

QUALITY OF LIFE SURVEY 2018

TECHNICAL REPORT









HUTTCITY

Absolutely Positively Wellington City Council Me Heke Ki Põneke

Tauranga City

Christchurch

City Council



poriruacity

ACKNOWLEDGEMENTS

Large-scale and complex research projects such as this require a combined effort. This research project was undertaken by Nielsen on behalf of the eight participating councils. A steering group from four councils managed the project on behalf of the other councils, and worked closely with representatives from Nielsen throughout this project.

The members of the Quality of Life management group were:

- Alison Reid, Auckland Council
- Kath Jamieson, Christchurch City Council
- David Stuart and Grace Newman-Hall, Wellington City Council
- Suzie Ballantyne, Dunedin City Council.

The large team at Nielsen who worked on this project included Amanda Dudding, Tessa Hoffman and Antoinette Hastings.

We would like to acknowledge and thank all those respondents who took the time to complete their surveys. This project would not be possible without your input.

ISBN 978-1-98-856448-7 (Print) ISBN 978-1-98-856449-4 (PDF)

Recommended citation

Nielsen. (2018). Quality of Life survey 2018: Technical report. A report prepared on behalf of Auckland Council, Wellington City Council, Christchurch City Council, and Dunedin City Council.

For more information on the Quality of Life Survey and to access the results for 2018, as well as reports from previous years, please go to the Quality of Life website. http://www.qualityoflifeproject.govt.nz/survey.htm

CONTENTS

1. BACKGROUND 1 1.1 Introduction 1
1.2 Council involvement1
1.3 Final sample size2
2. RESEARCH DESIGN
2.2 Sample design4
2.3 Questionnaire design
2.4 Quality of life measure
2.5 Programming and design13
2.6 Survey materials14
2.7 Survey response
2.8 Queries to Nielsen
2.9 Data entry
2.10 Data cleaning23
2.11 Response rate
2.12 Weighting
2.13 Reporting
2.14 Representativeness of the sample
APPENDIX 1: QUESTIONNAIRE
APPENDIX IV GLOSSARY

1. BACKGROUND

1.1 Introduction

The Quality of Life 2018 survey is a collaborative local government research project. The primary objective of the survey is to measure residents' perceptions across a range of measures that impact on New Zealanders' quality of life. The Quality of Life survey was originally established in response to growing pressures on urban communities, concern about the impacts of urbanisation and the effect of this on the wellbeing of residents. The results from the survey are used by participating councils to help inform their policy and planning responses to population growth and change.

The survey measures residents' perceptions across several domains, including:

- Overall quality of life
- Environment (built and natural)
- Housing
- Public transport
- Health and wellbeing
- Crime and safety
- Community, culture and social networks
- Economic wellbeing, and
- Council decision making processes.

This report outlines the technical details of the Quality of Life Survey 2018, including the methodology, sampling, weighting and data analysis.

1.2 Council involvement

The Quality of Life survey was first conducted in 2003, repeated in 2004, and has been undertaken every two years since. The number of participating councils has varied each time.

A total of nine councils participated in the 2018 Quality of Life survey project, as follows:

- Auckland Council
- Hamilton City Council
- Tauranga City Council
- Hutt City Council
- Porirua City Council
- Wellington City Council
- Christchurch City Council
- Dunedin City Council
- Greater Wellington Regional Council.

The target population was New Zealanders aged 18 years and over, living within the areas governed by the participating councils.

It should be noted that there is an overlap between the boundaries of the Greater Wellington Regional Council area and Hutt City Council, Porirua City Council and Wellington City Council areas. The Greater Wellington Regional Council area also includes smaller towns as well as rural and semirural areas such as Kapiti Coast District, Upper Hutt City and the Wairarapa.

The results for 2018 are provided in the *Quality of Life Survey 2018 Topline Report*. Throughout that report, the result for all nine council areas are reported on separately, and in addition, the aggregated result for the eight city councils are provided (referred to throughout as the '8-city total'). In light of the original reason for establishing the Quality of Life survey (discussed above), the focus of the text in that report is on the eight cities, as these are substantially urban areas¹.

1.3 Final sample size

A total sample of 7,615 was achieved.

This included 6,894 residents aged 18 and over living in the eight cities, as well as an additional 721 residents living in the broader Greater Wellington Region. Refer to Section 2.3 for more detail on sample design.

¹ The 'eight cities' are all exclusively urban areas, with the exception of Auckland. However, the majority of Auckland's population lives in urban areas.

2. RESEARCH DESIGN

This section details the 2018 survey methodology, sampling design, questionnaire design and response rates.

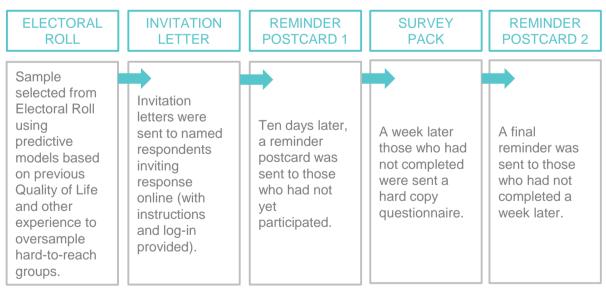
The research took place between 10 April 2018, when the first invitation letters were sent out, and 3 June 2018 when the survey closed.

2.1 Methodology

The 2018 survey employed a sequential mixed-method methodology, enabling respondents to complete the survey either online or on paper. This methodology was also used successfully in the 2012, 2014 and 2016 surveys, whereas in previous years a CATI survey had been undertaken.

Potential respondents were selected from the Electoral Roll, which allowed for the inclusion of the majority of residents. Using the Electoral Roll has the advantage of including people who are excluded from CATI methodologies due to not having phone numbers available through telematching (approximately 60% of the population). It is also superior to online panels, which tend to have limited number of panelists and only include residents who access the internet.

In a sequential mixed methodology, respondents are sent a letter in the mail inviting them to complete the survey online. After a period of time, and a reminder postcard, all respondents who have still not completed their survey online are sent a hard copy questionnaire to complete. This ensures that those who do not have internet access are still able to participate, while also encouraging those who can, to complete online (the most cost-effective method). A final postcard is sent approximately a week later, encouraging those who have not yet returned their questionnaire to do so.



An overview of the research process for the Quality of Life Survey 2018 is shown below: This is outlined in more detail in Section 2.7.

The sequential mixed methodology allows respondents to complete the survey in their own time, at their own pace and either online or hard copy according to their preference. Similar to previous years, 62% of respondents completed the survey online compared with 38% on paper across the eight cities.

2.2 Sample design

Sampling frame

The New Zealand Electoral Roll was used as the primary sampling frame. This enabled identification of potential respondents' local council, and mailing address for survey invitations.

For the purposes of sampling, 2013 Census data at meshblock level was used to identify areas where there were large numbers of people belonging to the broad Pacific and Asian ethnic groups. These meshblocks were included in the random sample selection. Māori descent from the Electoral Roll was used to identify those with a high possibility of having Māori ethnicity.

Gender was calculated using the title variable in the Electoral Roll.

Sub-city geographies for sampling and analysis (for example, local board, community areas, ward or suburb clusters) were agreed with the participating councils. These areas were checked against Stats NZ data to obtain the meshblock ID. The meshblock IDs are then linked to meshblocks in the Electoral Roll data to assign location prior to the sample selection process.

Age of respondents was calculated using the birthdate field in the Electoral Roll, and was used to identify respondents' age group for classification and quota purposes.

Sample design

The sample was a stratified probabilistic sample of the population of the nine geographical areas covering the participating councils. The nine geographical strata were Auckland, Hamilton city, Tauranga city, Hutt city, Porirua city, Wellington city, Christchurch city, Dunedin city and Greater Wellington (excluding Hutt, Porirua and Wellington cities).

Within the nine geographical areas, the sample was stratified by age, location and ethnicity (Māori and non-Māori) as follows:

- By ward at city level (or local board for Auckland) 18-24 years
- By ward at city level (or local board for Auckland) 25-49 years
- By ward at city level (or local board for Auckland) 50-64 years
- By ward at city level (or local board for Auckland) 65+ years

2013 Census data were used to calculate targets for each council area.

In Auckland, there was a requirement to achieve a minimum of 100 completed surveys in each of the Auckland local board areas, with the exception of Great Barrier and Waiheke Islands, where 100 completed surveys were required in these two areas combined.

The potential response rate was estimated based on previous years' data, and the letter rates were calculated and applied at sub-city level (either ward or suburb clusters) for each city (or local board for Auckland) to ensure the minimum target was achieved.

As in previous years, targets for gender, age and ethnicity within Auckland were split across four broad geographic areas, rather than across the whole region. The areas are:

- Auckland North (including Rodney, Hibiscus and Bays, Upper Harbour, Kaipātiki and Devonport-Takapuna local boards)
- Auckland West (including Waitākere Ranges, Henderson-Massey and Whau local boards)
- Auckland Central (including Waitematā, Waiheke and Great Barrier Islands, Albert-Eden, Puketapapa, Maungakiekie-Tāmaki and Orākei local boards)
- Auckland South East (including Howick, Ōtara-Papatoetoe, Māngere-Ōtāhuhu, Manurewa, Papakura and Franklin local boards).

The following table summarises the target sample, achieved sample and maximum margins of error. Margins of error have been calculated at the 95% confidence level and assume simple random sampling.

Location	Sample target	Sample achieved	Maximum margin of error (95% level of confidence)
Auckland	2500	2864	1.8%
Hamilton	500	572	4.1%
Tauranga	500	562	4.1%
Hutt	500	552	4.2%
Porirua	500	583	4.1%
Wellington	500	564	4.1%
Christchurch	500	495	4.4%
Dunedin	575	702	3.7%
8-city total	5575	6894	1.2%
Greater Wellington Region	2000	2420	2.0%

Table 1: Target sample, achieved sample and margin of error by City/Local area

Note: Dunedin's target sample is higher than other cities due to a Māori booster.

The targets for gender and age were set using 2017 sub-national population estimates prepared by Stats NZ while the ethnicity targets were set using 2013 Census data.

Quota	% of population	Achieved sample	Maximum margin of error (95% level of confidence)
Male	49	3037	1.8%
Female	51	3826	1.6%
18-24 years	15	1015	3.1%
25-49 years	46	2943	1.8%
50-64 years	22	1550	2.5%
65 years or more	17	1386	2.6%
Māori	9	1106	3.0%
Pacific	8	358	5.2%
Asian / Indian	17	787	3.5%
European	73	5581	1.3%

Table 2. Population	achieved sample an	d maximum marqin d	of error by key	demographic variables
radie z. ropulation,	, acilieveu sallipie ali	u maximum maryin (лепог бу кеу	ueniographic variables

Quality of Life Survey 2018 Technical Report

2.3 Questionnaire design

The questionnaire used in 2016 was reviewed by the project team and Nielsen to ensure that the 2018 survey result would provide relevant and useful information. Several questions were removed and several new items were added. There are also some questions that are cycled in and out of the questionnaire as needed every few years. A summary of changes made to the questionnaire from 2016 follows:

New questions

- Quality of Life question asked at the start of the survey (Q3)
- Reasons why disagree/neither agree nor disagree that the type of home lived in suits needs (Q9)
- Reasons why disagree/neither agree nor disagree that the neighbourhood you live in suits needs (Q11)
- World Health Organisation question standard on mental health (WHO-5) added (Q32)
- Children living in household (Q44 and Q45).

Modified questions

- Quality of Life question asked towards the end of the survey (Q35)
- Don't know/not applicable response option added to heating home in winter months (Q11)
- A new response option for 'People sleeping rough on the streets / in vehicles' was added to Q15 (problems in city/local area).
- Experience of public transport was also asked of those who had not used public transport in the last 12 months (Q17)
- Physical activity wording changed to bring in line with standard (Q23)
- Positive/negative experience of contact people have had with their neighbours (Q26)
- Updated list used for question about social networks and groups participated in (Q28)
- Updated response options for support in a difficult time (Q30)
- Cultural aspect removed from rich and diverse art scene (Q33)
- Not applicable wording updated for impact of greater cultural diversity (Q34)
- Ownership of home (Q46)
- Simplified response options included for highest qualification question (Q48).

Questions cycled in

- City/local area has become better or worse as a place to live in previous 12 months (Q6)
- Reasons why city/local area has become better or worse as a place to live (Q7)
- Trust in people (Q27).

Questions removed / cycled out²

- Why respondents disagree (Q5) or agree (Q6) they feel a sense of pride in the way their city / local area looks and feels
- Council decision-making questions about understanding how the council makes decisions (Q14 R1) and having more of a say in what the council does (Q14 R2)
- Annual personal income (Q41).

² Question numbers correspond with the 2016 hard copy questionnaire.

2.4 Quality of life measure

Over a number of years, the overall quality of life measure has been asked on a 5-point scale as follows:

Would you say that your overall quality of life is...

(Extremely poor, Poor, Neither good nor poor, Good, Extremely good).

In 2018, two changes were proposed to the way the question was asked:

- Change from a 5-point to a 7-point scale
- Ask the question at the start of the questionnaire, rather than at the end.

The change from a 5 to a 7-point scale was accepted and implemented into the 2018 survey.

However, before making the second (re-positioning) change, it was decided to ask the quality of life question both at the start of the survey and in its original position so that differences in the way participants answered could be reviewed.

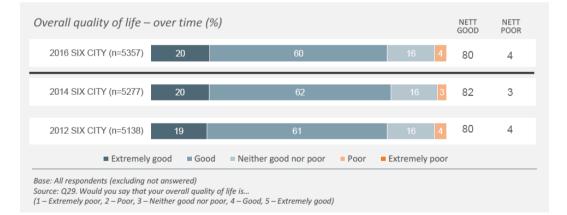
Note about 6-city comparisons used in this section

The rest of this section refers to '6-city results', rather than 8-city. These are the results for Auckland, Wellington, Hutt, Porirua, Christchurch and Dunedin cities combined. These six cities have participated in the Quality of Life Survey since 2012. As such, the 6-city results are used to ensure consistency and comparability throughout the discussion below.

Scale changes

Rationale for change

Over time, results from the 5-point scale for the 6 cities have remained consistent, with a large proportion (around 60%) of respondents reporting that their quality of life was 'Good'.



The proposed change to a 7-point scale aimed to help better understand this large proportion of 'Good' responses and provide more granularity in the scale by giving survey participants more options to more accurately report on their quality of life.

2018 Results

The 7-point scale worked as anticipated in that it appears those who would have traditionally chosen the 'Good' response option are now divided between the 'Good' and the new 'Very good' options.

In addition, the proportion of respondents who rated their quality of life as 'Extremely good' decreased.

	2012	2014	2016	2018
Extremely good	19	20	20	9
Very good	-	-	-	35
Good	61	62	60	40
Neither good nor poor	16	16	16	12
Poor	4	3	4	3
Very poor	-	-	-	1
Extremely poor	0	0	0	0

Table 3: Weighted 6-City Total: Q35. Quality of Life – detailed scale break

Overall, the 'top 3' and 'bottom 3' subtotals for 2018 appear to align most closely with previous measures.

There is no notable difference between the previous Poor result (4%) and the new 'bottom 3' Poor result which combines Poor, Very and Extremely poor ratings (4%).

There has however been a significant increase in those rating their quality of life as 'Good', up from 80% in 2016 to 84% in 2018. This appears to be a real change given that the increase has come from those in the 'Neither good nor poor' category which has dropped from 16% in 2016 to 12% in 2018.

	2012	2014	2016	2018
Good (2012-2016)	80	82	80	-
Good (Good/Very/Extremely)	-	-	-	84
Good (Very/Extremely)	-	-	-	44
	-	-	-	-
Poor (2012-2016)	4	3	4	-
Poor (Poor/Very/Extremely)	-	-	-	4
Poor (Very/Extremely)	-	-	-	1

Geographic and demographic differences

• Respondents from Wellington (16%) and Dunedin (14%) were significantly more likely to choose 'Extremely good', which was 9% across the 6-cities. For Hutt city (89%), Wellington

(88%) and Dunedin (87%), this resulted in a significantly higher Good score compared with the 6-cities result (84%).

- Hutt city respondents (41%) were more likely to select the 'Very good' response, which resulted in higher 'Good' results for Hutt (89%).
- NZ Europeans (39%) were more likely to select 'Very good' as were those who had graduated from university (40%). Both these groups have higher 'Good' results.

These findings indicate that the variation has reduced the use of the 'Good' response, but this has not caused systematic changes to push the positive result up or down. There is now more variation across the positive end of the scale.

Question positioning

Rationale for change

In previous iterations of the Quality of Life survey, the quality of life measure has been asked near the end of the questionnaire. This means that respondents' opinions about their quality of life can be influenced by the questions asked throughout the rest of the survey. Given that the survey content changes slightly each time the survey is conducted, there is a risk that the quality of life measure is being influenced by slightly different things each survey year.

To avoid this influence and obtain a more consistent measure of quality of life, it was proposed that this question be asked at the start of the questionnaire, rather than at the end.

2018 Results

The majority of respondents rated their quality of life positively (ie, rated it as either 'extremely good', 'very good' or 'good') both at the start and end of the survey (86% and 84% respectively). There was some slight change within these ratings as shown in Table 5.

	Q3 - NEW /Unprompted (Measure at front)	Q35 - OLD (Measure at back)	Percentage point difference
Extremely good	12	9	-3
Very good	37	35	-2
Good	37	40	+3
Neither good nor poor	10	12	+2
Poor	3	3	-
Very poor	1	1	-
Extremely poor	0	0	-
Good (Good/Very/Extremely)	86	84	-2
Poor (Poor/Very/Extremely)	4	4	-

Table 5: Weighted 6-City Total: Q3 cf. Q35. Quality of Life, 2018

Geographic and demographic differences

To better understand the impact that changing the position of the question within the survey had on responses, analysis was undertaken on the characteristics of those respondents who changed their response either down the scale, e.g. from Extremely good to Very good, or up the scale, e.g. from Very good to Extremely good.

For this analysis key demographic variables were explored, including gender, age and ethnicity as well as ratings of health (Q22) and responses to the question related to how well income meets their everyday needs (Q24).

From this it was found that:

- Māori were more likely to change their rating of quality of life (42% compared with 34% of the rest of the sample) between when the question was asked at the start vs. the end of the questionnaire. This could be either an increase or a decrease in rating.
- Pacific peoples were more likely to rate their quality of life more positively at the end of the questionnaire (19% compared with 13% for the rest of the sample).
- Respondents who rated their general health as 'poor' were more likely to decrease their quality of
 life rating at the end of the questionnaire (32%, compared with 21% for the rest of the sample) while
 those who rated their general health as 'Excellent' were less likely to decrease their quality of life
 rating (16%).

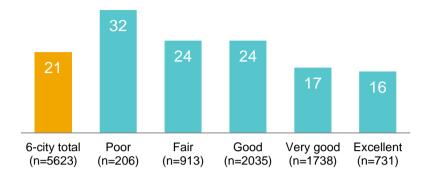
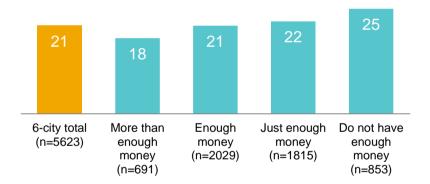


Figure 1: Proportion who decreased their QoL rating (by rating of health)

Similarly, those who said that they 'do not have enough money' were significantly more likely to decrease their quality of life rating at the end of the questionnaire (25%, compared with 21% overall who decreased their rating) while those who said they had 'more than enough money' were less likely to decrease their quality of life rating (18%).





Recommendation

A decision was taken in 2018 to report on results from the quality of life question asked at the end of the questionnaire in the 8-city topline report, in order that results could be comparable with previous surveys.

It is recommended however, that the quality of life measure be included only at the beginning of the questionnaire in the 2020 Quality of Life survey. This will result in a new time-series that can start with the Q3 measure from 2018.

2.5 Programming and design

The survey was programmed in Decipher (Nielsen's online survey software) and set up separately for hard copy completion.

There were some slight differences in the question wording to reflect individual council requirements and the size of the council jurisdiction.

If respondents did not respond online they were sent a hard copy version of the survey that corresponded to the address that was recorded for them on the Electoral Roll. There was a specific hard copy version for each participating council which included a map of the council area.

The online survey was programmed to present questions with specific references to the respondent's selected area (for example, 'Wellington is a great place to live').

Questionnaire differences by council area

- Area currently living in (Q1)
- Auckland and the Greater Wellington region questionnaires referred to 'your local area' for the following seven questions, whereas other cities' questionnaires referred to the specific city name (e.g. Hutt City)
 - Sense of pride in local area or city (Q4)
 - Views of local area or city as a great place to live (Q5, 6, 7)
 - o Rating of potential problems in local area or city in previous 12 months (Q15)
 - Rating of local arts scene (Q33)
 - o Rating of effect of increased cultural diversity on local area or city (Q34)
- Christchurch respondents were offered additional wording and options for their response to Q15, as follows:
 - In the first option of Q15 respondents in Christchurch were asked to what extent 'Rubbish or litter lying on the streets (this excludes any earthquake related building rubble and damage)' was a problem, while the wording in the other questions simply read 'Rubbish or litter lying on the streets'.
 - Respondents in Christchurch were also given the following additional option in this question: 'Continued presence of earthquake related building rubble and general damage'.
- A copy of the final questionnaire used in Wellington City can be found in Appendix I. While slight differences in questionnaires exist for each participating council, the majority of questions in the Wellington questionnaire are the same for other council areas.

2.6 Survey materials

Survey materials were designed to capture the attention of respondents, highlight the most relevant details and have a professional look and feel. Council branding was included in all mailing items to indicate the importance and scope of the survey and to reassure respondents that the correspondence was 'official'. In 2018, the survey materials were redesigned to appeal to a wide audience but to be particularly attractive to young people and harder to reach demographics. This was achieved in a number of ways such as using more youthful colours (bright), using icons as part of the imagery and including photos of different types of people (i.e. ages and ethnicities).

Section 2.2 provided an overview of the sequential mixed method employed in the 2018 Quality of life survey. Each step is outlined in more detail below.

Initial contact - invitation letter

An invitation letter was sent to all those selected from the Electoral Roll to take part in the survey. The letter included a link to the online survey and provided an individual login ID and password. All letters were sent out on 10 April 2018.

Respondents were directed to a 0800 number and email address if they had any questions about the survey. In addition, a set of 'Frequently asked questions' were provided on the reverse side of the invitation letter an example of the letter is shown below.



nielsen



<Addressee's Name> <Address Line 1> <Address Line 2> <City>, <postcode>

Dear <respondent>

HELP SHAPE YOUR COMMUNITY

We invite you to take part in an important local government survey. We want to hear your opinions on the area where you live, including your views on things like safety, transport and health and your quality of life.

The information you provide will be combined with other responses and used by [Council] to inform decisions that enhance quality of life in your area. This is a way for you to help shape those decisions. You can view findings from previous surveys here: http://www.qualityoflifeproject.govt.nz/

Why me?

You and other residents have been selected at random from the Electoral Roll to take part in the survey. It is important to us that you complete the survey to ensure it accurately reflects the different views of people in your area.

How long will it take?

The survey will take approximately 15-20 minutes to complete depending on your answers.

Is my information private?

Your answers will be confidential and results will not be reported in a way that will allow you to be identified.

Any questions?

If you have any questions, please contact Nielsen on 0800 400 402 or <u>adrienne.pointer@nielsen.com</u>

Yours sincerely,

K Jamieson

Kath Jamieson Project Sponsor, Quality of Life Survey



greater WELLINGTON REGIONAL COUNCIL Te Pane Matua Taiao





Absolutely Positively Wellington City Council Me Heke Ki Pöneke

Tauranga City

Christchurch

City Council



Hamilton City Council Te kaunihera o Kirikiriroa

HOW TO COMPLETE THE SURVEY AND ENTER THE DRAW TO WIN

Completing the survey online is secure, quick and easy.

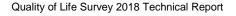
- 1. Go to: www.acnonline.com/life
- 2. Enter the user name and survey code:

User name: <user name> Survey code: <survey code>

3. Or scan the QR code



Your chance to win \$1,000 Everyone who completes the survey and provides contact details will be entered into a prize draw for a Prezzy card or, if they prefer, to make a donation to a charity of their choice. There are five chances to win. There is a top prize of \$1,000 and a further four prizes of \$250.



<i>Why was I invited to take part in the survey?</i>	You are one of hundreds of people in your area randomly selected from the Electoral Roll which contains the names and addresses of all New Zealanders registered to vote. Your council has been given permission to use the Electoral Roll for the purpose of this research.
	To make sure we hear the views of a cross-section of the population, it is important that you personally , rather than anyone else in your household, fill in the survey.
How many people are taking part in the survey?	Approximately 6,500 residents across New Zealand will take part in this survey.
<i>Do I have to complete the survey?</i>	To make sure results accurately reflect the views of people in New Zealand, i is very important that all those selected to complete this survey do so.
	The survey is voluntary. If you cannot take part or if you have any questions, please call Nielsen on 0800 400 402.
Why does the website address provided on the first page of this letter not take me to the correct web page?	You may have incorrectly typed in the address which is: www.acnonline.com/life (with the letter `n' included after `ac'). Or, you may have inserted the link into the search box rather than the address bar on the website browser. Using the address bar works better.
	ADDRESS BAR 🗹 🛛 SEARCH BOX 🔀
	G Google - https://www.gc ↓ ← → C Secure https://www.google.co.nz ☆ ⊗ :
	← → C Secure https://www.google.co.nz ☆ ⊗ :
What do I do if the survey stops or the site crashes before I've had time to complete the survey?	← → C Secure https://www.google.co.nz ☆ ⊗ : I ♥ Google Search I'm Feeling Lucky
stops or the site crashes before I've had time to	★ → C Secure https://www.google.co.nz Google Search I'm Feeling Lucky If you continue to have difficulties then please call 0800 400 402. Until you submit the questionnaire, you can re-open it and you should find that it will take you back to the last question you completed. All of your

Second contact – reminder postcard

Around seven days after the initial letters were sent, reminder postcards were sent to those who had not yet completed the survey, had not been returned GNA (gone no address) or had not called to decline to take part.

	QUALITY OF LIFE -CDates- Ka ora, Takida lawa, Kia orana, Malo e kele, Fabaalofa lawi, Batolar e I, N	ermit 💽
Help shape your community	 Addresser's Name> Addresser's Name> Addresser's Name> Addresser's Name> Addresser's Name> Address Ime >> Ad	, ns (like safety, community. w for a prize of . There are five
	The survey will take around 15-20 minutes to complete depending on you If you have any question call Nelsen toll free: 0800 400 402 Yours sincerely, Ngi mhi	

Third contact – survey pack

A week later those who had still not completed the survey online were sent a survey pack with a cover letter, hard copy questionnaire and a reply paid envelope. The survey link and individual login details were repeated in the letter in case the respondent preferred to complete it online.



Final contact – reminder postcard 2

In the final step, a week after the survey pack was sent, those who had still not replied online or by hard copy were sent a final reminder postcard.





2.7 Survey response

Survey response channel (online or hard-copy)

Overall, 61% of respondents completed the survey online while 39% completed through the hard copy. The chart below shows this proportionally across all nine participating council areas.

Of those who completed online, 22% completed the survey on a mobile phone, 11% on a tablet and 68% on a desktop computer³.

Survey response by council area	Online (%)	Hard copy (%)
Auckland	60	40
Hamilton	59	41
Tauranga	60	40
Hutt	65	35
Porirua	64	36
Wellington	71	29
Christchurch	67	33
Dunedin	65	35
8-city total	62	38
Greater Wellington Region (excluding Hutt, Porirua and Wellington City)	51	49
TOTAL	61	39

Table 6: Survey response by council area

³ Percentages may not add to 100% due to rounding.

Responses during fieldwork

The following chart shows the responses over the 2018 survey period, compared with the total response for the 2014 survey⁴.

The 2014 response comparison is useful for understanding how 2018 fieldwork progressed and also provided a benchmark that acted as an early warning indicator for risks and issues during the data collection period. As can be seen from the chart below, 2018 fieldwork progressed comparatively well over time.

The chart below also assists with understanding the effect of different fieldwork communications throughout 2018. As can be seen from the chart below, after each communication, there was an increase in responses which followed a consistent pattern with 2014. Together this shows that the 2018 fieldwork approach worked as predicted.

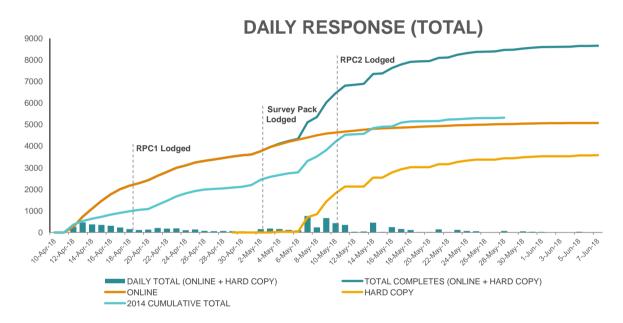


Figure 3: Daily response

⁴ The Quality of Life survey was not conducted by Nielsen in 2016 and as such, the latest comparable data available is 2014.

2.8 Queries to Nielsen

Nielsen managed queries from potential respondents throughout the survey period, via an 0800 number and dedicated email contact. A total of 451 emails and calls were received, and the nature of the calls and emails are listed in the table below. This information is used by researchers for a number of reasons including understanding the quality of the sample, monitoring refusals over time and planning for future research.

Table 7: Types of queries to Nielsen

Refusals	Number
Health/age reasons	37
Don't want to participate	74
Currently unavailable (e.g. on holiday, out of the country)	58
Language barrier	4
Person no longer lives at address	60
Deceased	9
Queries	Number
Feedback	3
General question / query	34
Trouble using link	55
Material received after completion	31
Request replacement / replacement survey	78
New address	8
Total refusals and queries	451

Note: The numbers in the table above will differ slightly from those noted in the response rate summary tables in this report. This is because notifications can come through by other means. For example, hard copy questionnaires can be returned with 'Don't want to participate' noted on the cover.

A set of Frequently Asked Questions (FAQs) was created for the 0800 number operator to assist in the response to callers' questions. A copy of these FAQs can be found in Appendix II.

2.9 Data entry

Process

As completed hard copy questionnaires were returned to Nielsen's Auckland office, the data were entered directly into QPSMR, the same software programme used for the online component of the survey. Using the same software reduced the chance of error in combining data sources.

The data entry team had different levels of access to the survey tool from survey respondents. For example, the data entry team had the ability to select 'no response' for any question in the case where a hard copy respondent had not selected a response.

Protocols

Data entry protocols were set up to ensure consistency. These protocols included:

- Other (specify) type in exactly as written.
- Q14 If no answer given NA
- Q43 Any number over '13' please put aside. It may be a retirement village, rest home, hostel etc. which should be coded as 1.
- Q46 If options '1 *and* 5' are circled, enter as 5 family trust.
- Q48 Single answer only. If multiple responses, with a few exceptions, the higher the number, the higher the qualification.
- In the case of multiple answers for single answer questions, please rotate choice and initial option used.
- Record any comments which are not part of 'other (specify)' in the comments box at the end of the questionnaire, remembering to include the relevant question number. The comments box is only for comments; there is no need to record respondent's name and contact details.
- If a questionnaire comes up as already entered (online) please write online on front cover and put aside.

Quality control

As part of Nielsen's quality control processes, 10% of data entered surveys were peer reviewed for consistency. Of the 10% of hard copies validated, less than 0.01% of the data entered required a change to be made.

10

2.10 Data cleaning

Once the hard copy questionnaires had been data entered, a series of checks were carried out as part of the quality control procedure. During this process, the following edits were carried out:

- 70 surveys were removed where respondents had completed both online and in hard copy (online version kept).
- Gender was added for 30 respondents who had left this question blank. For gender a title field, age, forename and occupation from the Electoral Roll were used. While Nielsen cannot be certain of being correct in every case, these details provide sufficient information for a gender assignment which has a very high probability of being correct.
- Age from the Electoral Roll was added for the 44 respondents who left this question blank.
- For 101 respondents the answer to Q1 (where they currently live) did not match their sample area (address in the Electoral Roll to which their invitation was mailed).
 - In 11 cases from offline sample (i.e. those who completed a hard copy questionnaire rather than completing online), 8 were allocated a council area based on their answer to Q1, assuming this was the most up to date information. The remaining 3 people moved district within the same region, the allocation was based on the district they selected at Q1.
 - For 90 cases from the online sample, the sample area was changed to match their response to Q1 given that the Q2a response (ward/local board) was consistent with the Q1 response (where they currently lived). Among these, 19 respondents answered 'don't know' at Q2a. Allocation was based on the most commonly reported group within the region selected at Q1 for these respondents.
- 80 respondents answered 'other', or answered 'no' (no longer live in the city or area listed at Q1). The status of these respondents was changed from 'complete' to 'screened'.
 - Online: 49 respondents
 - Hard copy: 31 respondents
- 322 respondents who completed a hard copy did not answer the Region question, and therefore Region allocation was pulled from the sampling frame.

2.11 Response rate

A total of 29,750 potential respondents were randomly selected from the New Zealand Electoral Roll.

To calculate the response rate, every individual who was sent an invitation to complete the survey was tracked and the outcome of the invitation carefully recorded.

By entry into QPSMR, Nielsen traced which of the letters, postcards or questionnaire packs were returned as 'gone no address.' (GNA) Any telephone or email notification of refusal to participate was logged into the 0800 number call log. This log also recorded notification from third parties that the nominated respondent was not available or capable to complete the survey due to age, language issues, health reasons, death or other disabilities. Every effort was made to remove any respondent from subsequent communications.

The two response rates are shown in the table on the next page and are calculated as follows:

• **Response rate method I** = (Number of completed surveys / total number of invitations mailed out (excluding GNAs and ineligibles)) x 100

A total of 7,615 completed questionnaires were received from people who had been invited to participate using details taken from the Electoral Roll, resulting in a 26.80% response rate.

• **Response rate method II** = (Number of completed surveys / total number of invitations mailed out (excluding GNAs, ineligibles and estimated ineligibles for unknown outcomes)) x 100

This method estimates how many with an 'unknown outcome' would have been ineligible, based on the known eligibility rate⁵. This is a conservative assumption as there is no obligation for respondents to notify Nielsen that they will not be participating. The response rate using this method is 29.84%.

 $^{^{5}}$ The known eligibility rate is the number of completed interviews divided by the sum of the number of completes and ineligibles. At a total sample level, this is 7,615/ (7,615+1,338) = 0.85.

The table below outlines the response for the total sample.

Table 8: Survey response by council area

Survey response by council area	TOTAL	AUCKLAND	HAMILTON	TAURANGA	HUT	PORIRUA	WELLINGTON	CHRISTCHURCH	DUNEDIN	GREATER WELLINGTON
Survey invitations	29750	12200	2250	2150	2200	2550	1800	1850	2650	2100
Completes	7615	2864	572	562	552	583	564	495	702	721
Online	4660	1706	337	337	358	371	398	330	456	367
Hard copy	2955	1158	235	225	194	212	166	165	246	354
Refusals / incomplete	448	160	26	44	24	34	31	34	63	32
Refused	79	20	7	9	5	7	4	7	12	8
Incomplete	250	88	16	23	10	21	17	19	40	16
Removed QC / late	119	52	3	12	9	6	10	8	11	8
Ineligibles	1338	417	86	157	103	100	87	93	192	103
Gone – no address	1137	368	69	143	89	74	72	80	157	85
Deceased	9	1	0	2	2	1	0	2	1	0
Out of region	78	12	7	6	7	10	10	3	13	10
Language	6	3	0	0	0	2	0	0	1	0
Unavailable	64	20	5	1	2	9	4	4	12	7
Health / age	44	13	5	5	3	4	1	4	8	1
Unknown outcome	20349	8769	1577	1384	1516	1829	1143	1227	1693	1232
Response rate method I	26.80	24.31	26.43	28.20	26.32	23.80	32.92	28.17	28.56	36.10
Response rate method II	29.84	26.71	29.08	32.91	29.58	26.57	35.91	31.46	33.14	39.03

Complete counts are based off Q1 answers (as per the final data). All other figures are based off the sample areas as per the Electoral Roll data. Any duplicate returns have been excluded from calculations, so respondent returns only count once.

Response rate method I was used as the final response rate for reporting purposes as part of the 2018 Quality of life survey.

2.12 Weighting

As with all general population surveys, the Quality of Life survey will have some inherent biases relating to:

- Disproportionate sample selection certain sub-populations were over-represented to
 ensure an adequate base size for analysis. Most notably some geographic regions were
 oversampled to meet the target quotas. As well as various cities, this also included some
 Auckland local boards.
- Differential response rates for example, in general older people and females have higher rates of response than younger people and males.
- The sample frame used while the New Zealand Electoral Roll is the most accurate and representative sampling frame available, it does not include all members of the survey population (for example, people living in New Zealand who are not permanent residents).

These biases need to be reduced in the survey results to accurately reflect the wider population through weighting. Survey results are weighted to be representative of the wider population according to age, gender, ethnicity and area.

The weighting procedure for the 2018 results took into account the need to:

- Be consistent with approaches taken in previous years to enable comparisons of results
 over time
- Appropriately weight the Greater Wellington Region
- Ensure weighting does not drastically reduce the effective sample size.

The weighting procedure was implemented as follows:

- 1. Each city was weighted separately to be representative of the population in terms of age, gender, ward/ local board, and ethnicity.
- 2. Post weights applied to Auckland, Wellington region, 6-cities, and 8-cities depending on how areas are amalgamated.
- 3. When weighting was applied, an iterative proportional fitting procedure (IPFP) was used against the following weighting dimensions: Age group (4 cells), Gender (2 cells), Ethnicity – Māori and non- Māori, Pacific and non-Pacific, Asian and non-Asian, and Other ethnicity and non-Other ethnicity (8 cells), and by ward, local board or territorial authority (the type of regional weighting differs by region).

Three weighting variables were produced:

- Local weight used for all analyses
- 8-city weight used for analysis of the combined results for the 8 cities
- 6-city weight used for comparisons over time.

Statistics for these three weighting variables are presented below.

Weight	Minimum	Mean	Maximum	Std dev.
Local weight	.06	1.0	4.73	0.46
8-city weight	.03	1.0	7.42	0.69
6-city weight	.03	1.0	6.91	0.67

Table 9: Weighting variable statistics

Quality of Life Survey 2018 Technical Report

2.13 Reporting

The overall results for the 2018 Quality of Life survey are presented in the Quality of Life Survey 2018 Topline Report.

In that report, the analysis includes a specific focus on the results for the aggregated 8-city sample. The results for all nine council areas are reported on separately, and in addition to this, the aggregated results for the eight city councils are provided (referred to throughout as the 'eight city total'). The text discusses results for the eight-city sample only.

The results for each city were sampled and weighted to be representative by age within gender, ethnicity and ward/local board. It should be noted that within each council area there are a range of results that may differ significantly.

Results for the Greater Wellington Region include results for Hutt City, Porirua City and Wellington City areas.

Significant differences

Differences between council areas are only reported in those cases where the following two criteria are met:

- The difference between the result for the council area and the result for all other sub-groups is significant at the 95% confidence level. (That is, the total excludes the sub-group being compared with it).
- The raw difference in results for the council area and the result for all other sub-groups is greater than 5%.

A t-test is used for significance testing. When using a t-test, the result being tested must be independent of what it is being tested against. Therefore when a sub-group result is being tested, it is tested against the total minus the sub-group itself. For example, when testing if the result for Auckland is significantly different from the total, those in Auckland are tested against the 'total minus Auckland residents' (i.e. against those in all the other participating cities/local areas).

Base sizes

All base sizes shown on charts and on tables (n=) are unweighted base sizes.

Please note that any base size of under n=100 is considered small and under n=30 is considered extremely small and therefore results should be viewed with caution.

Ethnicity

In this report, total ethnicity is reported rather than prioritised ethnicity. This means a person who identified with more than one ethnicity will be counted in more than one ethnic group. Therefore, ethnicity percentages add to more than 100 percent.

'Other specify' questions

Responses to 'other specify' questions are disaggregated, using codes that were included in the questionnaire, as well as codes created by Nielsen (based on the themes that emerged from respondents' answers).

2.14 Representativeness of the sample

Ideally the number of completed surveys should represent the population of the participating areas on a range of demographic, socio-economic and geographic characteristics.

A number of measures were put in place to increase the response rate (see section 2.9) and to ensure the sample was as representative as possible. A final response rate of 27% was achieved. This is similar to that achieved in previous surveys i.e. In 2014 the response rate was 26.3% and in 2016 the response rate was 28.7%⁶.

The quantity of letters sent was calculated in a way to help to ensure the sample was representative by age, gender and ethnicity.

The population data was drawn from the 2013 Census of Population and Dwellings.

The charts below compare the final total sample with the overall ethnic, age, gender, and regional distribution of New Zealand usual residents aged 18 years and over.

⁶ Response rate method I was used for this calculation.

Representativeness of sample

2013 Census population data was provided by Stats NZ according to the resident population aged 18 years and over.

Unweighted sample distribution	Population proportions	Sample proportions
in the 8-city council areas	(%)	(%)
Gender		
Male	48	44
Female	52	55
Gender diverse*	Unknown	0
Age groups		
18 - 24 years	15	15
25 – 49 years	46	43
50 – 64 years	23	22
65+ years	16	20
Ethnicity		
Māori	9	16
Pacific	8	5
Asian	17	11
NZ European/Other	68	81
Location		
Auckland	56	42
Hamilton	6	8
Tauranga	5	8
Hutt	4	8
Porirua	2	8
Wellington	8	8
Christchurch	14	7
Dunedin	5	10

Table 10: Representativeness of the sample

Note: population proportions are based on 2013 Census data.

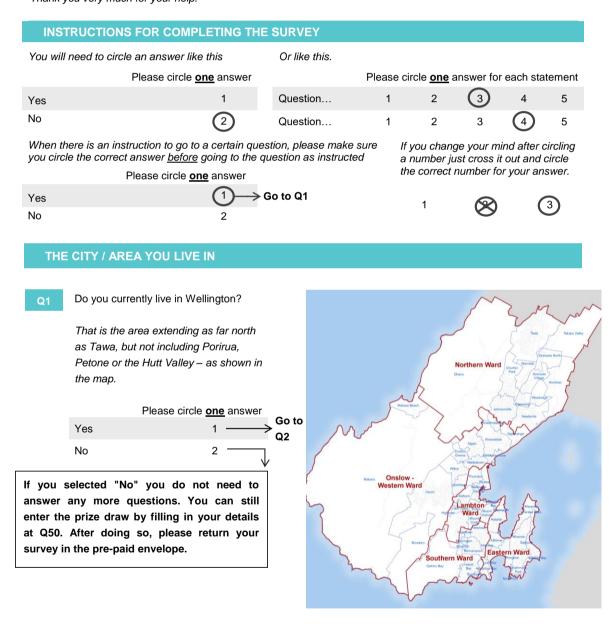
*Data (on which the residential population is based) is not available for gender diverse populations – these individuals were assigned to the female category for weighting.

APPENDIX 1: QUESTIONNAIRE

This appendix contains a copy of the paper questionnaire that was mailed out to residents of Wellington City. As mentioned earlier, slight amendments were made to some questions for respondents living in different council areas.

Thank you for agreeing to take part in this important survey.

This survey measures what life is like for you, your family and your community. It is a confidential survey and will take approximately 15-20 minutes to complete. Sharing your views will help make your area a better place to live by informing council decisions about social, cultural, environmental and economic goals. It is important to us that you complete the survey to ensure the results accurately reflect the views of people in your area. *Thank you very much for your help.*



And how long have you lived in Wellington?

Would you say that your overall quality of life is

Please circle	one answer
Less than 1 year	1
1 year to just under 2 years	2
2 years to just under 5 years	3
5 years to just under 10 years	4
10 years or more	5

IS	Please circle one answer		
	r lease sirele <u>erre</u> allemen		
Extremely poor	1		
Very poor	2		
Poor	3		
Neither poor nor goo	od 4		
Good	5		
Very good	6		
Extremely good	7		

How much do you agree or disagree with the following statement? "I feel a sense of pride in the way Wellington looks and feels".

	Please circle <u>one</u> answer
Strongly disagree	1
Disagree	2
Neither agree nor disagree	3
Agree	4
Strongly agree	5

How much do you agree or disagree with the following statement? "Wellington is a great place to live".

	Please circle one answer
Strongly disagree	1
Disagree	2
Neither agree nor disagree	3
Agree	4
Strongly agree	5

And in the last 12 months, do you feel Wellington has got better, worse or stayed the same as a place to live?

	Please circle <u>one</u> answer
Much worse	1
Slightly worse	2
Stayed the same	3 Go to Q8
Slightly better	4
Much better	5

Q7

And for what reasons do you say Wellington has changed as a place to live? *Please be as detailed as possible*

Q8

This question is about the home you currently live in. How much do you agree or disagree that:

Please circle one answer for each statement

	Strongly disagree	Disagree	Neither	Agree	Strongly agree	Don't know
Your housing costs are affordable (by housing costs we mean things like rent or mortgage, rates, house insurance and house maintenance)	1	2	3	4	5	6
The type of home you						
live in suits your needs and the needs of others	1	2	3	4	5	6
in your household		Go to Q9			Go to Q10	

Why do you disagree (or neither agree nor disagree) that the type of home you live in suits your needs and the needs of others in your household?

	Please circle <u>all</u> that apply
The home is too small (e.g. not enough living space or bedrooms)	1
The home is too big	2
The outdoor area is too small	3
The outdoor area is too big	4
Difficult access from the street to the home	5
Home is too cold / damp	6
Home in poor condition / needs maintenance	7
The home is not very safe (e.g needs earthquake-strengthening, hazards in home)	8
Other (please specify)	9

Q10

This question is about the home you currently live in. How much do you agree or disagree that:

					Please circle <u>or</u>	<u>1e</u> answer
	Strongly disagree	Disagree	Neither	Agree	Strongly agree	Don't know
The general area or neighbourhood your home is in suits your needs and the needs	1	2	3	4	5	6
of others in your household	<u> </u>			<u> </u>		
		Go to Q11			Go to Q12	

Q11

Why do you disagree (or neither agree nor disagree) that the area or neighbourhood you live in suits your needs and the needs of others in your household?

	Please circle <u>all</u> that apply
Not enough places to spend time with my friends	1
Lacks a feeling of community	2
Not a friendly area	3
Lacks character	4
Lack of cafes, bars, restaurants	5
Inconvenient in terms of travel / public transport	6
Not safe in terms of crime	7
Not safe from natural disasters (e.g. earthquakes, flooding)	8
Too far from family and / or friends	9
Too far from work	10
Too far from pre-school / school / university	11
Too far from amenities such as shops, malls, movie theatres, libraries, doctors, hospital etc	12
Too far from sports and recreation facilities	13
Too far from environmental features that are important to me (e.g. beach, hills, views, river, wetlands, forest)	14
Too busy	15
Too noisy	16
Other (please specify)	17

Q12

The following question asks about heating your home during the winter months. How much do you agree or disagree that:

			Please	circle <u>on</u>	<u>e</u> answer for	each statement
	Strongly disagree	Disagree	Neither	Agree	Strongly agree	Don't know / not applicable
My home has a problem with damp or mould	1	2	3	4	5	6
The heating system keeps my home warm when it is in use	1	2	3	4	5	6
I can afford to heat my home properly	1	2	3	4	5	6

CRIME AND SAFETY

Q13 In general how safe or unsafe do you feel in the following situations...

		Plea	ase circle <u>e</u>	one answer f	or each situation
	Very unsafe	A bit unsafe	Fairly safe	Very safe	Don't know / not applicable
In your home after dark	1	2	3	4	5
Walking alone in your neighbourhood after dark	1	2	3	4	5
In your city centre during the day	1	2	3	4	5
In your city centre after dark	1	2	3	4	5

Q14

What area do you regard as your 'city centre'? Please write in below To what extent has each of the following been a problem in Wellington over the past 12 months?

	r lease sirele <u>ene</u> allewer fer each pres			
	A big problem	A bit of a problem	Not a problem	Don't know
Rubbish or litter lying on the streets	1	2	3	4
Graffiti or tagging	1	2	3	4
Vandalism, other than graffiti or tagging, including broken windows in shops and public buildings	1	2	3	4
Car theft, damage to cars or theft from cars	1	2	3	4
Dangerous driving, including drink driving and speeding	1	2	3	4
People you feel unsafe around because of their behaviour, attitude or appearance	1	2	3	4
Air pollution	1	2	3	4
Water pollution, including pollution in streams, rivers, lakes and in the sea	1	2	3	4
Noise pollution	1	2	3	4
Alcohol or drug problems or anti-social behaviour associated with the use of alcohol or drugs	1	2	3	4
People begging on the street	1	2	3	4
People sleeping rough on the streets / in vehicles	1	2	3	4

Please circle one answer for each problem

TRANSPORT

Q16 Over the past 12 months, how often did you use **public** transport?

For public transport, please include cable cars, ferries, trains and buses, including school buses. Taxis / Uber are <u>not</u> included as public transport. If your usage changes on a weekly basis, please provide an average.

5 or more times a week12 - 4 times a week2Once a week32 - 3 times a month4At least once a month5Less than once a month6Did not use public transport over the past 12 months7Not applicable, no public transport available in my area8		Please circle <u>one</u> answer
Once a week32 - 3 times a month4At least once a month5Less than once a month6Did not use public transport over the past 12 months7	5 or more times a week	1
2 - 3 times a month4At least once a month5Less than once a month6Did not use public transport over the past 12 months7	2 - 4 times a week	2
At least once a month5Less than once a month6Did not use public transport over the past 12 months7	Once a week	3
Less than once a month6Did not use public transport over the past 12 months7	2 - 3 times a month	4
Did not use public transport over the past 12 months 7	At least once a month	5
	Less than once a month	6
Not applicable, no public transport available in my area 8	Did not use public transport over the past 12 months	7
	Not applicable, no public transport available in my area	8

Q15

8

Q17

Thinking about public transport in your local area, based on your experiences or perceptions, do you agree or disagree with the following: Public transport is...

			Please ci	rcle <u>one</u> ar	nswer for eac	h aspect
	Strongly disagree	Disagree	Neither	Agree	Strongly agree	Don't know
Affordable	1	2	3	4	5	6
Safe	1	2	3	4	5	6
Easy to get to	1	2	3	4	5	6
Frequent (comes often)	1	2	3	4	5	6
Reliable (comes on time)	1	2	3	4	5	6

COUNCIL DECISION MAKING

Q18

How much do you agree or disagree with the following statement? "Overall, I have confidence that the Council makes decisions that are in the best interests of my city".

	· · · · · · · · · · · · · · · · · · ·
Strongly disagree	1
Disagree	2
Neither agree nor disagree	3
Agree	4
Strongly agree	5

Please circle one answer

Q19

Overall, how much influence do you feel the public has on the decisions the Council makes? Would you say the public has...

	Please circle one answer
No influence	1
Small influence	2
Some influence	3
Large influence	4
Don't know	5

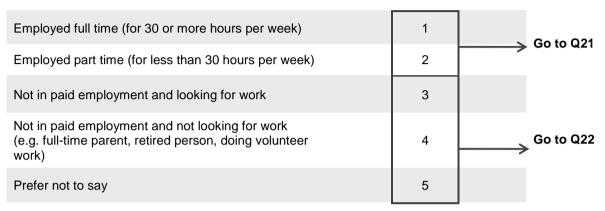
ASPECTS OF YOUR LIFE AND YOUR LIFESTYLE

Q20

Which of the following best describes your current employment status?

Employed means you undertake work for pay, profit or other income, or do any work in a family business without pay.

Please circle one answer



Q21 Overall how satisfied or dissatisfied are you with the balance between your work and other aspects of your life such as time with your family or for leisure?

	Please circle one answer
Very dissatisfied	1
Dissatisfied	2
Neither satisfied nor dissatisfied	3
Satisfied	4
Very satisfied	5

Q22

In general how would you rate your health?

	Please circle one answer
Poor	1
Fair	2
Good	3
Very good	4
Excellent	5

This question is about the physical activity you have done in the last **7 days** (not including today). By physical activity we mean doing anything using your muscles. Please think about activities at work, school or home, getting from place to place, and any activities you did for exercise, sport, recreation or leisure.

Thinking about all your physical activity over the last **7 days** (not including today), on how many days did you engage in...?

a) At least **30 minutes** of **moderate** activity - 'moderate' activities might make you breathe harder than normal, but only a little - like brisk walking, carrying light loads, cycling at a regular pace, or other activities like table tennis.

OR

Q23

b) At least **15 minutes** of **vigorous** activity - 'vigorous' activities make you breathe a lot harder than normal ('huff and puff') - like running, heavy lifting, digging, aerobics, fast cycling, or other activities like rugby or netball.

	Please circle <u>one</u> answer
None	0
One day	1
Two days	2
Three days	3
Four days	4
Five days	5
Six days	6
Seven days	7

Q24

Which of the following best describes how well your total income meets your everyday needs for things such as accommodation, food, clothing and other necessities?

	Please circle <u>one</u> answer
Have more than enough money	1
Have enough money	2
Have just enough money	3
Do not have enough money	4
Prefer not to answer	5

Q25

How much do you agree or disagree with the following statements?

Please circle one answer for each statement

	Strongly disagree	Disagree	Neither	Agree	Strongly agree
It's important to me to feel a sense of community with people in my neighbourhood	1	2	3	4	5
I feel a sense of community with others in my neighbourhood	1	2	3	4	5

In the last 12 months, which, if any, of the following types of contact have you had with people in your neighbourhood?

	Please circle <u>all</u> that apply
Negative contact where there's outright tension or disagreement	1
Some negative contact such as not getting on with them	2
Some positive contact such as a nod or saying hello	3
Positive contact such as a visit, or asking each other for small favours	4
Strong positive contact such as support / close friendship (e.g. having BBQs or drinks together)	5
I have not had any contact with the people in my neighbourhood	6

Which of the following statements about trust do you agree with the most?

	Please circle <u>one</u> answer
You almost always can't be too careful in dealing with people	1
You usually can't be too careful in dealing with people	2
People can usually be trusted	3
People can almost always be trusted	4
Don't know	5

Thinking now about the social networks and groups you may be part of, do you belong to any of the following?

	Please circle all that apply
Faith-based group / church community	1
Cultural group (e.g. kapa haka, Samoan group, Somalian group)	2
Marae / hapū / iwi participation (e.g. Land Trust)	3
Neighbourhood group (e.g. residents' association, play groups)	4
Clubs and societies (e.g. sports clubs, poetry groups, book clubs)	5
Volunteer / charity group (e.g. SPCA, Hospice)	6
Parent networks (e.g. school, pre-school)	7
Professional / work networks (e.g. network of colleagues or professional association)	8
Online community (e.g. Facebook / Twitter, forums, online gaming communities)	9
Other social network or group (please specify)	10
None of the above	11

Q29 Over the past 12 months how often, if ever, have you felt lonely or isolated?

	Please circle one answer
Always	1
Most of the time	2
Sometimes	3
Rarely	4
Never	5

Q30

If you were faced with a serious illness or injury, or needed emotional support during a difficult time, is there anyone you could turn to for help?

	Please circle <u>one</u> answer
Yes, definitely	1
Yes, probably	2
No	3
Don't know / unsure	4

At some time in their lives, most people experience stress.

Which statement below best applies to how often, if ever, over the past 12 months you have experienced stress that has had a negative effect on you?

Stress refers to things that negatively affect different aspects of people's lives, including work and home life, making important life decisions, their routines for taking care of household chores, leisure time and other activities.

	Please circle one answer
Always	1
Most of the time	2
Sometimes	3
Rarely	4
Never	5

```
Quality of Life Survey 2018 Technical Report
```

Please indicate for each of the five statements which is closest to how you have been feeling over the last two weeks.

Notice that higher numbers mean better well-being (example: If you have felt cheerful and in good spirits more than half of the time during the last two weeks, please circle the number 3 below).

Please circle one answer for each aspect

	All of the time	Most of the time	More than half of the time	Less than half of the time	Some of the time	At no time
I have felt cheerful and in good spirits	5	4	3	2	1	0
I have felt calm and relaxed	5	4	3	2	1	0
I have felt active and vigorous	5	4	3	2	1	0
I woke up feeling fresh and rested	5	4	3	2	1	0
My daily life has been filled with things that interest me	5	4	3	2	1	0

CULTURE AND IDENTITY

Q33

How much do you agree or disagree with the following? "Wellington has a rich and diverse arts scene".

	Please circle <u>one</u> answer
Strongly disagree	1
Disagree	2
Neither agree nor disagree	3
Agree	4
Strongly agree	5
Not applicable - no arts scene	6
Don't know	7

Q34

New Zealand is becoming home for an increasing number of people with different lifestyles and cultures from different countries.

Overall, do you think this makes Wellington \ldots

	Please circle <u>one</u> answer
A much worse place to live	1
A worse place to live	2
Makes no difference	3
A better place to live	4
A much better place to live	5
Not applicable, there are few or no different cultures and lifestyles here	6
Don't know	7

OVERALL QUALITY OF LIFE

Q35

Would you say that **your** overall quality of life is...

	Please circle <u>one</u> answer
Extremely poor	1
Very poor	2
Poor	3
Neither poor nor good	4
Good	5
Very good	6
Extremely good	7

Q36

And why did you describe your overall quality of life in this way? Please be as detailed as possible in your response And compared to 12 months ago, would you say your quality of life has...

	Please circle one answer
Decreased significantly	1
Decreased to some extent	2
Stayed about the same	3
Increased to some extent	4
Increased significantly	5

DEMOGRAPHICS

Lastly, a few questions about you. This is so we can compare the opinions of different types of people who live in New Zealand.

Q38	Which ethnic group, or groups, belong to?	, do you	Q39	In which of the following do you belong?	age groups
	-	<u>all</u> that apply			cle <u>one</u> answer
	New Zealand European	1		Less than 18 years	1
	Māori	2		18-19 years	2
	Samoan	3		20-24 years	3
	Cook Island Māori	4		25-29 years	4
	Tongan	5		30-34 years	5
	Niuean	6		35-39 years	6
	Chinese	7		40-44 years	7
	Indian	8		45-49 years	8
	Other (please specify)	9		50-54 years	9
		9		55-59 years	10
	Prefer not to say	10		60-64 years	11
	Don't know	11		65-69 years	12
				70-74 years	13

Q40

Are you...

Q41

75+ years

Were you born in New Zealand?

Please circle one answer

14

Male	1	Y
Female	2	N
Gender diverse	3	

Please circle one answer

Yes	1	\rightarrow	Go to Q43
No	2	\rightarrow	Go to Q42

If you were not born in New Zealand, please answer Q42

	40	
	47	
-		

How many years have you lived in New Zealand?

	Please circle <u>one</u> answer
Less than 1 year	1
1 year to just under 2 years	2
2 years to just under 5 years	3
5 years to just under 10 years	4
10 years or more	5

Currently, how many people live in your household, including yourself? Q43

By live in your household we mean anyone who lives in your house, or in sleep-outs, Granny flats etc. on the same property. If you live in a retirement village, apartment building or hostel, please answer for how many people live in your unit only.

Please write the number in the box below.



Q44 In the last 4 weeks, were there any children (excluding visitors) in the following age groups living in your home at least some of the time?

	Please circle <u>all</u> the apply
0 – 5 years old	1
6 – 9 years old	2
10 – 14 years old	3
15 – 17 years old	4
18 years old or over	5
Not applicable - no children	6 Go to Q46

Q45

And do any of these children live in another home some of the time?

	Please circle <u>one</u> answer
Yes	1
No	2

Q46 Who owns the home that you live in?

	Please circle one answer
I personally or jointly own it with a mortgage	1
I personally or jointly own it without a mortgage	2
A family trust owns it	3
Parents / other family members or partner own it	4
A private landlord who is NOT related to me owns it	5
A local authority or city council owns it	6
Housing New Zealand owns it	7
Other State landlord (such as Department of Conservation, Ministry of Education) owns it	8
A social service agency or community housing provider (e.g. the Salvation Army, New Zealand Housing Foundation) owns it	9
Don't know	10
What type of home do you currently live in?	
	Please circle <u>one</u> answer

	Please circle <u>one</u> answer
Stand alone house on a section	1
Town house or unit	2
Terraced house (houses side by side)	3
Low rise apartment block (2-7 storeys)	4
High rise apartment block (over 7 storeys)	5
Lifestyle block or farm homestead	6
Other (please specify)	
	7

Q48

Q47

What is the highest qualification that you have completed that took longer than three months to finish?

	Please circle <u>one</u> answer
No formal qualification	1
NCEA Level One or School Certificate	2
NCEA Level Two or Sixth form Certificate / University Entrance	3
NCEA Level Three or bursary or scholarship	4
NZQF Level 4, 5 or 6 – a trade or polytechnic qualification	5
Bachelor's degree	6
Post-graduate degree / diploma / certificate or higher (e.g. Masters or Doctorate)	7
Other (e.g. overseas qualification) (please specify)	

Q49 Which best describes your household's annual income before tax?

	Please circle <u>one</u> answer
Loss	1
No income	2
Less than \$10,000	3
\$10,001 - \$20,000	4
\$20,001 - \$30,000	5
\$30,001 - \$40,000	6
\$40,001 - \$50,000	7
\$50,001 - \$60,000	8
\$60,001 - \$70,000	9
\$70,001 - \$80,000	10
\$80,001 - \$90,000	11
\$90,001 - \$100,000	12
\$100,001 - \$150,000	13
\$150,001 - \$200,000	14
More than \$200,000	15
Prefer not to say	16
Don't know	17

Q50 Please fill in your contact details below so that we are able to contact you if you are one of the prize draw winners or if we have any questions about your questionnaire (e.g. if we can't read your response).

Name:			
Phone number:			
Email address:			

Q51

It is likely that more research about Wellington will be carried out in the near future.

Are you willing to provide your contact details so that we are able to contact you and invite you to take part in further research?

Please note: providing your contact details does not put you under any obligation to participate.

	Please circle <u>one</u> answer
Yes	1
No	2

We really appreciate that you have taken time to complete this survey. Thank you!

PLEASE CHECK THAT YOU HAVE COMPLETED ALL PAGES OF THE QUESTIONNAIRE.

Please put the completed questionnaire in the FreePost envelope provided or any envelope (no stamp required) and post it to:

FreePost Authority Number 196397 Survey Returns Team Nielsen PO Box 33819 Takapuna Auckland 0740 New Zealand

If you have any questions please contact Nielsen during office hours on 0800 400 402 toll free.

Quality of Life 2018 – Prize Draw Terms and Conditions of Entry

- 1. Information on how to enter the promotion forms part of these Terms and Conditions of Entry. Entry into the promotion is deemed acceptance of the following terms and conditions.
- The promotion commences on 10 April 2018 and closes on 3 June 2018 ("Promotional Period").
- To enter Eligible Respondents must complete and submit the Survey of New Zealanders within the Promotional Period by:
 a. filling out the online survey at <u>www.acnonline.com/life</u> (using your personalised username and password, provided in the letter
 - sent to you informing you of the survey) including your contact details, or
- b. returning a completed hard copy of the survey (if this has been provided) with your contact details to the Promoter.
 4. Entry is only open to "Eligible Respondents", being individuals who: (i) are residents of New Zealand aged 18 years or older; and (ii) are not employees of the Promoter or the Wellington City Council, Auckland City Council, Dunedin City Council, Christchurch City Council, Tauranga City Council, Hamilton City Council, Greater Wellington Regional Council, Porirua City Council, Hutt City Council; and (iii) are not a spouse, de facto partner, parent, child, sibling (whether natural or by adoption) or household member of such an employee; and (iv) are not professionally connected with the promotion.
- 5. Each completed survey with accompanying contact details, submitted in accordance with paragraph 3, above, will automatically receive one entry into the prize draw. There is a limit of one entry per Eligible Respondent.
- 6. The Promoter reserves the right, at any time, to verify the validity of the entry and Eligible Respondent (including a respondent's identity, age and place of residence) and to disqualify any respondent who submits a response that is not in accordance with these Terms and Conditions of Entry. Failure by the Promoter to enforce any of its rights at any stage does not constitute a waiver of those rights.
- The prize draw will take place on 19 June 2018. The winners will be notified within 10 working days of the draw by telephone or email.
 The first five (5) valid entries drawn at random will be deemed the winners. The top prize is \$1,000 with a further four prizes of \$250, which can be redeemed as a Prezzy card or a donation to a registered charity of the winner's choice. The winners are responsible for any tax associated with the prize.
- 9. The prize is not transferable or exchangeable. No responsibility is accepted for late, lost, misdirected or illegible entries.
- 10. The Promoter's decision is final and no correspondence will be entered into.
- 11. If after 10 working days following the Promoter attempting to contact a winner at the contact details provided the Promoter has been unable to make contact with the winner, that winner will automatically forfeit the prize, and the Promoter will randomly select one further entry who will be contacted by the Promoter by telephone or email and will be the winner of the prize.
- 12. The winner permits the Quality of Life Survey Team, the Promoter and their affiliates to use the winner's name and biographical information for advertising and promotional purposes, without any compensation.
- 13. All personal details of the respondents will be stored securely at the office of the Promoter and used to operate and administer the prize draw or to contact the respondent, if necessary, to clarify responses to questions in any hard copy of the survey. A request to access, update or correct any personal information should be directed to the Promoter.
- 14. The Promoter is ACNielsen (NZ) ULC, L5 150 Willis Street, Te Aro, Wellington, 6011, New Zealand. Phone 0800 400 402.
- 15. The Promoter reserves the right to amend or modify these Terms and Conditions of Entry at any time.
- 16. The Promoter will not be liable for any loss or damage whatsoever which is suffered (including but not limited to indirect or consequential loss) or sustained as a consequence of participation in the promotion or as a consequence of the use and enjoyment of the prize.
- 17. The promotion is governed by New Zealand law and all respondents agree to submit to the exclusive jurisdiction of the Courts of New Zealand with respect to any claim or matter arising out of or in connection with this promotion.

APPENDIX 2: 0800 NUMBER FAQS

The following FAQ document was created for the council contact centres to assist in the response to callers' questions

Key messages

- The national Quality of Life Survey is conducted every two years.
- Some residents will be sent a letter inviting them to participate online, a reminder postcard is then sent to those who have not completed. If the resident has still not completed the survey they will be sent a hard copy survey and a final reminder postcard.
- The survey is very important for councils to help them understand their residents' needs and ensure that the right decisions are made about programmes and services offered in different communities.
- The ultimate goal is to help councils improve their residents' overall quality of life.

Timings

What	When
Initial invite letter sent	Tuesday 10 April
1 st Reminder postcard sent	Tuesday 17 April
Survey Pack sent	Monday 30 April
2 nd Reminder postcard sent	Monday 7 May
Final day to post back completed hardcopy	Friday 1 June
survey	
Final day to complete survey online	Sunday 3 June
1 st Reminder postcard sent Survey Pack sent 2 nd Reminder postcard sent Final day to post back completed hardcopy survey	Tuesday 17 April Monday 30 April Monday 7 May Friday 1 June

Each letter and postcard has a unique identifier that will allow access to the survey for one person.

Online survey landing page: www.acnonline.com/life

Survey issues (general)

Q. What is the purpose of this survey/What is this survey about?

It is to provide information to local councils to improve the quality of life of New Zealanders.

Q. Is this survey genuine?

Yes it is. It is being done for 8 local councils and 2 regional councils. Nielsen is an independent market research company commissioned to do the survey. You can check on this if you like by looking at the Quality of Life website http://www.qualityoflifeproject.govt.nz

Q. Don't want to participate

In the first instance, thank the respondent and ask them if they would mind calling Nielsen on their toll free 0800 number so that their details can be removed.

If the respondent does not want to do this, ask for details (including username and survey code from letter, postcard, or survey) so they can be flagged in the database – check timeframes and ask to ignore the next reminder/survey if one is scheduled.

Email <u>xxx@nielsen.com</u> to with the respondents name, username and survey code, along with any other relevant details from the call as soon as possible so that the respondent can be removed from the sample.

Things to note:

The username is a numerical code (see picture below) and the survey code is three letters of the alphabet. It's important that you get these correct otherwise we will not be able to find the

 - <- Chara > <	witting you to take part in the inform local decisions (like safety, to help infanje your community, red ima o prize draw for a prize of	Kia ora, Talofa lava, Kia oran Dear <name> About a week ago, you shou Quality of Life Survey 2018 What you sell us will be used</name>		
Deer - Numerie Actorat a week sog, you should have inceined a lister inviting you to take part in the Calify of Life Survey 2018. Youry to use the low and to improve services and inform load decisions (like safety, transport, health and lessed, by the protect of the lister by the protect date to a protect Address Line 3> Address Line 3> Chybr, oposition de low and to improve services and inform load decisions (like safety, transport, health and lessed, by the lister bin and the lister inviting you to take the top protect date. Address Line 3> Chybr, oposition de low and the lister invites and a lastiter four prises of \$250* If you have not already completes the same you Prese got to wave someline comfile and lessed.	witting you to take part in the inform local decisions (like safety, to help infanje your community, red ima o prize draw for a prize of	Dear <name> About a week ago, you shou Quality of Life Survey 2018 What you tell us will be used</name>		
Cudity of Life Survey 2018. Cudity of Life	inform local decisions (like safety, to help shape your community, ed into a prize draw for a prize of	Quality of Life Survey 2018 What you tell us will be used		
Addressee's Name> Chddressee's Name> Chddressee's Name> Chddress Line 1> Contrawl, poly for coprologing the survey call be ensured in any draw for a price of your choice, wheth a Prezery card or a domain of your choice. There are five chances to wei. There is a top price of \$1,000 and a further four price of \$259°. (Chyp, cpostcode)> If you have not already completed the survey price of the other in a choice of the other integration of \$1,000 and a further four price of \$259°.	to help shape your community. red into a prize draw for a prize of			
Address Line 1> Conditions Line 2 Chiphy, spottcodel If you have not already completing the survey, you'll be entered into a point of or aprile of the point of a strate of or a point of the completing the survey and a stratement into a strate of oral close. There are find the survey completion of a strate of oral close. There are find the survey close of a strate of oral close. There are find the survey close of a strate of oral close of a strate of oral close of a strate of oral close. There are find the survey close of a strate of oral close of a strate of oran close of a strate of oral close of a strate of oral close of a st			Address of Newsy	
Addenses Line 2> Chyler o postcodei If you have not always compared the univery please go to wavecome compared the univery				
<city>, <postcode> If you have not already completed the survey places go to www.scnoeline.com/life and enter:</postcode></city>				
If you have not already completed the survey please go to www.acnonline.com/life and enter	and the process were a			
			and the second	
Username: <username></username>	SCAN THE TOTAL			
	OR CODE			
Survey code: <survey code=""></survey>	E168-52	Survey code: <survey code:<="" td=""><td></td></survey>		
The survey will take around 15-20 minutes to complete depending on your answers.	e depending on your answers	The survey will take around 1		
If you have any questions call Nielsen toil free: 0800 400 402				
Yours sincerely, Ngã mihi				
		1000000 00		
K Jamelson Kath Jamieson,		K Comeson	175	
Project Sponsor Quality of Life Survey			25	
*The five winners will be drawn on 19 June 2018	th Jamieson, sject Sponsor Quality of Life Survey		See and	
		"The five winners will be drawn o	Tasa Recycle	
	iject Sponsor Quality of Life Survey		laase Recycle	
	iject Sponsor Quality of Life Survey		laass Rocycle	
	iject Sponsor Quality of Life Survey		Iseas Recycle	



respondent and remove them.

Q. Respondent moved or unable to complete the survey

In the first instance, thank the respondent and ask them if they would mind calling Nielsen on their toll free 0800 number so that their details can be removed.

If the respondent does not want to do this, ask for details (including username and survey code from letter, postcard, or survey). Email <u>xxx@nielsen.com</u> with the respondents name, username and survey code, along with any other relevant details from the call as soon as possible so that the respondent can be removed from the sample.

Q. What do I get for completing it?

If you complete the survey online by 3 June or send back a hardcopy by 1 June 2018, you will go in the draw to win either a grand prize of \$1000 or one of four smaller \$250 prizes. These prizes can be provided as either a Prezzy card or a donation to a charity of the winner's choice.

Q. Do I have to do it?

No, the survey is completely voluntary but we would really appreciate it if you could take part.

Q. Some of my friends/family members have received a letter to take part but I never got one, can I take part?

Thank you for your enthusiasm and helpfulness but sorry, it is very important for the accuracy of the results that only the people randomly sampled complete the survey.

Confidentiality

Q. Is this survey really private/confidential/anonymous?

Yes it is. All the responses you provide will not be passed on to the council or sold. Nielsen are researchers, not direct marketers. To deliver results, your answers will be put together with those of others.

Nielsen is bound by Research Association of New Zealand's (RANZ) Professional Code of Practice which prohibits them from identifying any person who takes part in a survey unless they have explicit consent from them to do so.

Q. Where did you get my name and address from?

The project got your address by random selection from the Electoral Roll.

Q. How did you select me to participate <OR I want to know how you did the random selection>?

It was a random sample of all addresses from the Electoral Roll.

Q. How did you get access to the Electoral Roll?

Government agencies have access to the Electoral Roll for this purpose.

Q. Is this Nielsen?

To talk to Nielsen, you can call the survey hotline on 0800 400 402

Q. Can I get a copy of the results when you are finished? OR Can you send me the results?

You can see the results from the previous years on the Quality of Life website: www.qualityoflifeproject.govt.nz. Results from this year's survey will be available at this website around October 2018

Q. I don't have internet access / Can I get a hard copy of the questionnaire?

If you have not completed the online survey, a hard copy will be posted to you on the 30th of April 2018. If replacement copy required, please contact the Nielsen survey hotline on 0800 400 402.

Q. Already completed the survey and have received another communication

Sorry, unfortunately because it takes a few days for mail to be printed and delivered, sometimes reminder communications are received by people who have already completed the survey. If you would like to check Nielsen have received your survey, please call 0800 400 402.

Q. Want to know how long the survey takes

The survey has been designed to take around 15 - 20 minutes to complete, on average. Some people may take longer and some people may complete it faster

Technical questions

Q. Technical issues (with online survey)

Please contact Nielsen on 0800 400 402

Q. Is the website secure

The Nielsen website has advanced security measures in place to protect the loss, misuse and alteration of the information under our control. The data itself is encrypted into a proprietary binary format and cannot be read without the correct software even if it could be accessed.

All respondents are screened and allocated unique usernames and passwords so that they can only enter the questionnaire once.

Only the data programmers and researchers working on this project can view your individual response.

APPENDIX 3: WEIGHTING MATRIX

This section provides details of the population data used for weighting purposes.

Table 11: Population figures by age and gender

Estimated resident			Ma	ale		Female			
population aged 18+ (Estimate 2017)	TOTAL	18 - 24	25 - 49	50 - 64	65+	18 - 24	25 - 49	50 - 64	65+
Auckland Central*	375,500	30,685	95,520	34,830	22,920	29,175	97,805	37,605	26,890
Auckland North*	303,700	20,570	65,450	35,060	26,660	18,250	69,010	37,750	30,990
Auckland South-East*	395,200	30,880	88,910	43,400	28,140	29,090	96,640	46,130	32,110
Auckland West*	196,600	13,860	47,710	20,730	13,230	13,120	49,820	22,200	15,850
Hamilton	124,300	11,630	27,400	11,640	8,610	11,390	29,510	13,230	10,940
Tauranga	99,800	5,170	18,420	11,150	11,840	4,820	20,570	13,000	14,810
Porirua	40,600	2,710	8,580	4,940	3,140	2,620	9,790	5,280	3,550
Hutt	79,100	4,870	17,070	9,530	6,740	4,600	18,340	10,170	7,810
Wellington	171,500	14,750	41,510	17,090	10,080	15,180	42,950	18,300	11,610
Christchurch	303,100	23,390	69,010	33,880	25,170	20,310	65,020	35,190	31,140
Dunedin	104,400	10,890	18,130	11,430	9,200	12,260	19,100	12,230	11,110

Note: These figures are based on 2017 population estimates released by Stats NZ *As noted in the earlier description of the weighting approach, Auckland was divided into four sub-areas for weighting purposes. 'Auckland Central' consists of Albert-Eden, Maungakiekie-Tāmaki, Orākei, Puketāpapa, Waitematā, and Great Barrier/Waiheke. 'Auckland North' consists of Devonport-Takapuna, Hibiscus and Bays, Kaipātiki, Rodney, and Upper Harbour. 'Auckland South-East' consists of Franklin, Mangere-Otahuhu, Manurewa, Otara-Papatoetoe, Papakura, and Howick. Auckland West' consists of Henderson-Massey, Waitākere Ranges, and Whau.

Table 12: Population figures by ethnicity

Resident population aged 18+ (Census 2013)	TOTAL	NZ European / Other	Māori	Pacific	Asian
Auckland Central	301,695	200,286	17,850	23,694	77,118
Auckland North	256,638	208,302	13,470	5,610	41,142
Auckland South-East	331,569	177,006	38,730	63,345	76,947
Auckland West	168,501	107,007	16,125	22,047	37,365
Hamilton	105,087	79,335	17,241	3,717	13,587
Tauranga	86,493	75,909	10,848	1,251	4,140
Porirua	36,681	25,290	5,835	7,569	2,109
Hutt	73,167	55,314	9,606	6,060	7,983
Wellington	151,413	122,916	9,900	5,871	21,750
Christchurch	267,420	234,063	17,106	6,045	23,037
Dunedin	96,120	88,110	5,529	1,734	5,643

Note: These figures are actual 2013 Census data released by Stats NZ

Table 13: Population proportions (%) by age and gender

Estimated resident	Male				Female				
population aged 18+ (Estimate 2017)	8-city post weight	18 - 24	25 - 49	50 - 64	65+	18 - 24	25 - 49	50 - 64	65+
Auckland Central*	17	8	25	9	6	8	26	10	7
Auckland North*	14	7	22	12	9	6	23	12	10
Auckland South-East*	18	8	22	11	7	7	24	12	8
Auckland West*	9	7	24	11	7	7	25	11	8
Hamilton	6	9	22	9	7	9	24	11	9
Tauranga	5	5	18	11	12	5	21	13	15
Porirua	2	7	21	12	8	6	24	13	9
Hutt	4	6	22	12	9	6	23	13	10
Wellington	8	9	24	10	6	9	25	11	7
Christchurch	14	8	23	11	8	7	21	12	10
Dunedin	5	10	17	11	9	12	18	12	11

*As noted in the earlier description of the weighting approach, Auckland was divided into four sub-areas for weighting purposes. In combination, Auckland has a 8-city post weight of 58%

Resident population aged 18+ (Census 2013)	8-city post weight	NZ European / Other	Māori	Pacific	Asian
Auckland Central*	17	66	6	8	26
Auckland North*	14	81	5	2	16
Auckland South-East*	18	53	12	19	23
Auckland West*	9	64	10	13	22
Hamilton	6	75	16	4	13
Tauranga	5	88	13	1	5
Porirua	2	69	16	21	6
Hutt	4	76	13	8	11
Wellington	8	81	7	4	14
Christchurch	14	88	6	2	9
Dunedin	5	92	6	2	6

Table 14: Population proportion (%) by ethnicity

*As noted in the earlier description of the weighting approach, Auckland was divided into four sub-areas for weighting purposes. In combination, Auckland has a 8-city post weight of 58%

Table 15: Auckland area weights

Auckland local boards	Estimated resident population aged 18+ (Estimate 2017)	Population proportions (%)
Papakura	39,300	3.1
Ōtara-Papatoetoe	62,800	4.9
Manurewa	65,700	5.2
Māngere-Ōtāhuhu	55,600	4.4
Franklin	55,800	4.4
Howick	116,000	9.1
Ōrākei	71,400	5.6
Maungakiekie-Tāmaki	60,700	4.8
Puketāpapa	49,700	3.9
Waitematā	97,600	7.7
Waiheke-Great Barrier	8,600	0.7
Albert-Eden	87,500	6.9
Whau	65,800	5.2
Waitākere Ranges	40,400	3.2
Henderson-Massey	90,400	7.1
Devonport-Takapuna	49,500	3.9
Kaipātiki	73,400	5.8
Upper Harbour	50,900	4.0
Hibiscus and Bays	81,200	6.4
Rodney	48,700	3.8

Table 16: Post-weights for comparisons with historical data

	6-city post weight (%)
Auckland Central*	19.1
Auckland North*	15.4
Auckland South-East*	20.1
Auckland West*	10.0
Porirua	2.1
Hutt	4.0
Wellington	8.7
Christchurch	15.4
Dunedin	5.3

*As noted in the earlier description of the weighting approach, Auckland was divided into four sub-areas for weighting purposes. In combination, Auckland has a 6-city post weight of 64.5%

APPENDIX IV GLOSSARY

The purpose of this glossary is to provide a meaning to some of the more technical terms used in this report.

Codeframe

This is a summary list of the main themes or topics from the open-ended questions.

Confidence interval

This is the interval that is likely to contain the true population result.

Confidence level

This represents how reliable the result is. The 95% confidence level means that you are 95% certain that the true value lies between the confidence interval.

Margin of error

This term expresses the likely amount of random sampling error in the result.

Quota

This is a target number of interviews that is set to ensure a certain sub-group of the population is represented.

Significant

Where results are said to be significant, this means that they are statistically different at the 95% confidence level.

Weighting

Weighting is a method of calculation in which some observations have their influence reduced and other observations have their influence increased. It is used to account for the sample profile being imbalanced relative to the population being measured. For example, proportionally, we have more Māori in our sample than in the New Zealand population; therefore Māori is weighted down to adjust for this sample imbalance.