Waterloo Region Area Survey 2017

Summary of Results

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The Waterloo Region Area Survey

The Waterloo Regional Area Survey is an annual survey run out of the Survey Research Centre housed at the University of Waterloo. The 2017 data collection cycle for this survey ran March to April 2017. The sampling strategies used for this survey include random-digit dialed (RDD) telephone (using both landline and cell phone telephone numbers) and web surveys, representative by Region/Municipality and age. The sample used for the web component of the Waterloo Region Area Survey was originally recruited using the RDD telephone approach.

Respondent Demographics

A total of 404 responses to the 2017 Waterloo Region Area Survey were collected, 194 (48%) through a telephone survey and 210 (52%) through an online survey. Overall, 218 (54%) of the respondents were female, 195 (46%) were male, with one respondent identifying as transgender. This gender representation of survey respondents is a close match to the 51% female and 49% male breakdown in the Waterloo Region overall (census 2016).

The age range for respondents was 19 to 92; the average age was 58.3 (this was consistent for both the telephone and web survey methods). Age breakdown by category is captured in Figure 1 below. The population captured by this survey is disproportionately older than the population demographics of residents Waterloo Region where, according to the 2016 census the average age of residents age 20 or older is 47.8, and just 19 % of the adult population (age 20+) is reported to be over the age of 65, whereas 38% of the survey respondents reported to be over the age of 65.

Figure 1: Age of Survey Respondents (N=399)
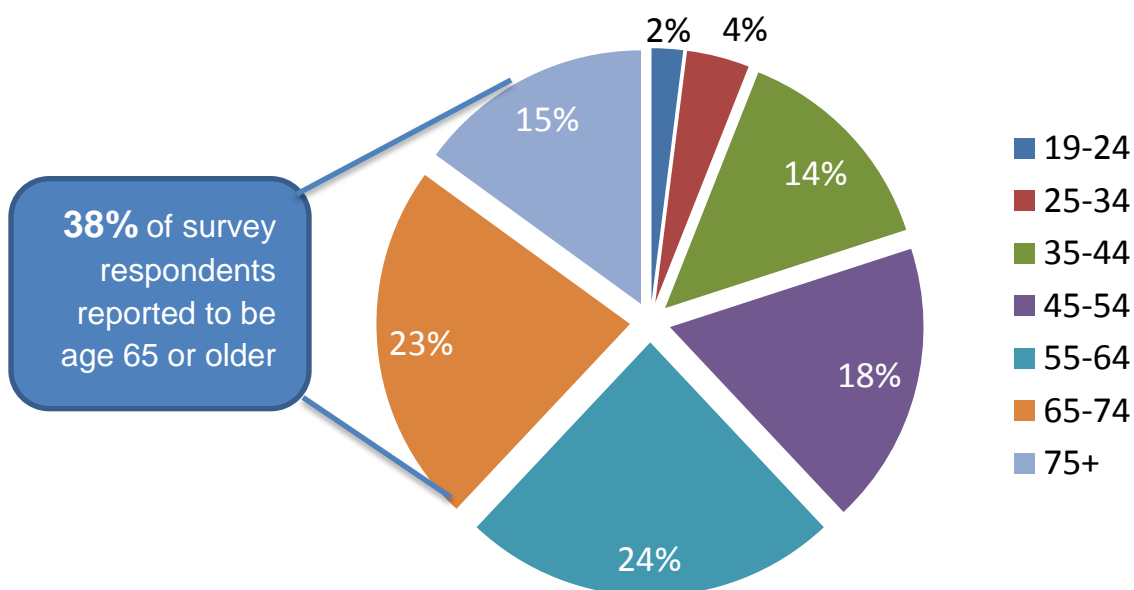
Due to this disproportionate sample, statistical adjustments (weights) have been calculated and applied to the survey data in order to provide results that may better represent the wider population. Calculation of the weights was done using the following age bracket percentages found in the Waterloo Region (from the most recent census, 2016).

Table 1: Calculation of Weights for Survey Data

WRAS SURVEY AGE (n=401)	Survey Frequency	WRAS Survey Percent	WR POPULATION percent	FORMULA	WEIGHT
19-24	9	2%	10%	10/2	5
25-34	16	4%	18%	18/4	4.5
35-44	57	14%	17%	17/14	1.2
45-54	71	18%	19%	19/18	1.01
55-64	98	24%	16%	16/24	0.67
65+	90	38%	19%	19/38	0.5
Average Age	58.3		47.8		

Weights were then applied for much of the descriptive and inferential analysis conducted. For instance, due to the disproportionately higher response from those aged 65 and older, a weight of 0.5 is applied to those responses, meaning that each response provided by a participant aged 65 or older will be counted as ½ of a response in relation to all other responses. Alternatively, due to the underrepresentation of respondents in the 19-24 age category, each response provided by a participant aged 19-24 will be counted as 5 responses. Each of the other categories have an appropriate weight applied so as to even out the responses as though the sample is representative of the population

The accuracy of how these weights have been applied can be seen by looking at the weighted and unweighted average age for survey respondents. As illustrated in the tables to follow, once weights have been applied to the data, the average age of respondents is adjusted accordingly to 47.34, which mirrors that of the Waterloo Region overall at 47.8.

Table 2: Average Age of Survey Respondents**: Unweighted Data**

	N	Minimum	Maximum	Average Age	Std. Dev
Age	399	19	92	**58.27**	15.395
Valid	399				

Table 3: Average Age of Survey Respondents**: Weighted Data**

	N	Minimum	Maximum	Average Age	Std. Dev
Age	396	19	92	**47.34**	17.691
Valid	396				

The age by gender difference found in the survey results was also found to be comparable to the population of the Waterloo Region, as the average age for women is 1-2 years older than men across the different cities and townships.

Table 4: Average Age of Survey Respondents by Gender: Weighted Data

	Average Age	N	Std. Deviation
Male	46.84	186	18.602
Female	48.28	205	16.714
Total	47.34	396	17.691

According to the 2016 census numbers, the current population of Waterloo Region is 583,500, with 42% of that population residing in Kitchener, 23% in Waterloo, 23% in Cambridge, and the remaining 12% spread out through the townships (as illustrated in the table below).

Table 5: Population Breakdown of Waterloo Region

City or Township	Cambridge	Kitchener	Waterloo	Townships*
% of Regional population	22.9%	42.3%	23.1%	11.6%

*North Dumfries, Wellesley, Wilmot, Woolwich

Shown in the table below is a breakdown of reported City or Township of survey respondents. Given the actual population breakdown of the Region shown above, the survey sample is a close match to the population of Waterloo Region, with a slight oversampling from Cambridge, and slight undersampling from Waterloo.

Table 6: Breakdown by place of residence – Waterloo Region Area Survey

City or Township* of Residence	Frequency	Percent
Cambridge	**100**	**24.8**
Kitchener	**176**	**43.6**
North Dumfries	7	1.7
Waterloo	**81**	**20.0**
Wellesley	7	1.7
Wilmot	15	3.7
Woolwich	18	4.5
Total	404	100.0

*total for all Townships 11.6%

In terms of marital status, there was some oversampling of those members of the Region who are married (63% of overall respondents versus 50% in the Region of Waterloo), and a subsequent underrepresentation of those who identify as "never married" (9% versus 28% in the Region overall.)

Figure 2: Marital status of WRAS respondents compared with Waterloo Region
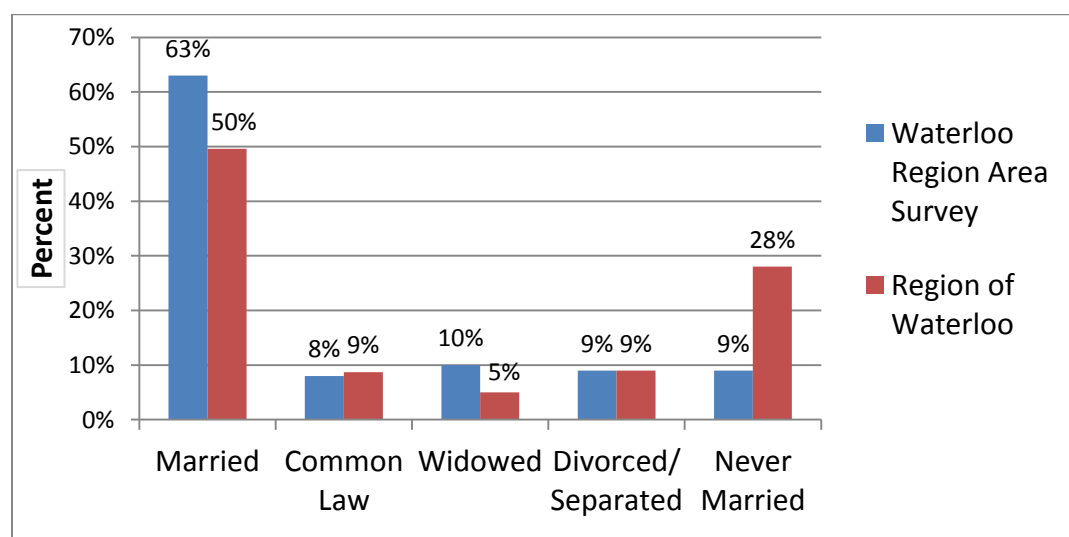
Respondents were also asked about their current employment status, their household income, and the highest level of education attained. For each of these variables, comparisons are made with Region of Waterloo statistics.

Figure 3: Current employment status – WRAS survey responses

Employment status - WRAS respondents (N=397)

Category	Percentage
Employed full time	52%
Employed part time	7%
Retired	22%
Unemployed	4%
Student	10%
Homemaker	3%
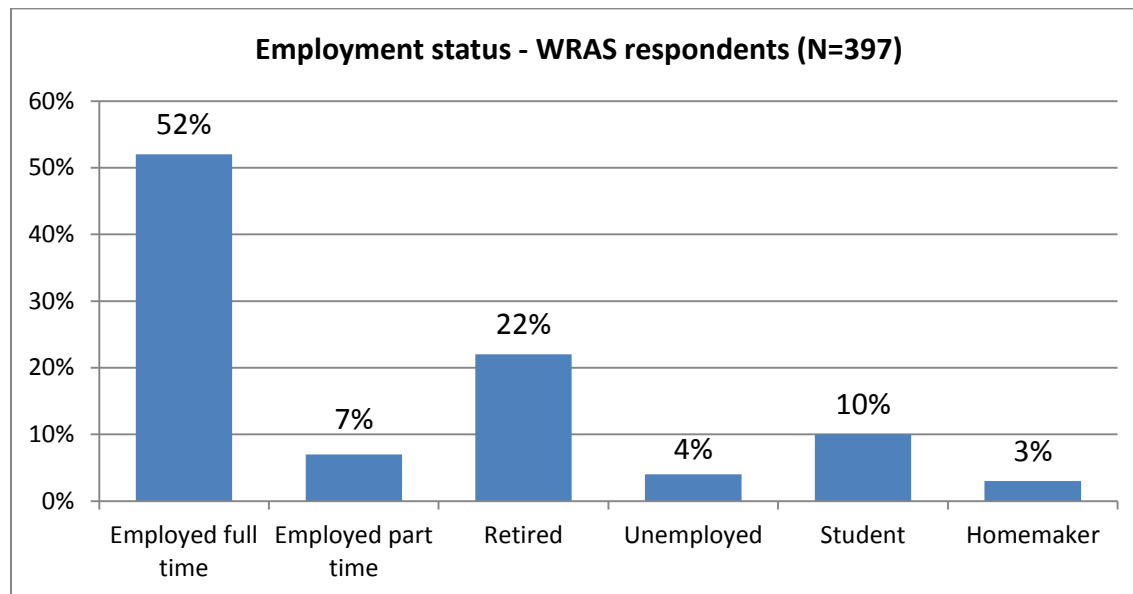
As displayed in the graph above, 59% of WRAS respondents reported to be working full time or part time, 22% are retired, 10% are students, 4% are unemployed, and 3% identified as a homemaker. This breakdown is similar to what is seen throughout Waterloo Region, where, according to the 2011 National Household Survey (NHS) labour statistics, 66% of the population of Waterloo Region is working either full-time or part-time, 5% are unemployed, and the remaining 30% are not in the labour force (which would include students, homemakers, and those who are retired).

Figure 4: Employment Status - Waterloo Region Labour Stats (NHS 2011)

Employment status - Waterloo Region (2011 NHS)

Category	Percentage
Employed full time	53%
Employed part time	13%
Unemployed	5%
Not in labour force	30%
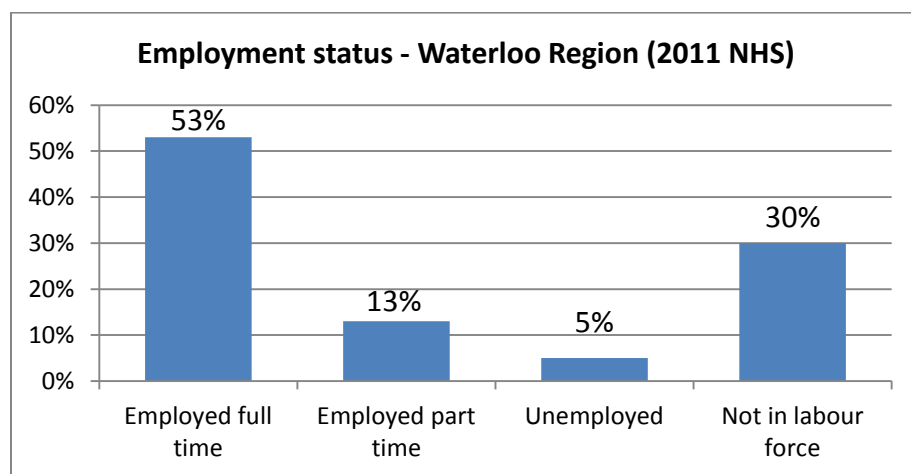
In terms of income levels, survey participants provided responses captured in the Table 5 below. As illustrated, just 5% of respondents reported a household income as less than $20,000, a total of 57% reported their household income as higher than $20,000 but lower than $100,000, and the remaining 37% reported their household income as over $100,000. When making comparisons to the latest Canada census data (Figure 6), which includes the income breakdown of Waterloo Region for 2015, although the income bracket categories are slightly different, the results are quite similar.

Figure 5: Reported Household Income - Survey Respondents

Total Household Income - WRAS Respondents (N=362)

Income Bracket	Percentage
Less than $20,000	5%
$20,000 - $49,999	23%
$50,000 - $79,999	17%
$80,000 - $99,999	17%
$100,000 +	37%
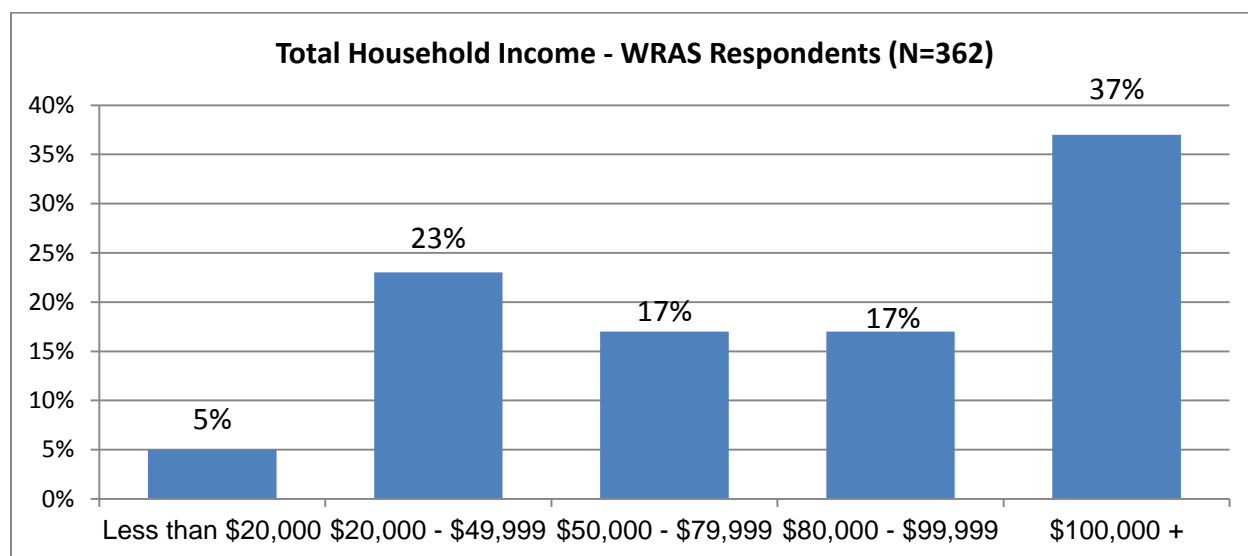
Figure 6: Reported Household Income - Waterloo Region (Census Data 2016)

Total Household Income - Waterloo Region (2015)

Income Bracket	Percentage
Under $30,000	15%
$30,000 - $59,999	23%
$60,000 - $99,999	26%
$100,000 +	36%
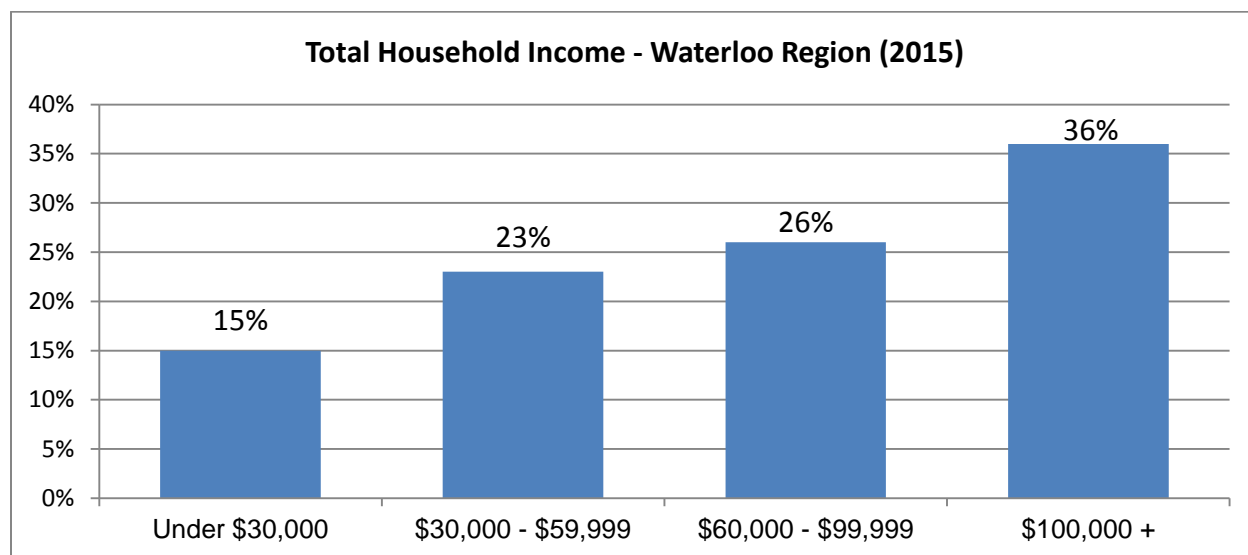
When asked about their highest level of education, respondents were given a choice of five categories to choose from, including 1=grade school, 2=high school, 3=college, 4=trade school, or 5=university. In order to simplify the analysis and render the groups comparable with national statistics, the five original categories were collapsed into three, as illustrated in the table below.

Figure 7: Highest level of Education: Survey Respondents and Waterloo Region
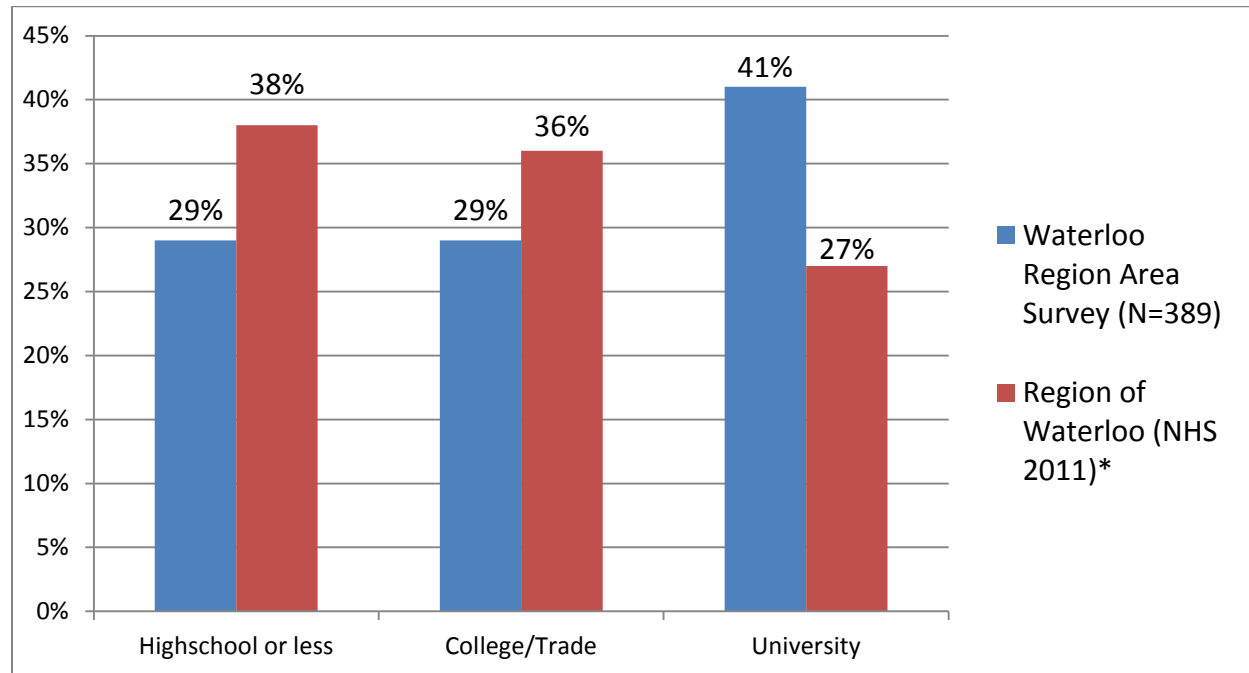
*This 2011 National Health Survey Data is derived from the total population aged 25-64 within Waterloo Region

Community Safety

The questions in this section are focused on community safety, in particular, respondents' perceptions of trust, safety, and crime within Waterloo Region.

Trust

The first question addressed how respondents view other people: "Generally speaking, would you say that most people can be trusted or that you cannot be too careful in dealing with people?" Overall, 76% of respondents chose the option "most people can be trusted."

Although respondents of the WRAS revealed an overwhelmingly trusting attitude about other people in general, the results were not consistent across gender (male respondents reported to be more trusting than female), nor were they consistent across city/township (although these differences are not statistically significant).

Figure 8: Trust responses split by gender

View of other people: Overall and split by Gender

Category	Most people can be trusted	You cannot be too careful in dealing with people
Overall	76	24
Male	81	19
Female	73	27
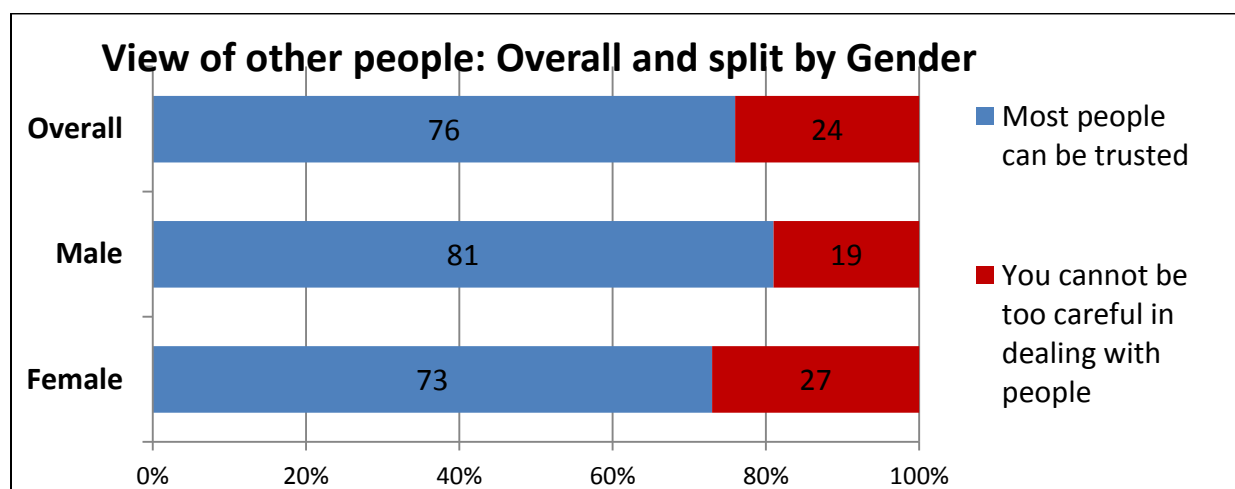
Figure 9: Trust responses split by City/Township

View of other people: Comparison by City/Township

Category	Most people can be trusted	You cannot be too careful in dealing with people
Cambridge	72	28
Kitchener	77	23
Waterloo	79	21
Townships	78	22
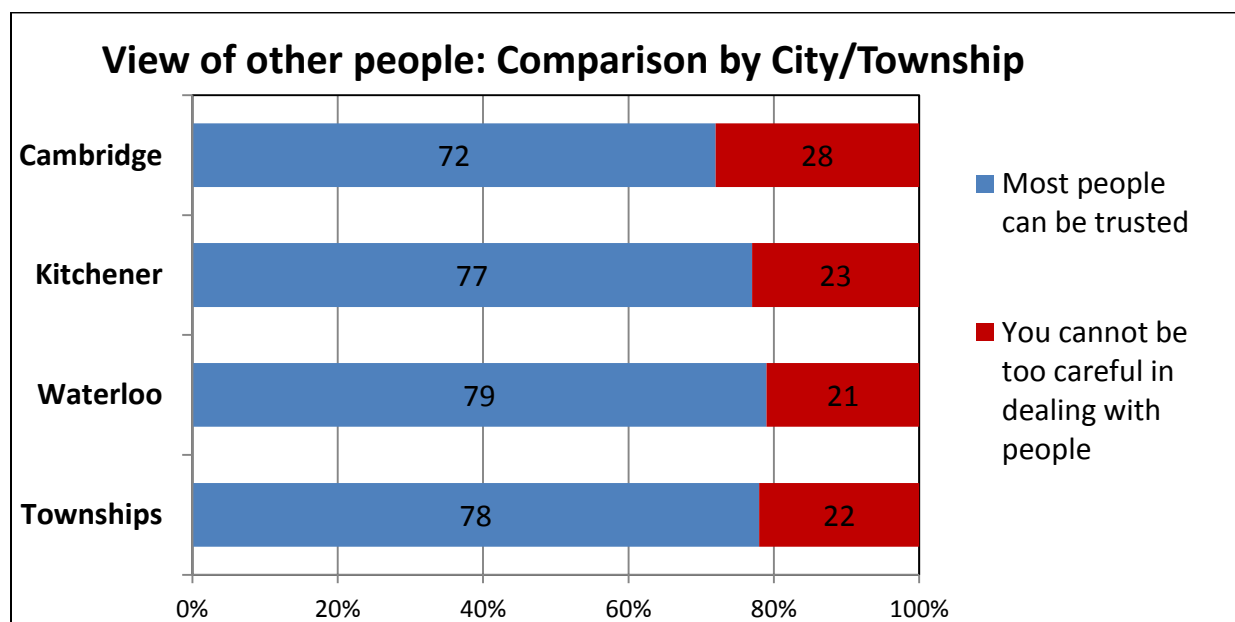
When looking at the responses to this question by age, no significant differences were found between the two groups for either overall age or by breakdown of age category, though a visible trend can be seen when looking at the age comparisons for those who selected "most people can be trusted."

Figure 10: Trust responses split by Age Category
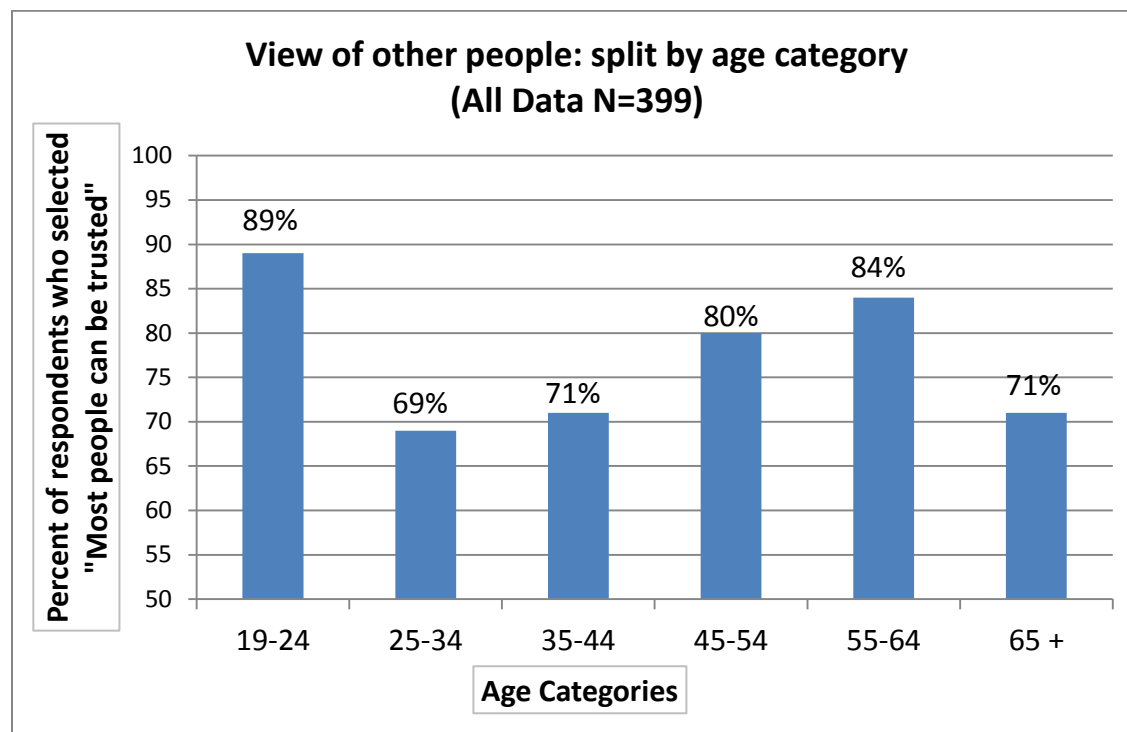
Looking at trends over time, this 76% overall result is a departure from the results reported from previous years, representing a 16% increase from the 2013 WRAS results and indicating a possible shift in attitudes in the Waterloo Region over the past 4 years.

Table 7: Trust responses: WRAS data over time

	2012 WRAS	2013 WRAS	2017 WRAS
Most people can be trusted	65.3%	60.2%	**76.4%**
N	376	400	404

The next few questions were focused on respondents' feelings of safety from crime in different places in Waterloo Region. The first two questions were closed questions measured on a 4-point scale, followed by a two open-ended questions whereby respondents were directed to explain their response in more detail.

Feelings of safety walking alone in your own area after dark

The first question focused on feelings of safety from crime after dark in respondents' own area of residence: How safe do you feel from crime walking alone in your area after dark? Do you feel: very safe (4), reasonably safe (3), somewhat unsafe (2),or very unsafe (1)[1].

Overall results for this question are illustrated in the figure below. As shown, the feelings of safety represented here are strong, with 90.8% of respondents indicating that they feel either "very safe" or "reasonably safe" from crime walking alone in their area after dark.

Figure 11: Perceptions of safety in your own neighbourhood: All response frequencies
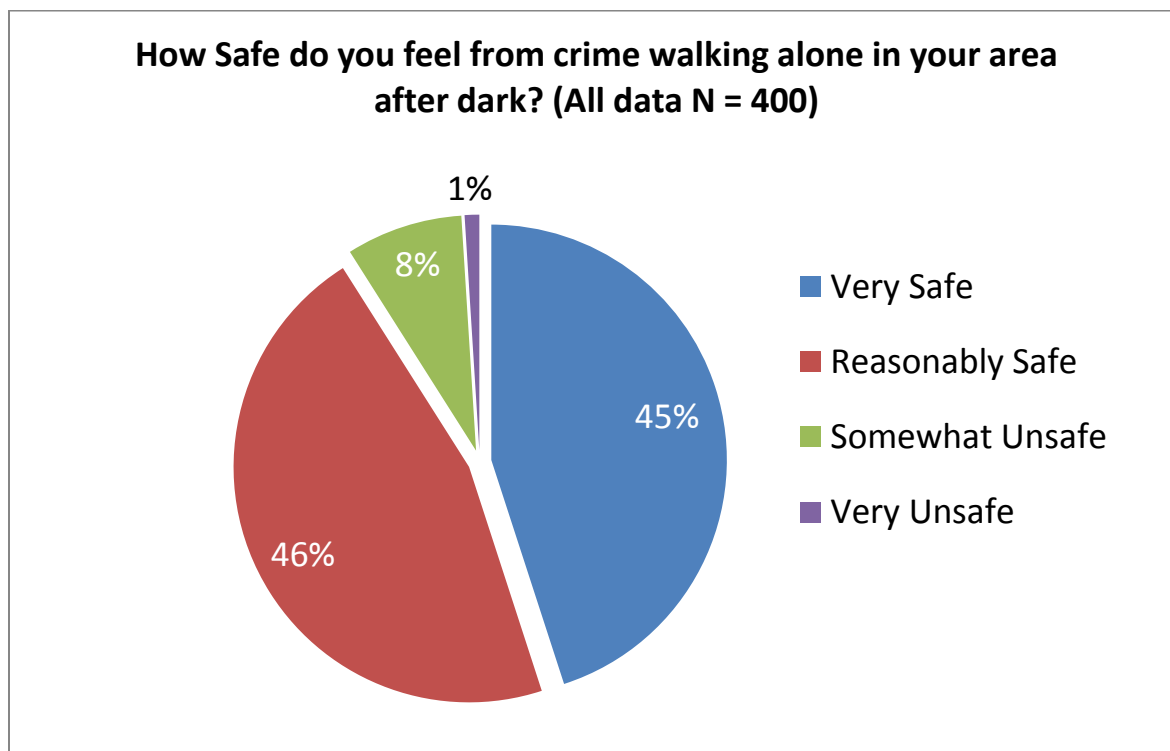
Looking at results over time, this result is very much in line with the results of previous WRAS responses; though an upward trend is seen over time, from 85% in 2011 to almost 91% in 2017.

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[1] The original coding for this scale was the reverse, Very safe = 1, to Very unsafe = 4. Reverse coding was done for all scale analysis, including means comparisons and computations of correlations.

Table 8: Perceptions of safety in your own neighbourhood: WRAS results over time

How safe do you feel from crime walking alone in your area after dark?	2011 WRAS	2012 WRAS	2013 WRAS	2017 WRAS
Very safe or Reasonably safe	85.3%	89.2%	90.6%	**90.8%**
N	644	376	400	404

Figure 12: Perceptions of safety in your own neighbourhood: Response frequencies split by City/Township
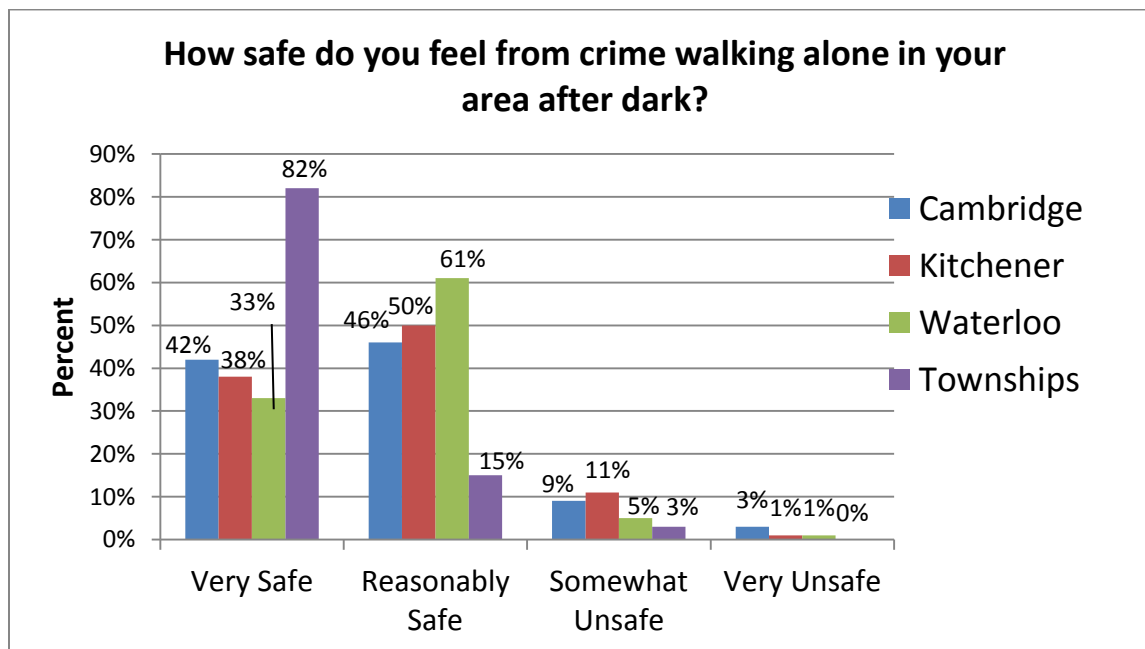
When looking at the results of this question through a comparative analysis of Cambridge, Kitchener, Waterloo, and the Townships, some differences can be seen in the frequencies of responses as shown in the figure above, A comparative analysis was conducted (ANOVA) between all four scale means, which revealed a significant result between the townships and each of the three cities, though the differences between the cities are not statistically significant, as means for each of the cities on this 4-point scale display very little variability.

Table 9: Perceptions of safety in your own neighbourhood: Scale mean by City/Township

How safe do you feel from crime walking alone in your area after dark? (4-point scale: 1=very unsafe, 4=very safe)

City of Residence	Mean	St. Dev	N
Cambridge	3.28	.740	101
Kitchener	3.26	.670	168
Waterloo	3.27	.585	72
Townships	3.79*	.476	57

*mean differences found between the townships and all three cities ($F_{(3)}$ = 10.67, p<.05)

When doing a comparison of response by gender for this question, a significant difference is found for the scale means for each group.

Table 10: Feeling safe from crime in your own area: Scale mean by Gender

How safe do you feel from crime walking alone in your area after dark? (4-point scale: 4=very safe, 1=very unsafe)

Gender	Mean	St. Dev	N
Male	3.55*	.557	187
Female	3.16*	.723	207

*mean differences are statistically significant ($t_{(391)}$ = 5.91, p<.05)

When looking at the frequency of responses between male and female respondents, although the combined percent of those who selected either "very safe" or "reasonably safe," is high (85% for female, 97% for male), the breakdown for each question is almost the reverse between the male and female respondents, indicating that the majority of male respondents (58%) feel "very safe," and the majority of female respondents feel "reasonably safe" (52%).

Figure 13: Feeling safe from crime in your own area: Frequency by Gender

Female Responses (N = 207)

- Very safe: 33%
- Reasonably safe: 52%
- Somewhat unsafe: 13%
- Very unsafe: 2%

Male Responses (N = 187)

- Very safe: 58%
- Reasonably safe: 39%
- Somewhat unsafe: 3%
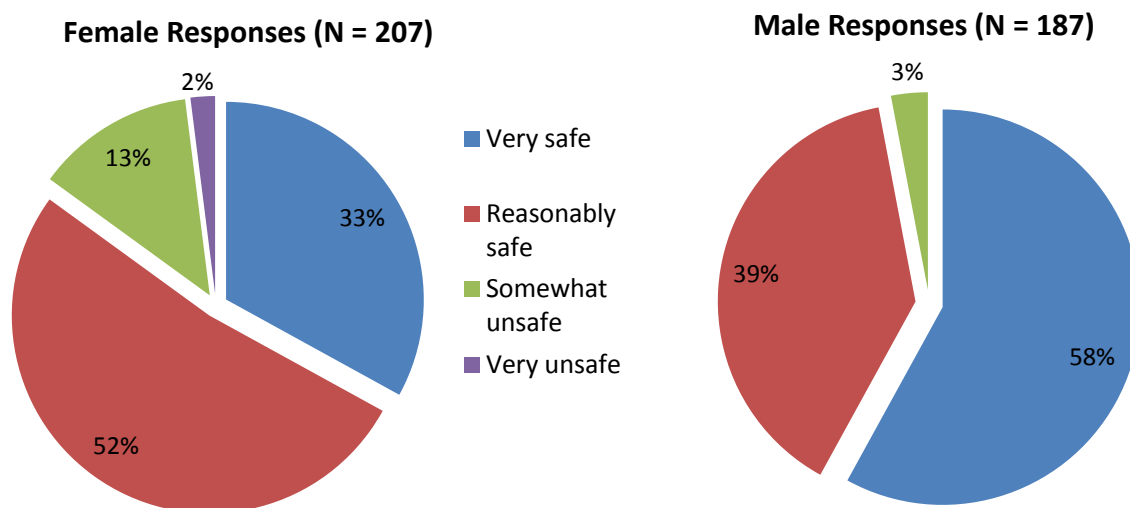
Feelings of Safety in the Downtown at Night

The next question focused on feelings of safety in respondents' downtown area at night: In thinking about your feelings of safety in your downtown area at night, do you feel: very safe (4), somewhat safe (3), somewhat unsafe (2),or very unsafe (1)[2]. Only responses from those who reside in Cambridge, Kitchener or Waterloo were used for this analysis; overall results for this question show a marked difference in feelings of safety between the downtown and respondents' own area of residence. Scale means for each of the questions, each measured on the same 4-point scale, are .6 of a point different from one another (which is large variation for such a small range).

Table 11: Perceptions of safety after dark: Mean comparisons between respondents' neighbourhoods and the downtown

Question Focus (CKW only)	Mean	St. Dev	N
Feelings of safety alone in your area after dark	3.27	.673	341
Feelings of safety in your downtown area at night	**2.68**	.870	338

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[2] The original coding for this scale was the reverse, Very safe = 1, to Very unsafe = 4. Reverse coding was done for all scale analysis, including means comparisons and computations of correlations.

Figure 14: Perceptions of safety in the downtown at night: overall frequencies

In thinking about your feelings of safety in your downtown area at night, do you feel: (overall CKW data N = 343)

- Very safe
- Somewhat safe
- Somewhat unsafe
- Very unsafe
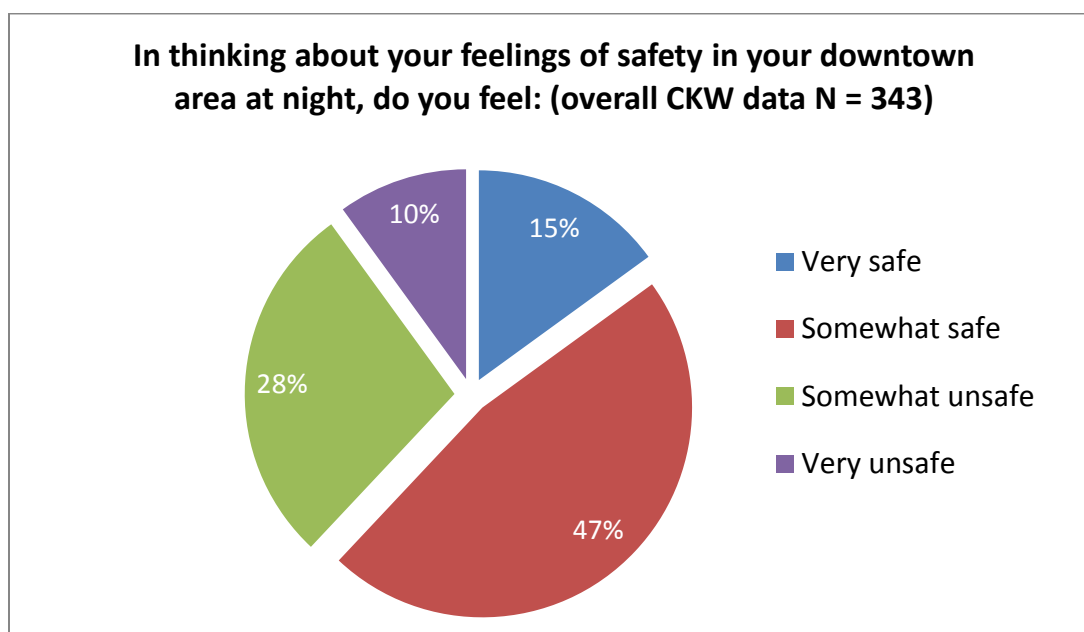
As seen in the figure above, compared with the 90.6% of respondents who felt either "very safe" or "reasonably safe" in their own area after dark, just 62% of respondents reported the same feeling of safety in their downtown at night. Looking at comparisons from the Waterloo Region Area Survey from 2011, this result does not indicate a change in perceptions of safety in the downtown – as illustrated in the table below, there is a negligible difference in the data sets.

Table 12: Perceptions of safety in the downtown: Comparison between WRAS 2011 & 2017

	Very safe	Somewhat safe	Somewhat unsafe	Very unsafe
WRAS 2011	19%	46%	25%	10%
WRAS 2017	15%	47%	28%	10%

When looking at the comparisons between cities, a marked difference can be seen between respondents residing in Waterloo (77% feel safe), who have the highest feelings of safety in the downtown, and those in Kitchener, who have the lowest (58% feel safe). Analysis of means revealed a significant result between each of the cities with the exception of Cambridge and Kitchener.

Figure 15: Perceptions of safety in the downtown at night: Response frequency split by City

Table 13: Perceptions of safety in the downtown: Mean differences between Cities

In thinking about your feelings of safety in your downtown area at night, do you feel: very safe (4), somewhat safe (3), somewhat unsafe (2),or very unsafe (1)

City of Residence	Mean	St. Dev	N
Cambridge	2.63*	.919	100
Kitchener	2.58*	.800	167
Waterloo	2.98*	.768	71

*Mean differences are statistically significant ($F_{(2)} = 6.04$, $p < .05$). Post-hoc comparisons reveal significant differences between Cambridge/Waterloo and Kitchener/Waterloo. Mean difference between Cambridge and Kitchener is not significant.

Significant mean differences between gender groups were also seen for this variable, with male respondents reporting a much higher feeling of safety than female respondents.
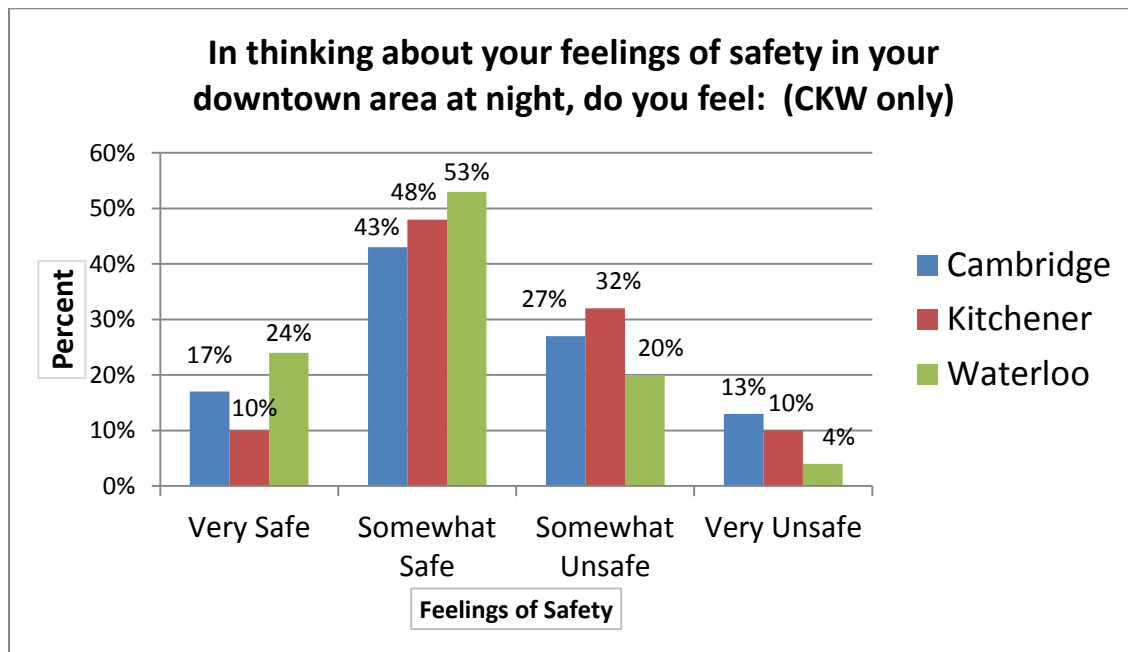
**Table 14: Perceptions of safety in the downtown: Mean differences by Gender**

In thinking about your feelings of safety in your downtown area at night, do you feel: very safe (4), somewhat safe (3), somewhat unsafe (2),or very unsafe (1)

Gender	Mean	St. Dev	N
Male	3.11*	.722	185
Female	2.56*	.913	205

*Mean differences are statistically significant (t(388) = 6.51, p<.05)

When looking at the frequency of responses between male and female respondents, there is a clear difference between an overall feeling of safety for male respondents (79% feel very or somewhat safe) and female respondents (52% feel very or somewhat safe).

Figure 16: Perceptions of safety in the downtown: Response frequencies by Gender
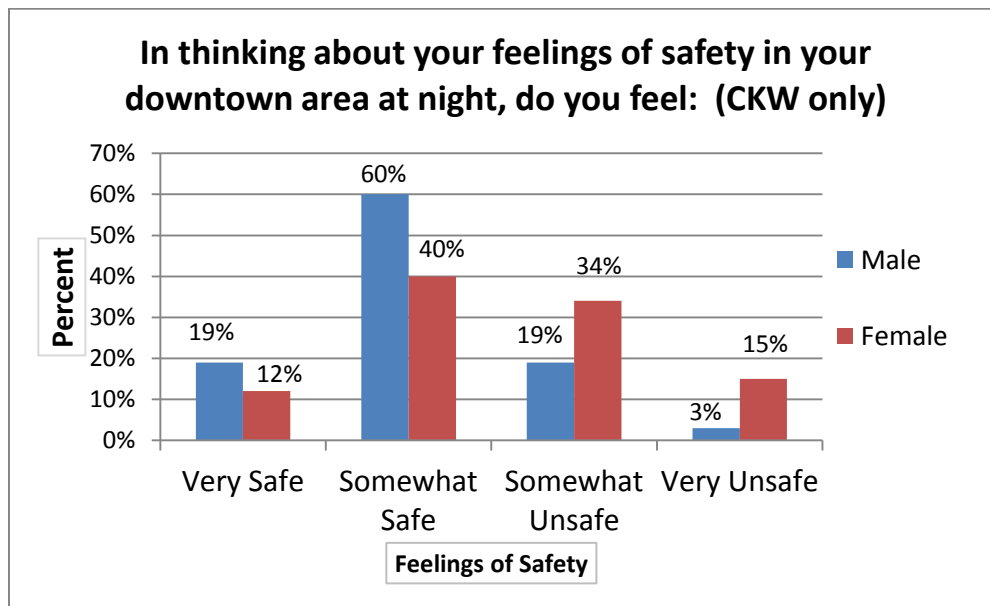
Other significant factors found to be related to feelings of safety in the downtown area at night are:
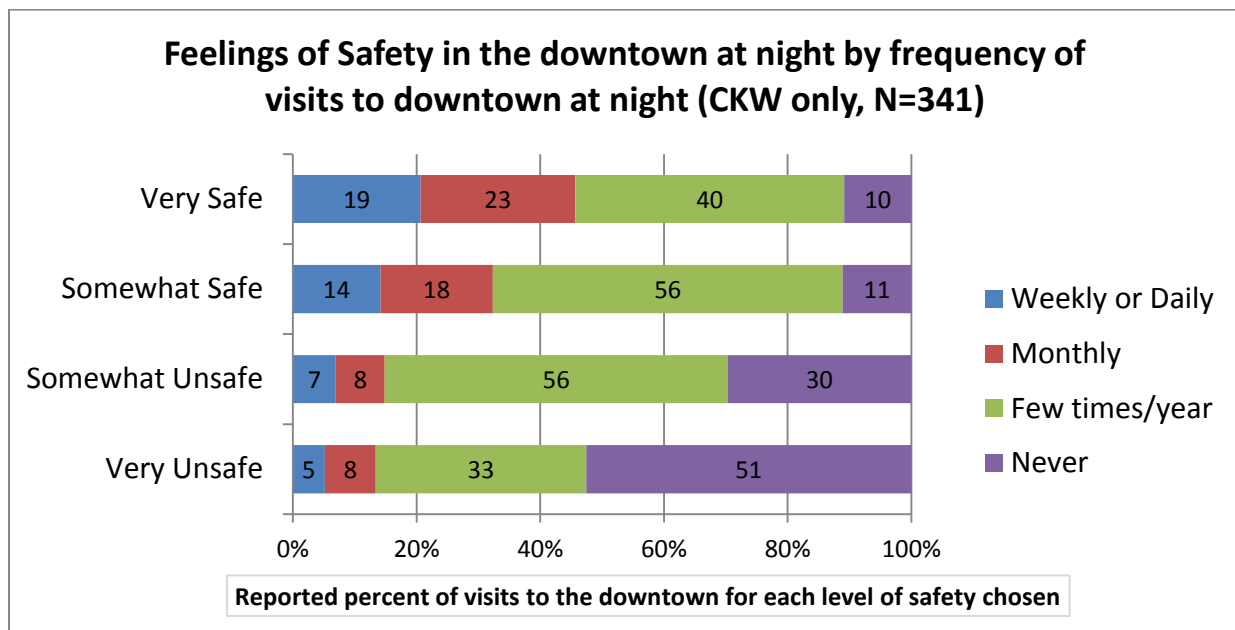
- **Income**: A significant positive correlation was found between income and feelings of safety in the downtown (r_s = .201(p<.05); as respondents' income bracket went up, feelings of safety in the downtown also went up.

- **Trust**: A significant mean difference on the 'feelings of safety in the downtown' scale is found between people who report "most people can be trusted" (mean =

2.91) and those who think "You cannot be too careful in dealing with people" (mean = 2.47). Thus, those who are more trusting towards others report a significantly higher feeling of safety in the downtown area at night (t(336) = 4.33, p<.05)

- **Education**: Highest level of education reported by respondents is found to be significantly related to feelings of safety in the downtown. Analysis of means (ANOVA) revealed a significant difference in scale means between categories (F(2) = 3.747, p<.05). Post-hoc analysis indicates that the significant difference is between those who reported University education (mean = 2.83) and Grade school/High school education (mean = 2.55) only. Those who reported College/Trade school education were not significantly different from the others.

Frequency of Visits to the Downtown at Night: A significant mean difference is found based on respondents' reported frequency of visits to the downtown at night. Analysis of means (ANOVA) revealed a significant difference between categories (F(2) = 13.25, p<.05). The more often respondents report to visiting the downtown at night, the higher the feelings of safety they report about being in the downtown at night. In particular, a one-point difference is seen in scale means between those who report to "never" go to the downtown at night (mean = 2.26), and those who report to go to the downtown at night on a "monthly" basis (mean = 3.26).

Figure 17: Perceptions of safety in the downtown compared with frequency of visits

Feelings of Safety in the downtown at night by frequency of visits to downtown at night (CKW only, N=341)

	Weekly or Daily	Monthly	Few times/year	Never
Very Safe	19	23	40	10
Somewhat Safe	14	18	56	11
Somewhat Unsafe	7	8	56	30
Very Unsafe	5	8	33	51

Reported percent of visits to the downtown for each level of safety chosen

As shown in the figure above, feelings of safety in the downtown at night reported by survey respondents are related to the frequency of how often they visit the downtown. The most significant difference in perception is seen between those who report feeling that the downtown is "very safe" at night compared with those who feel the downtown is

"very unsafe" at night. As shown, just over 50% of respondents who feel that the downtown is "very unsafe" reported to "never" go to the downtown at night, whereas just 10% of respondents who feel the downtown is "very safe" reported to "never" go downtown at night. Alternatively, just over 40% of respondents who feel the downtown is "very safe" reported to go downtown at night on either a weekly or monthly basis, whereas those who feel the downtown is "very unsafe" report negligible weekly/monthly visits.

Another way to look at this data is to report on the percent of those who feel safe in the downtown by frequency of visits to the downtown, as captured in the table below. As illustrated, for those respondents who visit the downtown at any frequency (anything from a few times per year to daily), their overall feelings of safety are at 69% (a 7% increase from the overall average of 62%), and if the results are further narrowed to those who report to frequent the downtown on a daily, weekly or monthly basis (excluding those who never visit the downtown or who visit a few times per year), feelings of safety jump another 8%, with 77% reporting to feel safe. Alternatively, for the 69 respondents who reported to never visit the downtown, just 33% reported feeling safe in the downtown at night.

Figure 18: Percentage of respondents who feel safe in the downtown at night: Overall and by frequency of visits to the downtown
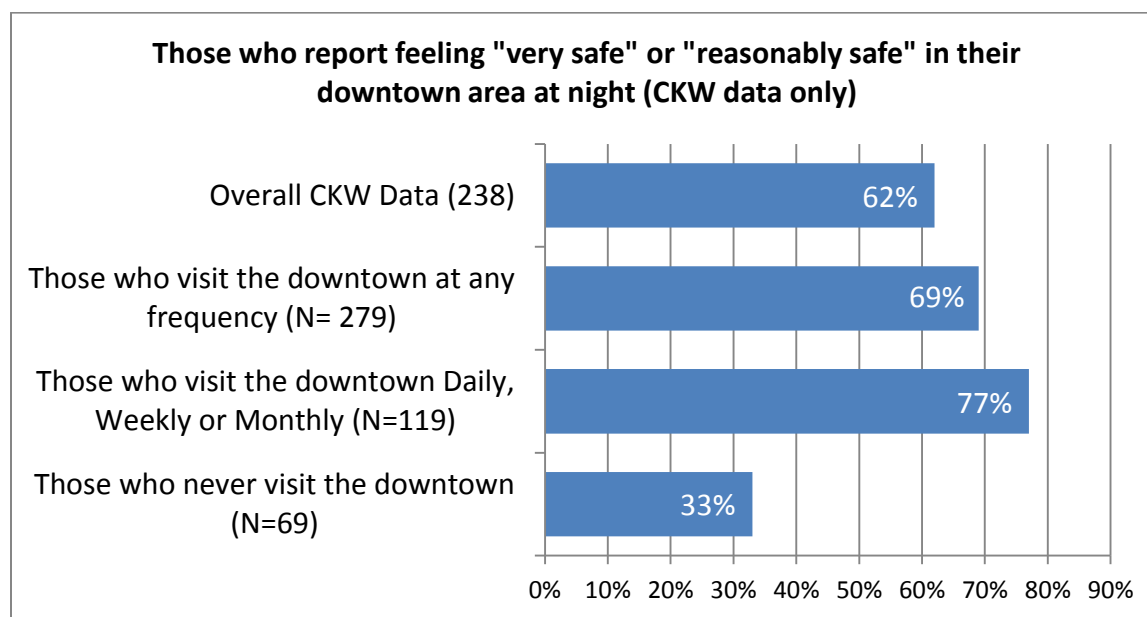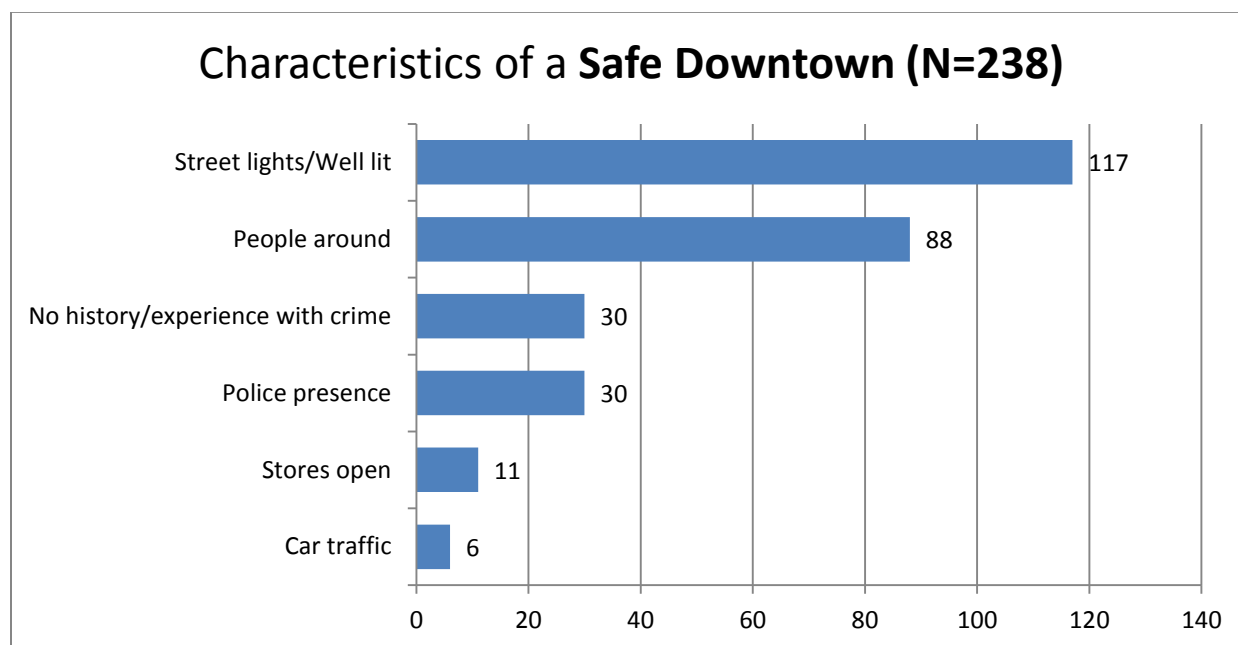
Open-Ended questions about safety in the downtown

Depending on how people responded to the question about safety in the downtown area at night, respondents were then asked to elaborate on the reasoning behind what it is that makes them feel either "safe" or "unsafe." If respondents chose either "very safe" or "somewhat safe," they were led to the open-ended question "What about your downtown area at night makes you feel safe?" If respondents chose either "very unsafe" or "somewhat unsafe," they were led to the open-ended question "What about your downtown area at night makes you feel unsafe?"

When asked about the characteristics that make up a **safe** downtown, the top response, with 117 people siting this, was related to lighting/street lights/the area being generally well lit. Second to that was the presence of other people around, followed by police presence and respondents having no history of or experience with crime. Themes to emerge from this question were coded into categories, and are displayed in the table below.

Because of the open-ended format of these questions, respondents may have covered more than one theme in their answer, in which case the one response provided may have been coded into two or three different themes. Thus, the total number of responses summarized in the figure here represents occurrences of each theme within the responses rather than respondent totals.

Figure 19: Characteristics of a safe downtown: Qualitative responses

Characteristics of a **Safe Downtown (N=238)**

Category	Value
Street lights/Well lit	117
People around	88
No history/experience with crime	30
Police presence	30
Stores open	11
Car traffic	6

When asked about the characteristics that make up an **unsafe** downtown, the top response was related to "shady or scary" people loitering, followed by the presence of

homeless people, people on drugs or drunk, and darkness. All themes to emerge for this question are included below.

Figure 20: Characteristics of an unsafe downtown: Qualitative responses

Characteristics of an **Unsafe Downtown (N=119)**

Characteristic	Count
Shady/scary people loitering	42
Homeless people	21
People on drugs or drunk	17
Darkness	12
Fear of crime/being robbed/assaulted	8
Lack of Police	7
Drug use	6
Poverty/unkempt/vacant buildings	6
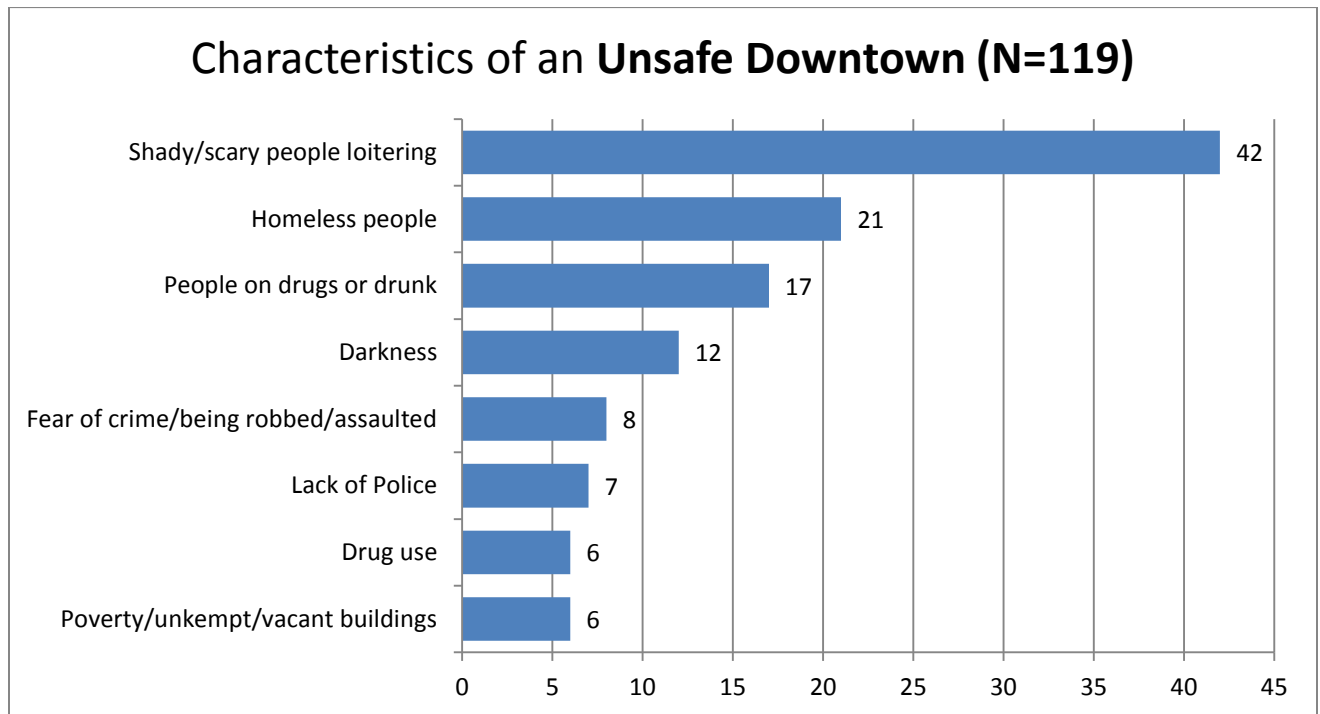
Smart on Crime

When asked the question "In your own words, what does being 'smart on crime' mean?" respondents provided answers in an open-ended format and those answers were then coded into categories based on emergent themes. The most prominent themes are summarized in the figure below. As illustrated, the most frequently cited definition for 'smart on crime' is being vigilant/aware of either surroundings or people.

In your own words, what does being **"smart on crime"** mean? (=356)

Category	Percent
Vigilance/Awareness of people surroundings	49%
Preventative measures (locking car, home, travel in groups)	12%
Not sure	9%
Focus on prevention/root causes/social determinants	9%
Avoiding dangerous/criminal areas or activities	6%
Being educated about crime	6%
Police/Police presence	5%
Rehabilitation/Community support	3%
Reporting crimes or suspicious activity	1%