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Compendium of Canadian Survey Research on Consumer Attitudes and Behavioural Influences Affecting Sustainable Transportation Options

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Introduction

As part of its [ecoMobility](#) program, Transport Canada has developed this compendium of Canadian survey research on consumer attitudes and behavioural influences affecting sustainable transportation options (“the Compendium”).

The purpose of the Compendium is to provide sustainable transportation practitioners, and others in related fields, with an up-to-date listing of research and findings about the key attitudes, perceptions and misperceptions of Canadians towards targeted sustainable transportation actions. It does not include individual program results.

Sustainable transportation researchers, project coordinators and others will be able to use this information when developing new sustainable transportation programs or services, when augmenting or refining existing programs or services, and when developing reports or other information documents.

The Compendium is organized by behaviour area (e.g. cycling, walking and telework are three of the areas covered). Each behaviour area is further divided into specific behaviours or actions. For each action, or group of actions, the Compendium includes:

- A prioritized listing of key motivators and barriers by target audience
- Variations within the research that relate to a variety of factors (regional, socioeconomic, urban/rural, gender differences, etc.)
- A listing of related research studies, with a summary for each that includes the key findings, geographic coverage, sample size and sampling methodology

The Compendium is meant to be a “living” document, with additional details added to it periodically, as new information becomes available. If users are aware of and would like to share additional research, please contact ecoMobility at ecomobility-ecomobile@tc.gc.ca. Please reference this document in your email.

Knowledge Gaps

Users will note that there are gaps in the information. Although research likely exists for these areas, it was not readily available at the time of preparing the Compendium. In addition, users will note that motivators and barriers for some target audiences are not listed. Although the motivators and barriers for one audience might be similar to others, if the research findings did not support that conclusion, those areas were intentionally left blank.

How to use the Compendium

The Compendium is set up so that users may easily search for information about specific sustainable transportation actions. Alternatively, users may use the [Index](#) at the end of the Compendium to search for key words or trip destinations.

Behaviour Area

Each set of sustainable transportation actions has been grouped into a major Behaviour Area. So, for example, there are many actions under the Cycling Behaviour Area, but only a few for Telework.

Actions Promoted

Each Behaviour Area provides a listing of sustainable transportation actions being promoted in Canada. This is not an exhaustive list of actions, but instead represents those that are the most widely promoted, or which have the greatest impact on modal shift, air quality or behaviour change.

Target Audience, Motivators, Variations and Barriers

Within each Behaviour Area, the information is divided by target audience. Motivators and barriers are listed in order of impact on behaviour change, with the most influential motivators and barriers listed first. This ordering is based on the literature cited in the tables that follow (Relevant Research). The Variations column explains any regional, urban/rural, socioeconomic, gender or other differences noted in the literature.

As noted above, the motivators and barriers for some target audiences have been left blank. The motivators and barriers for one audience might be similar to other audiences, but if the research findings did not support that conclusion, those areas were intentionally left blank.

F. Telework / Alternative Work Arrangements (e.g., flex hours, compressed work weeks)			
Actions promoted: F1 Telework regularly (1 to 5 days per week) F2 Use video or telephone conferencing to reduce trips F3 Use compressed work week programs or flex hours offered by employers (e.g., to commute fewer days)			
Target Audience	Primary Motivators	Variations Noted (e.g. Regional, socioeconomic)	Primary Barriers
Working adults			
Retired adults			
Disabled adults			
Parents			
Children (4-11)			
Youth (12-17)			
University/college students (18+)			
Employers			

Relevant Research

Following each Behaviour Area is a listing of the existing research related to that Behaviour Area or to the Actions Promoted. The research information presented in the Compendium is not exhaustive; rather, it presents the best available Canadian research dealing specifically with each sustainable transportation action. If users are aware of and would like to share additional research, please contact ecoMobility at ecomobility-ecomobility@tc.gc.ca. Please reference this document in your email.

For each piece of research, users will find:

- 1. The name and date of the document, along with the geographical coverage, sampling methodology, sample size and source of the study. Studies that are available online are hyperlinked. Research is listed in descending order of sample size.
- 2. Key findings are summarized including regional, socioeconomic, gender, urban/rural or other variations. This section does not include program results.

Study Name: Working at Home: An Update, June 2007		
Geographic Coverage	Survey Sample Size	Source
Canada-wide	25,000 respondents aged 15 and over in all provinces were surveyed. Random sample.	Statistics Canada
Key Findings: Contrary to expectation, the strong growth in telework during the 1990s was not sustained in the 2000s. The survey suggests that this could have been partly caused by employees and employers re-evaluating the advantages, disadvantages and effectiveness of this type of work arrangement. In addition, continuing developments in information and telecommunications technology now permit many employees to work effectively from many places other than home. In 2006, 25% of employees said that telework was a requirement of their job, 20% said that conditions were better at home. One-sixth said the arrangement helped save money and one-twelfth said that it helped them in caring for children and other family members and in meeting personal obligation.		

Information Sources & Methodology

The surveys and other public opinion reports included in the Compendium were solicited by a variety of sustainable transportation, health and environmental organizations. Additional information was collected through online and database searches. The majority of the research is less than 10 years old.

To obtain the information required, Transport Canada sent out an initial request for information to more than 20 organizations across Canada including federal and provincial agencies, transportation management associations, municipalities and municipal associations, transportation associations and national health organizations. The request was also sent to all members of Transport Canada's Moving on Sustainable Transportation (MOST) and Urban Transportation Showcase Program (UTSP).

Once the first round of information was gathered, a draft of this compendium was created and sent to an advisory committee for feedback. Based on the committee's feedback, the Compendium was amended to streamline the information presented. At that stage, a second information request was sent to more specialized organizations and relevant listservs to obtain additional survey information on specific target audiences and actions.

*Caveat: Users should be aware that some studies included in the Compendium have sample sizes of less than 400 (or, in some cases, the sample size and/or sampling methodology may not have been noted within the study). These studies may not be statistically reliable and have been flagged with a double asterisk (**).*

List of Behaviours

A. General Knowledge

The General Knowledge area is included in this section, but does not include motivators or barriers.

All behaviours are listed below.

B. Driving

Drive less

1. Drive less or switch to a more sustainable mode
2. Combine multiple driving trips or eliminate single occupant vehicle trips

Reduce or Eliminate Idling

3. Turn off motor when parked for longer than 1-3 minutes
4. Drive the vehicle to warm it up

Fuel-efficient driving

5. Use fuel-efficient driving techniques (e.g., drive the speed limit/constant speed, correct tire pressure, reduce weight in trunk, reduce drag by using air conditioning instead of opening windows, etc.)
6. Perform regular car maintenance (tune ups, oil checks, tire rotation, etc.)
7. Use ethanol blended gasoline or biodiesel

8. Purchase a hybrid or more fuel-efficient model

[Carpool/Carshare](#)

9. Use ridematching services (internal or external)
10. Use HOV lanes and carpooling parking
11. Join a carshare program

[C. Transit \(includes bus, streetcar, subway, lightrail, ferry\)](#)

1. Take public transit to/from work/school
2. Take public transit for other destinations
3. Use discounted transit passes or other transit programs offered by employer or school
4. Use charter buses offered by employer
5. Use kiss & ride/park & ride lots

[D. Cycling](#)

1. Commuter cycling (e.g., cycle to/from work/school)
2. Commuter cycling combined with transit (e.g., rack & roll type programs)
3. Other cycling trips (e.g., cycle to/from other destinations)
4. Other cycling trips combined with transit
5. Use cycling facilities offered by employer/school
6. Organize a cycling school bus
7. Take locally available cycling courses (safety, repair, anti-theft, etc.)
8. Join a cycling club or co-op

[E. Walking / Jogging / Skateboarding / Rollerblading](#)

1. Walk to/from work/school
2. Combine walking to/from work/school with transit
3. Walk to/from other destinations
4. Combine walking to/from other destinations with transit
5. Take courses on walking, jogging, etc. (e.g., running clinics, walking programs such as mall walks)

[F. Telework / Alternative Work Arrangements \(e.g., flex hours, compressed work weeks\)](#)

1. Telework regularly (1 to 5 days per week)
2. Use video or telephone conferencing to reduce trips
3. Work a compressed week or work flex hours (e.g., to commute fewer days)

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Research Sources and Findings Tables, Organized by Behaviour Area

A. General Knowledge
<p>*This section does not include target audiences, motivators, barriers or variations.</p>
<p>A1 General knowledge about environmental issues, such as climate change, the effects of transportation on the environment, etc. A2 General knowledge about the benefits of sustainable transportation (health, economic, environmental, social)</p>
<p>Summary of Key Findings/Variations:</p> <ul style="list-style-type: none">• A majority of Canadians, across all provinces and territories, are concerned with climate change. In some provinces, concern is as high as 80%, with those living in the Territories, Quebec and BC showing the highest concern. Compared to earlier surveys, those living in the Western provinces are increasingly placing a higher priority on environmental protection.• Although a minority says that they have an excellent understanding of climate change, a majority believes that there is something that they can personally do about climate change. Those with higher levels of education and younger people (aged 18-34) are more likely to hold this belief. When asked what specific actions could be taken to combat climate change, almost half cite transportation-related actions.• Canadians learn about climate change from many different sources. The top three are: schools, the media and government. Those aged 18-24, those with less education and those with lower incomes are more likely to say that the media is the best source of environmental information; those aged 55+ are more likely to cite schools.• High gasoline prices make people reconsider their transportation options. It is unclear whether these behaviour changes are sustained over the long term (depending on fluctuating gasoline prices or people becoming used to the cost). There is a high level of support for dedicating a portion of gasoline taxes for investments in public transit.• Those aged 18-34 are the most likely to decrease the number of automobiles they own.

Study Name: Looking West 2008, April 2008		
Geographic Coverage	Survey Sample Size	Source
BC, Alberta, Saskatchewan, Manitoba	4,000 random sample of adults (1,000 calls in each province)	Canada West Foundation
Key Findings: <p>74% of respondents rated environmental protection as a high or very high priority. Of the other 15 priority areas included in the survey, environmental protection ranked second, after health care. Compared to previous surveys done by the Foundation, westerners are increasingly placing a higher priority on environmental protection.</p> <p>64% ranked “reducing GHG emissions” as a high or very high priority.</p> <p>Almost 80% said that climate change is a very serious or somewhat serious problem.</p>		

Study Name: Climate Change Indicators, December 2001		
Geographic Coverage	Survey Sample Size	Source
Canada-wide	2,202 randomly sampled, adults	Survey conducted by Decima Research for Natural Resources Canada and Environment Canada. Climate Change Connection
Key Findings: <p>69% said that they are aware of climate change; highest awareness is in the Territories (85%), followed by 76% in BC.</p> <p>90% of respondents are somewhat to very concerned about climate change, with the highest concern expressed in Quebec (71% extremely or definitely concerned). Concern is also more pronounced among women (56%). Concern rises with level of education.</p> <p>6% claim to have an excellent understanding of climate change issues; most rate their understanding as good (38%) or fair (47%).</p> <p>32% believe that climate change will have an impact on their health. Ontario residents expressed the highest level of health concern (40%) and air pollution (20%).</p> <p>68% believe there is something they can do about climate change. Those with post-secondary degrees are more likely to feel that way (80%); 71% of those aged 18-34 feel they can do something, while only 56% of those aged 55+ do.</p> <p>When asked what actions they could take, 43% mentioned transportation-related steps such as driving less, carpooling, cycling, using transit and walking. Of the top 6 steps they could take, four were related to transportation (drive less/ carpool/cycle; use cleaner fuels; use public transit; walk more).</p> <p>8 in 10 said that they had taken at least one of these transportation-related actions and 90% said they walked more.</p>		

Study Name: Research Report: Survey of Attitudes, Awareness and Behaviour of Drivers – May 1998 and Report: Driver Behaviour Affecting Fuel Consumption – April 1998		
*Both reports are updates to a 1994 study		
Geographic Coverage	Survey Sample Size	Source
Canada-wide	1,503 Canadian households (adults); both reports relied on surveys conducted in February 1998	Natural Resources Canada, Office of Energy Efficiency http://oee.nrcan.gc.ca/transportation/business/documents/Idling-reports/idling-report3.cfm?attr=16 and http://oee.nrcan.gc.ca/transportation/business/documents/idling-reports/idling-report2.cfm?attr=16
Key Findings: 70% of respondents disagreed or strongly disagreed with this statement: “The effect of emissions from cars and trucks on our environment is not something I have really thought about.” This is an increase of 4% from the 1994 survey. Regionally, drivers in BC were the most concerned about vehicle emissions on the environment. Drivers in Quebec were the least concerned.		

Study Name: Public Opinion on Environmental Education, Urban Sprawl, and Water Issues, July 2002		
Geographic Coverage	Survey Sample Size	Source
Canada-wide	1,502 random sample, adults	Survey prepared by Environics for the Sustainability Network

Key Findings:

46% would be very willing to live closer to their workplace. Quebeckers, Albertans, Ontarians, young Canadians (18-24) and those earning less than \$20,000 annually are the most receptive to the idea.

28% said that they know most of what they need to know to make everyday decisions to maintain a healthy environment.

59% said that schools are the best source of information on environmental issues, 28% said media, and 6% said government.

Those from Alberta and Saskatchewan are the most likely to say that schools are the best source. Ontarians are more likely to say that media are the best sources. Quebeckers are more likely to choose government and community information as the best sources.

Those aged 18-24 are more likely than all other age groups to say that media are the best source of environmental information. Those 55+ are more likely to cite schools. People with less than a high school education and those with incomes of less than \$20,000 are also more likely to think that media are the best sources of information.

When asked to choose between five impacts of urban sprawl, 19% said that their greatest concern was increased air pollution because of dependence on cars. Those living in BC and those aged 25-34 are the most likely to hold this view.

Study Name: Canadian Perceptions Toward the “New Realities of High Gas Prices”: Implications for Public Transit and Environmental Policy, August 2008

Geographic Coverage	Survey Sample Size	Source
Canada-wide	1,100 Canadians aged 18+ in 48 communities with populations of 100,000 or more	Survey was conducted by The Strategic Council on behalf of the Federation of Canadian Municipalities and the Canadian Urban Transit Association

Key Findings:

32% of respondents cited energy-related expenses as the budget issue they are most concerned with. 21% cited rising gas prices as the single expenditure that concerns them most. High gas prices are of more concern in households with incomes of more than \$40,000 and with people over the age of 35.

60% said high gas prices are making them rethink their transportation choices. When asked what kinds of changes they have made, 23% said they are driving less and 20% say they have switched to or are considering a switch to public transit. 16% are considering purchasing a more fuel-efficient vehicle. Those aged 18-34 are more likely to “downsize” the number of vehicles per household because of gas prices (32%).

People living in communities with populations of less than 500,000 and those aged 35-54 were more likely to be rethinking their transportation choices.

81% support or strongly support the idea of dedicating an additional share of federal gas tax revenues to public transit. Support is highest in the Atlantic cities and lowest in the Western cities. Those aged 18-34 are the most supportive (90%) followed by those with higher incomes (85% of those making \$80,000+).

39% identify vehicles on the road as the main source of greenhouse gas emissions. 32% say manufacturing and 13% say the natural resources industry.

Study Name: Development of the York Regional Transportation Master Plan, 2008

Geographic Coverage	Survey Sample Size	Source
York Region	1,011 randomly sampled (adults). The sample was divided into four areas: Markham, Richmond Hill, Vaughan and the remaining 6 municipalities that make up the region, with approx. 250 interviews conducted in each division.	Survey prepared by EKOS Research Associates for the Region of York
Key Findings: About 1/3 of all residents think that transportation is the most important issue facing the region. No other issue came close to this frequency of mention. Those aged 45-64 are most likely to think that congestion is a serious problem (48%). Those 65+ or under 25 were the least likely. Those who have lived in the region for more than 10 years were more likely to consider congestion as a serious problem (46%).		

Study Name: 2008 Commuter Attitudes Survey Report, June 27, 2008		
Geographic Coverage	Survey Sample Size	Source
Greater Toronto, Hamilton Area (GTHA)	1,008 commuters or home-based workers in the Greater Toronto Area and City of Hamilton, aged 16 years or older. Random sample.	Survey conducted by Harris Decima on behalf of Metrolinx Smart Commute
Key Findings: Congestion/delay/gridlock was rated the most important reason why transportation is an important issue. Cost of travel was second. 84% of respondents said that transportation is the most important or one of the most important issues in the GTHA. GTA residents (except Hamilton), public transit and bicycle commuters, those within Toronto and those whose one-way commute is longer than 30 minutes are more likely to say that transportation is important. The likelihood that transportation is an important issue is greater as people get older, as household incomes rise, and the length of commute increases.		

Study Name: Canadian attitudes toward government intervention policies in the biofuels market, January 2006		
Geographic Coverage	Survey Sample Size	Source
Canada-wide	1,002 random sample, adults	Center for Research in Economics of Agri-Food

Key Findings:

85.7% of respondents said that public schools should teach students how to personally contribute to reducing environmental problems. 80.5% said that government should provide public information about environment-friendly products. 73.4% said that government should offer more public awareness campaigns on how to access environment-friendly products.

Study Name: Greater Toronto Transportation Authority Foundational Research, Phase I, November 2007

Geographic Coverage	Survey Sample Size	Source
Greater Toronto, Hamilton Area (GTHA)	1,000 Greater Toronto and Hamilton residents, 16+	Conducted by Ipsos Reid for the Greater Toronto Transportation Authority Foundational Research .

Key Findings:

In terms of local issues facing residents in the GTHA, health promotion and the environment are the top issues, but transportation is a high priority for 2 out of 3 residents

Study Name: Interest in Viable Transportation Options Among Private Vehicle Drivers, July 2004

Geographic Coverage	Survey Sample Size	Source
Greater Vancouver area	900 regular drivers, 16 years and older, who drive at least 3x/week for personal reasons (work, shopping, etc.), random sample.	Survey conducted by the Mustel Group on behalf of the British Columbia Automobile Association in association with the Greater Vancouver Transportation Authority/TransLink

Key Findings:

82% of regular drivers are concerned about global warming (57% very concerned). 44% attribute air pollution and global warming to private vehicles for personal use.

Study Name: Sustainable Region Showcase for Greater Vancouver, TravelSmart®, Final Report, June 2008

Geographic Coverage	Survey Sample Size	Source
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Greater Vancouver area	600 based on surveys and travel diaries (adults) The program was piloted in six neighbourhoods, each with different walking and cycling behaviours and different access to transit (Kitsilano, Richmond City Centre, Sperling, South Surrey, Coquitlam Town Centre, Tsawwassen)	Document available on request to TransLink. Email Sheila Hartmann for details: Sheila_Hartmann@translink.bc.ca . This individual travel marketing program encouraged more sustainable modes of transportation, specifically transit, walking and cycling. Program included at-home visits, tailor-made information (neighbourhood maps, transit route planning, etc.), general information (cycling, transit and walking maps, etc.) and incentives (tote bags, pedometers, umbrellas, discount coupons, etc.).
<p>Key Findings:</p> <p>Communicating with people in their own homes proved more effective than initiatives focused on specific destinations e.g., the workplace. At-home visits allowed program planners to establish an open and friendly dialogue with the households and provide options for all household members.</p> <p>Program planners did not “sell” sustainable travel modes, use negative marketing of car travel or discuss the benefits people might derive from their travel choices; individuals were instead left to make up their own minds.</p> <p>Of the respondents who were interested in participating, 34% were already using some form of sustainable transportation (transit, cycling or walking).</p> <p>Surveys and travel diaries indicated that the average number of trips per person per year was 1,040 and that program participants shifted their mode choices as a result of the pilot program. Relative increases/decreases: walking +9%; cycling +33%; transit +12%; single occupant vehicle driving –10%.</p> <p>In the “after” survey, testimonials revealed that people liked the incentives (umbrellas, bags, etc.) and were impressed with the level of information they received.</p> <p>The program confirmed that, while individualized travel marketing influenced travel behaviour, it had no measurable impact on the number of trips taken on a daily basis (average 3 trips), the number or type of activities undertaken on a daily basis (average 1.8 activities/day with the three most common being work, shopping and leisure), or the time spent traveling (70 minutes average).</p>		

B. Driving Drive Less			
Actions promoted: B1 Drive less or switch to a more sustainable mode B2 Combine multiple driving trips or eliminate single occupant vehicle trips			
Target Audience	Primary Motivators	Variations Noted (e.g. Regional, socioeconomic)	Primary Barriers
Working adults	Save time (B2) Save money (B1) Avoid traffic congestion Exercise/fitness benefits (if switching to an active mode) Environmental concerns Enhances time management skills (Note: some research indicates that people see this as both a positive and a negative) High parking costs Transit service improvements (i.e., frequency of service or new routes can prompt people to begin taking transit) Availability of a transportation consultant	<p>Canada: More men drive than women and suburban men drive the most. Being employed and living in a smaller community increases the probability of driving during the day. The farther people live from the city centre, the more time they spend behind the wheel.</p> <p>High gas prices: People in communities with populations less than 500,000 and those aged 35-54 are more likely to be rethinking transportation due to gas prices. Higher income earners are more likely to opt to drive less; those aged 18-34 are more likely to “downsize” number of vehicles per household.</p> <p>Edmonton: Urban residents generate more trips per weekday than rural residents. Women also tend to make more trips per day than men.</p> <p>Toronto: Those willing to switch from driving are more likely than other Torontonians to use carpooling, telework and transit as their preferred mode.</p>	Shift work/start times requires them to drive Live too far from work or in an isolated location Transit issues (infrequent service, takes too long, lack of routes, etc.) Driving is more flexible and can do errands Lack of carpooling options Need to carry equipment / need a car during the day / job requires a car Time-sensitive trips No shower or change facilities at work (if switched to an active mode) Parking is free Some view transit use as a sign of financial need

Working adults continued...		Vancouver: More driving trips are made for shopping or leisure activities than for commuting. Those aged 35-44, who work part-time or from home are more likely than other groups in Vancouver to combine trips. Urban dwellers are more likely to switch to a different mode than rural residents. Groups who would find it the easiest to switch modes: women, the employed, married, fewer children at home. Those most resistant to change tend to be men, suburban dwellers, middle-aged; the more people in a household, the more resistant to mode change.	
Retired adults	Avoid traffic congestion Save money Exercise/fitness benefits (if switching to an active mode) Free or discounted transit fares for seniors	Vancouver: Retirees in Vancouver are more likely than other age group in Vancouver to change the time of day they travel. Retirees in Vancouver also find it the easiest to switch modes.	Mobility issues that require them to drive Transit issues (infrequent service, takes too long, lack of routes, etc.) Need to carry things
Disabled adults			
Parents	Save time (B2) Exercise/fitness benefits Environmental concerns Save money	Canada: People with children aged 5-12 are more likely to drive more than once per day. However, they are also more likely to have made trips than other target audiences, regardless of the mode of transportation.	Need to pick up children from school or activities
Children (4-11)			
Youth (12-17)		Vancouver: Young drivers (16-24) are the least likely of all groups in Vancouver to eliminate/combine trips or switch modes.	

University/college students (18+)		<p>Canada: Younger workers and college/university students are more likely to choose sustainable modes of transport.</p> <p>Vancouver: Young drivers (16-24) are the least likely of all groups in Vancouver to eliminate/combine trips or switch modes.</p>	
Employers			

Study Name: Consumer Lifestyles – Canada / Transport		
Geographic Coverage	Survey Sample Size	Source
Canada-wide	25,000 randomly sampled surveys of people aged 15+. Data collected over a 12-month period on a variety of topics.	Report is available at Global Market Information Database (a site requires a subscription). Information is based on information from the 2006 General Social Survey and 2006 Census data.
<p>Key Findings:</p> <p>Suburban men drive the most. In 2005, 81% of Canadian men and 66% of women, 18+, made at least 1 trip by car as a driver.</p> <p>When neighbourhood density and other factors in the statistical model were kept constant, the odds that people aged 45-54 drove a car for all trips made in a given day was 2.5x higher than the odds for those aged 18-24.</p> <p>People with children aged 5-12 were 1.6x more likely than people without children that age to make at least one trip by car per day. These parents were also more likely to have made trips during the day, regardless of the mode of transportation.</p> <p>Being employed and living in a small Census Metropolitan Area were associated with a greater probability of driving during the day. The farther people lived from the city centre, the more time they spent behind the wheel.</p> <p>Younger workers were more likely to choose sustainable modes of transport. 32.9% of workers aged 25-34 reported using sustainable modes of transportation. 23.1% of workers aged 35-44 said they used greener forms of transportation.</p>		

Study Name: 2005 Household Travel Survey: Summary Report on Weekday Travel by Residents of the Edmonton Region		
Geographic Coverage	Survey Sample Size	Source
Edmonton region	6,600 random sample, adults	Survey conducted by ISL and Banister Research & Consulting Inc. on behalf of Alberta Infrastructure and Transportation
Key Findings: Urban residents generate more trips per weekday than rural residents (3.56 trips for urban residents, 3.19 trips for rural residents). Women make more trips per day than men (3.76 trips for women v. 3.51 trips for men). Weekday trips by car have increased 41% since 1994.		

Study Name: Rapport sur les habitudes et les attitudes de déplacement domicile-travail du personnel du Centre hospitalier universitaire Ste-Justine. 2007		
Geographic Coverage	Survey Sample Size	Source
Montreal hospital workers (60 % urban, 40% suburban)	1,184 adults 80% women, mostly between 25 and 54 (nurses and office workers).	Survey conducted by ADAPTES for Centre hospitalier universitaire Sainte-Justine.
Key Findings: Those who commute by car say that they choose to drive due to lifestyle, lack of or infrequent public transit service, and work schedule.		

Study Name: Canadian Perceptions Toward the “New Realities of High Gas Prices”: Implications for Public Transit and Environmental Policy, August 2008		
Geographic Coverage	Survey Sample Size	Source
Canada-wide	1,100 Canadians aged 18+ in 48 communities with populations of 100,000 or more	Federation of Canadian Municipalities

<p>Key Findings:</p> <p>60% said high gas prices are causing them to rethink their transportation choices. When asked what kinds of changes they have made in response to price increases, 23% said they are driving less.</p> <p>People living in communities with populations of less than 500,000 and those aged 35-54 were more likely to be rethinking their transportation choices.</p> <p>Driving less is occurring most often in communities with populations of less than 500,000</p> <p>Those with higher incomes are more likely to drive less (25% for those making \$80,000+).</p> <p>Those aged 18-34 are more likely to “downsize” number of vehicles per household because of gas prices (32%).</p>
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Study Name: 2008 Commuter Attitudes Survey Report, June 27, 2008		
Geographic Coverage	Survey Sample Size	Source
Greater Toronto, Hamilton Area (GTHA)	<p>1,008 commuters or home-based workers in the Greater Toronto Area and City of Hamilton, aged 16+. Random sample.</p> <p>Regional quotas were used to ensure accurate coverage across six areas</p>	Survey conducted by Harris Decima on behalf of Metrolinx Smart Commute
<p>Key Findings:</p> <p>The top three reasons people give for driving alone as their primary mode of commuting are time (32%), necessity (28%), and having no one nearby to carpool with (25%).</p> <p>17% of single occupancy vehicle (SOV) drivers said that having access to shower and/or change facilities would definitely or probably change their commuting mode.</p> <p>SOV commuters have been using their primary mode of commuting for an average of 16 years, indicating that it is a long-established habit.</p> <p>75% of SOV commuters are probably or definitely willing to switch to an alternative mode of commuting for at least one day per week. Carpooling, telework and public transit are modes of transportation lone drivers would more likely take.</p> <p>SOV commuters aged 16-44 are more likely to switch to walking or cycling one day per week. Those with incomes below \$75,000 are more likely to switch to public transit.</p> <p>The percentage of commuters who drive alone as a secondary mode of commuting fell to 10% in 2008 compared to 14% in 2006. Peel residents, commuters to or within Hamilton and those with commutes over an hour long indicated that gas prices are the main reason they switched.</p> <p>The most vulnerable, those aged under 25, students, and households with lower incomes are the most likely to have made changes to how they commute as a result of high gas prices.</p> <p>Commuters under the age of 25 are the least likely to drive alone and are more likely to commute by public transit, walk/jog or be a carpool passenger compared to other age groups.</p> <p>Commuters with household incomes of \$75,000+ are more likely to drive alone as their primary mode of commuting.</p> <p>75% of respondents said they don’t have to pay for parking at work. 63% said they would still drive alone even if they had to pay for parking, although 14% said it would depend on the cost.</p> <p>Three out of four SOV commuters are probably or definitely willing to switch to an alternative mode of commuting for at least one day per week. Carpooling, telework and public transit are the modes SOV drivers are most likely to take.</p>		

Study Name: Greater Toronto Transportation Authority Foundational Research, Phase I, November 2007		
Geographic Coverage	Survey Sample Size	Source
Greater Toronto, Hamilton Area (GTHA)	1,000 Greater Toronto and Hamilton residents, 16+	Conducted by Ipsos Reid for the Greater Toronto Transportation Authority Foundational Research .
<p>Key Findings:</p> <p>Nearly half of residents find it difficult to get around the GTHA by car. Those furthest from the core (Durham, Halton) have the most difficulty.</p> <p>Barriers to driving less include: Driving is more flexible (more places in one trip), more convenient, quicker than public transit.</p> <p>Motivators to driving less: High gas prices, more frequent transit service, better funded transit systems.</p> <p>Those who drive the most tend to be older (35+), have higher incomes, be homeowners, be male, own their own car, live outside Toronto, and rarely or never take public transit. These respondents are less likely to be a member of an environmental organization, have participated in a protest or organized demonstration, say that transportation is a priority issue, and say that transit is well coordinated and planned. These respondents are also more critical of regional transit service than transit users and are more likely to find traffic stressful.</p> <p>50% of drivers are likely to take transit more based on 4 initiatives proposed (expanding the areas served by GO Transit, running GO trains and buses more frequently; expanding the rapid transit lines; extending Toronto's subway lines).</p>		

Study Name: Interest in Viable Transportation Options Among Private Vehicle Drivers, July 2004		
Geographic Coverage	Survey Sample Size	Source
Greater Vancouver area	900 regular drivers, 16+, who drive at least 3x/week for personal reasons (work, shopping, etc.), random sample	Survey conducted by the Mustel Group on behalf of the British Columbia Automobile Association in association with the Greater Vancouver Transportation Authority/TransLink

Key Findings:

72% of respondents believe they wouldn't be able to do things without a car and 71% believe that if there were fewer people driving alone, all drivers would save travel time.

More men than women have a valid driver's license (90% v. 84%). The majority of drivers are between 35 and 64 years of age.

If provided with a transportation consultant (individual travel marketing), respondents said they would switch 4.3 one-way SOV trips per week (average). Current transit users and people who only sometimes or never need a car for work are the most interested in this idea.

In 2003-2004, 91% of respondents had changed their SOV travel to another mode (attributed primarily to high gas prices in the summer of 2004). 73% combined trips to save time, 52% switched to an alternative mode (e.g., transit, cycling, walking) at least once (but not permanently), and 42% changed the timing of their SOV trips to avoid traffic congestion.

71% of all respondents drive alone in a typical week (61% of students).

Reasons for reducing or eliminating SOV trips: 38% to save money (55% of students and 49% of part-time workers are more likely to state this as their main reason); 24% to save time (mainly by combining trips); 29% for fitness benefits; 13% due to environmental concerns; 8% due to traffic congestion. Leisure and shopping trips were the most often cited trips switched from SOV to another mode.

Of those who had not yet already made any changes to travel mode, when asked how easy/difficult it would be to combine, eliminate or switch two SOV trips/week, 52% said it would be easy. Of all methods of reducing SOV trips, combining trips (41%) was found to be the easiest, followed by switching to another mode (27%) and then eliminating the trip altogether (18%).

Shopping trips are dominated by SOV and carpooling (53% and 42% respectively).

SOV use is higher among single people (33%) and older drivers aged 55+ (27%).

Those who work part-time or work from home are more likely to combine trips (81%). Retired people are the most likely to change the time of day they travel (63%). Urban (City of Vancouver) dwellers are more likely to switch to alternative modes than those living in other regions around Vancouver. The survey notes that this is likely due to higher levels of transit service in Vancouver.

Reasons for combining trips: 1) saves time/convenience (60%) 2) saves money (42%) 3) environmental reasons (10%) 4) traffic congestion (4%).

Women are slightly more apt to eliminate SOV trips altogether (51% v. 49% of men) and combine trips (52% v. 48% for men). Men are more likely to change the time of their travel (53% v. 47% for women).

Young drivers (16-24 years) are the least likely of all age categories to eliminate or combine trips, switch their method of transport or change the time of their travel (all 10% or less).

Those aged 35-44 are the most likely of all age categories to eliminate or combine trips (23% and 27% respectively), switch their method of transport (24%) or change the time of their travel (27%).

Those employed outside the home are the most likely to eliminate or combine trips, switch transport mode or time of travel. Those working from home, part-time workers (outside the home), the unemployed and students are the least likely.

A majority felt that fewer SOV drivers would mean time savings for everyone. Many believe, however, that transit is too time-consuming.

Lifestyle changes that would need to occur in order to switch two trips from SOV to transit or eliminate trips include: 1) changes in employment/school 2) loss of vehicle, license or ability to drive 3) allotting more time spent traveling (e.g., be less busy, allocate more time, give up sleep) 4) move or shop closer to home.

71% of SOV drivers said that they drive to work in order to do errands on the way home. 48% of drivers want control over their schedule and there is resistance to handing over control to an outside force (e.g., the transit schedule). 34% said that they need a car during the day to do their work or pick up children.

56% enjoy private space while driving; 47% see driving in rush hour as stressful; 28% drive because of bad weather; 19% love driving and love their car; 17% think about accidents in heavy traffic.

34% said that reliance on transit is an indication of financial need. 15% said they take transit to save wear and tear on their car.

The most powerful influence on the “ease-difficulty” to change SOV travel is whether or not the person’s job requires a vehicle.

Flexibility to change the time of an SOV trip in order to avoid traffic problems is another key variable for people who do not require a vehicle for work.

If respondents had switched any SOV trip to an alternative mode (transit, walk, cycle, or carpool), they are much more likely to change future travel by combining, eliminating or switching 2 SOV trips per week.

Those who required a vehicle for their job, but had also eliminated SOV trips in the past year, were more inclined to make future changes. Conversely, if they had not eliminated SOV trips in the past year, they were less inclined to adopt alternatives.

The 11% of drivers who said that they would find switching modes easy or very easy were: 1) women (58%) 2) employed (70%) 3) retired (21%) 4) already using transit (53% in the past month) 5) married (68%) 6) people with fewer children living at home (64%).

The 28% of drivers who said that they would find switching modes difficult, but were receptive to some mode switching were: 1) men (54%) 2) employed (82%) 3) married (68%) 4) those with an average number of children living at home (40%).

The 17% of drivers who were resistant to any change in mode were: 1) men (74%) 2) employed (89%) 3) those who needed a car for work 4) those who lived in the suburbs 5) those with a low use of transit 6) middle-aged (59% are 35-54 years old).

The more people in a household (4+), the more car dependent and resistant to mode change they were (25%).

<div>B. Driving</div> <div>Reduce or Eliminate Idling</div>			
<div>Actions promoted:</div> <div> <div>B3 Turn off motor when parked for longer than 1-3 minutes</div> <div>B4 Drive the vehicle to warm it up</div> </div>			
Target Audience	Primary Motivators	Variations Noted (e.g. Regional, socioeconomic)	Primary Barriers
Working adults	Better for air quality /environment Better for vehicle to turn it off than to let it idle Not idling saves money on gasoline Anti-idling signage at schools, community centres, hospitals or other sites	<p>Canada: Men are more likely to idle than women. Those who are most receptive to anti-idling messages tend to be women, professionals, aged 45-54, have higher education levels, have incomes \$65,000+, live in BC.</p> <p>Extreme weather is a factor in reducing idling, particularly in more northern communities or during winter (or very hot days in summer)</p> <p>Mississauga: Men and those who drive 7 days a week in the Mississauga area are the most likely to idle.</p>	Forget to turn off engine Do not think that idling is a problem Waiting to pick up someone, or sitting in a drive-thru lanes Want to stay warm/cool in winter/summer Believe that starting and stopping engine uses more gasoline than idling Believe that idling is good for the engine to warm it up
Retired adults			
Disabled adults			
Parents	Emissions from idling are a concern for their children's health		
Children (4-11)			
Youth (12-17)	Concern over climate change/right thing to do for the environment Taught not to idle unnecessarily in driver's education classes		

University/college students (18+)	Concern over climate change/right thing to do for the environment Taught not to idle unnecessarily in driver's education classes		
Employers	Better air quality around building entrances Saves money in gasoline costs (fleet vehicles)		

Study Name: Vehicle Idling: Pre Anti-Idling Campaign Awareness Study, November 2002		
Geographic Coverage	Survey Sample Size	Source
City of Mississauga	11,186 people (adult drivers) approached at gas stations during anti-idling awareness campaign	Natural Resources Canada Or download from: www.icpp.ca/pdf/AntiIdling.pdf Study prepared for the Canadian Petroleum Products Institute in conjunction with Natural Resources Canada's Office of Energy Efficiency and the City of Mississauga.
Key Findings: 40% of car drivers approached admitted to vehicle idling. Idlers are more likely to be aged 25-54 (66% said they idle), while only 17% of those aged 55+ said that they idle. Men were more likely to idle than women (55% v. 47%). Average idling time was 3-4 minutes. Drivers who drive 7 days a week were more likely to idle.		

Study Name: Research Report: Survey of Attitudes, Awareness and Behaviour of Drivers – May 1998 and Report: Driver Behaviour Affecting Fuel Consumption – April 1998 (Both reports are updates to a 1994 study)		
Geographic Coverage	Survey Sample Size	Source
Canada-wide	1,503 Canadian households (adults); both reports relied on surveys conducted in February 1998	Natural Resources Canada, Office of Energy Efficiency http://oee.nrcan.gc.ca/transportation/business/documents/Idling-reports/idling-report3.cfm?attr=16 and http://oee.nrcan.gc.ca/transportation/business/documents/idling-reports/idling-report2.cfm?attr=16

Key Findings:

Time spent idling the engine was highest among those warming up a vehicle, waiting for or picking up someone, or those running errands. People generally idled their engines significantly less in summer.

The survey suggested that drivers who idle their engines but who have the greatest environmental sensitivity were more likely to: be women, be members of the professional or business occupational group, be between the ages of 45 and 54, have higher levels of education, have annual household incomes of more than \$65,000, live in BC.

Respondents had little knowledge about how long it actually takes to warm up a car. Respondents said that the low annual savings that might result from reduced idling would not be enough to motivate them to idle less. They suggested that protection of the environment should be the chief motivator.

Respondents agreed that the most effective campaigns would target drivers in situations where they are likely to idle their engine.

Study Name: Ladies and Gentlemen: Stop Your Engines. Reducing Idling in Halifax Regional Municipality, March 2006

Geographic Coverage	Survey Sample Size	Source
Halifax, Nova Scotia	413 driver interventions at 5 sites (drivers aged 16+) 380 pre- and post-campaign surveys	www.ecokings.ca/docs/Kings_County_Anti-Idling_Final_Report_August_19_2008.pdf

Key Findings:

In pre- and post-campaign surveys, 80% of respondents felt that unnecessary idling was a significant problem and a majority of drivers indicated that they had idled their vehicles in the last 7 days.

<div>B. Driving</div> <div>Fuel-efficient driving</div>			
<div>Actions promoted:</div> <div> <div>B5 Use fuel-efficient driving techniques (e.g., drive the speed limit/constant speed, correct tire pressure, reduce weight in trunk, reduce drag by using air conditioning instead of opening windows, etc.)</div> <div>B6 Perform regular car maintenance (tune ups, oil checks, tire rotation, etc.)</div> <div>B7 Use ethanol blended gasoline</div> <div>B8 Purchase a hybrid or more fuel-efficient model</div> </div>			
Target Audience	Primary Motivators	Variations Noted (e.g. Regional, socioeconomic)	Primary Barriers
Working adults	<div>Save money</div> <div>Reduce wear and tear on vehicle</div> <div>Improve vehicle performance</div> <div>Notice a problem (e.g., motivation for tune-up, tire pressure)</div> <div>Environmental reasons</div>	<div>Canada: In surveys, most people will agree that their driving habits can affect gas mileage. Men are more involved in vehicle maintenance.</div> <div>Older people, women, the more affluent and those living in Quebec are more likely to support government intervention to promote ethanol-blended gasoline.</div> <div>Capital cost is the single biggest factor in purchasing a high-efficiency vehicle (HEV).</div>	Don't consider tire pressure as part of routine vehicle maintenance
Retired adults			
Disabled adults			
Parents			
Children (4-11)			
Youth (12-17)			
University/college students (18+)			
Employers			

Study Name: Looking West 2008, April 2008		
Geographic Coverage	Survey Sample Size	Source
BC, Alberta, Saskatchewan, Manitoba	4,000 random sample of adults (1,000 calls in each province)	Canada West Foundation
Key Findings: When asked what they would be willing to do to reduce GHG emissions, 83.1% of respondents said they would purchase a hybrid vehicle. Of those, 5.7% had already done so.		

Study Name: Research Report: Survey of Attitudes, Awareness and Behaviour of Drivers – May 1998 and Report: Driver Behaviour Affecting Fuel Consumption – April 1998 (Both reports are updates to a 1994 study)		
Geographic Coverage	Survey Sample Size	Source
Canada-wide	1,503 Canadian households (adults); both reports relied on surveys conducted in February 1998	Natural Resources Canada, Office of Energy Efficiency http://oee.nrcan.gc.ca/transportation/business/documents/Idling-reports/idling-report3.cfm?attr=16 and http://oee.nrcan.gc.ca/transportation/business/documents/idling-reports/idling-report2.cfm?attr=16

Key Findings:

There were few gender-based differences in attitudes to fuel efficiency. The 1994 study found that women were more likely to have thought about the effect of emissions on the environment.

69% of respondents agreed or strongly agreed that it was easy to be a fuel-efficient driver. 68% reported thinking about reducing fuel consumption while driving a vehicle.

68% of respondents said that their driving habits have an effect on gas mileage and 92% agreed that there were steps they could take to improve gas mileage.

90% of respondents agreed that driving and maintaining their car with a view to conserving fuel would save them money.

Respondents’ top four recommendations for improving mileage: 1) not speeding 2) getting regular tune-ups 3) avoiding fast stops or starts 4) maintaining a steady speed.

When asked what steps they had taken to improve gas mileage, the top five responses were: 1) getting regular tune-ups (37%) 2) not speeding (34%) 3) nothing (21%) 4) not starting or stopping quickly (10%) 5) steady speed (10%).

Routine maintenance: 60% of survey participants were very involved in routine maintenance of their vehicle. Men are more involved than women (88% said they were very or somewhat involved). The percentage of women involved in maintenance rose 9% from the 1994 study to 74%. 53% reported getting a full engine tune-up once a year and 29% reported getting a full engine tune-up twice a year. The top five reasons given for tune-ups were to: 1) improve general performance or efficiency 2) prevent mechanical problems on the road 3) increase vehicle longevity 4) maintain gas mileage 5) ensure vehicle safety.

In the 1994 survey, respondents ranked the statement “Because it's better for the environment” in 10th place as a reason for a tune-up; in 1998, the statement dropped to 12th place.

Tire pressure: 64% had checked the tire pressure in the month prior to the survey. 67% had checked it six or fewer times each year. Of these respondents, 35% checked it three or fewer times, and less than one-third checked it 10 or more times in the year preceding the survey. The most frequent reasons for checking tire pressure were: 1) a problem noticed by the driver 2) part of a regular maintenance routine 3) preparation for a long trip 4) routine maintenance in conjunction with a tune-up 5) change of season. Most respondents did not know the correct pressure for their tires and did not perceive tire checks to be part of routine vehicle maintenance. Instead, the most frequently cited reason for tire checks was a soft tire. Those most likely to check tire pressure: male, aged 45-50, belong to a household with four or more persons, work as a technician or a tradesperson, and drive a car that was not under warranty. The main motivators for performing tire pressure checks were to: 1) reduce wear and tear on the tires 2) enhance tire performance and thus driving and travel comfort 3) ensure safety. Only a few participants checked tire pressure to achieve better gas mileage.

Study Name: Canadian attitudes toward government intervention policies in the biofuels market, January 2006		
Geographic Coverage	Survey Sample Size	Source
Canada-wide	1,002 telephone surveys, adults	Center for Research in Economics of Agri-Food
<p>Key Findings:</p> <p>35% of respondents were willing to pay 1¢-5¢ more per litre and 28% were willing to pay 6¢-10¢ more per litre. 33% of respondents were not willing to pay any more for 10% ethanol-blended gasoline. In the future, 27% said they would always purchase ethanol-blended gasoline, 31% said they would occasionally, and 43% would only purchase it rarely.</p> <p>Those most favourable to government interventions to promote the use of ethanol-blended gasoline tend to be older, women, more affluent, more educated, and living in Quebec.</p> <p>56.1% said that all public and government transportation fleets in Canada should be mandated to use ethanol blends. 42.4% believed that the government should mandate that all gasoline in Canada be ethanol-blended and 58.6% said that government should subsidize the price of ethanol-blended gasoline at the pump to make the price equal.</p> <p>67.7% would be willing to pay a 1% higher sales tax to support the development of ethanol-blended gasoline.</p>		

Study Name: Modelling Consumer Preferences and Technological Change: Survey of Attitudes to Hybrid Vehicles, 2002		
Geographic Coverage	Survey Sample Size	Source
Canada-wide	916 online surveys, randomly sampled (adults)	Thesis by Paulus Cheuk Wai Mau, Simon Fraser University
<p>Key Findings:</p> <p>67% of participants were female and a majority owned passengers vehicles (cars, mini-vans, SUVs).</p> <p>About half of all respondents said that capital cost was the most important factor in considering the purchase of a high-efficiency vehicle. However, if prices for both types of vehicles were the same, other attributes such as extended warranties and cruising range became more important.</p> <p>Respondents were more likely to considering buying a high-efficiency vehicle if a subsidy of more than 10% of the vehicle purchase price was offered (little additional value was seen in subsidies of only 5% to 10% of the vehicle price). 59% of respondents said they would be willing to spend more money to buy a high-efficiency car.</p> <p>Consumers' preference for high-efficiency vehicles tends to become stronger if consumers perceive there to be more such vehicles on the road.</p> <p>If a carbon tax were introduced (making gasoline prices higher, particularly for conventional gasoline vehicles), sales of new high-efficiency vehicles would not be affected due to the higher capital cost. In fact, owners of conventional gasoline vehicles were more likely to switch their mode of transportation to walking, transit or carpooling than to buy a high-efficiency vehicle.</p>		

<div>B. Driving</div> <div>Carpool / Carshare</div>			
<div>Actions promoted:</div> <div> <div>B9 Use ridematching services (internal or external)</div> <div>B10 Use HOV lanes and carpool parking</div> <div>B11 Join a carshare program</div> </div>			
Target Audience	Primary Motivators	Variations Noted (e.g. Regional, socioeconomic)	Primary Barriers
Working adults	<div>Save money</div> <div>Save time</div> <div>Environmental concerns</div> <div>Don't own a car</div> <div>Able to use HOV lanes</div> <div>Less wear and tear on vehicle</div>	<p>Canada: Those aged 18-34 are more likely to carpool if gas prices rise about \$2/litre. Community size doesn't appear to impact the decision to carpool.</p> <p>Quebec: Membership in a carsharing organization in Gatineau doubled once an incentive was provided. Carsharing members in Quebec tend to have higher education and income levels.</p> <p>Toronto: Women in Toronto are 1.3x as more likely to carpool than men, however women are also more likely to rate their carpool as "poor." About half of all carpoolers in Toronto are aged 25-39 (drivers tend to be 25-55 years old; passengers tend to be under 25). Few use a ridematching service; people are more likely to form informal carpools with family, friends or coworkers.</p> <p>Vancouver: Respondents would vanpool or carshare if their employer provided them with the service for free.</p> <p>Montreal: Men and those aged under 34 in Montreal tend to be more favourable to carpooling than women in Montreal.</p>	<div>Too much to organize</div> <div>No one to carpool with</div> <div>Don't have a driver's license</div> <div>Safety concerns (women)</div>
Retired adults			
Disabled adults			

Parents			
Children (4-11)			
Youth (12-17)			
University/college students (18+)			
Employers			

Study Name: Looking West 2008, April 2008		
Geographic Coverage	Survey Sample Size	Source
BC, Alberta, Saskatchewan, Manitoba	4,000 random sample of adults (1,000 calls in each province)	Canada West Foundation
Key Findings: When asked what they would be willing to do to reduce GHG emissions, 86.8% of respondents said they would carpool. Of those, 62.7% had already done so.		

Study Name: Commuting Connections: Carpooling and Cyberspace, Fall 2007		
Geographic Coverage	Survey Sample Size	Source
Greater Toronto, Hamilton Area (GTHA)	1,425 Carpool Zone* users *Carpool Zone is Smart Commute’s ridematching software, open to the Ontario general public	Metrolinx / Smart Commute
Key Findings: Of those who formed carpools, 84% are satisfied with the quality. 43% were female, 41% male (16% didn’t answer). Female respondents were 1.3x more likely to be carpooling. Approximately half of all users are aged 25-39. More women rated the system as “poor” than men. Overall, those who rated it satisfactory, good or excellent were roughly split between men and women. Motivations for women: 1) don’t drive 2) car unavailable 3) save money 4) environmental concerns 5) availability of HOV lanes. Motivations for men: 1) save money 2) environmental concerns 3) availability of HOV lanes 4) car unavailable 5) don’t drive. Overall, a desire to use HOV lanes was the only significant motivational factor that explained carpool formation and use (use of HOV lanes are associated with time savings). Before carpooling, the majority of women took public transit as their primary commute mode; the majority of men drove in a carpool or drove alone. The addition of one match within 1 kilometre of a person’s residence increased the odds of forming a carpooling by between 4% and 21%, but increases of matches in a broader area (3 km+) didn’t appear to affect carpooling rates. Transit commuters are 40% less likely to form a carpool than single occupant vehicle (SOV) commuters. Passengers in cars are 1.8x more likely to form a carpool than SOV commuters.		

Study Name: Rapport sur les habitudes et les attitudes de déplacement domicile-travail du personnel du Centre hospitalier universitaire Ste-Justine. 2007		
Geographic Coverage	Survey Sample Size	Source
Montreal hospital workers (60 % urban, 40% suburban)	1,184 adults 80% women, mostly between 25 and 54 (nurses and office workers).	Survey conducted by ADAPTES for Centre hospitalier universitaire Sainte-Justine.
Key Findings: <p>Nurses tend to carpool the most among all of the workers at the hospital. The most common carpool has 2 people in the car. 4% say they use a ridematching service. Men and those aged 34 and under tend to be more favourable towards carpooling than women.</p> <p>SOV drivers tend to view carpooling less favourably than those who use active transportation.</p>		

Study Name: Canadian Perceptions Toward the “New Realities of High Gas Prices”: Implications for Public Transit and Environmental Policy, August 2008		
Geographic Coverage	Survey Sample Size	Source
Canada-wide	1,100 Canadians aged 18+ in 48 communities with populations of 100,000 or more	Federation of Canadian Municipalities
Key Findings: <p>People living in communities with populations of less than 500,000 and those aged 35-54 were more likely to be rethinking their transportation choices</p> <p>Community size doesn’t appear to impact the decision to carpool, but those aged 18-34 are more likely to carpool if gas prices rise above \$2/litre. The less affluent are more likely to carpool if gas prices rise.</p>		

Study Name: 2008 Commuter Attitudes Survey Report, June 27, 2008		
Geographic Coverage	Survey Sample Size	Source
Greater Toronto, Hamilton Area (GTHA)	1,008 commuters or home-based workers in the Greater Toronto Area and City of Hamilton, aged 16+. Random sample. Regional quotas were used to ensure accurate coverage across six areas	Survey conducted by Harris Decima on behalf of Metrolinx Smart Commute

Key Findings:

Carpooler respondents said that using HOV lanes cuts their one-way commute time by an average of 13 minutes. 81% of respondents said that HOV lanes are a good way to encourage people to carpool and use transit.

Carpooler respondents had been using this mode of commuting for an average of 15 years.

Those who had heard of Smart Commute would be willing to carpool one day a week

Carpool drivers tend to be aged 25-55 and employed. Their passengers tend to be under 25 years old or without access to a vehicle.

The top reasons people give for carpooling as their primary mode of commuting are 1) cost (30%) 2) time (28%) 3) necessity (23%).

SOV commuters who said that they would be willing to carpool once a week cite 1) cost savings 2) better for the environment 3) less wear and tear on their vehicle.

Only 2% of carpoolers use a ridematch program. The most common type of carpool is with family members, co-workers and friends. Those under 25 are more likely to carpool with household members and friends. Those over 25 are more likely to carpool with co-workers.

SOV commuters that have a commute of up to 30 minutes or more are the most receptive to changing their behaviour as a result of employer-sponsored carpooling initiatives. Free carpool parking is the most likely initiative that would change their commuting behaviour.

Study Name: Interest in Viable Transportation Options Among Private Vehicle Drivers, July 2004		
Geographic Coverage	Survey Sample Size	Source
Greater Vancouver area	900 regular drivers, 16+, who drive at least 3x/week for personal reasons (work, shopping, etc.), random sample.	Survey conducted by the Mustel Group on behalf of the British Columbia Automobile Association in association with the Greater Vancouver Transportation Authority/TransLink
<p>Key Findings:</p> <p>20% of all respondents carpool (12% of students). Most carpooling trips (76%) are for leisure trips.</p> <p>47% of respondents would be likely or very likely to try vanpooling if the van were provided free of charge by the employer. If provided with a free employer-sponsored vanpool, respondents said they would make 7 fewer SOV trips per week (average). The most interested are women and those with lower incomes.</p> <p>If provided with an employer-sponsored carshare program, respondents said they would make 6 fewer SOV trips per week (average). The most interested are current transit users and the less affluent.</p> <p>40% would use transit or carpool if there was an employer-sponsored guaranteed ride home. 35% would use a 1-800 ridematching service if provided by an employer and would make an average of 6 fewer SOV trips per week. If employers offered a guaranteed ride home program, respondents said they would make 5 fewer SOV trips per week (average). The most interested in these initiatives were current transit users and those aged 45+.</p>		

Study Name: Le projet auto+bus : évaluation d'initiatives de mobilité combinée dans les villes canadiennes, 2006		
Geographic Coverage	Survey Sample Size	Source
4 cities in the Province of Québec	**No sample size provided	Communauto , survey prepared jointly by Transport Canada and Tecsult

Key Findings:

Between 1995 and 2005, the average annual growth in the number of carshare subscribers was 45%. The survey found that the main barrier to joining a carshare was the membership fee.

Communauto members used a carshare car for an average of 50 days per year.

Survey respondents said that the main benefit of carsharing was that it eliminates the need to own a car. Some also said that since they already have to walk some distance to get to their car, they might as well walk the distance to a Communauto parking lot.

The vast majority of Communauto members tend to have higher education levels (university degree), higher household incomes, be renters, do not already own a car, and have no children. The average age of users is 41 for both men and women. Carshare users also tend to be more aware of environmental issues and costs related to car ownership.

Carshare users are 2-3x more likely to walk and cycle more than average and are more likely to use public transit for commuting and recreation, shopping or leisure activities.

In 2005 Gatineau residents were offered a trial subscription to a carsharing organization. Since then, full membership has nearly doubled.

C. Transit (includes bus, streetcar, subway, light rail, ferry)			
Actions promoted: C1 Take public transit to/from work/school C2 Take public transit for other destinations C3 Use discounted transit passes or other transit programs offered by employer or school C4 Use charter buses offered by employer C5 Use kiss & ride/park & ride lots			
Target Audience	Primary Motivators	Variations Noted (e.g. Regional, socioeconomic)	Primary Barriers
Working adults	Saves money Environmental benefits Convenience Able to read, work, relax on transit	<p>Canada: About 20% of consumers would consider taking public transit regularly if gas prices rise above \$2/litre. Drivers that switch to transit tend to be in larger communities (500,000+). Younger or less affluent drivers are more likely to switch to transit. Older Canadians and the more affluent are the least likely to consider using transit, regardless of service improvements.</p> <p>Toronto: Younger workers (16-34), women, the less affluent and renters are more likely to take public transit than other Torontonians.</p> <p>Montreal: Men in Montreal tend to be more favourable to transit than women in Montreal; those aged 35-54 have the lowest use of public transit in Montreal.</p>	Transit concerns (takes too long, too crowded, infrequent or inadequate service, inadequate routes, etc.). Need to carry things/run errands (and therefore need to drive) Bad weather Some see using transit as a sign of financial need
Retired adults		<p>Canada: Older Canadians are the least likely to consider using transit, regardless of service improvements.</p>	
Disabled adults	Buses are accessible		Buses are not accessible
Parents			
Children (4-11)			

Youth (12-17)	Saves money		
University/college students (18+)	Saves money	<i>Toronto:</i> Younger people (16-34) are more likely to take transit than other age groups in Toronto.	
Employers			

Study Name: 2005 Household Travel Survey: Summary Report on Weekday Travel by Residents of the Edmonton Region		
Geographic Coverage	Survey Sample Size	Source
Edmonton region	6,600 random sample (adults)	Survey conducted by ISL and Banister Research & Consulting Inc. on behalf of Alberta Infrastructure and Transportation
Key Findings: Largest group of transit users are 16-24 year olds who use transit for 13% of all trips. Households with income less than \$30,000 were found to use transit more (4%).		

Study Name: Looking West 2008, April 2008		
Geographic Coverage	Survey Sample Size	Source
BC, Alberta, Saskatchewan, Manitoba	4,000 random sample of adults (1,000 calls in each province)	Canada West Foundation
Key Findings: When asked what they would be willing to do to reduce GHG emissions, 84.1 of respondents said they take transit. Of those, 63.7 had already done so. Those in BC and Alberta are more likely to be using transit more.		

Study Name: Looking West 2007, April 2007		
Geographic Coverage	Survey Sample Size	Source
7 urban areas	3,500 urban residents (adults), split among Greater Vancouver, Calgary, Edmonton, Regina, Saskatoon, Winnipeg, Greater Toronto	Canada West Foundation

<p>Key Findings:</p> <p>Presented with a list of 13 issues facing their city, respondents living in Calgary, Toronto and Vancouver rated improving transit systems as a high or very high priority.</p> <p>Building and maintaining roads was a high priority for the 5 Prairie cities.</p> <p>Vancouver and Calgary also rated reducing traffic congestion as a high priority (Vancouver 78.4%, Calgary 79.2%).</p>

Study Name: Public Opinion on Environmental Education, Urban Sprawl, and Water Issues, July 2002		
Geographic Coverage	Survey Sample Size	Source
Canada-wide	1,502 random sample (adults)	Survey prepared by Environics for the Sustainability Network
<p>Key Findings:</p> <p>52% were willing to support a gasoline tax to improve public transit. Ontarians, Quebecers, those with a university education and those earning between \$60,000 and \$80,000 annually were the most supportive of the idea.</p>		

Study Name: Rapport sur les habitudes et les attitudes de déplacement domicile-travail du personnel du Centre hospitalier universitaire Ste-Justine. 2007		
Geographic Coverage	Survey Sample Size	Source
Montreal hospital workers (60 % urban, 40% suburban)	1,184 adults 80% women, mostly between 25 and 54 (nurses and office workers).	Survey conducted by ADAPTES for Centre hospitalier universitaire Sainte-Justine.
<p>Key Findings:</p> <p>Those living in urban neighborhoods use public transit more. Those aged 35-54 have the lowest use of public transit; those under 34 tend to view transit more favourably. Men tend to be more favourable towards transit than women.</p> <p>Nearly 66% of transit users buy a monthly a pass (12 passes/year)</p> <p>80% live less than 5 minutes walking distance of a bus stop, 33% within 5 minutes of a subway station and 13% from a light rail station.</p> <p>Use of public transit is influenced by how much the commuter knows about the transit service and its frequency. Professionals, doctors and managers have the most favourable attitudes towards transit and, if they are drivers, are the most likely to switch to transit if they live on Montreal Island near a subway station. Those less favourable tend to be office workers, nurses and technicians.</p>		

Study Name: Canadian Perceptions Toward the “New Realities of High Gas Prices”: Implications for Public Transit and Environmental Policy, August 2008		
Geographic Coverage	Survey Sample Size	Source
Canada-wide	1,100 Canadians aged 18+ in 48 communities with populations of 100,000 or more	Federation of Canadian Municipalities
<p>Key Findings:</p> <p>60% said high gas prices are causing them to rethink their transportation choices. 20% said they had already switched to or were considering switching to public transit as a result of high gas prices. The switch to transit is occurring most often in larger communities with populations of 500,000+. Youth and the less affluent are more likely to make the switch to transit (24%).</p> <p>25% of those who have not already switched to public transit said that they would if gas prices rose to between \$1.20 and \$2/litre. 20% said it would take gas prices above \$2/litre to make them use public transit on a regular basis. Close to half would resist taking public transit under any pricing scenario.</p> <p>60% said they would be somewhat more likely, and one-third much more likely, to think about taking public transit if 1) travel times were reduced 2) wait times shortened 3) if public transit offered better hours of service.</p> <p>81% support (40% strongly support) directing more of the federal gas tax to investments in public transit.</p> <p>65% would switch to transit (due to high gas prices) if: 1) travel times were faster (65%) 2) waiting times shorter (64%) 3) better hours of service (60%). These averages are slightly higher in the Atlantic provinces and in communities of more than 500,000 people.</p> <p>Older Canadians and the more affluent are less likely to consider public transit as an option, regardless of any service improvements. Of those who wouldn’t take transit regardless of gas prices, 44% said they would consider it if travel times were faster</p> <p>81% support or strongly support the idea of dedicating an additional share of federal gas tax revenues to public transit. Support is highest in the Atlantic cities and lowest in the Western cities. Those aged 18-34 are the most supportive of the initiative (90%) and those with higher incomes (85% for those making \$80,000+).</p>		

Study Name: Development of the York Regional Transportation Master Plan, 2008		
Geographic Coverage	Survey Sample Size	Source
York Region	1,011 randomly sampled (adults). The sample was divided into four areas: Markham, Richmond Hill, Vaughan and the remaining 6 municipalities that make up the region, with approx. 250 interviews conducted in each division.	Surveyed prepared by EKOS Research Associates for the Region of York

Key Findings:

Those under 35 were less likely to rate traffic congestion as a concern, but those 65+ were more likely to mention it. Conversely, 14% of those under 35 mentioned public transit as the most important issue, while only 4% of those 65+ did.

Overall, respondents said that the most important issue related to transportation was a lack of or need for public transit (26%). Richmond Hill residents were the most likely to rate this as a top concern (30%).

Greater access to transit was of less concern to those 65+ (17%) than those in younger age groups (30%).

54% thought that improving public transit was the best strategy to reducing traffic congestion. Those who take transit regularly were the most likely to think so (65%). The other top rated measures included 1) building subways to accommodate growth 2) designing more walkable/bikeable communities 3) providing a standard fare system on all York transit services.

Respondents in Vaughan were most likely to choose park & ride measures as an effective strategy to reduce traffic congestion.

When asked what the single most effective strategy would be to reduce congestion, four of the five measures were public transit related.

Study Name: 2008 Commuter Attitudes Survey Report, June 27, 2008		
Geographic Coverage	Survey Sample Size	Source
Greater Toronto, Hamilton Area (GTHA)	1,008 commuters or home-based workers in the Greater Toronto Area and City of Hamilton, aged 16+. Random sample. Regional quotas were used to ensure accurate coverage across six areas.	Survey conducted by Harris Decima on behalf of Metrolinx Smart Commute
Key Findings:		
Public transit commuters have been using this mode for 14 years.		
The federal tax credit for transit passes spurred 27% of commuters who drive alone occasionally to switch to transit. Those most likely to have made the switch are those who commute to or within Toronto, those under 25, students, households with lower incomes, and those without access to a vehicle.		
The top reasons people gave for taking transit as their primary mode of commuting were 1) cost (52%) 2) time (25%) 3) necessity (18%) 4) 15% say they do it for environmental and comfort reasons.		
Transit users are the most likely to say that their commute has improved.		
SOV commuters who said they would be willing to use transit once a week cite 1) cost savings 2) environmental benefits 3) convenience as top reasons.		
44% of transit users said that access to route information at or near work, school or other regular destinations is important. Women and those in households with incomes of less than \$75,000 are more likely to see this as important.		
SOV commuters are receptive to employer-sponsored transit passes and flex times. Employer-subsidized transit passes are more likely to change the commuting behaviour of those who drive alone.		

Study Name: Greater Toronto Transportation Authority Foundational Research, Phase I, November 2007

Geographic Coverage	Survey Sample Size	Source
Greater Toronto, Hamilton Area (GTHA)	1,000 Greater Toronto and Hamilton residents, 16+	Conducted by Ipsos Reid for the Greater Toronto Transportation Authority Foundational Research .
<p>Key Findings:</p> <p>Public transit is the most important transportation issue for both transit users and drivers, particularly for those in the core (Toronto, York, Peel).</p> <p>Commuting times are a barrier to taking public transit. The average commute for those who drive is 34 minutes, compared to 50 minutes for transit users. Commute times are higher for those who drive to transit services (e.g., GO Trains, park & ride lots).</p> <p>50% of drivers are likely to take public transit more often if service improved. Those who said that they are likely to take public transit more often said that extending Toronto’s subway lines and GO train service into an area near them would be major motivators. Messages about the environment and high gas prices also influence this group.</p> <p>79% of transit users are likely to take public transit more often. 66% of transit users drive their car at least one day a week. The main motivator among this group is increased frequency of service. Crowding on public transit is also a barrier. These users said that if gas prices rise, they would consider driving less.</p> <p>Those living in urban areas (Toronto) tend to be young (16-34), women, lower income and renters. 44% of these respondents own a car and 66% drive at least once a day. These users are more likely to: 1) be a member of environmental organization 2) say that transit is better for environment than driving 3) feel embarrassed to tell people they drive when could take transit 4) have participated in a protest or organized demonstration 5) consider transportation as a priority issue 6) see the environment as a priority issue 7) say that transit is well coordinated and planned.</p> <p>79% of transit users are likely to take transit more based on 4 initiatives proposed (expanding the areas served by GO Transit, running GO trains and buses more frequently, expanding the rapid transit lines and extending Toronto’s subway lines).</p> <p>56% of respondents said that public transit was the most important transportation issue facing area residents and the one that should receive the greatest attention from government.</p> <p>Top 3 barriers to using public transit: 1) flexibility of driving 2) quicker commute times 3) convenience. 6 in 10 would take transit more often if service improved (79% transit users, 50% drivers)</p> <p>Top 3 attitudes towards transportation issues: 1) 77% said public transit is critical to GTHA so that everyone can get around 2) taking public transit is better for the environment than driving 3) less traffic means less money spent on gas and wear & tear on cars.</p> <p>67% believe that the best way to improve traffic is to encourage more people to use transit by making it easier to get around. Top 3 issues for improving transit: 1) ensure proper funding 2) increase frequency of service 3) increase number of routes.</p>		

Study Name: Interest in Viable Transportation Options Among Private Vehicle Drivers, July 2004		
Geographic Coverage	Survey Sample Size	Source
Greater Vancouver area	900 regular drivers, 16+, who drive at least 3x/week for personal reasons (work, shopping, etc.), random sample.	Survey conducted by the Mustel Group on behalf of the British Columbia Automobile Association in association with the Greater Vancouver Transportation Authority/TransLink
<p>Key Findings:</p> <p>In the past year, 52% had switched from SOV commuting to an alternative mode (e.g., transit, cycling, walking) at least once (but not permanently).</p> <p>Regular transit users were more likely to have switched a regular SOV trip for another mode. Less frequent transit users and non-users have also made changes (50% and 31% respectively).</p> <p>Preferred transit modes included light rail (60%), shuttle buses linked to regional centres (58%), regular buses (50%) and express buses (48%).</p> <p>13% said that transit improvements would not make any difference in their behaviour.</p> <p>7% of all respondents (17% of students) use transit or combine transit with walking, cycling, carpooling or driving.</p> <p>The top changes needed for people to switch to transit: 1) on-time & reliable transit 2) service as fast as driving 3) costs less 4) no more than one transfer 5) secure parking 6) security cameras or personnel 7) getting a seat. The ideal transit service would be at 15-minute intervals. Those in outlying regions were more willing to wait longer (20-25 minutes).</p> <p>31% said that transit is more productive than driving (can read, relax, work).</p> <p>If provided with secure parking for transit users, respondents said they would switch 4.1 one-way SOV trips to transit if the cost was \$2/day. 4.4 one-way SOV trips to transit if it cost \$4/day. Those most interested in the idea were current transit users and drivers in outlying regions.</p>		

Study Name: Transportation Survey		
Geographic Coverage	Survey Sample Size	Source
City of Leduc and Leduc County, Alberta	368 businesses responded to a transportation survey conducted by the Leduc-Nisku Economic Development Authority	Alberta's International Region
Key Findings: 64% of the businesses surveyed felt that a lack of public transportation from Edmonton was a deterrent in attracting new employees. 61% said that their employees would use a bus service between Edmonton and the City of Leduc but that it would need to be affordable. 17% would be willing to subsidize a bus service in some way, but 15% would not. A majority of respondents did not answer this question or required more information to answer.		

Study Name: Measuring Up the North: Terrace Committee 2008		
Geographic Coverage	Survey Sample Size	Source
Terrace, BC (population 11,320)	176 adults completed a community survey about accessibility and inclusivity	City of Terrace
Key Findings: Seniors and those with disabilities were the most likely to rate public transit poorly, with a need for more accessible buses that have more flexible schedules and longer hours of operation. Respondents also noted that some public transit buses lacked wheelchair access and that many bus stops do not have shelters or seats for riders to wait out of the weather.		

D. Cycling			
Actions promoted: D1 Commuter cycling (e.g., cycle to/from work/school) D2 Commuter cycling combined with transit (e.g., rack & roll type programs) D3 Other cycling trips (e.g., cycle to/from other destinations) D4 Other cycling trips combined with transit D5 Use cycling facilities offered by employer/school D6 Organize a cycling school bus D7 Take locally available cycling courses (safety, skills, repair, anti-theft, etc.) D8 Join a cycling club or co-op			
Target Audience	Primary Motivators	Variations Noted (e.g. Regional, socioeconomic)	Primary Barriers
Working adults	Exercise/fitness Pleasure/recreation Convenience Environmental reasons Saves money	Canada: 3 in 10 Canadians live within 5 km of work and a majority support government spending for bike lanes. Women are more apt to cite safety as a reason why they don't cycle to work. Weather and safety concerns are highest in the largest urban centres (Toronto, Montreal, Vancouver). Residents in larger communities are more likely to cycle due to high gas prices. The more affluent are more likely to consider cycling if gas prices rise above \$2/litre. Quebec: More men than women cycle regularly in Quebec and for longer distances. Those who cycle more tend to have higher education and income levels than other Quebecers. Vancouver: Best features to encourage cycling: cycling routes away or separate from traffic, near beautiful scenery, paths next to major routes, lighting, bike-accessible transit.	Distance is too far Dangerous conditions (i.e., no cycling lanes or multi-use paths) Bad weather No facilities at work (e.g., change rooms, showers, parking)
Retired adults			
Disabled adults			

Parents	Exercise/fitness Saves time Environmental reasons	Canada: Parents are more likely to judge the route unsafe if they have daughters.	Distance Safety reasons
Children (4-11)	Fun to do/share time with peers Feeling of independence Environmental reasons	Ontario: More children express the desire to cycle to school than currently do. Boys in Ontario are slightly more apt to prefer cycling than girls in Ontario. Quebec: Children in Quebec are more likely to cycle if their parents also cycle, and if the distance to school is between 1 and 2 km.	Parents don't allow it due to safety or distance reasons (poor crosswalks, unsafe drivers)
Youth (12-17)			
University/college students (18+)	Convenience Saves money Environmental reasons	Canada: Those aged 18-34 are more likely to cycle due to high gas prices.	Bad weather Distance or safety reasons No facilities (e.g., change rooms, lockers, secure parking)
Employers			

Study Name: Ontario Walkability Study, May 2001		
Geographic Coverage	Survey Sample Size	Source
78 schools in 12 Ontario municipalities	<p>6,369 elementary school-aged children were surveyed during the 2000 International Walk to School Day. Primary-aged students completed the survey with assistance from an adult.</p> <p>Municipalities involved: Toronto, Perth, Oshawa, Markham, North York, Vaughan, Richmond Hill, Oakville, Etobicoke, Mississauga, St. Thomas and Kitchener.</p> <p>The authors note that the results would be different depending on the time of year the survey was done (this survey was done in October). In addition, all students surveyed were at schools registered for the International Walk to School Day event, reflecting a population that is more inclined towards active transportation. Finally, the surveys were completed by the students themselves.</p>	<p>Survey compiled by the York Centre for Applied Sustainability in partnership with Greenest City and the Ontario Ministry of Environment.</p>
<p>Key Findings:</p> <p>61.2% said they already walked or cycled to school and 72.2% said they would prefer to do so. 27.5% were driven to school by an adult.</p> <p>3.5% of students surveyed rode their bike to school, but 26.8% said they would like to do so.</p> <p>Slightly more boys preferred cycling than girls (57% v. 43%).</p> <p>24.6% said they didn't find street crossings safe (predominant reasons: streets were too wide or did not have a crosswalk or traffic signal). 23.4% said that drivers didn't behave well (main reasons: speeding up through yellow lights, driving too fast and not yielding to pedestrians).</p>		

Study Name: L'état du vélo au Québec en 2005, June 2006		
Geographic Coverage	Survey Sample Size	Source
Province of Québec	1,950 adults, random sample	Vélo Québec Association
<p>Key Findings:</p> <p>Three of 19 transportation agencies in Montreal have buses equipped with bicycle racks. Approximately 16% of the population uses a bicycle for commuting; 19% of all cycling transport is by children going to school. Those who cycle the most tend to be 18-24, with 16% of this age group using a bicycle as their primary commuting mode in the summer.</p> <p>Those most interested in cycling more said they would if the following factors were available: cycling paths, secure parking, other bicycle support facilities (showers).</p> <p>Factors that discourage cycling are weather (42%), distance (32%) and the risk of theft (17%). Regular cyclists, however, give more importance than others to the weather (51%) and the risk of theft (22%), while distance is less important (24%). The main reasons given for stopping cycling in the fall are: shortening of daylight hours and the fact that many cycling paths close for the winter (some as early as mid-October).</p> <p>93% believe that cycling should be encouraged in urban areas (compared to 55% of Quebecers in 1995).</p> <p>Those who cycle several times a week tend to have higher education levels and household incomes of more than \$80 000.</p> <p>84% of Quebecers agree that a cycling path network should be developed in their municipality (in Montreal, 78% supported this idea)</p> <p>More men than women cycle on a regular basis and men also tend to cycle longer distances. This gap between genders increases with age. Urban cyclists are more likely to cycle for work purposes and also tend to cycle longer distances than suburban or rural residents. Those who cycle to commute cover almost twice the distance as those who cycle for recreational purposes only.</p> <p>Children are more likely to cycle many times a week if their parents also cycle. Children are also more likely to cycle to school if the distance is between 1 and 2 km.</p>		

Study Name: Major Benefits to Health and Environment, 1998		
Geographic Coverage	Survey Sample Size	Source
Canada-wide	1,501 adults, random sample	Environics

Key Findings:

70% of Canadians say if they had access to a dedicated bike lane that would take them to work in less than 30 minutes at a comfortable pace, they would definitely use it. 82% support government spending to create dedicated bicycle lanes and paths.

Respondents said that cycling for transportation offers both a way to reduce pollution and increase individual physical activity. This survey found that the public ranks environmental pollution and exercise/diet highest by far among all factors determining individual health.

74% of Canadians could cycle to one or more routine destinations in 30 minutes or less (up to 5 km cycling).

57% of Canadians (54% of women and 61% of men) own a bicycle. 47% cycle for leisure or recreation. 38% of those with bikes use them for transportation to a routine destination and 6% cycle to work occasionally.

Of bicycle owners who live within 5 km of work, 85% rarely or never cycle. 6% said they cycle nearly all the time to leisure time destinations and 12% said that they cycle more than half the time to leisure destinations. 63% rarely or never cycle to pursue leisure activities.

Two-thirds of respondents (including 60% of those considered "inactive") would like to cycle more often.

53% believe that cycling on the streets in their community is dangerous due to vehicle traffic. Women are more inclined to that opinion than men (59% vs. 47%). Worries about the weather and about the safety of cycling in traffic are strongest in communities larger than 1 million (Toronto, Montreal, Vancouver).

Roughly 3 in 10 Canadians live within 5 km of work but just 1 in 10 cycles to work sometimes.

Women are far less likely to cycle to work (92% said rarely or never, compared with 79% of men).

The top five reasons for bicycling: 1) exercise and health 2) pleasure 3) practicality and convenience 4) environmental concern 5) save money.

Public attitudes towards bicycle commuting are positive. Asked for views on the statement “I think people who cycle to work are a little odd,” 92% disagreed.

72% of respondents disagreed with the statement “Cyclists in my community are reckless and a major menace to pedestrians and cars.” 9 in 10 Canadians feel drivers should be much more considerate of cyclists than they are now.

Among children 13-18, 82% have a bike yet just 4% cycle to school. 96% of parents with children aged 5-13 said their children have bikes but only 2% of children in that age group cycle to school.

Parents cite distance and safety as the top two reasons why their children don't cycle more often. 42% of parents with daughters and 33% of those with sons say it is fairly or very unsafe. Among people who consider cycling to school unsafe, 88% cite busy traffic and bad drivers, 14% cite poor roads or a lack of routes and 12% say it is unsafe because of the distance involved. If cycling to school was very safe, almost half (49%) of those who don't now feel that way say their child would cycle more often, with 17% saying “much more often.”

Study Name: Cycling in Cities Opinion Survey, 2006		
Geographic Coverage	Survey Sample Size	Source
Metro Vancouver	1,402 current and potential adult cyclists	University of British Columbia
<p>Key Findings:</p> <p>The study concluded that 31% of adults in the Vancouver region are in the market for cycling.</p> <p>Top motivators and deterrents were related to engineering (e.g., cycling routes away from traffic) and environment (beautiful scenery while cycling). Education and encouragement factors (e.g., cycling maps, courses, bike storage) were moderate motivators. Enforcement factors (e.g., helmet, light, cycling restrictions) were of neutral influence.</p> <p>The most desirable route type was a paved off-street cycle path for bikes only. The least desirable was major city street with parked cars.</p> <p>Respondents said that the best route types to encourage cycling are 1) paved off-street paths for cyclists only 2) residential streets designated for cycling and with traffic calming measures 3) paths next to major streets separated from motor vehicles by a curb or other barrier.</p> <p>Respondents said that the top design features that would encourage cycling are: 1) cycling routes away from traffic and noise pollution 2) cycling routes near beautiful scenery, separated from heavy and high speed traffic, with minimum slopes and distances, and with smooth, non-slip surfaces clear of debris.</p> <p>Other features that encourage cycling are good lighting, lanes marked with reflective paint, safe indoor bike storage, and the option to take bikes on transit.</p> <p>Top 10 motivators: 1) Route is away from traffic noise and air pollution 2) Route has beautiful scenery 3) Route has bicycle paths separated from traffic for the entire distance 4) Route is flat 5) Cycling to the destination takes less time than travelling by other modes 6) Distance to my destination is less than 5 km 7) I can make the trip in daylight hours 8) I can take my bike on the Skytrain at any time 9) A 2-way off-street bike path has a reflective centre line for night and poor weather cycling 10) Secure indoor bike storage is available at my destination.</p> <p>Top 10 deterrents: 1) Route is snowy or icy 2) Street has a lot of car, bus, or truck traffic 3) Route has glass or debris 4) Vehicles drive faster than 50 km/h 5) Risk from motorists who don't know how to drive safely near bicycles 6) Risk of injury from car-bike collisions 7) It is raining 8) Route has surfaces that can be slick when wet or icy when cold 9) Route is not well lit after dark 10) Need to carry bulky or heavy items.</p>		

Study Name: Rapport sur les habitudes et les attitudes de déplacement domicile-travail du personnel du Centre hospitalier universitaire Ste-Justine. 2007		
Geographic Coverage	Survey Sample Size	Source
Montreal hospital workers (60 % urban, 40% suburban)	1,184 adults 80% women, mostly between 25 and 54 (nurses and office workers).	Survey conducted by ADAPTES for Centre hospitalier universitaire Sainte-Justine.

Key Findings:

Men are more apt to use active transportation (walking, cycling) than women.

One on six respondents claim to use a different mode (walking, cycling) in summer than in winter.

Those who use an active mode of transportation tend to be the most satisfied with their commute.

20% say they would cycle more between May and October if cycling facilities (change rooms, showers, secure parking) were offered.

Study Name: Canadian Perceptions Toward the “New Realities of High Gas Prices”: Implications for Public Transit and Environmental Policy, August 2008

Geographic Coverage	Survey Sample Size	Source
Canada-wide	1,100 Canadians aged 18+ in 48 communities with populations of 100,000 or more	Federation of Canadian Municipalities

Key Findings:

60% said high gas prices are causing them to rethink their transportation choices. People living in communities with populations of less than 500,000 and those aged 35-54 were more likely to be rethinking their transportation choices.

Residents in larger communities (500,000+) and those aged 18-34 are more likely to walk or cycle instead of drive due to high gas prices. The more affluent are more likely consider walking/cycling if gas prices go over \$2/litre (49%).

Study Name: 2008 Commuter Attitudes Survey Report, June 27, 2008

Geographic Coverage	Survey Sample Size	Source
Greater Toronto, Hamilton Area (GTHA)	1,008 commuters or home-based workers in the Greater Toronto Area and City of Hamilton, aged 16 years or older. Random sample. Regional quotas were used to ensure accurate coverage across six areas.	Survey conducted by Harris Decima on behalf of Metrolinx Smart Commute

<p>Key Findings:</p> <p>29% of public transit and bicycle commuters would be willing to consider taking their bicycle on public transit.</p> <p>28% of bicycle commuters said that shower and change facilities were extremely or very important. Just under half of bicycle commuters cite bike parking as important. Change and shower facilities and bicycle parking are more likely to change the commuting behaviour of those who drive alone and are under 24 years old.</p> <p>90% of cyclists were satisfied with their commute.</p> <p>SOV commuters who said that they would be willing to cycle once a week say their main reasons for doing so are: 1) exercise 2) environmental benefits 3) cost savings.</p> <p>Only 5% of bicycle commuters cycle year-round.</p>

Study Name: Greater Toronto Transportation Authority Foundational Research, Phase I, November 2007		
Geographic Coverage	Survey Sample Size	Source
Greater Toronto, Hamilton Area (GTHA)	1,000 Greater Toronto and Hamilton residents, 16+	Conducted by Ipsos Reid for the Greater Toronto Transportation Authority Foundational Research .
<p>Key Findings:</p> <p>Overall, 60% found it easier to cycle around their own neighbourhood than over a broader area of the city.</p>		

Study Name: Interest in Viable Transportation Options Among Private Vehicle Drivers, July 2004		
Geographic Coverage	Survey Sample Size	Source
Greater Vancouver area	900 regular drivers, 16+, who drive at least 3x/week for personal reasons (work, shopping, etc.), random sample.	Survey conducted by the Mustel Group on behalf of the British Columbia Automobile Association in association with the Greater Vancouver Transportation Authority/TransLink
<p>Key Findings:</p> <p>If provided with lockers/showers at work/school, respondents said that they would switch 4.3 one-way SOV trips per week (average). The most interested are those living close to work, those under 45 and those who pay for parking at work.</p>		

Study Name: Bike Lanes, On-Street Parking and Business: A Study of Bloor Street in Toronto’s Annex Neighbourhood, February 2009

Geographic Coverage	Survey Sample Size	Source
Toronto	538 adult pedestrians at 8 locations along Bloor Street; 61 of 110 merchants along Bloor Street. Surveys conducted July 2008	Clean Air Partnership
<p>Key Findings:</p> <p>50% of the businesses that responded to the survey were restaurants, 35% stores, 15% services.</p> <p>Merchants were asked how many customers they serve, how many of their customers they think drive to visit their business; and their opinions on the business impacts of losing one lane of on-street parking in order to install a bike lane or widen the sidewalk. More merchants believe that a bike lane or widened sidewalk would increase business. When asked how the installation of a bike lane or a widened sidewalk (with a corresponding removal of half of the on-street parking) would affect their business, 75% believed their business would improve or stay the same.</p> <p>People were approached at 8 different locations along the street and asked if they live or work in the area, how often they visited the area, how much they spend in the area, the purpose of their visit, what form of transportation they used to get to the area and their preference for a bike lane or a wider sidewalk. 55% lived or worked in the area.</p> <p>Among those who lived in the area, 81% walked or cycled to get to the street. For those who didn't live in the area, 54% took public transit, 20% walked, 16% drove, 10% cycled. 58% of all respondents said that they visited the area more than 10 times per month.</p> <p>Overall, pedestrians and cyclists visited the neighbourhood the most often, with 84% of pedestrians and 72% of cyclists visiting 5x/month.</p> <p>Pedestrians and cyclists visited the neighbourhood the most often and spent the most money per month. Among those who lived or worked in the area, 50% reported spending between \$100 and \$499.</p> <p>Pedestrians spent the most (more than \$100/month), followed by cyclists, car drivers, and finally public transit users.</p> <p>62% of respondents, regardless of whether they lived or worked in the area, preferred a bike lane to a widened sidewalk.</p>		

E. Walking (includes jogging/skateboarding/rollerblading/wheelchair use)			
Actions promoted: E1 Walk to/from work/school E2 Combine walking to/from work/school with transit E3 Walk to/from other destinations E4 Combine walking to/from other destinations with transit E5 Take courses on walking, jogging, etc. (e.g., running clinics, walking programs such as mall walks)			
Target Audience	Primary Motivators	Variations Noted (e.g. Regional, socioeconomic)	Primary Barriers
Working adults	Exercise/fitness Pleasure Convenience Environmental reasons Saves money	<p>Canada: A majority of adults walk for pleasure, but not for commuting. About 20% of Canadians live within 3 km of their workplace but only 10% walking most of the time. Slightly more women than men walk for pleasure.</p> <p>People in larger communities and the more affluent are more likely to walk due to high gas prices.</p> <p>Toronto: Pedestrian commuters are more likely to be satisfied with their commute than those Torontonians using other modes of transportation.</p> <p>Montreal: Men in Montreal are more apt to combine walking with transit than women in Montreal.</p>	Too far to walk Takes too long Bad weather Have things to carry (too awkward)
Retired adults	Health and fitness benefits Chance to socialize Transit is accessible		
Disabled adults	Transit is accessible Health and fitness benefits Destination is close enough to walk		No audible pedestrian signals

Parents	Promotes better fitness and health for children		Safety (unsafe conditions, bad drivers, etc.) Too far for children to walk Bad area to walk through
Children (4-11)	Fun to do/share time with peers Feeling of independence Environmental reasons	Ontario: More children in Ontario express the desire to walk to school than currently do. Quebec: More than half of children in Quebec walk to school when the distance is less than 1 km. Quebec children living in urban areas tend to walk more than those in the suburbs.	Parents don't allow it due to safety or distance reasons (poor crosswalks, unsafe drivers) Unsafe sidewalk conditions or no sidewalks
Youth (12-17)	School is close to home Feelings of independence and responsibility Chance to socialize with peers School/transit company provides discounted student pass		Same as for children (4-11)
University/college students (18+)	Less expensive than driving Health and fitness benefits School is close to home School/transit company provides discounted student pass	Canada: Those aged 18-34 are more likely to walk due to high gas prices. Toronto: For those who cycle year-round, the majority are under 25 years old.	Bad weather Parents or others drive them to destinations
Employers	Promotes greater health and fitness in employees (and can contribute to fewer sick days, greater productivity) Boosts employee morale through social activities		

Study Name: 2005 Household Travel Survey: Summary Report on Weekday Travel by Residents of the Edmonton Region		
Geographic Coverage	Survey Sample Size	Source
Edmonton region	6,600 random sample (adults)	Survey conducted by ISL and Banister Research & Consulting Inc. on behalf of Alberta Infrastructure and Transportation
Key Findings: Overall, about 35% of children and walk to school; youth have a slightly lower walking to school rate of 27%.		

Study Name: Ontario Walkability Study, May 2001		
Geographic Coverage	Survey Sample Size	Source
78 schools in 12 Ontario municipalities	<p>6,369 elementary school-aged children were surveyed during the 2000 International Walk to School Day. Primary-aged students completed the survey with assistance from an adult.</p> <p>Municipalities involved: Toronto, Perth, Oshawa, Markham, North York, Vaughan, Richmond Hill, Oakville, Etobicoke, Mississauga, St. Thomas and Kitchener.</p> <p>The authors note that the results would be different depending on the time of year the survey was done (this survey was done in October). In addition, all students surveyed were at schools registered for the International Walk to School Day event, reflecting a population that is more inclined towards active transportation. Finally, the surveys were completed by the students themselves.</p>	Survey compiled by the York Centre for Applied Sustainability in partnership with Greenest City and the Ontario Ministry of Environment.
Key Findings: <p>61.2% said they already walked or cycled to school; 72.2% said they would prefer to do so. 27.5% were driven to school by an adult.</p> <p>45.4% chose walking as their preferred mode to get to school.</p> <p>18.2% said that their walk was not safe (main reasons: cracked or broken sidewalks, sidewalks blocked by parked cars, dumpsters or utility poles, no sidewalk, path or shoulder). 24.6% said they didn't find street crossings safe (main reasons: streets were too wide or did not have a crosswalk or traffic signal). 23.4% of students said that drivers didn't behave well (main reasons: speeding up through yellow lights, driving too fast and not yielding to pedestrians).</p> <p>72% said that they would keep walking regularly in the future.</p>		

Study Name: Looking West 2008, April 2008		
Geographic Coverage	Survey Sample Size	Source
BC, Alberta, Saskatchewan, Manitoba	4,000 random sample of adults (1,000 calls in each province)	Canada West Foundation
Key Findings: When asked what they would be willing to do to reduce GHG emissions, 90.4% of respondents said they would walk or cycle more. Of those, 83.7% had already done so.		

Study Name: L'état du vélo au Québec en 2005, June 2006		
Geographic Coverage	Survey Sample Size	Source
Province of Québec	1,950 adults, random sample	Vélo Québec Association
Key Findings: When school is less than 1 km away from home, 53% of children walk to school. Children living in urban areas tend to walk more than those in the suburbs (37% v. 20% respectively).		

Study Name: Major Benefits to Health and Environment, 1998		
Geographic Coverage	Survey Sample Size	Source
Canada-wide	1,501 adults	Environics
<p>Key Findings:</p> <p>85% of adults (89% women, 80% men) walk for exercise or leisure but only about half of Canadians who could walk to work in 30 minutes or less do so as a rule. 68% of children have a walk to school of 30 minutes or less, but only 36% walk as a rule. 62% of Canadians could walk to one or more routine destinations (work, shopping/errand, visiting friends/family, pursue leisure activities) in 30 minutes or less (up to 3 km walking). As a rule, 43% do walk.</p> <p>Respondents said that walking for transportation helps 1) reduce pollution and 2) increase individual physical activity. The survey found that the public ranks environmental pollution and exercise/diet highest by far among all factors determining individual health.</p> <p>About 1 in 5 respondents live within 3 km of their workplace (30 minute walk or less) but just 1 in 10 report walking most of the time (3 days a week or more). One-third of those with a walk to work of 3 km or less never or rarely walk. The average distance covered by those who walk to work at least sometimes is 3.6 km each way.</p> <p>62% of Canadian adults live within 30 minutes by foot of at least one regular destination (work, shopping, visiting family/friends, pursue leisure activities). Among those who live within a reasonable walk of a routine destination, the survey found that people are more likely to walk to leisure activities (19% walk most of the time to leisure destinations and 31% walk at least sometimes).</p> <p>82% of Canadians say they'd like to walk more than they do. One-third of respondents agreed with the statement: “I never have time to walk” and 15% said that “there were no pleasant places to walk near my home.”</p> <p>Barriers: distance (47%) lack of time (19%) weather conditions (18%), poor health/disabled (11%), laziness or inconvenience (11%), too much to carry (6%). The lack of a pleasant route was cited by 2% of respondents and 1% cited traffic concerns and bad roads.</p> <p>The survey divided respondents into two groups: inactive and active (those who walk or cycle at least sometimes—one day a week—to a destination). Both groups showed virtually the same desire to walk more often (81% of the inactive group, 83% of the active group) but the inactive respondents were more inclined (40% vs. 24%) to the view that they never have time.</p> <p>A majority (62%) said that they walk for exercise and health, 30% for pleasure. 24% said that walking is practical and convenient, 10% cited environmental reasons, 9% cited cost savings and 2% said they had no other modal choice.</p> <p>On a typical day, about 40% of Canadian school children take a school bus, 29% walk, 13% ride in a family vehicle, 5% use public transit; and 2% cycle.</p> <p>Asked to rate the safety of their child's walk to school, 25% of parents with daughters and 19% with sons said that is it is fairly or very unsafe. Safety concerns are higher in smaller communities—29% of those in centers with less than 10,000 people say walking to school is unsafe.</p> <p>Top parental concerns about walking to school: busy traffic/bad drivers (55%), no sidewalks/poor roads (19%), too far (16%), bad area/drugs etc. (12%), gangs/other kids (3%). If walking to school was very safe, 20% of those who don't now feel that way say their child would walk much more often.</p>		

Study Name: Rapport sur les habitudes et les attitudes de déplacement domicile-travail du personnel du Centre hospitalier universitaire Ste-Justine. 2007		
Geographic Coverage	Survey Sample Size	Source
Montreal hospital workers (60 % urban, 40% suburban)	1,184 adults 80% women, mostly between 25 and 54 (nurses and office workers).	Survey conducted by ADAPTES for Centre hospitalier universitaire Sainte-Justine.
<p>Key Findings:</p> <p>A majority of survey respondents used transit combined with walking to commute. Men are more apt to use active transportation (walking, cycling) than women. Those who use an active mode of transportation tend to be the most satisfied with their commute.</p> <p>One on six respondents claim to use a different mode (walking, cycling) in summer than in winter.</p>		

Study Name: Canadian Perceptions Toward the “New Realities of High Gas Prices”: Implications for Public Transit and Environmental Policy, August 2008		
Geographic Coverage	Survey Sample Size	Source
Canada-wide	1,100 Canadians aged 18+ in 48 communities with populations of 100,000 or more	Federation of Canadian Municipalities
<p>Key Findings:</p> <p>60% said high gas prices are causing them to rethink their transportation choices. People living in communities with populations of less than 500,000 and those aged 35-54 were more likely to be rethinking their transportation choices.</p> <p>Residents in larger communities and those aged 18-34 are more likely to walk or cycle instead of drive due to high gas prices. The more affluent are also more likely consider walking/cycling if gas prices go over \$2/litre (49%).</p>		

Study Name: 2008 Commuter Attitudes Survey Report, June 27, 2008		
Geographic Coverage	Survey Sample Size	Source

Greater Toronto, Hamilton Area (GTHA)	1,008 commuters or home-based workers in the Greater Toronto Area and City of Hamilton, aged 16 years or older. Random sample. Regional quotas were used to ensure accurate coverage across six areas.	Survey conducted by Harris Decima on behalf of Metrolinx Smart Commute
Key Findings: 8% of pedestrian commuters said that shower and change facilities were extremely or very important. Change and shower facilities and bicycle parking are more likely to change the commuting behaviour of those who drive alone and are under 24 years old. The top reasons people give for walking as their primary mode of commuting were 1) cost (34%) 2) exercise (33%) 3) time (30%). Proximity to their destination and environmental reasons were also given as reasons (20% and 19% respectively). Pedestrian commuters are the least likely to say their commute is worse than a year ago. Pedestrian commuters are the most satisfied with their commute (92%). SOV commuters who said they would be willing to walk once a week cite exercise, cost savings and environmental benefits as main reasons for doing so. 34% of pedestrian commuters said that they walk/jog/skate/wheelchair year-round. They are most likely to be under 25 years old.		

Study Name: Greater Toronto Transportation Authority Foundational Research, Phase I, November 2007		
Geographic Coverage	Survey Sample Size	Source
Greater Toronto, Hamilton Area (GTHA)	1,000 Greater Toronto and Hamilton residents, 16+	Conducted by Ipsos Reid for the Greater Toronto Transportation Authority Foundational Research .
Key Findings: 78% of respondents said that walking to destinations within their neighbourhood is easier than using public transit or bicycle.		

Study Name: Interest in Viable Transportation Options Among Private Vehicle Drivers, July 2004		
Geographic Coverage	Survey Sample Size	Source
Greater Vancouver area	900 regular drivers, 16+, who drive at least 3x/week for personal reasons (work, shopping, etc.), random sample	Survey conducted by the Mustel Group on behalf of the British Columbia Automobile Association in association with the Greater Vancouver Transportation Authority/TransLink
Key Findings: If provided with lockers/showers at work/school, respondents said they would switch 4.3 one-way SOV trips per week (average). Those living close to work, those under 45 and people who pay for parking at work were the most interested in this idea.		

Study Name: Bike Lanes, On-Street Parking and Business: A Study of Bloor Street in Toronto’s Annex Neighbourhood, February 2009		
Geographic Coverage	Survey Sample Size	Source
Toronto	538 adult pedestrians at 8 locations along Bloor Street; 61 of 110 merchants along Bloor Street. Surveys conducted July 2008	Clean Air Partnership
Key Findings: 50% of the businesses that responded to the survey were restaurants, 35% stores, 15% services. Merchants were asked how many customers they serve, how many of their customers they think drive to visit their business; and their opinions on the business impacts of losing one lane of on-street parking in order to install a bike lane or widen the sidewalk. More merchants believe that a bike lane or widened sidewalk would increase business. When asked how the installation of a bike lane or a widened sidewalk (with a corresponding removal of half of the on-street parking) would affect their business, 75% believed their business would improve or stay the same. People were approached at 8 different locations along the street and asked if they live or work in the area, how often they visited the area, how much they spend in the area, the purpose of their visit, what form of transportation they used to get to the area and their preference for a bike lane or a wider sidewalk. 55% lived or worked in the area. Among those who lived in the area, 81% walked or cycled to get to the street. For those who didn’t live in the area, 54% took public transit, 20% walked, 16% drove, 10% cycled. 58% of all respondents said that they visited the area more than 10 times per month. Overall, pedestrians and cyclists visited the neighbourhood the most often, with 84% of pedestrians and 72% of cyclists visiting 5x/month. Pedestrians and cyclists visited the neighbourhood the most often and spent the most money per month. Among those who lived or worked in the area, 50% reported spending between \$100 and \$499. Pedestrians spent the most (more than \$100/month), followed by cyclists, car drivers, and finally public transit users. 62% of respondents, regardless of whether they lived or worked in the area, preferred a bike lane to a widened sidewalk.		

Study Name: Measuring Up the North: Terrace Committee 2008		
Geographic Coverage	Survey Sample Size	Source
Terrace, BC (population 11,320)	176 adults completed a community survey about accessibility and inclusivity	City of Terrace
<p>Key Findings:</p> <p>Survey respondents said that street signs would be more helpful if they were in larger print and at higher heights from the ground. Respondents also said that more crosswalks need to have audible signals or crossing lights. The timing of crosswalk lights also needed to be lengthened so that those with mobility challenges can cross in time.</p> <p>Respondents also noted that some public transit buses lacked wheelchair access and that many bus stops do not have shelters or seats for riders to wait out of the weather.</p> <p>Respondents said that a lack of sidewalks is a hazard for all pedestrians, regardless of physical ability. They also said that sidewalk snowclearing needed to be improved.</p> <p>Some respondents mentioned that the use of painted lines to warn of a change in grading (curb cuts or elevation changes) would be useful for those with disabilities.</p> <p>Some respondents also noted the lack of accessible multi-use trails for recreation purposes.</p>		

Study Name: Ontario Evaluation: Summary Report, July 2008		
Geographic Coverage	Survey Sample Size	Source
Ontario	Telephone and online survey of 28 community partners and 36 educators	Survey commissioned by Green Communities Canada and conducted by Informa for Active & Safe Routes to School (ASRTS)
<p>Key Findings:</p> <p>Educators said that the single most popular ASRTS element was the International Walk to School Day because it garnered the support of students and the community. They also found the event easy to organize and that parents were willing to lend their support. Because the event is a one-day affair in the fall, it is easier to organize and easier to get support from parents, teachers and children. Walk to School Day is the most likely ASRTS event that educators and community partners will participate in. Educators said that students enjoyed the fanfare and the fact that they were participating in an international event.</p> <p>Schools that did not participate in the event cited busing, no parental support and bad weather as top barriers. Community partners said that the Walking School Bus was the program least likely to attract participation for a number of reasons: there is no leadership to sustain it, there are safety concerns from parents, a lack of participation, bad weather, distance is too far for students.</p>		

F. Telework / Alternative Work Arrangements (e.g., flex hours, compressed work weeks)			
Actions promoted: F1 Telework regularly (1 to 5 days per week) F2 Use video or telephone conferencing to reduce trips F3 Work a compressed week or work flex hours (e.g., to commute fewer days)			
Target Audience	Primary Motivators	Variations Noted (e.g. Regional, socioeconomic)	Primary Barriers
Working adults	More flexible schedule No commute Promotes productivity Saves money Saves time Allows a balance of work/family Better working conditions Requirement of the job	<p>Canada: Employees in smaller workplaces are more likely to work flex hours. Employees in large workplaces, non-unionized workers and the self-employed are the most likely to telework. More men than women are apt to telework and the majority are aged 26-45.</p> <p>Toronto: Those employed in the IT sector in Toronto are the most likely to telework.</p> <p>Quebec: Telework is more attractive to Quebecers who are married and have children. Workers with seniority are more apt to telework than other types of workers in Quebec. Executives and professionals tend to make the decision to telework on their own, while a majority of clerical workers (predominantly women) make the decision jointly with a supervisor. Women in Quebec are particularly concerned that there is no legislation to ensure working conditions for teleworkers.</p>	Workplace doesn't allow it Isolation/absence of colleagues/reduced career advancement Tend to work longer hours Lack of self-discipline Employer doesn't provide computer or other equipment
Retired adults			
Disabled adults			
Parents	Allows parents to care for children during the day		
Children (4-11)			
Youth (12-17)			

University/college students (18+)		Quebec: Fewer single people telework in Quebec, primarily due to a sense of isolation.	
Employers			

Study Name: Working at Home: An Update, June 2007		
Geographic Coverage	Survey Sample Size	Source
Canada-wide	25,000 respondents aged 15+ in all provinces. Random sample.	Statistics Canada
<p>Key Findings:</p> <p>Contrary to expectations, the strong growth in telework during the 1990s was not sustained in the 2000s. The survey suggests that this could have been partly caused by employees and employers re-evaluating the advantages, disadvantages and effectiveness of this type of work arrangement. In addition, continuing developments in information and telecommunications technology now permit many employees to work effectively from many places other than home.</p> <p>In 2005, 25% of employees said that telework was a requirement of their job, 20% said that conditions were better at home. One-sixth said the arrangement helped save money and one-twelfth said that it helped them in caring for children and other family members and in meeting personal obligation.</p>		

Study Name: Workplace and Employee Survey Compendium, 1999 and 2005		
Geographic Coverage	Survey Sample Size	Source
Canada-wide	6,351 workplaces, 24,597 employees, random sample.	Depository Services Program http://dsp-psd.pwgsc.gc.ca/Collection/Statcan/71-585-X/71-585-XIE1999001.pdf and http://www.statcan.gc.ca/pub/71-585-x/71-585-x2008001-eng.pdf Some data reported at Job Quality.ca www.jobquality.ca/indicators/schedules/sch3.shtml
<p>Key Findings:</p> <p>The opportunity to exert some control over the start and end of the workday is associated with workplace size. Employees in large workplaces were the least likely to be employed on a flexible schedule. Those employed in business services were the most likely to have flexible work hours (50%), manufacturing the least (30%). 44% of survey respondents who were able to choose their schedule, within established limits, said that they were able to balance work and family. Of those who were not able to choose their schedule, 18% said they were able to balance work and family.</p>		

Study Name: 2008 Commuter Attitudes Survey Report, June 27, 2008
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Geographic Coverage	Survey Sample Size	Source
Greater Toronto, Hamilton Area (GTHA)	1,008 commuters or home-based workers in the Greater Toronto Area and City of Hamilton, aged 16+. Random sample. Regional quotas were used to ensure accurate coverage across six areas.	Survey conducted by Harris Decima on behalf of Metrolinx Smart Commute
<p>Key Findings:</p> <p>Among those who did not work at home at all in a typical week, 15% indicated that telework is a potential option for them. Those who work in information technology (38%) are more likely to say that telework is an option, compared to 16% in the services sector, 15% in government and education and 8% in manufacturing.</p> <p>SOV commuters who said that they would be willing to telework once a week cite time to spend with family, convenience/flexibility, and cost savings as main reasons for doing so.</p> <p>90% of teleworkers said that they were very satisfied with working from home and 77% indicated that their employer is supportive or very supportive of teleworking. When not working, driving alone (47%) and public transit (37%) were the two most likely modes of transportation.</p> <p>60% said that their employer did not provide them with their computer equipment.</p> <p>Employer-sponsored programs resonate with SOV commuters, particularly a teleworking option (51% of respondents said that being allowed to telework would likely change their commuting behaviour). Those who commute to Toronto or York, have children and have a commute time of more than 15 minutes are the most likely to change their commuting behaviour if their employer offered teleworking.</p>		

Study Name: Interest in Viable Transportation Options Among Private Vehicle Drivers, July 2004		
Geographic Coverage	Survey Sample Size	Source
Greater Vancouver area	900 regular drivers, 16+, who drive at least 3x/week for personal reasons (work, shopping, etc.), random sample	Survey conducted by the Mustel Group on behalf of the British Columbia Automobile Association in association with the Greater Vancouver Transportation Authority/TransLink
<p>Key Findings:</p> <p>50% would telework 2 days per week if available at their workplace. If allowed to telework two days a week to work, respondents said they would make 4 fewer SOV trips per week (average). Most interested: those who pay for parking at work.</p>		

Study Name: Telework: A new mode of gendered segmentation? Results from a Study in Canada, 2003		
Geographic Coverage	Survey Sample Size	Source

Quebec	520 adult respondents* and case studies of 6 organizations *This study restricted the definition of telework to jobs that used information technology.	Canadian Journal of Communication, Vol 28, No 4 (2003) Available online only: http://www.cjc-online.ca/index.php/journal/article/viewArticle/1393/1475
<p>Key Findings:</p> <p>58.8 of respondents were self-employed, 35% non-unionized workers, 6.6% unionized workers. 60% of respondents had been engaged in telework for more than 2 years, 11% for less than 6 months, 28% between 6 months and 2 years. More men (58.8%) than women (41.2%) telework</p> <p>Among salaried teleworkers: 70% are between 26 and 45 years old, 41.7% are between 35 and 45 years old. 47% have a spouse and one or more children, 22.7% have a spouse but no children, 19.4% are single without children. 60.6% have a university degree, 25.6% have a college diploma and 12.5% have a high school diploma (these percentages are higher than those for the population as a whole). Although the majority of salaried teleworkers in this survey were men, this is not true of salaried teleworkers who work exclusively out of their homes. In 67% of the latter cases, teleworkers are women.</p> <p>Distribution of teleworkers according to sector: Public sector (administration, health, education) 24.6; Manufacturing and industrial (transportation, construction, manufacturing) 13.0; Private Services (Financial, business, publicity, sales and others) 58.3; Agricultural sector 2.8; Other 1.4.</p> <p>The two most often reported tasks done by teleworkers were 1) writing/text entry and 2) accounting. The percentage of male/female teleworkers differed according to the task: 27.7% of male teleworkers worked on writing or text entry, compared to 30.5% of female teleworkers. 24.9% of female teleworkers were engaged in accounting tasks, while only 12.3% of male teleworkers were.</p> <p>23.6% of full-time salaried female workers spent 100% of their time working from home compared to only 7.9% of male workers.</p> <p>48.6% of all our survey respondents made the decision to telework jointly with their supervisor while 45.8% made the decision on their own. 5.1% of respondents said that telework was a requirement of their job. Executives and professionals had greater autonomy in their decisions regarding telework (58% of executives and 47.4% of professionals made the decision on their own), while 85.7% of the clerical workers made the decision jointly with their employer. 55.9% of men made the decision on their own while 64% of women made the decision jointly with their supervisor.</p> <p>54.9% of the respondents who have a spouse and one or more children made the decision to telework independently. 62.5% of single parents made the decision jointly with their supervisor (case studies [see below] confirmed that telework is more attractive for those who have a spouse and children because it allows them to reduce their travel time and achieve a better balance between work and family responsibilities).</p> <p>Fewer single people opt to telework, partly because it would result in greater isolation. Single people without children, however, make up 19.4% of all of the teleworkers surveyed.</p>		

Survey results indicate that the larger the firm, the greater the likelihood that the teleworker had an agreement with his or her employer. 36.8% of the teleworkers who signed an agreement work for a firm with 500+ employees, 22.8% work for a firm with 10 to 15 employees, and 12% work for a firm with between 200 and 500 employees. 64% of women required a supervisor's approval to telework, compared to 37.8% of men.

Several of those interviewed thought that they had more autonomy in solving problems that arose while working and reported that they have been able to acquire new skills and knowledge since they have had to manage on their own at home. At the office they might have consulted a co-worker.

Teleworkers (women in call centres especially) generally feel that they have a fair degree of freedom in their work, even though some of them may be monitored from a distance through the computerized systems that they use to carry out the work

Some firms required performance levels that were 10% to 20% higher than those required of other employees. Teleworkers tended to agree to these conditions despite warnings from their unions.

Female teleworkers are more concentrated in accounting, translation, word processing, and secretarial work and the decision to do telework more often has to be made jointly with their supervisor. In contrast, male teleworkers are concentrated in executive, management, professional, and technical positions and they are more likely to have made the decision to do telework on their own.

Case studies: Among full-time teleworkers more women than men teleworked, the majority were between 36 and 45 years old, the majority lived with a spouse and have children, one-third had a high school diploma, one-third had a college diploma, and one-third had a university degree. The percentage of interviewees with diplomas or degrees is therefore lower than that of the population of teleworkers identified in the survey (the case studies were conducted with mainly full-time telworkers and these were administrative or clerical workers). The workers interviewed had between 5 and 10 years' seniority in their organization.

Main advantages of telework, according to gender:

- More flexible schedule: men 29.2%; women 30.7%
- Not having to take transport to work: men 23.1%; women 24.9%
- I am more productive: men 10.2%; women 4.4%-
- Stay at home, more with family: men 5.1%; women 8.3%
- Economies (transportation, clothing, meals, etc.): men 5.1%; women 5.9%
- More tranquility: men 5.1%; women 3.9%
- Better quality of work: men 2.0%; women 2.9%

Top dissatisfactions among teleworkers, by gender:

- Absence of colleagues; men 14.2%, women 17.1%
- Isolation; men 10.5%, women 10.2%
- Work more or too much: men 10.1%, women 9.3%
- Difficulty to motivate or discipline oneself: men 4.7%, women 7.3%
- Conflict between work and family: men 5.7%, women 3.9%
- Computer or IT are slower than at the office: men 2.4%, women 2.4%
- No disadvantage: men 27.7%, women 24.4%

Study Name: August 2006 Omnibus Survey, Teleworking in the GVRD		
Geographic Coverage	Survey Sample Size	Source
Greater Vancouver	500 telephone interviews with adults, 18+	Prepared by Mustel Group Market Research for TransLink.. Document available on request to TransLink. Email Sheila Hartmann for details: Sheila_Hartmann@translink.bc.ca .
<p>Key Findings:</p> <p>50% of teleworkers are aged 50+. 87% of those who did not telework said that they would likely choose to do so 2 days a week if they could.</p> <p>When asked for the best description of working from home situations, the majority, 59%, chose “An informal program where you have made an arrangement with your supervisor to work from home.”</p> <p>25% of the teleworkers surveyed had professional or technical occupations, followed by 20% in sales and supervisory positions, and executives and managers at 18%. Arts, entertainment and recreation type companies are the most likely to have teleworkers (17%) followed by professional, scientific and technical services (13%).</p> <p>Companies with multiple locations tend to have more teleworkers (51%). Companies with 2-9 employees and those with 500+ employees are tied for the percentage of employees who telework (21% each).</p> <p>More men (66%) than women (34%) telework.</p>		

Study Name: Is the Drive to Work Driving You Crazy? 2003		
Geographic Coverage	Survey Sample Size	Source
Canada-wide	388 (268 women, 117 men)	Job Quality.ca www.jobquality.ca/surveys/results_6.shtml
<p>Key Findings:</p> <p>Less than 2% of respondents indicated that they worked from home, but 24% said they have the option. Of the 76% who said that they do not have the option to telework, 66% would like to have the option.</p>		

Study Name: Market Potential for Teleworking in Greater Vancouver, December 2006		
Geographic Coverage	Survey Sample Size	Source
Greater Vancouver	<p>Human resources manager at 78 companies in the Greater Vancouver Area were surveyed.</p> <p>A letter from TransLink's TDM manager was sent to human resources managers in 212 organizations that are currently participants in TransLink's OnBoard program, a program that assists Metro Vancouver employers to identify and implement commuting options for their employees.</p>	<p>Document available on request to TransLink. Email Sheila Hartmann for details: Sheila_Hartmann@translink.bc.ca.</p>
<p>Key Findings:</p> <p>Employers surveyed said that they would most value assistance in developing telework policies and financial support.</p> <p>Those surveyed said that the main reason they do not currently have telework programs is that most positions require people to be physically present in the office (42%). Productivity and supervision, equality and union issues, the need for access to paper files and the need for group collaboration are other reasons that telework programs have not been implemented.</p> <p>Both the employer and employee survey found good potential for future growth of teleworking, which is in line with the aging population, growing concerns about the environment, the competition for scarce employee resources and escalating cost of office space in BC.</p> <p>About five companies each cited issues with technology, supervision, buy-in from management and understanding from those not included in the telework program. Issues related to productivity and favoritism were the main concerns. Two companies cited issues related to determining eligibility, setting up offices and connecting to the network. Communication and liability issues were also mentioned.</p>		

Study Name: Balancing Work and Family with Telework? Organizational Issues and Challenges for Women and Managers		
Geographic Coverage	Survey Sample Size	Source
Quebec	63 teleworkers from 6 organizations	Université du Québec
<p>Key Findings:</p> <p>More men than women telework (58% v. 42%). When considering those who always telework, however, there are more women than men (67% v. 33%).</p> <p>70% of teleworkers are between 26 and 45 years old. 47% of teleworkers have spouse and one or more children. 22.7% have spouse with no children. 19.4% are without children and single. 60.6% have university degree.</p> <p>Despite the fact that the majority that said they teleworked were executives or had a university degree, 59.2% reported that they earn an income of \$20,000 or less. This is likely due to the fact that many of them are employed by small firms (10 employees, or less) or are self-employed.</p> <p>The survey found that those married with children preferred telework because it enabled a work-life balance and reduced transportation time, allowing them to spend more time with family.</p> <p>Conversely, single workers stayed away from telework as it increased isolation and reduced potential career advancements.</p> <p>Managers were less likely to promote teleworkers as they are at a distance from the organization. Managers are also not accustomed to managing at a distance.</p> <p>The greatest dissatisfaction with telework was related to technology (slowness of computer internet lines, incompatibility, cumbersome security measures, etc.).</p> <p>The impression of reduced workload at home was in part due to a more relaxed environment more conducive to a higher level of productivity.</p> <p>49% of respondents said that a more flexible schedule was the most advantageous aspect of teleworking.</p> <p>Major concern among women: there are no legislations to ensure that working conditions of teleworkers are the same as for other workers.</p>		

Study Name: Part-time work and family-friendly practices in Canadian workplaces 2003		
Geographic Coverage	Survey Sample Size	Source
Canada-wide	**Based on the Workplace and Employee Survey of 2001 (no sample size provided)	Statistics Canada
<p>Key Findings:</p> <p>Women had a lower rate of access to flextime and telework than did men, even within managerial/professional groups.</p> <p>Flextime and telework were most available to employees working in small workplaces. Roughly 40% of women and 53% of men working in establishments with fewer than 10 employees reported a flextime schedule.</p> <p>Unionization was associated with lower levels of access to flextime and telework, and higher levels of access to childcare and eldercare services.</p> <p>Telework was rare among employees in manufacturing and retail industries, sectors in which work processes or the need for customer contact demand that employees be on site. Conversely, telework was most prevalent among employees in business services, real estate and insurance operations, industries in which the work may be more portable or performed with remote technology.</p> <p>Out of the sample surveyed, 4.9% of all Canadian employees were women with telework arrangements. Out of all women, the majority with telework arrangements were over 65 yrs old (9.8%), then 35-44 (7.6%). 15-24 year olds were reported to telework the least.</p> <p>Out of the sample surveyed, 5.3% of all Canadian employees were men with telework arrangements. Out of all men surveyed, 6.1% were 55-64 yrs old, followed by 5.4% 35-44 yrs old. The categories to telework the least were 65+ years old (1.5%) and 15-24 years old (1.4%).</p>		

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