

2015 Traffic Safety Survey



Part One: Quantitative Research Results

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I. INTRODUCTION AND PURPOSE OF THE STUDY

In April/May 2015, Strathcona County asked Strathcona County residents to provide feedback about aspects of traffic safety in the community. This is the second time this kind of survey has been done in the County, the first having been done in 2013. The main purposes of this research were:

- To establish resident perceptions and attitudes towards traffic safety and traffic safety initiatives;
- To identify where resident perceptions and attitudes vary from best practices in traffic safety so that educational resources can be used most effectively;
- To evaluate traffic safety initiatives in Strathcona County.

This report will provide a detailed summary of the quantitative survey results. Results from open-ended survey questions are available in a companion report: 2015 Traffic Safety Survey Part Two: Qualitative Research Results. Obtaining primary data from residents directly will provide Strathcona County departments with information, and enable County officials to make decisions that accurately reflect the perspectives and attitudes of residents. This report will provide a comprehensive review of all steps undertaken in the development and implementation of the survey, as well as a detailed summary of the results. A review of the methodology associated in the development and implementation of the survey can be found in the next section of this report.

II. METHODOLOGY

A. The Questionnaire

The questionnaire used in this study was a modified survey that was initially created in 2013 by Strathcona County's Corporate Planning and Intergovernmental Affairs and Transportation and Agriculture Services Departments. A copy of the 2015 questionnaire can be found in Appendix A.

Initially, the survey was administered using a telephone survey methodology (outlined in Section B on the next page). The same survey was then presented online, that allowed residents (and others who accessed the Internet) to complete it online.

B. Sampling Design and Data Collection Procedure – Telephone Survey

The sample frame used in this study were residents of Strathcona County who were 18 years of age or older. The sample frame incorporated a statistical proportion estimate of 0.5, which assumes that there is a homogeneous mixture of attitudes and opinions about the quality of life in Strathcona County. A 95% confidence interval was established for this study, which is standard for any public opinion study that utilizes a random sample of residents.

The sample frame consisted of 500 people living in urban¹ and rural parts of Strathcona County. The number of urban and rural residents was reflective of the proportionate distribution of residents living in Strathcona County. As such, 70% of the sample was drawn from the urban area, while 30% came from rural parts of Strathcona County. The sample frame provided overall results² accurate to within $\pm 4.32\%$, 19 times out of 20. It was also determined in advance to have a 50/50 split of male and female respondents.

A telephone survey research design was used to collect the data for this study. Respondents were contacted by telephone between April 22nd and April 27th 2015. Strathcona County derived telephone numbers from the EVS 2014 database of residential phone numbers and randomized them for this study. Trained interviewers from Banister Research & Consulting Inc. made all telephone calls under supervised conditions. Each questionnaire took an average of 10 minutes to complete. The data was analyzed by Strathcona County's Corporate Planning and Intergovernmental Affairs using SPSS for Windows.

¹ In this report, the urban component of Strathcona County is Sherwood Park.

² The $\pm 4.35\%$ is the *margin of error* associated with this study and refers to the potential percentage spread that exists within answers to particular questions. This means that an answer could be up to 4.35% higher or lower than what is reported.

C. Data Collection Procedure – Online Survey

Strathcona County also posted this survey on the Internet. The survey was posted on May 5th and stayed up until May 17^h. While it was hoped that the survey would be completed by residents who were 18 years of age or older, in actuality, there were no controls in place to prevent those under the age of 18 to do the survey. It was hoped that people doing the survey online were truthful when they filled in the age grouping category. There were some instances where people living outside of Strathcona County attempted to complete the survey; however, the online survey program terminated their participation once they indicated this fact.³ Overall, usable data was obtained from 450 people who did the survey online.

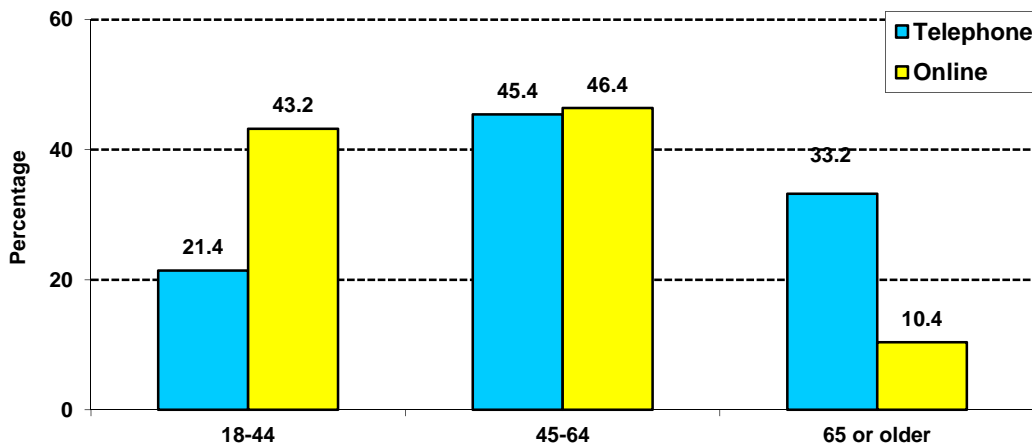
³ Overall, this process eliminated 41 people from completing the survey.

III. RESPONDENT DEMOGRAPHICS

This section of the report presents a summary of the results for residents who completed the telephone survey and those who did the survey online in 2015.

As seen in Figure 1, the majority of respondents who participated in the telephone survey are over the age of 44. Respondents who completed the survey online were more likely to be younger than 45. Both the telephone survey and the online survey had equal participation from those aged 45-64.

FIGURE 1
Age of Respondents



Overall, 31.7% of the households surveyed by telephone had children under the age of 18 living in the household. Of those who did it online, the percentage of those having children in the household increased to 39.9%. Residents who completed the survey online were also more likely to be living in urban Strathcona County. Eighty-one percent of respondents were urban, compared to 70% of respondents who were surveyed by telephone.

Almost all respondents who took part in the survey either online or via the telephone indicated that they drove a motor vehicle in Strathcona County.⁴

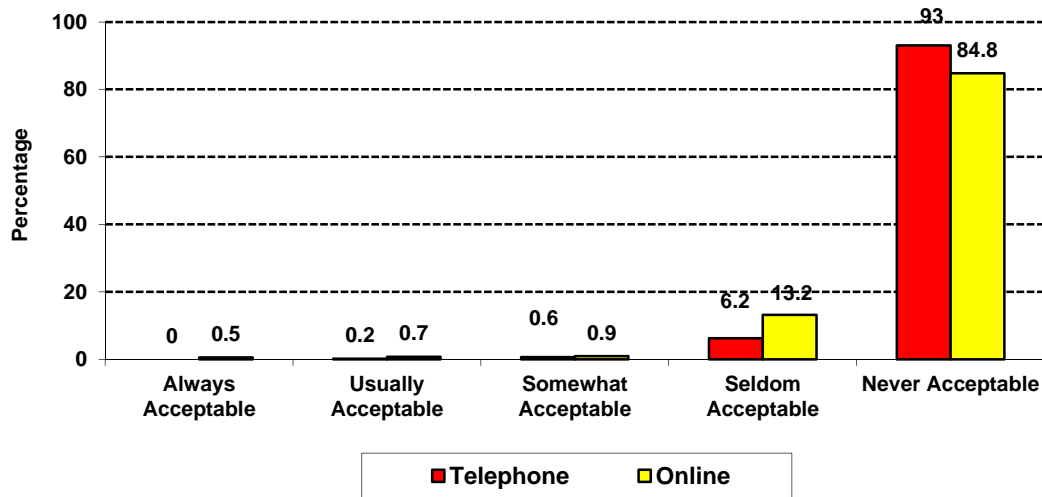
⁴ Overall, 95.4% of telephone respondents and 99.1% of online respondents drove a motor vehicle.

IV. 2015 SURVEY RESULTS

A. Perceptions about Driving Behavior

Strathcona County residents were initially asked a series of questions about driving behavior in general. Initially, respondents were asked how acceptable they thought it was to run a red light. It can be seen from Figure 2 that almost everyone felt that this was not acceptable.

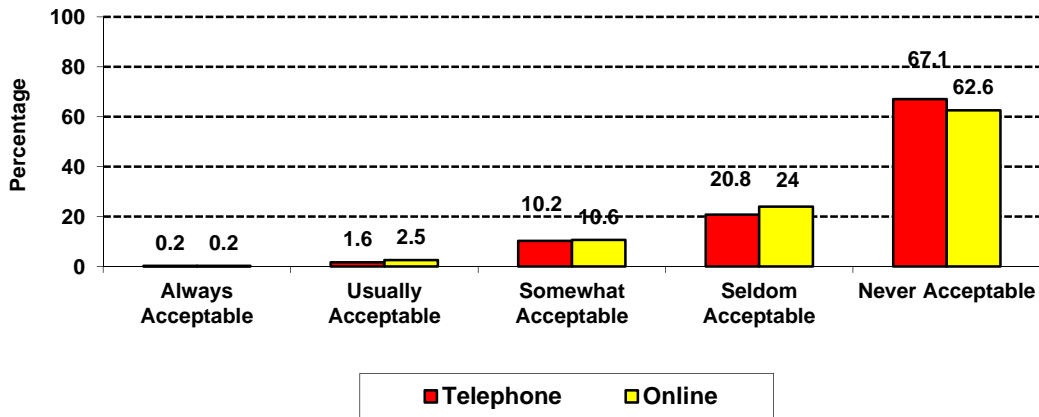
FIGURE 2
Running a Red Light



No differences were seen for this question between rural and urban residents, gender or age.

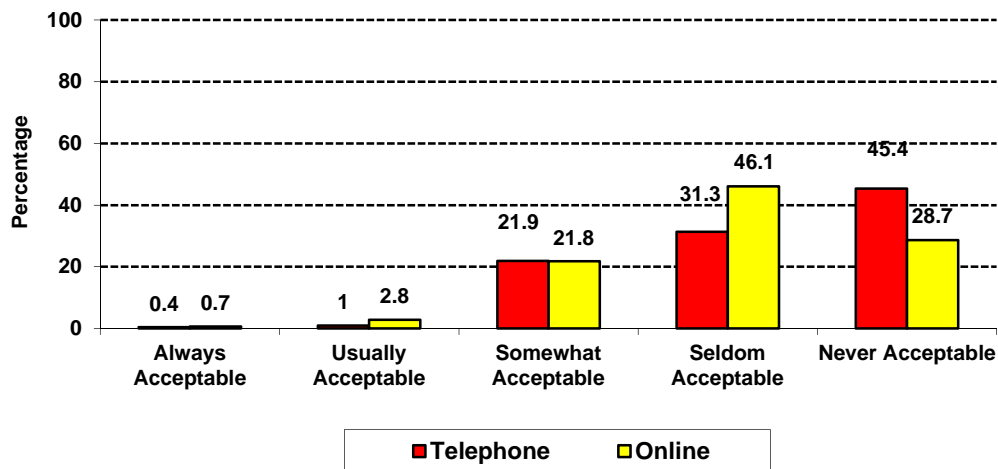
Respondents were then asked how acceptable they thought it was to roll through a stop sign. It can be seen from Figure 3 that the majority felt that this was not acceptable, though this was slightly higher among the telephone respondents than the online ones.

FIGURE 3
Rolling through a Stop Sign



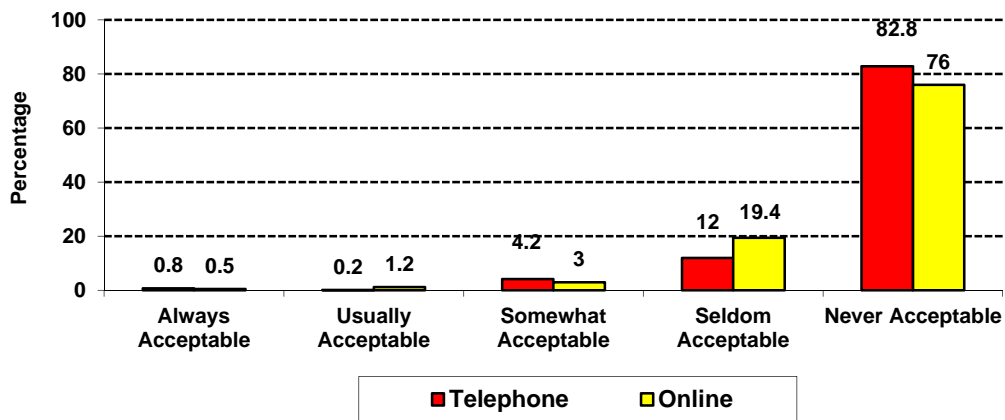
With respect to how acceptable they thought it was to speed up to get through a yellow light, it can be seen from Figure 4 that just over half of the telephone respondents felt that this was not acceptable. Considerably less of the online respondents felt this way, however. A further investigation of the online respondents showed that age was a factor here, as considerably more online residents under the age of 45 thought this was somewhat acceptable compared to those online respondents aged 45 or older.

FIGURE 4
Speeding up to get through a Yellow Light



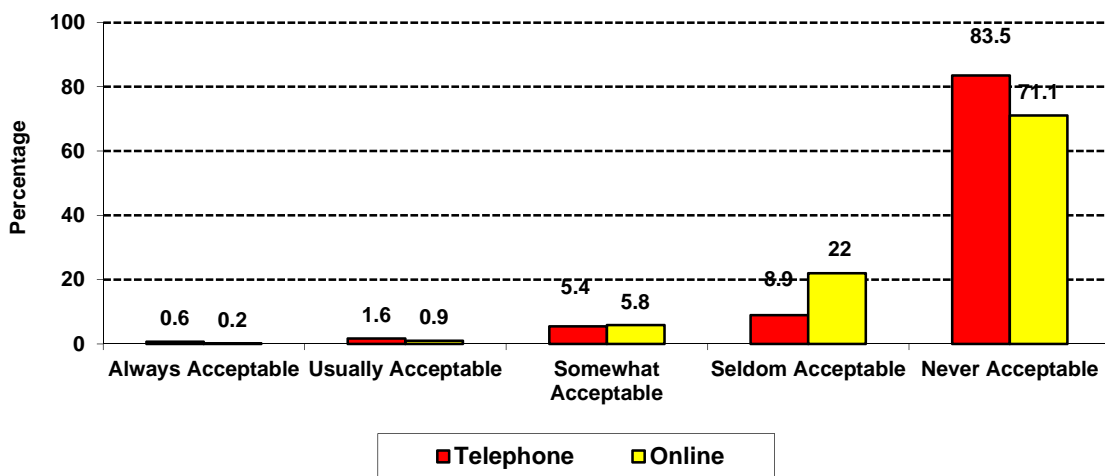
With respect to how acceptable they thought it was to drive over the speed limit on a residential street, it can be seen from Figure 5 that most people felt that this was not acceptable.

FIGURE 5
Driving over the Speed Limit on Residential Streets



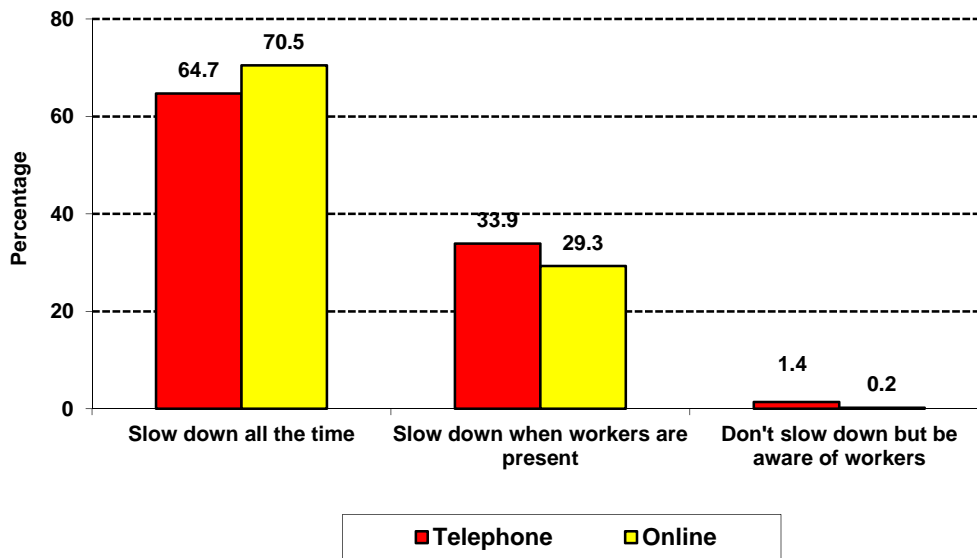
Respondents were also asked to indicate how acceptable they thought it was for a driver to talk on a cell phone while driving. It can be seen from Figure 6 that the majority felt that this was not acceptable, though this figure was higher for the telephone respondents than for online respondents. Adding the *seldom* and *never acceptable* figures together, however, yields similar perceptions for both online and phone respondents

FIGURE 6
Talking on a Cell Phone while Driving



With respect to construction zones, it can be seen in Figure 7 that the majority of residents felt that one should slow down to the posted speed limit any time (night or day); however, a sizable percentage thought this should only be observed if workers are present. Virtually no one thought that one should not reduce one's speed in a construction zone (even when one was cognizant of construction workers).

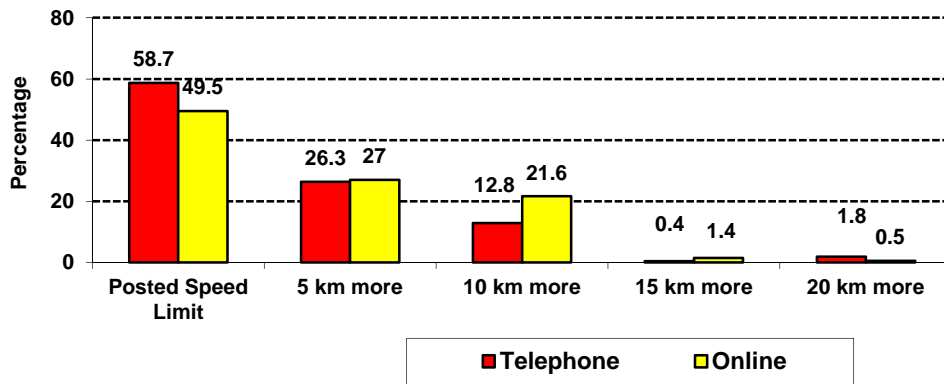
FIGURE 7
Attitudes toward Construction Zones



B. Perceptions about Personal Driving Behavior

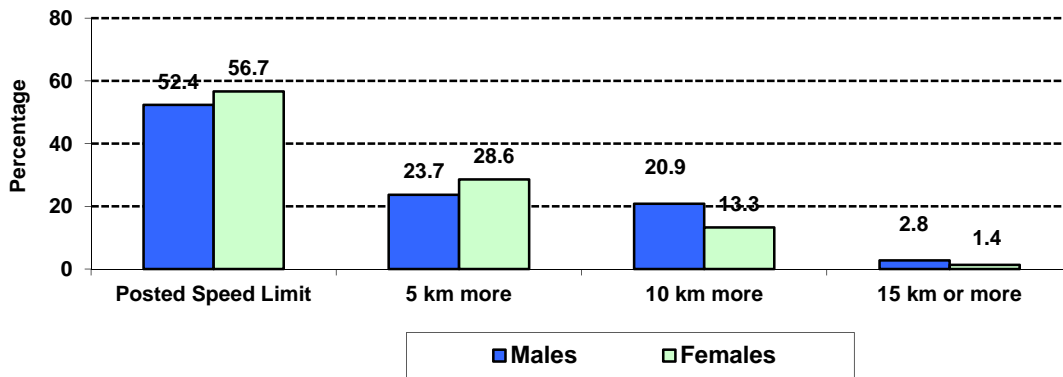
Strathcona County residents were then asked some questions about their own driving habits. No differences were seen in this section between rural and urban residents. When asked about driving at (or over) the posted speed limit on a main road in the County (such as Baseline Road or a rural grid road), it can be seen in Figure 8 that the majority of telephone residents (and to a lesser extent, online respondents) felt it was unsafe to drive over the posted speed limit, but that maybe 5-10 km over the limit would be okay. A further investigation of the online respondents showed that age was a factor here, as considerably more online residents under the age of 45 thought it would be acceptable to drive 5-10 km over the limit compared to online respondents aged 45 or older.

FIGURE 8
Safe Driving Speeds on a Main Road



In terms of gender differences, it can be seen in Figure 9 that a slightly higher percentage of females felt it was unsafe to drive over the posted speed limit compared to males. More males felt it was okay to drive 10 km or more over the limit compared to females.⁵

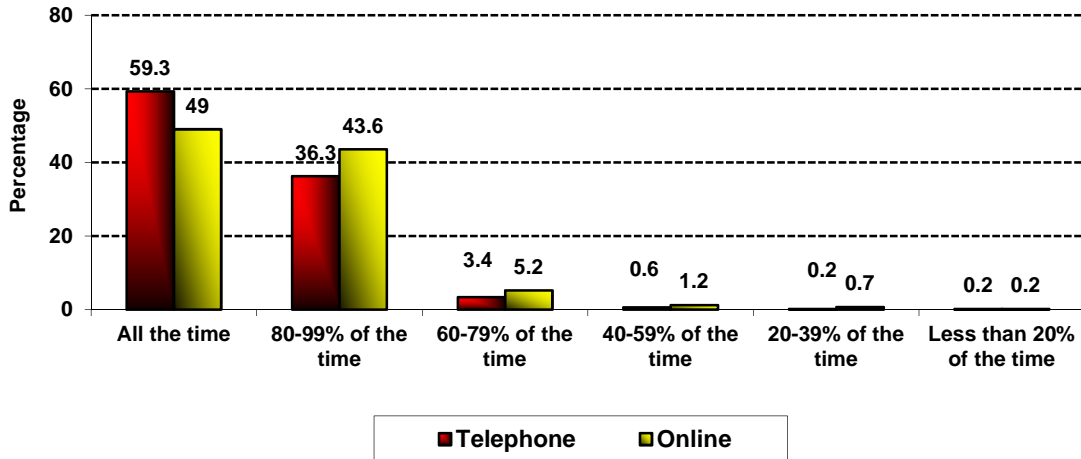
FIGURE 9
Driving over the Speed Limit on a Main Road: Gender differences



⁵ These are combined results from the telephone and online survey.

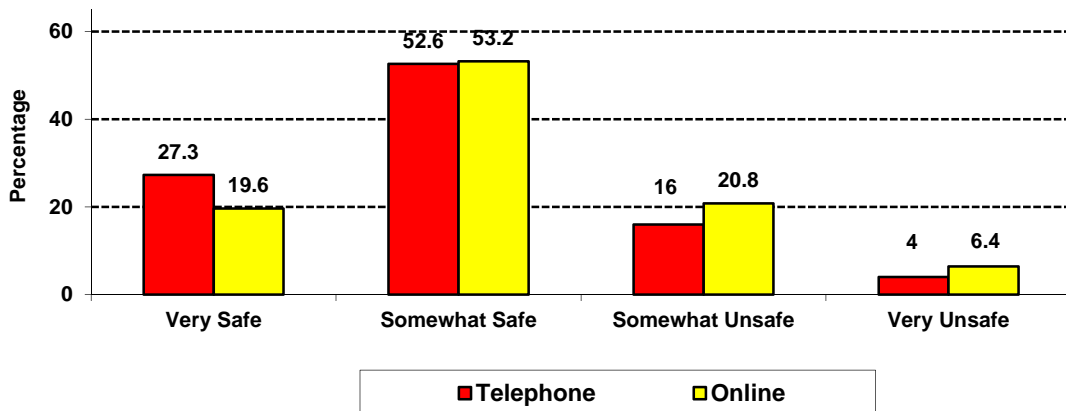
Figure 10 depicts the patterns indicated by residents with respect to coming to a complete stop at stop signs. It can be seen that more telephone respondents report coming to a complete stop all of the time compared to online respondents. However, factoring in those who will do it 80-99% of the time balances out this discrepancy.

FIGURE 10
Coming to a Complete Stop at a Stop Sign



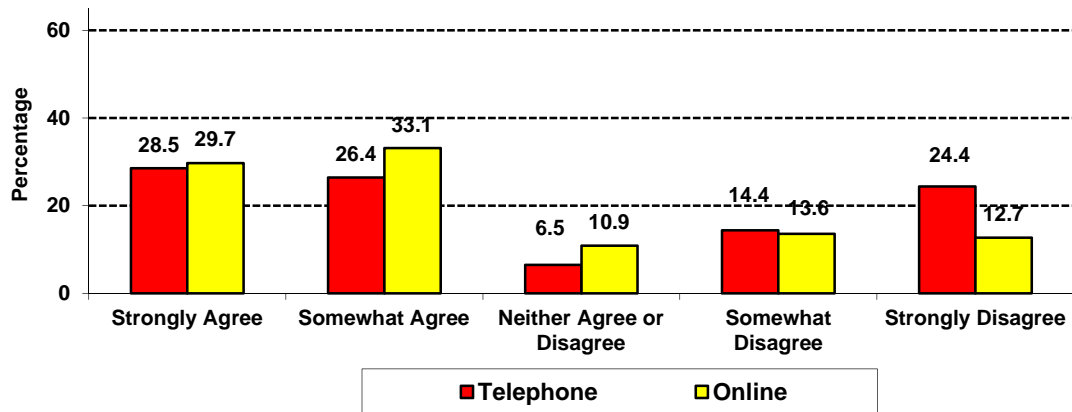
When asked to rate the state of traffic safety in Strathcona County, the majority of residents (both telephone and online) feel somewhat safe, suggesting that there is still room for improvement.

FIGURE 11
Rating Overall Traffic Safety in Strathcona County



With respect to traffic calming methods in Strathcona County, the majority of residents (both telephone and online) support traffic calming, though the telephone survey found a higher percentage of residents disagreeing with traffic calming as compared to those who completed the survey online.

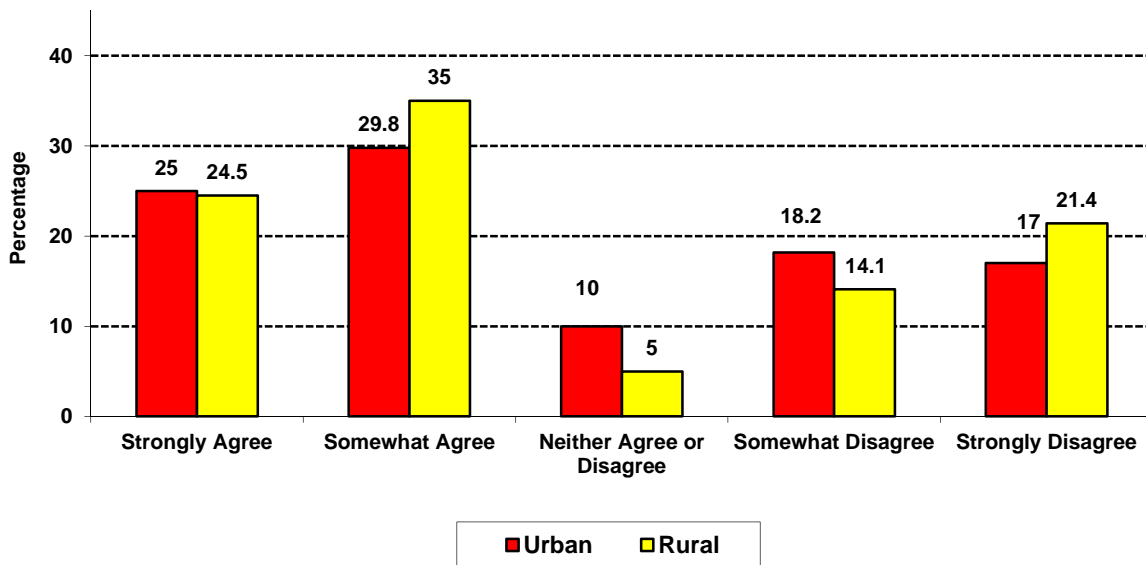
FIGURE 12
Agreement with the use of traffic calming in Strathcona County



C. Attitudes toward Traffic Safety in Strathcona County – Urban/Rural Comparisons

Residents were then asked to rate a series of statements about traffic safety on the basis of how much they agreed or disagreed with each statement. A comparison of the responses, broken down by urban or rural residency, is shown in Figures 13 through 22.⁶ In Figure 13, it can be seen that a slightly higher percentage of rural residents agree with this more than urban residents, but there are many who disagree with this approach.

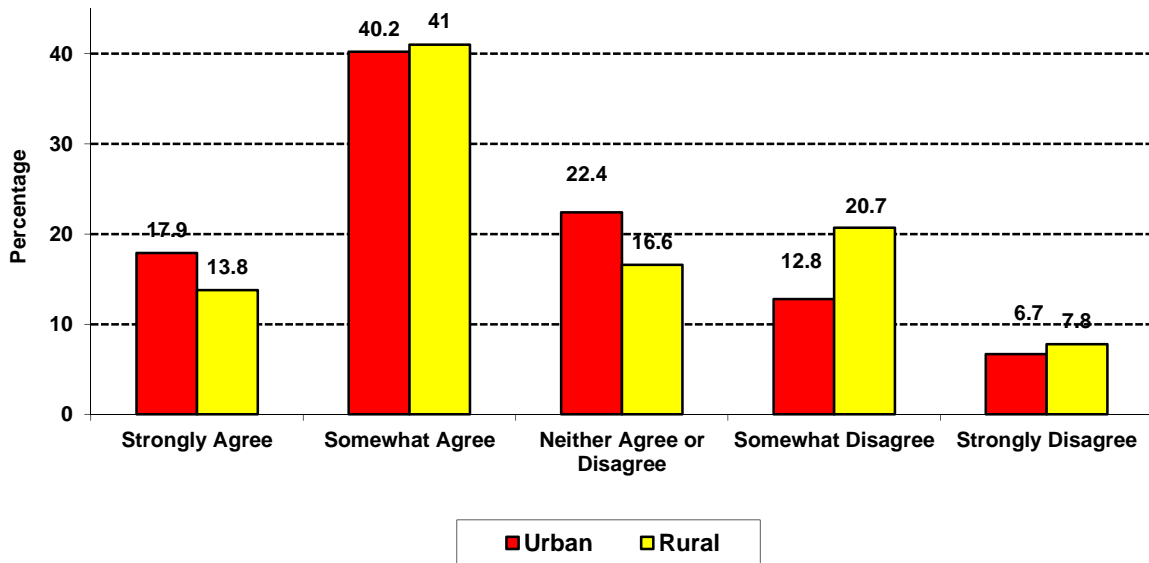
FIGURE 13
Red light cameras make intersections safer



⁶ The data in these figures is drawn from a combination of the telephone survey and the online survey.

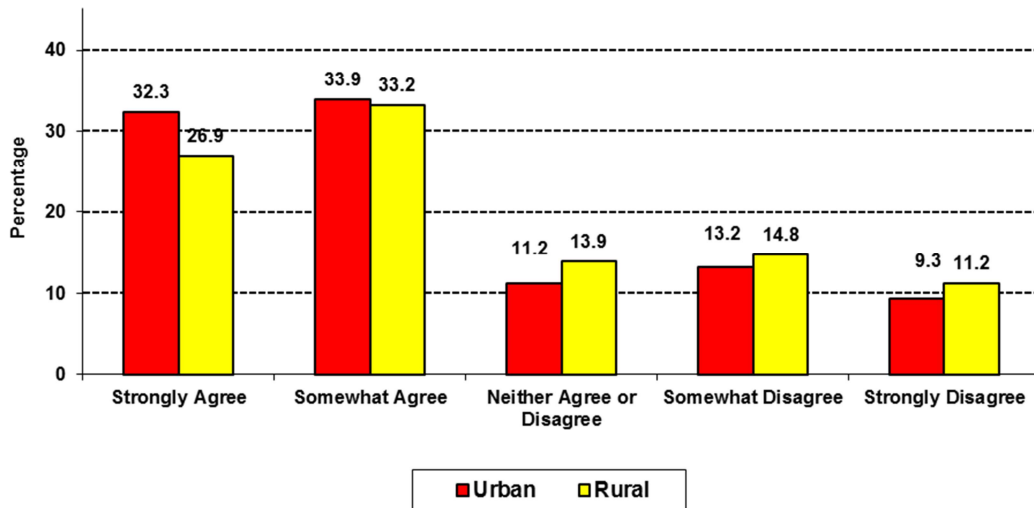
In Figure 14, the majority of residents, regardless of where they lived, agreed that the County was engaging its residents in addressing traffic safety.

FIGURE 14
Strathcona County engages its residents in addressing traffic safety



In Figure 15, it can be seen that neighbourhood traffic safety is a concern for many County residents, with urban residents showing more concern than rural.

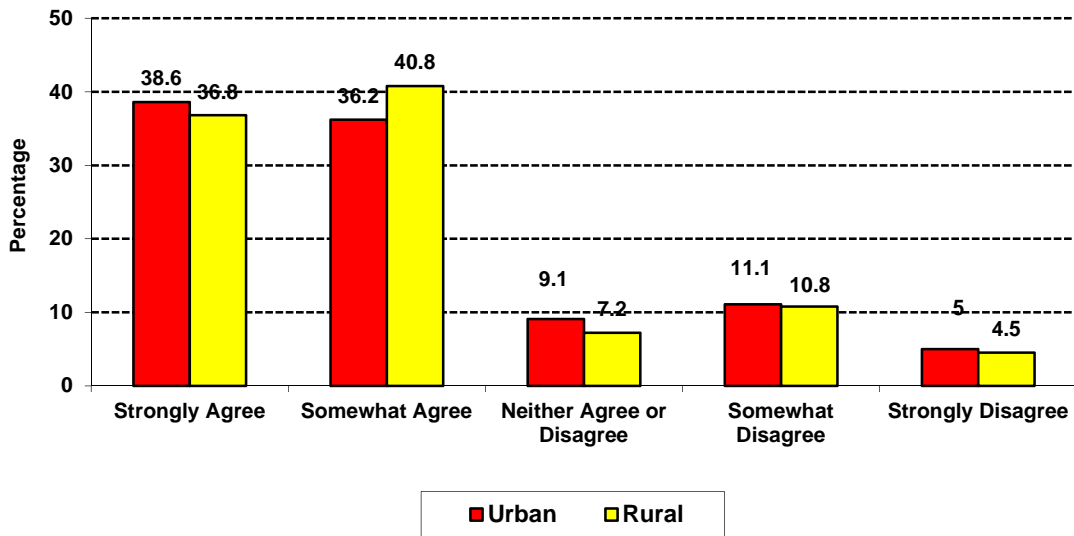
FIGURE 15
Traffic safety is a concern in my neighbourhood



In

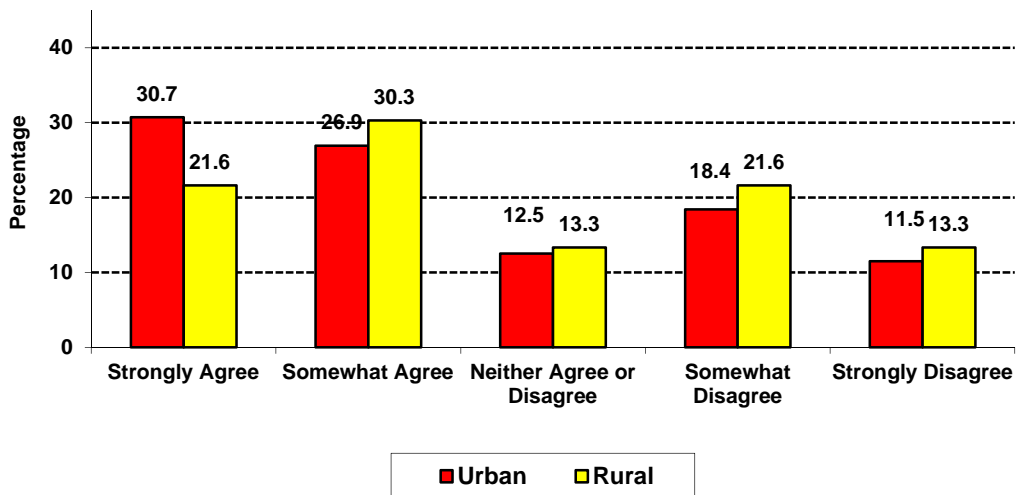
Figure 16, the majority of residents, regardless of where they lived, agreed that traffic enforcement made Strathcona County’s roads safer.

FIGURE 16
Traffic enforcement in Strathcona County makes our roads safer



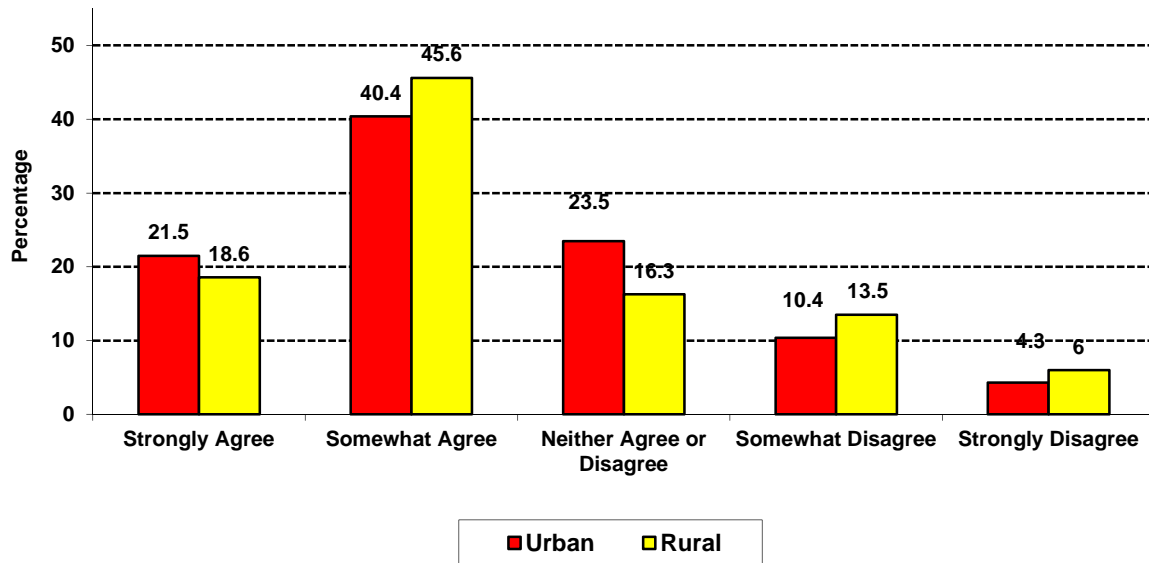
In Figure 17, it can be seen that residents, regardless of where they lived, were somewhat divided as to whether or not there was enough traffic enforcement in Strathcona County.

FIGURE 17
There is not enough traffic enforcement in Strathcona County



In Figure 18, the majority of residents, regardless of where they lived, agreed that Strathcona County was always working to improve road safety.

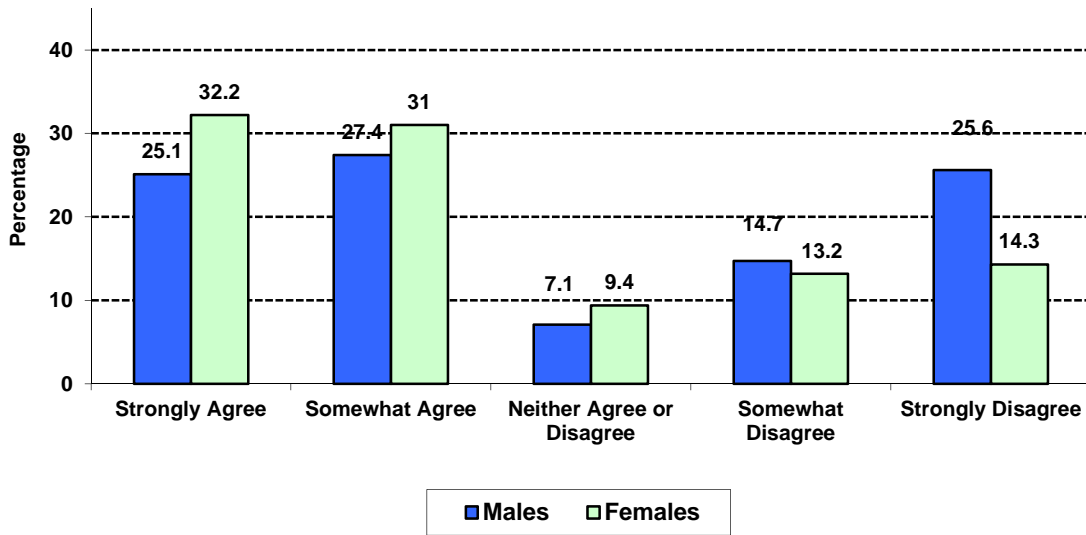
FIGURE 18
Strathcona County is always working to improve road safety



Attitudes toward Traffic Safety in Strathcona County – Specific Gender Comparisons

For the most part, gender was not a factor contributing to attitudes toward traffic safety. However, gender differences were seen with respect to the use of traffic calming in Strathcona County, where females were more in favor of traffic calming measures than males (Figures 19).⁷

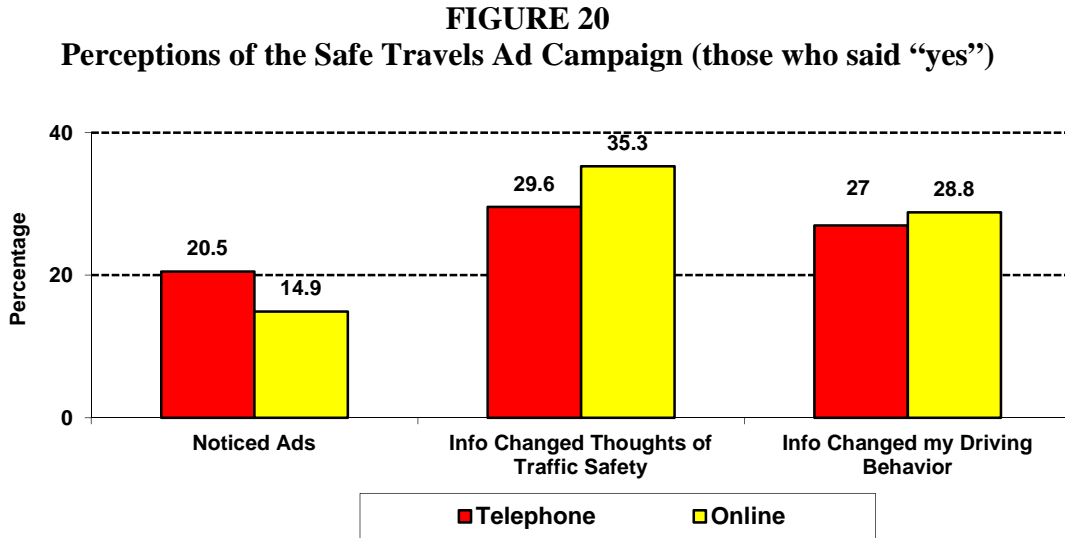
FIGURE 19
I support the use of traffic calming in Strathcona County – Gender Comparisons



⁷ A *t-test* measurement for mean score differences ($t = -4.17, 883 \text{ df}, p = .000$)

D. The *Safe Travels* Ad Campaign

Residents were asked a series of questions about the *Safe Travels* advertising campaign. It can be seen in Figure 20 that 20% of telephone respondents and 15% of online respondents were aware of the advertisements.



Of those who were aware of the ads, approximately one third of the respondents indicated that the info changed the way they thought about traffic safety. When these residents were asked how it had changed the way they thought about traffic safety, most answered quite generally that it had increased their awareness.

Just under 30% of residents who had noticed the ads agreed that the information in the ads changed their driving behavior. When asked in what way the information had changed their behaviour, many again spoke of having an increased awareness generally. About one third of the respondents described a specific driving behaviour, such as “I slowed down” or “stopping at stop signs and not speeding up on yellow lights”.

V. COMPARATIVE ANALYSIS - TELEPHONE SURVEYS (2013 & 2015)

This section of the report compares the results of the telephone surveys between 2013 and 2015. Online results have not been included in this analysis. In general, responses did not show a significant amount of change between 2013 and 2015. For the purposes of comparison, changes will be highlighted to show differences in opinion between the years, but statistical tests were not run.

A. Perceptions about Driving Behavior

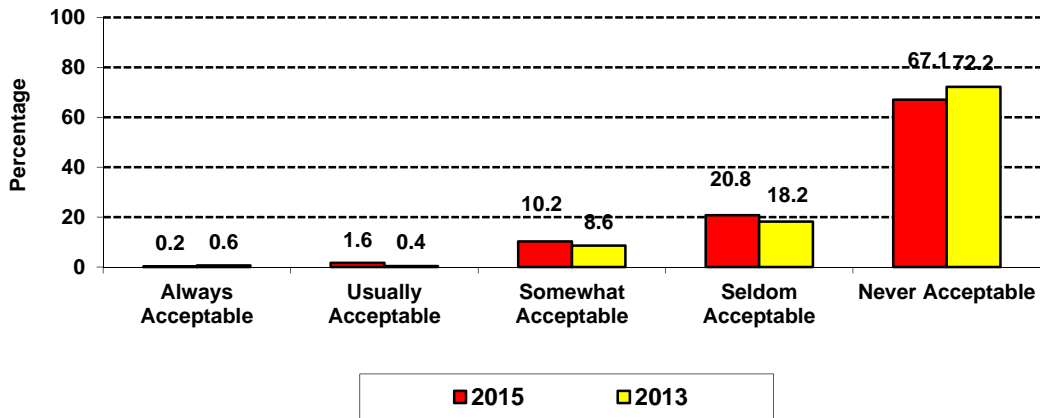
Initially, respondents were asked how acceptable they thought it was to run a red light. It can be seen from Figure 21 that almost everyone felt that this was not acceptable, and this perception has not changed between 2013 and 2015.

FIGURE 21
Running a Red Light



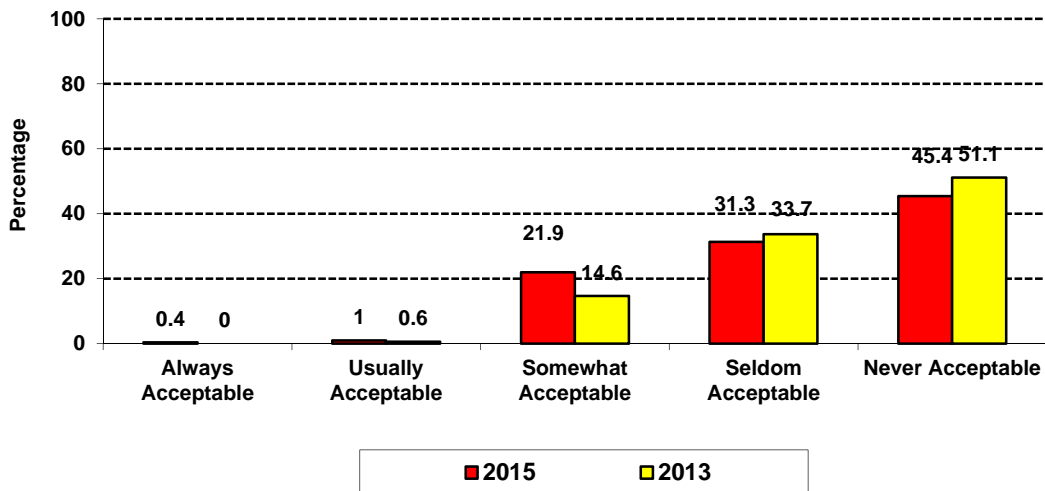
Respondents were then asked how acceptable they thought it was to roll through a stop sign. It can be seen from Figure 22 that the majority felt in both years that this was not acceptable, though this was higher among the telephone respondents in 2013 than 2015.

FIGURE 22
Rolling through a Stop Sign



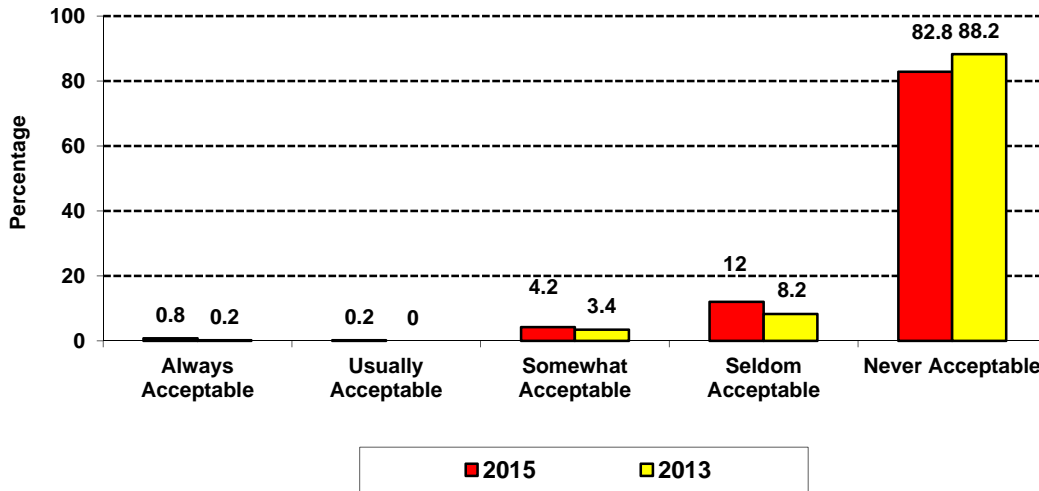
With respect to how acceptable residents thought it was to speed up to get through a yellow light, it can be seen from Figure 23 that there was an increase in the acceptability of this action between 2013 and 2015.

FIGURE 23
Speeding up to get through a Yellow Light



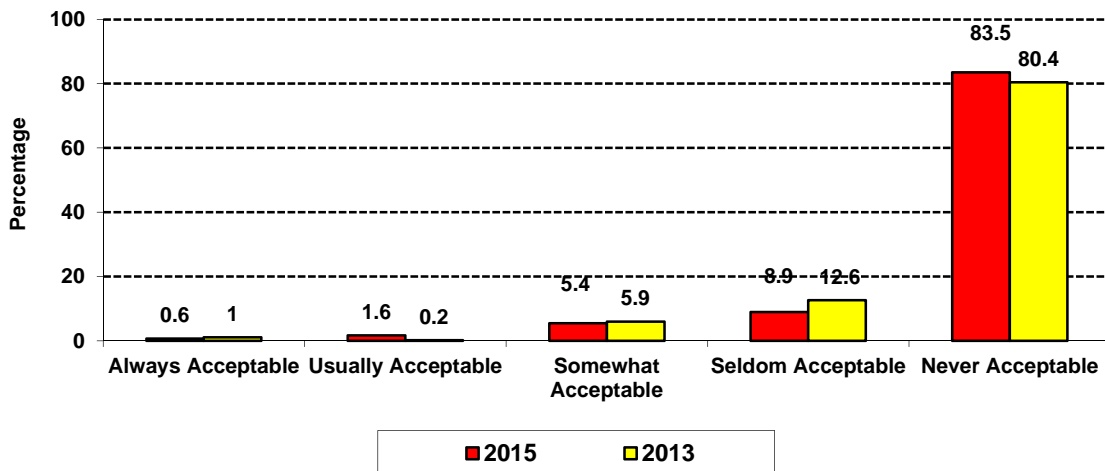
With respect to how acceptable they thought it was to drive over the speed limit on a residential street, it can be seen from Figure 24 that most people felt that this was not acceptable.

FIGURE 24
Driving over the Speed Limit on Residential Streets



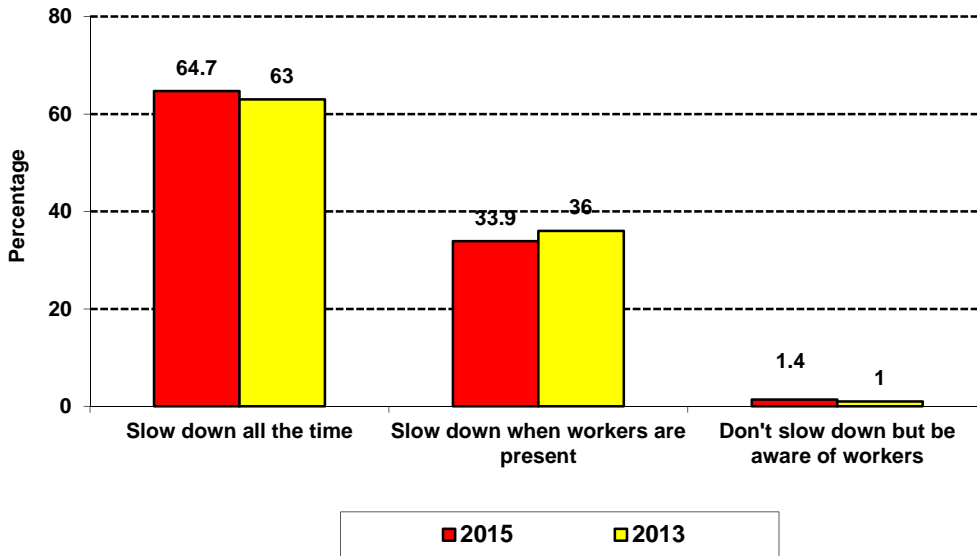
Respondents were also asked to indicate how acceptable they thought it was for a driver to talk on a cell phone while driving. It can be seen from Figure 25 that the majority felt that this was not acceptable, and this now higher in 2015 than it was in 2013.

FIGURE 25
Talking on a Cell Phone while Driving



With respect to construction zones, it can be seen in Figure 26 there is little change in resident understanding of construction zone rules between 2013 and 2015.

FIGURE 26
Attitudes toward Construction Zones



B. Perceptions about Personal Driving Behavior

It can be seen from Figure 27 that there is a slight shift towards an increased perception of safety at higher speeds on main roads in the County.

FIGURE 27
Safe Driving Speeds on a Main Road

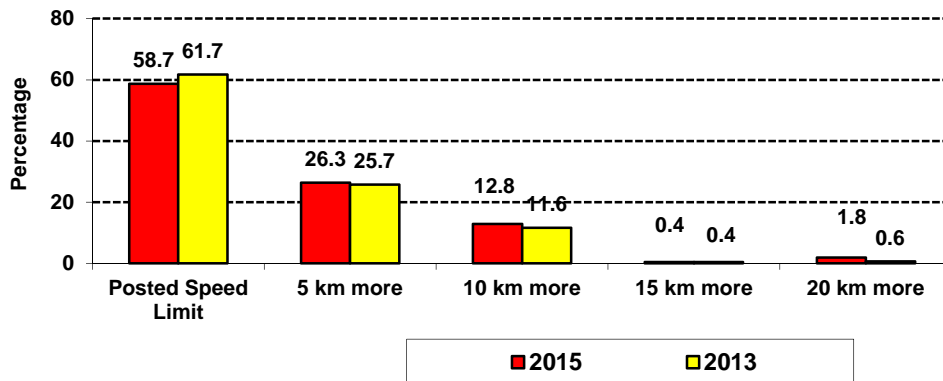
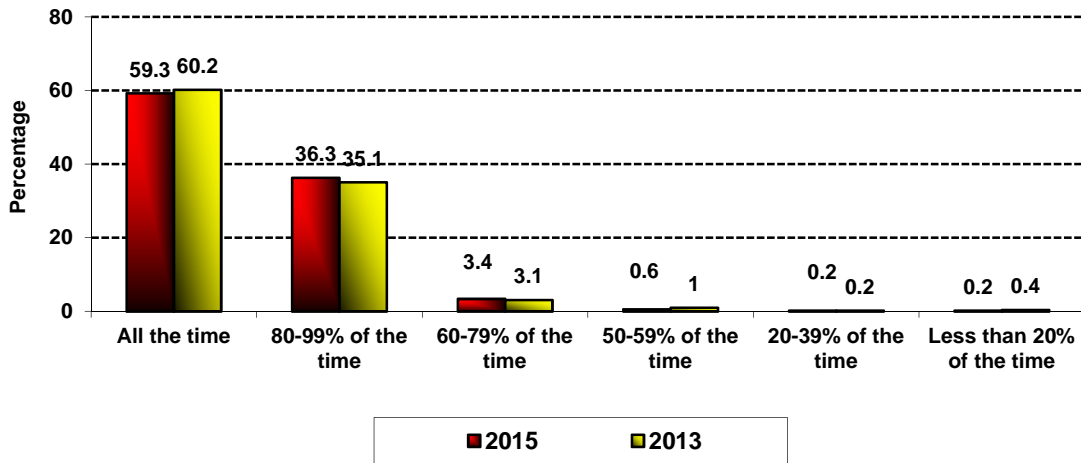


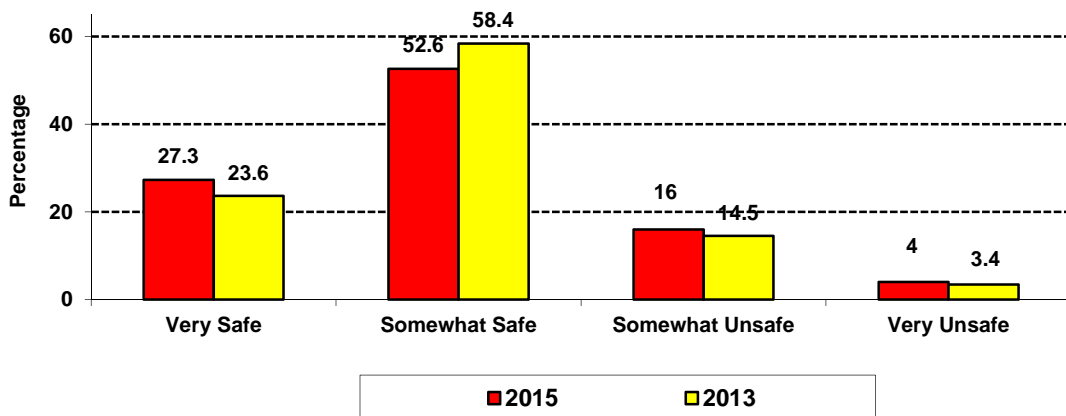
Figure 28 depicts the patterns indicated by residents with respect to coming to a complete stop at stop signs. It can be seen that responses in 2015 were almost identical to those in 2013.

FIGURE 28
Coming to a Complete Stop at a Stop Sign



When asked to rate the state of traffic safety in Strathcona County, the changes between 2013 and 2015 are minimal (Figure 29).

FIGURE 29
Rating Overall Traffic Safety in Strathcona County

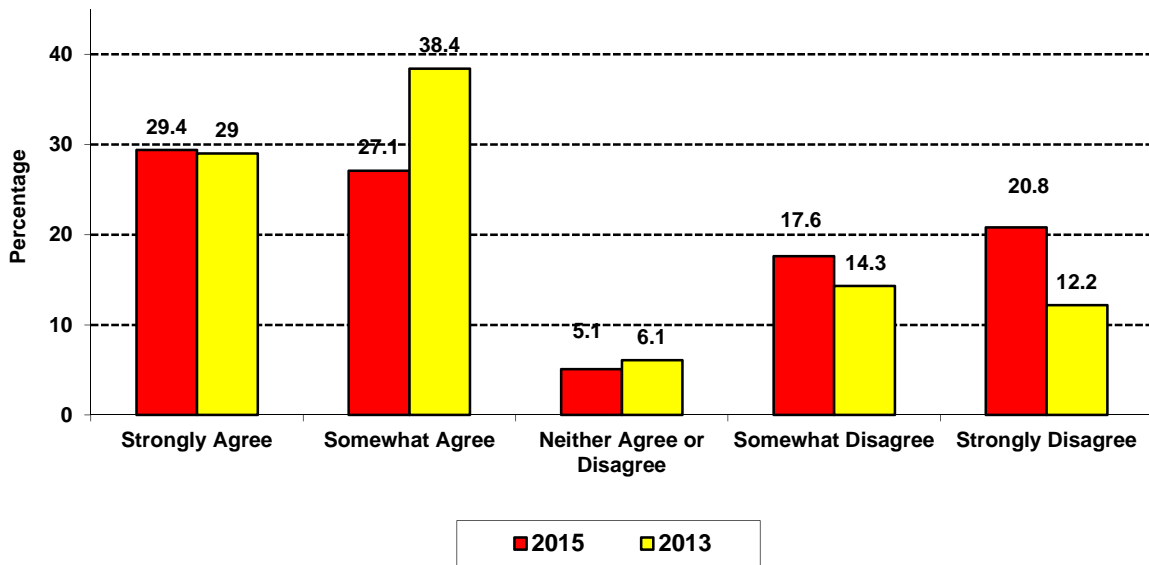


C. Attitudes toward Traffic Safety in Strathcona County

Using the overall results from the telephone data from both the 2013 and 2015, a comparison pertaining to trending attitudes toward aspects of traffic safety is shown in Figures 30 through 36.

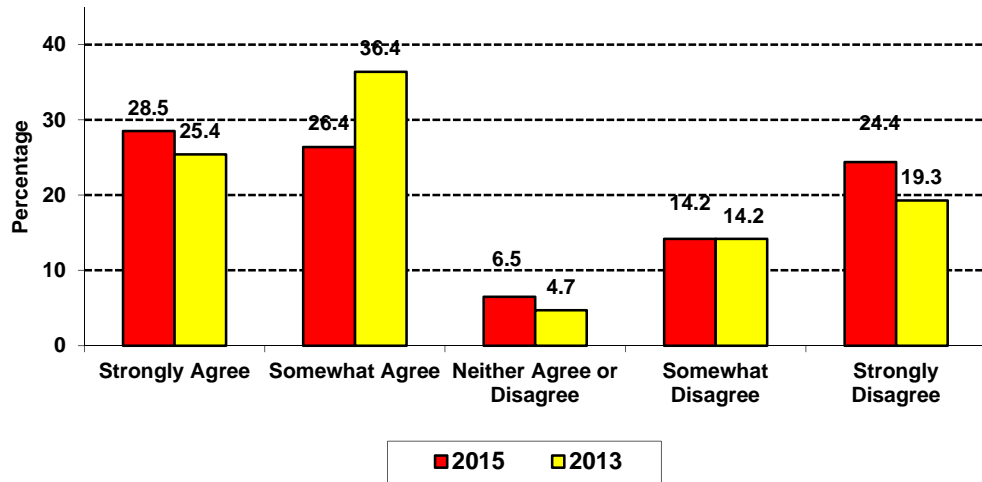
With respect to red light cameras, there was a notable shift towards disagreement that the cameras improve intersection safety.

FIGURE 30
Red light cameras make intersections safer



In Figure 31, it can be seen that there was a minor shift toward disagreement in 2013 with respect to supporting the use of traffic calming in Strathcona County.

FIGURE 31
I support the use of traffic calming in Strathcona County



In Figure 32, there was a slight shift in 2015 toward greater agreement that the County is engaging its residents in addressing traffic safety. However, there was not much change toward the attitudes associated with traffic safety being a concern in the neighborhood between 2013 and 2015 (Figure 33).

FIGURE 32
Strathcona County engages its residents in addressing traffic safety

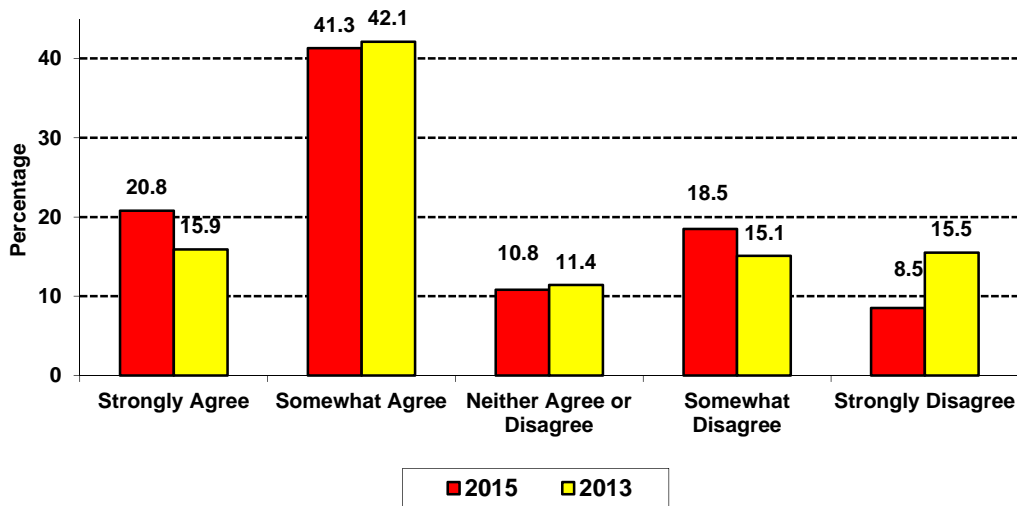
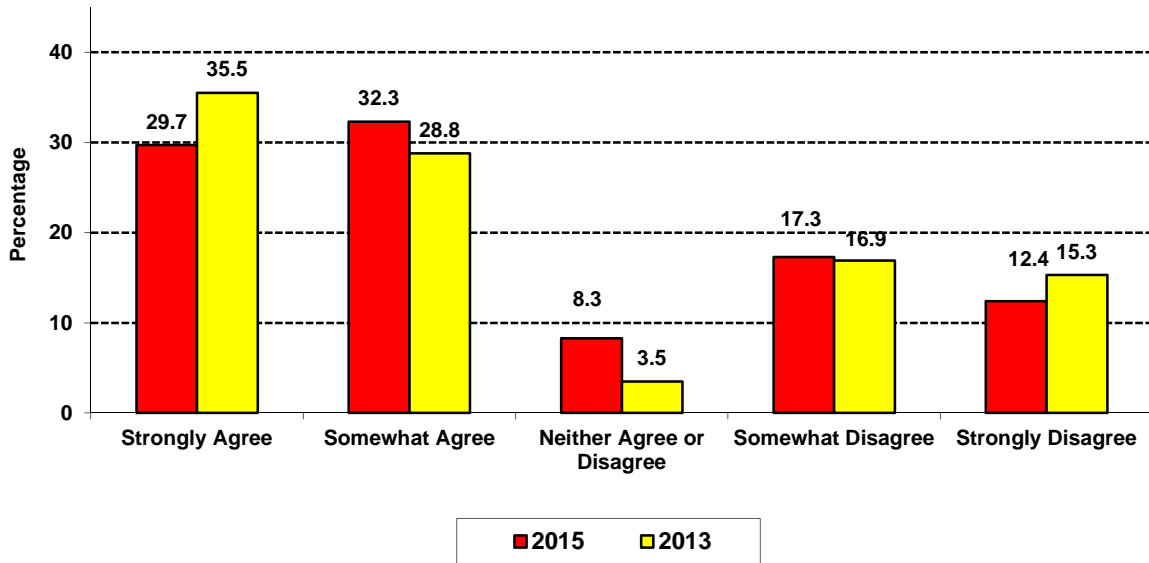
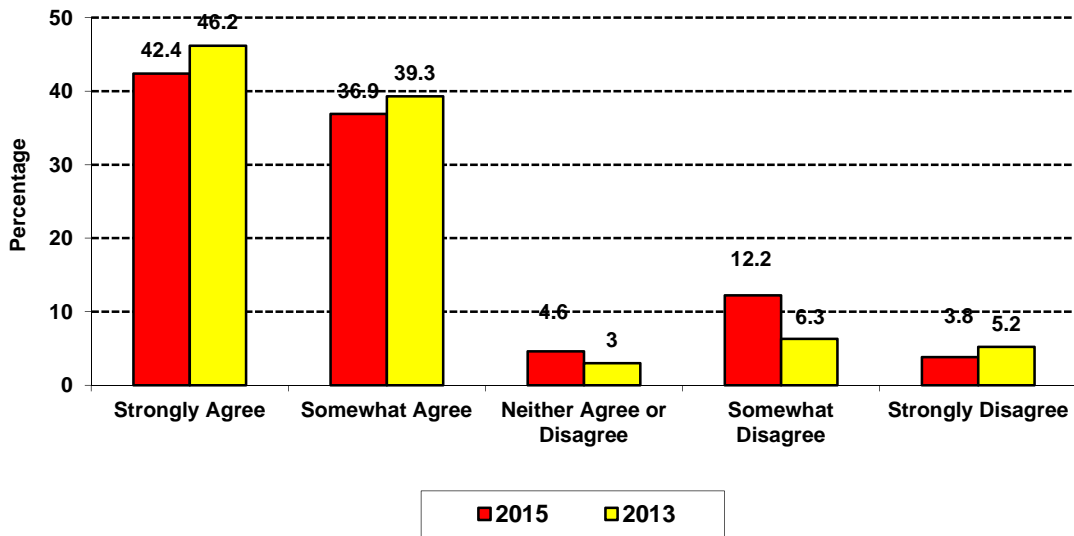


FIGURE 33
Traffic safety is a concern in my neighbourhood



In Figure 34, there was a slight increase in disagreement that traffic enforcement makes the roads safer between 2013 and 2015.

FIGURE 34
Traffic enforcement in Strathcona County makes our roads safer



There was not much change toward the attitudes associated with traffic enforcement (Figure 35) nor for the County working to improve road safety (Figure 36) between 2013 and 2015.

FIGURE 35
There is not enough traffic enforcement in Strathcona County

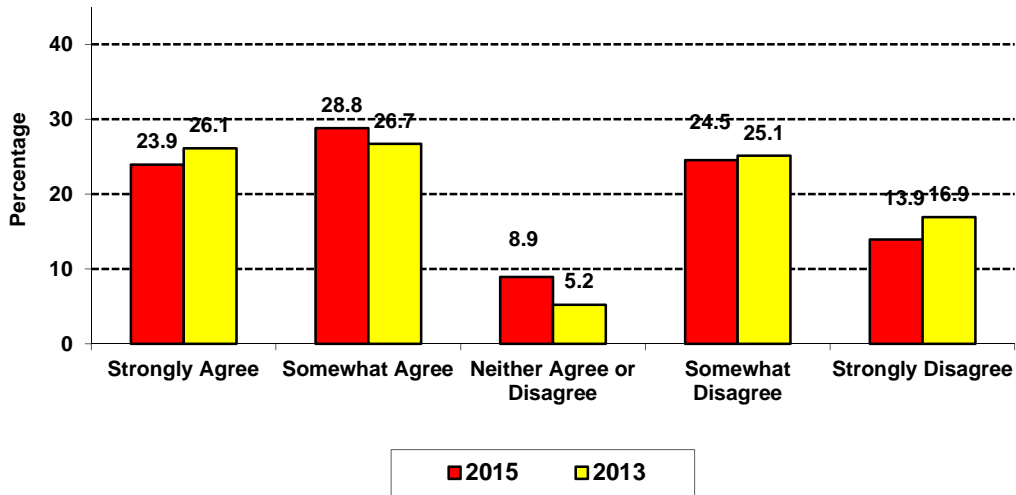
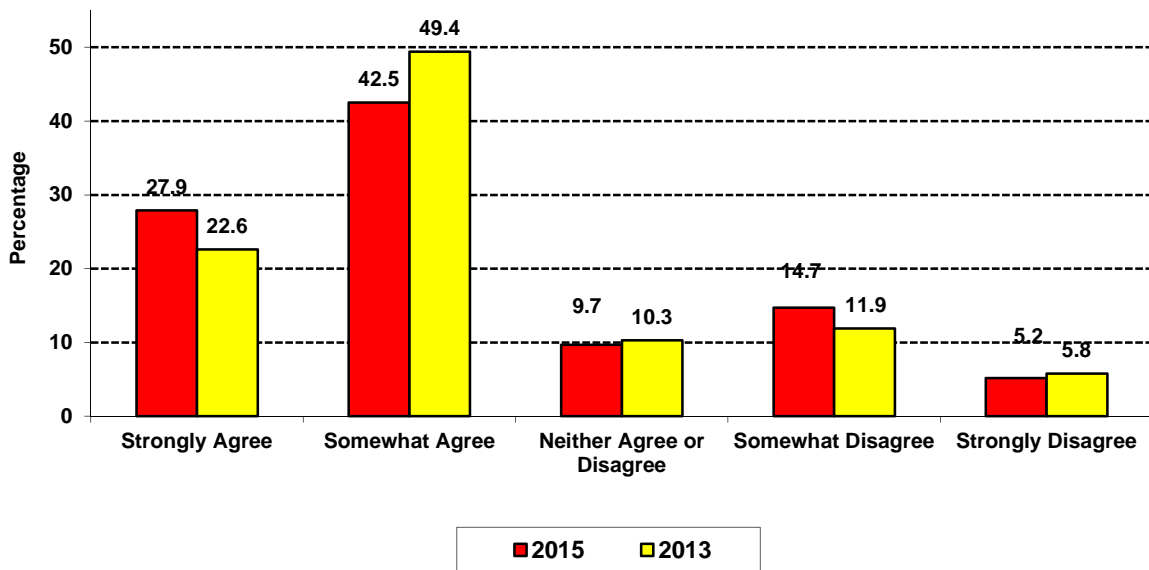


FIGURE 36
Strathcona County is always working to improve road safety



APPENDIX A: THE QUESTIONNAIRE

Strathcona County Traffic Safety Questionnaire

Hello. My name is _____ of *Banister Research*. We are doing a traffic safety survey of adult residents on behalf of Strathcona County to find out how residents feel about traffic safety in their community. Can you spare me about **10 minutes** of your time right now to take part in this important survey?

(Use if Respondent says “No”)

IF NO: When could I call you back to answer this survey?...Note time for follow-up
Is there someone else in your household who could answer this survey?

ONCE AN ADULT MEMBER OF THE HOUSEHOLD IS ON THE LINE, CONTINUE.

The survey will ask for your opinions about traffic safety in Strathcona County. The County will use these results to evaluate its services, and help make the best use of its resources. Can we continue?

Great, but before we begin I need to know:

A. Do you live:

1. In Sherwood Park → *Ask:* In which neighbourhood do you reside?

2. or elsewhere in Strathcona County? → *Ask:* In which part of the County do you reside?

If not 1 or 2 – Thank and terminate

First, I'd like to ask you some general questions about driving behaviour. To begin with:

1. How acceptable do you think it is to run a red light?
 1. Never Acceptable
 2. Seldom Acceptable
 3. Somewhat Acceptable
 4. Usually Acceptable, or
 5. Always Acceptable

9. Don't know

2. How acceptable do you think it is to roll through a stop sign, where I mean slow down but not come to a complete stop?
 1. Never Acceptable
 2. Seldom Acceptable
 3. Somewhat Acceptable
 4. Usually Acceptable, or
 5. Always Acceptable

 - 9. Don't know
-
3. How acceptable do you think it is for a driver to talk on a cell phone while driving?
 1. Never Acceptable
 2. Seldom Acceptable
 3. Somewhat Acceptable
 4. Usually Acceptable, or
 5. Always Acceptable

 - 9. Don't know
-
4. How acceptable do you think it is to speed up to get through a yellow light?
 1. Never Acceptable
 2. Seldom Acceptable
 3. Somewhat Acceptable
 4. Usually Acceptable, or
 5. Always Acceptable

 - 9. Don't know
-
5. How acceptable do you think it is to drive over the speed limit on a residential street?
 1. Never Acceptable
 2. Seldom Acceptable
 3. Somewhat Acceptable
 4. Usually Acceptable, or
 5. Always Acceptable

 - 9. Don't know

6. Which of the following best describes what someone should do when driving in a construction zone?
1. Slow down to the posted speed limit any time day or night
 2. Slow down to the posted speed limit only if workers are present
 3. Maintain your current speed but be aware of construction workers
-
9. Don't know
7. Under ideal road conditions, how fast do you think it's safe to drive on a main road in the County, such as Baseline Road or a rural grid road? Would you say:
1. The posted speed limit
 2. 5 km/h over the speed limit
 3. 10 km/h over the speed limit
 4. 15 km/h over the speed limit
 5. 20 km/h or more over the speed limit
-
9. Don't know
8. Do you drive a motor vehicle in Strathcona County?
1. Yes
 2. No (*Skip to Q-10*)
9. How often do you come to a complete stop at stop signs?
1. All the time
 2. 80-99% of the time
 3. 60-79% of the time
 4. 40-59% of the time
 5. 20-39% of the time, or
 6. Less than 20% of the time
-
9. Don't know
10. Overall, how would you rate the state of traffic safety in Strathcona County?
1. Very Safe
 2. Somewhat Safe
 3. Somewhat Unsafe, or
 4. Very Unsafe
-
9. Don't know

11. What are the top two actions Strathcona County could take to improve traffic safety in our community?
-

12. To what extent do you agree or disagree that traffic safety is a concern in my neighbourhood? Do you:

1. Strongly agree
 2. Somewhat agree
 3. Somewhat disagree
 4. Strongly disagree, or
 5. You neither agree nor disagree with this
-
9. Don't know

13. In the 2013 Traffic Safety Survey, two-thirds of residents agreed that traffic safety was a concern in their neighbourhood. Moreover, 70% of these residents identified speed as the cause of this concern.

In your opinion, how should the County best address residential speeding concerns?

14. The term "Traffic Calming" refers to the use of physical measures, such as curb extensions or speed humps to reduce the undesirable effects of traffic in residential areas. With this in mind, to what extent do you agree with the following statement?

I support the use of traffic calming in Strathcona County. Do you:

1. Strongly agree
 2. Somewhat agree
 3. Somewhat disagree
 4. Strongly disagree, or
 5. You neither agree nor disagree with this
-
9. Don't know

I'd now like to ask you to rate a series of statements of questions about traffic safety in Strathcona County. To begin with: *(Read statement, then ask extent of agreement/disagreement)*.

I believe that _____. Do you:	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	Neither Agree or Disagree	Don't Know
15. Red light cameras make intersections safer.	1	2	3	4	5	9
16. Strathcona County engages its residents in addressing traffic safety.	1	2	3	4	5	9
17. Traffic enforcement in Strathcona County makes our roads safer.	1	2	3	4	5	9
18. There is not enough traffic enforcement in Strathcona County.	1	2	3	4	5	9
19. Strathcona County is always working to improve road safety.	1	2	3	4	5	9

20. If you had a concern about traffic safety in Strathcona County, who would you contact to address this concern?

21. Over the last year, Strathcona County has published a series of "Safe Travels" advertisements in the Sherwood Park News to inform residents about the safe system approach to traffic safety. Did you notice these ads?

- 1. Yes (*Go to Q22*)
- 2. No (*Skip to Q24*)

- 9. Don't remember ads/don't know (*Skip to Q24*)

22. Did any of the information contained in these ads change the way you think about traffic safety?

- 1. Yes → In what way? _____
- 2. No _____

- 9. Don't know

23. Did any of the information contained in these ads cause you to change your driving behaviour?
1. Yes → In what way? _____
 2. No _____
 9. Don't know
24. Are there any children under 18 years old in your household?
1. Yes → **Ask:** What are their ages? _____
 2. No _____
 9. Refused
25. And as I read a list of age groups, please stop me when I come to the category that contains your current age:
1. 18 to 24
 2. 25 to 44
 3. 45 to 64
 4. 65 or older _____
 9. Refused
26. **DO NOT READ:** Note Gender 1. Male 2. Female

This ends our survey. However, Strathcona County is exploring ways to engage residents in Traffic Safety. Would you be interested in being put on our email list to receive information regarding upcoming community traffic safety initiatives? This information will not be linked in any way to the responses on this survey.

1. Yes Could I please get your name for the list? _____
 And can I get an email address from you: _____
 (Alternately a phone number if they do not have an email or would rather not give it)
2. No I understand.

Thank you for your help in completing this survey. Just so you know, more information about traffic safety is available on the web at strathcona.ca or by phone at 780-417-7100.

Thanks again. Have a very pleasant evening.