



Calgary Transit Customer Satisfaction - Biennial user and non user survey FINAL REPORT

Prepared for The City of Calgary by:

NRG Research Group
933 - 17th Avenue SW, Suite 405
Calgary, AB Canada T2T 5R6
www.nrgresearchgroup.com

enrg RESEARCH GROUP





	Page
Background	3
Quantitative Methodology	4
Qualitative Methodology	5
Executive summary	6
Main survey findings	
Key transit user profile changes to note	13
Overall satisfaction and customer commitment	15
Attitudes towards Calgary Transit	18
Importance and satisfaction with service attributes (including penalty/reward analysis and drivers analysis)	23
The role of Calgary Transit in the life of its user base	32
Interactions with Calgary Transit	37
Satisfaction with the quality of information provided by Calgary Transit	42
Calgary Transit momentum and future improvements	50
Non user survey results	58
Appendices	
Detailed Qualitative results – user segments	64
Detailed Qualitative results – non user segments	71
Questionnaire	76
Historical satisfaction comparisons	98
Penalty reward analysis overview	102
Segmentation analysis overview	114
Regressions analysis overview for key drivers	122

Calgary Transit is the public transit service which is owned and operated by The City of Calgary and has served The City for over 100 years. Ridership peaked at 110.27 million passenger trips in 2014 but the downturn in the economy had a negative impact on 2015 numbers. Passenger trips were down for the first time in 5 years – dropping from 110.27 million rides in 2014 to 109.97 million trips in 2015. In spite of this, The City and Calgary Transit continue to plan for future growth of the transit system, which is about to benefit from a \$68.5 million dollar injection to support expansion and refurbishment projects. In addition, further updates and improvements are on the way for the Calgary Transit app launched in 2015.

Calgary Transit has been conducting annual customer satisfaction surveys since 1993, and every other year since 1998 the survey has included non-users as well. Since inception, the customer satisfaction survey has been a telephone survey of 500 regular Calgary Transit customers with the biennial non-user study surveying an additional 500 non-users. The responses to the customer survey inform Calgary Transit of customer experiences, behaviour, satisfaction, perceptions, loyalty and priorities for service provisions, and provide contextual information to frame the data. The objectives of the non-user survey include measuring prior transit usage, understanding their preferred mode and travel choices and their potential for making Calgary Transit their mode of choice. Calgary Transit uses the survey findings to remain responsive to Calgarians' transit needs.

The 2016 Calgary Transit Customer Satisfaction Survey was conducted using a telephone survey. The sampling frame consisted of both users and non users. For the purposes of this survey, a user is defined as someone who takes an average of at least one trip a week on Calgary Transit. Non users either do not use transit at all or use it to make an average of less than one trip per week.

- The user sample size was n=500, with an average survey length of 24 minutes
- The non user sample size was n=500 users, with an average survey length of 9 minutes
- All data were collected via telephone using random digit dialling (RDD) and numbers from both landlines and cell phones were included in order to obtain an objective, randomly selected and statistically representative measure of the opinions of Calgarians.
- A total of 30% of the sample used came from cell phones.

NRG ensured sample representativeness by setting completion quotas by age category, gender and quadrant to ensure the survey sample reflects that of the general population of The City of Calgary aged 15 and older. Data were then weighted to the 2016 Civic census for age and gender.

Note: For a general population sample of 500, the maximum margin of error at the 95% level of confidence is +/- 4.4%; this is based on 50/50 split on any given question. As consensus on a question increases, the margin of error decreases. For instance, if the results are split 90/10 on a subgroup sample of 100, the margin of error at the 95% level of confidence narrows from +/- 9.8% to +/- 5.9%.

NRG used the quantitative survey results to develop a behavioural segmentation that was used to help inform the framework for the focus groups (a full breakdown of the methodology used can be found on page 56, while further SPSS outputs are contained in Appendix D)

In consultation with The City of Calgary, a total of 5 user groups and 3 non user groups were decided upon as follows;

Regular users:

- **Multi purpose transit users:** Use transit for a variety of trips including work, social/recreational and medical/dental (20% of the user base)
- **Singular purpose transit users:** Use transit with a singular focus in mind i.e. commuting to work or school (25% of the user base)
- **Captive riders:** Use transit as they don't have a car available to them or do not drive (23% of the user base)
- **Park n Ride transit users:** Use transit and park their car in a Park n Ride facility or park nearby a transit stop (21% of the user base)
- **Older predominantly non rush hour transit users:** Older commuters who predominantly use transit during non rush hour periods and whose trips are not work related (10% of the user base)

Non regular users:

- **Lapsed users:** Used Calgary Transit regularly in the past but not currently regular users (55% of the non regular user base)
- **Occasional users:** Never used Calgary Transit regularly, currently use only occasionally (26% of the non regular user base)
- **Non users:** Never been a regular Calgary Transit user and don't currently use Calgary Transit (19% of the non regular user base)

A screener questionnaire was developed to confirm 1-2 key characteristics of each of these groups and recruitment took place between 16th and 22nd November. Ten participants were recruited for each of the eight groups.

Focus groups were conducted between November 28th and December 1st. The number of final participants per group were as follows;

- Multi purpose transit users: 9 participants
- Singular purpose transit users: 9 participants
- Captive riders: 6 participants
- Park n Ride transit users: 4 participants
- Older predominantly non rush hour transit users: 10 participants
- Lapsed users: 9 participants
- Occasional users: 9 participants
- Non users: 10 participants

Overall satisfaction and performance on customer commitment elements

In 2016, total satisfaction is significantly higher compared to 2015, with a third (32%) feeling very satisfied and a further 49% feeling satisfied (vs. 25% very satisfied and 47% satisfied in 2015).

In 2015, Calgary Transit launched its Customer Commitment. The commitment is for Calgary Transit to be safe, reliable, clean, helpful, informative, and easy-to-use. In 2016, Calgary Transit users were asked to provide ratings for each of these 6 areas. The strongest performing area is 'ease of use', where 23% rate performance as 'extremely good'. The weakest area is 'being informative' where 28% rate performance as less than 7 out of 10.

Qualitative feedback from Calgary Transit users offers ways in which improvements can be made on 'informative'. Some transit users feel it's not widely known where to turn to for information regarding unplanned disruptions. Here the use of multi modal approaches was put forward (i.e. online via Twitter and offline via station announcements). In addition, the rationale behind fare changes was not always felt to be wholly understood. As such, Calgary Transit needs to ensure strong awareness between fare increases and the reasons behind them (i.e. greater transparency) and that the reasons provided are in fact visible within the community.

Aside from Customer Commitment, attitudes are measured across a range of areas. Performance is currently strong for Calgary Transit drivers with respect to their safety, knowledge and friendliness. In addition Calgary Transit users are very happy with their general transit experience and feelings of safety on transit vehicles. Calgary Transit is also seen to be doing well in regard to providing stops/stations that are in close proximity to user's needs.

Adapting to service disruptions quickly and arriving at stops on time are two areas requiring attention based on lower top box scores (38% strongly agree that Calgary Transit vehicles are punctual and 32% strongly agree that Calgary Transit adapts to service disruptions quickly). However, it should be noted that attitudes towards punctuality have seen significant improvements in the last 5 years, so the trend is heading in the right direction.

Key satisfaction drivers and penalty/reward/performance factors

Overall satisfaction with Calgary Transit depends on a number of various service attributes. To better understand the relationship between overall satisfaction and these service attributes, both Penalty-Reward and Key Driver analyses were run.

A Penalty-Reward Analysis (PRA) shows whether scoring low (or high) on a specific attribute is more strongly associated with a low or high score on an overall measure. The PRA produces a Penalty and a Reward score for each attribute and compares the difference between these scores. The difference score is used to categorize attributes into one of three types: Penalty, Reward, and Performance as follows;

- **Penalty:** an attribute that is expected. Failing to provide this service results in decreased satisfaction, but provision of the service does not increase overall satisfaction.
- **Reward:** an attribute that is unexpected but appreciated. Failing to provide this service does not decrease satisfaction, but provision of the service increases overall satisfaction.
- **Performance:** an attribute which increases satisfaction if provided, however it can also decrease satisfaction if not provided.

Key Drivers identifies service attributes that have the highest impact on overall satisfaction.

Combining these two analyses yields 5 key focal areas for Calgary Transit. All of these attributes have a significant impact on overall satisfaction and their Penalty-Reward scores indicate that an increase in attribute satisfaction will lead to an increase in overall satisfaction.

- Being on time (punctuality);
- Value for money;
- Convenience and connection of transfers;
- Length of travel time;
- Not being overcrowded.

Key satisfaction drivers and penalty/reward/performance factors - continued

In addition there are 3 service areas classified as penalty attributes. Calgary Transit needs to ensure they maintain a good performance level on these as customers **expect** to have this as part of their transit experience. Failing to provide this service results in decreased satisfaction, but provision of the service does not increase overall satisfaction.

- Having courteous and helpful staff;
- Convenience of purchasing tickets and passes;
- Information made available about changes to Calgary Transit service and fares.

Additional qualitative insight on two focal areas – value for money and length of travel time

One third of transit users (33%) are unsatisfied with the length of travel time and the same proportion are currently unsatisfied with Calgary Transit's value for money. Qualitatively, transit users in the focus groups echoed some degree of dissatisfaction with travel times (unsurprisingly this was stronger amongst non regular users).

Here this dissatisfaction stems from;

- The number of connections/transfers that can be involved in a trip;
- The perception that similar distances can be covered in substantially quicker time via private vehicle, and;
- The current transit network structure of buses feeding into CTrain stations can be perceived as overcomplicated and leading to longer travel times.

Qualitatively, when it comes to value for money, more regular users can rationalise the cost savings provided by transit, however, there are factors which lower value for money perceptions;

- Paying the same price irrespective of distance, resulting in feelings of lower value on shorter trips;
- Journeys can involve multiple connections/transfers so there is some sense of 'paying money to wait';
- Monthly reserved parking fees perceived as a 'grudge' purchase for Park 'n Ride users. Offers convenience and security but can be seen as a penalty charge rather than something that actively encourages transit use.

Reasons for using Calgary Transit and the role it plays in the life of its users

In 2016 the main reason for using Calgary Transit is convenience. Here this relates mainly to having a service that takes users to/from work/school, helps avoid parking fees and the drive downtown. Other factors include cost and circumstance (i.e. don't drive/have no car available).

Calgary Transit not only plays a strong role in the lifestyle of its user base but over time this role is growing bigger. This is evidenced by a significant positive shift in top box agreement that 'Calgary Transit is an important choice in my life and lifestyle' and 'Calgary Transit availability influences where I live or move to'. Calgary Transit does play a slightly lesser role in journey decisions ('I consider Calgary Transit for each trip I make' and 'I use Calgary Transit to go to multiple places on my journey') but over time the strength of conviction here is becoming more positive.

Opportunities exist to increase consideration and shift the dial on usage of Calgary Transit for multiple locations. Here some insights were provided by single use transit users (i.e. those who use transit to just get to/from work/school) who indicated that;

- Consideration for social trips could be positively impacted by an increase in service hours (i.e. to accommodate closing time for bars or special events/concerts);
- Smaller, short incidental trips could benefit from the introduction of smaller fares as there was some aversion towards the same fare being charged for a long commute and a short 3-4 stop trip

Interactions with Calgary Transit

In 2016 Calgary Transit began measuring the different types of interactions users have with them. A high proportion (76%) did not make any contact with Calgary Transit or 311 in the past 12 months. Concerns/complaints were twice as prevalent as compliments (11% have been in contact for a concern/complaint while 5% have been in contact with a compliment).

Calgary Transit is also interested in the frequency of usage of various information sources. In 2016, online information sources prove more popular than their offline counterparts, particularly the Calgary Transit Smartphone app. The TeleRide system is the most frequently used offline information source. Email alerts and the customer call centre are much lower down the radar as sources of information for Calgary Transit users.

In terms of usage frequency, Calgary Transit is making the most traction on Google Transit and Twitter. Meanwhile, usage of the Calgary Transit website and email alerts remains relatively static. Usage of the TeleRide system is in decline and this may be in response to Calgary Transit users turning more to online methods i.e. Google Transit and Twitter.

Satisfaction with the quality of information provided by Calgary Transit

Calgary Transit users are quite satisfied with the quality of information provided from offline sources. In particular Calgary Transit users are becoming increasingly satisfied with the quality of information provided by Calgary Transit drivers.

Over time, more Calgary Transit users are turning to Twitter and Google Transit to find out information from Calgary Transit. As such it is pleasing to see that there are strong levels of satisfaction with the quality of information provided by these two sources. The area requiring more attention is the Calgary Transit website, as satisfaction here continues to be weaker.

In terms of communication around various issues, Calgary Transit performs well on communication around planned disruptions and how to use the Transit system. However, there are improvements to be made, particularly with regard to fare change communication and communication around unplanned disruptions.

Calgary Transit momentum and future improvements

Momentum for Calgary Transit has fluctuated in recent years however the long term trend is positive, growing from 27% positive momentum in 2011 to 35% in 2016. This positive momentum is driven mainly by positive attitudes towards service frequency however other contributing factors include services being on time and provisions for safety and security.

In regard to improvements desired by Calgary Transit users, service design continues to top the list. This includes actions such as more frequent service, expanded service and better punctuality. Routes/planning is another key area to address, and within this Calgary Transit users are seeking expanded services and improved bus routes.

As part of these improvements, Calgary Transit continually seeks feedback from users in terms of how these should be funded. In 2016 and historically, at least 1-in-2 Calgary Transit users are positive towards fare increases and funding improvements.

Non regular transit user results

In 2016, most non regular users have either never been a regular user (45%) or stopped being a regular user over a year ago (49%). In the last 4 years there has been a slight (but not significant) rise in the proportion of lapsed users (those who used Calgary Transit regularly in the past but are no longer regular users).

A private vehicle is the most common form of transportation used by non regular transit users/non transit users and regardless of status (i.e. driver or passenger), the general consensus is that there are many good reasons to continue using a private vehicle as a method of transport (i.e. there is a high level of commitment to private vehicles).

Qualitatively, there were several reasons provided for wanting to use private vehicles;

- **More efficient/convenient/faster:** Driving allows for more direct routes so this is seen as faster and more efficient. Transit is perceived as lengthy and involves too many connections or transfers (and to a degree this comes down to the trade off made around the choice of community lived in and access to transit routes). The network design is perceived as buses feeding into Ctrains, therefore if you are not near a CTrain station the journey becomes off-putting.
- **Greater flexibility/control:** A private vehicle puts you in control vs. transit which requires more pre planning

Calgary Transit is interested in finding out more about the different user types, particularly lapsed users. Lapsed users currently have the greatest propensity to use transit again, relative to non users or occasional users. This is due to the fact that 74% of lapsed users can identify at least one thing Calgary Transit could do to increase their patronage (vs. 59% for occasional and 51% for non users). In addition, circumstantial reasons are more common than service related areas as a reason for becoming a lapsed user (circumstantial reasons here relate to a location change or the acquisition of a vehicle).



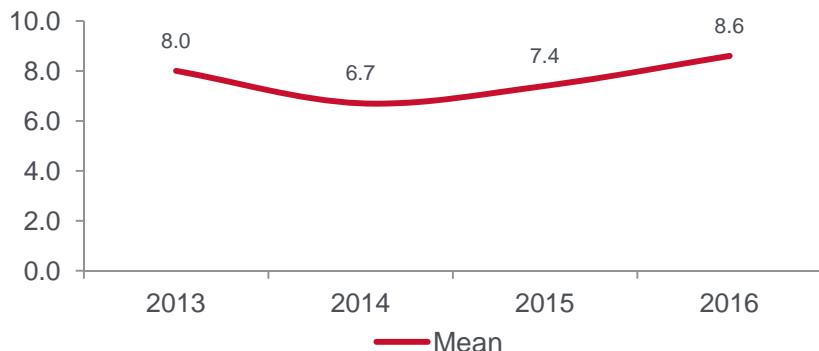
Key transit user profile changes to note



Transit user profile – key changes over last 3 years

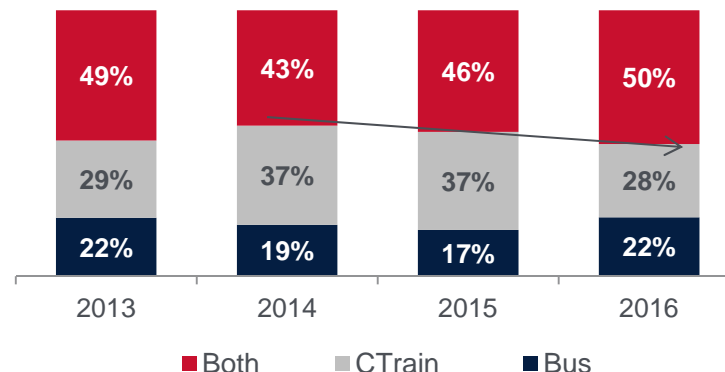
Q. In an AVERAGE week, that includes all 7 days, how many times would you normally ride Calgary Transit buses AND/OR CTrains?

Average number of weekly transit trips – regular users



Q. Do you mainly use the bus, the CTrain, or both?

Transit methods used



Q. For what type of trips do you mainly use Calgary Transit? Do you use Transit for...[TOTAL MENTIONS]

Transit trip types	2013	2014	2015	2016
Work	58%	60%	59%	64%
School	27%	18%	20%	26%
Social/recreational	16%	19%	25%	24%
Shopping	14%	16%	12%	18%
Medical, dental, personal business	12%	13%	11%	17%

Calgary Transit users are now taking a higher average number of weekly trips compared to 2013. There has also been a significant positive shift in the proportion using transit for purposes outside of work/school.

Encouraging multi purpose trip usage is a way in which Calgary Transit can grow the average number of weekly transit trips. Qualitatively, some transit users (particularly lapsed or single purpose users) indicated that an increase in service hours would help them consider transit for more trips (i.e. to accommodate social occasions such as concerts/events or closing times for bars).



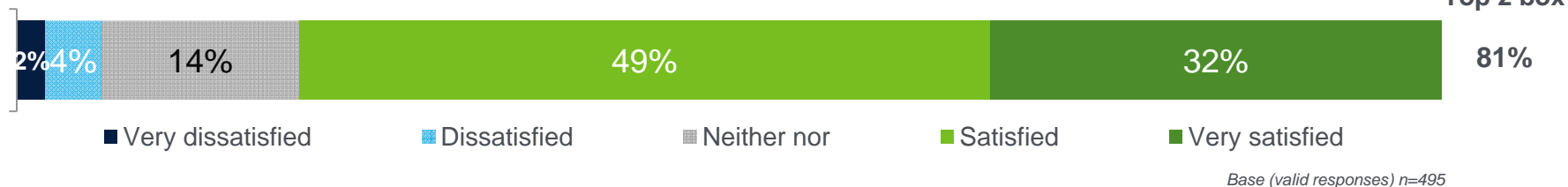


Overall satisfaction and customer commitment

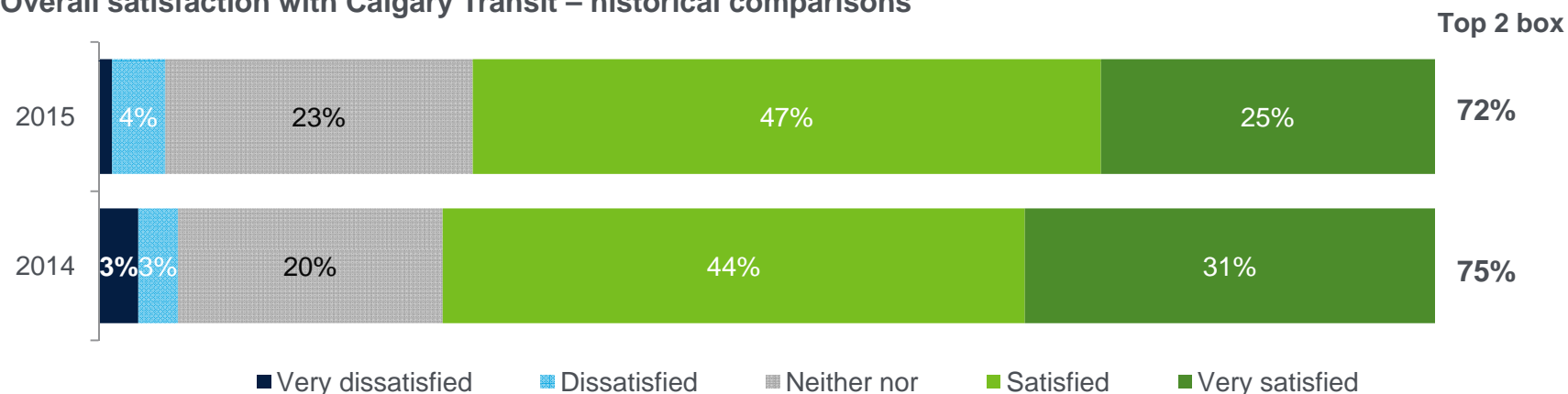
Overall satisfaction with Calgary Transit

Q. Based on your own experience in the last seven days, how satisfied or dissatisfied are you with the overall service provided by the transit system in Calgary?

Overall satisfaction with Calgary Transit - 2016



Overall satisfaction with Calgary Transit – historical comparisons



Based on their recent experience, a high proportion of Calgary Transit users are satisfied with the overall service provided by the transit system in Calgary. In 2016 total satisfaction is significantly higher compared to the last 2 years, with a third (32%) feeling very satisfied and a further 49% feeling satisfied.

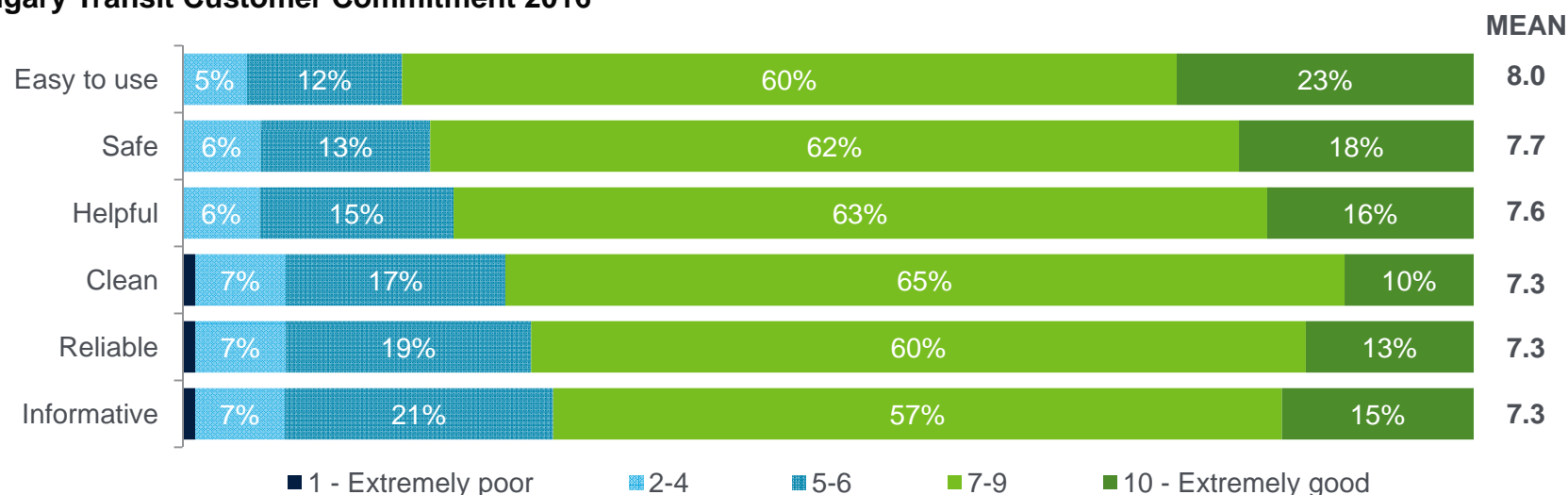
Those aged 55 years and over are significantly more likely to be very satisfied with the overall service provided by Calgary Transit (40% of those aged 55 or older are very satisfied vs. 29% of those aged under 55). Those who only use the bus are also significantly more likely to be very satisfied (the top box score amongst bus only users is 40% vs. 23% for those who only use the CTrain).



2016 Customer Commitment

Q. Please rate how Calgary Transit is doing on each of the following elements of Customer Commitment.

Calgary Transit Customer Commitment 2016



Base (valid responses) n=500

A new measure for 2016, Customer Commitment measures how well Calgary Transit is seen to be performing across six areas. Currently performance is strongest for 'ease of use', where almost a quarter (23%) rate this as 'extremely good'. The lowest performing area is 'being informative', as such moving in to 2017 this is an element that Calgary Transit should focus making improvements on.

Those aged 55 years and older are more likely to perceive Calgary Transit as 'reliable' (the mean rating amongst this age group is 7.7 vs. 7.2 for those aged under 55).

Qualitative feedback from Calgary Transit users may offer some areas for where improvements can be made to perceptions the 'informative' priority. Some transit users feel that it's not widely known where to turn to for information regarding unplanned disruptions. Here the use of multi modal approaches was put forward (i.e. online via Twitter and offline via station announcements). In addition, the rationale behind fare changes was not always felt to be wholly understood. As such Calgary Transit needs to ensure strong awareness between the fare increase and the reasons behind it (i.e. greater transparency) and ensuring that the reasons provided are in fact visible within the community.



Attitudes towards Calgary Transit

Calgary Transit – attitudes towards drivers, the experience, station locations, punctuality and service restorations

Q. I'd like to ask you how strongly you agree or disagree with a few statements about Calgary Transit. For each of the following statements, please tell me if you strongly agree, somewhat agree, somewhat disagree or strongly disagree

Drivers

Calgary Transit drivers operate their vehicles safely

Total agreement: 96%



■ Strongly agree ■ Agree

Base (valid responses): n=498

Bus drivers are knowledgeable about the service they provide

Total agreement: 95%



■ Strongly agree ■ Agree

Base (valid responses): n=438

The bus drivers usually greet me in a friendly manner

Total agreement: 90%



■ Strongly agree ■ Agree

Base (valid responses): n=446

Transit experience

My experience while travelling on Calgary Transit is usually pleasant

Total agreement: 96%



■ Strongly agree ■ Agree

Base (valid responses): n=499

I feel safe when traveling on transit

Total agreement: 93%



■ Strongly agree ■ Agree

Base (valid responses): n=500

Other passengers are usually well-behaved

Total agreement: 87%



■ Strongly agree ■ Agree

Base (valid responses): n=498

Other attributes

A bus stop/CTrain station is within a reasonable distance of my origin/destination

Total agreement: 94%



■ Strongly agree ■ Agree

Base (valid responses): n=495

Calgary Transit vehicles normally arrive at my stop on time

Total agreement: 87%



■ Strongly agree ■ Agree

Base (valid responses): n=493

Calgary Transit restores service or adapts to service disruptions quickly

Total agreement: 85%



■ Strongly agree ■ Agree

Base (valid responses): n=485

On the whole attitudes towards Calgary Transit are positive for drivers as well as the transit experience as a whole. When it comes to Calgary Transit's provision of stops/stations that are in close proximity to users' needs, ratings are also strong. The two focus areas, based upon weaker ratings, are punctuality and adaptation/restoration around service disruptions.

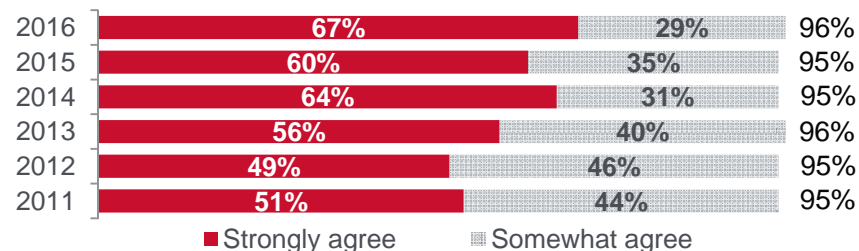
Adapting to service disruptions is an area currently weaker amongst CTrain only users (77% agree that CT adapts to service disruptions quickly vs. 87% agreement amongst bus only users). Those who only use buses are also more likely to agree that they feel safe when using transit (97% vs. 89% amongst those who only use Ctrains).

Calgary Transit – attitudes towards drivers

Q. I'd like to ask you how strongly you agree or disagree with a few statements about Calgary Transit. For each of the following statements, please tell me if you **strongly agree**, **somewhat agree**, **somewhat disagree** or **strongly disagree**

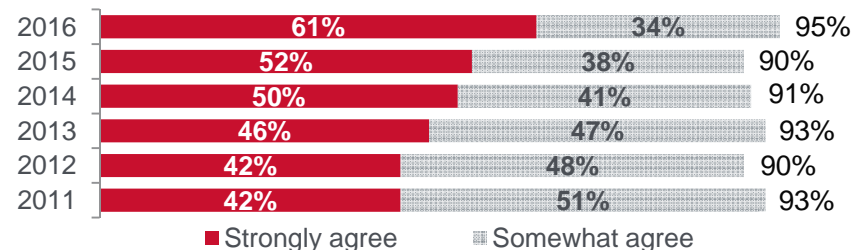
Attitudes towards Calgary Transit drivers are becoming increasingly more positive, as evidenced by a significant increase in top box agreement scores for their vehicle operation, service knowledge and friendly greeting.

Calgary Transit drivers operate their vehicles safely



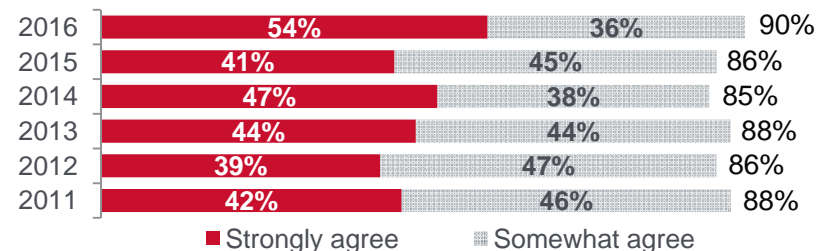
Base (valid responses): n=498

Bus drivers are knowledgeable about the service they provide



Base (valid responses): n=438

The bus drivers usually greet me in a friendly manner



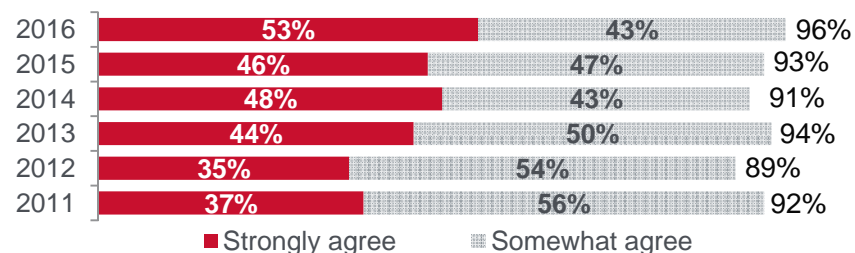
Base (valid responses): n=446

Calgary Transit – attitudes towards the experience

Q. I'd like to ask you how strongly you agree or disagree with a few statements about Calgary Transit. For each of the following statements, please tell me if you **strongly agree**, **somewhat agree**, **somewhat disagree** or **strongly disagree**

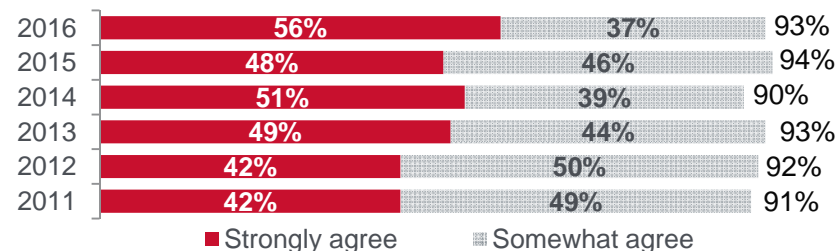
Attitudes towards the Calgary Transit experience are becoming increasingly more positive. As is the case with Calgary Transit drivers, this is evidenced by a significant increase in top box agreement scores for overall experience, feelings of safety and good behaviour of other passengers.

My experience while travelling on Calgary Transit is usually pleasant



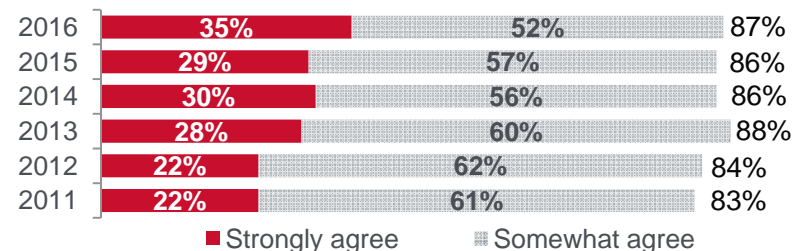
2016 Base (valid responses): n=499

I feel safe when traveling on transit



2016 Base (valid responses): n=500

Other passengers are usually well-behaved



2016 Base (valid responses): n=498



Calgary Transit – attitudes towards station locations and punctuality

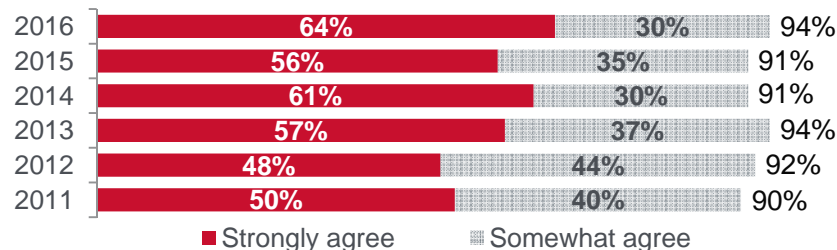
Q. I'd like to ask you how strongly you agree or disagree with a few statements about Calgary Transit. For each of the following statements, please tell me if you **strongly agree**, **somewhat agree**, **somewhat disagree** or **strongly disagree**

Since 2011, there has been a significant shift in the proportion of Calgary Transit users who strongly agree that a bus stop/CTrain station is located within a reasonable distance from their origin/location.

Throughout this same time period, Calgary Transit users are becoming increasingly more positive towards the punctuality of Calgary Transit vehicles.

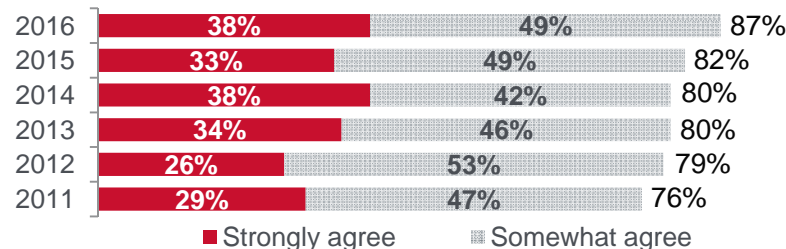
Speaking directly to Calgary Transit users in a qualitative setting, most could agree that transit stops were in close proximity to their origin/destination. However proximity is only one side of the coin for transit users, as perceptions will change depending on what type of stop is close by and the purpose of the trip. For example, being in close proximity to a CTrain station is great when you need to commute downtown, but living near a bus stop may have more negative perceptions if that means catching a bus to a CTrain station or even another bus connection in order to complete your intended trip.

A bus stop/CTrain station is within a reasonable distance of my origin/destination



2016 Base (valid responses): n=495

Calgary Transit vehicles normally arrive at my stop on time



2016 Base (valid responses): n=493

No historical data available for 'Calgary Transit restores service or adapts to service disruptions quickly' as this is a new measure in 2016



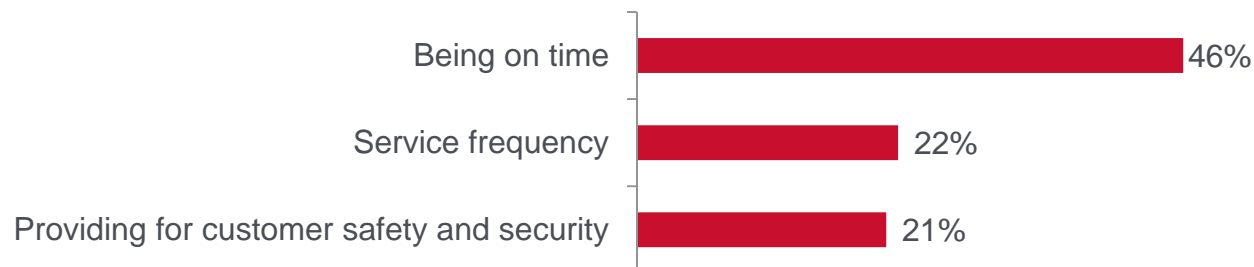


Importance and satisfaction with service attributes
(including Penalty/Reward and Key Driver
analysis)

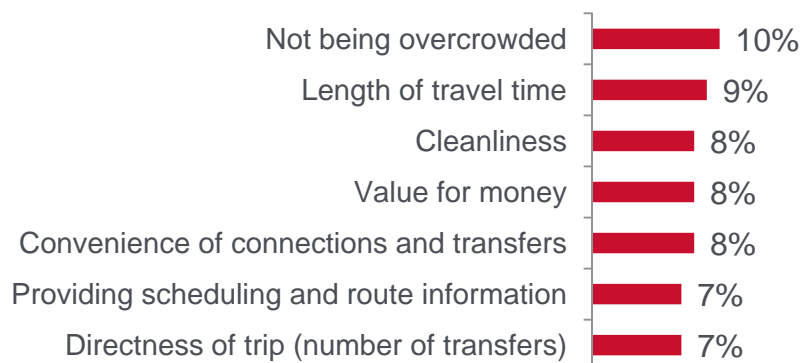
Claimed importance factors

Q. Thinking of the factors we have just discussed, what, from your point of view, would you say is the one most important service factor? And what is the second most important? (TOTAL MENTIONS)

Most commonly claimed importance factors - 2016



Other claimed important factors - 2016



Base (valid responses): n=495

Punctuality, service frequency and provision for customer safety/security all rank high in the minds of Calgary Transit users in terms of claimed importance. However, to help prioritise these factors attention should be given to the relationship between current satisfaction on each service factor and overall satisfaction with Calgary Transit. Here Penalty/Reward analysis and Key Driver analysis can help provide further insight (the results of these analyses are covered on pages 26 to 29, and in more detail in Appendix C).



Historical comparisons of service factors

Q. Thinking of the factors we have just discussed, what, from your point of view, would you say is the one most important service factor? And what is the second most important? (TOTAL MENTIONS)

Most important service factors (historical comparison based on top 10 factors in 2016)	2011	2012	2013	2014	2015	2016
Being on time	50%	52%	55%	38%	41%	46%
Service frequency	28%	31%	32%	28%	26%	22%
Providing for customer safety and security	16%	14%	13%	17%	20%	21%
Not being overcrowded	16%	19%	16%	13%	11%	10%
Length of travel time	8%	10%	9%	9%	9%	9%
Cleanliness	8%	6%	6%	10%	7%	8%
Value for money	10%	9%	10%	11%	11%	8%
Convenience of connections and transfers	6%	9%	5%	11%	11%	8%
Providing scheduling and route information	5%	3%	2%	3%	3%	7%
Directness of trip (number of transfers)	10%	11%	6%	6%	9%	7%

2016 Base (valid responses) n=495

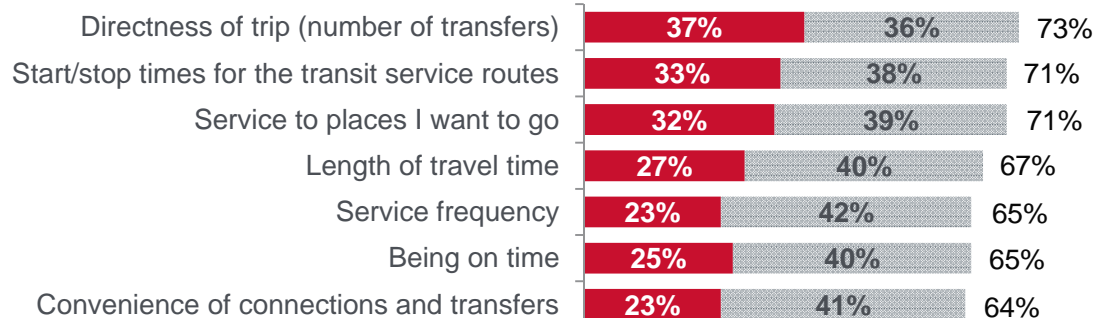
In the minds of Calgary Transit users, punctuality, service frequency and provision for customer safety/security continually rank highest on claimed importance.

Providing for customer safety and security has increased in importance over the last 4 years and is now significantly higher than it was in 2012. Providing scheduling and route information is also now considered to be significantly more important relative to the last 4 years.

Satisfaction with Calgary Transit elements

Q. I would like you to tell me how satisfied or dissatisfied you were with each service aspect.

Satisfaction with Transit journey attributes



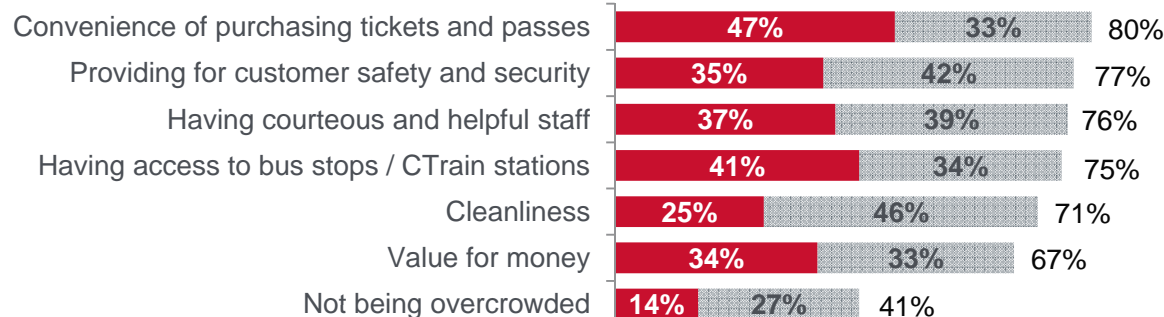
Compared to those who use both buses and CTrains, those who only use the CTrain are significantly more satisfied with the directness of trips (85% vs. 68%), length of travel time (79% vs. 64%) and service frequency (73% vs. 62%).

Satisfaction with communications attributes



Those who have been classified as older/non rush hour travel users are significantly more satisfied with transit being value for money (92%) and not being overcrowded (64%).

Satisfaction with other attributes



(For historical comparisons on these attributes please refer to Appendix B).

Further analysis on these attributes has been conducted using Penalty/Reward analysis (results of which are outlined on the following pages)

Elements with a significant impact on satisfaction ratings for Calgary Transit

A regression model looking at all satisfaction attributes identified the following key focal areas:



Satisfaction is positively impacted when:

- Transit vehicles are on time
- Transit vehicles are not overcrowded
- Transit is perceived to be good value for money
- There are convenient connections and transfers in place
- There are high levels of satisfaction with the length of travel time i.e. transit users are happy with the travel time for their journey

Based on a linear stepwise regression where variables were transformed to account for multi-collinearity – regression model chosen accounts for 47% of the variation in the overall satisfaction rating for Calgary Transit – see Appendix E for further information

Some areas for improvement – value for money and length of travel time

Qualitative insights on length of travel time:



There is room for improvement with regards to travel time perceptions.

Quantitatively, 67% are satisfied with the length of travel time (and since 2014, this proportion has remained unchanged).

Transit users spoken to echo a degree of dissatisfaction with travel times (unsurprisingly this was stronger amongst non regular users).

Here this dissatisfaction stems from;

- **The number of connections/transfers that can be involved in a trip;**
- **The negatively framed comparisons between transit travel times and private vehicle travel:** The perception that similar distances can be covered in substantially quicker time via private vehicle, and;
- **The network construction that facilitates buses feeding into CTrain stations:** Seen by some as overcomplicating the system and leading to longer travel times.

These are all factors that Calgary Transit needs to be mindful of in terms of what is negatively impacting satisfaction with travel times.

Qualitative insights on value for money



There is also room for improvement with regards to value for money perceptions.

Quantitatively, 67% are satisfied with value for money (and since 2014, this proportion has remained unchanged).

Frequent users are more adept at rationalising the cost savings transit offers over driving (i.e. parking, gas, maintenance, tax rebates). However there are factors which lower value for money perceptions;

- **Time rather than distance based ticket prices:** Paying the same price irrespective of distance, resulting in feelings of lower value on shorter trips
- **Time as a cost factor:** Also linked to perceptions around travel time, some journeys can involve multiple connections/transfers to there is some sense of 'paying money to wait'
- **Monthly reserved parking fees:** Somewhat of a grudge purchase for Park 'n Ride users. Offers convenience and security but can be seen as a penalty charge rather than something that actively encourages transit use

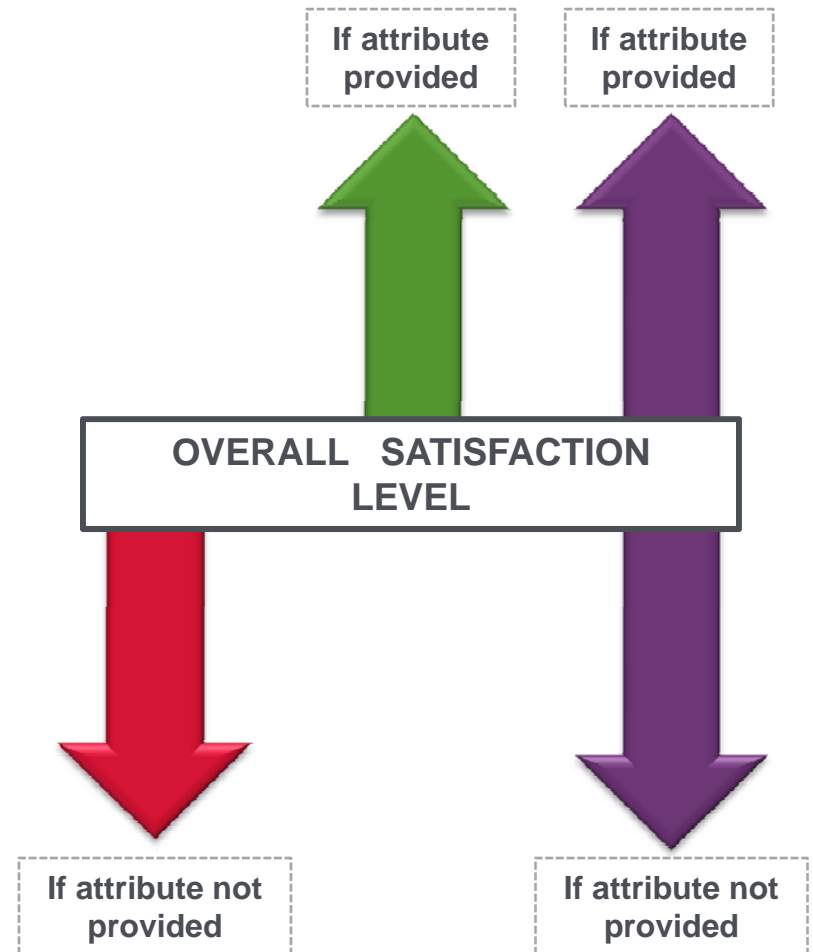
These are all factors that Calgary Transit needs to be mindful of in terms of value for money perceptions.

A Penalty-Reward Analysis (PRA) helps to determine whether scoring low (or high) on a specific attribute is more strongly associated with a low or high score on an overall measure. Depending on this association, PRA categorizes each attribute into one of three categories:

Penalty Attribute (red arrow in diagram): an attribute that is expected. Failing to provide this service results in decreased satisfaction, but provision of the service does not increase overall satisfaction.

Reward Attribute (green arrow) an attribute that is unexpected but appreciated. Failing to provide this service does not decrease satisfaction, but provision of the service increases overall satisfaction.

Performance Attribute (purple arrows): an attribute which increases satisfaction if provided, however it can also decrease satisfaction if not provided. Unlike Penalty or Reward attributes, Performance attributes can positively or negatively influence overall satisfaction.



PERFORMANCE ATTRIBUTES ALSO CLASSIFIED AS KEY DRIVERS

For the following 4 attributes, overall satisfaction will increase if customers feel their needs are being met on this attribute but will decrease if this is not the case. As these attributes are also key satisfaction drivers, they have the most impact on overall satisfaction. As such, these areas need to be a priority for Calgary Transit.

- Being on time
- Value for money
- Convenience of connections and transfers
- Length of travel time

THE REWARD ATTRIBUTE ALSO CLASSIFIED AS A KEY DRIVER

Not being overcrowded is a reward attribute, which means that it is **unexpected but appreciated**.

Failing to provide this service does not decrease satisfaction, but provision of the service increases overall satisfaction. As this is also a key driver, it has deemed to have a **large impact on overall satisfaction**.

PENALTY ATTRIBUTES

The following attributes have been identified as penalty attributes by Calgary Transit. Customers **expect** all of these aspects as part of their transit experience. Therefore, in order to ensure that strong customer satisfaction, Calgary Transit should ensure that these service attributes are delivered to Calgary Transit users.

- Having courteous and helpful staff
- Convenience of purchasing tickets and passes
- Information made available about changes to Calgary Transit service and fares

PERFORMANCE ATTRIBUTES

For the following 10 attributes, overall satisfaction will increase if customers feel their needs are being met on this attribute but will decrease if this is not the case. As these attributes have not also been identified as key satisfaction drivers they should be considered a secondary priority for Calgary Transit (behind those performance attributes also identified as key drivers).

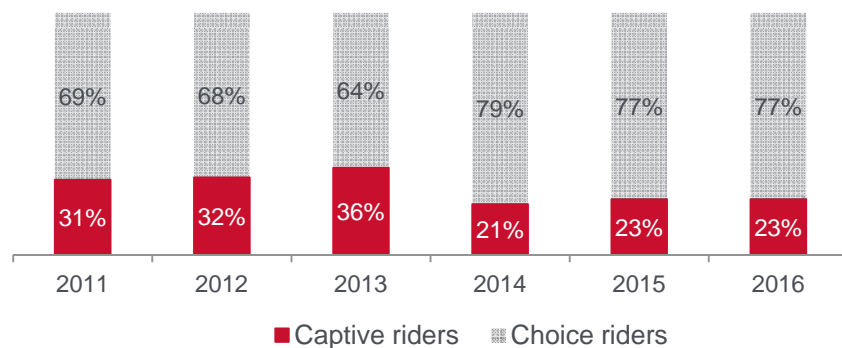
- Service frequency
- Having access to bus stops / CTrain stations
- Cleanliness
- Communication about disruption to CT services
- Directness of trip (number of transfers)
- Providing real-time bus and CTrain information
- Providing scheduling and route information
- Service to places I want to go
- Providing for customer safety and security
- Start/stop times for transit service routes



The role of Calgary Transit in the life of its users



Reasons for using Transit



Comfortable/Relaxing
No Car Available
Save Gas/High Parking Rates
Less Expensive
Convenient Service
Avoid Parking
Don't Drive
Faster travel time
Environmental reasons

The proportion of captive riders remains stable from 2015 but is down significantly from 2013.

Q. What is your one main reason for using Calgary Transit instead of alternative forms of transportation?

One main reason for using transit	2014	2015	2016
Convenient service	20%	3%	26%
Less expensive	13%	19%	17%
Don't drive	11%	11%	13%
Avoid parking	20%	20%	12%
No car available	10%	12%	10%
Avoid traffic	6%	10%	5%
Save Gas/High gasoline prices	4%	5%	3%
Faster travel time	5%	12%	3%
Bus stop close by/on a route	-	-	2%
No alternative option available	-	-	2%
Base (valid responses)	404	501	500

Main reasons why transit is convenient - 2016	%
Takes me to/from work	6%
Don't have to pay parking fees	3%
For getting downtown/avoids the downtown drive	3%
Takes me to/from school	3%
Easier/better to use	3%

In 2016 the main reason for using Calgary Transit is convenience. Here this relates mainly to having a service that takes users to/from work/school, helps avoid parking fees and the drive downtown. Other factors include cost and circumstance (i.e. don't drive/have no car available).

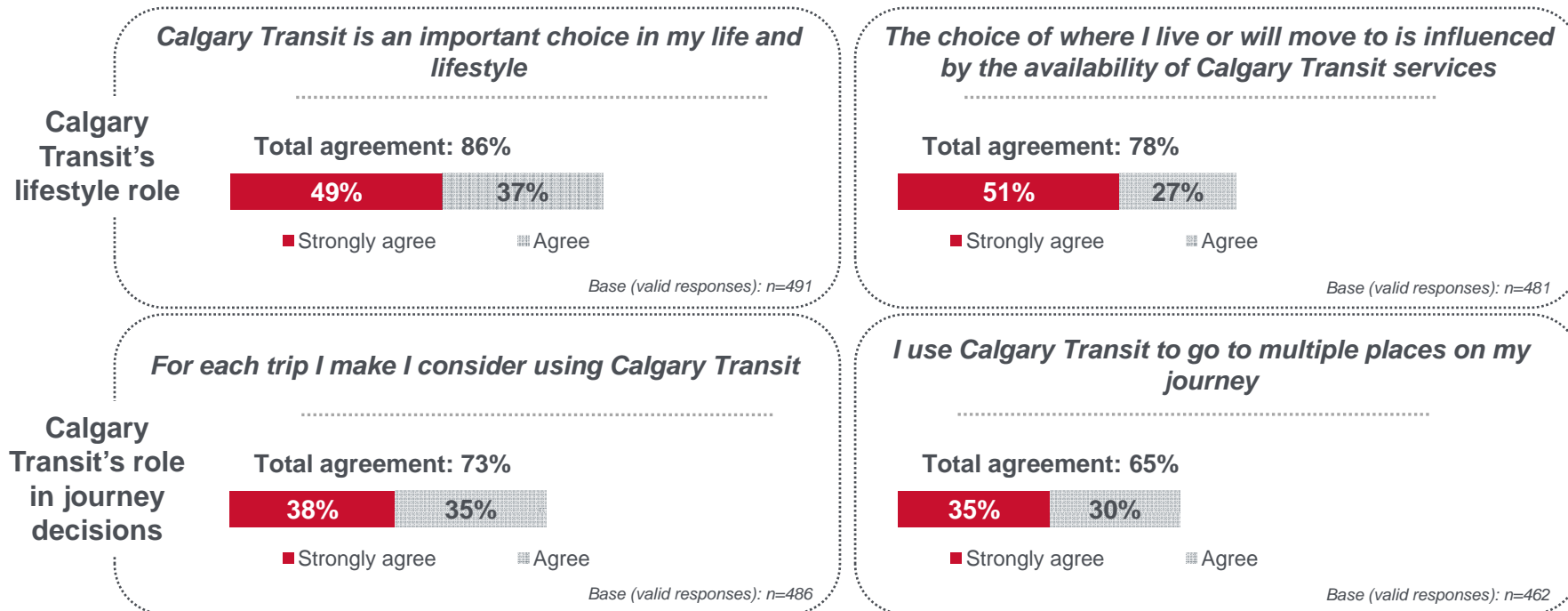
Males are more inclined to use transit due to cost reasons and issues with parking (21% of males claim 'less expensive' as their main reason vs. 12% of females while 16% of males use transit to avoid parking vs. 9% of females).





Calgary Transit's role in journey decisions and lifestyle

Q. Calgary Transit is interested in how Calgary Transit fits into your life. For each of the following statements, please tell me if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree



Calgary Transit plays a relatively strong role in the **lifestyle** of its regular user base – however, there is room for improvement to increase its role in journey decisions i.e. consideration of Calgary Transit for each trip and using Calgary Transit to get to multiple places.

There are opportunities to increase consideration and in turn shift the dial on usage of Calgary Transit for multiple locations. Here some insights were provided by single use transit users (i.e. those who use transit to just get to/from work/school) who indicated that;

- Consideration for social trips could be positively impacted by an increase in service hours (i.e. to accommodate closing time for bars or special events/concerts);
- Smaller, short incidental trips could benefit from the introduction of smaller fares as there was some aversion towards the same fare being charged for a long commute and a short 3-4 stop trip.





Calgary Transit's role on lifestyle and journey decisions

Demographic differences

Q. Calgary Transit is interested in how Calgary Transit fits into your life. For each of the following statements, please tell me if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree

	% agreement	CT is an important choice in my life and lifestyle	Choice of where I live or will move to is influenced by the availability of CT services	For each trip I make I consider using CT	I use CT to go to multiple places on my journey
Total		86%	78%	73%	64%
Gender					
Male		83%	72%	70%	60%
Female		89%	84%	76%	69%
Age					
<35 years		82%	77%	73%	73%
35-54 years		90%	77%	68%	55%
55+ years		86%	82%	80%	64%
User type					
Use both CTrain and buses		89%	81%	84%	79%
Use CTrain only		80%	71%	58%	41%
Use bus only		85%	80%	67%	58%
Multi use		87%	79%	87%	86%
Segment					
Single use		87%	73%	62%	43%
Park'n'ride		75%	67%	44%	35%
Captive users		90%	88%	91%	84%
Older non rush hour commuters		94%	91%	90%	80%

○ Significantly higher relative to counterparts
 □ Significantly lower relative to counterparts

Females are more engaged with Calgary Transit, as evidenced by their significantly higher agreement scores on most lifestyle/journey related statements. Park n Ride transit users (those who park near train stations or use park n ride facilities) are the least engaged segment of transit users – conversely, older non rush-hour commuters have higher engagement levels.



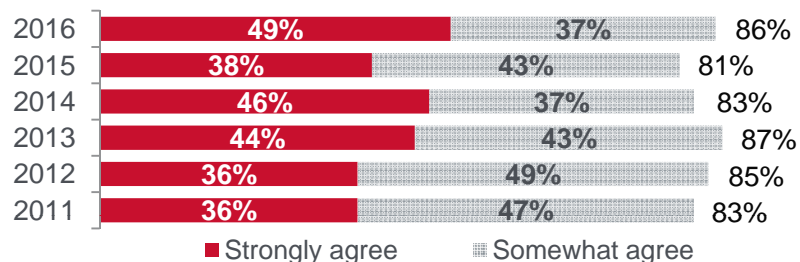
Calgary Transit's role on lifestyle and journey decisions

Historical comparisons

Q. Calgary Transit is interested in how Calgary Transit fits into your life. For each of the following statements, please tell me if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree

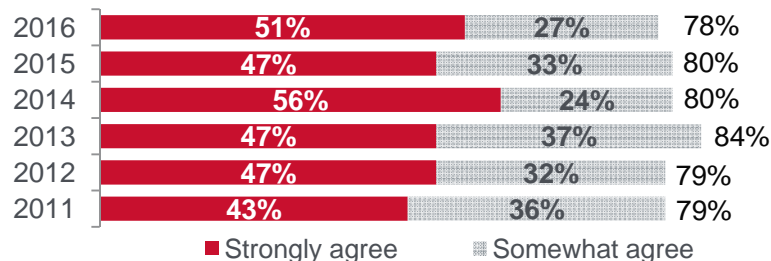
Calgary Transit's lifestyle role

Calgary Transit is an important choice in my life and lifestyle



2016 Base (valid responses): n=491

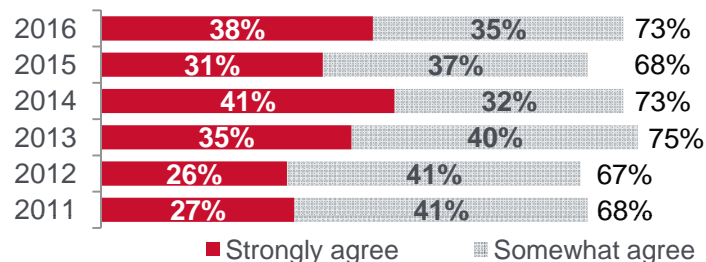
The choice of where I live or will move to is influenced by the availability of Calgary Transit services



2016 Base (valid responses): n=481

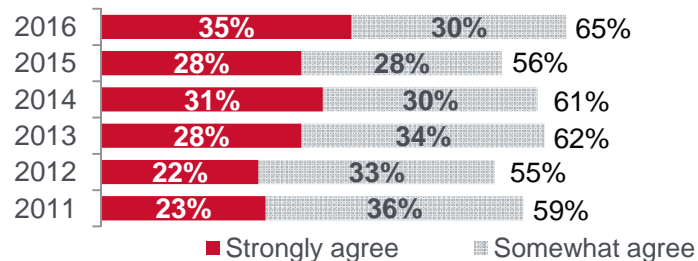
Calgary Transit's role in journey decisions

For each trip I make I consider using Calgary Transit



2016 Base (valid responses): n=486

I use Calgary Transit to go to multiple places on my journey



2016 Base (valid responses): n=462

Calgary Transit not only plays a relatively strong role in the lifestyle of its user base but over time this role is growing bigger. This is evidenced by a significant positive shift in top box agreement that 'Calgary Transit is an important choice in my life and lifestyle' and 'Calgary Transit availability influences where I live or move to'. Calgary Transit does play a slightly lesser role in journey decisions but over time the strength of conviction here is becoming more positive.



Interactions with Calgary Transit



Interaction with Calgary Transit/311 for questions, complaints, compliments or other

Q. In the past 12 months, have you contacted Calgary Transit or 311 to do any of the following concerning transit service:

Interaction/contact with Calgary Transit/311 in past 12 months [2015/2016]

76% made no contact in the past 12 months



14% have contacted Calgary Transit to ask a question



5% have registered a concern or complaint about a transit operator

8% have registered a concern or complaint about a another aspect of transit



4% have registered a compliment about a transit operator

3% have registered a compliment about a another aspect of transit

Bases (valid responses): n=499

Net concern/complaint – 11%

Net compliment – 5%

Concerns/compliments outnumber compliments 2-to-1, however most have not made any contact with Calgary Transit/311 in the past 12 months.

Captive Riders (those who primarily use Calgary Transit as they don't drive or have a car available to them) are more likely to have registered a concern or complaint about a transit operator in the last 12 months.

Females are more likely to have contacted transit for the purpose of asking a question about transit or transit service (17% vs. 11% amongst males).

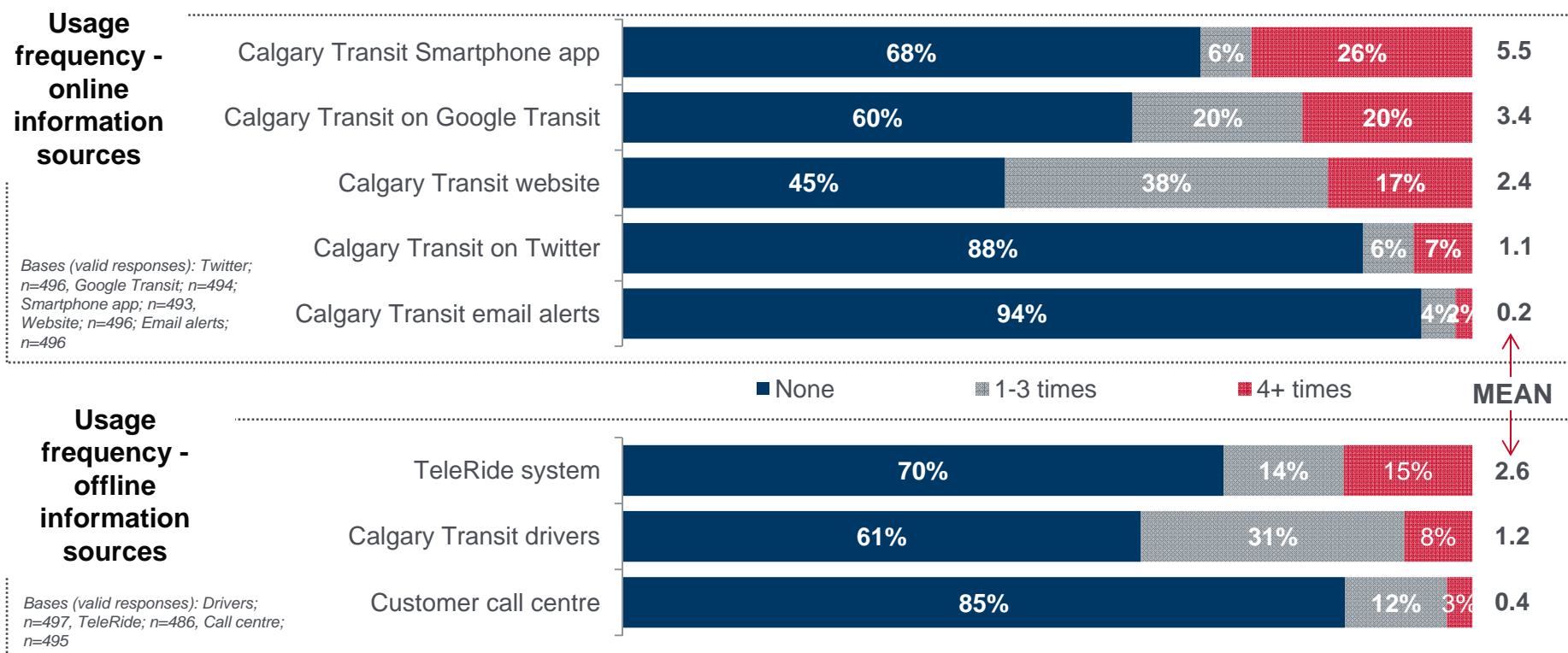
No historical data is available for this question as it was introduced in 2016.





Frequency of access/usage with Calgary Transit across various touch points

Q. Calgary Transit provides information to customers in a number of ways. In an average month, how many times would you access/use the following information sources:



Online information sources prove more popular than their offline counterparts, particularly the Calgary Transit Smartphone app. The TeleRide system is the most frequently used offline information source. Email alerts and the customer call centre are much lower down the radar as sources of information for Calgary Transit users.

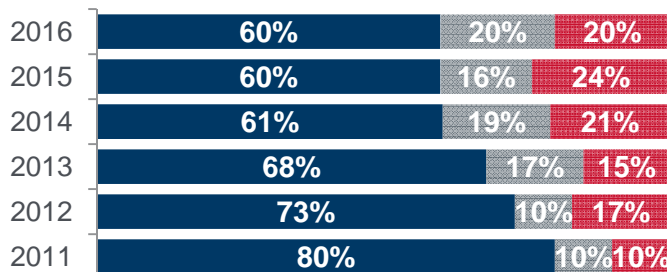
The CT Smartphone app is used more frequently by females (average of 7.1 times per month vs. 3.9 for males), those under 35 years (average of 9.1 times per month vs. 3.2 for those aged over 35 years) and those who only use buses (average 7.8 times per month vs. those who only use Ctrains 2.0).

Usage of online information sources

Historical comparisons

Q. Calgary Transit provides information to customers in a number of ways. In an average month, how many times would you access/use the following information sources:

Calgary Transit on Google Transit



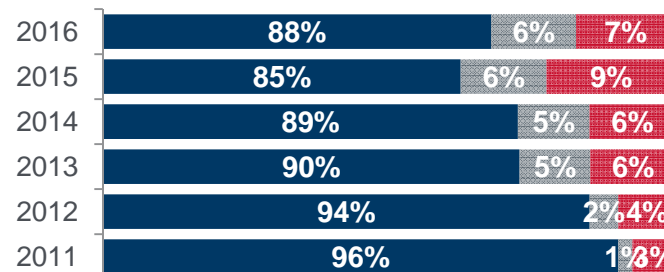
2016 Base (valid responses): n=494

■ None

■ 1-3 times

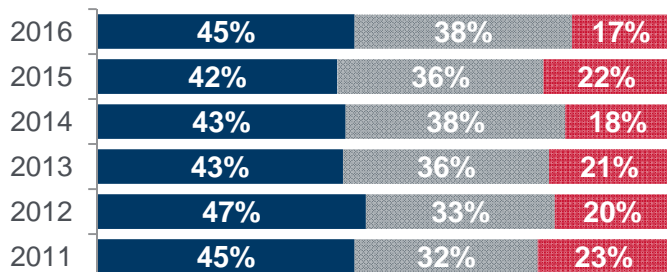
■ 4+ times

Calgary Transit on Twitter



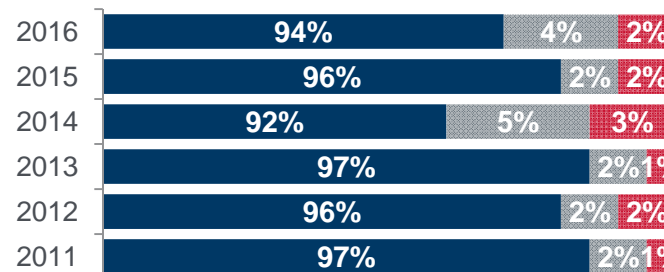
2016 Base (valid responses): n=496

Calgary Transit website



2016 Base (valid responses): n=496

Calgary Transit email alerts



2016 Base (valid responses): n=496

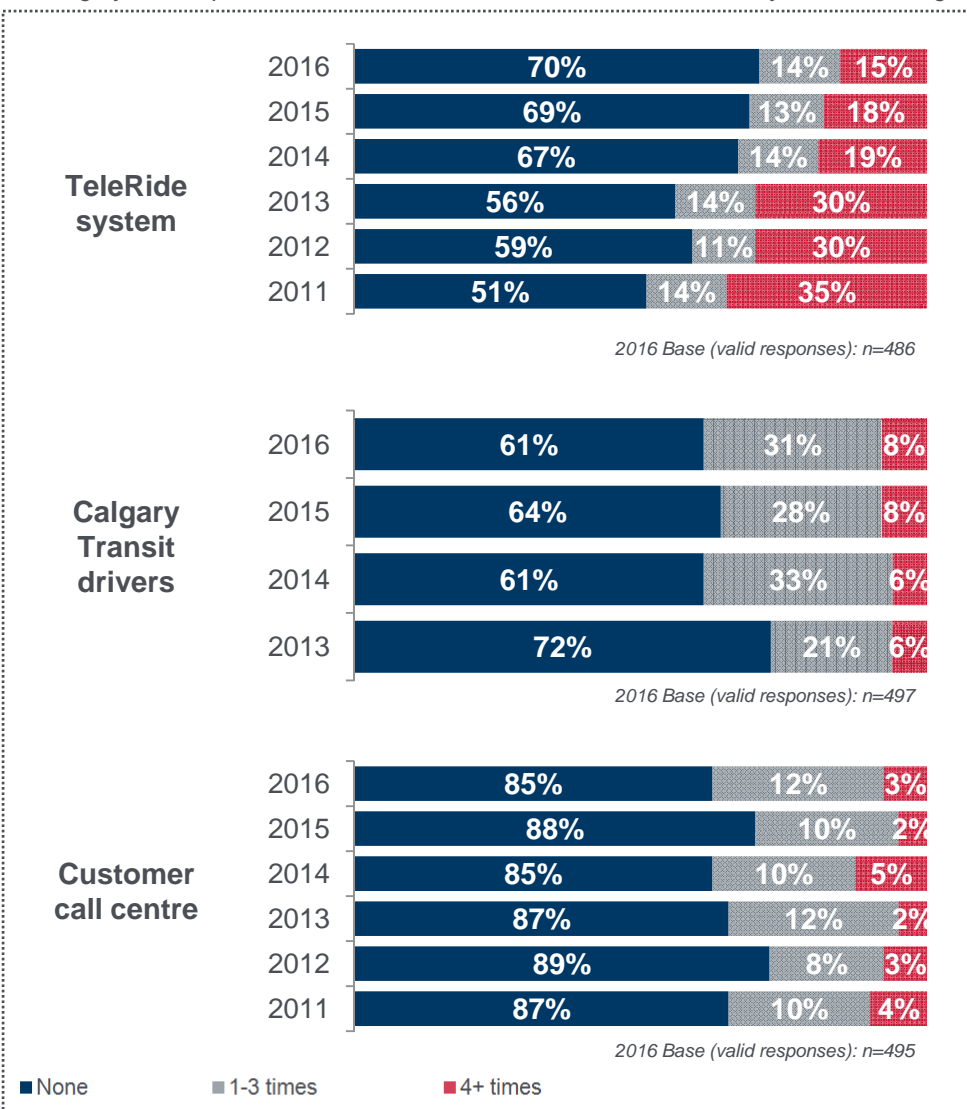
Over the last 5 years, Calgary Transit has seen the greatest traction on Google Transit and Twitter. Meanwhile, usage of the Calgary Transit website and email alerts remains relatively static.

(NB: No historical data is available for the Smartphone App as this was only launched in 2015).

Interaction with offline information sources

Historical comparisons

Q. Calgary Transit provides information to customers in a number of ways. In an average month, how many times would you access/use the following information sources:



Usage of the TeleRide system is in decline. In 2011, 1-in 2 Calgary Transit users were accessing this information source at least once a month, now just under 1-in-3 (29%) claim to be using to the same extent.

The decline in usage for the TeleRide system may be due in part to Calgary Transit users turning to more online methods such as Google Transit and Twitter.

Though usage of Calgary Transit drivers and the customer call centre is fluctuating, neither is seeing any consistent year on year increases or declines.

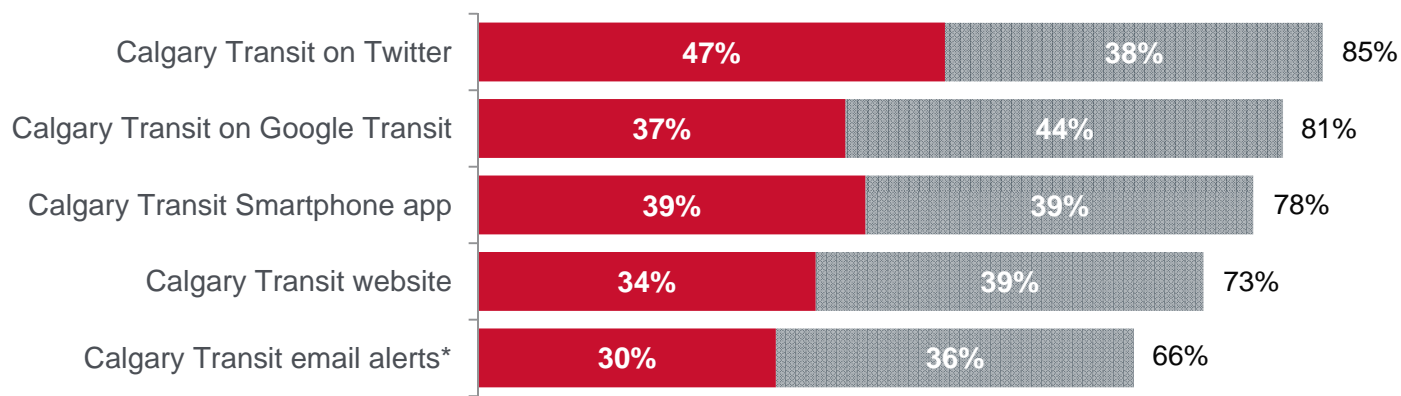


Satisfaction with the quality of information
provided by Calgary Transit

Satisfaction with quality of information from various sources

Q. How satisfied or dissatisfied are you with the quality of information provided by the information sources that you use?

Satisfaction with quality of information provided from online sources



Bases (valid responses): Twitter; n=59, Google Transit; n=189; Smartphone app; n=157, Website; n=269; Email alerts; n=28

*Caution low base

Satisfaction with quality of information provided by offline information sources



Bases (valid responses): Drivers; n=193, TeleRide; n=141, Call centre; n=74

When it comes to the quality of information provided from offline sources, Calgary Transit users are quite satisfied, with little separating the three offline sources available. Over time more and more Calgary Transit users are turning to Twitter and Google Transit to find out information from Calgary Transit. As such it is pleasing to see that there are strong levels of satisfaction with the quality of information provided by these two sources.

The Smartphone App – additional qualitative learnings



FEEDBACK IS MOSTLY POSITIVE BUT THERE IS STILL ROOM FOR IMPROVEMENT:

Qualitative feedback around the Smartphone App is mostly positive, the more regular transit users are quite familiar with it in terms of the information on offer and how to navigate it. However, there is still room for improvement as not all users are aware of its full functionality or how to fully navigate the information on offer.



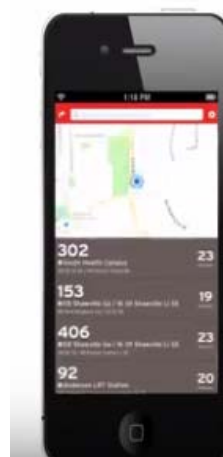
THERE IS AN OPPORTUNITY TO INCREASE MARKET WIDE AWARENESS:

Unsurprisingly, non regular users are less aware of the app and its functions, so there is a market wide opportunity to a) increase app awareness and b) improve awareness of the functionality and features on offer.



THERE IS AN OPPORTUNITY FOR CALGARY TRANSIT TO ASSIST THOSE LESS 'TECH SAVVY' USERS:

As not all users feel 'tech savvy' there is an opportunity for Calgary Transit to potentially offer workshops to help facilitate knowledge around the app (and even the website).

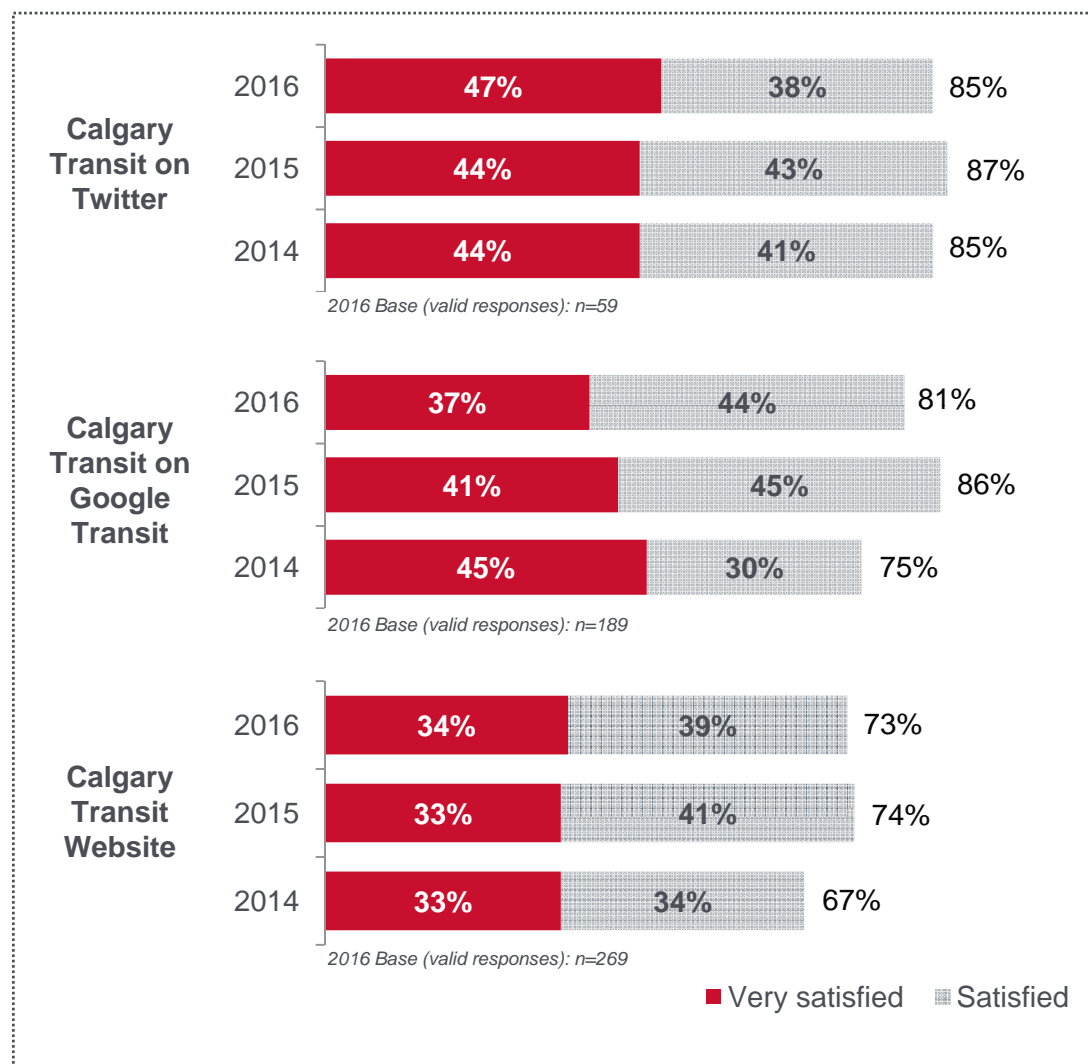


● it knows where you are

← it detects nearby routes with real-time arrivals

Satisfaction with quality of information provided by online information sources - historical comparisons

Q. How satisfied or dissatisfied are you with the quality of information provided by the information sources that you use?

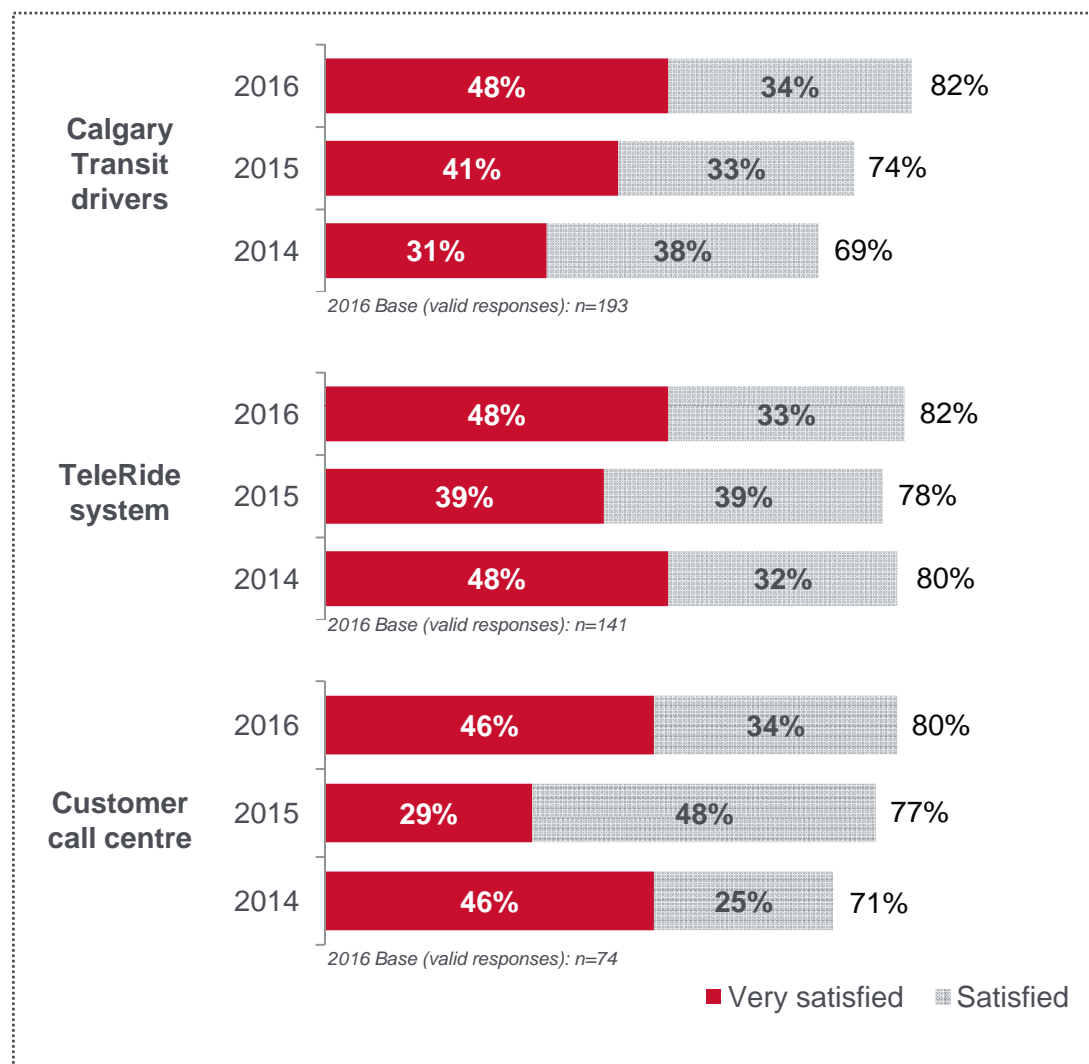


Historically, the quality of information provided by Calgary Transit on Twitter remains the strongest amongst online information sources.

The area requiring more attention is the Calgary Transit website – here satisfaction continues to be weaker.

Historical comparison - satisfaction with quality of information provided by offline information sources

Q. How satisfied or dissatisfied are you with the quality of information provided by the information sources that you use?



Calgary Transit users are becoming increasingly satisfied with the quality of information provided by Calgary Transit drivers. A trend that Calgary Transit should ensure is maintained going into 2017.

Satisfaction with the quality of information made available from Calgary Transit on various issues

Q. How satisfied or dissatisfied are you with the quality of information being made available from Calgary Transit on the following issues?



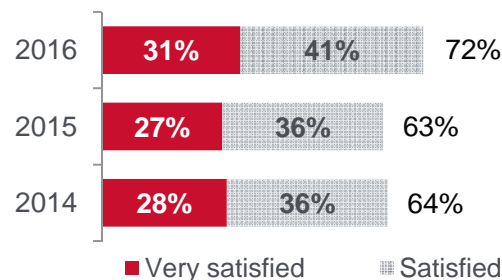
Calgary Transit performs well on communication around planned disruptions and how to use the Transit system but there are improvements to be made, particularly with regard to fare change communication and communication around unplanned disruptions.

Satisfaction with the quality of information made available from Calgary Transit on various issues – historical comparisons

Q. How satisfied or dissatisfied are you with the quality of information being made available from Calgary Transit on the following issues?

Disruptions

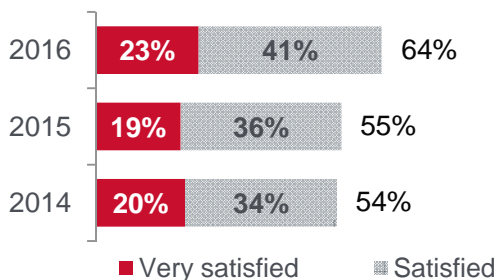
Planned disruptions



2016 Base (valid responses): n=490

Service and fare changes

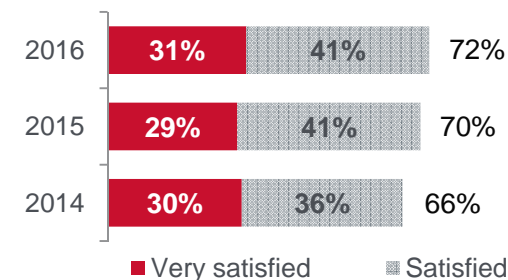
Service changes



2016 Base (valid responses): n=491

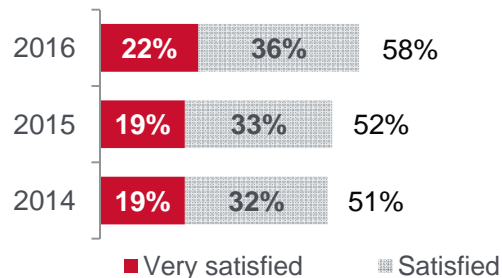
Other issues

How to use the Transit system



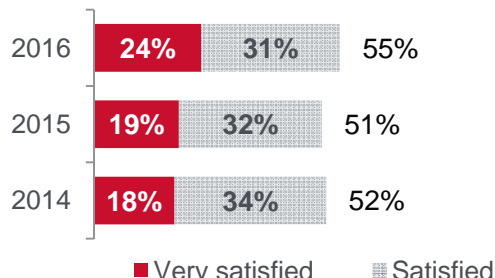
2016 Base (valid responses): n=482

Unplanned disruptions



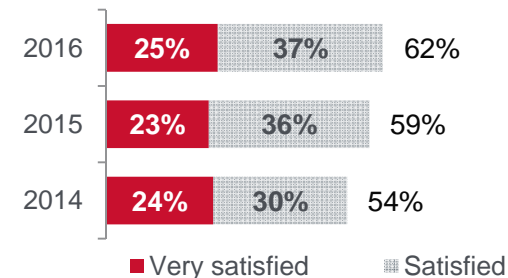
2016 Base (valid responses): n=490

Fare changes



2016 Base (valid responses): n=492

Future plans



2016 Base (valid responses): n=489

Over the last 3 years there have been some minor improvements with regard to communication on fare changes and unplanned disruptions, however there remains further room for improvement.

Better dissemination of information

What additional qualitative insights were found in speaking directly to users?

Communication around unplanned disruptions

While unplanned disruptions can pose a challenge, feedback from Calgary Transit users suggests that not all users know where to turn to for this information and that multi modal approaches need to be used. So enhancing communication comes down to creating greater awareness of where to turn to and ensuring a multi modal approach to disseminate the information (i.e. online and offline).

Some suggested methods may require additional mechanisms and structures to be put in place i.e. greater announcements on platforms and in transit vehicles (both audio and visual to ensure both the vision and hearing impaired are catered to). Online platforms such as Twitter and the website are already in existence so in this regard Calgary Transit needs to ensure that a) users are aware that these are options available to them and b) the necessary information is disseminated in a timely manner.

Communication around fare changes

Calgary Transit users (and non users) rationalize that the costs of living are always on the rise and as such the costs associated with the running of Transit vehicles (including staff, maintenance and gas) increase over time. With this in mind, there is an expectation that fares will increase from time to time.

What Calgary Transit needs to carefully manage is the communication around any fare changes. While information is disseminated to the public with the rationale behind these changes, Calgary Transit needs to ensure two things; 1) strong awareness between the fare increase and the reasons behind it (i.e. greater transparency) and 2) ensuring that the reasons provided are in fact visible within the community i.e. fares may be increased to provide enhanced service but without strong awareness or transparency around what this 'enhanced service' entails, the public will be left to devise their own interpretation and hence this increases the risk of disconnect and displeasure at what is delivered vs. what is perceived will be delivered.

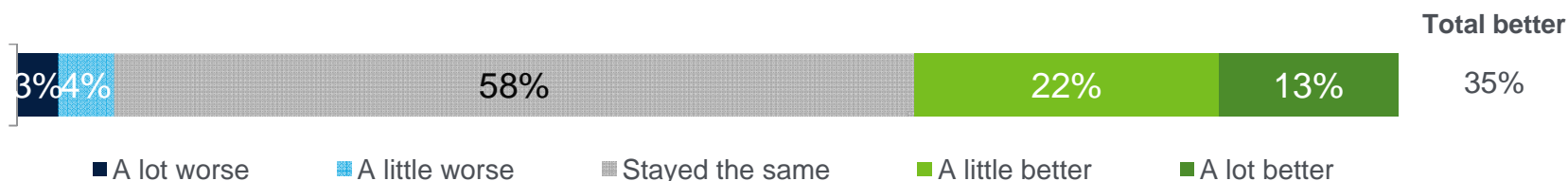
To an extent communication around future plans links into this, especially if fare increases are proposed in order to fund improvements to the service (i.e. expansion of routes, increased service frequency etc).



Calgary Transit momentum and future improvements

Perceived service level changes

Q. Thinking of the overall level of Calgary Transit service in your community during the past year, would you say it has become better, worse, or stayed the same compared with previous years?



2016 Base (valid responses): n=500

Why is a little/lot worse?	%
Lack of service frequency	33%
No access to bus stops / CTrain stations	19%
Being overcrowded	16%
Not being on time	15%
Lack of service to places I want to go	11%
Inconvenience of connections and transfers	8%
Not having courteous & helpful staff	6%

Base (valid responses): n=30*

Why is it a little better?	%
Being on time	20%
Service frequency	19%
Bus and CTrain vehicle upgrades	12%
Expansion of CTrain service/CTrain line extension	11%
Having access to bus stops / CTrain stations	9%
Not being overcrowded	9%
Providing real-time bus and CTrain information	8%
Service to places I want to go	6%

Base (valid responses): n=105

Why is it a lot better?	%
Service frequency	30%
Being on time	14%
Providing for customer safety and security	13%
Providing real-time bus and CTrain information	9%
Having access to bus stops / CTrain stations	8%
Expansion of CTrain service/CTrain line extension	7%
Having courteous & helpful staff	7%

Base (valid responses): n=63

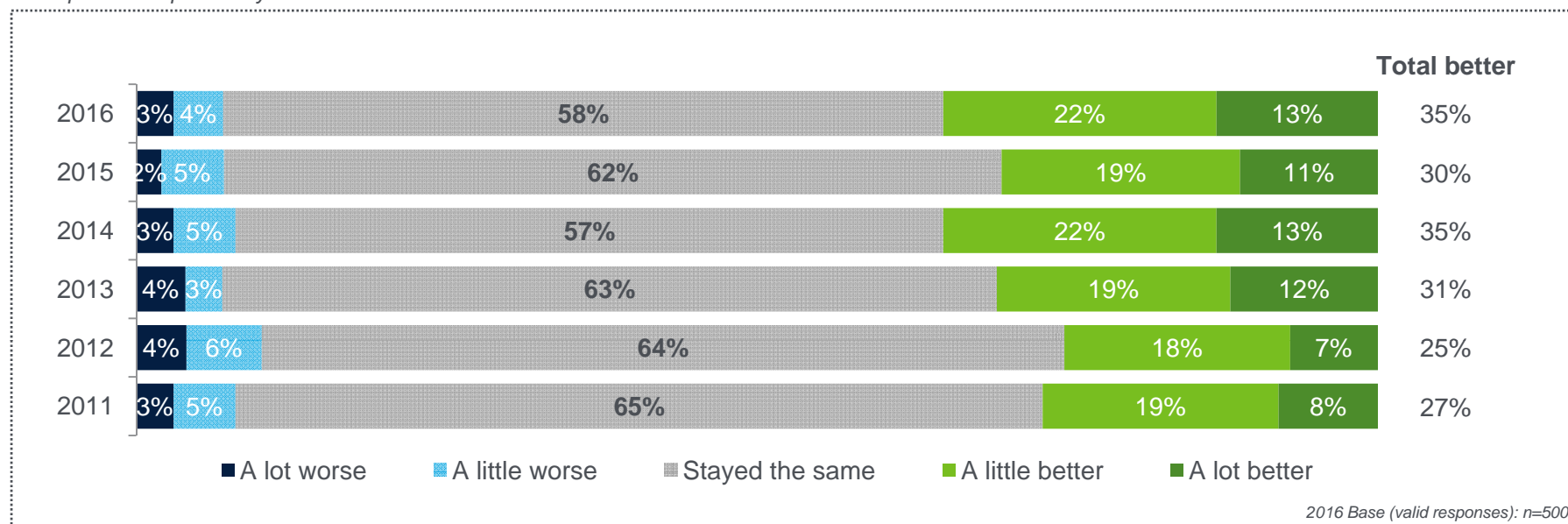
A third of regular Calgary Transit riders (35%) feel that Transit service has seen improvements in the past year, relative to previous years. This stems predominantly from service frequency however other contributing factors include services being on time and provisions for safety and security. Although lack of serviced frequency is a common concern for those who feel service has worsened, in relative terms service frequency is seen to be helping to improve perceptions rather than weaken them.



Perceived service level changes

Historical comparisons

Q. Thinking of the overall level of Calgary Transit service in your community during the past year, would you say it has become better, worse, or stayed the same compared with previous years?



Overall service has fluctuated in recent years however the long term trend is positive – growing from 27% positive momentum in 2011 to 35% in 2016.

In 2016, those under 35 years of age are more likely to feel that the overall level of Calgary Transit service has become better (41%) vs. those aged over 35 (31%).

Slightly more people in the Northwest feel that Calgary Transit service has worsened compared to previous years. In the Northwest, 11% currently feel that service has worsened, compared to 4-6% feeling the same way in other regions.

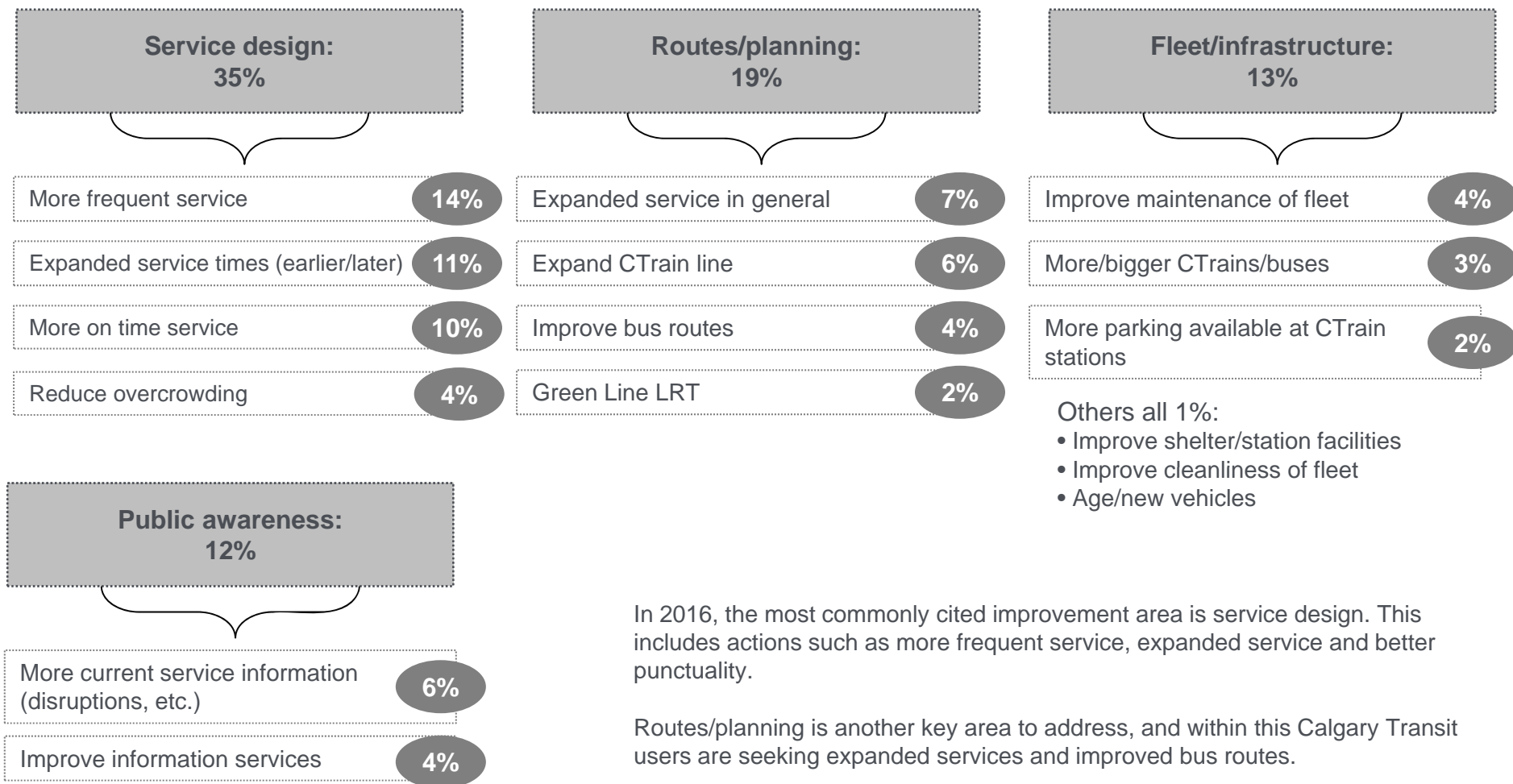
Momentum is highest for Captive Riders and those using transit for multiple uses (42% and 45% respectively feel that Calgary Transit service is getting better relative to previous years, this is significantly higher relative to older/non rush hour users, 24%, and those using transit for a singular purpose, 27%).





Main improvements wanted by Calgary Transit users

Q. In your opinion what is the one most important thing you would like to see Calgary Transit change or improve? (CODED - TOTAL MENTIONS)



In 2016, the most commonly cited improvement area is service design. This includes actions such as more frequent service, expanded service and better punctuality.

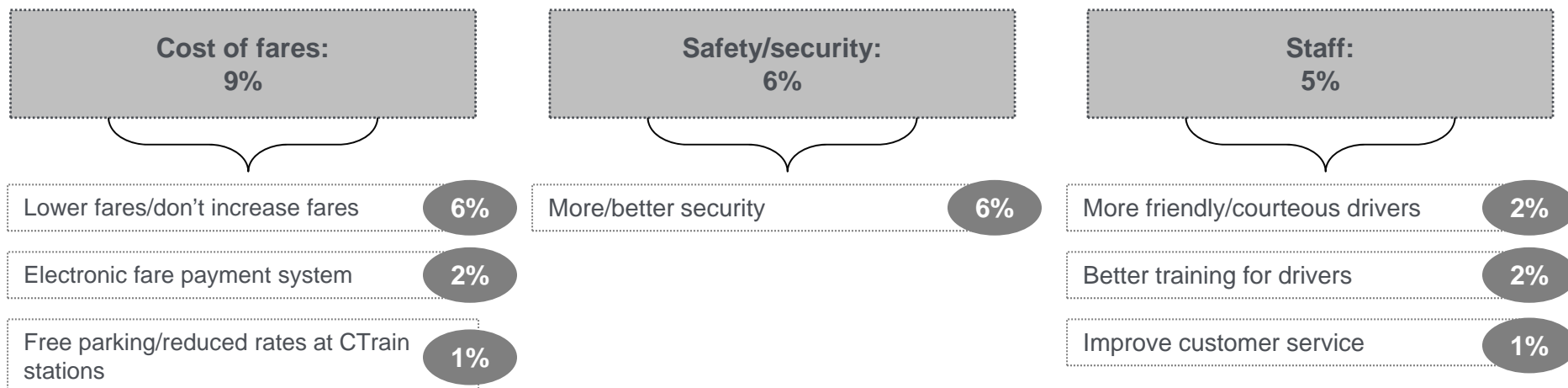
Routes/planning is another key area to address, and within this Calgary Transit users are seeking expanded services and improved bus routes.

Base (valid responses): n=451



Other improvements wanted by Calgary Transit users

Q. In your opinion what is the one most important thing you would like to see Calgary Transit change or improve? (CODED - TOTAL MENTIONS)



Base (valid responses): n=451

Lower down the radar for Calgary Transit users are fare costs, safety security and staff. The low proportions here indicate that these issues are far less top of mind as areas requiring improvement.

Qualitatively, similar improvements were cited by transit users, particularly around service design (frequency, punctuality and expanded service hours). Some additional feedback included;



Consideration of smaller fares for short trips: To alleviate some feelings around inequality whereby a 3-4 stops journey is the same as a cross town journey.



Wifi on board: This stems from the perception of a social trade off. There is an understanding that the trip takes a long time but if there were ways in which this time could be mitigated to make better use of it (i.e. working, connecting on social media etc) this would help make the journey more entertaining.



Better luggage storage on transit vehicles: Transit that can better accommodate luggage on airport routes or potential for storage of shopping bags.

[A full breakdown of improvements by transit user segment can be found in the Transit Users Qualitative Appendix, and in the Non Transit User Qualitative Appendix there are further qualitative findings from non users in terms of what might encourage them to use transit]

Improvements/changes suggested by Calgary Transit users

Historical comparisons

Most commonly suggested improvements	2011	2012	2013	2014	2015	2016
Service design	30%	30%	39%	32%	34%	35%
Routes/planning	14%	17%	16%	19%	19%	19%
Fleet/infrastructure	24%	26%	17%	13%	17%	13%
Public awareness	5%	4%	3%	8%	11%	12%
Cost of fares	2%	3%	6%	9%	6%	9%
Safety/security	10%	7%	4%	9%	5%	5%
Staff	3%	2%	3%	3%	4%	5%

2016 Base (valid responses) n=451

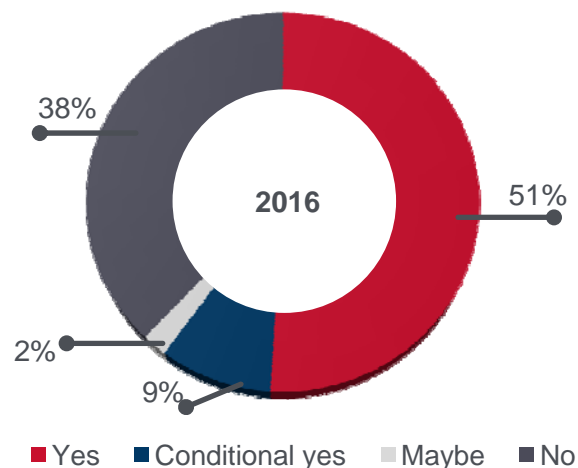
Service design continues to be the main improvement Calgary Transit users want, however there have been some shifts seen across other priorities.

Fleet/infrastructure and safety/security are now less of a priority compared to 5 years ago. On the other hand, public awareness and fare cost are growing in priority amongst Calgary Transit users.

Funding for improvements

Q. Since it would take additional revenue to fund the priorities you mentioned above, would you be in favour of a fare increase if the funds generated were directly applied to these improvements?

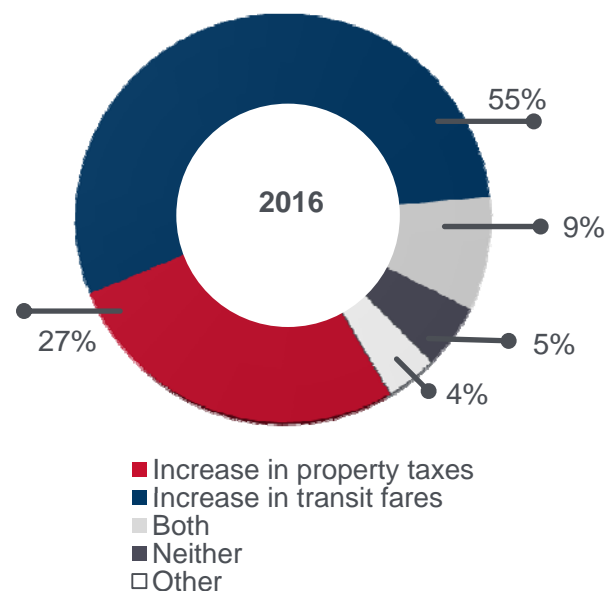
In favour of a fare increase to fund improvements?



Base (valid responses): n=498

Q. In your opinion, do you think better transit service should be paid for by an increase in property taxes or by increases in transit fares?

How should better transit service be funded?



Base (valid responses): n=475

Around 1-in-2 (51%) support a fare increase to fund improvements and a further 11% are open to the idea.

When given the choice between increasing property taxes or transit fares to fund transit improvements, Calgary Transit users are more in favor of a fare increase.

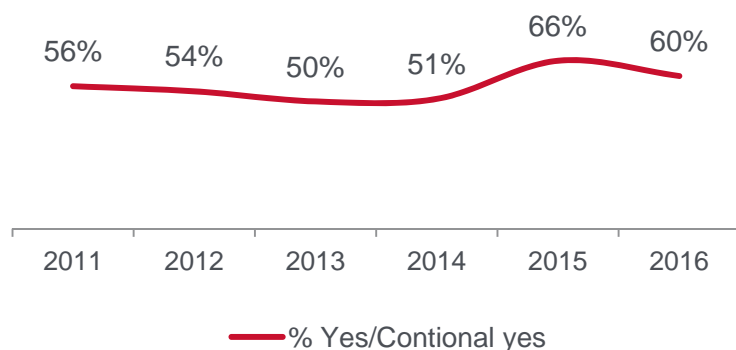


Funding for improvements

Historical comparisons

Q. Since it would take additional revenue to fund the priorities you mentioned above, would you be in favour of a fare increase if the funds generated were directly applied to these improvements?

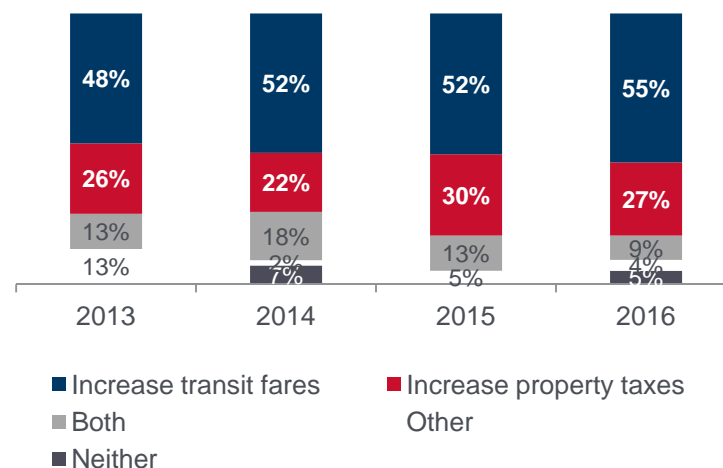
In favour of a fare increase to fund improvements?



2016 Base (valid responses): n=498

Q. In your opinion, do you think better transit service should be paid for by an increase in property taxes or by increases in transit fares?

How should better transit service be funded?



2016 Base (valid responses): n=475

In 2016 and historically, at least 1-in-2 Calgary Transit users are positive towards fare increases funding improvements.





Non regular users - survey results

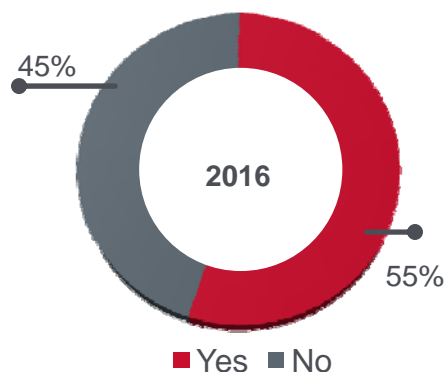
Usage of Calgary Transit - amongst those who are non regular users

Q. Have you ever used Calgary Transit on a regular basis – that is, at least once a week?

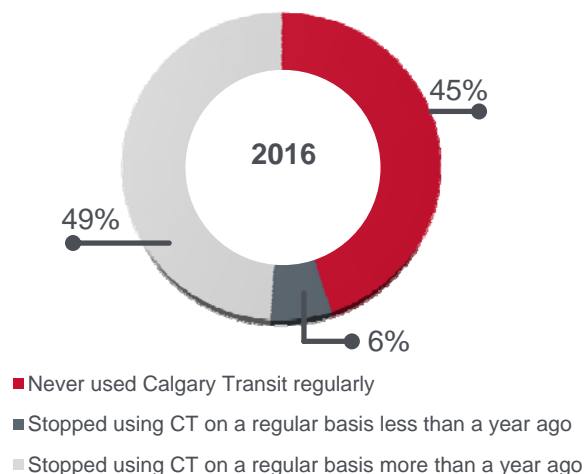
Q. How long ago did you stop using Calgary Transit regularly? Was it ...

Q. Do you currently use Calgary Transit occasionally – for example, for sports events, during Stampede, New Year's Eve or other special events

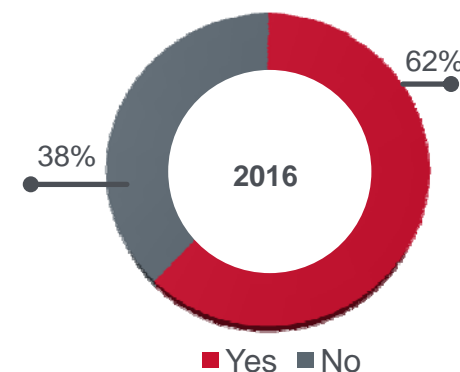
Ever used Calgary Transit?



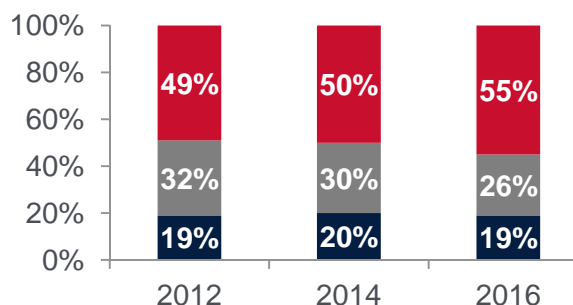
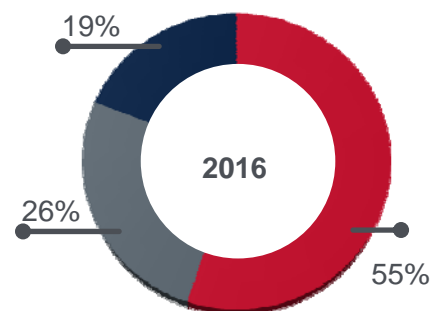
Usage status



Occasional user?



2016 Base (valid responses): n=500



■ Lapsed ■ Occasional users ■ Non users

In 2016, most non regular users have either never been a regular user or stopped being a regular user over a year ago.

Over the last 4 years there has been a slight (but not significant) rise in the proportion of lapsed users (those who used Calgary Transit regularly in the past but are no longer regular users).

2016 Base (valid responses): n=500

Lapsed users: Used Calgary Transit regularly in the past but not currently regular users

Occasional users: Never used Calgary Transit regularly, only use occasionally

Non users: Never been a regular Calgary Transit user and don't currently use Calgary Transit



Transportation methods used by non regular transit users/non transit users

Q. What one method of transportation do you use most often for travelling within the city of Calgary?

Method used most often for travelling within the City of Calgary



Car/motorcycle
(driver): 58%



Car (passenger/
carpool): 32%



Bike: 1%



Taxi: 1%



Walk: 1%

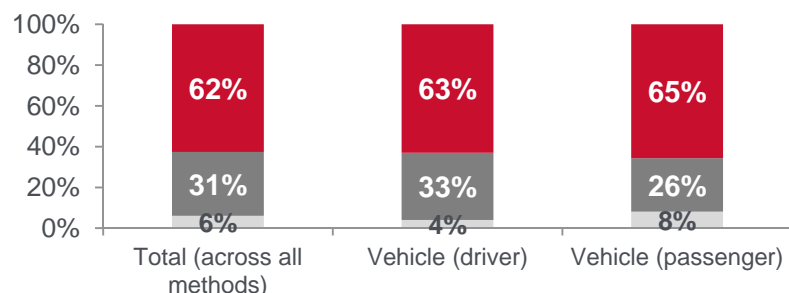


Other: 5%
(Non regular bus/train
or Car2Go)

2016 Bases (valid responses): n=498

Q. Please tell me the one statement that best describes your feelings?

2016 disposition to alternative transportation (most common methods)



2016 Bases (valid responses): Total; n=498; Vehicle (driver); n=290, Vehicle (passenger); n=162

- Many good reasons to continue using this method and none to change
- Many good reasons to continue using this method and many good reasons to change
- Few good reasons to continue using this method and many good reasons to change

A private vehicle is the most common form of transportation used by non regular transit users/non transit users.

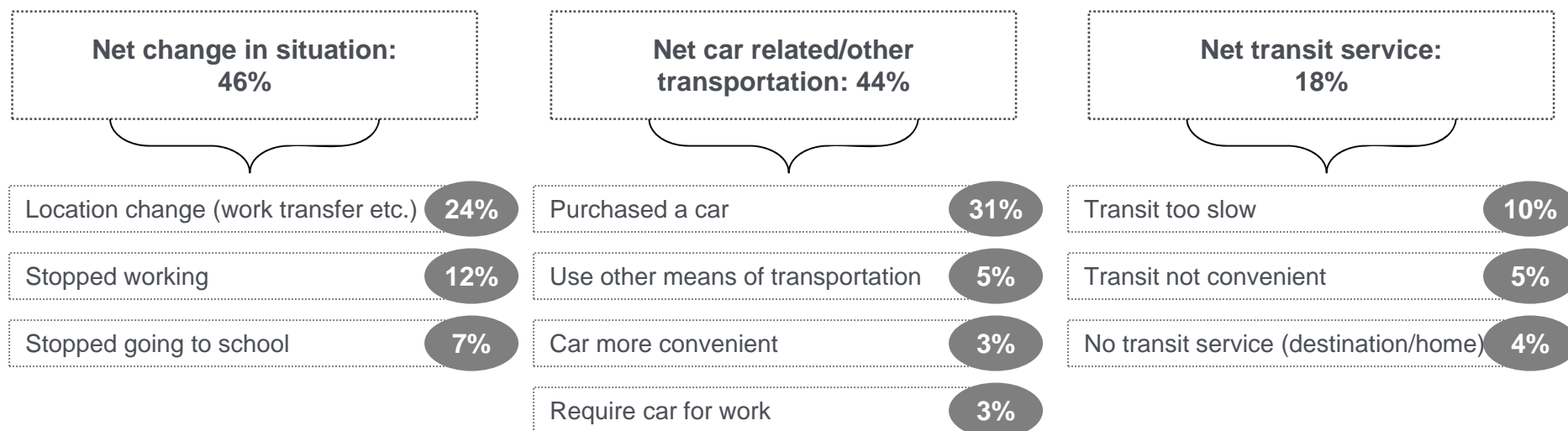
Regardless of status (i.e. driver or passenger), the general consensus is that there are many good reasons to continue using a private vehicle as a method of transport.

Qualitatively, there were a number of reasons provided for wanting to use private vehicles;

- **More efficient/convenient/faster:** Driving allows for more direct routes so is seen as faster and more efficient. Transit is perceived as lengthy and involves too many connections or transfers (and to a degree this comes down to the trade off made around the choice of community lived in and access to transit routes). The network design is perceived as buses feeding into CTrains therefore if you are not near a CTrain station the journey becomes off-putting.
- **Greater flexibility/control:** A private vehicle puts you in control vs. transit which requires more pre planning.

Reasons for becoming a lapsed transit user

Q. For what reasons did you stop using Calgary Transit buses or CTrains on a regular basis?



2016 Base – lapsed regular users (valid responses): n=267

In 2016, circumstantial reasons are more common than service related areas as a reason for becoming a lapsed user. These reasons are predominantly related to location change and acquisition of a vehicle.

Given their change in circumstance, transit is not seen to best service their current commuting needs. This was uncovered qualitatively, as lapsed users feel that transit can be slower and less efficient than driving. Driving has the advantage of more direct routes.

In addition, lapsed users are quite conscious of the 'time cost' involved in using transit. These users understand that potential savings can be made over driving (gas, vehicle maintenance) but these are outweighed by the length of the journey (including getting to the first transit stop, any connections and the routes on offer).



Stopped working/not working
 Use different means of transportation
 Stopped going to school
 Transit too slow
 No transit service
 Transit service not convenient
 Purchased Car/can afford car
 Location change
 Don't work downtown



How can Calgary Transit encourage non regular users to become regular users?

Q. In your opinion, what should Calgary Transit do to increase the likelihood of you becoming a regular transit user?

	Total	Lapsed users	Occasional users	Non users
Nothing	34%	26%	41%	49%
Extended routes	16%	16%	22%	9%
More frequent service	12%	14%	7%	12%
Faster, more direct, express service	12%	14%	11%	7%
Reduced fare	11%	14%	9%	7%
Closer stops	10%	12%	7%	8%
Transit schedule better aligned to my work hours	3%	4%	1%	4%
Provide convenient parking spaces	3%	3%	4%	1%
Better security	2%	2%	2%	2%
Base	467	258	125	84

-  Significantly higher relative to counterparts
-  Significantly lower relative to counterparts

Lapsed users: Used Calgary Transit regularly in the past but not currently regular users
Occasional users: Never used Calgary Transit regularly, only use occasionally
Non users: Never been a regular Calgary Transit user and don't currently use Calgary Transit

The greatest opportunity for conversion lies within the lapses user group, here 74% can identify at least one thing Calgary Transit could do to increase their patronage. This is in line with their reasons for lapsing linked mainly to circumstantial rather than service related issues.

For non users, only half (51%) could identify something Calgary Transit could do. The most commonly cited actions are extending routes, providing more frequent service as well as a faster, more direct service.



Encouraging more regular usage – further qualitative insights

Aside from enhancements to routes and any major network changes, there are some other potential ways to engage with non users/non regular users.

Lapsed users	Occasional users	Non users
<p>Ticket changes:</p> <ul style="list-style-type: none"> • Accommodate group travel: Group/family passes • Bundle up transit passes alongside event tickets: Brings transit more on the radar for social/recreational travel • A seniors discounted day rate or travel pass: For those who don't wish to purchase an annual pass <p>Longer transit hours: To accommodate social occasions (events/concerts) and closing times for bars</p> <p>Wifi on board</p> <p>Increasing the transfer time: There are perceptions of current journey times exceeding current transfer times (due to connections etc)</p> <p>Communication and promotion of safety to consumers: Transparency on Calgary Transit's performance here and where this is improving/what further improvements are being planned</p>	<p>Ticket changes:</p> <ul style="list-style-type: none"> • Accommodate group travel: Group/family passes • Bundle up transit passes alongside event tickets: Brings transit more on the radar for social/recreational travel • Transit explorer pass options: Allow people to be tourists in their own city <p>Raise awareness and profile of Calgary Transit using the app: Showcase how it can help plan journeys and facilitate connections and transfers. App can also be used to promote Calgary Transit passes and travel options</p>	<p>Ticket changes:</p> <ul style="list-style-type: none"> • Staff transit subsidies/promotions (creating buy in from organizations) <p>Communication on how to best navigate the current network: To mitigate the time/cost perception as much as possible</p> <ul style="list-style-type: none"> • Awareness of the app and website as well as Google Transit to assist in journey planning • Real time boards on stops to assist in managing expectations and journey planning <p>Wider community transit promotions: Help dial up awareness and engagement in the community – bring some attention to Transit in a positive community focused way</p> <p>Provision of amenities at stations: Convenience stores or other similar facilities)</p>



Appendix A – Detailed qualitative transit user results

Who are our user segments and what have we have learned from them qualitatively?

Introduction to how segments were developed

In order to identify ways in which to split up the user segments NRG took the approach of a hierarchical cluster analysis using Ward's method. This method was chosen as it seeks to maximise the differences between groups. This cluster analysis was used as an exploratory tool, with the purpose of identifying key behavioral characteristics that could be used to separate out the groups.

The variables entered into the cluster classification analysis were:

- **QC7A** – Agreement with 'Calgary Transit is an important choice in my life and lifestyle'
- **QC7B** – Agreement with 'The choice of where I live or will move to is influenced by the availability of Calgary Transit services'
- **QC7C** – Agreement with 'For each trip I make I consider using Calgary Transit'
- **QC7D** - Agreement with 'I use Calgary Transit to go to multiple places throughout my journey'
- **QC6A** – Overall satisfaction with Calgary Transit
- **QC14** – Level of commitment with Calgary Transit

Both 3 and 4 cluster solutions were saved and the results of these solutions was cross-tabbed against the results of other survey data including demographic information (age, income, gender), reasons for using Calgary Transit, time periods Calgary Transit used, frequency of Calgary Transit usage, method for getting to Calgary Transit stops, purpose of Calgary Transit trips and types of tickets used.

This information was then used to identify key behavioral attributes that were separating out the clusters. In total, 4 the following behavioral themes were identified;

- Usage of Park n Ride facilities or parking nearby a stop./station vs. walking
- Singular vs. multi purpose use of transit
- Rush hour vs. non rush hour patronage
- Using transit due to being a captive rider vs. cost vs. convenience

This led to the final decision on segmenting users according the following groups:

- **Multi purpose transit users:** Use transit for a variety of trips including work, social/recreational and medical/dental (20% of the user base)
- **Singular purpose transit users:** Use transit with a singular focus in mind i.e. commuting to work or school (25% of the user base)
- **Captive riders:** Use transit as they don't have a car available to them or do not drive (23% of the user base)
- **Park n Ride transit users:** Use transit and park their car in a Park n Ride facility or park nearby a transit stop (21% of the user base)
- **Older predominantly non rush hour transit users:** Older commuters who predominantly use transit during non rush hour periods and whose trips are not work related (10% of the user base)

Multi purposes riders – key qualitative learnings

Value for money perceptions



These users are fairly heavy patrons of transit (quantitatively they take an average of 9 transit trips per week and a third use it more than 10 times per week), as such they rationalize that transit is good value for a variety of reasons;

- Less stressful than driving
- There are cost savings to make relative to driving – parking, gas, maintenance and insurance
- Can get a lot out of one pass if you plan your journey right
- Monthly passes can be rebated on taxes

What attracts this group to transit?



MAIN BENEFITS:

Offers benefits over driving: Avoids parking costs, less stressful, less wear and tear on your vehicle and yourself (e.g. avoids traffic jams).

Network coverage: The network has extensive coverage across the city and while the journey times are long you can get to where you need to go, it is possible to survive without a car.

OTHER BENEFITS:

Health benefits: More walking/more active

Environmental benefits: Less cars on the road

What improvements do this group want to see?



Service reliability: Both reliability in terms of time (punctuality) and consistency (mechanical reliability, i.e. the bus/train won't break down)

- Within this Calgary Transit can look to strengthen communications around this area by providing information on where improvements have been made and what are they looking to address in the future.

Wifi on board: This stems from the perception of a social trade off. There is an understanding that the trip takes a long time but if there were ways in which this time could be mitigated to make better use of it (i.e. working, connecting on social media etc) this would help make the journey more entertaining

- Wifi can help people make use of the transit app while on board to further assist in planning journeys and keeping up to date on any changes/service disruptions
- There is a feeling that trips can be 'painful' and 'require patience', so this is one method to counter this

Value for money perceptions and perceived benefits

Quantitatively, cost and convenience are the main reasons singular purpose riders take transit and qualitatively this is echoed in value for money rationalizations;

- Transit is seen as cheaper than driving
- Faster and less stressful
- Time on the journey becomes 'useable time' i.e. can multi task with other things when using transit



DETRACTORS:

- Value for money can be negatively impacted when the service is overcrowded and you can't make alternative use of your time.
- Regardless of distance, ticket prices are constant so therefore when travelling shorter distances this reduces value for money perceptions.

What could make them consider transit for more trips (i.e. any improvements that would increase usage)?



Longer transit operating hours: To accommodate social occasions (events/concerts) and closing times for bars (and also potentially shift workers). Working in with closing hours for bars helps to dial up social responsibility by discouraging drinking and driving.

- This could involve a 'night rider' service that operates on a lower frequency on select routes and can help save the cost of a taxi fare home (as currently underway in other cities across Canada and internationally)

Better luggage storage on transit vehicles: Transit that can better accommodate luggage on airport routes or potential for storage of shopping bags.

- While storage may not be an option on the entire network it might be worth considering on routes that service major shopping hubs

Consideration of smaller fares for short trips: Those who are only travelling 3-4 stops are currently having to pay the same as those who are using transit to cross town. As such could this be improved by moving to a zoning type approach where costs are based on journey length and location rather than time.

Improving station comfort: Increasing the comfort level at stations by provision of shelters to accommodate the severe cold during Calgary's winters.

Park n ride users – key learnings

Impact of Park'n'Ride usage on value for money perceptions

Monthly reserved parking fees are seen as somewhat of a 'grudge' purchase, and there are waitlists to contend with.

On the one hand they provide the guarantee and convenience of securing a parking spot and allowing more flexibility in the morning commute (i.e. 'I don't have to worry if not there by 6am and miss out on a spot'). Conversely, the cost is not something that tries to encourage the use of transit, rather this is perceived as a 'penalty fee'.

So all in all, this additional fee can detract from value for money perceptions.

[Quantitatively, compared to the total user base, Park n Ride users have a significantly lower top box satisfaction score for Calgary Transit's value for money' – 22% vs. 34% across all regular transit users]



What attracts this group to transit?

MAIN BENEFIT: Avoids downtown parking costs and traffic congestion/accidents (quantitatively this is in with their transit usage behavior, relative to the total user base, Park n Ride users are significantly more likely to be using transit for work)

OTHER BENEFITS: Tax rebates on monthly passes / Environmentally friendly



What do these users see as potential barriers for others?

Perceived as 'downtown commute' focused : Might not cater to all as not all work downtown 'if you're not working downtown then transit is not the best option'

Lack of flexibility and freedom: Cars = more freedom

Some routes involve long journey : The wait time for transit connections/transfers can make the commute longer vs. hopping in a car.

Waitlists for reserved parking spots: A pain point for these users, and while there might be alternative stations available this might involve an even longer commute. So then the value equation becomes further degraded by both time and financial cost.



What improvements do this group want to see?

More parking options at transit stops: For these users this is the key focal point and there is some degree of rationalization that this may involve more costs. Some also feel that addressing the parking issue will be seen as 'future proofing' (i.e. planning ahead for future growth and ensuring that current and future needs are met)

[Note that it is likely that further research is needed here to look at the cost benefit analysis for various future options as this goes beyond the scope of the current research.]



Value for money perceptions and perceived benefits



Quantitatively, for these users the choice of where they live or move to is strongly influenced by the availability of Calgary Transit services (91% would agree with this sentiment).

Qualitatively, value for money perceptions are linked to the convenience of the network as it relates to them (living near main routes), as well as the low annual fee. In addition, the journey is seen as relatively comfortable as supported by feedback on the vehicles being clean, maintained and heated in winter.

Transit use also helps to avoid the costs associated with trying to park downtown.

What improvements do this group want to see?



- **Provide better communication around the network:** Where it can take you and how to use it
 - There is some degree of knowledge around the website and app but there are varying degrees of computer literacy that need to be taken into consideration. Calgary Transit could look to address this by offering workshops to help facilitate awareness and knowledge around the app and website, for those keen on learning how this works.
- **Provide shuttles or services that can help to better accommodate travel patterns of seniors:** Assisting seniors with travel to recreational activities or essential services
 - Again, part of this might be facilitated by better communication and knowledge dissemination to this group in terms of how they can plan some of these journeys (some may already be well catered to by current routes)
- **Improving station comfort and safety:** Increasing the comfort level at stations (i.e. shelters to accommodate the cold and wind) and within the vicinity of stops (i.e. measures that can be taken to increase the safety on sidewalks leading to transit stops)



Captive riders – key learnings

Value for money perceptions?

These users rationalize Calgary Transit as being good value for money due to the cost savings offered over private vehicles, especially when buying monthly passes that allow unlimited travel across the city.

The time factor can detract somewhat i.e. if your home and destination are at opposing ends of the city then your travel time can be very long and you're 'paying money to wait'.

There is also a sense within this group that the needs of lower income families and individuals could be better met – and this could help raise value for money perceptions.



What do these users see as the attractions of using transit?



MAIN BENEFITS:

- Save money – parking fees, gas, car insurance etc
- Avoid the hassles and stresses of driving/traffic

OTHER BENEFITS: Environmental benefits (less cars on the road) / social interaction

What improvements do this group want to see?



Consideration of smaller fares for short trips: Those who are only travelling 3-4 stops are currently having to pay the same as those who are using transit to cross town. As such this could be improved by moving to a zoning type approach where costs are based on journey length and location rather than time.

Provide reduced fares for those on lower income/experiencing financial hardship: Calgary Transit may consider providing more fare options to address those on lower incomes; or, if this is planned, it could be better communicated. (Quantitatively, as context, 44% of those in this group have a household income of under \$40K) .

Improvements that relate to 'safety/comfort' factors: These users would like to see improvements to cleanliness and maintenance of transit vehicles as well as security on platforms and on CTrains.

Service design/frequency: A more reliable service (linked back to maintenance to help ensure reliability), more frequent service and better punctuality of service (areas that were also more commonly cited by this group quantitatively).



Appendix B – Detailed qualitative non transit user results

Who are our non user segments and what have we have learnt from them qualitatively?

Introduction to how the non regular user segments were developed

In order to identify the different non regular user segments a couple of key behavioral questions were taken into consideration;

- Previous usage with Calgary Transit [regular user/non regular user]
- Current level of usage with Calgary Transit [occasional user/non user]

From here three groups fell out which were as follows;

- **Lapsed users:** Used Calgary Transit regularly in the past but not currently regular users (55% of the non regular user base)
- **Occasional users:** Never used Calgary Transit regularly, currently use only occasionally (26% of the non regular user base)
- **Non users:** Never been a regular Calgary Transit user and don't currently use Calgary Transit (19% of the non regular user base)

Lapsed users – key qualitative learnings and insights

Value for money



As lapsed users this group has greater appreciation for the potential cost savings that transit can offer over private vehicles (i.e. vehicle maintenance/gas)

However there is a perception that these cost savings can be outweighed by the 'time cost'. The length of the journey, including getting to the transit stop, connections and convenience of service routes.

The cost also starts to add up for families all buying their own individual tickets, so the choice to drive is mitigated by both time and cost factors.

Barriers



Service hours: If socializing downtown it's hard to use transit for the journey home as bars close after transit service has ended for the day.

Perceived as less efficient/convenient than driving: Driving allows you to use more direct routes and therefore is seen to be faster and more efficient. In addition, there is a perception that the current network better facilitates commuters and is less focused on social/recreational users. The network is also regarded as too complex and this slows down the journey.

Reduced feelings of safety and comfort vs. driving: Transit experiences mean having to be in close proximity to other passengers whose behaviours are out of your control. These feelings are stronger on platforms at night and on CTrains where drivers are less visible.

Breaking down the barriers – what hooks might help encourage this group to use transit?



- **Communication and promotion of safety to consumers:** Transparency on Calgary Transit's performance here and where this is improving/what further improvements are being planned
 - Past negative experiences may be reducing trust on safety/security so there is work to be done here to remedy this
- **Accommodate group travel:** Group/family passes
- **Bundle up transit passes alongside event tickets:** Brings transit more on the radar for social/recreational travel
- **A seniors discounted day rate or travel pass:** For those who don't wish to purchase an annual pass
- **Increasing the transfer time:** Linked to perceptions of long journey times (i.e. if a journey time on the app reads over 1.5 hours due to connections/transfers this won't suffice)
- **Longer transit hours to accommodate social occasions (events/concerts) and closing times for bars**
- **Wifi on board**

Non users – key qualitative learnings and insights

Value for money perceptions



Time is a substantial 'cost' factor for non users.

There is an understanding that transit can help to mitigate the costs associated with driving (gas, insurance, depreciation) but the additional time taken to use the system can be seen to undermine that.

Here the value equation is related to how amiable your chosen route is. Too many connections and transfers starts to offset the value provided by eliminating parking and other costs.

So here value for money perceptions are linked to better, faster more direct routes.

Barriers



Current network construction: The way buses are designed to feed into CTrains creates the perception that the journey of getting there is too difficult and inconvenient if not near a CTrain station, so this is off-putting.

Lack of flexibility: Private vehicles can offer more flexibility as you are in control of the journey. Transit requires more pre planning and again this creates a sense of inconvenience as it takes away from the 'comfort zone'.

Journey time: Too many connections or transfers required (and to a degree this comes down to the trade off made around the choice of community lived in and access to transit routes).

Bus route planning: Multiple stops means transit users are well catered too but on the reverse side this leads to longer more complicated journeys.

Breaking down the barriers – what hooks might help encourage this group to use transit?



Aside from enhancements to routes and the network, there are some other potential ways to engage with this group . However, their reduced potential to switch means this group should be a lower priority compared to lapsed users or occasional users.

- **Communication on how to best navigate the current network:** To mitigate the time/cost perception as much as possible
 - Awareness of the app and website as well as Google Transit to assist in journey planning
 - Real time boards on stops to assist in managing expectations and journey planning
- **Create buy in from organizations for staff transit travel i.e. subsidies, promotions?**
- **Wider community transit promotions:** Help dial up awareness and engagement in the community – bring some attention to Transit in a positive community focused way
- **Provision of amenities at stations:** Convenience stores or other similar facilities)



Occasional users – key qualitative learnings and insights

Value for money perceptions



Occasional users rationalize value for money in a few ways;

Group size: Transit perceived as good value when travelling alone but worse when travelling in a group (friends or family).

Proximity to a CTrain station and intended destination: Value for money is perceived as better if a CTrain station is close by and links you to your intended destination.

Ability to accommodate large crowds effectively and efficiently: Overcrowding issues lower value for money perceptions after large events.

Barriers



Lack of awareness and consideration: Some don't even see it as an option on their radar (lack of awareness -> lack of consideration).

Information on trip lengths can make them unfavorable: While the website is informative it might not be palatable – 'the information on the website is great but I don't like what it tells me the wait time and transit trip length is too long'.

Not time efficient and therefore less convenient: Perceptions that transit is lengthy if you're not in proximity to a station. Feeling that there is a 'lack of respect for my time'.

Breaking down the barriers – what hooks might help encourage this group to use transit?



Time and inconvenience are substantial barriers to this group so aside from major network changes there are few potential options to help engage with them. These factors take into consideration the current behavioral profile of occasional users and their willingness to use transit for events and other non regular instances.

- **Raise awareness and profile of Calgary Transit using the app:** Showcase how it can help plan journeys and facilitate connections and transfers
 - App can be used to promote Calgary Transit passes and travel options
- **Accommodate group travel:** Group/family pass
- **Raise the profile of Calgary Transit via promotion of destination travel:** 'Leave the car at home and explore your city by transit'
 - Transit explorer options – allow people to be tourists in their own city
 - Bundle up transit passes alongside event tickets or attraction tickets to encourage social/recreational travel



Appendix C- Questionnaire



2016 Calgary Transit Customer Satisfaction and Non-User Survey Questionnaire

NOTE TO THE READER:

- Comments to survey sponsors by consultants are **presented in blue**.
 - Instructions to interviewers are presented as **words in red** and are not read to respondents
 - For Computer Aided Telephone Interviewing software programming, instructions are presented as **words in green** and are not provided to the interviewers or respondents
-

INTRODUCTION/SCREENING SHEET

Hello, my name is _____. I am calling from NRG Research Group on behalf of Calgary Transit. Today we are conducting an important survey to gather opinions from Calgarians aged 15 or older about Calgary Transit

QS1. Can I ask, how many regular users of Calgary Transit there are in this household? By regular user we mean those who use Calgary Transit, either CTrain or bus, at least once a week on average.

(INTERVIEWER NOTE: IF CREDIBILITY IS AN ISSUE OR IF RESPONDENT HAS A CONCERN SAY: If you wish to talk to a City official about this survey, we encourage you to contact The City at 3-1-1 during regular business hours and specifically mention the "2016 Calgary Transit Satisfaction Survey." City staff would be happy to address your concerns.)

NO, NOT INTERESTED IN SURVEY → THANK AND CLOSE
YES → CONTINUE

INTERVIEWER RECORD NUMBER OF TRANSIT USERS IN HOUSEHOLD ____

QS2. In an **AVERAGE** week, that includes all 7 days, how many times would you normally ride Calgary Transit buses AND/OR CTrains? **Please count a one-way trip as one ride and a trip to and from a destination as two rides.**

_____ # of rides

[IF 1+ COUNTS TOWARDS TRANSIT CUSTOMER QUOTA n=500]
[If 0, NON-USER QUOTA n=500]

QS3. Are you 18 years or older?

IF YES → GO TO QS8

IF NO → ASK TO SPEAK TO PARENT/GUARDIAN AS PERMISSION IS NEEDED TO CONDUCT THIS INTERVIEW IF RESPONDENT IS AGED 15-17

- IF PERSON IS AGED 15-17 AND PARENT/GUARDIAN AVAILABLE GO TO QS6 [IF NOT AVAILABLE ARRANGE CALL BACK]



ONCE NON USER QUOTA REACHED ASK:

QS4a. Are there any other transit users in the house who could take part in this survey?

IF NEEDED: By transit user we mean anyone who takes at least one transit trip per week on average

IF YES ->GO TO QS5

IF NO -> THANK AND CLOSE

ONCE USER QUOTA REACHED ASK:

QS4b. Are there any other non transit users in the house who could take part in this survey?

IF NEEDED: By non transit user we mean anyone who takes less than one transit trip per week on average

IF YES -> GO TO QS5

IF NO -> THANK AND CLOSE

QS5. Are any of these people aged between 15-17?

IF YES -> GO TO QS7

**IF NO -> ASK FOR NAME OF PERSON AND ASK FOR TRANSER IF AVAILABLE – REINTRODUCE SURVEY AS NECESSARY AND GO TO QS8
– OTHERWISE ARRANGE CALL BACK IF POSSIBLE**

QS6. REINTRODUCE PURPOSE OF SURVEY AND CONFIRM - Am I speaking with the parent/guardian of the transit user/non transit user who is aged between 15- 17?

QS7. Am I speaking with the parent/guardian of the transit user who is aged between 15- 17?

IF YES ->

“CALGARY TRANSIT IS LOOKING TO GET FEEDBACK FROM CALGARIANS ABOUT SERVICES THAT ARE PROVIDED. WE WOULD LIKE TO INTERVIEW YOUR CHILD FOR THIS RESEARCH, BUT WE UNDERSTAND HE/SHE IS NOT 18 YEARS OF AGE. BEFORE WE PROCEED WITH THE INTERVIEW, I MUST RECEIVE PERMISSION FROM YOU TO INTERVIEW YOUR CHILD. DO YOU PROVIDE PERMISSION FOR ME TO INTERVIEW YOUR CHILD FOR THIS IMPORTANT SURVEY?

**IF YES-> “THE CITY’S FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY POLICY REQUIRES THAT I HAVE YOUR FIRST AND LAST NAME BEFORE PROCEEDING WITH INTERVIEWING YOUR CHILD. CAN I HAVE YOUR FIRST AND LAST NAME.”
MUST RECORD FIRST AND LAST NAME OF PARENT OR GUARDIAN**

– IF NOT WILLING TO PROVIDE BOTH FIRST AND LAST NAME, INFORM PARENT OR GUARDIAN:



"IT IS THE REQUIREMENT OF THE CITY'S FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY POLICY THAT FIRST AND LAST NAMES OF PARENTS OR GUARDIANS MUST BE PROVIDED WITH CONSENT. UNFORTUNATELY, WE WILL NOT BE ABLE TO CONTINUE WITH THE INTERVIEW."

IF CONCERNS EXPRESSED BY PARENT – INFORMATION ABOUT THIS FOIP REQUIREMENT CAN BE OBTAINED BY CONTACTING THE CITY AT 311 OR CALGARY TRANSIT AT 403-262-1000.

FIRST NAME: _____

LAST NAME: _____

ONCE NAMES CAPTURED – ASK TO SPEAK TO THE PERSON AGED UNDER 18 THEN REINTRODUCE SURVEY IF NECESSARY

IF NO -> ASK FOR NAME OF PERSON AND ASK FOR TRANSFER IF AVAILABLE OR CALL BACK IF NOT

QS8. If you have some time now I would like to interview you for this important survey. It will take approximately 15-20 minutes depending on your answers.

IF YES -> GO TO QS9

IF NO -> ASK:

Could I call back _____?

IF YES -> ASK FOR NAME OF PERSON AND RECORD TIME ON CALL SHEET

IF NO -> THANK AND DISCONTINUE; MARK AS "REFUSED" ON CALL SHEET

Please be assured that all your responses are confidential, and you will not be personally identified. Any personal information collected is under the authority of the Freedom of Information Protection and Privacy Act, Section 33(c), and is used solely for the review and improvement of City of Calgary Transit related programs. Would you be willing to answer our survey today?

QS9. DO NOT READ - Male [] 1 Female [] 2

[CHECK SOFT QUOTAS HERE FOR THOSE AGED 18+ AND DETERMINE ELIGIBILITY]

QS10. Are you a permanent resident of Calgary?

IF YES, CONTINUE

IF NO, TERMINATE WITH THANK YOU..

QS11. Do you or does a member of your household work for Calgary Transit?

IF YES, TERMINATE WITH THANK YOU.

IF NO, CONTINUE.



QS12. And to confirm which age group are you in?
[IF SPEAKING TO SOMEONE UNDER 18 - CHECK]

[READ GROUP CATEGORIES]

- ☐ 1 15 to 17 yrs
- ☐ 2 18 to 19 yrs
- ☐ 3 20 to 24 yrs
- ☐ 4 25 to 34 yrs
- ☐ 5 35 to 44 yrs
- ☐ 6 45 to 54 yrs
- ☐ 7 55 to 64 yrs
- ☐ 8 65 to 74 yrs
- ☐ 9 75 and older
- ☐ 10 Refused

SURVEY QUESTIONNAIRE

[IF QS2 >0 CONTINUE UNTIL QUOTA OF n=500 REACHED]

[If QS2=0, SKIP TO QN1: NON-USER QUOTA n=500]

IF IDENTIFIED QC1A. Do you mainly use the bus, the CTrain, or both?

1 ☐ Bus 2 ☐ CTrain 3 ☐ Both

QC1B. For your most frequent transit trip, how many transfers do you make on that trip?

IF NEEDED, DEFINE A TRANSFER AS "The act of getting off of one transit vehicle and boarding another one."

- 1 ☐ None
- 2 ☐ One
- 3 ☐ Two
- 4 ☐ Three
- 5 ☐ Four
- 6 ☐ Five or more
- 7 ☐ Don't know

QC1C. Please tell me how many minutes it takes you to make a typical one-way trip using Calgary Transit from when you board the first transit vehicle until you get off the last vehicle of your trip.

of Minutes: _____



QC2A. What is your **one main reason** for using Calgary Transit instead of alternative forms of transportation? **DO NOT READ - IF THEY SAY "CONVENIENCE", PROBE FOR SPECIFIC REASON - E.G - "Convenient in what way?"**

TAKE ONE RESPONSE ONLY

- 01 [] No Particular Reason
- 02 [] Less Expensive
- 03 [] Save Gas/High gasoline prices / High Parking Rates
- 04 [] No Car Available - CAPTIVE RIDERS
- 05 [] Avoid Traffic
- 06 [] Avoid Parking
- 07 [] Don't Drive - CAPTIVE RIDERS
- 08 [] Convenient Service (Specify) _____
- 09 [] Faster Travel Time
- 10 [] Comfortable/Relaxing
- 11 [] Environmental Reasons
- 12 [] Transit Pass included in Tuition (U-Pass)
- 13 [] Other (Specify) _____
- 14 [] Don't Know

QC2B. For what type of trips do you **mainly** use Calgary Transit? Do you use Transit for . . .
[READ CATEGORIES - TAKE NO MORE THAN 2 RESPONSES]

- 1 [] Work
- 2 [] School
- 3 [] Shopping
- 4 [] Medical, dental, personal business
- 5 [] Social/recreational
- 6 [] Other (specify) _____

QC3A. During what time period do you use Calgary Transit **most often** – rush hour or some other time period?
[TAKE ONLY ONE RESPONSE - IF ASKED, RUSH HOUR IS WEEKDAYS 6:00 - 9:00 AM & 3:00 - 6:00 PM]

- 1 [] No Specific Time Period >>>> SKIP TO QC3C
- 2 [] Rush Hour ONLY >>>> SKIP TO QC3C
- 3 [] Rush hour and other Time Periods >>>> GO TO QC3B
- 4 [] Non-Rush Hour >>>> GO TO QC3B

QC3B. While taking transit during non rush hour times, would that be on a weekday midday, weekday evening or a weekend?

- 1 [] Weekday midday
- 2 [] Weekday Evening
- 3 [] Weekend
- 4 [] Don't Know

QC3C. Which transit fare do you use most often?

DON'T READ - TAKE NO MORE THAN 2 RESPONSES; PROBE TO ENSURE THAT PROPER PASS TYPE IS GIVEN

- | | |
|------------------------------|--------------------------------------|
| 01 [] Youth Monthly Pass | 06 [] Ticket from a book of tickets |
| 02 [] Universal Pass/U-Pass | 07 [] Cash |
| 03 [] Senior Citizen Pass | 08 [] Low Income Transit Pass |
| 04 [] Adult Monthly Pass | 09 [] Don't Pay |
| 05 [] Day Pass | 10 [] Other (Please specify _____) |
| | 11 [] Don't Know |

QC4A. I am going to read you a list of different aspects of service. For each one, based on your most recent experience, I would like you to tell me how satisfied or dissatisfied you were with each service aspect, using a scale of 1 to 5 where "1" means "very dissatisfied" and "5" means "very satisfied." **ROTATE**

	1 Very dissatisfied				5 Very Satisfied	Refused
a) Having Courteous & Helpful Staff	1	2	3	4	5	6
b) Being on Time	1	2	3	4	5	6
c) Cleanliness	1	2	3	4	5	6
d) Not Being Overcrowded	1	2	3	4	5	6
e) Service Frequency	1	2	3	4	5	6
f) Value for Money	1	2	3	4	5	6
g) Length of Travel Time	1	2	3	4	5	6
h) Directness of trip (number of transfers)	1	2	3	4	5	6
i) Service to places I want to go	1	2	3	4	5	6
j) The times the first vehicle starts, and the last vehicle stops operating for the day on routes you use.	1	2	3	4	5	6
k) Convenience of Connections and Transfers	1	2	3	4	5	6
l) Providing for Customer Safety and Security	1	2	3	4	5	6
m) Providing Scheduling and Route Information	1	2	3	4	5	6
n) Providing Real-Time bus and CTrain Information	1	2	3	4	5	6
o) Convenience of Purchasing Tickets and Passes	1	2	3	4	5	6
p) Having access to bus stops / CTrain stations (Prompt, if necessary: being nearby bus stops/CTrain stations)	1	2	3	4	5	6
q) Information made available about disruptions of Calgary Transit services	1	2	3	4	5	6
r) Information made available about changes to Calgary Transit service and fares	1	2	3	4	5	6

QC5A. Thinking of the factors we have just discussed, what, from your point of view, would you say is the one most important service factor? [DO NOT READ LIST.]

QC5B. And what is the second most important?

MARK [1] FOR 1ST MOST IMPORTANT AND [2] FOR 2ND MOST IMPORTANT QUESTION; DON'T KNOW = 98 Set up CATI to identify 1st and 2nd

Factor	1 st Most Important	2 nd Most Important
Having Courteous & Helpful Staff		
Being on Time		
Cleanliness		
Not Being Overcrowded		
Service Frequency		
Value for Money		
Length of Travel Time		
Directness of trip (number of transfers)		
Service to places I want to go		
The times the first vehicle starts, and the last vehicle stops operating for the day on routes you use.		
Convenience of Connections and Transfers		
Providing for Customer Safety and Security		
Providing Scheduling and Route Information		
Providing Real-Time bus and CTrain Information		
Convenience of Purchasing Tickets and Passes		
Having access to bus stops /CTrain stations (Prompt, if necessary: being nearby bus stops/CTrain stations)		
Information made available about disruptions of Calgary Transit services		
Information made available about changes to Calgary Transit service and fares		
Other		
None in particular		
Don't know		

QC5C. Calgary Transit recently introduced its Customer Commitment. The commitment is for Calgary Transit to be safe, reliable, clean, helpful, informative, and easy-to-use. On a scale of 1 to 10 where a '10' is Extremely Good and a '1' is Extremely Poor, please rate how Calgary Transit is doing on each of the following elements of Customer Commitment **ROTATE**

	1 Extremely Poor	2	3	4	5	6	7	8	9	10 Extremely Good	Refused
a) Safe	1	2	3	4	5	6	7	8	9	10	11
b) Reliable	1	2	3	4	5	6	7	8	9	10	11
c) Clean	1	2	3	4	5	6	7	8	9	10	11
d) Helpful	1	2	3	4	5	6	7	8	9	10	11
e) Informative	1	2	3	4	5	6	7	8	9	10	11
f) Easy-to-use	1	2	3	4	5	6	7	8	9	10	11

QC6A. Based on your own experience in the last seven days, how satisfied or dissatisfied are you with the overall service provided by the transit system in Calgary? Please use a scale of "1" to "5" where "1" means very dissatisfied and "5" means "very satisfied".

READ ALL CATEGORIES EXCEPT "DON'T KNOW"

1 [] Very dissatisfied 2 [] 3 [] 4 [] 5 [] Very satisfied 6 [] Don't know

QC6B. Thinking of the overall level of Calgary Transit service in your community during the past year, would you say it has become better, worse, or stayed the same compared with previous years?

IF BETTER OR WORSE ASK: Would that be a lot or a little better/worse?

- 1 [] A lot better
- 2 [] A little better
- 3 [] Stayed the same >>>> **SKIP TO QUESTION QC7A**
- 4 [] A little worse
- 5 [] A lot worse
- 6 [] Didn't use in previous years >>>> **SKIP TO QUESTION QC7A**
- 7 [] Don't know >>>> **SKIP TO QUESTION QC7A**

QC6C. And what specific aspect of service makes you feel that way?

DO NOT READ - ACCEPT UP TO 2 RESPONSES ONLY

- | | | | |
|--|--------|--|---------------|
| (Not) Having Courteous & Helpful Staff | [] 01 | (Not) Providing Scheduling and Route Information | [] 13 |
| (Not) Being on Time | [] 02 | (Not) Providing Real-Time bus and CTrain Information | [] 14 |
| (Lack of) Cleanliness | [] 03 | (Lack of) Expansion of CTrain service/CTrain line | |
| (Not) Being Overcrowded | [] 04 | extension | [] 15 |
| (Lack of) Service Frequency | [] 05 | (In)Convenience of Purchasing Tickets and Passes | [] 16 |
| (Lack of) Value for Money | [] 06 | (Not) Having access to bus stops / CTrain stations | [] 17 |
| Length of Travel Time is too long | [] 07 | (Prompt, if necessary: being nearby bus stops/CTrain stations) | |
| (In)Directness of Trip (number of transfers) | [] 08 | (Lack of) Information made available about disruptions of | |
| (Lack of) Service to places I want to go | [] 09 | Calgary Transit services | [] 18 |
| The times the first vehicle starts, and the last | [] 10 | (Lack of) Information made available about changes to Calgary | |
| vehicle stops operating for the day on routes you use. | | Transit service and fares | [] 19 |
| (In)Convenience of Connections and Transfers | [] 11 | New Services | [] 20 |
| (Not) Providing for Customer Safety and | | Other (Specify: _____) | [] 21 |
| Security | [] 12 | Don't Know | [] 22 |

QC7A. Calgary Transit is interested in how Calgary Transit fits into your life. For each of the following statements, please tell me if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. If any of the statements are not applicable, please tell me. **ROTATE**

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Refused	Not applicable
a) Calgary Transit is an important choice in my life and lifestyle	1	2	3	4	5	6
b) The choice of where I live or will move to is influenced by the availability of Calgary Transit services	1	2	3	4	5	6
c) For each trip I make I consider using Calgary Transit	1	2	3	4	5	6
d) I use Calgary Transit to go to multiple places throughout my journey	1	2	3	4	5	6

QC7C. How do you typically get to the first bus or CTrain vehicle when you use Calgary Transit? **DO NOT READ, TAKE ONLY TOP ONE OR TWO RESPONSES**

- 1 [] Walk
- 2 [] Drive, use park and ride
- 3 [] Drive, park nearby
- 4 [] Cycle
- 5 [] Passenger in another vehicle (carpool, kiss n ride, etc)
- 6 [] Other



IF QC7C INDICATED WALK PLEASE COMPLETE QC7D

QC7D. You indicated that you typically walk to your first bus or CTrain on your trip. Can you tell me how many minutes you currently take to walk to the first bus or CTrain?

_____ Minutes

QC7B. How many minutes do you typically wait at the stop or station for the first bus or CTrain to arrive on your trip?

_____ Minutes

IF QC1D INDICATES 1 OR MORE TRANSFERS PLEASE COMPLETE QC7E

QC7E. Thinking now about transfers, how many minutes are you willing to wait for a transfer to another Calgary Transit vehicle?

_____ Minutes

IF QC1A INDICATES BOTH BUS AND CTRAIN PLEASE COMPLETE QC7F

QC7F. You indicated earlier that you use both Calgary Transit buses and CTrains, which of the following best describes your typical behaviour on your most frequent trip? (READ)

- 1 [☐] My most frequent transit trip consists of both a bus and a train
- 2 [☐] My most frequent transit trip consists of just the bus
- 2 [☐] My most frequent transit trip consists of just the CTrain

QC8. I'd like to ask you how strongly you agree or disagree with a few statements about Calgary Transit. For each of the following statements, please tell me if you strongly agree, somewhat agree, somewhat disagree or strongly disagree. If any of the statements are not applicable, please tell me. **ROTATE**

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	Refused	Not applicable
a) The bus drivers usually greet me in a friendly manner	1	2	3	4	5	6
b) Bus drivers are knowledgeable about the service they provide	1	2	3	4	5	6
c) I feel safe when traveling on transit	1	2	3	4	5	6
e) Other passengers are usually well-behaved	1	2	3	4	5	6
f) Calgary Transit vehicles normally arrive at my stop at the scheduled time	1	2	3	4	5	6
h) Overall, I feel Calgary Transit drivers operate their vehicles safely	1	2	3	4	5	6
i) My experience while travelling on Calgary Transit is usually pleasant	1	2	3	4	5	6
j) There is generally a bus stop or CTrain station within a reasonable distance of my origin and destination	1	2	3	4	5	6
k) Calgary Transit restores service or adapts to service disruptions quickly	1	2	3	4	5	6

QC9. In the past 12 months, have you contacted Calgary Transit or 311 to do any of the following concerning transit service:

- 1 [] Register a concern or complaint about a transit operator
- 2 [] Register a concern or complaint about any other aspect of transit or transit service
- 3 [] Register a compliment about a transit operator
- 4 [] Register a compliment about any other aspect of transit or transit service
- 5 [] Ask a question about transit or transit service
- 6 [] Any other reason?



QC10. Calgary Transit provides information to customers in a number of ways. In an average month, how many times would you access/use the following information sources:

READ ALL. (97=Don't know what the information service is. 98=Don't know how many times)

IF NEEDED FOR TWITTER:

Here we are interested in the number of times you would actively view information about Calgary Transit on Twitter'

IF NEEDED FOR EMAIL ALERTS:

Here we are interested in the number of times you would read email alerts about Calgary Transit'

- a) Customer Call Centre **(READ IF NECESSARY, 262-1000)?** [] times per month
- b) TeleRide System **(READ IF NECESSARY, 974-4000)?** [] times per month
- c) Calgary Transit web site
(READ IF NECESSARY www.calgarytransit.com)? [] times per month
- d) Calgary Transit on Google Transit? [] times per month
- e) Calgary Transit on Twitter? [] times per month
- f) Calgary Transit email alerts? [] times per month
- g) Obtaining information from Calgary Transit Drivers? [] times per month
- h) The Calgary Transit Smartphone app [] times per month

QC11A **[FOR INFORMATION SOURCES THE RESPONDENT ACCESSED IN AN AVERAGE MONTH]** How satisfied or dissatisfied are you with the quality of information provided by the information sources that you use? Please use a scale of 1 to 5 where "1" means "very dissatisfied" and "5" means "very satisfied".

	1 Very dissatisfied	2	3	4	5 Very satisfied	Refused
a) Customer Call Centre	1	2	3	4	5	6
b) TeleRide System	1	2	3	4	5	6
c) Calgary Transit web site	1	2	3	4	5	6
d) Calgary Transit on Google Transit	1	2	3	4	5	6
e) Calgary Transit on Twitter	1	2	3	4	5	6
f) Calgary Transit email alerts	1	2	3	4	5	6
g) Obtaining information from Calgary Transit Drivers	1	2	3	4	5	6
h) Calgary Transit Smartphone App	1	2	3	4	5	6

QC11B How satisfied or dissatisfied are you with the quality of information being made available from Calgary Transit on the following issues? Please use a scale of 1 to 5 where "1" means "very dissatisfied" and "5" means "very satisfied".

	1 Very dissatisfied	2	3	4	5 Very satisfied	Refused
a) Disruptions of Calgary Transit services that are planned, such as station refurbishments, track work, etc.	1	2	3	4	5	6
b) Disruptions of Calgary Transit services that are unplanned, such as a result of collisions, fatalities, medical emergencies, etc.	1	2	3	4	5	6
c) Service changes (changes to route destinations, scheduling, etc.)	1	2	3	4	5	6
d) Fare changes	1	2	3	4	5	6
e) Future plans (LRT network upgrades, service to new communities, improved vehicles, etc)	1	2	3	4	5	6
f) How to use the transit system	1	2	3	4	5	6

QC12. In your opinion what is the one most important thing you would like to see Calgary Transit change or improve?

SERVICE DESIGN

- ☐ 1 More on-time service
- ☐ 2 Reduce overcrowding
- ☐ 3 More/earlier/later bus/CTrain service
- ☐ 4 More frequent service
- ☐ 5 Make connections better/easier

FLEET/INFRASTRUCTURE

- ☐ 6 More/bigger CTrains/buses
- ☐ 7 Improve maintenance of fleet
- ☐ 8 Improve cleanliness of fleet
- ☐ 9 Age/new vehicles
- ☐ 10 Improve shelter/station facilities (heating, cleaning etc.)
- ☐ 11 More available parking at CTrain stations
- ☐ 12 More shelter facilities

ROUTES/PLANNING

- ☐ 13 Improve bus routes
- ☐ 14 Expand CTrain line (generally)
- ☒ 15 Green Line LRT
- ☐ 16 LRT to the airport
- ☐ 17 Expand Northwest LRT

- ☐ 19 Expanded service (generally)

COST FARES

- ☐ 20 Lower fares/don't increase fares
- ☐ 21 Electronic fare payment system
- ☐ 22 Free parking/reduced rates at CTrain stations



SAFETY/SECURITY

☐ 23 More/better security

PUBLIC AWARENESS

☐ 24 Improve information services

☐ 25 More current service information (disruptions, etc.)

☐ 26 Provide schedule information at bus stops/CTrain stations

STAFF

☐ 27 More friendly/courteous drivers

☐ 28 Improve customer service

☐ 29 Better training for drivers

NOTHING / SATISFIED

☐ 30 Nothing/satisfied

☐ 31 Other (Specify) _____

QC13A. Since it would take additional revenue to fund the priorities you mentioned above, would you be in favour of a fare increase if the funds generated were directly applied to these improvements?

ALTERNATIVE WORDING IF DON'T KNOW OR REFUSED IN QC12

Any improvements to Calgary Transit would take additional revenue to fund. Would you be in favour of a fare increase if the funds generated were directly applied to these improvements?

☐ Yes ☐ Conditional Yes ☐ Maybe/Perhaps ☐ No

IF CONDITIONAL "YES", Specify condition(s): _____

QC13B. In your opinion, do you think better transit service should be paid for by an increase in property taxes or by increases in transit fares?

1 ☐ Increase in property taxes

2 ☐ Increase in transit fares

3 ☐ Both (DO NOT READ)

4 ☐ Don't know (DO NOT READ)

5 ☐ Other (specify: _____) (DO NOT READ)

QC14. With regard to your use of Calgary Transit, I am going to read three statements. Please tell me the one statement that best describes your feelings..

1 ☐ There are many good reasons to continue using Calgary Transit, and no good reasons to change to another method of travel.

2 ☐ There are many good reasons to continue to use Calgary Transit, but there are also many good reasons to change to another method of travel.

3 ☐ There are few good reasons to continue to use Calgary Transit, and there are many good reasons to change to another method of travel.

[CUSTOMER RESPONDENTS, QS2 = 1+, SKIP TO D3]



NON-USER QUESTIONNAIRE

QN1. Have you ever used Calgary Transit on a regular basis – that is, at least once a week?

Yes
No

[ASK QN2 IF QN1=YES]

QN2 How long ago did you stop using Calgary Transit regularly? Was it ...

Less than 1 year ago or
More than 1 year ago

[ASK QN3 IF Q1=YES]

QN3 When you used Calgary Transit regularly, what type of trip or trips did you take? Did you use transit for [READ]...
[SELECT ALL THAT APPLY]

Work
School
Shopping
Medical, dental
Personal business
To attend social or recreational events or activities
Any other purposes? [SPECIFY] _____

Yes
No



QN4 For what reasons did you stop using Calgary Transit buses or CTrains on a regular basis?
[DO NOT READ - PROBE FULLY –SELECT ALL THAT APPLY]

CAR RELATED/OTHER TRANSPORTATION

- Purchased Car/can now afford car
- Car is more convenient
- Require car for work
- Got parking space at work
- Use different means of transportation (bike, walking, car-pooling, etc.)

CHANGE IN SITUATION

- Stopped working/not working (housewife, retired, laid off, etc.)
- Only used for school purposes/no longer going to school
- Working at home
- Location change (work transfer, moved, etc.)
- Employed out of town
- Personal mobility problems

TRANSIT SERVICE

- Transit service not convenient
- No transit service to my destination / from my home
- Transit too slow
- CTrain too crowded
- Buses too crowded
- Lack of parking at Park'n'Ride
- Introduction of Park'n'Ride fees
- Transit information not available
- Concern for personal security
- Transit Service not available at time I need to travel (too early/too late)
- Other [SPECIFY] _____

QN5 Do you currently use Calgary Transit occasionally – for example, for sports events, during Stampede, New Year's Eve or other special events?

- Yes
- No



[ASK QN6 IF QN5=YES]

QN6 How many times have you used Transit in the past month?

[ENTER 0-100]_____times

[ASK QN7 IF QN5=YES]

QN7 How many times have you used Transit in the last year?

[ENTER 0-100]_____times

QN8 What one method of transportation do you use most often for travelling within the city of Calgary? [DO NOT READ - SELECT ONE RESPONSE ONLY]

Vehicle / Motorcycle (driver)
Vehicle (passenger / carpool)
Taxi
Bicycle
Walk (includes skateboard, rollerblade, etc)
Access Calgary (HandiBus/Shared Ride Taxi)
Car sharing program (Car 2 Go)
Do not travel
Other [SPECIFY]_____

QN9 With regard to the method of transportation that you use most often, I am going to read three statements. Please tell me the one statement that best describes your feelings. Now thinking about using [READ NAME OF METHOD BELOW THAT CORRESPONDS TO METHOD MENTIONS ABOVE IN QN8] ... can you please tell me whether Statement A, Statement B, or Statement C provides the best description of the way you feel.

- a) There are many good reasons to continue to use this method as I am now doing, and no good reasons to change to another.
- b) There are many good reasons to continue to use this method as I am now doing, but there are also many good reasons to change.
- c) There are few good reasons to continue to use this method as I am now doing, and there are many good reasons to change



QN10 In your opinion, what should Calgary Transit do to increase the likelihood of you becoming a regular transit user? [DO NOT READ – PROBE FULLY - SELECT ALL THAT APPLY]

Nothing

TRANSIT SCHEDULE

Transit routes provide later service on weekday evenings

Transit routes provide later service on weekend evenings

Transit routes provide earlier service on weekday mornings

Transit routes provide earlier service on weekend mornings

Transit schedules match my work hours better

REDUCED FARE

Bus/CTrain fare is lowered

Reduce or eliminate Park'n'Ride fees

FASTER, MORE DIRECT, EXPRESS

If travel time by transit would be comparable to the method I use now

More direct Transit routes

Express bus route is added to serve my neighbourhood

Better transfer connection (shorter wait time at connection)

MORE FREQUENT SERVICE

Bus routes run more frequently

EXTENDED ROUTES

Bus routes are extended to where I wish to travel

CTrain lines are extended to where I wish to travel

CLOSER STOPS

Stops/stations located closer to my home/work/school

BETTER SECURITY

Calgary Transit provides better security for my personal safety

TRANSIT INFORMATION

Provide better schedule information

TRANSIT ACCESS

Provide better access for people with disabilities on buses

Provide better access for people with disabilities at LRT stations

Other [SPECIFY] _____)



QN11 In your opinion, do you think better transit service should be paid for by an increase in property taxes or by increases in transit fares?

Increase in property taxes

Increase in transit fares

(DO NOT READ) Both

(DO NOT READ) Don't know

(DO NOT READ) Other [SPECIFY]: _____)

Demographic Questions

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

D3. What community do you live in?

D4. What are the first four characters of your postal code?

____ _

D5. For how many years have you been a regular Calgary Transit user?

of years: _____

D6. And which of the following income groups includes your annual household income, before taxes, in 2014? **[READ LIST]**

1 ☐ Less than \$25,000

2 ☐ \$25,000 to less than 40,000

3 ☐ \$40,000 to less than 60,000

4 ☐ \$60,000 to less than 80,000

5 ☐ \$80,000 to less than 100,000

6 ☐ \$100,000 to less than \$120,000

7 ☐ \$120,000 to less than \$135,000

8 ☐ \$135,000 to less than \$150,000

9 ☐ \$150,000 or more

10 ☐ Refused/Don't know

D7. Do you use the following technologies in your everyday life? **[READ LIST]**

Technology	Yes	No	Don't know
Smartphone (eg. iPhone, Android, Blackberry)	1	2	3
Mobile phone that does not have Internet access or Apps	1	2	3
Smartcard – A card that may allow for access to a building, or may be tapped to pay for goods or services, etc.	1	2	3
Internet	1	2	3
Desktop or laptop computer (home or work)	1	2	3
Tablet device	1	2	3

D8. How many vehicles does your household have available for everyday use?

of vehicles: _____

Thank On behalf of Calgary Transit, thank you for your time and for participating in the survey today.

FINTRO: Before we conclude, we have just a couple of final questions to ask. We are gathering interest for some focus groups that will be conducted at the end of November. The purpose of these groups is to discuss some of the questions raised in this survey in more detail. The groups will take 1.5 hours and will be held in a central Calgary location. As a thank you to all those who participate we are offering \$80.

If you would like to be considered to take part in a focus group, we would just need to get your contact details so we can follow up with you.

IF NEEDED: THE LIKELY DATES FOR THESE GROUPS WILL BE 28-30TH NOV AND THE LOCATION IS ON 10TH AVE SW.

NO, NOT INTERESTED IN FG → THANK AND CLOSE

YES → CONTINUE [HERE PERSONAL INFORMATION WILL BE COLLECTED UNDER A SEPARATE LINK]

F1: Thanks, can I please have a contact name?

F2: And what is your best contact number?

F3: As an alternative contact, could you provide us with your email address?



F4: Lastly do you have a preference for a focus group session time

DO NOT READ BUT PROMPT IF NEEDED – MAY SELECT MULTIPLE

1. Morning – before midday
2. Afternoon – midday -5pm
3. Evening – 5pm onwards

Thanks for providing us with these details. If you are selected we will be contacting you in the first week of November to confirm your participation. Please note that as we are looking for a range of different people we cannot guarantee a spot in a focus group for all those who are interested and only those selected will be contacted.

THANK AND CLOSE

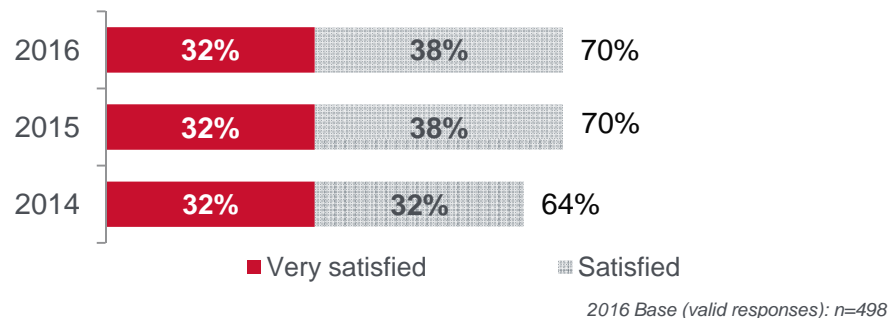


Appendix D – Historical comparisons of satisfaction attributes

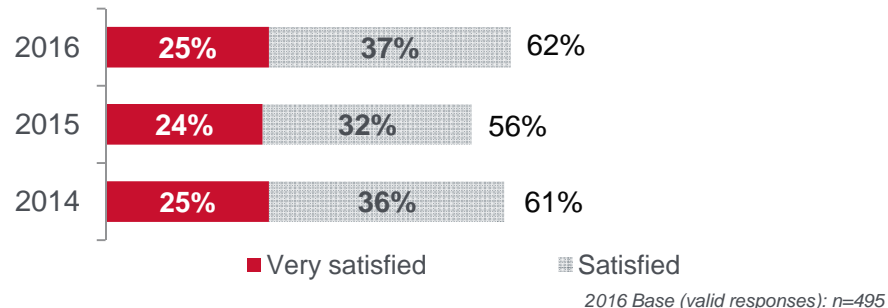


Historical comparisons – satisfaction with information and communication attributes

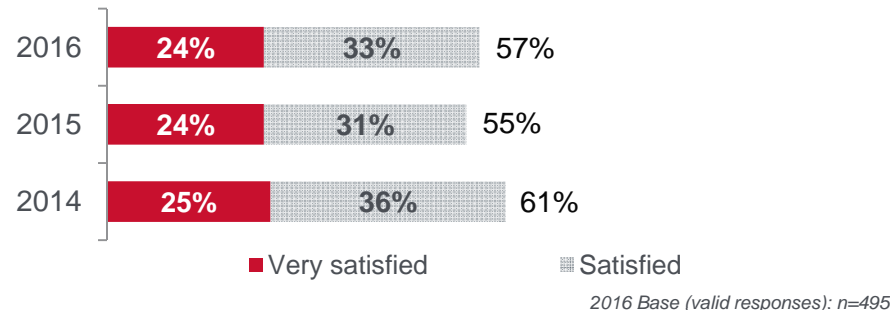
Providing scheduling and route information



Communication on changes to Calgary Transit services and fares



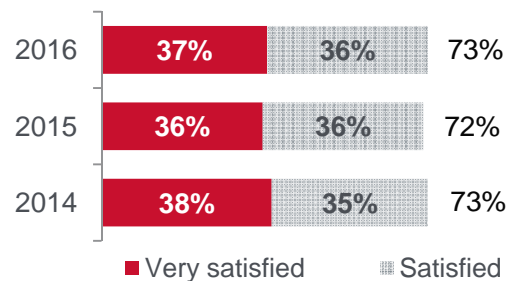
Communication about Calgary Transit service disruptions





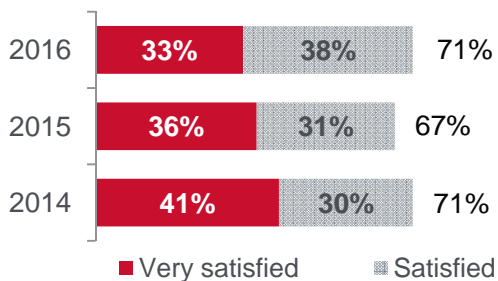
Satisfaction with Transit journey attributes

Directness of trip (no. of transfers)



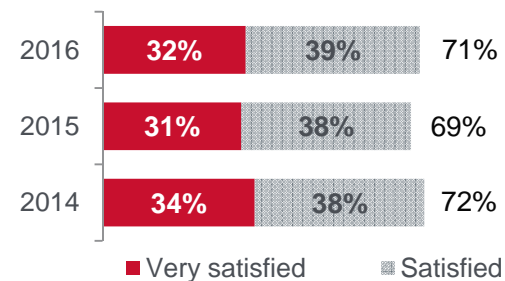
2016 Base (valid responses): n=498

Start/stop times for transit service routes



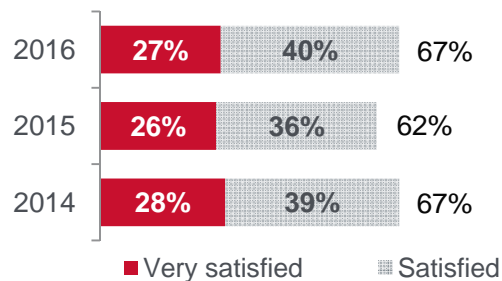
2016 Base (valid responses): n=484

Service to places I want to go



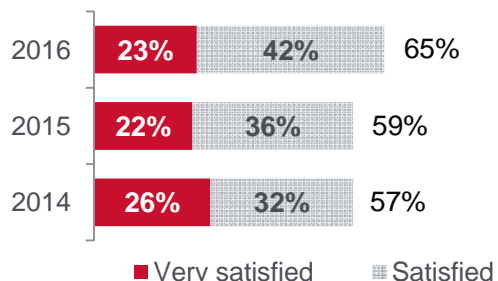
2016 Base (valid responses): n=499

Length of travel time



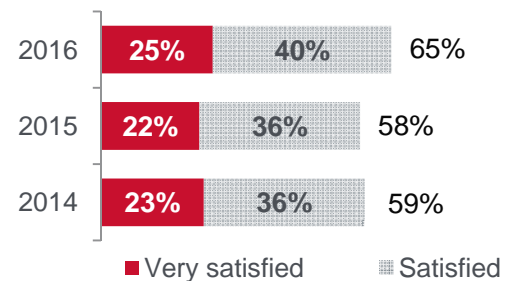
2016 Base (valid responses): n=500

Service frequency



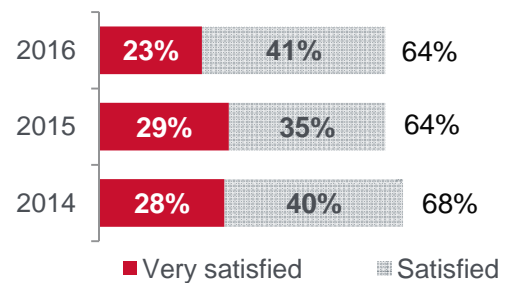
2016 Base (valid responses): n=498

Being on time



2016 Base (valid responses): n=498

Convenience of connections and transfers

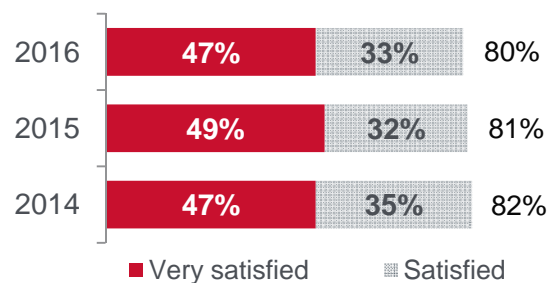


2016 Base (valid responses): n=474



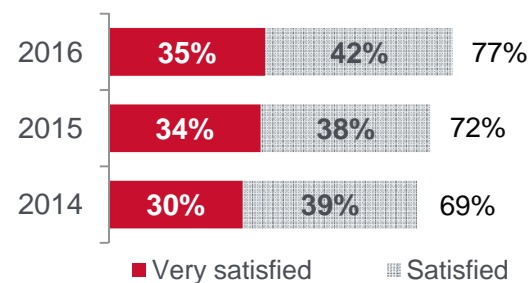
Satisfaction with other attributes

Convenience of purchasing tickets/passes



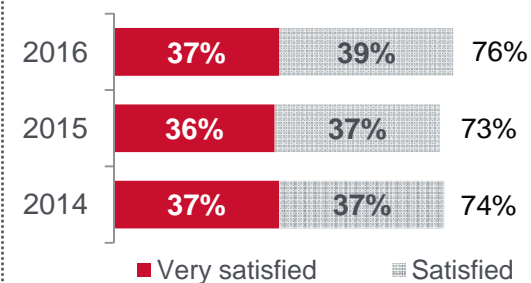
2016 Base (valid responses): n=497

Providing for customer safety and security



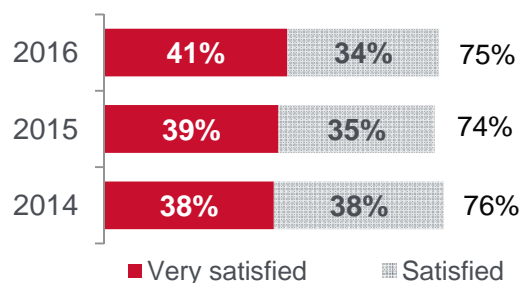
2016 Base (valid responses): n=499

Having courteous and helpful staff



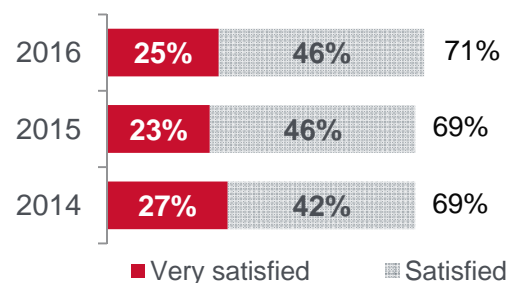
2016 Base (valid responses): n=486

Having access to bus stops / CTrain stations



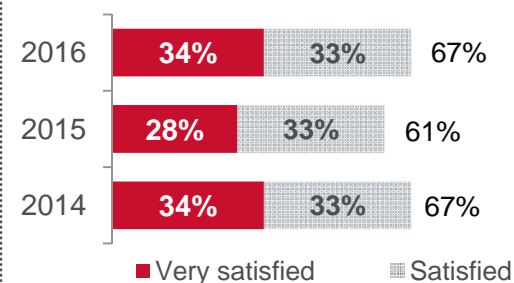
2016 Base (valid responses): n=500

Cleanliness



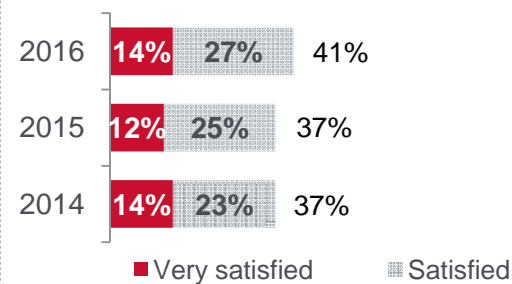
2016 Base (valid responses): n=498

Value for money



2016 Base (valid responses): n=499

Not being over crowded



2016 Base (valid responses): n=499



Appendix E - Penalty Reward Analysis



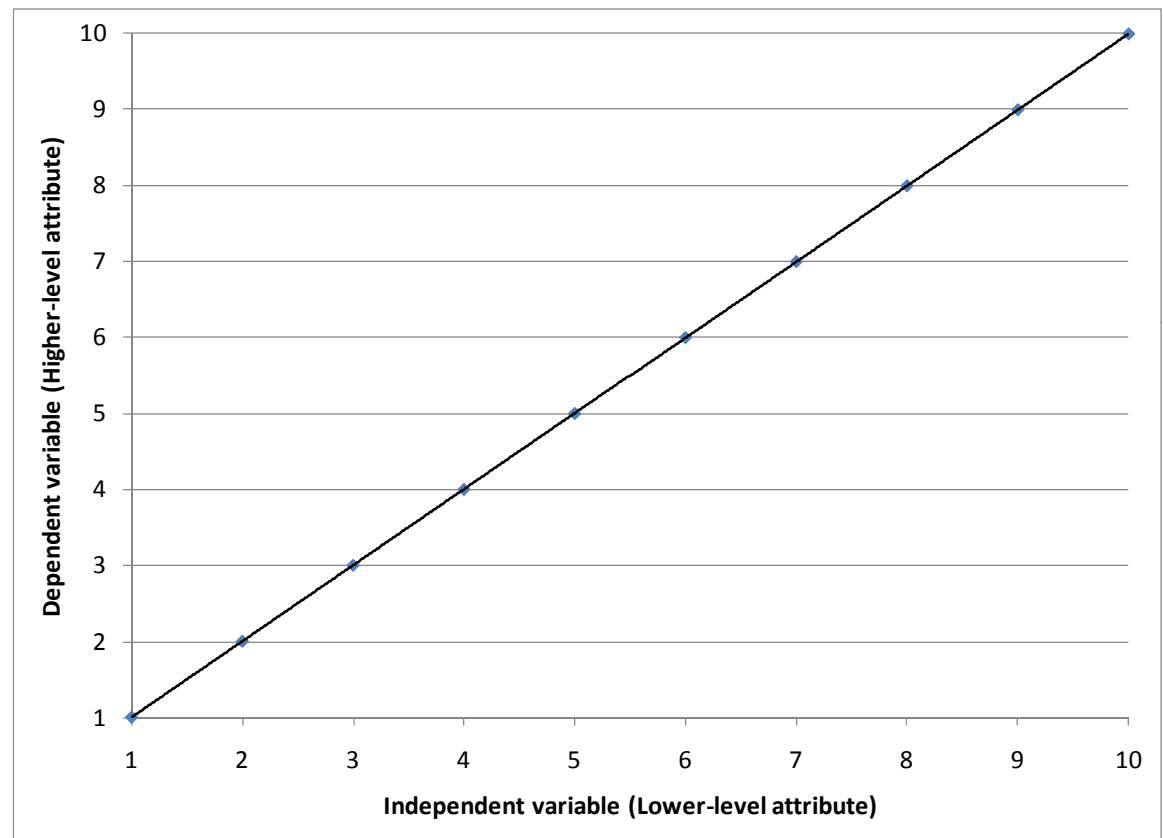
Transit users overall satisfaction with Calgary Transit depends on a various service attributes provided and the level of expectation surrounding these attributes. A Penalty-Reward Analysis (PRA) shows whether scoring low (or high) on a specific attribute is more strongly associated with a low or high score on an overall measure.

The PRA produces a Penalty and a Reward score for each attribute and compares the difference between these scores. The difference score is used to categorize attributes into one of three types: Penalty, Reward, and Performance. Categorization depends on the magnitude and direction of the difference between the Penalty and the Reward score.

Various aspects of service delivery have different effects on customers' views of a company (or product) depending on customer expectations. There are three broad categories of service attributes:

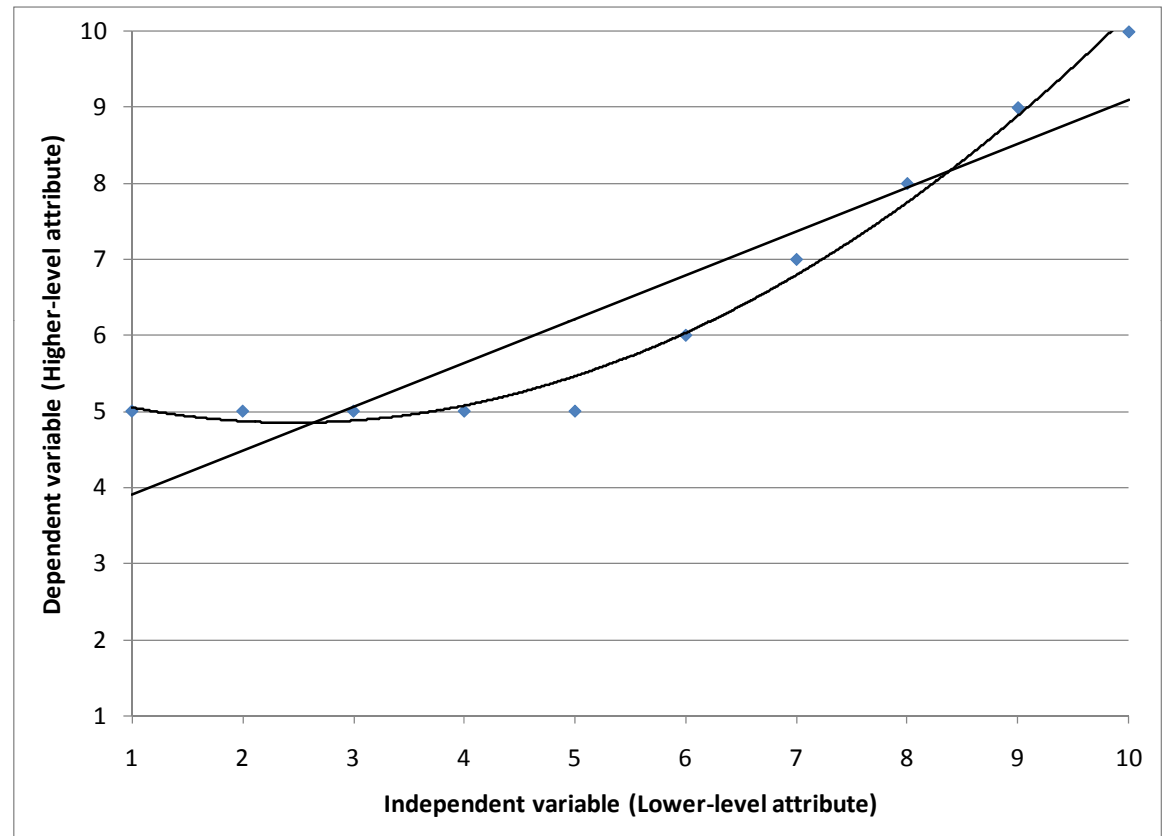
- Performance Attributes – These attributes have equal penalty and reward characteristics. Companies will be rewarded for good performance, and penalized for poor performance.
- Penalty Attributes – Attributes that are expected by customers (“cost of entry”). If the attribute is not present, customers will penalize the company for its absence, but they will not reward the company for its presence.
 - E.g., customers expect that a new car will start when they turn the key. If it does not, they will think less of the manufacturer, but if it does start they would not reward the manufacturer.
- Reward Attributes – Attributes that are not expected by customers (“delight attributes”). Customers will reward a company for delivering these attributes, but they will not penalize the company for failing to deliver these attributes.
 - E.g., car purchasers would be delighted by having a voice activated navigation system, but they would not think less of the car if it did not include this feature.

The relationship between a Performance attribute and higher-level dependent variables is straightforward – low X performance is associated with low Y outcomes, and high X performance is associated with high Y outcomes. The relationship is the same regardless of whether it is modelled using a linear equation or nonlinear equations (i.e., quadratic and cubic).

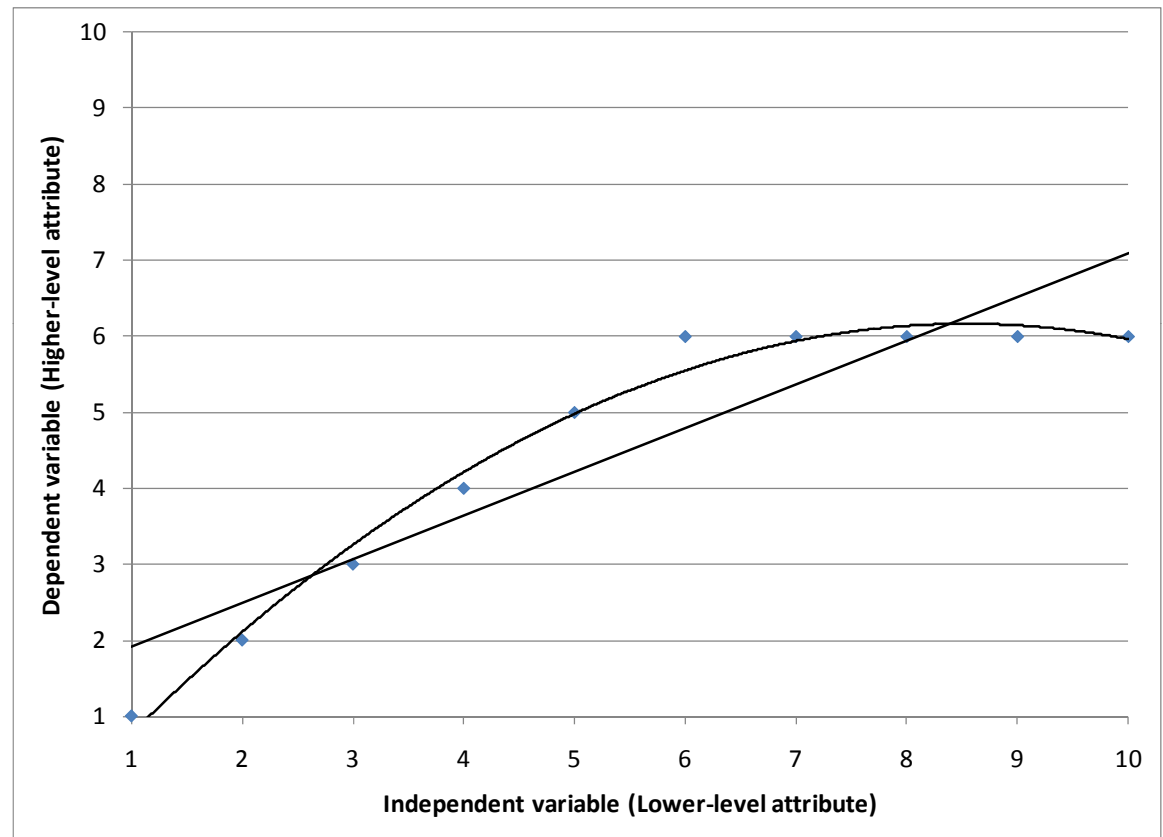


Penalty-Reward Method – Penalty Attributes

- Reward attributes have similar curves – performing well does not net gains in Y until other needs are met. The relationship between the independent and dependent variables is thus curved at the bottom-end of the scale, where low X values do not relate to particularly low Y values (i.e., there is no penalty for not performing), but performing well results in increased Y values.
- To relate this to the car example, imagine that X ratings are the inclusion of various hi-tech car features and Y ratings are “overall” ratings of the car. Low ratings of the features (1-5) do not result in deflated Y scores (all 5 here), but high ratings (6-10) are associated with increasing scores.



- Penalty attributes have a ceiling on performance gains – in this example ratings up to 6 yield increases in Y scores, but then there are no further gains past this point. The relationship between the independent and dependent variables is thus curved at the top-end of the scale, where X values continue to increase but Y values reach a ceiling.
- To relate this to the previous example, if ratings of “car starting” (X) to not reach a minimum threshold (6 out of 10 in this case), “overall” ratings (Y) will suffer correspondingly. If “car starting” ratings are 6 or higher, “overall” ratings do not increase.

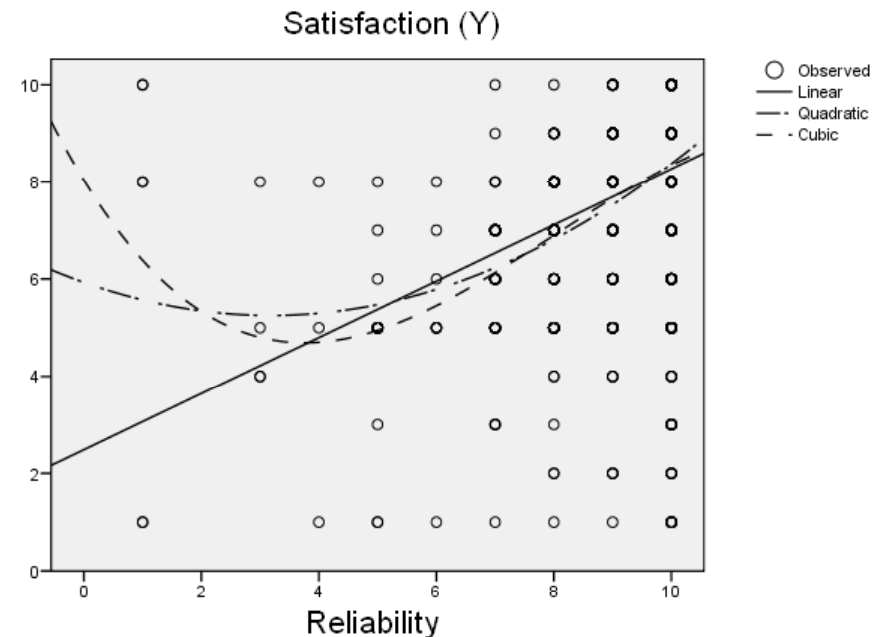


Penalty-Reward Method

- The Penalty-Reward results show whether scoring low (or high) on an attribute is more strongly associated with a low (or high) on the Overall measure. Attributes that have a consistent relationship on the low and high-end are Performance attributes. Those that have stronger relationships on the low-end compared to the high-end are Penalty attributes, and attributes that have stronger relationships on the high-end compared to the low-end are Reward attributes. The Penalty and Reward attributes have non-linear relationships to measures of overall satisfaction.
- The Penalty-Reward analysis assesses the strength of the non-linear relationship between an independent variable and a dependent variable. As seen in many surveys, variables in the survey often have at least a moderate linear relationship with all other variables, as well as related Overall measures, and typically with the highest-level Overall Satisfaction measure.

An example:

- In theory, the non-linear relationship between two variables can be identified by using curve estimates. Unfortunately, customer satisfaction data is often so skewed that a curve model is not a significantly better fit than a linear model.
- In the example, you can see the linear, cubic, and quadratic curve estimations for “reliability” and “overall satisfaction” in a utility provider’s data.
- Although visually we can clearly see the curved pattern this data yields, the model r^2 values do not differ sufficiently to call the curve models better than the linear model and characterize the attributes as Penalty or Reward attributes. This is because there are so few cases on the lower end of the scales (i.e., the positive skew).



Penalty-Reward Method – Calculations

- NRG has developed a non-parametric technique to characterize variable relationships. All attributes, including lower- and higher-level variables, were re-coded into 3-box groupings. The boxes are based on the distribution of the data; for, the low-box is 1 to 2, mid-box is 3, and top-box is 4 and 5.
- The relationships between the 3-box proportions of independent (lower-level) and dependent (higher-level) variables were then assessed. This is accomplished by calculating a Penalty score and a Reward score, and then comparing them. A Penalty score is defined (mathematically) as the probability of obtaining a dissatisfactory (i.e., low-box) rating on the dependent variable if the independent variable is rated poorly (i.e., low-box). That is, it is the strength of association between poor independent variable (IV) ratings and poor dependent variable (DV) ratings.
- The Reward score is the opposite – it is the probability of obtaining a positive (i.e., top-box) rating on the dependent variable if the independent variable is rated positively (i.e., top-box). That is, it is the strength of association between good independent variable (IV) ratings and good dependent variable (DV) ratings.
- The most straightforward relationship is that of a Performance attribute. Performance attributes will demonstrate a relationship between a lower-level and higher-level variable that are about even – low scores on the independent variable are associated with low scores on the dependent variable, and high scores will be associated with high scores. That is, the Penalty and Reward scores will be about equal. Performance attributes can be strong or weak depending on the values of the Penalty and Reward; when the scores are higher the Performance relationships are stronger, and when the scores are lower the Performance relationship is weaker.
- Penalty attributes are those with significantly higher proportions of “low-low” participants compared to the proportion of “high-high” participants (calculated based on the difference between the Penalty and Reward scores). That is, a low score on the independent variable is strongly associated with a low score in the dependent variable, but a high score on the independent variable is comparably less associated with a high score in the dependent variable. This is because high independent variable scores on a Penalty attribute could result in any dependent variable score – after meeting the minimum requirement there is no predictable added gain (the flat-lining of gains in the previous example).
- Reward attributes are those with significantly higher proportions of “high-high” participants compared to the proportion of “low-low” participants. That is, a high score on the independent variable is associated with a high score in the dependent variable, but a low score on the independent variable is comparably less associated with a low score on the dependent variable. This is because low independent variable scores on a Reward attribute could result in any dependent variable score – doing well on a superfluous attribute will not result in gains in overall satisfaction unless other requirements are met first.

Penalty-Reward Method – Interpreting the Results

- After obtaining the Penalty and Reward scores, the difference between them indicates whether an attribute is a Penalty or Reward attribute. If the Penalty score is statistically significantly higher than the Reward score, then the attribute is a Penalty attribute. If the Reward score is significantly higher than the Penalty score, then the attribute is a Reward attribute.
- If the difference between the scores is low or nil, then the attribute is more of a Performance-related attribute than a Penalty or Reward attribute, where poor scores will make customers unhappy and high scores will make customers happy.
- The detailed results of the Overall Penalty-Reward Analysis for the Calgary Transit data are presented on the following pages. These results include all participants.



KEY FOCAL AREAS:

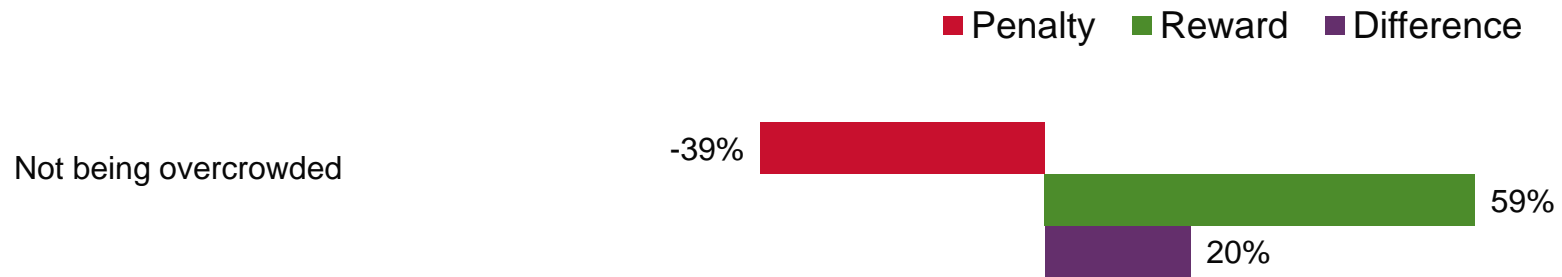
Performance attributes and drivers of overall satisfaction



A total of 4 attributes (above) have been identified as both a key performance attribute and a key driver.

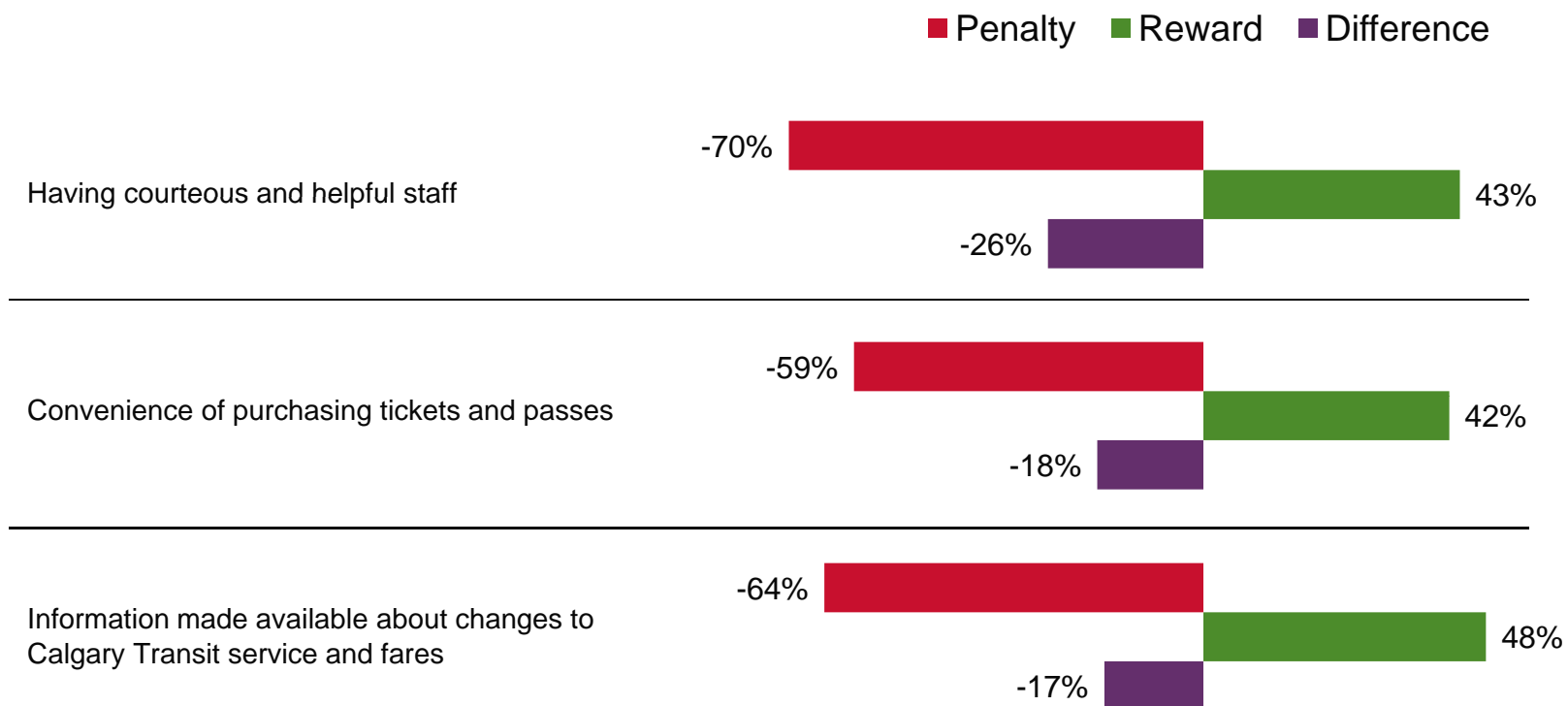
For each of the attributes shown above, there is no significant difference between the Penalty and Reward scores, hence satisfaction will increase if customers feel their needs are being met on this attribute but will decrease if this is not the case. As they are also considered key satisfaction drivers, they also have the most impact on overall satisfaction. As such, the data suggest these as top priorities for Calgary Transit..

Reward attribute and key driver of satisfaction for Calgary Transit users



Results indicate that amongst Calgary Transit users there is only one reward attribute and that is lack of overcrowding. As this has been classified as a reward attribute it might not be something that is expected, but given it has also been identified as a key driver, it has strong potential to add value and satisfaction.

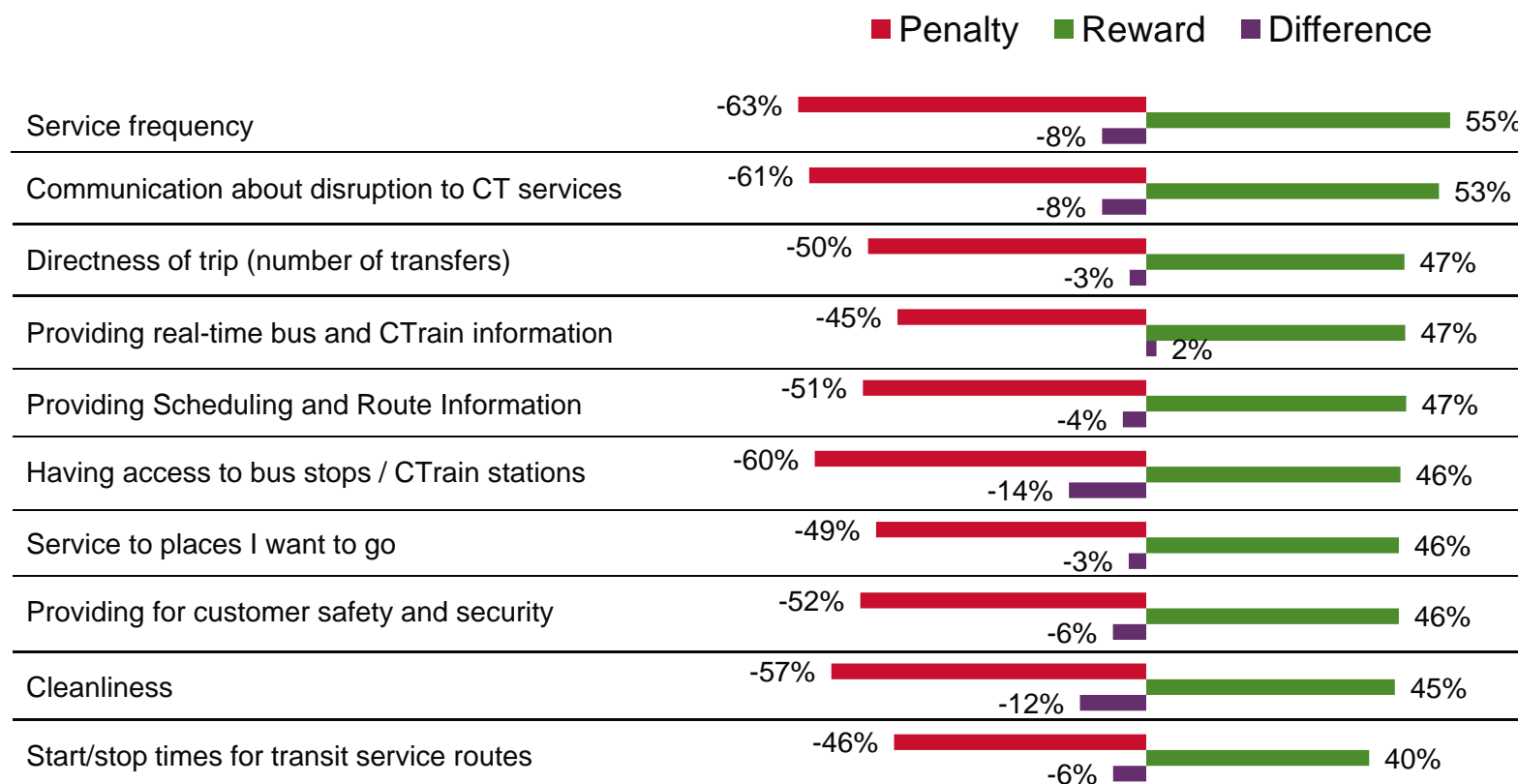
Penalty attributes for Calgary Transit users



For each of the attributes shown above, the Penalty score significantly exceeds the Reward score, indicating that Calgary Transit customers **expect** all of these aspects as part of their transit experience. The strength of the Penalty scores shows the importance of delivering on these factors to the perception of overall satisfaction.

Therefore, in order to ensure that strong customer satisfaction, Calgary Transit should ensure that these service attributes are delivered to Calgary Transit users.

SECONDARY FOCAL AREAS: Performance attributes that are not key drivers



For each of the attributes shown above, there is no significant difference between the Penalty and Reward scores, hence satisfaction will increase if customers feel their needs are being met on this attribute but will decrease if this is not the case.

However, given that these attributes are not key drivers, these should be addressed as a secondary priority.



Appendix F – Segmentation exploratory SPSS output

```

DATASET DECLARE D0.9278928870136073.
PROXIMITIES QC7AA QC7AB QC7AC QC7AD QC14 QC6A
/MATRIX OUT(D0.9278928870136073)
/VIEW=CASE
/MEASURE=SEUCLID
/PRINT NONE
/STANDARDIZE=VARIABLE Z.
CLUSTER
/MATRIX IN(D0.9278928870136073)
/METHOD WARD
/PRINT SCHEDULE CLUSTER(3,4)
/PRINT DISTANCE
/PLOT DENDROGRAM VICICLE
/SAVE CLUSTER(3,4).
Dataset Close D0.9278928870136073.

```

CROSSTABS

```

/TABLES=QS2_Comb Gender Age QC1A QC2A QC3A QC6A QC14 QC7AA QC7AB QC7AC QC7AD QC10A_Comb
QC10B_Comb QC10C_Comb QC10D_Comb QC10E_Comb QC10F_Comb QC10G_Comb QC10H_Comb BY cluster4all
/FORMAT=AVALUE TABLES
/CELLS=COLUMN
/COUNT ROUND CELL.

```

% within Ward Method

		Ward Method			
		1	2	3	4
In an AVERAGE week, that includes all 7 days, how many times would you normally ride Calgary Transit buses AND/OR CTrains? (COMBINED)	1-3 times	25.8%	19.0%	10.0%	5.6%
	4 to 7 times	18.1%	27.0%	29.0%	20.4%
	8 to 10 times	46.5%	30.2%	37.0%	59.3%
	more than 10	9.7%	23.8%	24.0%	14.8%
Total		100.0%	100.0%	100.0%	100.0%

% within Ward Method

		Ward Method			
		1	2	3	4
Gender	Male	53.5%	40.5%	43.0%	38.9%
	Female	46.5%	59.5%	57.0%	61.1%
Total		100.0%	100.0%	100.0%	100.0%

% within Ward Method

		Ward Method			
		1	2	3	4
QS12. And to confirm which age group are you in? Just stop me when I reach your category.	15 to 17 yrs	5.2%	7.1%	7.0%	
	18 to 19 yrs	5.2%	1.6%	6.0%	1.9%
	20 to 24 yrs	9.0%	9.5%	17.0%	
	25 to 34 yrs	23.2%	10.3%	15.0%	7.4%
	35 to 44 yrs	18.7%	13.5%	17.0%	25.9%
	45 to 54 yrs	16.1%	14.3%	18.0%	33.3%
	55 to 64 yrs	16.1%	12.7%	9.0%	20.4%
	65 to 74 yrs	4.5%	21.4%	6.0%	7.4%
	75 and older	1.9%	9.5%	5.0%	3.7%
Total		100.0%	100.0%	100.0%	100.0%

% within Ward Method

		Ward Method			
		1	2	3	4
QC1A. Do you mainly use the bus, the CTrain, or both?	Bus	20.0%	23.8%	18.0%	24.1%
	CTrain	38.1%	12.7%	14.0%	38.9%
	Both	41.9%	63.5%	68.0%	33.3%
	Refused				3.7%
Total		100.0%	100.0%	100.0%	100.0%

% within Ward Method

		Ward Method			
		1	2	3	4
QC2A. What is your one main reason for using Calgary Transit instead of alternative forms of transportation?	Less Expensive	18.7%	10.3%	16.0%	22.2%
	Save Gas/High gasoline prices / High Parking Rates	5.2%		1.0%	3.7%
	No Car Available	7.1%	9.5%	21.0%	9.3%
	Avoid Traffic	5.2%	4.0%	5.0%	5.6%
	Avoid Parking	20.6%	5.6%	7.0%	9.3%
	Don't Drive	7.1%	23.0%	14.0%	11.1%
	Convenient Service	23.9%	29.4%	21.0%	25.9%
	Faster Travel Time	1.9%	5.6%	2.0%	
	Comfortable/Relaxing	0.6%	0.8%	3.0%	1.9%
	Environmental Reasons	1.9%	1.6%	1.0%	1.9%
	Transit Pass included in Tuition (U-Pass)		0.8%		
	Bus stop is close by / On a route	1.3%	2.4%	2.0%	1.9%
	No alternative / Only option available		2.4%	3.0%	3.7%
	Other	6.5%	4.8%	4.0%	3.7%
Total		100.0%	100.0%	100.0%	100.0%

% within Ward Method

		Ward Method			
		1	2	3	4
During what time period do you use Calgary Transit most often - rush hour or some other time period?	No Specific Time Period	5.2%	11.1%	9.0%	3.7%
	Rush Hour ONLY	58.1%	38.9%	44.0%	74.1%
	Rush hour and other Time Periods	14.8%	29.4%	31.0%	14.8%
	Non-Rush Hour ONLY	21.9%	20.6%	16.0%	5.6%
	Refused				1.9%
Total		100.0%	100.0%	100.0%	100.0%

% within Ward Method

		Ward Method			
		1	2	3	4
QC6A. Based on your own experience in the last seven days, how satisfied or dissatisfied are you with the overall service provided by the transit system in Calgary?	1 - Very Dissatisfied	2.6%		5.0%	
	2	3.9%	0.8%	8.0%	
	3	15.5%	7.1%	18.0%	16.7%
	4	53.5%	37.3%	39.0%	64.8%
	5 - Very Satisfied	24.5%	54.8%	30.0%	18.5%
Total		100.0%	100.0%	100.0%	100.0%

% within Ward Method

		Ward Method			
		1	2	3	4
QC14. With regard to your use of Calgary Transit, I am going to read three statements. Please tell me the one statement that best describes your feelings...	There are many good reasons to continue using Calgary Transit, and no good reasons to change to another method of travel	14.8%	100.0%	3.0%	83.3%
	There are many good reasons to continue to use Calgary Transit, but there are also many good reasons to change to another	74.8%		87.0%	16.7%
	There are few good reasons to continue to use Calgary Transit, and there are many good reasons to change to another meth	10.3%		10.0%	
	Total	100.0%	100.0%	100.0%	100.0%

% within Ward Method

		Ward Method			
		1	2	3	4
QC7A. Calgary Transit is interested in how Calgary Transit fits into your life. Calgary Transit is an important choice in my life and lifestyle	Strongly agree	11.0%	74.6%	74.0%	81.5%
	Somewhat agree	54.8%	25.4%	26.0%	18.5%
	Somewhat disagree	23.9%			
	Strongly disagree	10.3%			
Total		100.0%	100.0%	100.0%	100.0%

% within Ward Method

		Ward Method			
		1	2	3	4
QC7A. Calgary Transit is interested in how Calgary Transit fits into your life. The choice of where I live or will move to is influenced by the availability of Calgary Transit services	Strongly agree	18.7%	70.6%	75.0%	77.8%
	Somewhat agree	31.0%	27.8%	24.0%	13.0%
	Somewhat disagree	22.6%	1.6%	1.0%	7.4%
	Strongly disagree	27.7%			1.9%
Total		100.0%	100.0%	100.0%	100.0%

% within Ward Method

		Ward Method			
		1	2	3	4
QC7A. Calgary Transit is interested in how Calgary Transit fits into your life. For each trip I make I consider using Calgary Transit	Strongly agree	11.0%	72.2%	58.0%	18.5%
	Somewhat agree	32.3%	23.8%	39.0%	53.7%
	Somewhat disagree	35.5%	4.0%	2.0%	13.0%
	Strongly disagree	21.3%		1.0%	14.8%
Total		100.0%	100.0%	100.0%	100.0%

% within Ward Method

		Ward Method			
		1	2	3	4
QC7A. Calgary Transit is interested in how Calgary Transit fits into your life. I use Calgary Transit to go to multiple places throughout my journey	Strongly agree	11.6%	63.5%	58.0%	3.7%
	Somewhat agree	20.0%	32.5%	40.0%	22.2%
	Somewhat disagree	41.3%	4.0%	4.0%	35.2%
	Strongly disagree	27.1%			38.9%
Total		100.0%	100.0%	100.0%	100.0%

		Ward Method			
		1	2	3	4
How get to first transit stop	Walk	71.1%	92.0%	91.8%	75.9%
	Drive, use park and ride	24.3%	5.6%	6.1%	18.5%
	Drive, park nearby	9.9%	5.6%	5.1%	5.6%
	Passenger in another vehicle	3.3%	0.8%	5.1%	0.0%
Total		152	125	98	54

Percentages and totals are based on respondents.

a. Group

		Ward Method			
		1	2	3	4
Types of transit trips taken	Work	68.2%	47.6%	62.6%	83.3%
	School	25.3%	23.8%	31.3%	9.3%
	Shopping	11.0%	31.7%	26.3%	9.3%
	Medical, dental, personal business	8.4%	31.0%	25.3%	9.3%
	Social/recreational	26.0%	27.8%	18.2%	14.8%
Total		154	126	99	54

Percentages and totals are based on respondents.

a. Group

% within Ward Method

		2	3	4	Total
D6. And which of the following income groups includes your annual household income, before taxes, in 2015?	Less than \$25,000	20.6%	16.0%		11.0%
	\$25,000 to less than 40,000	15.9%	15.0%	1.9%	11.7%
	\$40,000 to less than 60,000	17.5%	12.0%	14.8%	14.5%
	\$60,000 to less than \$80,000	9.5%	14.0%	9.3%	9.4%
	\$80,000 to less than \$100,000	7.1%	12.0%	7.4%	10.6%
	\$100,000 to less than \$120,000	5.6%	7.0%	20.4%	9.9%
	\$120,000 to less than \$135,000	3.2%	1.0%	5.6%	3.0%
	\$135,000 to less than \$150,000	1.6%		9.3%	2.8%
	\$150,000 or more	4.0%	8.0%	18.5%	12.2%
	Don't know / Refused	15.1%	15.0%	13.0%	14.9%
Total		100.0%	100.0%	100.0%	100.0%

			Ward Method		
		1	2	3	4
Transit fares used	Youth Monthly Pass	6.6%	11.2%	9.1%	5.7%
	Universal Pass/U-Pass	10.5%	6.4%	13.1%	1.9%
	Senior Citizen Pass	6.6%	24.0%	11.1%	11.3%
	Adult Monthly Pass	6.6%	24.0%	11.1%	11.3%
	Day Pass	40.1%	36.0%	40.4%	58.5%
	Ticket from a book of tickets	4.6%	0.8%	3.0%	0.0%
	Cash	34.2%	22.4%	33.3%	28.3%
	Low Income Transit Pass	13.2%	11.2%	8.1%	5.7%
	Don't Pay	2.0%	2.4%	1.0%	0.0%
		0.7%	0.0%	1.0%	1.9%
Total		152	125	99	53

Percentages and totals are based on respondents.

a. Group



Appendix G - Regression outputs from key driver analysis

Model summary and collinearity diagnostics

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.541 ^a	0.292	0.291	0.750	0.292	176.057	1	426	0.000
2	.617 ^b	0.380	0.378	0.702	0.088	60.384	1	425	0.000
3	.662 ^c	0.438	0.434	0.670	0.058	43.664	1	424	0.000
4	.678 ^d	0.459	0.454	0.658	0.021	16.441	1	423	0.000
5	.687 ^e	0.472	0.466	0.651	0.013	10.149	1	422	0.002

e. Predictors: (Constant), Zscore: QC4. I would like you to tell me how satisfied or dissatisfied you were with each service aspect. Being on Time, Zscore: QC4. I would like you to tell me how satisfied or dissatisfied you were with each service aspect. Convenience of Connections and Transfers, Zscore: QC4. I would like you to tell me how satisfied or dissatisfied you were with each service aspect. Value for Money, Zscore: QC4. I would like you to tell me how satisfied or dissatisfied you were with each service aspect. Not Being Overcrowded, Zscore: QC4. I would like you to tell me how satisfied or dissatisfied you were with each service aspect. Length of Travel Time

Coefficients^a

Model		Standardized Coefficients		t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error			Zero-order	Partial	Part	Tolerance	VIF
5	(Constant)	4.079	0.031	129.637	0.000					
	Zscore: QC6A	0.195	0.039	4.984	0.000	0.541	0.236	0.176	0.636	1.573
	Zscore: QC6B	0.184	0.038	4.861	0.000	0.504	0.230	0.172	0.675	1.482
	Zscore: QC6C	0.215	0.037	5.817	0.000	0.508	0.272	0.206	0.727	1.375
	Zscore: QC6D	0.140	0.036	3.930	0.000	0.402	0.188	0.139	0.825	1.212
	Zscore: QC6E	0.120	0.038	3.186	0.002	0.462	0.153	0.113	0.686	1.457

a. Dependent Variable: QC6A. Based on your own experience in the last seven days, how satisfied or dissatisfied are you with the overall service provided by the transit system in Calgary?

REGRESSION

```

/DESCRIPTIVES MEAN STDDEV CORR SIG N
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT QC6A
/METHOD=STEPWISE QC4A QC4B QC4C QC4D QC4E QC4F QC4G QC4H QC4I QC4J QC4K QC4L QC4M QC4N QC4O QC4P
QC4Q QC4R.

```

```

DESCRIPTIVES VARIABLES=QC4A QC4B QC4C QC4D QC4E QC4F QC4G QC4H QC4I QC4J QC4K QC4L QC4M QC4N QC4O QC4P QC4Q QC4R
/save.

```

REGRESSION

```

/DESCRIPTIVES MEAN STDDEV CORR SIG N
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT QC6A
/METHOD=STEPWISE ZQC4A ZQC4B ZQC4C ZQC4D ZQC4E ZQC4F ZQC4G ZQC4H ZQC4I ZQC4J ZQC4K ZQC4L ZQC4M ZQC4N
ZQC4O ZQC4P ZQC4Q ZQC4R.

```



Regression outputs – coefficients from chosen model (47% of variance accounted for)

Coefficients ^a											
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
Model											
5	(Constant)	4.079	0.031		129.637	0.000					
	Zscore: QC4. Being on Time	0.195	0.039	0.221	4.984	0.000	0.541	0.236	0.176	0.636	1.573
	Zscore: QC4. Convenience of Connections and Transfers	0.184	0.038	0.209	4.861	0.000	0.504	0.230	0.172	0.675	1.482
	Zscore: QC4. Value for Money	0.215	0.037	0.241	5.817	0.000	0.508	0.272	0.206	0.727	1.375
	Zscore: QC4. Not Being Overcrowded	0.140	0.036	0.153	3.930	0.000	0.402	0.188	0.139	0.825	1.212
	Zscore: QC4. Length of Travel Time	0.120	0.038	0.136	3.186	0.002	0.462	0.153	0.113	0.686	1.457
a. Dependent Variable: QC6A. Based on your own experience in the last seven days, how satisfied or dissatisfied are you with the overall service provided by the transit system in Calgary?											