

3. Surveys

This chapter describes the main survey of people aged 65 years and over, the two supplementary surveys that were conducted, and the information that was used for the data analysis presented in this report. Statistics New Zealand (SNZ) was commissioned to undertake the main survey of older people and a supplementary survey of older Māori, and ACNielsen NZ Ltd was commissioned to undertake a more limited supplementary survey of people aged 18 to 64 years (working-aged).

This report presents an initial investigation of the data collected from the surveys focusing primarily on the data gathered from the main survey of older people. The information collected from the main and supplementary surveys constitutes a rich research database that can be used to investigate living standards and the situation of older New Zealanders from a variety of perspectives. A copy of the questionnaire used for the survey of people aged 65 years and over is provided in Appendix 1. Demographic information collected from the main survey respondents through the Household Labour Force Survey was also added to the research database and a copy of the Household Labour Force Survey form is also provided in Appendix 1.

The supplementary survey of older Māori obtained the same information gained from the main survey of older people with additional information collected about cultural identity and orientation (replicating questions used by the Te Hoe Nuku Roa research team in their longitudinal research at Massey University). The survey of working-age people involved much shorter interviews collecting mainly living standards information and much less information about contributing factors to differences in living standards. Questions about Māori cultural identity and orientation and new questions about dependent children and crowding were included in the working-age survey. Both supplementary survey datasets are the subject of further separate Ministry of Social Policy analyses and reporting exercises. A full description of the supplementary surveys that were undertaken and the associated questionnaires is available from the Ministry of Social Policy.

3.1 Main Survey of People Aged 65 Years and Over

3.1.1 Survey Population

The survey population for the Survey of Older People (SOP) was defined as the civilian, usually resident, non-institutionalised population aged 65 years and over living in permanent private dwellings.¹⁸ A permanent private dwelling is defined as a fixed dwelling or mobile dwelling at a permanent location on land. It has cooking facilities common to all people who sleep at that dwelling. This definition usually includes granny flats and self-contained units in retirement villages.

¹⁸ The research did not include individuals living in institutions or non-private dwellings as their living standards and circumstances need to be assessed according to different criteria.

The following people were excluded:

- those living in non-private dwellings (i.e. dwellings where a number of unrelated people live and which are available to the public. For example, persons residing in hotels, motels, and hostels.)
- those not living in permanent dwellings (i.e. persons residing in tents, caravans not permanently sited, etc.).

For practical reasons a small number of households that were part of the defined survey population were excluded from the survey. Such households were those which were in very remote locations and inaccessible by private car. The exclusion of these households will have had negligible impact on the results.

3.1.2 Survey Design

The Survey of Older People (SOP) was administered through the Household Labour Force Survey (HLFS) using the HLFS sampling frame. All households containing a person aged 65 and over who were eligible for and participated in the HLFS for the March 2000 quarter were eligible for selection into the SOP. In addition, a further sample of households that had completed their obligations to the HLFS in the September 1999 quarter were added to the SOP to boost the achieved sample size. This additional sample was incorporated in with the main sample of older respondents. One eligible person per household was selected for the SOP. HLFS non-respondents were automatically considered to be non-respondents in the SOP.

Sample frame

The Household Labour Force Survey uses a stratified sample frame. Regions are grouped into 14 regional council based areas and these are then stratified according to a number of characteristics. These characteristics include: urban/rural classification, proportion of Māori, proportion of Pacific people, proportion of Asian people, level of education, employment status, and level of income.

A three-stage stratified cluster design based on the HLFS sample frame was used to select the sample. The three stages were:

1. selection of geographic area units by drawing an equi-probable selection of area units which had not been recently selected for other Statistics New Zealand surveys;
2. a systematic (kth dwelling) selection of households within the selected geographic area units; and
3. random selection of one individual per household using a selection grid approach.

The extra sample of households that rotated out of the HLFS in the September 1999 quarter contains a different selection of geographic area units to those selected in the HLFS March 2000 quarter.

Design effect

The use of clustering in a survey design will increase the variance of the estimators compared to a simple random sample with the same sample size. It is expected that the average design effect for variables collected in the SOP will be no higher than 1.3 which is

the average design effect for estimated variables for the HLFS. The sample design for the SOP is similar to the HLFS. However, the SOP sample of people aged 65 years and over will be less clustered within geographic area units (due to the sparseness of the older population) and have no clustering within household (as only one older person per household was selected) compared with the HLFS.

3.1.3 Survey Procedures

The survey fieldwork was carried out between 7 February 2000 and 7 April 2000. Like all surveys undertaken by SNZ, the survey was conducted within the terms of the Statistics Act (1975). The confidentiality protection and data security provisions of that Act were applied, therefore. Initial notice of the survey was sent to potential respondents by letter.

Participation was voluntary. Up to six telephone calls were made to establish initial contact with the respondent and arrange a suitable interview time. Up to three visits were made to interview a respondent after an interview time had been arranged. Interviews were conducted face-to-face in the respondent's home by skilled SNZ interviewers. Respondents were also invited to ask their partners (where relevant) to assist in responding to questions relating to their joint situation or about the partner. For 62.6% of the interviews with couples, partners were at the home and wished to assist in the interview. Otherwise, respondents were asked to respond on behalf of their partners.

In the early stages of the survey all of the returned questionnaires were reviewed, firstly by regional field supervisors and again at the Wellington Head Office of SNZ. The reason for this quality control procedure was to ensure the early detection of any problems interviewers might have. Based on interviewer de-briefing sessions following the interviewing, respondents did not seem to have any major concerns with the interview process, and few problems were reported. However, due to the sensitive nature of some questions, all respondents were given an Age Concern contact number for referral to support services if needed.

The survey design was based on an average interview length of 90 minutes. Actual interview times were not recorded in the main survey, but in a prior field test with 160 respondents the duration of interviews ranged from less than an hour to well over two hours, with the average estimated at just over an hour.

Respondents were asked to sign a consent form to enable non-government researchers to have direct access to the survey dataset. This was because the Ministry of Social Policy wants to make a unit record dataset available to academic and other bona fide researchers outside government. 96% of respondents returning an eligible response signed the consent form. A dataset comprised of these 96% will, therefore, be able to be supplied to non-government researchers.¹⁹

Response rate

The response rate for SOP was 68%. This response rate is a weighted estimate of the total responding eligible older population as a proportion of the total eligible older population. This should be interpreted as the proportion of the eligible older population covered by the SOP. It is not the same as the unweighted calculation of the number of older persons responding as a proportion of the number approached.

¹⁹ Subject to the relevant administrative and security database protocols being met.

This response rate can be separated into household and individual response rates that allow estimation of the magnitude of the sample loss at each stage of selection. The household response rate was 91%. This was the proportion of eligible older households responding to the screening questionnaire (i.e. HLFS). The individual response rate was 75%. This was the proportion of eligible older people responding to the SOP questionnaire, given they responded to the screening questionnaire. Combining these two response rates gives the overall response rate of 68%.

The individual non-response rate was 25% (of eligible older households responding to the screening questionnaire). This percentage relates to the following reasons for non-response:

- 6% unable to be contacted
- 6% unable to give a complete response due to illness
- 13% refusals.

Achieved sample

The survey achieved a sample of 3060 people aged 65 years and over.

Analysis of non-response

An analysis of the distribution of characteristics of the respondents of the SOP compared with non-respondents and 1996 Population Census data was undertaken by Statistics New Zealand to assess potential response bias for the SOP. This analysis is provided in Appendix 2. Overall, the analysis found little evidence of any bias in the SOP sample with respect to age, sex, ethnicity, country of birth, years in New Zealand, marital status, labour force status, total income, home ownership or secondary school qualifications. However, there was some evidence that Pacific and Asian peoples who had more recently migrated to New Zealand were under-represented in the sample.

3.2 Supplementary Samples

3.2.1 Supplementary Survey of Older Māori

In addition to the main survey described above, Statistics New Zealand was commissioned to conduct a supplementary survey of 500 Māori aged 65 and over to boost the number of older Māori respondents in the research. This was because the main survey of 3,000 persons would only include about 120 Māori respondents as Māori only make up three percent of the New Zealand population aged 65 and over. This number would not allow detailed sub-group analysis with statistically reliable results to be produced for the Māori population.

Various options were investigated to achieve a sample that would enable reasonably accurate statements about the situation of older Māori to be made. These included using the electoral roll, and approaching Māori respondents whom had previously participated in the Household Labour Force Survey. The approach that was adopted was to use the Superannuation database administered by the Department of Work and Income (the Super database) as the sample frame for the survey. Seventy was chosen as an upper age limit for

sampling from the Super database because of the incompleteness of ethnicity data for Māori aged 70 years and over who qualified for New Zealand Superannuation (NZS) in the years before ethnicity was fully recorded in the administrative records.

The survey population for the survey of older Māori was defined as the usually resident, non-institutionalised New Zealand Māori population aged 65 to 69 years, living in permanent private dwellings and in receipt of New Zealand Superannuation. Māori aged 65-69 not in receipt of NZS were not included in the survey population. Eligible survey participants were those who self-identified as having Māori or part-Māori ethnicity.

For practical reasons a small number of individuals who were part of the defined survey population were excluded from the survey. Such individuals were those who:

1. had agents responsible for their finances;
2. had their records held secure by the Department of Work and Income for confidentiality reasons; or
3. lived in very remote locations.

Recipients of NZS that had agents were excluded from the survey population as they were likely to be frail and, therefore, unable to participate in the survey. The exclusions of these individuals, people living in remote places, and those with secure records will have had negligible impact on the results.

A simple random sample of Māori aged from 65 to 69 years was selected from the Super database. Only one eligible person per household was selected for the survey and confirmation was gained from respondents that they identified themselves as having Māori ethnicity (with or without other ethnic identifications). Specific cultural training was provided to the survey interviewers and a non-monetary koha²⁰ was offered to survey participants.

The survey:

- was conducted between 10 April 2000 and 12 June 2000
- involved face to face interviews about 90 minutes in length
- obtained a sample of 542 Māori aged 65 to 69 years
- achieved a response rate of 63 percent.

3.2.2 Supplementary Survey of Working-Age People

A further, but more limited, supplementary survey of people aged 18 to 64 years was conducted by ACNielsen NZ Ltd. This survey was undertaken to provide reference point information about the living standards of working-age people to assist the interpretation of the data on older people. Information was collected about living standards and some other key variables (such as income and assets), but not about the full range of potential determinants collected for the main survey of older people.

²⁰ A gift or contribution – for the survey this was most commonly food such as a packet of biscuits. See Glossary for further explanation.

The population for the survey was defined as people aged from 18 to 64 years (inclusive) living in permanent private dwellings. The sample design is best described as a fully national multi-stage stratified probability sample with clustering. The survey involved house to house sampling where only one person per household was interviewed. One person was randomly selected for participation in the survey from those eligible using a selection grid approach. In New Zealand, 83% of households contain at least one person aged 18 to 64.

Achieved sample

The survey:

- was conducted between 11 March 2000 and 18 June 2000
- involved face to face interviews about 40 minutes in length
- obtained a sample of 3682 people aged from 18 to 64 years
- achieved a response rate of 60 percent.

3.3 Research Data

3.3.1 Introduction

This section describes the information that was collected for the analysis. The questionnaire content was developed using cognitive testing and a field-test of 160 respondents for the SOP. Pre-testing of questions was also undertaken for the surveys of older Māori and working-age people. Demographic information that had already been supplied by SOP respondents through the HLFS was added to the living standards database.

Unit of analysis

The main unit of analysis for the research is the Core Economic Unit (CEU) of the respondent. The respondent serves as an informant about the unit. The CEU is made up of the respondent; her or his partner, regardless of age and sex; and any dependent children (aged under 18 years). This is distinct from the sampling unit, which was the household, with one eligible person within each household interviewed about their Core Economic Unit. Information about partners was either provided by the partner themselves or by the respondent on behalf of their partner. Since few people aged 65 and over have dependent children, this aspect of the definition of a CEU can be set aside. Operationally then, the CEU is either a single older person (living by themselves or with others) or a couple (living by themselves or with others) in which at least one partner is aged 65 years or older.

The CEU was chosen as the unit of analysis for two reasons. Firstly, it reflects the operational definition of the unit of entitlement used by the New Zealand Government for income support and assistance programmes. Secondly, when measuring living standards it is difficult to disentangle the living standard of each partner in a couple, given that their economic and social arrangements are usually intertwined. It is more practical, therefore, to regard them as a single economic unit with a shared standard of living. For the purposes

of this research, the measure of living standards developed for a CEU is assumed to apply equally to its constituent members.

Weighting to CEU and individual population estimates

While this survey has been described as a survey of people aged 65 and over, it can also be described as a survey of CEUs containing at least one person aged 65 and over. When examining the distribution of living standards and other characteristics, the differences between the population of CEUs and the population of individuals aged 65 and over need to be considered.

Each respondent to the SOP was assigned an individual weight, and a CEU weight. The weighting process inflates the sample to represent the target population, accounting for different probabilities of selection, and accounting for non-response.

There were several adjustments in the weighting process for the SOP:

- Initial probability of selection
- Household non-response
- Number of older people in a household
- Individual non-response
- Combining the main sample and extra rotation group
- Post-stratification to **individual** population benchmarks
- Adjustment to **CEU** population estimates.

With unpartnered adults there is only one adult per CEU. With partnered adults there are two adults per CEU, although in the SOP only one partner was aged 65 or over in some cases. Since males are more likely than females to have younger partners, in those CEUs with one partner aged under 65, the younger partner is more likely to be female. The difference between the population of CEUs (containing at least one adult aged 65 or over) and the population of individuals aged 65 and over is that the population of CEUs also incorporates some individuals under the age of 65, and the majority of these individuals are females. The demographic characteristics of the two populations are somewhat different, therefore, and a different weighting variable is required to weight the survey results to be representative, depending on which of these two populations is being reported on. The results presented in this report are based on the population of CEUs unless otherwise specified.

3.3.2 General and Demographic Data

The general and demographic information that was collected is presented in Table 3.1 on the following page.

Table 3.1: General and demographic data collected for the research on the living standards of older people

Variable	Information collected
Age	Age in years
Sex	Male / Female
Ethnicity ¹	Ethnicity data was further coded to one prioritised ethnicity code such that if a person identified more than one ethnic category they were coded to a certain group according to the following order of priority: Māori, Pacific Island people, Other, and European.
Country of origin	Refers to country of birth
Marital status	Social partnership status and legal marital status
Household composition:	Partnership status (single / couple) by whether dependent children, other family members, and other non-family members in the household
Core Economic Unit (CEU) composition:	Data was collected on their: relationship to the respondent, age, gender and ethnicity
Location:	North Island: Auckland / Wellington / other major urban / minor urban / rural South Island: Major urban / minor urban / rural
Labour force status	Employed / not employed
Education	Highest educational qualification
Socio-economic status	This was coded using the New Zealand Socio-economic Index of Occupational Status (NZSEI) (Davis, McLeod, Random, & Ongley, 1997) applied to the last full time occupation of the respondent and/or partner during the interval from age 50-59 years. The NZSEI gives a numerical score (ranging from 10-90) that ranks the population from low to high socio-economic status.

Note 1: This is the standard approach to coding ethnicity adopted by Statistics New Zealand. See Glossary for further explanation.

3.3.3 Information About Disabilities and Health

Physical difficulties and disabilities

Respondents were asked whether any of 11 physical difficulties or disabilities (e.g. confined to a wheelchair) applied to them (or their partner). The list of 11 difficulties and disabilities is shown in the questionnaire (Q.10 and Q10a, Appendix 1).

Health problems

Respondents were asked whether any of 14 health problems (e.g. diabetes) applied to them (or their partner). The list of 14 health problems is shown in the questionnaire (Q.9 and Q9a, Appendix 1).

Depression

Respondents were asked questions to assess for evidence of major depression based on the DSM IV diagnostic criteria for major depression (APA, 1994). This involved two filter questions followed by 28 Yes/No response items for those who answered yes to either or both of the initial two filter questions. These questions were also asked for the respondent's partner where applicable (Q. 17-35, Appendix 1).

Global self-rating of health

Respondents were asked whether they rated their health (and separately their partner's health) generally as excellent, very good, good, fair, or poor (Q. 8 and Q8a, Appendix 1).

3.3.4 Items for the Living Standards Measure

The information collected for the construction of a living standards measure is presented in this section. These questions were asked of the primary respondent for the interview.

Possessions

Information was collected about the possessions people owned (e.g. telephone, washing machine, car). The full list of 29 items is listed in the questionnaire (Q.141 and blue show cards 10-38, Appendix 1). Respondents were asked:

1. whether they had the item;
2. if they did not have it, whether they would like to have it; and
3. if they would like to have it, whether they did not have it because of the cost, or some other reason.

Respondents were also asked to rate how important they perceived owning each of the items was to them.

Social participation

Information was collected about respondents' participation in social activities (e.g. having a holiday away from home each year). They were asked about:

1. whether they did the activities;
2. if they did not do them, whether they would like to do them; and
3. if they would like to, if they did not do so because of the cost or some other reason.

Respondents were also asked to rate how important they perceived partaking in the each of the activities was to them. The full list of 10 activities is listed in the questionnaire (Q.142 and yellow show cards 39-48, Appendix 1).

Economising behaviours

Respondents were asked whether they had done certain things in the past 12 months to keep down costs (e.g. put up with feeling cold to save heating costs). The response options were no, yes a little, and yes a lot. The full list of 19 behaviours is listed in the questionnaire (Q.126, Appendix 1).

Severe financial problems

Respondents were asked whether any of six activities indicating financial problems had happened to them in the past 12 months (e.g. could not keep up with payments for electricity, gas, or water). The list of six financial problems is shown in the questionnaire (Q.127, Appendix 1).

Self-assessments

Respondents were asked self-assessment questions about their living standards. The two questions were:

- Now I am going to ask you some questions about your material standards of living – the things that money can buy. Your material standard of living does NOT include your capacity to enjoy life. You should NOT take your health into account. Generally, how would you rate your standard of living?

Respondents then rated their standard of living as high, fairly high, medium, fairly low or low (Q.133, Appendix 1).

- How well does your and your partner's combined) total income meet your everyday needs for such things as accommodation, food, clothing and other necessities. Would you say you have not enough money, just enough money, enough money, or more than enough money? (Q.130, Appendix 1).

3.3.5 Information to Assess the Validity of the Living Standards Measure

Net annual income, financial assets and accommodation costs data was used to assess the validity of the living standards measure that was developed. In addition, the following information was used for measurement validation purposes.

Ability to save

Respondents were asked which of the following best described the financial situation of their CEU over the past 12 months. They were: able to save money most months; just broke even most months; or had to borrow or draw on their savings most months. (Q.128, Appendix 1).

Money in an emergency

Respondents were asked whether they could obtain \$1500 for something important within a week, and if yes, whether they could obtain \$5000 within a week if an emergency arose. (Q.131, Appendix 1).

Health related financial stress

Respondents were asked whether any health costs for them (and/or their partner) in the past 12 months had caused them no, some, or a lot of financial stress. (Q.16, Appendix 1).

Community services card

Respondents were asked whether they (or their partner) had a community services card. (Q.77, Appendix 1).

Satisfaction of living standards

Respondents were asked how satisfied they generally were with their current standard of living. (Q.138, Appendix 1).

Living standards rating relative to other New Zealanders generally

Respondents were asked whether they rated their standard of living compared with other New Zealanders generally as better, about the same, or worse. (Q.137, Appendix 1).

3.3.6 Information about Potential Factors

Information about the following potential factors underlying variation in living standards was also collected.

Net annual income for the CEU

An estimate of net annual income for the CEU was obtained from the survey. This was derived from responses to 50 income questions asked in the survey. Respondents were first asked about their (and their partners) individual income over the past 12 months from the following sources: New Zealand Superannuation, other pensions (private and job-related pension schemes), Accommodation Supplement, Disability Allowance, overseas (regular pensions), regular paid employment; self-employment (including income from hobbies); interest; dividends; overseas income; rents (net of expenses); royalties; Māori land or other leased land; and income from trusts, bequests, maturing insurance policies, etc.

For regular income sources, such as New Zealand Superannuation, wages or salaries, respondents were asked for their latest payment to the nearest dollar, either before or after tax. For employment income and (separately) for other sources of income (such as interest or rents) respondents were asked to estimate annual income within income ranges.

Respondents were then asked to provide an estimate of the CEU's (their and their partner's) combined total annual income from all sources within income ranges up to a total income of \$100,000 or more, either before or after tax. A show card gave the respondent 14 income bands to choose from, ranging from \$2,500 bands at the low end to a \$30,000 band at the high end. For more details of the income questions, see Q.72-Q.112 in the questionnaire (Appendix 1).

An analysis of this data (including checking consistency across responses) was then undertaken to derive the best estimate of net annual income. This analysis is further described in Appendix 3. It is this best estimate of net annual income that is used in most of the analysis that follows.

Accommodation costs and tenure

- Respondents were asked whether their accommodation was owned outright; owned with mortgage; rented, or other (includes family trust owned).

- Information about accommodation costs was collected based on the respondent's last mortgage, rent, rates, board, and/or body corporate contribution payments.
- Those owning their own home were asked to provide the most recent Government Valuation of the property.

Assets

Respondents were asked whether they (and/or their partner) had the following assets (apart from their own home): other residential properties; investment in commercial properties (including syndicates); bank deposits; other New Zealand or foreign currency; life insurance policies; business ownership or investments (including farm and forestry); money or investments in a family trust; unit trusts, shares, debentures, government bonds; money owed them; and other assets (eg investment collections – antiques, car registration plates etc).

They were then asked to estimate the value of the total assets that they had identified within value ranges up to a total value of \$400,000 or more. Bands of \$50,000 were used between \$50,000 and \$400,000, with six smaller bands below \$50,000. The mid-points of these ranges were used when point estimates were required for the analysis.

Recent financial stresses

Respondents were asked whether any of 14 events had happened to them (or their partner) in the past 12 months causing unusual financial stress (e.g. natural disaster). The list of 14 events is shown in the questionnaire (Q.125, Appendix 1).

Number of children (ever)

Respondents were asked about how many children they had been responsible for raising or supporting (Question 7, Appendix 1).

Family contact

Respondents were asked how often they kept in touch with close friends or family members they did not live with (Q.39, Appendix 1).

Family support

Respondents were asked whether extended family members had helped them (or their partner) out in any of 13 ways in the past 12 months (e.g. mowed their lawn). The list of 13 support activities is shown in the questionnaire (Q.42, Appendix 1).

Home production

Respondents were asked whether they (or their partner) had done any of 10 home production activities in the past 12 months (e.g. home-baking). The list of 10 activities is shown in the questionnaire (Q.46, Appendix 1).

Major events when aged 50 to 59 years

Respondents were asked whether any of 13 events had occurred for the respondent (or their partner of the time) during the period when the respondent was aged 50 to 59 years (e.g. mortgagee sale of home). The list of 13 events is shown in the questionnaire (Q.124, Appendix 1).

3.3.7 Data capture

Once interviews were completed, the information collected on the questionnaires was coded and entered into a computer database in Wellington, and data edit checks were carried out. This dataset was then delivered to the Ministry of Social Policy and to the analysis team who carried out the analyses that follow.

The next chapter presents the key descriptive features of the sample from the information that has been collected.

