

Calgary



Roads Annual Survey

2016

Prepared for The City of Calgary by:

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Executive Summary

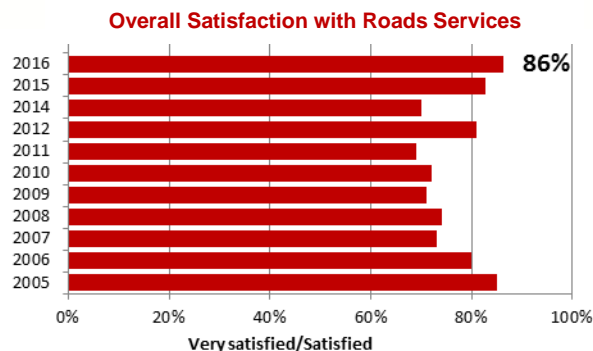
The City of Calgary Roads Business Unit (Roads) is committed to providing a safe, effective and well maintained road system for all modes of travel within Calgary. Roads annually conducts a survey of Calgarians to measure and assess satisfaction with its operations and maintenance services. In 2016, the survey was conducted by telephone with 500 randomly selected adult Calgarians. The results of the survey are used to understand citizens' perceptions of services and assist Roads with ongoing planning and development. HarGroup Management Consultants Inc. was engaged by Roads to conduct the survey.



Key Findings

Key Performance Indicator

- **Higher Satisfaction Levels for Roads Maintenance and Operations Services in 2016** Approximately nine in ten respondents (86%) rated Roads operations and maintenance services as very satisfied or satisfied in the 2016 survey, which is higher than results achieved in recent years and more respondents stated very satisfied than is typically observed. Considering data gathered over the years, it appears that Calgarians appreciate and acknowledge Roads initiatives to improve or enhance services, such as those associated with Spring-Clean Up in 2016.



Other Findings

- **Ratings for travel being reasonably safe, accessible and efficient higher in 2016** When asked questions about travel being reasonably safe, accessible, and efficient in Calgary, respondents gave high ratings in 2016. Indeed, ratings in 2016 (as well as 2015) were significantly higher than those observed in previous years, especially the proportions of respondents who strongly agreed with these assertions. Many of the satisfaction ratings throughout the 2016 survey were higher than has been achieved in recent years.





- Satisfaction ratings in 2016 are higher for many of the attributes of main and neighbourhood roads** The figure to the right shows satisfaction ratings achieved in 2016 for attributes of main and neighbourhood road services, conditions, markings and signs, and traffic controls. However, for most attributes, the 2016 ratings were higher compared to recent surveys. The table below shows the top 3 increases in ratings between 2015 and 2016 among service attributes. There were also some decreases observed; the top 3 of which are presented below.

Top 3 Increases and Decreases Among Service Attributes Between 2015 and 2016

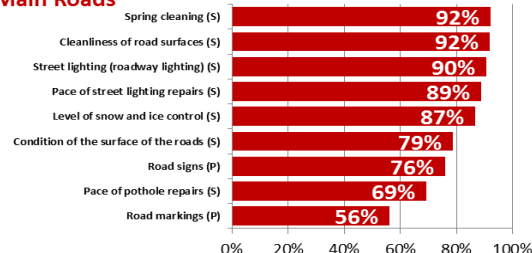
Increases

- Level of snow and ice control – Neighbourhood Roads ↑ 10%
- Spring cleaning – Main Roads 7%
- Cleanliness of road surfaces – Main Roads 7%

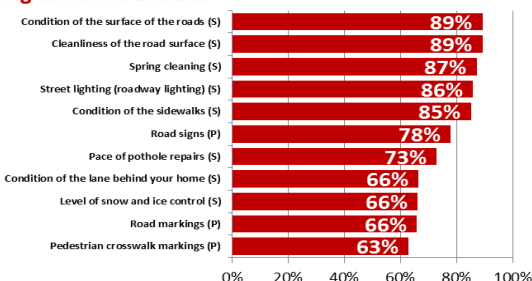
Decreases

- Road signs – Neighbourhood Roads ↓ -6%
- Traffic signaled intersections on main roads are able to reasonably accommodate traffic volumes during rush hour periods -5%
- Street lighting – Neighbourhood Roads -4%

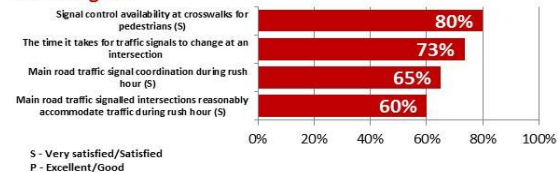
Main Roads



Neighbourhood Roads

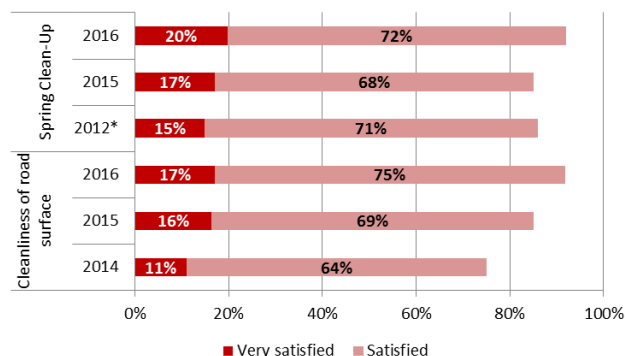


Traffic Signals

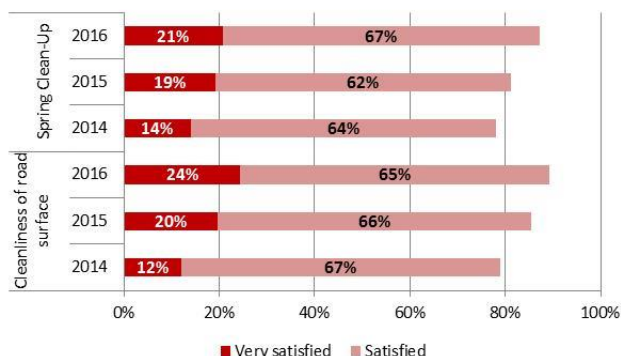


- Higher satisfaction ratings for cleanliness of roads and Spring Clean-Up** Satisfaction ratings for cleanliness of roads and Spring Clean-Up were higher in 2016 compared to recent years. Roads implemented some changes to the Spring Clean-Up process in 2016 including initiating the program earlier in the year. Increased attention was observed among citizens based on calls into 3-1-1 in 2016, many of which being concerns expressed by citizens. Nonetheless, the survey results suggest that citizens were more likely to welcome Roads' initiative to improve these services than to be concerned about the changes that occurred.

Main Roads



Neighbourhood Roads



*Note: Spring cleaning on main roads was not measured in 2014. The next available year of data was 2012.



1.0 Introduction

The City of Calgary Roads Business Unit (Roads) strives to provide a safe, effective and well maintained road system for all modes of travel within Calgary with a commitment to excellence, innovation, sustainability and environmental sensitivity. It is the vision of Roads to connect and move people in a vibrant Calgary through the provision of service excellence. Roads conducts an annual survey of Calgarians to understand citizens' perceptions of conditions and operations of main and neighbourhood roads, signs and road markings, and traffic controls. This report presents the findings of the 2016 survey.

A set of objectives has guided the annual survey process, which includes:

- To measure Calgarians' overall satisfaction with maintenance and repair of roads in the city;
- To assess Calgarians' perceptions of the maintenance and conditions of main and neighbourhood roads;
- To examine Calgarians' satisfaction with traffic controls at intersections; and
- To assess Calgarians' opinions about the outcomes from the maintenance and operations services of Roads.

The 2016 Annual Roads Survey was conducted with a random sample of 500 Calgarians who were interviewed by telephone. In addition, an open-link online survey was conducted with 683 Calgarians. Survey specifications are presented in Appendix A.

Historical data are presented for comparative purposes in this report where appropriate; for example, when questions have been constant among annual surveys in construct and content. It should be noted that data are not shown for 2013 because the survey was not fielded in that year due to the flood that impacted Calgary. Significant differences among data noted and, where relevant, in this report (detailed tables presented in Appendix B).

The remainder of this report presents the 2016 Roads Annual Survey results. Basic frequencies of question results are presented. Various statistical procedures are used within the analyses to assess significance of contrasting responses or perceptions of respondents. These analyses provide additional insight into the data and allow for a greater degree of certainty in statements of inference. Tables and figures contained within the body of this report are presented with rounded percentages. As such, totals may not sum to 100%.

HarGroup Management Consultants Inc. was engaged to conduct the 2016 survey and prepare this report of the findings.



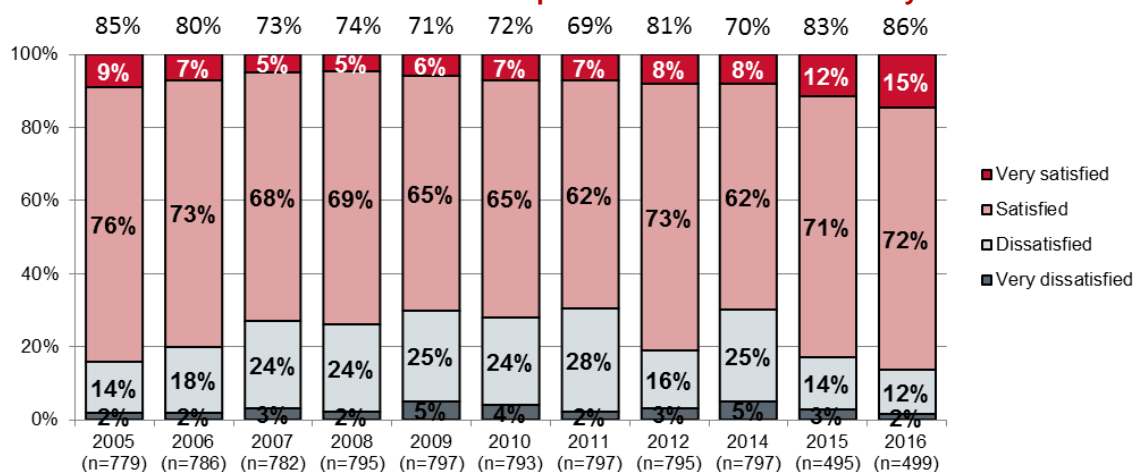
2.0 Roads Services and Road Conditions

Roads maintains, rehabilitates and reconstructs existing roadways and bridges, and manages traffic and parking infrastructure within Calgary. To ensure answers were provided within this context, survey respondents were instructed at the outset of interviews to respond based on their perceptions of road conditions such as the quality of road surfaces, street lighting, road markings, street signs and traffic signals. The findings presented in this section of the report examine respondents' overall perceptions of Roads maintenance and operation services, as well as conditions for travel on city roads and travel experiences.

2.1 Satisfaction with Roads Business Unit Services

In 2016, almost nine in ten respondents (86%) stated they were very or somewhat satisfied with maintenance and operation services provided by Roads (Figure 2.1). This is the highest level of satisfaction achieved by Roads since Calgarians were first asked this question in 2006 (see Appendix C), and follows an upward trend that has been observed since at least 2014.

Figure 2.1: Satisfaction with Maintenance & Operation Services Provided by Roads Business Unit



Significance of differences among survey waves ($p < .05$) - see Appendix C.

Based on commentary offered by respondents about satisfaction ratings, it's apparent that Calgarians increasingly appreciate and acknowledge the services provided by Roads and are less likely to feel that other circumstances are impacting services (Table 2.1) such as population growth, municipal budgets, etc. As well, in 2016, there are fewer concerns being considered about snow and ice control and potholes than has been previously observed.



Table 2.1: Reasons for Levels of Satisfaction

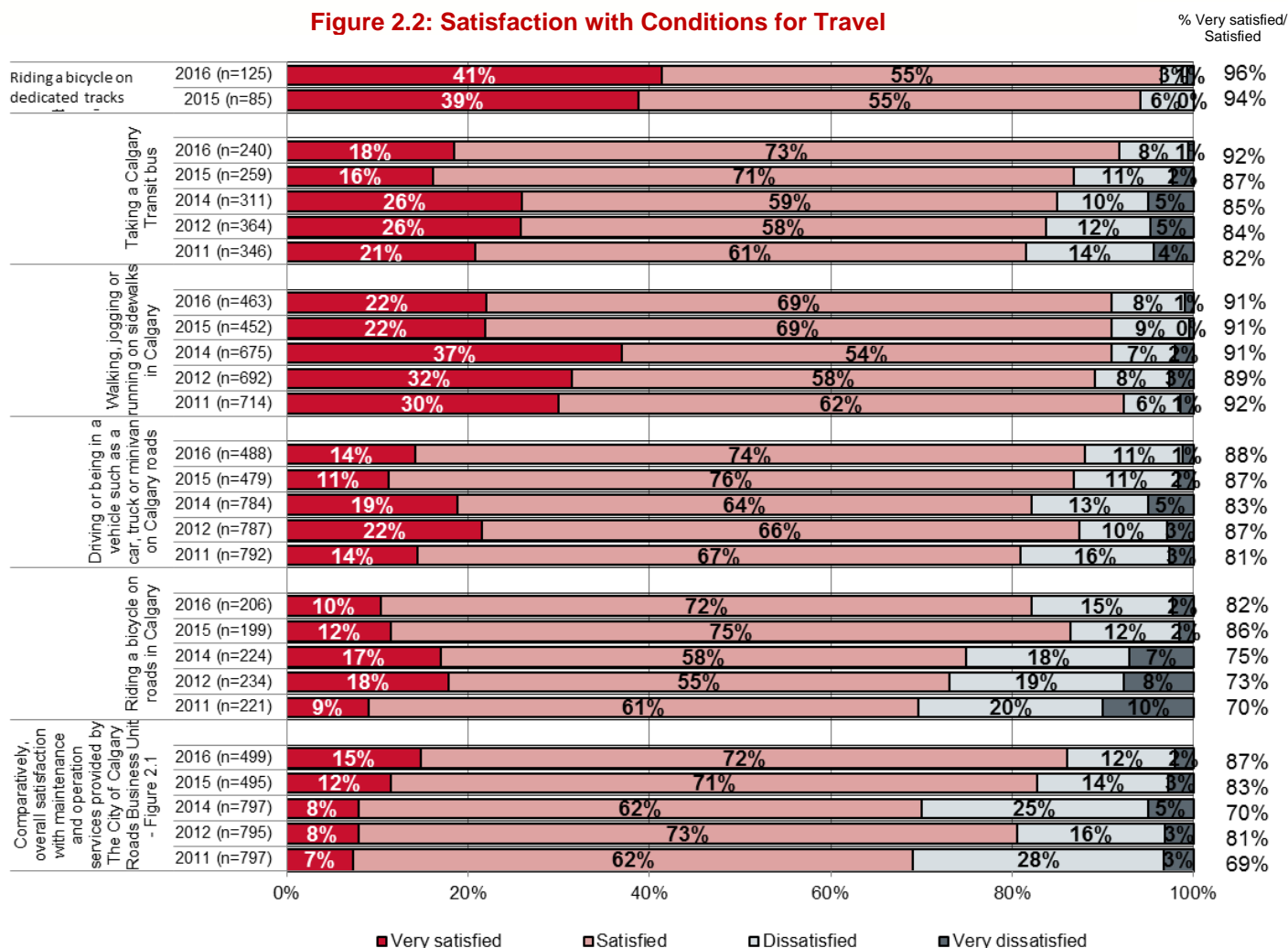
Reasons		% of Responses										
		2005 (n=779)	2006 (n=786)	2007 (n=778)	2008 (n=767)	2009 (n=793)	2010 (n=787)	2011 (n=790)	2012 (n=768)	2014 (n=785)	2015 (n=484)	2016 (n=499)
Compliments	Satisfied with things as they are	-	5	4	12	12	12	12	13	10	25	34
	Do a good job for circumstances (population, budget, weather)	19	37	34	26	9	9	16	13	6	7	7
	Overall maintenance of roads is good	11	7	4	5	5	5	8	10	6	10	6
	Roads are in good condition	9	<1	3	2	4	4	6	7	5	4	4
	Repairs done in timely manner	13	2	2	2	3	3	4	4	3	3	4
	Good traffic flow	-	-	-	-	-	-	-	-	2	3	4
	Signs/road markings visible/easy to see	-	-	-	-	-	-	-	-	1	2	2
	Roads are kept clean	3	1	1	1	1	1	3	2	5	2	2
	Snow/ice removal is timely/well done	3	1	1	1	2	2	3	6	6	2	2
	Keep up with needed repairs (get job done)	3	2	3	9	1	1	2	2	3	2	1
	Good timing/coordination of traffic signals	-	-	-	-	-	-	-	-	1	1	<1
	Infrastructure well designed/planned	-	-	-	-	-	-	-	-	1	1	<1
	Repairs don't affect traffic flow much	4	4	2	1	1	1	1	1	<1	0	<1
	Bike lanes/tracks are good	-	-	-	-	-	-	-	-	-	<1	-
	Feel safe when driving	-	-	-	-	-	-	-	-	-	-	1
	Do work in off hours	-	-	-	-	-	-	-	-	-	-	1
	Other	10	7	10	3	7	7	2	1	<1	0	0
Concerns	Poor timing/coordination of traffic signals	<1	3	3	2	4	4	4	5	4	3	5
	Snow/ice removal poorly done/not timely	1	2	3	3	14	14	7	4	9	6	3
	Potholes not repaired in timely manner/well done	1	3	1	5	5	5	8	6	10	5	3
	Repairs not done in a timely manner	3	3	4	4	3	3	1	3	3	4	3
	Signs/road markings not visible/hard to see	1	1	2	2	3	3	2	4	4	4	3
	Too many detours/construction going on at once	1	2	4	4	2	2	1	1	<1	2	3
	Lack of infrastructure/planning	-	5	1	5	2	2	<1	1	3	2	2
	Roads need more maintenance	1	1	2	2	1	1	3	2	1	1	2
	Not enough focus on residential/side roads	-	-	-	-	-	-	-	-	3	4	1
	Sidewalks in poor condition/need repair	-	-	-	-	-	-	-	-	-	2	1
	Roads are in poor condition (e.g. bumpy, cracked, not repaired well)	3	4	2	2	2	2	4	5	3	1	1
	Repairs affect traffic flow too much	1	1	2	4	3	3	2	1	1	0	1
	Street lighting needs improvement	-	-	-	-	-	-	-	-	-	-	1
	Need to spend more on roads to keep up with city growth	-	2	3	1	1	1	1	1	1	1	<1
	Roads are unclean	-	-	-	-	-	-	-	2	3	1	<1
	Concern about bike lanes/tracks	-	-	-	-	-	-	-	-	-	<1	<1
	Snow removal when not needed	-	-	-	-	-	-	-	-	-	-	<1
	Too much spring cleaning	-	-	-	-	-	-	-	-	-	-	<1
	Other	7	5	8	5	14	14	8	1	1	0	0
Unsure		5	5	3	2	1	1	1	2	2	0	2
Total (all responses)		100	100	100	100	100	100	100	100	100	100	100
Multiple response; number of responses		(975)	(958)	(916)	(859)	(890)	(1188)	(1117)	(935)	(1177)	(644)	(664)



2.2 Satisfaction with Conditions for Travel

To further understand Calgarians perceptions, respondents are asked about conditions of travel so as to gauge the outputs of services provided by Roads. As can be seen in Figure 2.2, a significant majority of respondents were satisfied (very satisfied or satisfied) with riding a bicycle on dedicated tracks (96%), taking a Calgary Transit bus (92%), walking, jogging or running on sidewalks (91%), driving or being in a vehicle (88%) and riding a bicycle on Calgary roads (82%). From a historical perspective, these ratings are very similar to those obtained in previous survey years, particularly for driving or being in a vehicle (see Appendix C).

Figure 2.2: Satisfaction with Conditions for Travel



Significance of differences among survey waves ($p < .05$) - see Appendix C.

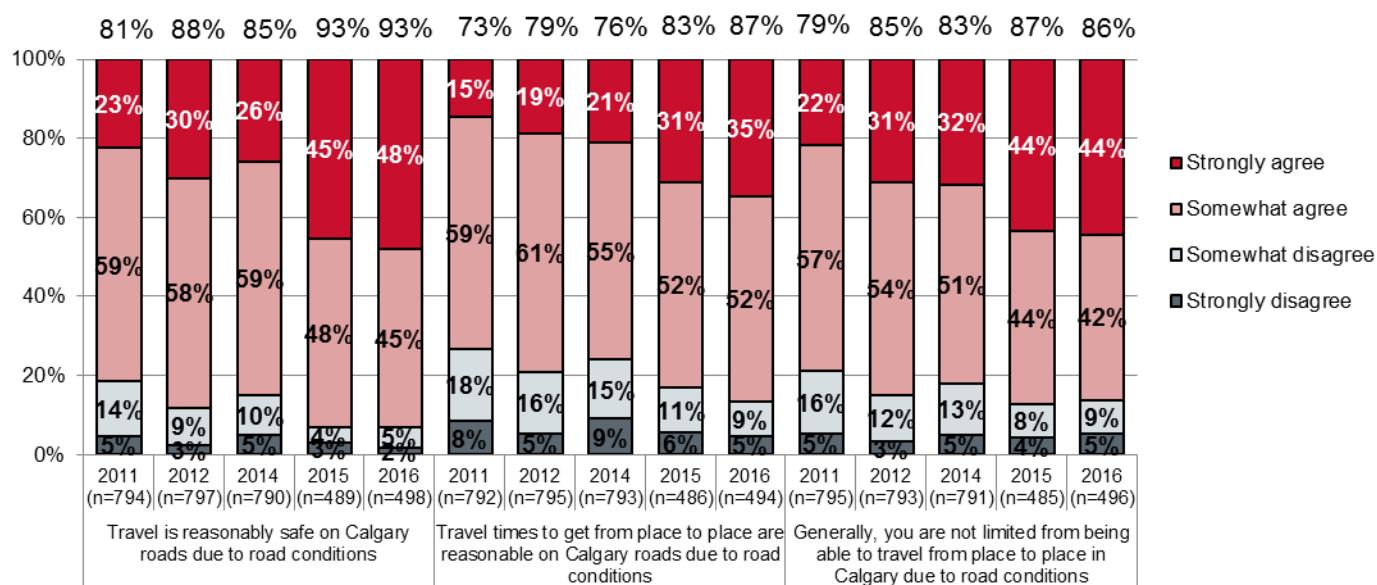


Last year, it was suggested that respondents' opinions were more favourable when asked about specific conditions of travel than when they were asked to rate Calgary Road services as a whole, but that these differences were less extreme in 2015 than had been previously reported. In 2016, these differences are even less obvious. For example, 88% of respondents stated being very or somewhat satisfied with conditions for driving or being in a vehicle on roads, while 87% indicated similar ratings for being satisfied with maintenance and operation services provided by Roads generally. These findings may support the earlier observation that Calgarians, on the whole, are increasingly valuing the services provided by Roads.

2.3 Perceptions of Travel Experience

Roads strives to provide services that support a safe, effective and well maintained road system and, as such, survey respondents are asked about the safety, accessibility and efficiency of travel on Calgary roads. In 2016, a significant majority of respondents agreed (strongly or somewhat) that travel is reasonably safe on roads (93%), travel times to get from place to place in Calgary are reasonable (87%), and they are not limited from being able to travel from place to place due to road conditions (86%), as shown in Figure 2.3. Over the past two years, ratings have been higher than those observed in previous years; particularly among respondents who state strongly agree (see Appendix C).

Figure 2.3: Perceptions of Various Travel Attributes



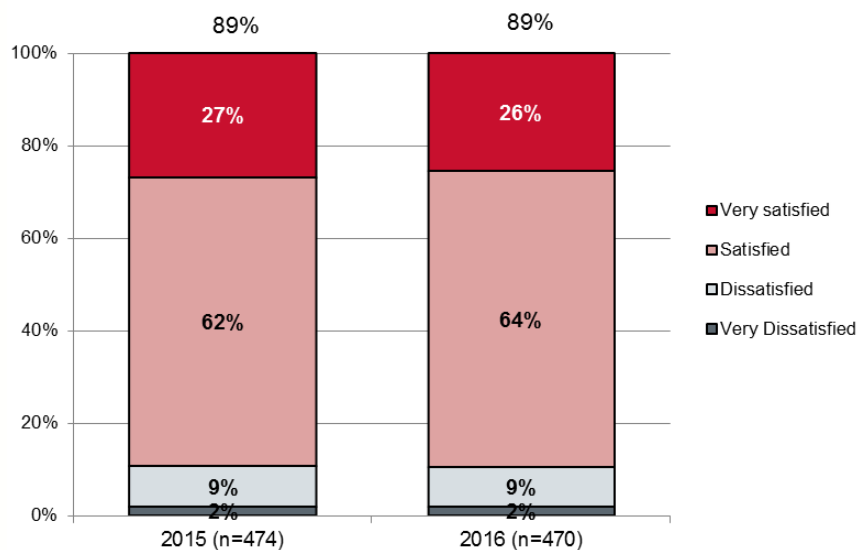
Significance of differences among survey waves ($p < .05$) - see Appendix C



2.4 Satisfaction with Roads' Communications

Respondents were asked about their satisfaction with the efforts of The City of Calgary to inform citizens about road conditions in Calgary. Figure 2.4 reveals that the vast majority of respondents (89%) stated that they were very satisfied or satisfied with Roads communications, which is consistent with the level reported last year.

Figure 2.4: Satisfaction with Roads Communications





3.0 MAIN ROADS

The Roads Business Unit provides various operations and maintenance services for roadways within Calgary. This section of the report examines respondents' opinions of road services associated with main roads in Calgary such as Memorial Drive, Glenmore Trail, Barlow Trail, Macleod Trail and Country Hills Boulevard.

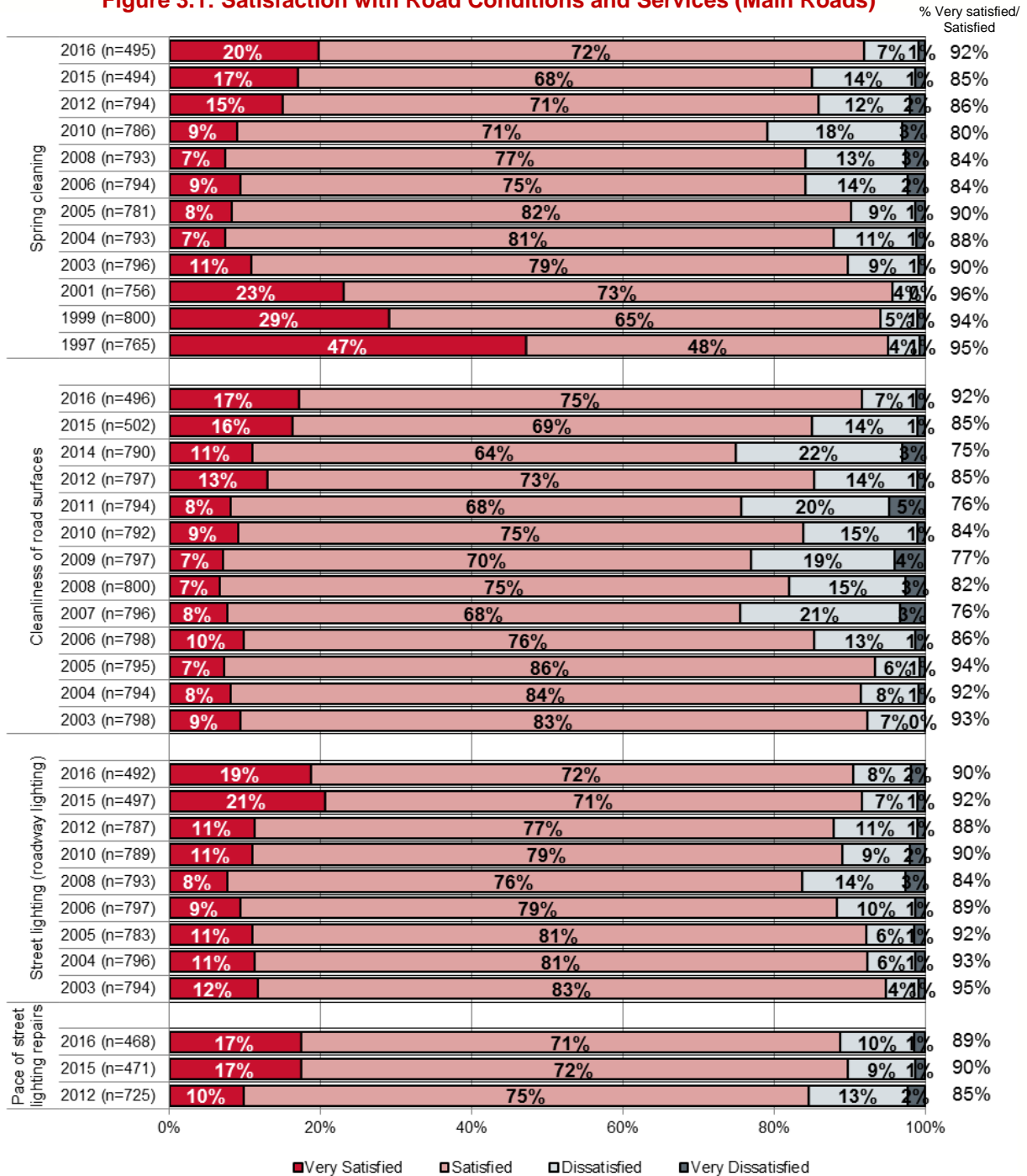
3.1 Road Conditions and Services – Main Roads

Respondents' ratings of conditions and services for main roads enquiries are presented in Figure 3.1 (over the next few pages). On the whole, most respondents expressed satisfaction with conditions and services examined about main roads such as spring cleaning (92% - very satisfied or satisfied), cleanliness of the roads (92%), street lighting (90%), pace of street lighting repairs (89%), and the level of snow and ice control (87%). To a lesser extent, respondents were satisfied with the condition of the surface of the roads (79%) and the pace of pothole repairs (69%).

Considering the data from a historical perspective, some of the ratings achieved in 2016 are higher than those that have been observed in recent years; in particular spring cleaning and the level of snow and ice control (see Appendix C). In both cases, the ratings of these services have shown an upward trend over the past three years. The ratings for spring cleaning, as well as the cleanliness of roads, are noteworthy as Roads commenced operation of this service earlier in 2016 compared to previous years and, based on information provided by Roads, inquiries among citizens during the 2016 spring cleaning process were higher than usual (many being concerns of citizens). Based on the data gathered in the survey, it is suggested that residents on the whole were more likely to acknowledge and appreciate the efforts of Roads to implement the street cleaning initiatives in 2016 rather than to have had concerns.



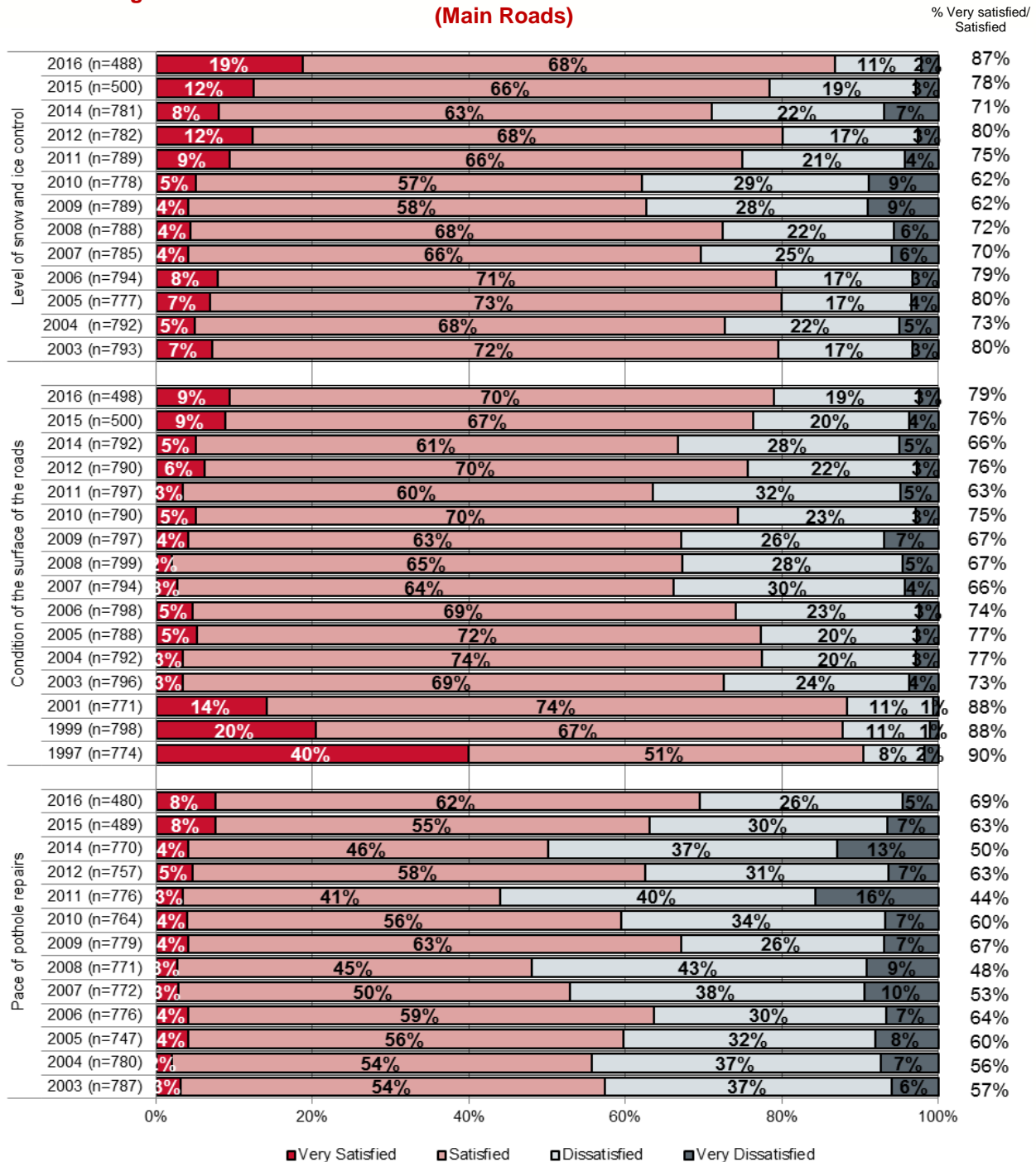
Figure 3.1: Satisfaction with Road Conditions and Services (Main Roads)



Significance of differences among survey waves ($p < .05$) - see Appendix C



Figure 3.1: Continuation of Satisfaction with Road Conditions and Services (Main Roads)



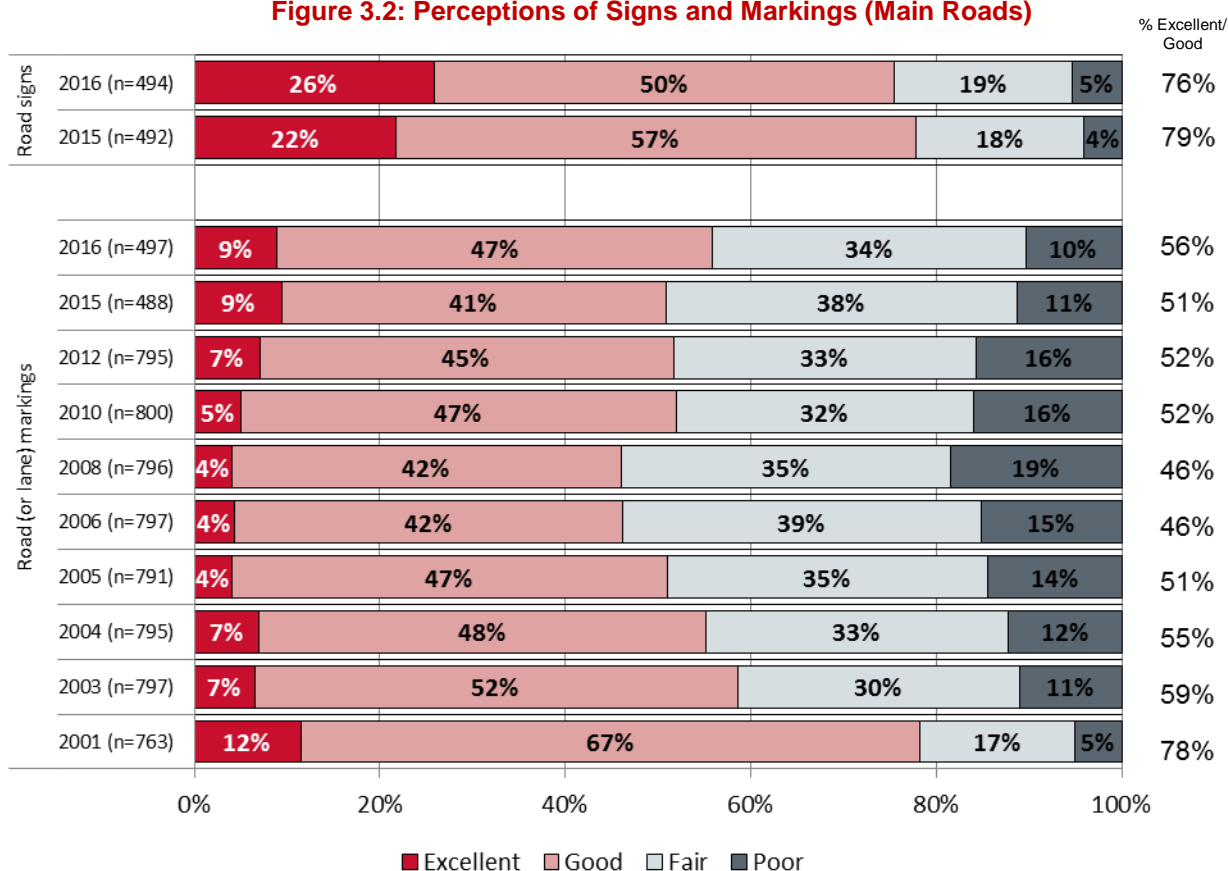
Significance of differences among survey waves ($p < .05$) - see Appendix C



3.2 Signs and Markings – Main Roads

Figure 3.2 shows that three-quarters of respondents (76%) rated road signs as excellent or good, while over half (56%) gave these ratings to road or lane markings. Overall ratings (excellent or good) for road signs and road or lane markings in 2016 are similar to those observed in 2015 (see Appendix C).

Figure 3.2: Perceptions of Signs and Markings (Main Roads)



Significance of differences among survey waves ($p < .05$) - see Appendix C.



4.0 NEIGHBOURHOOD ROADS

Similar conditions and services were examined in the survey for neighbourhood roads, as well as sidewalks and lanes behind homes. This section of the report examines respondents' perceptions of these issues. In most cases, ratings for neighbourhood roads are higher in 2016 compared to recent years.

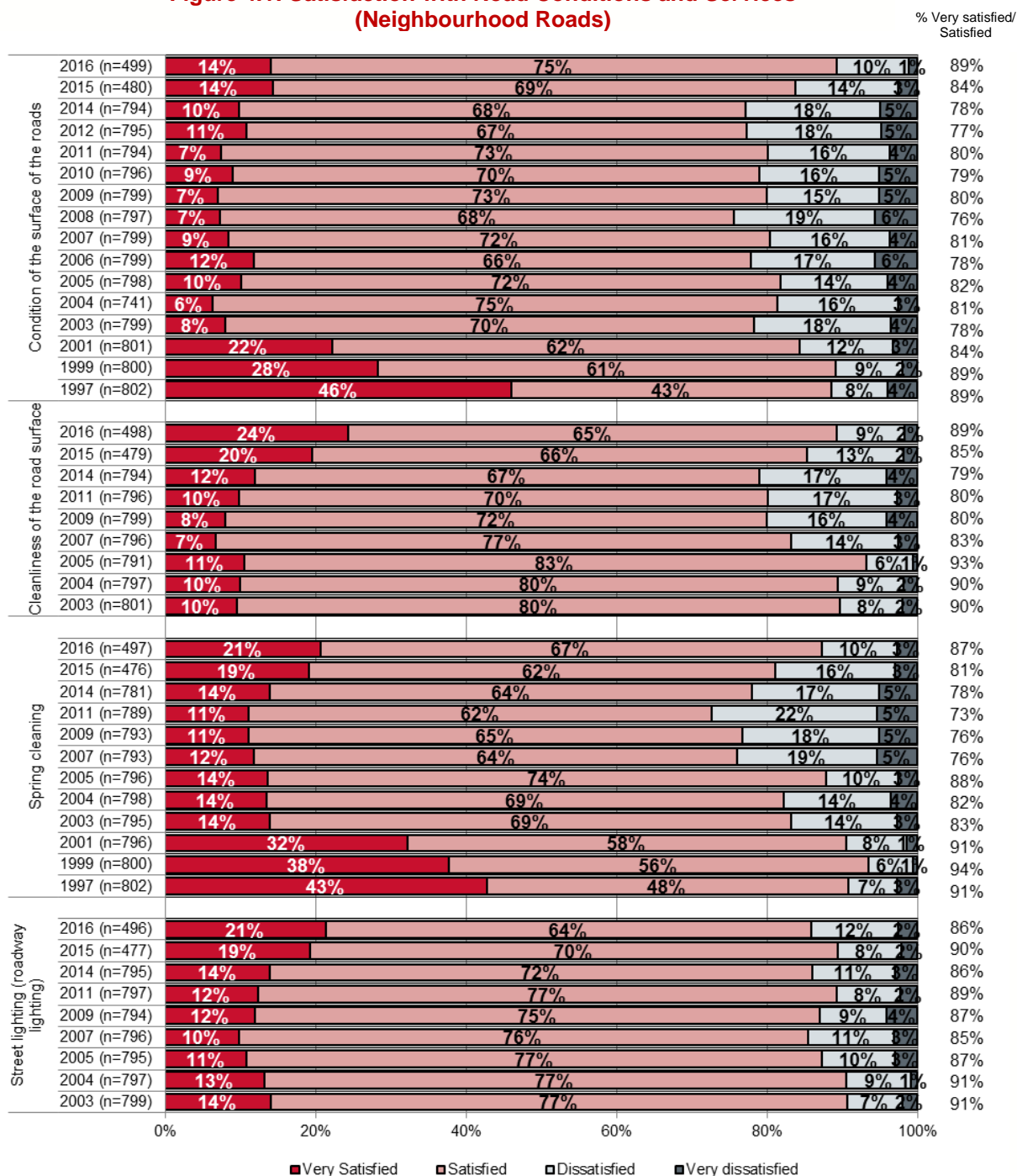
4.1 Road Conditions and Services - Neighbourhood Roads

Figure 4.1, presented on the next few pages, shows respondents' ratings of conditions and services for neighbourhood roads. In 2016, a significant majority of respondents expressed satisfaction (very or somewhat) with condition of the surface of the roads (89%), cleanliness of the road surface (89%), spring cleaning (87%), street lighting (86%), and the condition of the sidewalks (85%). Fewer respondents stated satisfaction with the pace of pothole repairs (73%), the condition of the lane behind their homes (67%), and snow and ice control (67%).

Historically, the findings in the 2016 survey are some of the highest observed for neighbourhood roads; either for overall satisfaction (very satisfied or satisfied) or very satisfied ratings (see Appendix C). Most notable are ratings for condition of sidewalks, pace of pothole repairs, condition of the lane behind their homes, and snow and ice control. Ratings for spring cleaning and cleanliness ratings in 2016 are also particularly notable given the issues that have been reported in the previous section for main roads (mainly, the higher than usual number of citizens contacting The City about spring cleaning in 2016). The survey results suggest that more citizens favoured the services provided for spring cleaning in 2016 compared to those who might have had concerns.



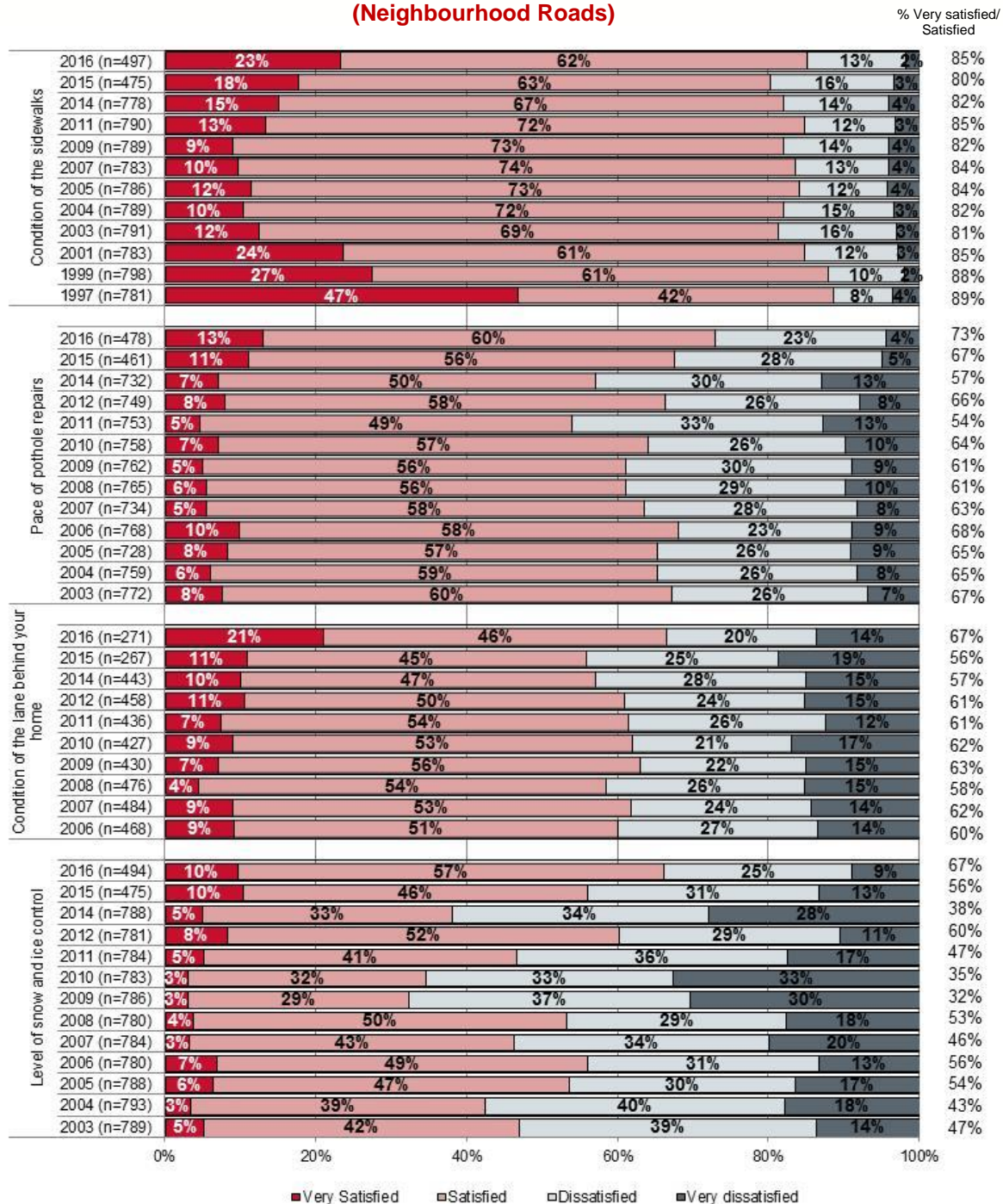
**Figure 4.1: Satisfaction with Road Conditions and Services
(Neighbourhood Roads)**



Significance of differences among survey waves ($p < .05$) - see Appendix C.



**Figure 4.1: Continuation of Satisfaction with Road Conditions and Services
(Neighbourhood Roads)**



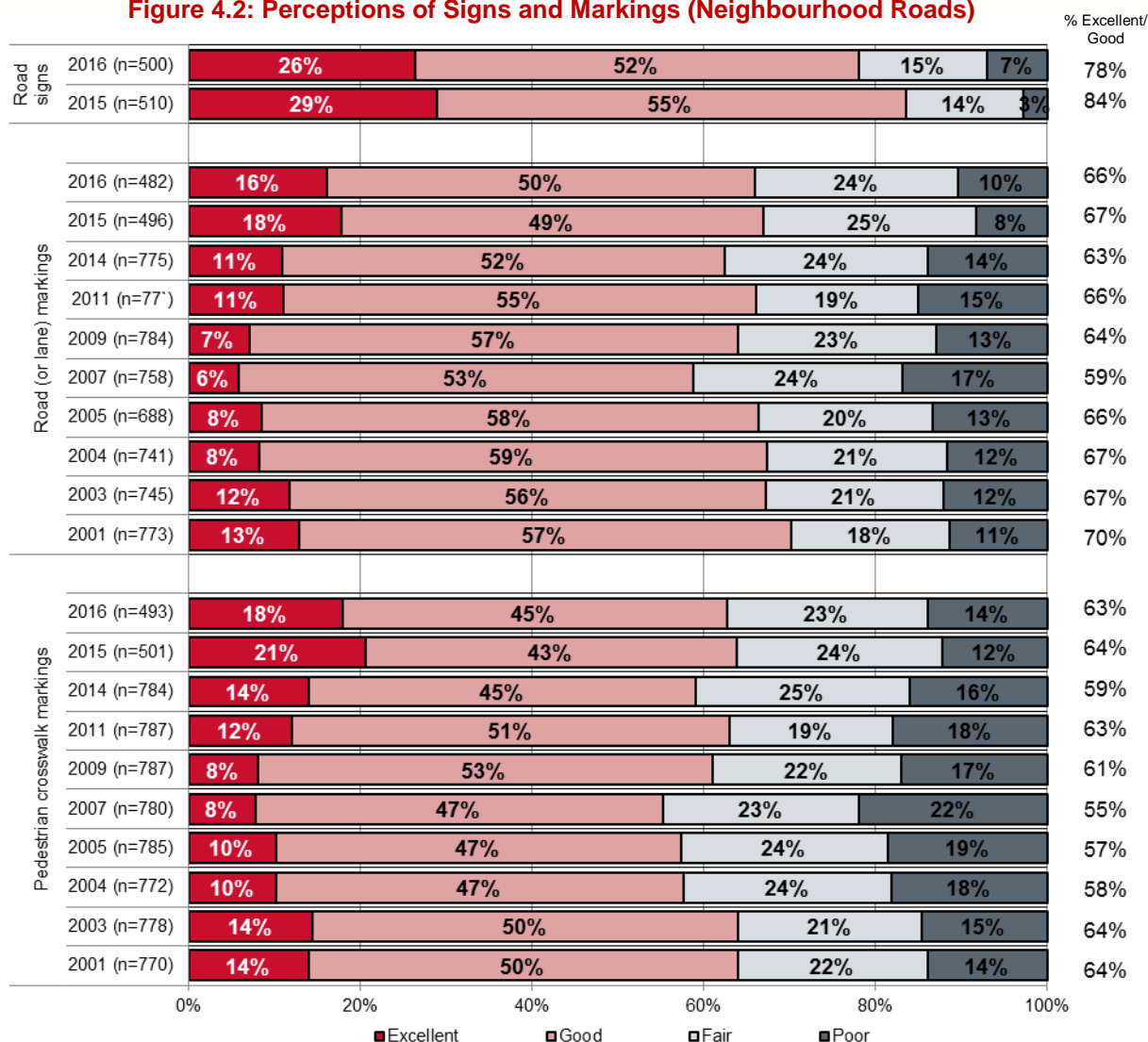
Significance of differences among survey waves ($p < .05$) - see Appendix C.



4.2 Signs and Markings - Neighbourhood Roads

A majority of respondents indicated excellent or good ratings for the conditions of roads signs (78%), road or lane markings (66%) and pedestrian and crosswalk markings (63%). Taking into account historical data, ratings for road or lane and pedestrian and crosswalk markings were higher in 2015 and 2016 compared to recent surveys, especially when considering the excellent ratings.

Figure 4.2: Perceptions of Signs and Markings (Neighbourhood Roads)



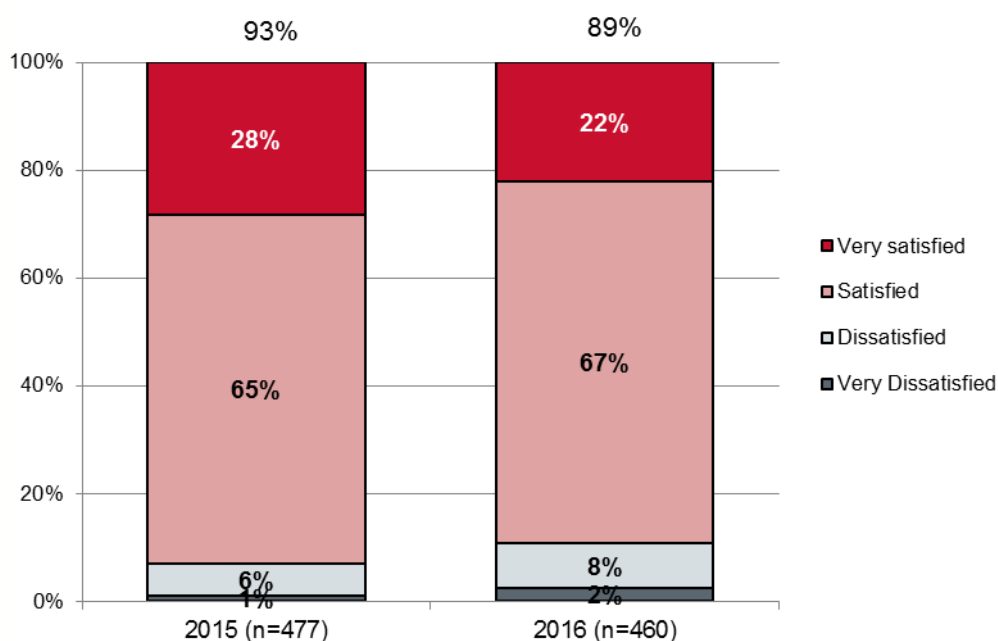
Significance of differences among survey waves ($p < .05$) - see Appendix C.



5.0 PROVINCIAL MAINTAINED ROADS

Although the maintenance and operation services conducted on Deerfoot Trail and Stoney Trail are the responsibility of the Alberta Government, respondents are asked to rate the condition and services of these roadways. Figure 5.1 shows that the majority of respondents (89%) gave a rating of very satisfied or satisfied to this query.¹

Figure 5.1: Satisfaction with Road Conditions & Services of Provincially Maintained Roads



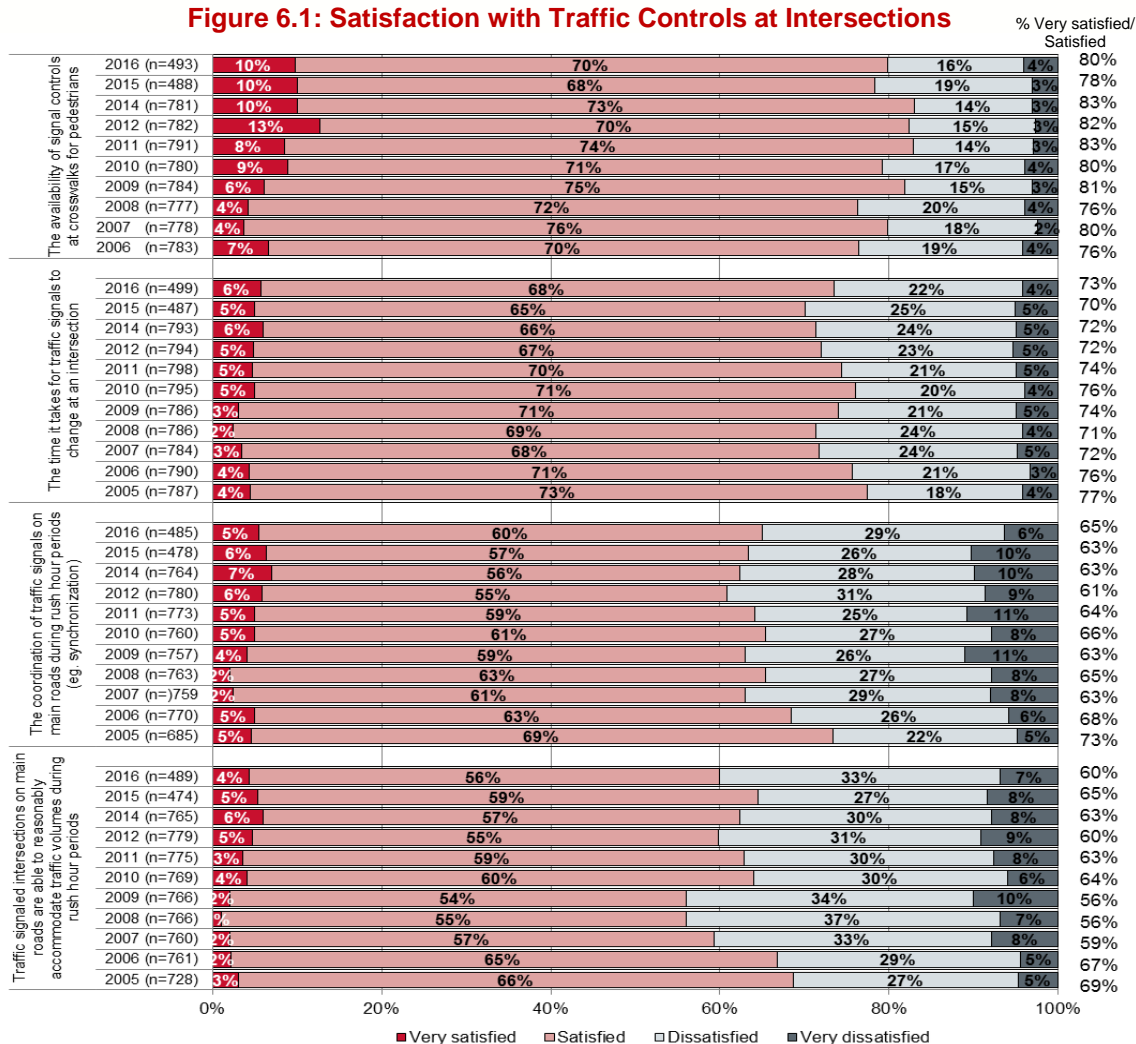
¹ Note: In previous surveys, respondents were asked a series of questions about these roadways. In 2015, these questions were condensed into one query.



6.0 TRAFFIC SIGNALS

Figure 6.1 shows respondents' perspectives for mobility of traffic and traffic controls at roadway intersections. In 2016, a significant majority of respondents were satisfied (very satisfied or satisfied) with the availability of signal controls at crosswalks for pedestrians (80%), and most with the time it takes for traffic signals to change at intersections (73%), the time it takes for traffic signals to change at main road intersections (65%), and coordination of traffic signals on main roads during rush hour periods (60%). Over the years, ratings of traffic signals have fluctuated, but the 2016 results are the same as previous surveys (see Appendix C).

Figure 6.1: Satisfaction with Traffic Controls at Intersections



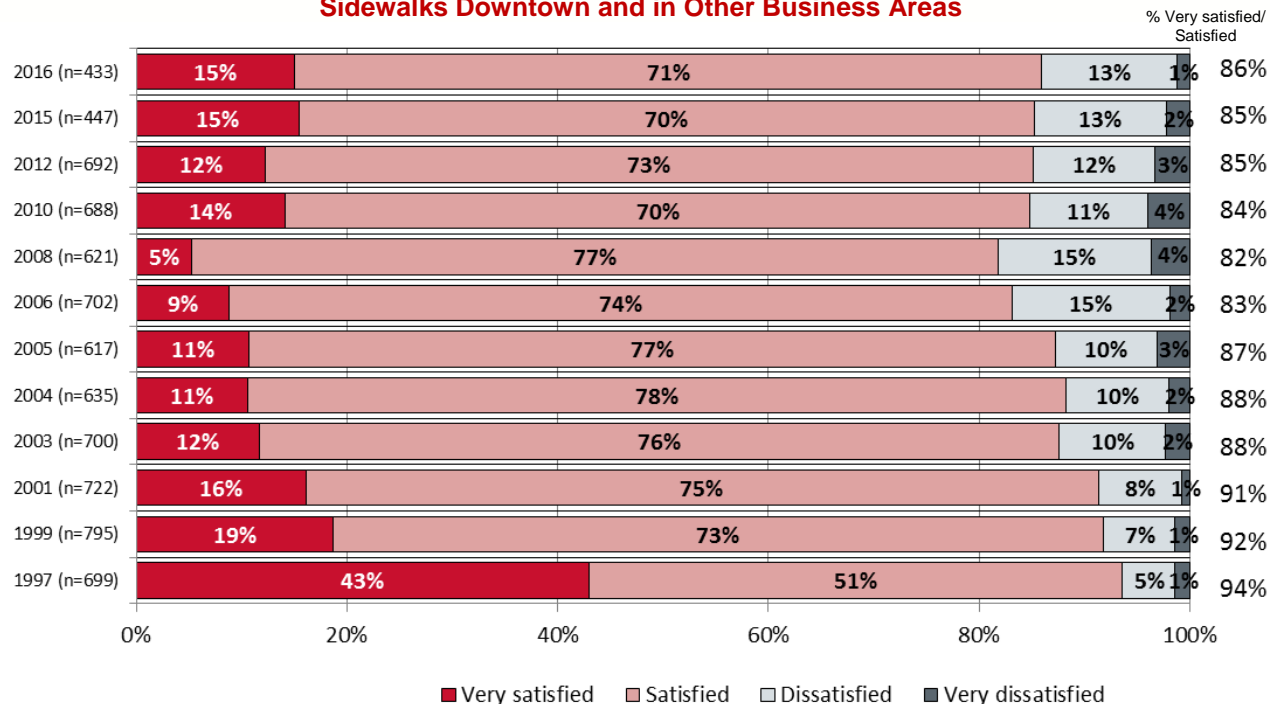
Significance of differences among survey waves ($p < .05$) - see Appendix C.



7.0 CONDITIONS OF SIDEWALKS

When asked about the condition of sidewalks downtown and in other business areas, a significant majority of respondents (85%) in 2016 reported satisfaction, which is similar to the findings observed in recent years (see Appendix C).

Figure 7.1: Satisfaction with Condition of the Sidewalks Downtown and in Other Business Areas




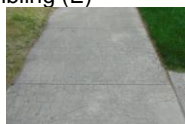







Significance of differences among survey waves ($p < .05$) - see Appendix C.

For sidewalks in the city, Roads categorizes the need for repairs based on the severity of defects and possible safety implications. In the online survey, respondents were asked to rate examples of sidewalks that might need repair. Table 7.1 on the next page reveals that ratings provided by respondents for the various examples were consistent with the categorization that Roads applies to sidewalks needing repair (Note: Roads ratings are identified by the first number shown for each example in the Items column with 1 being least and 5 being most need of repair). Only one of the examples 5 Crumbling (F) was rated lower for needing repair by respondents than would have been categorized by Roads. Other than this one noted difference, respondents' ratings suggest that the categorization and criteria used by Roads to identify sidewalks needing repair are consistent with how citizens on the whole might identify or select sidewalks for repair.



Table 7.1: Perceptions of Sidewalk Conditions
(Online Survey)

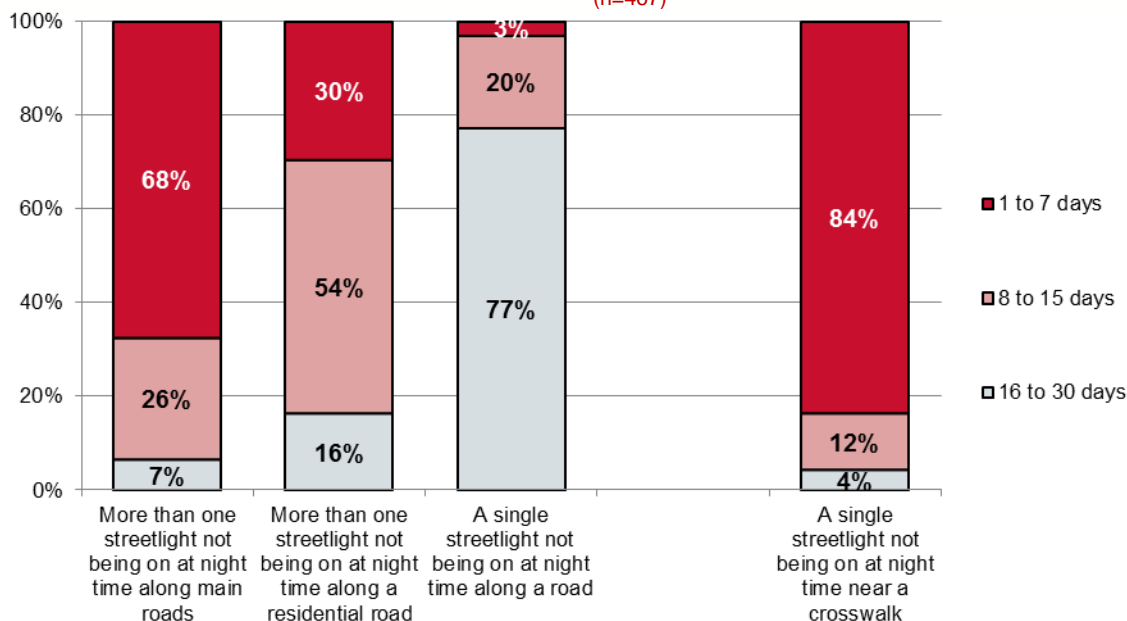
Table 7.1: Perceptions of Sidewalk Conditions (Online Survey)														
Items		1 - Definitely Does Not Need Repaired	2	3	4	5	6	7	8	9	10 – Definitely Needs Repair	Total	Averages	
													Mean	Median
1Cracking (A) 	% n=	40 267	17 116	13 85	9 59	7 49	5 32	3 17	3 22	1 8	2 14	100 669	2.89	2.00
2Cracking (B) 	% n=	15 99	21 144	15 98	12 81	12 78	9 64	5 37	4 28	3 18	4 28	100 675	4.01	3.00
3Cracking (D) 	% n=	17 117	15 104	14 97	12 84	14 97	8 57	7 46	5 34	3 19	3 21	100 676	4.07	4.00
3Crumbling (E) 	% n=	10 66	13 86	14 97	11 74	13 86	10 69	11 71	8 53	4 26	7 48	100 676	4.89	5.00
5Crumbling (F) 	% n=	8 57	11 74	11 75	11 77	14 92	12 81	10 67	9 63	5 34	8 53	100 673	5.19	5.00
3Cracking (G) 	% n=	4 28	8 53	11 77	9 64	13 87	10 70	14 93	13 90	5 36	11 77	100 675	5.84	6.00
4Cracking (H) 	% n=	3 23	6 38	10 65	11 74	12 84	13 89	16 105	10 69	6 38	13 91	100 676	6.04	6.00
5Distortion (I) 	% n=	3 23	6 42	7 45	9 63	10 70	8 55	12 82	13 86	8 57	23 153	100 676	6.63	7.00
5Crumbling (J) 	% n=	1 6	0 1	0 3	1 9	2 14	3 17	4 28	12 81	12 80	65 436	100 675	9.11	10.00



8.0 RESPONSE TO STREET LIGHT OUTAGES

When citizens report streetlights outages, the streetlights are inspected within 7 days and typically repaired within 30 days. For these kinds of situations, priorities have to be considered for what is repaired. Respondents were offered some examples of streetlight outage occurrences and asked which of these examples should be repaired within 1 to 7 days, within 8 to 15 days, and within 16 to 30 days. Figure 8.1 shows that most respondents thought that a situation where more than one streetlight not being on along main roads should be repaired with 1 to 7 days, while most believed more than one streetlight not being on along a residential road should be repaired in 8 to 15 days. As well, there was general consensus among respondents that a single streetlight not being on along a road generally should be repaired in 16 to 30 days. In a separate question, respondents were asked when a single streetlight not being on near a crosswalk should be repaired and a significant majority indicated 1 to 7 days. Taken as a whole, the later example appears to be a higher priority for repair compared to the first three.

Figure 8.1: Perceptions of Response to Streetlight Outages
(n=467)



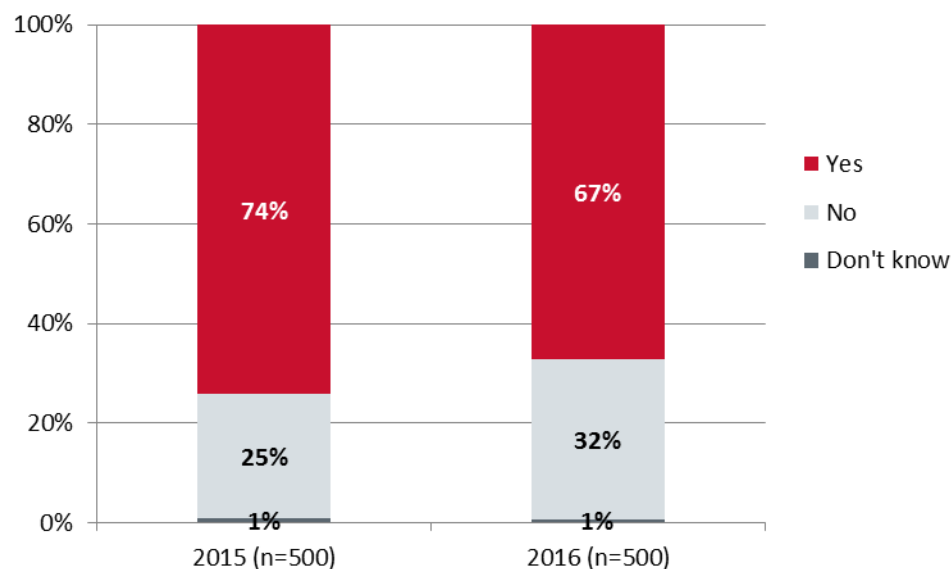


9.0 COMMUNICATIONS

Earlier in this report, it was reported that the vast majority of 2016 respondents were satisfied with The City's efforts to inform citizens about road conditions in Calgary, which was consistent with the results of 2015. Within this section, specific aspects of The City's efforts to inform residents about Roads maintenance and operations services are examined.

Respondents were asked if they were aware that The City provides up to date information to the public about incidents on roads such as accidents, detours, major construction projects, and other issues. Two-thirds of respondents (67%) indicated they were aware that The City provides up to date information. This proportion is significantly lower than the level of awareness observed in 2015 (see Appendix C).

Figure 9.1: Awareness of Information Provided by The City of Calgary



Significance of differences among survey waves ($p < .05$) - see Appendix C.

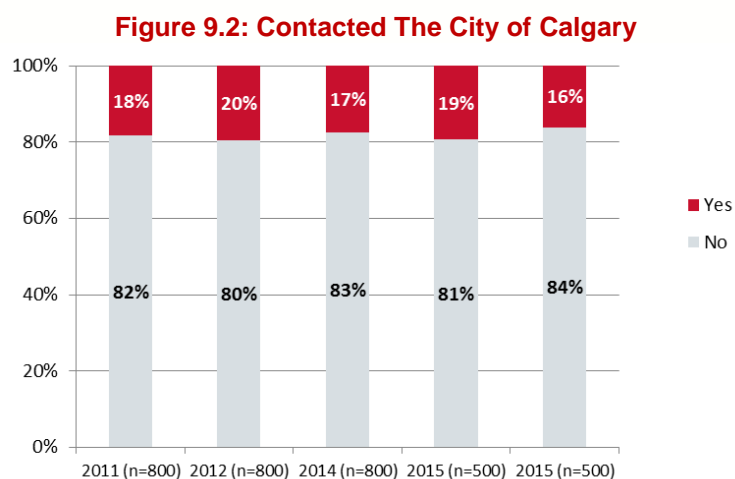


Most of the respondents who indicated awareness of Roads communications methods identified website based initiatives such as The City's website (Table 9.1). Radio and other media were also commonly mentioned by respondents, including The City's Traffic Advisory Radio station on 106.5 FM. To a lesser extent, respondents identified social media, other media, the Roads Smartphone app, road signs/billboards, and telephoning 3-1-1. It should be noted that the responses to this question were unaided; in other words there were no prompts given to respondents to identify the methods that were stated. Notable increases are observed in recall between 2015 and 2016 for The City's Traffic Advisory Radio station on 106.5 FM, the Advanced Traveler Information System map at Calgary.ca, Google maps, and the Roads Smartphone app.

Table 9.1: Awareness of Roads Communication Methods			
Method		% of Respondents	
		2015 (n=365)	2016 (n=336)
Website/Internet	The City's website (not specific)	44	42
	The Advanced Traveler Information System map at Calgary.ca	<1	8
	Google maps	-	5
	Internet generally	3	3
	Web cams on the Internet	-	1
Radio	Radio reports	38	33
	The City's Traffic Advisory Radio station on 106.5 FM	6	15
Social Media	Tweets on The City's Twitter site (generally)	16	14
	Tweets on Roads YYC Twitter site (specific to roads)	2	4
	Posts on The City's Facebook social media site	2	4
	Social media generally	1	1
Other Media	Television reports	17	15
	Newspaper reports/articles	5	3
Smart app	Roads Smartphone App	9	14
Signs	Road signs/billboards	13	12
Telephone	Telephoning 3-1-1	9	11
E-mails	E-mails	2	1
511	Alberta 511	1	<1
Other	Other	1	2
Don't know	Don't know	5	4
Multiple Response		(635)	(649)



The survey also examined methods citizens use to report concerns about road conditions to The City of Calgary. In 2016, about one in six respondents (16%) stated that they had contacted or accessed The City to report concerns, which, for the most part, is similar to previous surveys.



Of these respondents, most were likely to contact The City by telephone (e.g. 311) to report a concern about road conditions, which is consistent with previous survey results (Table 9.2). However, some respondents stated using websites and e-mails, as well as the Roads Smartphone app.



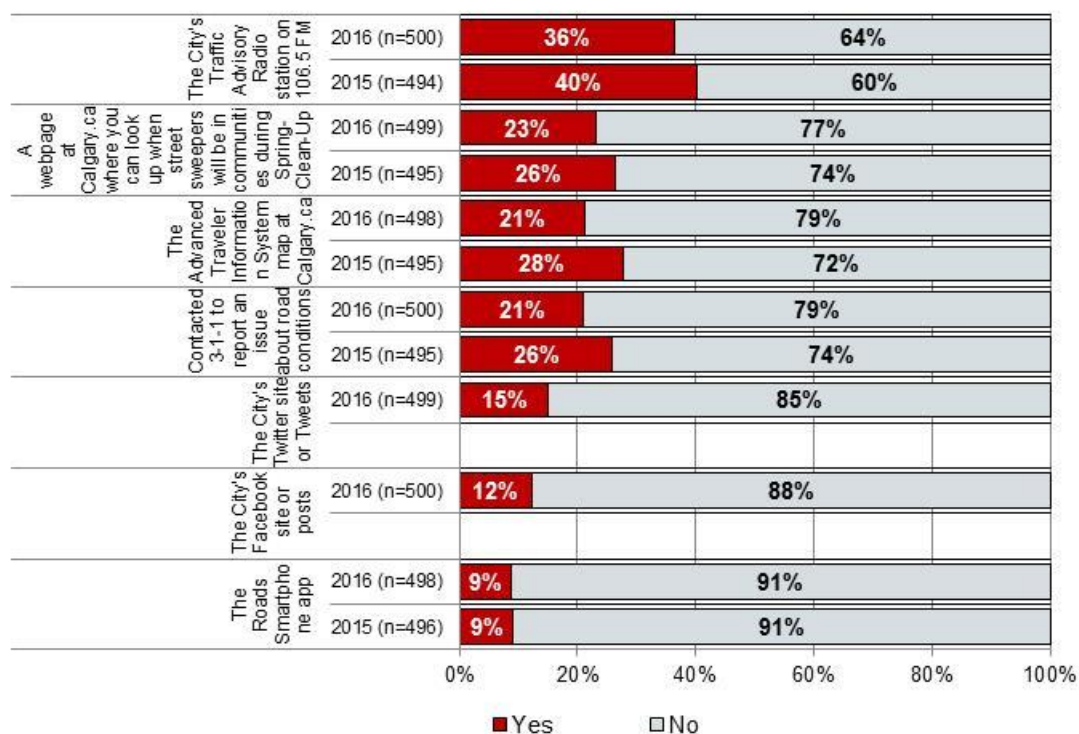
Table 9.2: Methods of Communicating Concerns (Actual)

Method		% of Respondents				
		2011 (n=139)	2012 (n=157)	2014 (n=146)	2015 (n=89)	2016 (n=80)
Telephone	Telephoned 311	82	87	84	75	81
	Telephoned The City	7	6	3	4	9
	Telephoned Alderman/Councillor	2	3	0	2	2
Websites	Went to The City's website	4	6	5	8	7
	Used the 311 Request a City Service Online Contact form	1	0	7	3	7
E-mail	Send an e-mail	0	0	1	2	4
	Send an e-mail to Alderman/Councillor	1	1	3	1	1
Apps	The Roads Smartphone app	-	-	-	4	3
Spoke to Someone Directly	Spoke directly to my Alderman/Councillor	1	0	0	0	2
Social Media	Used The City's Twitter website	1	2	1	1	0
	Used The City's Facebook website	0	0	0	0	0
Other	Other	2	2	0	2	4
Don't know	Don't know	2	0	0	0	0
Multiple Response		(143)	(168)	(152)	(94)	(96)



Respondents were specifically asked (aided recall) if they had used various methods to become informed about road conditions in Calgary in the past 12 months. Figure 9.3 shows that respondents were most likely to use The City's Traffic Advisory Radio station on 106.5 FM, followed by the Spring Clean-Up webpage, the Advanced Traveler Information System Map, and contacting 3-1-1. Some respondents also used The City's Twitter and Facebook sites², and the Roads Smartphone app. Notable decreases in use between 2015 and 2016 are observed for the Advanced Traveler Information System map and contacting 3-1-1. However, it should be noted that in 2016 respondents were asked if they had used the methods in the past 12 months, while in 2015 there was no time reference included in the question.

Figure 9.3: Use of Communications Roads Methods
(in past 12 months for 2016)³



Significance of differences among survey waves ($p < .05$) - see Appendix C.

² Note: Measurement of awareness for The City's Twitter and Facebook sites were introduced in 2016.

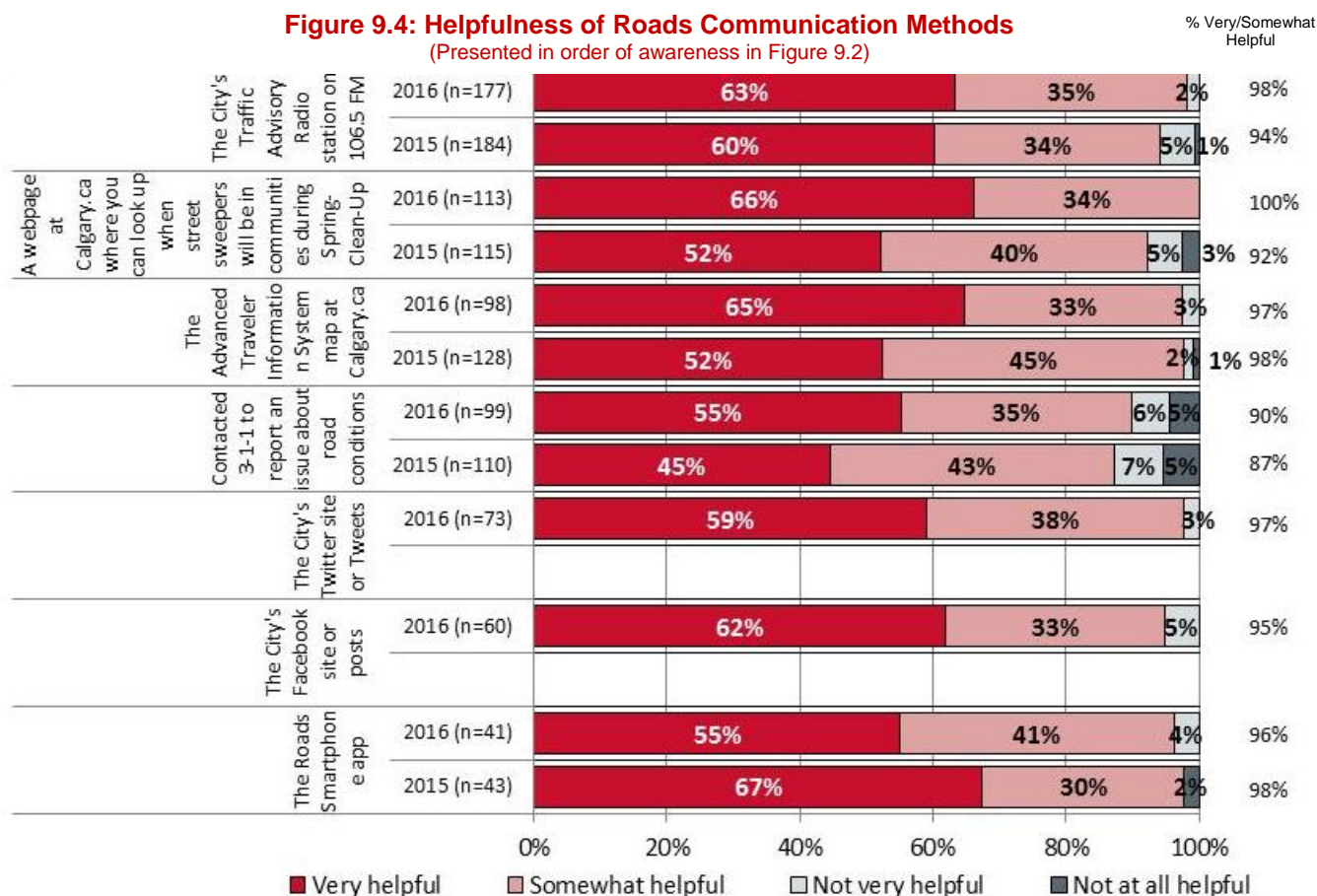
³ Note: Respondents to the 2016 were asked specifically to consider use within the past 12 months, while in 2015 there was no time reference in the question.



The vast majority of respondents reported that the methods The City uses to inform Calgarians are helpful to them (Figure 9.4), which was also observed in 2015.

Figure 9.4: Helpfulness of Roads Communication Methods

(Presented in order of awareness in Figure 9.2)



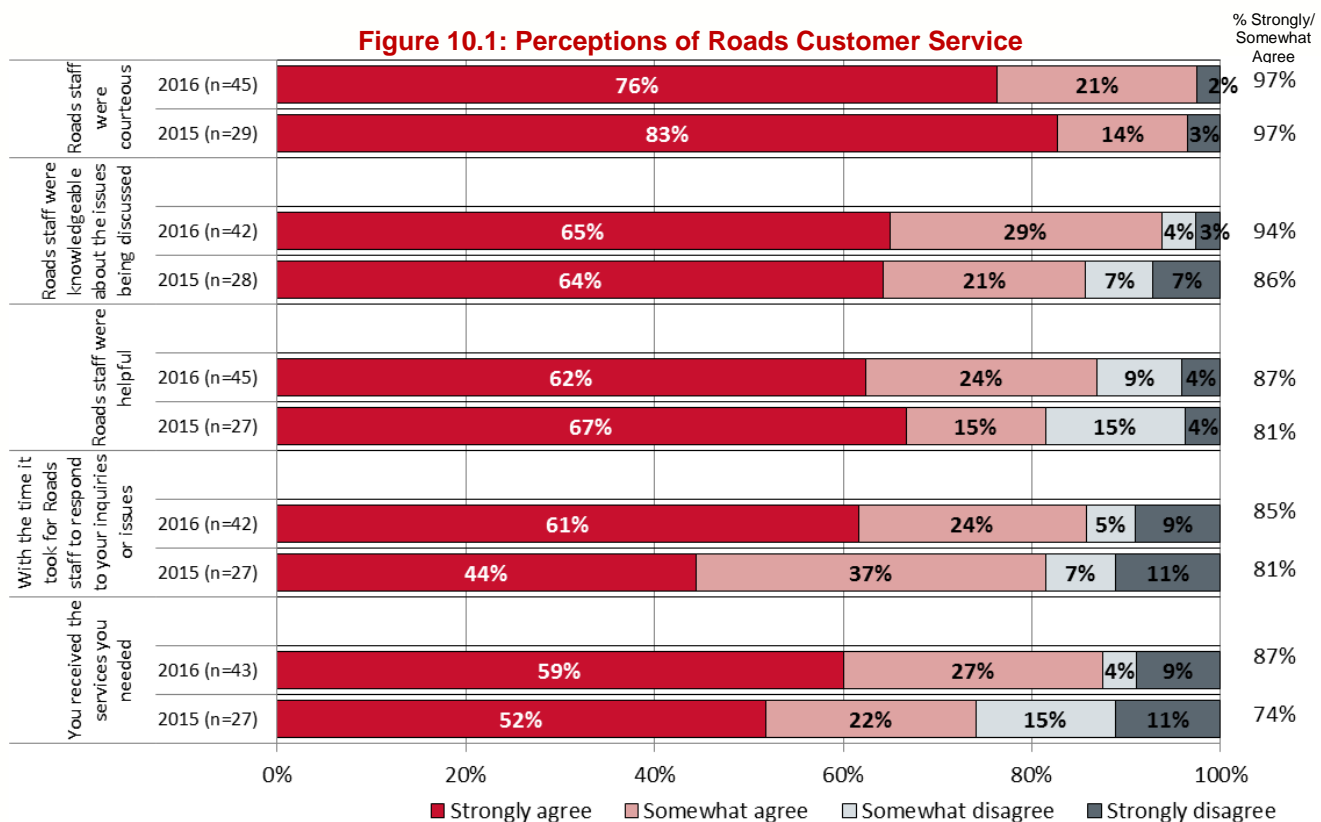
Significance of differences among survey waves ($p < .05$) - see Appendix C.



10.0 ROADS CUSTOMER SERVICE

Some respondents (7% in 2015 and 9% in 2016) indicated that they had directly communicated or interacted with Roads employees such as speaking to staff who are cleaning or fixing roads, when obtaining a permit, or receiving a call back from a Roads employee after calling 3-1-1. These respondents were asked about customer service issues based on their experience with Roads staff. Data presented in Figure 10.1 show that respondents expressed high regard of Roads employees for being courteous (97%), knowledgeable (94%), helpful (87%), responsive (85%), and received the services they needed (87%) when contacting Roads staff. Caution should be considered when observing these data due to the small number of respondents.

Figure 10.1: Perceptions of Roads Customer Service





11.0 CONCLUDING REMARKS

The Roads Business Unit has engaged Calgarians about satisfaction with maintenance and operations services and road conditions through survey research for over a decade. Throughout this period, Calgarians have typically expressed high levels of satisfaction. However, over the past two years, satisfaction ratings from the survey research have been higher than previous years. Based on all of the data that has been gathered over the years, Calgarians on the whole appreciate and acknowledge the efforts provided by Roads; especially the continued efforts of Roads to improve and enhance services and conditions. In previous years, it has been reported that Calgarians responded favorably to improvements implemented for the snow and ice control program. In 2016, the findings suggest that many Calgarians acknowledge the additional efforts and early implementation of the Spring Clean-Up and street cleaning initiatives.

Indeed, satisfaction ratings for spring cleaning and cleanliness of road surfaces was higher for both main roads and neighbourhood roads in 2016 compared to what has been typically observed in the survey results; at least in recent years. These findings are somewhat unexpected as Roads received higher than usual inquiries among citizens during the spring cleaning process this year and many of these were concerns being expressed by citizens. Even so, the survey results suggest citizens were more likely to welcome Roads' initiative to improve these services than to be concerned about the changes that occurred.

In 2016, the survey examined citizens' perspectives of concrete quality for sidewalk repairs and response times for street lighting repairs. Based on the findings, there is evidence to suggest that criteria typically used by Roads for determining repairs is consistent with how citizens would perceive the need for repairs; at least as it relates to concrete quality.

Similar to the findings last year, a significant majority of respondents are satisfied with the efforts of The City to inform citizens about road conditions in Calgary and are aware of or have used The City's website tools (e.g. the Advanced Traveler Information System map on Calgary.ca, the Spring Clean-up webpage), the traffic Advisory Radio station, 3-1-1, The City's social media sites, and the Roads Smartphone app. When asked about helpfulness of these methods, the vast majority of respondents concurred.

As well, the survey results reveal that some respondents have direct contact with Roads employees and, those who have, agree that Roads staff are courteous, knowledgeable, and helpful.



APPENDIX A: SURVEY SPECIFICATIONS

Methodology

Telephone Survey

- The survey was conducted from June 23 to July 9, 2016, which is consistent with survey periods of previous years.
- A total of 500 interviews were conducted with a random sample of adult Calgarians (at least 18 years of age). A sample size of 500 yields an estimated margin of error of $\pm 4.4\%$ within a 95% confidence interval for the Calgary adult population. The margin of error is computed for the entire sample and analyses based on sample subsets will typically not achieve the same level of confidence. Prior to 2015, sample sizes were typically 800 respondents (which yields an estimated margin of $\pm 3.5\%$).
- Demographic data were gathered from respondents and controlled to ensure equal representation between males and females.
- Over half of respondents were drawn from mobile (58%) and less than half (42%) from landline telephone numbers.
- Presentation of telephone survey data have been weighted to reflect the Calgary adult population in terms of gender, age, and city quadrant.

Online Open-Link Survey

- The survey was conducted from June 22 to July 10, 2016.
- A total of 683 respondents participated in the online open-link survey. The online open-link survey does not randomly sample from the Calgary population and, as such, margins of error are not calculated.
- The City of Calgary promoted the survey through posts of The City's Facebook and Twitter sites. Paid advertising was also conducted by The City on Facebook. HarGroup Management Consultants also promoted the survey through social media.
- Respondents were directed to a webpage on The City of Calgary's website to access the online open-link survey. HarGroup Management Consultants hosted and collected the survey data.
- Data presented in this report for the online open-link survey have not been weighted.