

# Walk 'n' Roll Kingston City of Kingston Active Transportation (AT) Master Plan

**Online Survey Summary Report** 

January 2017





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# **1.0** Introduction

Since the development of Walk 'n' Roll Kingston, the City has officially launched and operated an online engagement tool. This document summarizes the survey results and identifies key themes that emerge from submitted responses.

The online questionnaire was designed to give local residents and stakeholders an opportunity to provide their input and ideas regarding active transportation (AT) within the City. The survey posed questions with the intent of learning the current and desired state of AT infrastructure (i.e. routes and facility types), areas of deficiency, and opportunities for improvements. The survey results lay the foundation for further understanding the wants and needs of those who will use, manage, and promote AT city-wide. The findings in this summary report will be used to align the City's overall vision, better shape the AT network, and identify up-to-date recommendations and strategies outlined in the master plan.

### **Development, Timeline & Format**

The survey was developed using an iterative process between the consultant team and City of Kingston staff, and was managed on the City's project website (<u>https://www.cityofkingston.ca/city-hall/get-involved/walk-roll-kingston</u>). The survey was active between October and December 2016 and was promoted using various promotional materials: study postcards; a press release sent to local media outlets, and an advertising notice posted on the Walk 'N' Roll website.

The survey was composed of 21 multiple choice and a number of short, open-ended questions. The diversity of questions allowed participants to elaborate on their answers based on their personal experiences and perceptions of AT within the City of Kingston. Overall, the open-ended responses provided by participants ranged from 28 to 326 answers. Participants were also given the option to provide their basic personal information (i.e. name, age, postal code, and email address) at the end of the survey.

### **Survey Participants**

There were 338 participants that responded to the survey. Of these respondents, 287 completed all questions in full (85%). The survey took participants approximately 30 minutes to complete. For those who willingly provided their basic information, the two largest age groups



were ranges 45-54 (23%) and 55-64 (22%), followed by participants aged 25-34 (19.9%) and 35-44 (17.1%). Below is a more detailed break-down of the response rate, based on age group.

It is important to note that the survey sample was *self-selected*. The results found in this survey may or may not be statistically valid or representative of the City of Kingston.

A distinction must be made between the questionnaire results and the City's modal split data: for instance, a large proportion of the population suggests they walk (23.1%) and cycle (18.1%) as their primary mode of transportation. When compared to the City of Kingston's actual walking (13%) and cycling (1%) modal share during peak periods (as they appear in the City's Transportation Master Plan), the difference is especially clear.

Despite some representative deficiencies, the survey should be understood as a useful tool for identifying keys trends based on the input given by interested participants on the City's current AT network.

# **2.0** Summary of Survey Results

In this section, the results of the Walk 'N' Roll survey are presented. For each question, general trends and key themes are identified and described in brief. For more details on the base survey data please contact the City of Kingston's study team at <u>walknroll@cityofkingston.ca</u>.

# Q. 1A How do you normally travel to your workplace / school / most common destination?

Mode	Drive alone	Walk	Bicycle	Transit	Carpool	Wheelchair / Scooter	In-line skating / skateboard
Respondents (%)	40.7%	23.1%	18.8%	8.5%	8.2%	0.3%	0.3%

The first survey question asked users to self-report their transportation choices for day to day trip-making, providing a greater understanding of some of the typical commuting behavior. Driving alone in a private automobile garnered the highest proportion of primary trips (40.7%), followed by walking (23.1%) and cycling (18.8%). Though these relatively high active mode shares can be explained by the non-random nature of the survey, the results suggest that there are portions of the population for whom AT represents their preferred method of day to day travel.

# Q. 1B Why do you choose your primary mode of travel (326 responses)?

Responses in this category are best reviewed mode by mode. Car drivers provided the following reasons for their choice:

- Commuting constraints related to time and distance;
- Accessibility concerns, particularly for older demographics;
- A lack of reliable and / or direct transit services between home and work / school;
- A lack of convenient and / or safe cycling and walking facilities between home and work / school; and
- The seasonal and weather-related reliability of car travel.



Pedestrians listed the following as factors influencing their behaviour:

- Exercise and health benefits;
- Cost savings, including the avoidance of parking; and
- Environmental motivations (e.g. reducing carbon footprints).

It is important to note that both pedestrian and cyclists identified the top three factors noted above. In addition, cyclists emphasized other factors including:

- Proximity to trails and other cycling routes,
- Proximity to amenities and workplaces (e.g. residents living downtown);
- Fitness benefits; and
- A lack of car access / ownership.

# Q. 2A What should a walking and cycling network look like (78 responses)?

Characteristic	Respondents
Safe	301
Complete (no gaps or missing sections)	264
Good lighting	215
Includes support for walking and cycling (e.g. education programs, bike racks, etc.)	210
Direct	192
Other	78

A list of AT network characteristics were provided, and participants were able to select the characteristics that most appropriately reflect their preferences. Safety was the most important concern, followed by network completeness, good lighting, and the presence of supportive infrastructure and programming. Preferences will vary significantly based on the individual that is responding to the question, their age, gender, level of confidence, etc. It not only helps to identify potential routes but also can influence the facility types that are selected and complementary amenities.

# Q. 2B Please describe other features that a walking and cycling network should have.

Participants invited to elaborate or identify other important network characteristics. The most common AT network characteristics identified by participants included:

- Separation of cycling and walking facilities from automobiles;
- Well-maintained facilities, including pavement repair and reliable winter maintenance;
- A range of direct connections for commuters and leisure routes for recreational use;
- Driver and cyclist education programs to ensure all road and trail users operate safely;



- Availability of network maps in a variety of formats (e.g. printed and online);
- Inclusion of cycling-supportive facilities, including air pumping stations, route signage and bike storage;
- Integration of the route with green space, providing a pleasant user experience;
- Safe crossings of roadways and cycling routes for pedestrians; and
- Connections to transit services.

# Q. 3A What barriers prevent you from walking, cycling, or wheeling?

Barrier	Respondents
Weather	194
Busy roads that are hard to get across because there is not a crosswalk or a traffic signal	171
Not enough maintenance (such as debris, snow, ice, or uneven surfaces)	169
Travel distance	151
Travel time	111
Terrain (including gravel surfaces, hills, ice, uneven pavement, puddles)	110
Not enough walking or cycling facilities	109
Lack of sufficient bicycle parking	84
Lighting / visibility	79
Other	71
Accessibility	46
Not enough information about walking and cycling options and routes	44

A list of potential barriers were identified and respondents were asked to identify their top barriers. Here, participants indicated that unpredictable weather in Eastern Ontario is the greatest impediment to AT choices. Specifically, the winter weather experienced in southern Ontario can have a significant seasonal impact on activity levels. Other significant barriers were busy roads, insufficient maintenance, and travel distance to key destinations. Maintenance deficiencies may speak to budget constraints, while busy roads and distance highlight potential connectivity issues in the City's AT network.

## Q. 3B Please describe any unlisted barriers or concerns (167 responses).

In addition to the list of potential barriers that were pre-generated for the question prior, respondents were also provided with an opportunity to identify additional barriers or concerns. A list of some of the more frequently noted barriers included:

- Streets with heavy traffic volume and aggressive driver behaviour;
- Cars blocking bike lanes and sidewalks
- Cyclists on sidewalks endangering pedestrians;
- A lack of secure bicycle parking and storage;
- Construction issues resulting in facility fragmentation;
- Mobility / physical limitations;
- A lack of continuous connectivity in sidewalks / cycling facilities; and
- A lack of mutual respect between cyclists and motorists.



Cyclists on sidewalks are considered a nuisance for pedestrians

### Q. 4 How often do you walk?

Frequency	%
More than once a day	46.8%
Once a day	28.6%
More than once a week	16.9%
Once a week	4.3%
Never	3.3%

As noted above, the relative use of various modes for day to day activities was one of the key outputs of the survey responses. Additional questions were posed to gain a better understanding of these trends. The results of this question indicate that 46.8% of survey participants walk more than twice a day – participants of this survey are familiar with Kingston's pedestrian facilities and network. These responses also acknowledge the common understanding that each person's trip starts and ends with walking. At some point throughout the day individuals will be walking. Harnessing this opportunity is a key focus on Walk 'n' Roll Kingston.

### Q. 5A Why do you walk?

Reason for walking	Always	Sometimes	Never	Total
For fitness / health	127	140	24	291
To get to work	60	99	132	291
To run errands	63	200	28	291
For recreation	87	188	14	289
To travel to tourist destinations	18	157	114	289

Though at some point people will walk over the course of the day it is important to understand the reasons why they walk and to improve upon infrequent trip opportunities and types. Responses indicate that the majority of respondents walk for fitness and health and fitness reasons, while recreation, getting to work, and running errands are far less frequently identified. The lack of these trips is a significant opportunity for a City where a number of individuals work within a short distance of where they live.

# Q. 5B Please describe any unlisted reasons why you walk (151 responses).

Additional reasons for walking provided by survey participants include:

- Pet exercise (i.e. dog walking);
- Connecting to transit services;
- Socializing (i.e. walking clubs);
- Reducing environmental impacts;
- Enjoyment of walking / cycling over auto use;
- Immersion in nature; and
- Saving money.



### Q. 6 Is there anyone in your household who walks to school?

As noted above, the typical respondent is above the age of 25. Despite this strong representation, we also need to better understand the wants and needs of younger populations including those who need to travel to and from school. As such, the survey included a question which asked respondents to indicate if there was someone who walks to school. The responses were noted below. This could be attributed to the fact that the respondents may not have school aged children in their homes anymore.

Yes 19.9% No 80.1%

### Q. 7A Which type of school do(es) the student(s) attend?



- Elementary school (JK to Gr. 3)
- Elementary school (Grades 4 to 6
- Elementary school (Grades 7 & 8)
- High school
- College/University



The largest group of student participants who walk to school attend college / university.

# Q. 7B What ideas do you have for increasing walking to and from school (48 responses)?

This question allowed respondents to help brainstorm preliminary ideas for increasing active and safe routes to school. Recurrent ideas identified within the submitted responses included:

- More crossing guards and safer crossings;
- Advertising campaigns emphasizing the benefits of walking to students and parents;
- Educational programs emphasizing safe driving practices during peak school periods;
- Traffic calming measures, both in proximity to schools and beyond;
- Locating new schools in central locations accessible to more students / keeping smaller, neighbourhood schools open;
- · Completion of snow and ice clearing before school hours; and
- Removal or regulation of school drop-off locations and parking facilities.

The suggestions provided are feasible and short to medium-term options that can effectively improve walking and cycling throughout the City of Kingston.

### Q. 8A How safe do you feel walking in Kingston?

Safety is a hard thing to quantify. Everyone has a very distinct and unique interpretation of what makes them feel comfortable and safe when walking. That said, it is good to gain a baseline "sense" of safety by asking respondents how they currently feel. The chart below demonstrates that 81.1% of pedestrian participants generally feel safe and / or extremely safe while walking in Kingston, a strong basis of support for the current conditions while also acknowledging that improvements need to be made.



### Q. 8B Why do you feel this way (238 responses)?

As noted above, ones level of comfort and safety will vary because of many different factors. For those who indicated that they feel safe, the following themes were identified as key influencers:

- Prevalence of sidewalks and other pedestrian facilities (including signals and lighting);
- Generally well-maintained sidewalks in many locations;
- Presence of other road users throughout the day (i.e. "eyes on the street"); and
- Low crime rates in the community.

While the majority of respondents indicated that they feel safe in Q. 8A, a number of the comments mentioned areas for improvement including:

- Lacking or fragmented sidewalks on some roads;
- Poorly-maintained sidewalks, particularly in winter;
- Absence of other road users at night;
- Busy streets and aggressive driving behavior; and
- A lack of signalized crossing points at some intersections.



Busy streets make pedestrian participants feel unsafe

### Q. 9 What would encourage you to walk more in Kingston?

In order to prioritize actions to encourage walking, it is important to gain a sense of what would entice users of other modes to consider pedestrian options more often. The results below show that participants consider better maintenance of walkways to be the most important incentive to increase walking. This was followed by an increase in the number of walking and cycling routes (i.e. improved connectivity) as well as improvements to existing sidewalks, pathways and trails (i.e. greater density of facility types) and connections to public transit.

Incentive	Important	Somewhat important	Not important
Better maintenance of sidewalks, paths, trails, and walkways	211	75	14
More routes on which to walk, such as sidewalks, pathway or trails	186	80	33
Improvements to existing sidewalks, pathways and trails	160	103	36
Improved connections to key destinations	139	110	50
Install traffic signals or crosswalks so it would be easier to cross roads	126	119	55
Connections to Kingston Transit routes and stops	125	100	74
Wayfinding signage	57	146	96
Shower and locker facilities; benches	45	79	175

# Q. 8B What other ideas do you have for improving walking in Kingston (152 responses)?

This open ended question expanded on the responses noted above, highlighting additional improvements which could influence the number of pedestrians within the City.

- Consider pedestrians more in roadway design (i.e. reduce sidewalk grade changes in curb-cut design)
- Greater enforcement of sidewalk blocking by-laws and other driver-policing practices;
- Connectivity to medical services (e.g. hospitals, clinics, mental health facilities);
- Installation of emergency call boxes along key routes;
- Greater provision of garbage disposal bins, drinking fountains, and washroom facilities along pathways and sidewalks; and
- More accessible green space by urban walking routes.



Participants suggested adding garbage disposal bins to improve walking in Kingston

# Q. 10A What do you think are the barriers to a fully accessible walking network in Kingston?

It is important to understand the barriers that prevent people from being more active. Whether it is infrastructure, programming, or complementary amenities, it helps to identify as well as prioritize future improvements. For this question, maintenance was considered the most important concern followed by missing links in routes, busy roads, and curb cuts. These responses are consistent with the responses to the previous question – mimicking similar desires for improved maintenance, infrastructure and connectivity.

Barrier	Yes	No	Not Sure
Not enough maintenance (such as debris, snow, ice or uneven	236	33	31
Missing links/gaps in the routes or network	216	40	40
	210	40	42
Busy roads that are hard to get across because there is not a	191	71	37
crosswalk or traffic signal			
Bumpy or rough sidewalks	148	92	59
Cuts in the curb that prevent smooth transitions between the roadway	148	84	66
and the sidewalk			
Narrow sidewalks/walkways	147	94	58
Uneven or gravel surfaces	141	89	68
Not enough crosswalks with audible pedestrian signals	105	99	95

# Q. 10B Please provide any additional comments about accessibility challenges (96 responses).

Other additional mobility and accessibility challenges provided in this section by survey participants included:

- Changing sidewalk gradients (i.e. sloped driveway ramps);
- Lack of curb cuts for wheelchair access;
- Poor lighting of sidewalks in some areas;
- Stairs into transit facilities and commercial buildings;
- Funding constraints for accessible infrastructure;
- Button-operated pedestrian signals (touch-activated devices are more accessible); and
- Aggressive driving behaviour and speed adjacent to sidewalks.

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## Q. 11 Based on your experience, how safe do you feel using each of the following types of walking facilities?

According to the survey, all of the facility types listed were identified as safe and no facilities were rated above 1% as "very unsafe". Sidewalks were identified as the "safest" facility type (59.5% "very safe"), followed by asphalt multi-use trails (57.9% "very safe"). Natural surface single tracks were considered the most "unsafe" facility type (8.4%), followed by woodchip trails (7.7%).

These responses are not uncommon, citing facility types with a greater level of separation from motorized vehicles as the preferred. The results are presented in the figures on the following page.

#### Types of walking facilities:



#### 1. Sidewalks:

Very safe	37.5%
Safe	49.5%
Unsafe	8.4%
Very unsafe	0.7%
I do not know	4.0%

#### 2. Asphalt multi-use trail

Very safe	57.9%
Safe	36.1%
Unsafe	3.7%
Very unsafe	0.3%
I do not know	2.0%

#### 3. Granular multi-use trails:

Very safe	45.5%
Safe	47.5%
Unsafe	4.3%
Very unsafe	0.3%
I do not know	2.3%

4. Natural surface single tracks:

Very safe	59.5%
Safe	36.8%
Unsafe	2.3%
Very unsafe	0.7%
I do not know	0.7%

5. In-boulevard multi-use trails:

Very safe	55.2%
Safe	35.1%
Unsafe	3.0%
Very unsafe	0.7%
I do not know	6.0%

6. Woodchip trails:

Very safe	35.9%
Safe	51.7%
Unsafe	7.7%
Very unsafe	1.0%
I do not know	3.7%

# Q. 11B Please provide any further comments about these walking facilities (106 responses).

In addition to commenting on their sense of comfort and safety regarding these facility types, respondents were also asked to provide additional comments to give greater context on their responses. Some of the frequently noted responses included:

- Facility safety is often time-dependent for instance, time of day, season, and degree of use affects how safe users feel.
- Separation from cars is a large determiner of safety.
- Poor winter maintenance decreases the safety of all facility types.
- Multi-use trails of all types tended to be considered more unsafe many respondents highlighted conflicts between competing modes (e.g. cyclists and pedestrians).
- Variation within facility types were mentioned for instance, sidewalk width is not uniform within the city.
- Other factors contributing to safety were described, including lighting and sight lines.
- Some respondents expressed preferences for naturalized surfaces (i.e. granular or woodchip) in natural areas.
- Barriers between modes (e.g. between cars and trail users) would enhance safety.

Q. 12 Do you have access to a bicycle? Yes: 83.1%

No: 16.9%

Of the 83% of participants with bicycle access, 26% indicated that they cycle more than once per day. This suggests that at least for some residents, Kingston's existing network is able to meet the needs of a variety of trip types.





### Q. 14A Why do you cycle?

Reason for walking	Always	Sometimes	Never	Total
For fitness / health	105	82	14	201
For recreation	81	114	6	201
To get to work	51	80	70	201
To run errands	44	122	35	201
To travel to tourist destinations	16	120	65	201

Similar to the walking survey, respondents were asked about their typical trip types related to cycling within the City. Also similar to the pedestrian survey responses, cycling survey participants identified a preference for cycling for health and recreational purposes.

## Q. 14B Are there any other reasons why you cycle (82 responses)?

Respondents then provided the following additional reasons for cycling within Kingston noting some more unique and specific drivers behind cycling activity:

- Socializing (e.g. cycling groups);
- Environmental considerations (e.g. lowering carbon footprint);
- Avoidance of costs (including parking) / saving money;
- Connectivity to natural areas; and
- Convenience for short- and medium-distance trips within the city.



Q. 15 Is there anyone in your household who bikes to school?

Yes: 13.4% No: 86.6%

The results in the adjacent chart show that the highest proportion of students that bike to school attend college / university, followed by elementary school (JK-Grade 3). Q. 16A What type of school do(es) the student(s) attend?



# Q. 16B What ideas do you have for increasing cycling to and from school (28 responses)?

Respondents provided some additional thoughts on how cycling to and from school could be improved. These ideas could be considered a part of a more comprehensive active and safe routes to school strategy.

- Constructing bike lanes and other dedicated cycling infrastructure;
- Increasing bike storage capacity at schools;
- Planning direct and safe cycling routes to school, involving parents, students, and school officials;
- Installing bike boxes at busy intersections;
- Incentives for cycling to school for students;
- Traffic calming in areas adjacent to schools; and
- Maintaining cycling routes and facilities to a high standard in winter.

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### Q. 17A How safe to you feel cycling in Kingston?



40.7% of survey participants feel unsafe and 10% very unsafe when cycling in Kingston. On the other hand, around 36% of participants generally feel safe. Further detail about these perceptions is provided below. As noted in the summary above regarding walking, personal perceptions and interpretations on safety may vary based on different socio-demographic factors and external habits of other road users.

### Q. 17B Why do you feel this way (233 responses)?

Those who felt safe expressed that they tend to take routes with dedicated lanes or have a high degree of cycling experience and comfort. However, most additional comments focused on reasons for unsafe feelings while cycling in Kingston. Themes emerging from these responses included the following and provide a more comprehensive set of suggested improvements that could be explored when developing the City-wide AT network and complementary amenities:

- Aggressive / distracted driving behaviour and high vehicle speeds;
- Missing links and gaps in the cycling network;
- Negative and / or dangerous cycling experiences involving interactions with cars;
- · Issues with bike security in storage areas, including theft;
- A lack of understanding of right-of-way in turning or sharrow situations (by both cyclists and drivers, including transit vehicles);
- Issues with visibility, particularly at night (including lighting concerns);
- A lack of bike boxes at intersections; and
- General hostility between cyclists and drivers.

### Q. 18A What would encourage you to cycle more in Kingston?

Encouragement tactics can vary significantly. A set of potential incentives to encourage a greater amount of cycling was identified by respondents. Participants were given the opportunity to provide input and ideas about making the City of Kingston more appealing to cyclists of all levels. Constructing more designated cycling routes was rated as the highest priority, followed by improving existing cycling routes and improving intersection safety.



Improving bicycle parking will encourage more participants to cycle

Incentive	Important	Somewhat important	Not important
More routes for cycling, such as bicycle lanes or trails	233	38	18
Improvements to existing cycling routes	198	63	28
Improvements at intersections that would make me feel safer	171	72	46
Install traffic signals or crosswalks	118	90	81
Connections to Kingston Transit routes and stops	77	101	111
Improved connections to key destinations	136	97	56
Opportunities and connections to the rural areas	142	87	60
Better maintenance of bicycle lanes, sidewalks, paths, trails and walkways	212	59	18
Bicycle parking	159	92	38
Shower and locker facilities; benches	55	72	162
Rest areas (including benches)	58	109	122

# Q. 18B What other ideas do you have for improving cycling in Kingston (127 responses)?

In addition to the options noted above, respondents were able to identify additional incentives to improve cycling or encourage them to cycle more often. They included:

- Educational programs for both cyclists and drivers, focusing on sharing the road;
- Providing air pumps along key cycling routes;
- Providing more traffic signals capable of detecting cyclists (to ensure cycling wait times at intersections are reasonable);
- Improving security in public bike storage areas;

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- Installing bike rental services throughout the city;
- Implement programs for city staff to commute to work by bicycle;
- Enhance the proportion of off-road cycling facilities in the city; and
- Remove cyclists from sidewalks via by-law enforcement.

#### Q. 19 Do you cycle to and from rural areas?

The growing demand for long-distance cycling encourages the City of Kingston to expand its designated routes through both urban and rural areas. Understanding the general level of interest in and experience with cycling in distinct areas is important for identifying desired linkages and connections throughout the City. As such, a key aim of this study it so ensure that the perspectives of both urban and countryside stakeholders and community members in Kingston are considered. The following statistic represents the proportion of survey respondents who cycle to and from rural areas:

### Yes: 34.9% No: 65.1%

## Q. 20A Based on your experience, how safe do you feel using each of the following types of walking facilities?

Participants suggested that in-boulevard (61.2%) and asphalt multi-use pathways (58.5%) are the safest facility types of the list provided, followed by cycle tracks and buffered bicycle lanes (both rated 51.2% "very safe"). It is important to note that the most favoured facility types are all fully separated from automobile traffic.

Signed bike Signed bike Signed bike **Bike lane** Paved **Suffered** bike Buffered Cycle track In-boulevard route route shoulder multi-use route lane. paved with Sharrow with edge line shoulder pathway

Types of Cycling Facilities

#### Signed bicycle routes with sharrows:

Very safe	4.2%
Safe	24.6%
Unsafe	46%
Very unsafe	18%
I do not know	7.3%

Bicycle lanes:

Very safe	9.7%
Safe	60.2%
Unsafe	21.8%
Very unsafe	3.1%
l do not know	5.2%
D. ff and a second at a second	

Buffered paved shoulders:

Very safe	24.9%
Safe	53.6%
Unsafe	14.5%
Very unsafe	1.7%
l do not know	5.2%

Cycle tracks:

Very safe	51.2%
Safe	35.3%
Unsafe	5.9%
Very unsafe	1.4%
l do not know	6.2%

Paved shoulders:

Very safe	3.8%
Safe	38.1%
Unsafe	42.2%
Very unsafe	10.7%
l do not know	5.2%

Buffered bicycle lanes:

Very safe	51.20%	
Safe	40.80%	
Unsafe	2.40%	
Very unsafe	1.00%	
l do not know	4.50%	
Aenhalt multi ueo traile:		

Asphalt multi-use trails:

Very safe	58.5%
Safe	31.8%
Unsafe	4.2%
Very unsafe	0.7%
l do not know	4.8%

In-boulevard multi-use pathways:

Very safe	61.2%
Safe	30.1%
Unsafe	3.1%
Very unsafe	0.3%
l do not know	5.2%

# Q. 20B Please provide any further comments about these cycling facilities (98 responses).

Additional comments about the various cycling facility types noted above were also provided including:

- Many comments focus on modal conflicts associated with multi-use trails.
- Some participants suggest they would cycle to and from rural areas more often if buffered paved shoulders were more prevalent on arteries and highways.
- Intersections were a frequently-cited concern by many in relation to all of these facility types; ensuring safe crossings is an important consideration for network safety.

- There is a general perception that off-road trails are safer than on-road facilities (e.g. buffered shoulders).
- Some suggest that bike lanes can produce a "false sense of security" for inexperienced cyclists, and should still be used with caution.
- There is a sense that weather and seasonality are also important aspects of safety that relate to all facility types, particularly in relation to winter weather.

# Q. 21 How far is your home from your workplace / school / other frequent destination?



The chart above shows that most (55%) participants commute either between 2 to 5 km or less than 2 km away from home.

# **3.0** Key Themes and Takeaways

A number of themes emerged from the review of results. These include a general preference for fully-separated facilities, for both walking and cycling; a positive relationship between facility maintenance and the sense of comfort and safety when using various facilities; and the need for education programs for drivers and cyclists. Each of these areas is explored in greater detail below.

### **Preference for Fully-Separated Facilities**

The survey results and comments provided in the open-ended format demonstrate a need to implement a higher degree of fully-separated walking and cycling facilities. Responses suggest that sidewalks, buffered bike lanes, and in-boulevard multi-use pathways and trails are considered to be the most appealing facilities due to their real or perceived sense of comfort and safety. More frequent and continuous separation between pedestrians, cyclists and motor vehicles will help make cyclists and pedestrians feel more comfortable which in turn could generate more AT activity in Kingston.



### Winter Maintenance and Cycling / Walking Likelihood

Comments indicated that weather conditions and facility maintenance influence whether or not a user is likely to use an active transportation mode. Maintenance of sidewalks, trails, and cycling facilities in the winter were listed as strong barriers to use, and also have a strong influence on the level of perceived safety of select facility types. Throughout the survey, respondents suggested they would be more likely to use AT infrastructure year-round if facilities are maintained to the same standard as roadways (e.g. snow clearing and salt / sanding).



### The Need for Driver and Cyclist Education

Participants frequently mentioned driver and cyclist education programs as much-needed components to restore respect for AT users in Kingston. Ensuring that users of all modes respect rights-ofway, space, and the safety of active users was cited as important for boosting the use of active modes for both recreational users and commuters. Building respect for pedestrians and cyclists while reducing hostility is an objective when developing promotion, awareness and education programs to help to shape life-long walking and cycling habits.

### **Space-Time Influence on Cycling and Walking**

A number of participants stated that issues of distance and travel time ultimately influence their transportation mode choice. Many open-ended questions allowed respondents to express their thoughts on the limitations of cycling or walking. For example, responses to Question 3 suggested that local residents are less likely to walk or cycle if they perceive that their destination is too far away, or takes a long time to reach. This demonstrates the importance of convenience and creating effective linkages (e.g. easier access to bus stops) so that residents may consider active transportation for longer-distance trips and build healthy, active habits.

### **Congestion / Busy Roads in Urban Areas**

The historical predominance of auto use in urban areas plays a major role in the decrease of cycling and walking in Kingston. Many survey participants stated that the abundance of cars on the roadways make active transportation users feel unsafe and uncomfortable. This barrier was a recurring theme within the survey, relating closely to the lack of maintenance and need for fully-separated facilities and education for all types of road users. Prioritizing improvements for designated bike lanes and crosswalks may help to improve the safety of active transportation, while also managing road congestion by promoting modal shift.







# **4.0** Conclusions

This report has demonstrated that AT users in Kingston have both a wide range of opinions about the current and future state of facilities and routes. By identifying, documenting and integrating this input, the project team will be better positioned to establish strong actions and recommendations for future improvements. The suggested improvements identified through these results will be reviewed and considered as the project team works through the next steps to identify proposed routes, facility types, amenities, programs and initiatives.

It is important to note that the City of Kingston and the WSP | MMM study team have ensured that all public comments, actions and events are documented over the course of the Walk 'N' Roll process, constituting a comprehensive and transparent record of input received from the public and other stakeholder groups about AT in Kingston.