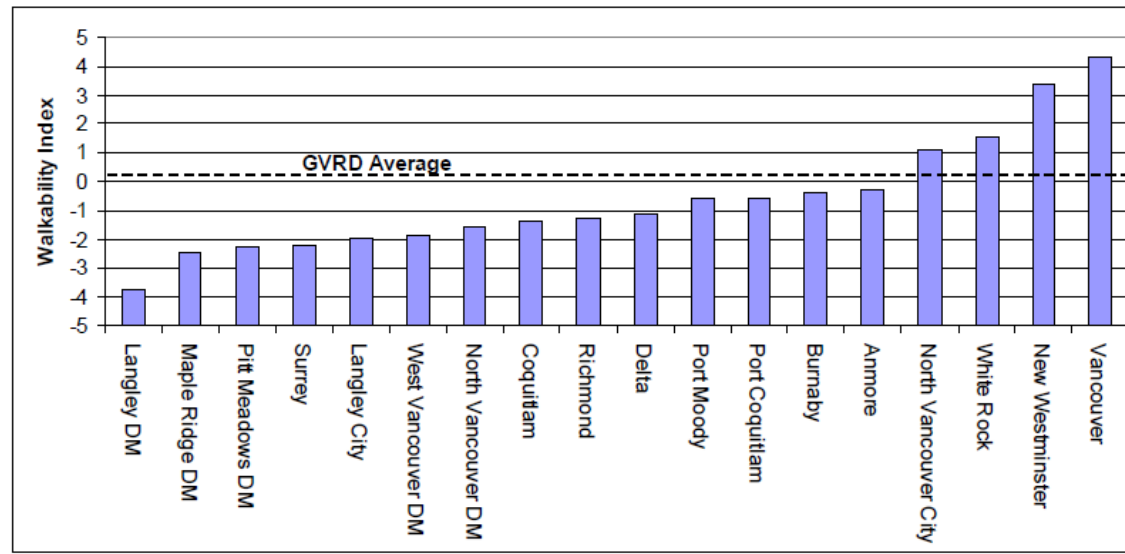


c) **Walkability** \approx **0**; 72 Avenue and 124 Street, Surrey



d) **Walkability** \approx **-6**; 97 Avenue and 177A Street, Surrey

Average Walkability Index Scores Across Metro Vancouver



Highlights of the study include the following:

- Adults who live in more walkable neighbourhoods are more likely to engage in active transportation for home-based trips
- Transit use is more common in more walkable places
- Adults who live in more walkable neighbourhoods drive less
- Density is the most significant predictor of reported travel behaviour
- Parks and open spaces are strong predictors of active transportation in the region
- Neighbourhood built environment, as measured in this study, does not significantly influence whether or not youth walk to school
- Transit and vehicle use in older youth is more likely to be influenced by the built environment than younger children
- Modest changes in the walkability of a neighbourhood can translate into important, health-enhancing increases in active transportation and physical activity
- More walkable communities can help people become more physically active through their daily travel behaviour

Comparison

N/A

Data Considerations

This study used 1999 Translink Trip Diary Survey data in conjunction with a geographic information system generation of a Walkability Surface Index at the postal code level, for a 1-km “network buffer.” Household locations were spatially matched to their corresponding postal codes and the corresponding data on walkability around each household. Socio-economic and demographic variables like age, gender and household income were controlled for in order to isolate the effects of land use patterns on travel behaviour.

Source

Study : [Physical activity and transportation benefits of walkable approaches to community design in BC](#) prepared for BC Recreation and Parks Association

Link

http://www.bcrpa.bc.ca/recreation_parks/active_communities/active_transportation.htm

Car Sharing and Membership in Car Clubs

Data Summary

Membership in car sharing clubs and cooperatives is on the rise region-wide, with the Cooperative Auto Network showing 43% growth from 2008-2010 to nearly 7000 members and drivers.

Date

2008

Geography

Metro Vancouver and municipalities

Description

Cooperative Auto Network Membership Distribution, 2008-2010

Municipality	2008	2010	% Change, 2008-2010
Vancouver (includes UBC)	4320	5865	+35.8
Burnaby	204	398	+95.1
North Vancouver	137	202	+47.4
New	73	144	+97.3

Westminster			
Surrey	17	68	+300
Coquitlam	31	57	+83.9
Richmond	22	47	+113.6
Delta	12	38	+216.7
West Vancouver	17	30	+76.5
Port Moody	8	22	+175
Port Coquitlam	7	15	+114.3
Bowen Island	n/a	12	n/a
TOTAL	4848	6898	+42.3

Vehicles in Fleet, Cooperative Auto Network and Jack Bell Ride Share Program, 2002-2010

	Number of Vehicles	
	Cooperative Auto Network	Jack Bell Ride Share Program
2002	-	90
2006	-	120
2007	170	-
2008	238	
2010	245	

Comparison

N/A

Data Considerations

Figures shown for Cooperative Auto Network include municipalities where there are at least 10 members or drivers. Members have purchased shares in the cooperative, while drivers have not but use the cars with a different fee structure. The option to be a "driver" is new since 2008.

Source

Cooperative Auto Network; Jack Bell Foundation, by request

Link

http://www.cooperativeauto.net/resources/pdf/SER_2008.pdf

New Rapid Transit in Development

Data Summary

In 2009, the new rapid transit Canada Line opened and has reached ridership capacity. Three additional rapid transit lines are in early stages of development around the region.

Date

1999-2009, selected years

Geography

Metro Vancouver

Description

From 1999-2009, the share of transit provided in the region via rapid transit has remained fairly constant, 17% in 2009. However, 2009 saw the opening of a new rapid transit line, the Canada Line. The Canada Line's estimated capital cost of about \$1.9 billion (in 2003 dollars) will provide the additional transportation capacity equivalent to 10 major road lanes and serve the region for the next 50 to 100 years. Three additional rapid transit projects are in early stages of development that promise to change the rapid transit capacity, ridership, and share of public transit in the region in years to come.

Annual Service Hours, 1999-2009

	1999	2001	2003	2005	2007	2008	2009
Rapid transit (Sky Train, Canada Line, West Coast Express)	659,689	659,434	862,711	926,804	898,782	909,748	1,010,684
Other transit	3,486,207	2,413,009	3,642,848	3,966,653	4,434,231	4,678,670	4,942,869
% of rapid transit in total transit	16%	21%	19%	19%	17%	16%	17%

New Rapid Transit Lines in Development

UBC Line	Currently in Phase 2 public consultation regarding technology (bus rapid transit, light rail transit, rail rapid transit), routing, and other factors.
Surrey Line	Currently in Phase 2 public consultation regarding technology (bus rapid transit, light rail transit, rail rapid transit), routing, and other factors.
Evergreen Line	In development, estimated construction cost \$1.4 Billion

Comparison

N/A
Data Considerations
None
Source
Translink
Link
http://www.ravrapidtransit.com/aboutFAQ.asp#1 http://www.translink.ca/

Perceived Safety of Cycling in the Region
Data Summary
Concerns related to personal safety are the most common deterrent from cycling more often in the region. Comfort levels with cycling are high on routes physically separated from cars (89.5 %), on designated bike routes on residential roads (81%) and on main roads on which a painted line serves as the separation from traffic (80.5%).
Date
2009
Geography
Metro Vancouver
Description
Nine of the top ten deterrents from cycling in the region are safety-related. Three of the top 10 motivators for cycling in the region are related to personal safety (the route has bicycle paths separated from traffic for the entire distance; you can make the trip in daylight hours, a 2-way off-street bike path has a reflective centre line for night and poor weather cycling) and one is related to property safety (the destination has indoor bike storage).
The influence score in the table of 73 influencing factors shown below ranges as follows: +1 = much more likely to cycle, 0 = neutral; -1 = much less likely to cycle.
<u>Motivating and Deterring Factors for Cycling, by Level of Influence</u>

FACTOR	INFLUENCE
The route is away from traffic noise & air pollution	0.79
The route has beautiful scenery	0.70
The route has bicycle paths separated from traffic for the entire distance	0.69
The route is flat	0.61
Cycling to the destination takes less time than traveling by other modes	0.59
The distance to your destination is less than 5 km	0.53
You can make the trip in daylight hours	0.50
You can take your bike on the SkyTrain at any time	0.50
A 2-way off-street bike path has a reflective centre line for night & poor weather cycling	0.49
The destination has secure indoor bike storage	0.49
The route has bike signage, pavement markings & bike activated signals on residential streets	0.47
The destination has covered bike racks, to protect from rain	0.47
Information about cycling routes to the destination is available	0.46
The bus has racks that carry bikes	0.45
A web-based trip-planning tool is available	0.45
The destination has outdoor bike racks	0.42
There is a consistent type of bike lane marking throughout the greater Vancouver area	0.41
There are secure bike lockers at transit stations	0.41
The route is wide enough for cyclists to ride side-by-side	0.40
The destination has a place to store a change of clothing	0.38
The route has on-road bicycle lanes on major roads for the entire distance	0.36
Traffic calming on designated bike routes reduces the number of cars using the route	0.36
The destination has a place to dry your cycling gear	0.36
The bike lane has a different colour pavement than the road	0.35
You would be eligible to receive prizes or discounts such as savings on bike gear	0.35
There are shops, banks, & grocery stores along the route	0.34
The destination has showers	0.34
The route has push-button-activated traffic signals for cyclists & pedestrians only	0.30
There are bike racks at transit stations	0.30
Inexpensive or free short courses are available to help you learn how to fix your bike	0.30
A bicycle is stenciled every 75 m (250ft) along the route	0.28
The destination has bike repair facilities	0.28
The destination has rental bike lockers	0.27
A solid white line is painted on both sides of the lane separating it from moving cars & from parked cars	0.26
Inexpensive or free short courses are available to help you improve your cycling skills	0.24
You are making the trip with other people	0.18

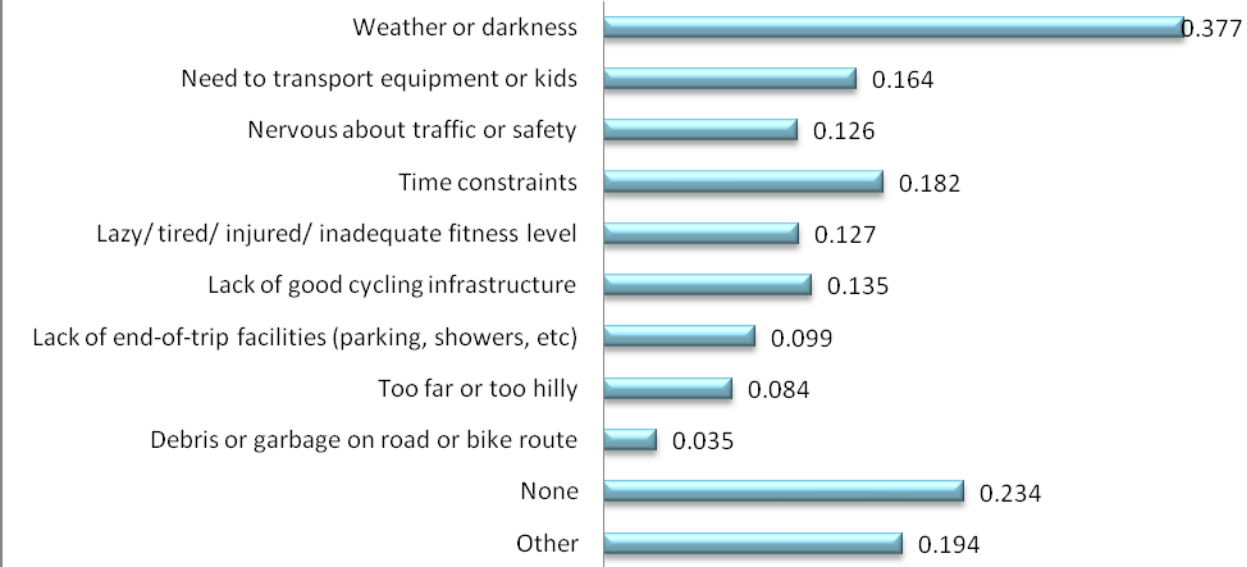


The bike lane has one solid white line painted between moving cars & the bike lane	0.16
The distance to your destination is 5 to 10 km	0.14
Cycling helmets are required	0.14
Lights are required for cycling after dark	0.13
The street is wide enough for motorists to safely pass cyclists	0.10
The route has a few small hills	0.02
The route has regular traffic signals for all traffic (cyclists, pedestrians, cars & trucks)	0.01
Cycling side-by-side on roads is not allowed	-0.05
Many intersections on the route have traffic circles	-0.12
Bike lane markings end just before intersections	-0.13
The route has rail crossings	-0.13
The weather is hot & humid	-0.16
Cycling on sidewalks is not allowed	-0.22
You need to buy groceries	-0.23
The route surface is gravel or dirt	-0.25
The route has speed bumps	-0.25
The route has lots of fallen leaves	-0.29
Designated bike routes on residential streets are used by cars because there are fewer stop signs	-0.31
There are bridges along the route where cyclists must share a narrow sidewalk	-0.34
The distance to your destination is 10 to 20 km	-0.37
The risk from cyclists who don't know how to ride safely	-0.37
Cyclists have to stop at many stop signs on the route	-0.37
The street has on-street parking	-0.43
The route has long steep sections	-0.50
The risk of violent crime when cycling	-0.55
The route has potholes or uneven paving	-0.55
The risk of bicycle theft	-0.56
You need to carry bulky or heavy items	-0.57
The route is not well lit after dark	-0.59
The route has surfaces that can be slick when wet or icy when cold	-0.59
It is raining	-0.63
The risk of injury from car-bike collisions	-0.67
The risk from motorists who don't know how to drive safely near bicycles	-0.73
Vehicles drive faster than 50 km/hr	-0.76
The route has glass or debris	-0.76
The street has a lot of car, bus, & truck traffic	-0.83
The route is icy or snowy	-0.86

DETERRENTS

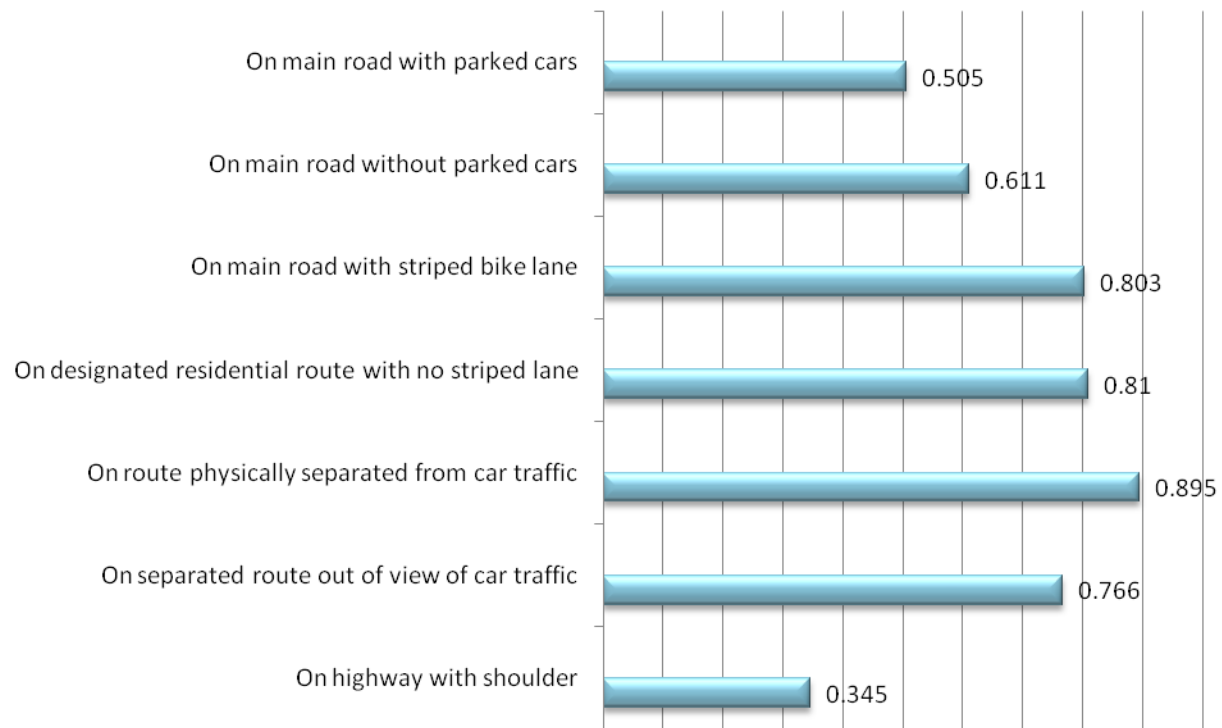
Respondents cited concerns related to safety most frequently as barriers to cycling more often (weather or darkness, 37.7%; nervous about traffic or safety, 12.6%; and lack of good cycling infrastructure, 13.5%). Another set of common barriers were related to busy lives (need to transport equipment or kids, 16.4%; time constraints, 18.2%).

Barriers to cycling more



Comfort levels with cycling are high on routes physically separated from cars (89.5 %), on designated bike routes on residential roads (81%) and on main roads on which a painted line serves as the separation from traffic (80.5%). Comfort levels decrease to 61.1% for cycling on the road with traffic and even less (50.5%) for cycling on roads with parked cars.

Which type of routes are you comfortable cycling on? Multiple responses allowed



Comparison

N/A

Data Considerations

Based on a mail or online survey of 1,402 current and potential adult cyclists in metro Vancouver. The random sample for the survey was drawn from the phone book.

Source

Cycling in cities, opinion survey conducted by the UBC Cycling in Cities Research Team

Link

<http://www.cher.ubc.ca/cyclingincities/default.htm>

<http://www.cher.ubc.ca/cyclingincities/pdf/OpinionSurveyBrochure.pdf>