CYCLING STRATEGY RESEARCH

ONLINE SURVEY

THE CITY OF
CALGARY

JANUARY 2011

HarGroup
Management Consultants

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Submitted to

The City of Calgary

By

HarGroup Management Consultants, Inc.

January 2011

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EXECUTIVE SUMMARY

The City of Calgary offered Calgarians an opportunity to provide input on factors that might impede cycling and identify initiatives that might encourage residents to cycle more often. Findings from the survey are an engagement component in the creation of a Comprehensive Cycling Strategy being developed by The City.

A total of 750 responses were analyzed from the online survey. HarGroup Management Consultants Inc. was engaged to conduct the survey, which was fielded in September 2010, and report the results.

It should be noted that the online survey involved a non-probability sampling process. Respondents were individuals who became aware of the survey through City news releases, on the City blog and on its Twitter account, or word of mouth. As such, the survey results are unrepresentative of any population. The findings only reflect the opinions of those who participated in the survey.

KEY FINDINGS

- Most survey respondents appear to be avid cyclists as they typically cycle daily (39%) or at least once a week (36%) and riding is an extremely important part of their lives (85%). Most respondents (71%) refer to themselves as cyclists when talking to other people. Nonetheless, most respondents (73%) would like to cycle more often.

- Prominent barriers to cycling more often that were identified by respondents included not feeling safe when cycling in traffic (64%), bike racks not being secure enough (58%), not having enough bike racks available (56%), bike routes to destinations being out of the way (53%), and lack of change facilities at destinations (50%).

- Respondents were most likely to have cycled for shopping or appointments (85%) or for social purposes (82%) in the last twelve months. Recreation (66%) and to get to and from work or school (61%) were also common. The most commonly cited reasons for cycling for these purposes were because it is fun or enjoyable, to get exercise and because it is more convenient than other forms of transportation.

- Respondents were given an opportunity to provide suggestions for improvements they thought might encourage them to cycle more often. The main suggestions offered were more bicycle lanes and more pathways integrated into communities. Other prevalent suggestions from respondents included more or better bicycle parking, separate pathways for cyclists and pedestrians, and increased motorist education about cyclists.

1.0 INTRODUCTION

The City of Calgary is developing a comprehensive cycling strategy, which identifies actions The City will take in the short, medium and long term in order to make Calgary a bicycle–friendly city for all; a city where cycling is a great option for transportation and recreation purposes. In developing the strategy, The City conducted an online survey about barriers to cycling and possible measures that could encourage people to cycle more often. There were 1,143 respondents who completed an interview in the online survey of which 750 were randomly selected for analysis purposes. This report presents the findings of the survey.

The City commissioned HarGroup Management Consultants Inc. to design a survey questionnaire, field the online survey and report the results.

1.1 Survey Background

There is a long history of planning initiatives that have supported cycling in Calgary. For instance, in 1996, the *Calgary Cycle Plan* was adopted to meet the growing demand for bike programs and facilities, which was followed up by the *Pathways and Bikeways Plan* in 2001. These kinds of initiatives have resulted in more than 707 kilometres of pathways and 260 kilometres of on-street bike routes in Calgary (*Calgary Pathways and Bikeways Map, 2009*). Indeed, Calgary is recognized for its extensive multi-use pathway system, which facilitates cycling through a good part of the city. Nonetheless, many Calgarians have expressed a desire for better on-street cycling facilities.

The *Calgary Transportation Plan*, which was approved by City Council in 2009, supports cycling through various policies such as the introduction of new types of cycling infrastructure or facilities, improved design of future and redeveloped streets and the provision of better connections for cycling throughout the city. As an example, a new Primary Cycling Network[1] is proposed that will connect major destinations throughout the city and ensure that cycling is a convenient, year-round alternative to travel in Calgary for both commuters and recreational users. To identify actions that foster the policies and concepts presented in the *Calgary Transportation Plan*, Council directed Administration to prepare a comprehensive cycling strategy. The strategy will expand the bicycle system to include better on-street and off-street facilities and deliver programs that encourage more people to cycle.

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[1] An illustrative presentation of the Primary Cycling Network is available in the Calgary Transportation Plan, 2009 (Appendix D - Map 1).

To assist with the development of the comprehensive cycling strategy, The City conducted an online survey to Calgarians.   The survey addressed a variety of issues such as:

- Participation in cycling among Calgarians,
- Reasons for cycling,
- Perceptions of cycling in the city,
- Perceived barriers to cycling within the city,
- Opinions about potential actions The City could take to encourage more cycling in the city.

In addition to understanding the above issues, a requirement of the survey project was to design a typology of cyclists in Calgary. Building upon work done by the Office of Transportation of the City of Portland, Oregon,[2] respondents were categorized based on answers to questions about existing cycling behaviour, attitudes about cycling and willingness to cycle on various types of streets. The last of these factors emerges from the premise that many people refrain from cycling more often because of concerns about personal safety; particularly when riding on roads with automobiles. The next section of this report (Section 2.0) presents categories of cyclists among survey respondents.

1.2 Survey Specifications

The online survey was conducted with members of the general public and a group of stakeholders who had expressed interest in participating in the public engagement and consultation process.

The City of Calgary advertised the online survey as a news release, on the City blog and on its Twitter account. Additionally, approximately 100 stakeholders were sent invitations to participate in the survey of which approximately two-thirds participated. In total, 1,143 stakeholders completed the online survey.[3] Of these, a random sample of 750 completed interviews was organized for analysis purposes and the findings are presented in this report. Since the online survey involved a non-probability sampling process,[4] the results are unrepresentative of any population. The findings only reflect the opinions of those who participated in the survey.

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[2] Four Types of Cyclists, Roger Geller, Bicycle Coordinator, Portland Office of Transportation, 2009.
[3] This number represents those stakeholders who answered questions in the online survey; some stakeholders may not have answered every question.
[4] Respondents were individuals who became aware of the survey through City news releases, The City blog, The City Twitter account or word of mouth.

A questionnaire was designed by HarGroup Management Consultants in conjunction with City representatives. A copy of the questionnaire is presented in Appendix A.

Demographic data were gathered from respondents and are presented in Appendix B. These data reveal that the survey sample has a higher representation of males and respondents aged 25 to 54 compared to the Calgary population. The sample is also slightly lower in representation for visible minority respondents.

1.3 Reporting

The remaining sections of the report present the results of the Cycling Strategy Research Online Survey. Basic frequencies of survey question results are presented in the report. However, various statistical procedures have also been used within the analyses to assess significance of contrasting responses or perceptions of respondents. These analyses provide additional insight into the data and allow for a greater degree of certainty in statements of inference.

Tables and figures contained within the body of this report are presented with rounded percentages. As such, totals may not sum to 100%.

2.0 CYCLING PROFILE AMONG RESPONDENTS

This section of the report presents a profile of cycling among respondents. These data are used to establish categories of cyclists based on the types presented in the previous section.

2.1 Cycling Behaviours

Almost all respondents (98%) indicated that they owned a bike. Most respondents (75%) indicated that they rode their bike at least once a week (daily and at least once a week). Further, approximately three-quarters of respondents (75%) stated that they would like to ride more.

Figure 2.1: Cycling Profile among Respondents
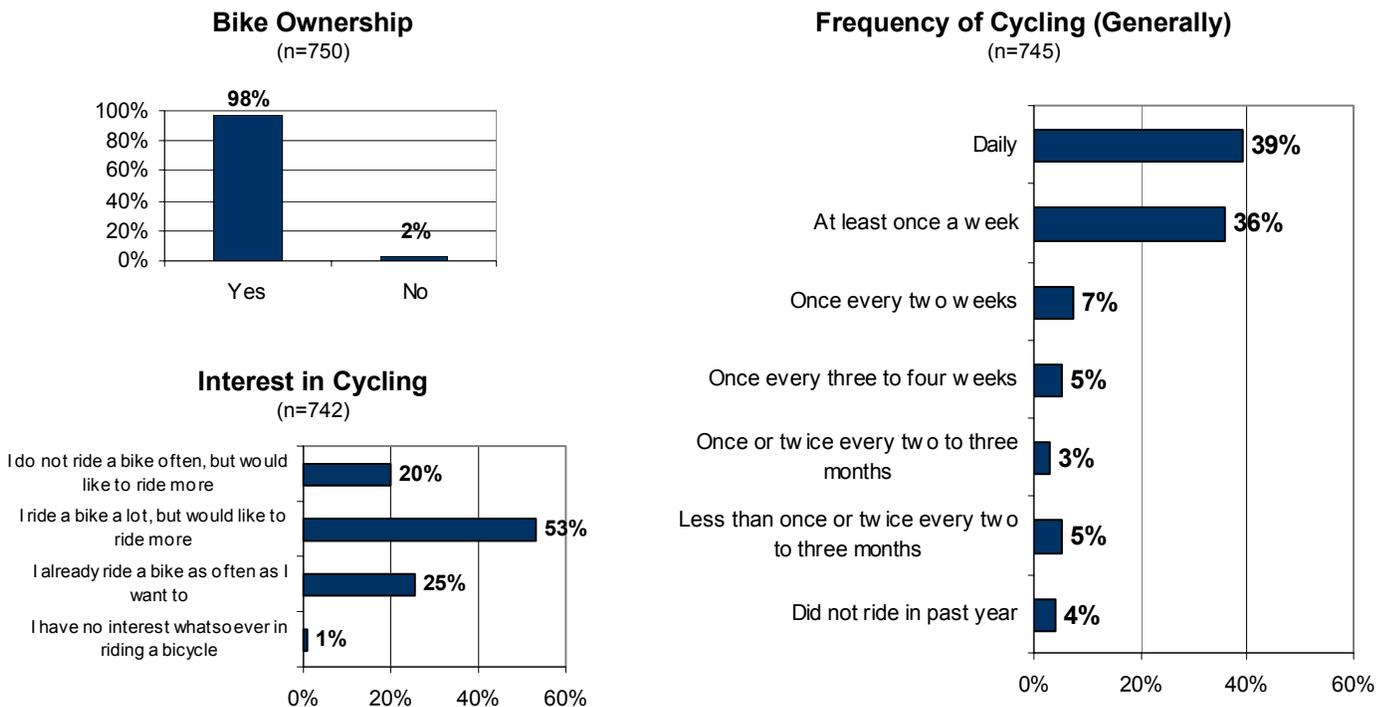
2.2 Identifying as a Cyclist

Data presented in Figure 2.2 suggests that most respondents identified themselves as a cyclist. Indeed, 85% agreed (strongly or somewhat) that riding a bike was extremely important to them, 71% are likely to ride a bike even when other forms of transportation are more convenient and refer themselves as cyclists, and 57% are willing to ride their bike in bad weather.

Figure 2.2: Identity as a Cyclist

Legend: ■ Strongly agree ■ Somew hat agree ■ Somew hat disagree ■ Strongly disagree □ Don't cycle/No interest in cycling
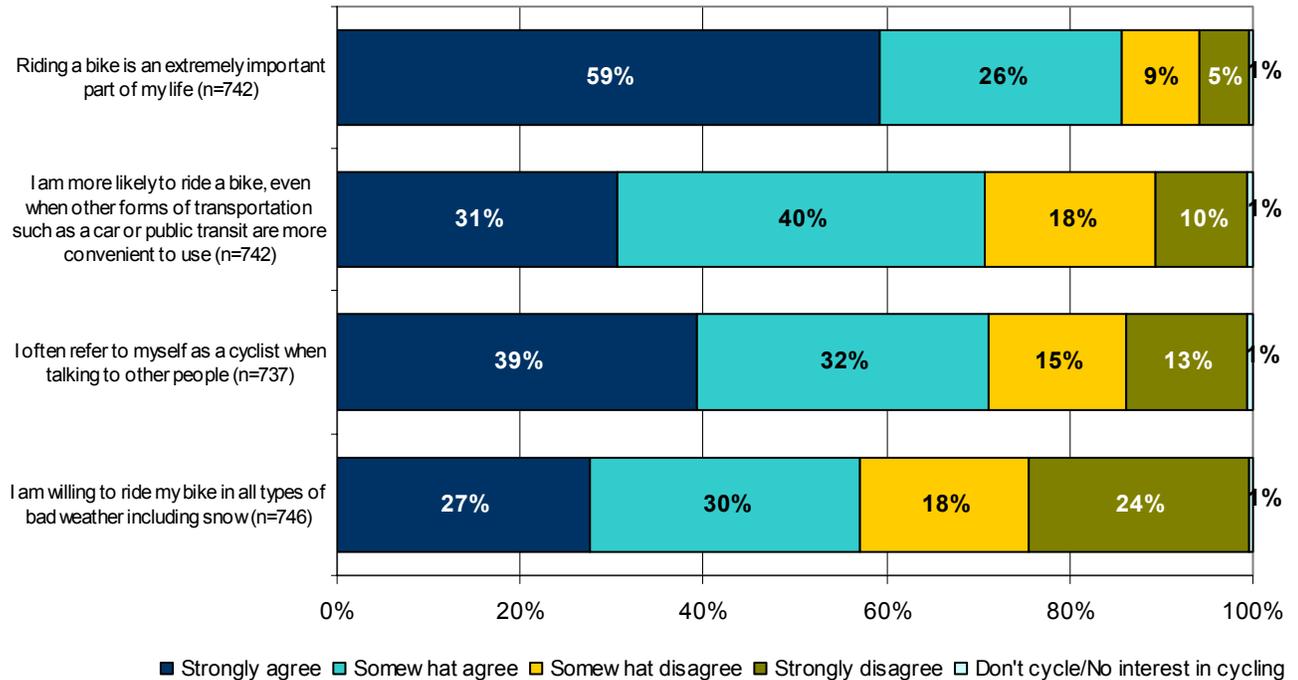
2.3 Comfort of Cycling on Various Routes

Data presented in Figure 2.3 shows agreement about levels of comfort using various types of routes for cycling. There are some routes, such as residential roads and pathways that are not busy, where the vast majority (97%) of respondents agreed they would be comfortable cycling on. Similarly, a significant majority of respondents stated that they would be comfortable cycling on neighbourhood roads that are transit routes and have bike lanes (89%), and on busy pathways (78%). After these, however, comfort levels decline significantly. For example, approximately half (52%) of respondents agreed they would feel comfortable on neighbourhood roads that have bus routes, but no bike lanes. Fewer respondents would be comfortable on main roads (26%) and a limited number (5%) on high speed roads such as Crowchild Trail, Glenmore Trail and Barlow Trail.

Figure 2.3: Level of Comfort among Types of Routes
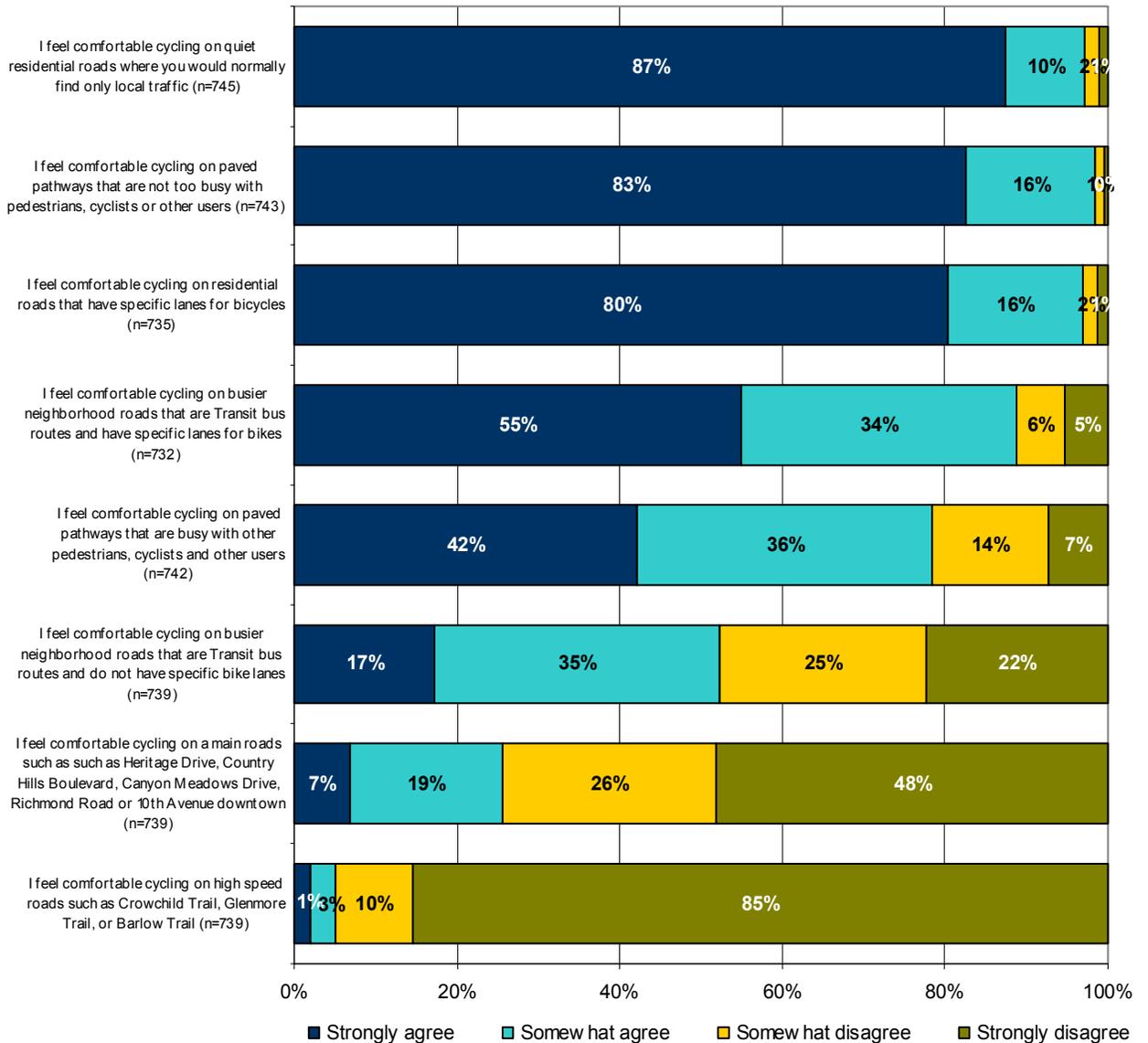
2.4 Types of Cyclists

Using the data presented above, respondents were grouped into four categories of cyclists. The four categories and general descriptions of each are presented below. Depending on respondents' answers to questions about frequency of cycling, identifying as a cyclist and comfort cycling on various routes, respondents were classified into different types of cyclists. For example, respondents who indicated that they cycled at least once a week and agreed (strongly or somewhat) that they are "comfortable riding on a busier

neighbourhood road that has Transit bus routes without specific bike lanes",
"riding was an extremely important part of their life" and "likely to ride a bike,
even when other forms of transportation are more convenient to use" were
classified as Fearless Cyclists. Other factors were used to group respondents
into the other three categories, which are presented in Appendix C.

Characteristics of Main Categories

- ***Fearless Cyclists***: Cycling is a strong part of their identity and they are
generally undeterred by motor vehicles. They will consider cycling even in
the absence of any visible bike facility.

- ***Confident Cyclists***: Cycling is a part of their identity. They are slightly or
moderately comfortable sharing the road with motor vehicles. They will
consider cycling only if there is a route available which mostly consists of
visible bike facilities.

- ***Interested Cyclists***: These respondents are curious about bicycling. They
do not identify as a cyclist, but enjoy riding a bicycle.

- ***Reluctant to Cycle***: These respondents are not interested in cycling and are
not likely to ride a bike, even during seasons when weather is most
accommodating to cycling.

Figure 2.4 provides a distribution of online survey respondents who were
identified within each of the cyclist categories.   These data show that four out of
ten respondents (42%) fit into the Fearless Cyclist category, a quarter (24%) the
Confident Cyclists category and a third (33%) Interested Cyclists. Few
respondents (1%) were identified as Reluctant to Cycle.

Figure 2.4: Cycling Segments among Respondents
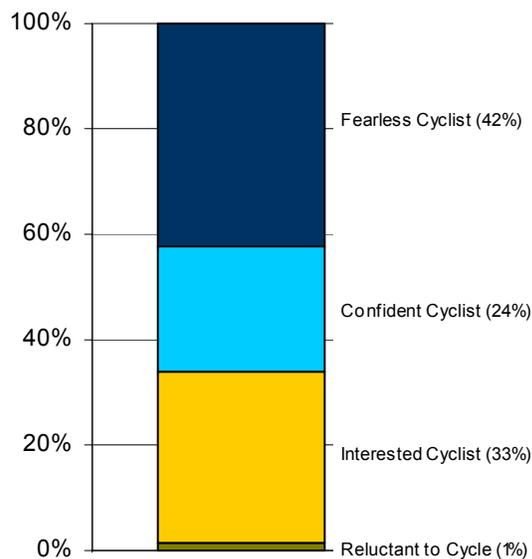
3.0 BARRIERS TO CYCLING

Respondents were asked to consider a prescribed set of potential barriers and indicate the extent to which these might impede them from cycling.

Figure 3.1 reveals that the most commonly agreed upon barrier by respondents was not feeling safe when cycling in traffic. Approximately two-thirds (64%) concurred that they feel unsafe cycling in traffic.

The next set of barriers were agreed upon by half (or just over half) of respondents, including: bike racks are not secure enough (58%), not enough bike racks (56%), bike routes to destinations are out of the way (53%), and lack of change facilities at destinations (50%).

Just under half of respondents agreed that there is a lack of storage spaces at destinations (45%) and they are concerned about weather (43%).

Fewer respondents concurred that they do not know where there are safe routes to cycle (38%), they have obligations that prevent them from cycling (37%), they are unable to carry items when cycling (32%), they do not feel safe cycling on busy pathways (31%), helmets mess up cyclists hair (23%), cycling takes too long to get places (4%) and they are not familiar with laws affecting cycling (19%).

Few respondents agreed that cycling is too tiring or it's too far to cycle (9%) and they did not know how to ride a bike (1%).

Figure 3.1: Barriers to Cycling
(Informed responses - Don't know is not included)
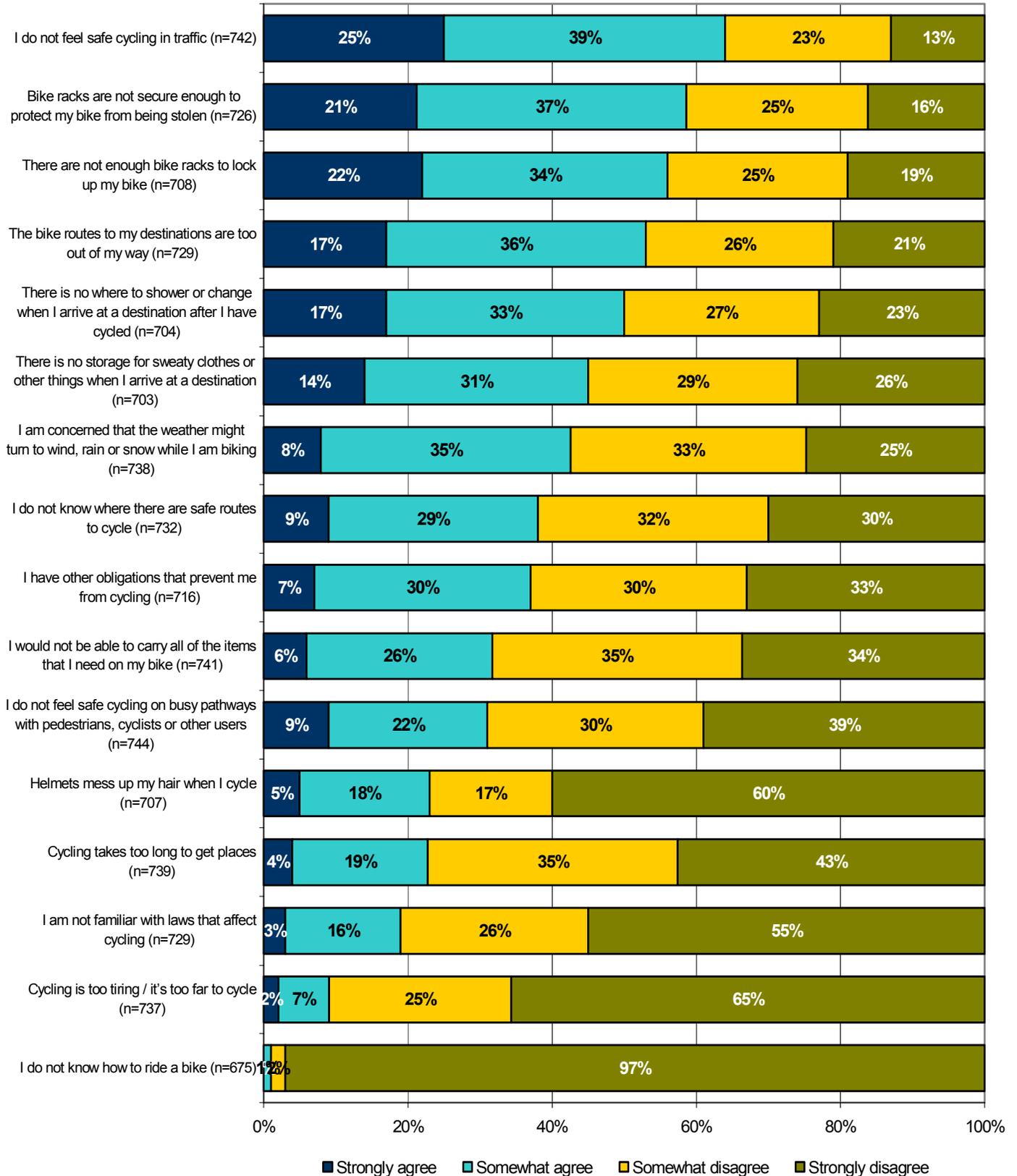
4.0 CYCLING TRIPS

The survey examined the types or purpose of trips taken by online survey respondents for shopping or appointments, social purposes, recreation and work or school. Respondents were asked why they cycled for these trips, barriers to cycling more often and what might be done to increase the likelihood of them cycling. Questions about barriers and improvement were specifically asked for cycling for social purposes, shopping or appointments and for work or school.

4.1 Frequency of Cycling

Table 4.1 shows the frequency of which respondents cycled for various trip purposes in the past twelve months. Respondents were most likely to cycle for shopping or appointments, followed by social purposes. Cycling for recreation and work or school were least likely to be reported by respondents, however, respondents who did report it were likely to cycle for that purpose at least once a week.

Table 4.1: Frequency of Cycling in Past 12 Months by Trip Purpose (Organized by the proportion of respondents who cycled at least once in the past 12 months)					
Frequency	**Generally** (n=749)	**Shopping/ appointments** (n=716)	**Social Purposes** (n=709)	**Recreation** (n=750)	**Work/ School** (n=738)
Daily	39	7	4	7	26
At least once a week	36	21	18	30	19
Once every two weeks	7	12	12	12	5
Once every three to four weeks	5	13	13	8	3
Once or twice every two to three months	3	11	13	4	2
Less than once or twice every two to three months	5	20	20	6	6
Did not ride in past year*	4	15	18	34	39
Total	100	100	100	100	100
*Represents respondents who either didn't ride their bicycle at all in the past year (generally or for a specific purpose) or those who didn't take that type of trip (e.g. don't have a job or attend a school program they need to commute to and from)					

4.2 Reasons for Trip Purposes

Table 4.2 reveals reasons for choosing to cycle for the various types of trips. The most commonly cited reasons for cycling were because it is fun or enjoyable, exercise and it is a more convenient form of transportation. These three reasons were most mentioned for all trip purposes.

Table 4.2: Reasons for Choosing to Cycle by Purpose of Cycling Trip				
Reason	**Shopping/ Appointments** (n=607)	**Social Purposes** (n=583)	**Recreation** (n=502)	**Work/ School** (n=452)
More convenient than other forms of transportation	24	15	0	18
Fun and enjoyable	22	44	41	16
For exercise	21	17	41	32
Less harmful to the environment than other types of transportation/activities	14	9	1	9
Less expensive than other types of transportation/activities	5	3	<1	9
Less stressful than other types of transportation	5	5	0	9
Other	4	4	2	5
Don't know/refused	4	4	0	<1
More convenient - general	1	<1	0	0
To spend time with friends or family	0	0	7	0
Nice to be out in nature	0	0	6	0
Training	0	<1	1	0
No car available	0	<1	0	1
Total	100	100	100	100

4.3 Barriers to More Cycling for Trip Purposes

Respondents were also asked about potential barriers for cycling more often for shopping or appointments, social purposes, and work or school. Table 4.3 shows that the most common barriers among online survey respondents were not feeling safe while cycling in traffic, not being able to carry items when cycling, bike racks not being secure enough to protect bikes, not knowing of safe cycling routes, concern about weather, not having change facilities at destinations, cycling taking too long to get places, and having other obligations that prevent cycling. These reasons were most mentioned for all trip purposes.

Table 4.3: Barriers to Cycling by Trip Purpose			
	% of Respondents		
Barriers	**Shopping/ Appointments** (n=734)	**Social Purposes** (n=727)	**Work/ School** (n=547)
I would not be able to carry all of the items that I need	47	17	23
I do not feel safe cycling in traffic	38	34	42
Bike racks are not secure enough to protect my bike from being stolen	32	22	20
There are not enough bike racks to lock up my bike	29	21	14
The bike route to my destinations are too out of my way	27	28	26
I do not know of safe routes to bike between my home and destination	23	24	17
Concern that the weather may turn to wind/rain/snow while cycling	21	23	35
There is nowhere to shower/change at my destination after cycling	20	22	25
Cycling takes too long to get places	19	22	15
I have other obligations that prevent me from cycling	16	19	30
No storage for sweaty clothes/other things at my destination	16	17	17
I do not feel safe cycling on busy paths with people/bike	10	11	14
Cycling is too tiring	8	12	8
Helmets mess up my hair when I cycle	5	10	7
I am not familiar with the laws that affect cycling	3	2	6
I'm too old/health issues	1	1	2
Prefer to walk/drive/etc/not to cycle	1	0	2
Don't like cycling at night	0	2	0
Like to dress up to go out	0	<1	0
I do not know how to cycle	0	<1	0
Don't have a bike/other required equipment	<1	<1	0
Other	3	2	11
Number of Responses	2,384	2,190	1,742

4.4 Interest in Cycling for Transportation Purposes

Respondents were also asked about their interest in cycling more often for transportation purposes such as for social purposes, shopping or appointments, or work or school. About three-quarters of respondents (74%) indicated that they would like to cycle more often. This proportion is slightly higher than the results showing respondents who would like to cycle more often generally.

Figure 4.1: Interest in Cycling[5]

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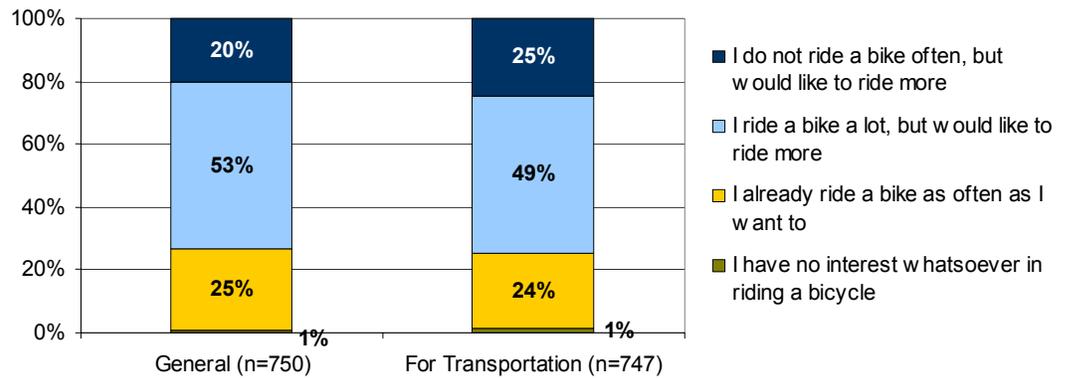
[5] Transportation represents cycling for social purposes, shopping or appointments, or work or school.

5.0 INCREASING CYCLING AMONG RESPONDENTS

Respondents were given an opportunity to provide suggestions for what improvements might encourage them to cycle more often. Table 5.1 shows that when respondents were unaided, the top two suggestions were more bicycle lanes and more paths being integrated or accessible in communities. Other prevalent suggestions from respondents included more or better bicycle parking, separate pathways for cyclists and pedestrians, and increased motorist education about cyclists.

Table 5.1: Suggested Improvements to Encourage More Cycling (Unaided)	
Improvements	**% of Respondents** (n=701)
More bicycle lanes	41
More paths/integrated paths/access to communities	23
More or better bicycle parking	15
Separate pathways for cyclists and pedestrians	14
Increase motorist education about cyclists	13
Increase path speed limit	8
Improve pathway snow clearing	8
Better (by)law enforcement	7
Better route maintenance	7
Bike routes along major routes/roads	7
More available rules of the roads for cyclists	6
Promotion (special days/events/rider education program)	6
More shower and locker facilities	5
Introduce cycle tracks	5
More or better signage and maps	5
General bike infrastructure	5
Better integration of bikes and transit	5
Education on path etiquette (riders, pedestrians, etc)	4
Wider paths/lanes	4
Painted lines/markings on road	3
Safer routes - general	3
Make bikes accessible (rent/sharing program/cheaper)	2
More quiet roads with reduced vehicle access speeds	2
Financial incentives	2
Improve on-street snow clearing	1
Better lighting along paths	1
Improve gravel clearing on cycling routes	1
Other	10
Nothing	2
Number of Responses	1,518

It is worth noting that only 2% of online survey respondents stated that there is nothing that could be done to encourage them to cycle more often.

Respondents were also provided with a list of possible improvements and asked to rate the extent to which they thought these might encourage them to cycle more often. At the top of the list was more bicycle only lanes on roads, cycle tracks (bike only lanes alongside a road physically separated from both cars and pedestrians), increasing motorists education about cyclists, and improve snow clearing for cycling lanes on roads. For these suggestions, at least nine out of ten respondents stated agreement (strongly/somewhat) that these initiatives would encourage them to cycle more often generally.

Figure 5.1: Improvements to Encourage More Cycling
(Aided, Informed Responses- Don't know is not included)

Improvement	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree
More bicycle only lanes on roads (n=743)	79%	17%	2%	2%
Introduce bike only lanes that run alongside a road but are physically separated from both cars and pedestrians (n=742)	79%	15%	3%	3%
Increase motorist education about cyclists (n=743)	69%	24%	6%	2%
More separate pathways for cyclists and pedestrians (n=742)	66%	24%	7%	2%
Improve snow clearing for cycling lanes on roads (n=740)	64%	26%	8%	2%
Improve snow clearing on pathways (n=739)	58%	32%	8%	3%
Improve gravel clearing on cycling routes (n=742)	58%	32%	9%	1%
More or better bicycle parking (n=740)	47%	40%	10%	3%

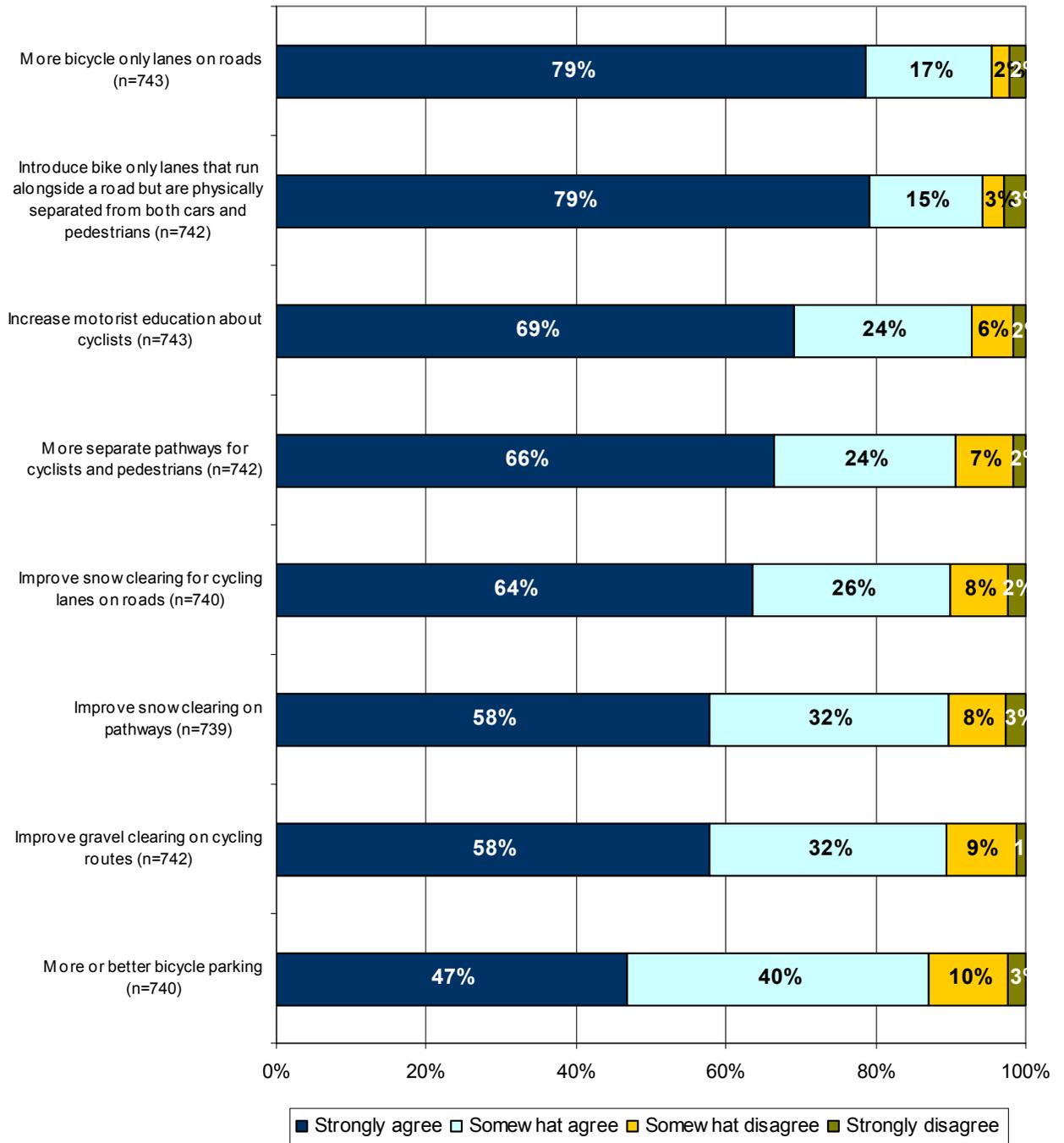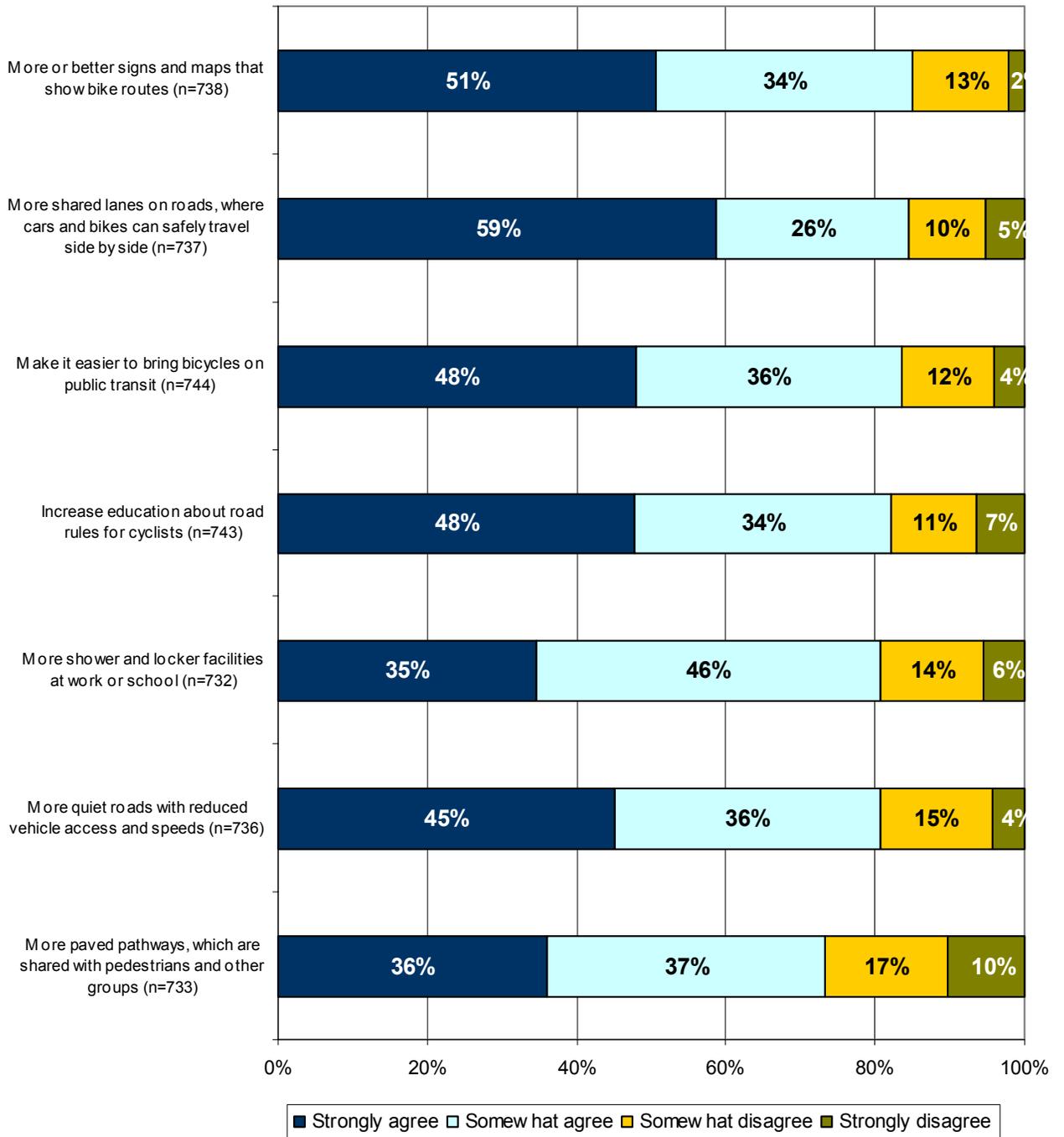■ Strongly agree □ Somewhat agree ■ Somewhat disagree ■ Strongly disagree

Figure 5.1: Improvements to Encourage More Cycling (Continued)
(Aided, Informed Responses- Don't know is not included)

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree
More or better signs and maps that show bike routes (n=738)	51%	34%	13%	2%
More shared lanes on roads, where cars and bikes can safely travel side by side (n=737)	59%	26%	10%	5%
Make it easier to bring bicycles on public transit (n=744)	48%	36%	12%	4%
Increase education about road rules for cyclists (n=743)	48%	34%	11%	7%
More shower and locker facilities at work or school (n=732)	35%	46%	14%	6%
More quiet roads with reduced vehicle access and speeds (n=736)	45%	36%	15%	4%
More paved pathways, which are shared with pedestrians and other groups (n=733)	36%	37%	17%	10%

6.0 CONCLUDING REMARKS

The City provided Calgarians an opportunity to give their input to the Comprehensive Cycling Strategy through an online survey. The survey was advertised through a City of Calgary news release, blog posting and social networking websites such as Twitter. Interested Calgarians who applied to be on the Cycling Committee were also directly invited to participate in the online survey.

The online survey respondents appear to be avid cyclists as a significant majority cycle daily or at least once a week. As well, the vast majority of them indicated that riding bike is an extremely important part of their lives and many refer to themselves as cyclists. Even so, most of these respondents would like to cycle more often.

Prominent barriers to cycling more often among the online survey respondents include not feeling safe while in traffic, bike racks not being safe enough, not enough bike racks to lock up bikes, bike routes to destinations are out of the way, and lack of change facilities at destinations.

The main suggestions offered by online survey respondents for improvements that might encourage them to cycle more often include more bicycle lanes, more paths being integrated and accessible to communities, more or better bicycle parking, separate pathways for cyclists and pedestrians and increased motorist education about cyclists.

APPENDIX A - *Survey Questionnaire*

NOTE TO THE READER:

▪ Comments to survey sponsors based on HarGroup consultants' review of questions are **presented in blue**.
▪ For CAWI software programming, instructions are presented as **(words that are presented in green)** and are not provided respondents.

Cyclist Categorization

S1   Are you at least 18 years of age and a resident of Calgary?

1. Yes
2. No **(Terminate)**

G1.a Do you own a bicycle?

1. Yes **(Go to C1)**
2. No

G1.b Even though you many not have a bicycle, I am going to ask you questions that will help us understand your views on cycling. We are asking these questions of all Calgarians, even those who may not own a bicycle, to better understand if there is anything that might encourage Calgarians to cycle more often.

The next question asks about cycling over the past year. Even though you may not own a bicycle, I will be asking you this question as you may have ridden a bicycle.

C1. Which of the following best describes how often you have cycled, on average, in Calgary in the past 12 months? (SELECT ONE RESPONSE)

1. Daily
2. At least once a week
3. Once every two weeks
4. Once every three or four weeks
5. Once or twice every two or three months
6. Less than once or twice every two or three months
7. Did not ride a bicycle in the past year
8. Unsure/Don't know

C2. And, which of these statements best describe your interest in cycling? (SELECT ONE RESPONSE)

1. I have no interest whatsoever in riding a bicycle
2. I already ride a bike as often as I want to (Skip to C3)
3. I ride a bike a lot, but would like to ride more (Skip to C3)
4. I do not ride a bike often, but would like to ride more (Skip to C3)
5. Unsure/Don't know (Skip to C3)

NW. If C1=7 and C2=1: Even though you have not cycled recently and you have indicated that you are not interested in doing so, we still have some questions that we are interested in asking you, as your answers may help us better understand why some Calgarians do not cycle. (Skip to C4)

C3. Please tell me if you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the following statements about being a cyclist?

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	Don't know
a. Riding a bike is an extremely important part of my life	1	2	3	4	5
b. I often refer to myself as a cyclist when talking to other people	1	2	3	4	5
c. I am more likely to ride a bike, even when other forms of transportation such as a car or public transit are more convenient to use	1	2	3	4	5
d. I am willing to ride my bike in all types of bad weather including snow	1	2	3	4	5

C4. For the next question, when I say pathway, I do not mean sidewalks. Rather paved, usually asphalt, pathways that may run throughout green spaces, or alongside a road to connect green spaces.

Please indicate the extent you agree or disagree with the following statements about riding bikes on pathways and roads:

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	Don't know
a. I feel comfortable cycling on high speed roads such as Crowchild Trail, Glenmore Trail, or Barlow Trail	1	2	3	4	5
b. I feel comfortable cycling on a main roads such as such as Heritage Drive, Country Hills Boulevard, Canyon Meadows Drive, Richmond Road or 10th Avenue downtown	1	2	3	4	5
c. I feel comfortable cycling on busier neighborhood roads that are Transit bus routes and do not have specific bike lanes	1	2	3	4	5
d. I feel comfortable cycling on busier neighborhood roads that are Transit bus routes and have specific lanes for bikes	1	2	3	4	5
e. I feel comfortable cycling on residential roads that have specific lanes for bicycles	1	2	3	4	5
f. I feel comfortable cycling on paved pathways that are busy with other pedestrians, cyclists and other users	1	2	3	4	5
g. I feel comfortable cycling on quiet residential roads where you would normally find only local traffic	1	2	3	4	5
h. I feel comfortable cycling on paved pathways that are not too busy with pedestrians, cyclists or other users	1	2	3	4	5

Barriers to Cycling

B1. There are many different types of cycling trips. Some people cycle as a form of transportation to get to and from work or school, go shopping and to appointments, and going to see friends or to get a meal. Some people also cycle for recreation purposes such as taking a leisurely bike ride, getting some exercise, riding with friends or relatives, etc.   For the next question, I want you to think of all kinds of cycling trips.

There are many different reasons for why people do not cycle, or do not cycle more often. I am going to read you a list of statements. Please tell me if you strongly agree, somewhat agree, somewhat disagree or strongly disagree with these statements. If you feel a statement is not applicable to your situation, just say so (Rotate)

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Not Applicable	Don't know
a. I do not know how to ride a bike	1	2	3	4	5	6
b. I do not feel safe cycling in traffic	1	2	3	4	5	6
c. I do not know where there are safe routes to cycle	1	2	3	4	5	6
d. I do not feel safe cycling on busy pathways with pedestrians, cyclists or other users	1	2	3	4	5	6
e. There are not enough bike racks to lock up my bike	1	2	3	4	5	6
f. Bike racks are not secure enough to protect my bike from being stolen	1	2	3	4	5	6
g. There is no where to shower or change when I arrive at a destination after I have cycled	1	2	3	4	5	6
h. There is no storage for sweaty clothes or other things when I arrive at a destination	1	2	3	4	5	6
i. The bike routes to my destinations are too out of my way	1	2	3	4	5	6
j. I would not be able to carry all of the items that I need on my bike	1	2	3	4	5	6
k. Cycling takes too long to get places	1	2	3	4	5	6
l. I am concerned that the weather might turn to wind, rain or snow while I am biking	1	2	3	4	5	6
m. Helmets mess up my hair when I cycle	1	2	3	4	5	6
n. I have other obligations that prevent me from cycling	1	2	3	4	5	6
o. Cycling is too tiring / it's too far to cycle	1	2	3	4	5	6
p. I am not familiar with laws that affect cycling	1	2	3	4	5	6

Trip Purpose

Earlier, I had indicated that there are many different kinds of cycling. Now, I would like to ask you about specific types of trips that you take when you cycle.

(Skip to P2i if C1=7)P1i. The first kind of trip relates to recreational cycling, such as taking a leisurely bike ride, getting some exercise, athletic training, riding with friends or relatives, enjoying nature etc.

Do you ride your bike on trips that are primarily for recreational purposes?

1.   Yes
2.   No (skip to P2i)
3.   Don't know (skip to P2i)
4.   Refused (skip to P2i)

P1ii. Which of the following best describes how often you have cycled in Calgary in the past 12 months primarily for recreational purposes? (SELECT ONE RESPONSE)

1. Daily
2. At least once a week
3. Once every two weeks
4. Once every three or four weeks
5. Once or twice every two or three months
6. Less than once or twice every two or three months
7. Did not bicycle in the past 12 months
8. (DO NOT READ) Unsure/Don't know

P1iii. Of the following, which is the main reason you bicycle for recreational purposes? Would you say it is: (SELECT ONE RESPONSE)

1. For exercise
2. Fun and enjoyable
3. Less expensive than other types of recreation
4. Less harmful to the environment than other types of recreation
5. Nice to be out in nature
6. To spend time with friends or family
7. Other _____ (please specify)
8. Don't know/refused

P2i. . Do you have a job or attend a school program that requires you to either commute to and from school or work, or as a part of work or your school program?
1. Yes
2. No (skip to P3i)
3. Don't know /Refused (skip to P3i)

(Skip to P2iv if C1=7)P2ii. Which of the following best describes how often you have cycled in Calgary in the past 12 months primarily to travel to and from school or work, or as a part of work or school? (SELECT ONE RESPONSE)

1. Daily
2. At least once a week
3. Once every two weeks
4. Once every three or four weeks
5. Once or twice every two or three months
6. Less than once or twice every two or three months
7. Did not ride a bicycle in the past year (Go to (skip to P2iv)
8. (DO NOT READ) Unsure/Don't know (Go to P2iv)

P2iii. What is the primary reason you cycle to and from work or school, or for work or school purposes? Would you say it is: (SELECT ONE RESPONSE)

1. For exercise
2. Fun and enjoyable
3. Less expensive than other types of transportation
4. Less harmful to the environment than other types of transportation
5. Less stressful than other types of transportation
6. More convenient than car
7. More convenient than public transit

8. It is a job requirement
9. Other _____ (please specify)
10. Don't know/refused

P2iv. : Earlier, we asked you reasons for why you do not cycle or do not cycle more often. Thinking about some of the reasons we discussed, what are the different reasons for why you do not cycle to and from work or school (more often)?

_____

(Skip to P3iii if C1=7) P4i. Which of the following best describes how often you have cycled in Calgary in the past 12 months primarily to travel to go shopping or to appointments? (SELECT ONE RESPONSE)

1. Daily
2. At least once a week
3. Once every two weeks
4. Once every three or four weeks
5. Once or twice every two or three months
6. Less than once or twice every two or three months
7. Did not ride a bicycle in the past year (Go to (skip to P3iii)
8. Unsure/Don't know (Go to P3iii)

P3ii. What is the primary reason you cycle to go shopping or to appointments? Would you say it is: (SELECT ONE RESPONSE)

1. For exercise
2. fun and enjoyable
3. less expensive than other types of transportation
4. less harmful to the environment than other types of transportation
5. less stressful than other types of transportation
6. more convenient than car
7. more convenient than public transit
8. Other _____ (please specify)
9. Don't know/refused

P3iii. Earlier, we asked you reasons for why you do not cycle or do not cycle more often? Thinking about some of the reasons we discussed, what are the different reasons for why you do not cycle to go shopping or to appointments?

_____

(Skip to P4iii if C1=7) P4i. Which of the following best describes how often you have cycled in Calgary in the past 12 months primarily to travel for social purposes, such as travelling to visit with friends and family or eating out? Would you say?

1. Daily
2. At least once a week
3. Once every two weeks
4. Once every three or four weeks
5. Once or twice every two or three months
6. Less than once or twice every two or three months

7. Did not ride a bicycle in the past year (Go to (skip to P4iii)
8. Unsure/Don't know (Go to P4iii)

P4ii. What is the primary reason you cycle to travel for social purposes, such as visiting friends and family or eating out? Would you say it is: (SELECT ONE RESPONSE)

1. For exercise
2. fun and enjoyable
3. less expensive than other types of transportation
4. less harmful to the environment than other types of transportation
5. less stressful than other types of transportation
6. more convenient than car
7. more convenient than public transit
8. Other _____ (please specify)
9. Don't know/refused

P4iii. Earlier, we asked you reasons for why you do not cycle or do not cycle more often? Thinking about some of the reasons we discussed, what are the different reasons for why you do not cycle to travel for social purposes, such as visiting friends and family and to eating out (more often)?

_____

P5i. Now thinking of using your bicycle for transportation purposes, such as commuting to work or school, going shopping or cycling to visit a friend, which of these statements best describe your interest in cycling for transportation purposes? (SELECT ONE RESPONSE)

1. I have no interest whatsoever in riding a bicycle
2. I already ride a bike as often as I want to
3. I ride a bike a lot, but would like to ride more
4. I do not ride a bike often, but would like to ride more
5. Unsure/Don't know

Improvements

I1.In your opinion, what, if anything, could The City of Calgary do that would encourage you to cycle more?

_____

I2. To what extent do you agree or disagree that the following initiatives would encourage you to cycle more often as a form of transportation to getting to and from work or school, going shopping and to appointments, and going to see friends and family or to eat out. (Rotate)

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	Don't Know
a. More bicycle only lanes on roads	1	2	3	4	5
b. More shared lanes on roads, where cars and bikes can safely travel side by side.	1	2	3	4	5
c. More paved pathways, which are shared with pedestrians and other groups.	1	2	3	4	5
d. More quiet roads with reduced vehicle access and speeds	1	2	3	4	5
e. Introduce bike only lanes that run alongside a road but are physically separated from both cars and pedestrians.	1	2	3	4	5
f. More or better bicycle parking	1	2	3	4	5
g. More shower and locker facilities at work or school	1	2	3	4	5
h. More separate pathways for cyclists and pedestrians	1	2	3	4	5
i. Make it easier to bring bicycles on public transit	1	2	3	4	5
j. Improve snow clearing for cycling lanes on roads	1	2	3	4	5
k. Improve snow clearing on pathways	1	2	3	4	5
l. Improve gravel clearing on cycling routes	1	2	3	4	5
m. Increase motorist education about cyclists	1	2	3	4	5
n. Increase education about road rules for cyclists	1	2	3	4	5
o. More or better signs and maps that show bike routes.	1	2	3	4	5

Demographic Questions

My last few questions are being asked so that we can group your answers with others provided in the survey. All responses will be held in strict confidence and will not be attributed to any individual.

D1.   In which quadrant of the city do you reside? (Read)

        1__Northwest 2__Northeast 3__Southwest 4__Southeast

D2.   In which community (neighborhood) do you reside?
        _____

D3.   Which of the following most closely describes your household?

        1. Couple with children living at home
        2. Couple without children living at home
        3. Single Parent household
        4. Living alone
        5. Living with roommate(s)
        6. Living with extended family
        7. Other

D4.   Do you consider yourself to be a member of a visible minority?

        1 [ ] YES   2 [ ] NO 3 [ ] DON'T KNOW

D5.　　Do you have a disability or medical condition that would inhibit your ability to ride a bicycle?

　　　　1 [ ] YES　　2 [ ] NO　　3 [ ] DON'T KNOW

D6.　　In what year were you born?　　　　　19 __

D7. And which of the following income groups includes your annual household income, before taxes, in 2009?

1 [ ] Less than $15,000	7 [ ] $65,000 to less than $75,000
2 [ ] $15,000 to less than 25,000	8 [ ] $75,000 to less than $85,000
3 [ ] $25,000 to less than 35,000	9 [ ] $85,000 to less than $100,000
4 [ ] $35,000 to less than 45,000	10[ ] $100,000 to less than $120,000
5 [ ] $45,000 to less than 55,000	11[ ] $120,000 to less than $140,000
6 [ ] $55,000 to less than $65,000	12[ ] $140,000 or more

D8.　　Are you:

　　　　1___Male　2___Female

Thank you for taking part in this survey today. Have a nice evening/afternoon.

APPENDIX B -Respondent Profile

Characteristic	Descriptor	% of Survey Respondents	% of Calgarians
Gender	Male	65	50
	Female	35	50
	Total	100	100
Age (n=724)	18-24	4	13
	25-34	28	22
	35-44	31	22
	45-54	23	20
	55-64	9	12
	65+	5	13
	Total	100	100*
Visible Minority (n=713)	Visible minority	11	24
	Non-visible minority	89	76
	Total	100	100**
Disability or Medical Condition that Inhibits Cycling (n=735)	Yes	2	n/a
	No	98	
	Total	100	
Quadrant (n=746)	Northwest	39	n/a
	Northeast	10	
	Southwest	39	
	Southeast	12	
	Total	100	
Household Composition (n=738)	Couple with children living at home	36	n/a
	Couple without children living at home	37	
	Single parent household	1	
	Living alone	15	
	Living with roommate(s)	7	
	Living with extended family	2	
	Other	1	
	Total	100	
Income (n=657)	Less than $15,000	2	n/a
	$15,000 to less than $25,000	2	
	$25,000 to less than $35,000	3	
	$35,000 to less than $45,000	3	
	$45,000 to less than $55,000	4	
	$55,000 to less than $65,000	6	
	$65,000 to less than $75,000	8	
	$75,000 to less than $85,000	6	
	$85,000 to less than $100,000	12	
	$100,000 to less than $120,000	13	
	$120,000 to less than $140,000	11	
	$140,000 or more	30	
	Total	100	
*Comparative data from the 2009 City of Calgary Census			
**Comparative data from the 2006 Federal Census			

APPENDIX C -Factors for Types of Cyclists

Fearless Cyclist (42%)

- Cycle at least once a week
- Agree they are comfortable sharing a busier neighborhood road that has Transit bus routes and <u>does not have</u> specific bike infrastructure such as bike lanes
- Generally agree that:
    - Riding is an extremely important part of my life
    - I am more likely to ride a bike, even when other forms of transportation such as a car or public transit are more convenient to use

Confident Cyclist (24%)

- Cycle at least once every two weeks
- May agree they are comfortable sharing a busier neighborhood road that has Transit bus routes and <u>does not have</u> specific cycling infrastructure such as bike lanes; but more likely neighbourhood roads that do have cycling infrastructure[6]
- May agree that:
    - Riding is an extremely important part of my life
    - I am more likely to ride a bike, even when other forms of transportation such as a car or public transit are more convenient to use

Interested Cyclist (33%)

- May or may not cycle
- May or may not agree they are comfortable sharing a busier neighborhood road that has Transit bus routes and <u>does have</u> specific cycling infrastructure such as bike lanes

Reluctant to Cycle (1%)

- Did not cycle in past 12 months/Less than once or twice every two or three months/Once or twice every two or three months/Don't know
- Have no interest in cycling/Already ride a bike as often as like to
- Generally disagree that:
    - Riding is an extremely important part of my life
    - I often refer to myself as a cyclist when talking to other people
    - I am more likely to ride a bike, even when other forms of transportation such as a car or public transit are more convenient to use
    - I am willing to ride my bike in all types of bad weather including snow

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[6] Note: Some of the Assured Regular Cyclist respondents were not comfortable with cycling on neighbourhood roads without bicycling infrastructure, but fit with other factors such as traveling in bad weather, identifying as a cyclist, frequency of cycling, etc.