



New Zealand
Crime and Victims **survey**

HELP CREATE SAFER COMMUNITIES

Methodology Report
2018 (Year 1)

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Executive summary

The following table provides a summary of the key methodological elements of the New Zealand Crime and Victims Survey (NZCVS) 2018.

Summary of New Zealand Crime and Victims Survey

	Details	
Aim	NZCVS is an annual survey which provides information for researchers, policy makers and the public about the nature and extent of crime and victimisation in New Zealand.	
Overview	Nationwide, face-to-face random probability survey, with one respondent selected per household using multistage stratified cluster sampling methods.	
Target population	Total usually resident, non-institutionalised, civilian population of New Zealand aged 15 years and over.	
Sampled areas	North Island, South Island and Waiheke Island.	
Dwellings included	Permanent, private dwellings. Note: While hospitalised or dependent residents of homes for the elderly were ineligible for the survey (i.e. living in institutions), residents of aged care facilities who were living independently in a permanent, private dwelling (e.g. a self-contained unit) were eligible.	
Sample composition	Two samples were drawn as part of the NZCVS: a general or 'main' sample and a Māori booster sample that aimed to increase sample size for Māori.	
Interviews completed	Main sample:	5,273
	Māori booster sample:	2,757
	Total sample:	8,030
Response rates	Main sample:	81%
	Māori booster sample:	80%
	Total sample:	81%
Interviewing period	1 March 2018 – 7 October 2018	
Average interview length	21 minutes and 33 seconds	
Questionnaire recall period	12 months preceding the date of the interview ¹	
Crimes/offences	In the NZCVS, questions were asked about different events (incidents) that might have happened to the respondent or their household. These incidents were then coded by legal experts to determine whether or not the incident was a crime, and what type of offence (or offences) occurred. Important: The NZCVS does not ask survey participants about crimes that happened to them. This is because people don't always: <ul style="list-style-type: none"> • view some things that happen as crimes • know what are legally considered crimes and what aren't. 	

¹ While most critical questions use the recall period 12 months preceding the date of the interview, there were some that referred to a different period (eg the in-depth module questions on lifetime prevalence of sexual assault and offences by a partner).

	Details
In-depth module	The focus of the in-depth module for 2018 was family/whanau violence.
Comparability between surveys	The NZCVS is the successor to the New Zealand Crime and Safety Survey (NZCASS), which was administered in 2006, 2009 and 2014. Although some elements of the NZCVS are similar or the same as NZCASS, the NZCVS questionnaire and methodology has been completely redesigned. For this reason, the results of the NZCVS are not comparable with previous victimisation surveys.
Weighting	Two types of weighting were applied: <ul style="list-style-type: none"> • household weights: to ensure that results represent all households in New Zealand • individual weights: to ensure results represent the New Zealand population.
Imputation	Missing income data were imputed by nearest neighbour hotdeck. Offence codes were not available for five percent of incidents as victim forms were not available, as the maximum eight forms had already been completed. These data were also imputed from the distribution of offence codes associated with the scenario that generated the incident.

1. Introduction

The New Zealand Crime and Victims Survey (NZCVS) is being introduced to replace the New Zealand Crime and Safety Survey (NZCASS) following the 2015 Stats NZ review of NZCASS. A key recommendation of this review was to explore options to redevelop NZCASS in order to collect crime volume data annually, expand the crime type coverage, allow more comprehensive data analysis and improve the cost efficiency of running the survey and delivering the results.

The NZCVS has a modular design including core crime and victimisation questions which will be repeated every year to form consistent time series, and revolving modules added annually. It is an annual survey which provides information for researchers, policy makers and the public about the nature and extent of crime and victimisation in New Zealand. 2018 is the first time that the NZCVS has been conducted in its current form.

The purpose of this manual is to provide:

- a detailed description of the design and methods used
- information about the management and quality assurance processes undertaken as part of the 2018 NZCVS
- Additional technical and analytical information for use of NZCVS findings.

Research objectives

The research objectives of the 2018 NZCVS are to:

- measure the extent and nature of both reported and unreported crime across New Zealand
- understand who experiences crime and how they respond
- identify the groups at above-average risk of victimisation
- facilitate a better understanding of victims' experiences and needs
- provide a measure of crime trends in New Zealand
- provide more timely and adequate information to support strategic decisions
- significantly shorten the period between data collection and reporting
- match survey data with relevant administrative records in order to reduce information gaps in the decision and policy making process.

Key benefits

The key benefits NZCVS will provide are:

- an increased ability to quantify the underlying level of crime
- an improved ability to monitor crime trends over time by delivering annual reports
- an ability to collect particular aspects of victimisation or types of crime and to learn about victims' experience related to the selected prioritised topic
- an improved ability to support performance monitoring for the wider Justice System
- an improved ability to analyse survey results by linking victimisation to other outcomes by bringing the NZCVS into Stats NZ's Integrated Data Infrastructure (IDI) in order to better inform conversations and decision-making.

The NZCVS process

The high-level NZCVS timeline shown in Table 1.1.

Table 1.1: The NZCVS process - stage timeline

Dates	Project activities	Description
July 2016	Statistics NZ review	Recommendation on the survey improvement.
August 2016	Start-up and initiation	Project planning and set-up of initiation and governance structures.
September 2016	Investment Logic workshops and discussion	Discussing the project objectives, high-level approach, inclusions and exclusions with key stakeholders.
October-November 2016	Developing the Case for Design and Implementation	The document summarising the project objectives and core requirements.
December 2016 – April 2017	Tendering and contracting	Open tender for all core services: project design, fieldwork and reporting. Contract negotiations.
May – December 2017	Project design	Included stakeholder engagement, core questionnaire design, in-depth module questionnaire design, offence coding design, victim forms design, sampling methodology design, data processing methodology design.
January – February 2018	Testing, piloting and preparation to the fieldwork	Cognitive testing of questionnaires, piloting the survey procedures, sampling, training the interviewers.
March – September 2018	Fieldwork	Primary data collection, manual offence coding.
July 2018	In-depth module for the second cycle of NZCVS	Questionnaire design, cognitive testing and survey piloting.
August 2018	Technical report writing	Producing NZCVS technical report
October 2018	Data processing	Data cleaning, compiling and formatting datasets, weighting, imputations, data quality assurance processes.
October 2018	Fieldwork (second cycle)	The fieldwork for the second cycle of NZCVS commenced (due 30 September 2019)
November 2018	Analysis and topline report writing	Analysis of the cleansed datasets and producing NZCVS topline report
December 2018	Dataset for IDI	Preparing dataset for linking with the Integrated Dataset Infrastructure (Statistics NZ). Note: only records which obtained respondents' consent.
January – March 2019	Full size project report (first cycle)	Preparing the full size NZCVS project report.

Quality assurance processes

Due to the complexity of the NZCVS, specialised quality assurance processes were designed for each different activity and put in place at each stage of the project. These processes have been detailed within each chapter where relevant.

Comparability with previous surveys

NZCVS is a new survey with some significant differences in design as compared with its predecessor NZCASS. In particular, NZCVS:

- has a larger annual sample (target of 8000, versus 7000 for NZCASS)
- uses different approach to offence coding (more consistent with Police approach)
- applies much lower level of data imputation as compared with NZCASS
- covers additional offence types (e.g. fraud, cybercrime)
- employs different approach for collecting data from highly victimised people (allowing similar incidents to be reported as a cluster).

These differences, especially the different approach to offence coding and to data imputation make direct comparison with its predecessor NZCASS impossible, even within similar offence types.

However, consistent annual reporting provides significantly better opportunity to build reliable time series and analyse victimisation trends. NZCVS is therefore an improvement on NZCASS, where it often took two or three years to publish the results. NZCVS will produce a much greater range and depth of information than the previous survey, and this data will be current.

2. Sampling

Overview

Table 2.1 provides an overview of the key information relating to the sampling process for NZCVS.

Table 2.1: Overview of sampling information

Sampling element	Detail
Overview	Nationwide, face-to-face random probability survey, with one respondent selected per household, using multistage cluster sampling methods.
Multistage sampling	<p>Primary sampling units (PSUs) were drawn from Stats NZ's Household Survey Frame. Houses were selected within each PSU. A single respondent was selected from within each dwelling. Each respondent then answered questions about incidents they had experienced:</p> <ol style="list-style-type: none"> 1. selected first: PSUs 2. selected second: households (dwellings) within PSUs 3. selected third: one respondent within each household 4. final: selection of some (or all) incidents from those experienced by respondents.
Samples	<p>Two samples were drawn for NZCVS:</p> <ul style="list-style-type: none"> • main sample • Māori booster sample. <p>The purpose of the Māori booster sample was to ensure that the survey collected sufficient data from Māori, in order to produce reliable results for this group.</p>
Primary sampling unit (PSU)	Stats NZ primary sampling units (PSUs). ² PSUs are formed following the 2013 Census of Population and Dwellings. PSUs contain an average of 70-100 dwellings.
Number of PSUs selected	One thousand PSUs were selected using a probability proportional to size sampling (PPS) method, based on the size of PSUs (number of private dwellings) and NZDep Scores of PSUs.
Target population	Total usually resident, non-institutionalised, civilian population of New Zealand aged 15 years and over.
Sampled areas	North Island, South Island and Waiheke Island.
Areas excluded	Offshore islands other than Waiheke Island.
Sample frame	<p>In the NZCVS, sample PSUs were selected from "Stats NZ's Household Survey Frame (HSF)". Within PSUs, two sampling frames were used:</p> <ul style="list-style-type: none"> • New Zealand Post's Postal Address File (PAF; the most complete and up-to-date database of postal addresses in NZ) • Māori electoral roll.

² 2015 PSU definitions were used for the main study sampling.

Sampling element	Detail
Enumeration	In-field enumeration was completed by interviewers. Any addresses in the pre-selected sample that were not dwellings (e.g. businesses or empty sections) were removed, and any dwellings that were not in the original sample were added. Added dwellings were selected on-the-fly, according to the pre-defined 'skip' for that PSU. This ensured that they had the same chance of selection as other dwellings that were in the original sample list.
Dwellings included	Permanent, private dwellings. Note: While hospitalised or dependent residents of homes for the elderly were ineligible for the survey (i.e. living in institutions), residents of aged care facilities who were living independently in a permanent, private dwelling (e.g. a self-contained unit) were eligible.
Dwellings excluded	<ul style="list-style-type: none"> temporary private dwellings non-private dwellings. The Māori booster sample only included addresses where an elector of Māori descent resided.
Eligible respondents	As noted above under 'Target population', eligible respondents were usually resident, non-institutionalised civilians, aged 15 years and over. For the Māori booster sample, one occupant identifying as Māori was randomly selected from all occupants identifying as Māori (if any), otherwise one occupant was randomly selected.
Ineligible respondents	<ul style="list-style-type: none"> those who were present at the time of the interview but usually resided elsewhere (either within New Zealand or overseas) non-New Zealand diplomats and their non-New Zealand staff members of the non-New Zealand armed forces stationed in New Zealand overseas visitors in New Zealand for less than 12 months children under shared custody arrangements if they spent more nights of the week elsewhere. those living in institutions, hospitals, barracks etc those without a usual residence (homeless).
Sampling error	Sampling error arises because only a small part of the New Zealand population is surveyed, rather than the entire New Zealand population (census). Because of this, the results (estimates) of the survey will generally differ to some extent from the figures for the entire New Zealand population. This difference due to random sampling variation is known as sampling error. The size of the sampling error depends on the sample size, the size and nature of the estimate, and the design of the survey.

Sampling assumptions, targets and outcomes

This section provides information on:

- the assumptions made in the NZCVS to design the sample and plan fieldwork
- key targets (e.g. number of interviews/response rates) and what was achieved.

The assumptions noted in Table 2.2 were used to help estimate statistics like 'the number of interviews expected to be conducted with Māori respondents as part of the main sample' and to help estimate research costs. These are contrasted against the results achieved.

Table 2.2: Summary of sampling assumptions, targets and outcomes

	Description	Target/Assumption	Achieved
Booster source	Māori electoral roll		
Number of PSUs selected	Total sample (dwellings for both the main and Māori booster samples were selected in each PSU)		1,000
Average number of households selected per PSU	Main sample	7.5 ³	7.6 ⁴
	Māori booster sample	4	3.9 ⁵
	Total sample	11.5	11.4
Sample loss (proportion of selected addresses which were not occupied private dwellings)	Main sample	10%	12%
	Māori booster sample	10%	10%
	Total sample	10%	12%
Average interviews per PSU	Main sample	5.4	5.3
	Māori booster sample	2.9	2.8
	Total sample	8.3	8.0
Main sample yield	Non-Māori	4590	4374
	Māori	810	899
	Total	5400	5273
Māori booster sample yield	Non-Māori	1538	1351
	Māori	1258	1406
	Total	2796	2757
Total sample yield	Non-Māori	6128	5725
	Māori	2068	2305
	Total	8196 ⁶	8030
% of interviews conducted with Māori	Main sample	15%	17%
	Māori booster sample	45%	51%
	Total sample	25%	29%
Response rate	Main sample	80%	81%
	Māori booster sample	80%	80%
	Overall	80%	81%

³ In 500 PSUs seven dwellings were selected, and in the other 500 PSUs, eight dwellings were selected. This was done to ensure that the target of 8000 interviews was not exceeded by a significant margin.

⁴ The actual number of selected main sample houses was higher than target as 78 of the 573 houses enumerated into the sample in-field by the interviewers, were selected for inclusion in the sample.

⁵ The actual number of selected booster sample houses was lower than target due to the lack of households containing Māori electors in some PSUs.

⁶ 8196 was the projected survey yield based on a response rate of 80 percent. The target number of surveys was 8000.

Survey frame

The survey frame comprises the databases and methods used to select the sample. The first stage in the NZCVS sampling process was to list the Primary Sampling Units (PSUs) that fell within the geographical coverage of the survey, and to select a sample of these PSUs with probability proportional to size. This precedes the selection of dwellings within each PSU, and respondents within those dwellings.

About meshblocks and PSUs

A meshblock is the smallest geographical statistical unit for which data is collected and processed by Stats NZ⁷. Meshblocks can be aggregated into larger statistical units such as area units, territorial local authorities and regions. The meshblock pattern is reviewed annually. According to the 2013 meshblock definition, there were 46,637 meshblocks in New Zealand.

The sampling frame used for selecting PSUs at the first stage of the NZCVS is Stats NZ's Household Surveys Frame (HSF). The HSF is the standard sampling frame that Stats NZ uses to select samples and manage overlap control between a variety of household-based surveys which run either with Stats NZ, or other government departments (e.g. the Ministry of Health's New Zealand Health Survey). PSUs in this frame are comprised of a combination of one or more meshblocks⁸ and have an average of 70 dwellings. There are a total of 22,440 PSUs in the HSF.

PSUs were selected from both the North and South Islands as well as Waiheke Island. After inclusion and exclusion processes, one PSU and 1,424 occupied private dwellings were excluded⁹.

Stage 1: Primary sampling unit selection

Defining Inclusion Probabilities of PSUs

The first stage of the sample selection process for NZCVS involved the selection of 1,000 PSUs from the Stats NZ HSF. The required sample of 1,000 PSUs for NZCVS were selected with probability proportional to size (PPS) where "size" was the number of private dwellings in a PSU.

Since experiencing crime is strongly linked with the socio-economic factors, a decision was made to select slightly more PSUs from areas which have higher level of socio-economic deprivation. NZDep2013 Index of Deprivation (NZDep) which is created by Otago University, and is available in the HSF, provides a comparative measure of deprivation among areas in New Zealand. Based on the NZDep, New Zealand's PSUs are scaled from 1–10, where one represents the PSUs with the least deprived scores, and 10 represents the areas with the most deprived scores¹⁰.

In the NZCVS sample selection process, NZDep deciles were combined together to create a new index with five quintiles. Similar to the NZDep index, PSUs in the higher quintiles were more deprived than the PSUs in the lower quintiles. The concordance between the decile and quintile scales is provided in Table 2.3.

⁷ <http://archive.stats.govt.nz/methods/classifications-and-standards/classification-related-stats-standards/meshblock/definition.aspx>

⁸ 2013 definition.

⁹ The 2013 Census count of occupied private dwellings for the 22,439 PSUs in the sample frame was 1,552,306.

¹⁰ The University of Otago produce the NZDep classification at the meshblock-level (<http://www.otago.ac.nz/wellington/departments/publichealth/research/hirp/otago020194.html>). Where a PSU consisted of more than one meshblock, Stats NZ assigned the most common NZDep score (by share of dwellings) to produce PSU-level scores.

Table 2.3: NZDep decile to quintile concordance

NZDep quintile	NZDep deciles
1 (least deprived)	1, 2
2	3, 4
3	5, 6
4	7, 8
5 (most deprived)	9, 10

In order to oversample deprived areas, it was decided to select more PSUs from areas which had higher NZDep scores. The frequency of population PSUs with different NZDep quintiles and the sample size preference for each quintile are shown in the second and third columns of Table 2.4, respectively.

Table 2.4: PSUs per NZDep quintile and sample size preference

NZDep quintile	Number of PSUs	Sample size preference
1 (least deprived)	3,996	160
2	4,768	180
3	4,873	200
4	4,668	220
5 (most deprived)	4,134	240

The preference sample size in each NZDep quintile can be met by stratifying the population into five explicit strata (according to the NZDep quintile) and then implementing the sample selection method in each stratum separately. However, creating the explicit strata may make the sampling design more complicated, resulting in some difficulties in the step of population characteristics estimation.

Because of this, it was decided to control the sample size preference in each NZDep quintile by assigning a proper inclusion probability to each PSU and then using the coordinated sampling technique. In this case, it is not necessary to stratify the population explicitly. In fact, the stratification information is used only to calculate the proper inclusion probabilities.

In the NZCVS sampling design, the proper inclusion probability of each PSU was calculated according to its NZDep quintile score and the number of dwellings located in it, by using the below equation:

$$\pi_{ij} = n_i \times \frac{\text{Size } V_{ij}}{\sum_j \text{Size } V_{ij}} \quad \text{for } i = 1, 2, 3, 4, 5.$$

where:

π_{ij} = inclusion probability of j^{th} PSU which have score i in NZDep quintile index,

n_i = sample size preference of PSUs which have score i in NZDep quintile index, and

$\text{Size } V_{ij}$ = size variable (the number of dwellings) of j^{th} PSU which have score i in NZDep quintile index.

Stratifying PSUs Implicitly

According to information that the Ministry of Justice (the ministry hereon in) provided about the number of burglaries and assaults which have occurred in different regions of New Zealand¹¹, PSUs were categorised by Statistics NZ into three different groups: PSUs which had high offence rates, PSUs which had medium offence rates and PSUs which had low offence rates. Based on this categorisation, an auxiliary variable was created, u , which takes values 1, 2 or 3 as below:

$u_i = 1$ if PSU i has high offence rate

$u_i = 2$ if PSU i has medium offence rate

$u_i = 3$ if PSU i has low offence rate

In order to spread the sample PSUs over all regions in New Zealand, and ensure that the selected sample could provide a good coverage of PSUs with different offence rates, an implicit stratification was defined using Territorial Authority and u as implicit stratification variables. Through the implicit stratification, after ordering the frame (HSF) by the stratification variables (TA and u), sample PSUs were selected systematically.

Sample PSU selection

After calculating the inclusion probabilities and defining the implicit stratification variables, sample PSUs were selected using coordinated sampling. Coordinated sampling is a sampling technique which is used by Stats NZ to control overlap between sample PSUs among all household surveys.

Stage 2: Dwelling selection

Main sample

In each PSU selected, an attempt was made to select the same number of occupied private dwellings to be approached for the main sample. A systematic sample of dwellings was selected from a list of all dwellings in the PSU, following the process described in the section titled 'Process for incorporating address files' (page 22). This process distributed the selected dwellings throughout the PSU.

Part of this process is the selection of every x^{th} address from a randomly selected starting point within the PSU. Here x is the sampling interval, which can be derived by dividing the number of census counts of occupied private dwellings in the PSU, by the cluster size. The cluster size was set at 6.75; that is, the average cluster size of occupied dwellings to be approached in the 1,000 PSUs for the main sample was 6.75. This cluster size was determined by the number of PSUs sampled (1,000), the assumed response rate (80 percent) and the final required sample size (5,400). Approaching 6,750 occupied dwellings with a response rate of 80 percent would result in 5,400 interviews, so 6.75 occupied dwellings needed to be approached in each PSU. Note that more dwellings than this were actually selected per PSU for the main sample – 7.5. This was based on the assumption that 10 percent of addresses selected would not be private occupied dwellings (i.e. they were unoccupied private dwellings, businesses or empty sections). To produce a sample with an average of 7.5 houses per PSU, seven houses were selected in 500 randomly selected PSUs and eight houses were selected in the remaining PSUs. See Table 2.5 for assumed survey yield.

As described above, every x^{th} dwelling was included in the main sample, and this method distributed the selected dwellings throughout the PSU, irrespective of PSU size.

Fieldwork processes

Addresses were pre-selected by the Ministry's contracted fieldwork provider, CBG Public Sector Surveying (CBG) before the interviewer visited the PSU. This meant that interviewers were given a list of addresses they needed to visit, with each address having already being sent an invitation letter and information leaflet about the survey (see Appendix B). Interviewers were also given a complete list of addresses on file for each PSU they worked in, so they could survey the PSU and enumerate

¹¹ This information was sourced from previous crime surveys and NZ Police administrative database.

any dwellings that were missing from this list. A proportion of these enumerated dwellings were then selected for the main sample.

A final contact outcome was recorded for every dwelling in the main sample (see Chapter 6 for further details of contact outcomes and response rates in the main sample).

Māori booster sample

The Māori booster sample was designed to ensure that responses were obtained from at least 2,000 Māori.

Addresses for the Māori booster sample were selected from those on the electoral roll where an elector of Māori descent resided, within the 1,000 PSUs selected for the main sample. Addresses that were already selected for the main sample were excluded. See page 22 for information about the 'Process for incorporating address files'.

The number of booster sample addresses to approach in each PSU was calculated assuming an 80 percent response rate and that in 45 percent of cases, a person identifying as Māori would complete the interview (this figure was 15 percent in the main sample). The cluster size for the Māori booster sample was 3.6, with a target of four booster houses to be selected per PSU. In the end, 3.9 booster houses were selected per PSU due to the fact that in some PSUs, there weren't enough addresses on the electoral roll to select four booster dwellings.

A final contact outcome was recorded for every dwelling selected for the Māori booster sample (see Chapter 6 for more details).

Table 2.5: Sampling assumption

	Main Sample	Booster Sample	Total
Selected dwellings per PSU	7.5	4	11.5
Total selected dwellings	7,500	4,000	11,500
Occupied dwellings (90%)	6,750	3,600	10,350
Completed interviews (80%)	5,400	2,880	8,280
Interviews with Māori (15% in Main, 45% in Booster)	810	1,296	2,106

Stage 3: Respondent selection

To select the respondent within each sampled dwelling, the interviewer asked the person who answered the door for the initials, age and gender of every eligible occupant in the dwelling. The householder was also asked to report if any of the listed occupants considered Māori to be one of their ethnic groups. CBG's Sample Manager¹² software then automatically selected one person to be the respondent based on the following rules.

- if there were occupant(s) present who identified as Māori, one person was randomly selected from those identifying as Māori
- if there were no occupant(s) present who identified as Māori, one occupant was selected at random.

There was no substitution in the case of non-response.

¹² The CBG Sample Manager is a survey administration software platform that runs on surveyors' laptops. It handles all aspects of survey fieldwork, including providing lists of houses that have been selected and relevant maps, managing household visiting and callback protocols, respondent selection and managing consent forms. It synchs data back to CBG servers for daily backup of survey data.

Because many types of victimisation are household-based, only one respondent per dwelling was selected. This provided efficient measurement of household victimisation, and avoided potential contamination effects that may have arisen if more than one person in a household was interviewed. As discussed in Chapter 10, weights for person-based estimates incorporated the number of residents aged 15 or older in each household to remove any household size biasing effect, which is a routine statistical procedure for household-based surveys.

Probabilities of selection

PSUs

The final probability that a PSU was selected was supplied by Stats NZ.

Dwellings

The probability that a dwelling was selected for the main sample was:

$$\text{Pr}(\text{selection of dwellings in the main sample}) = \text{Pr}(\text{PSU selected}) \times \text{PrM}$$

Where,

$$\text{PrM} = (\text{main sample dwellings selected}) / (\text{total dwellings in PSU})$$

As a dwelling that was selected in the booster sample could also have been selected in the main sample the probability that a dwelling was selected for the Māori booster sample was:

$$\text{Pr}(\text{selection of dwellings in the booster sample}) = \text{Pr}(\text{PSU selected}) \times (\text{PrM} + \text{PrB})$$

Where,

$$\text{PrB} = (\text{booster dwellings selected}) / (\text{ER dwellings in PSU} - \text{ER dwellings in main sample})$$

Alternatively:

$$P_{ji,1} = P_i \times \frac{n_{i,1}}{m_i}$$

$$P_{ji,2} = P_i \times \left(\frac{n_{i,1}}{m_i} + \frac{n_{i,2}}{mER_i - mER_{i,1}} \right)$$

Where:

$P_{ji,1}$: the probability of selection of the j^{th} dwelling in the i^{th} PSU for the main sample

$P_{ji,2}$: the probability of selection of the j^{th} dwelling in the i^{th} PSU for the booster sample

P_i : probability of selection of the i^{th} PSU

$n_{i,1}$: number of main sample dwellings selected in the i^{th} PSU

$n_{i,2}$: number of booster sample dwellings selected in the i^{th} PSU

m_i : total dwellings in the i^{th} PSU

mER_i : number of addresses with Māori flag in the i^{th} PSU

$mER_{i,1}$: number of addresses with Māori flag in the i^{th} PSU which have been already selected in the main sample

Respondents

The probability that a respondent was selected was:

- household with Māori occupant = $1 / (\text{number of Māori occupants})$
- household with no Māori occupants = $1 / (\text{number of occupants})$.

Process for incorporating address files

The process for incorporating New Zealand Post's Postal Address File (PAF) and electoral roll addresses is shown in Table 2.6.

Table 2.6: Process for incorporating address files

Step	Purpose	Process description
1	Create list from which to select addresses	Add addresses from the electoral roll (where an elector of Māori descent resides) to the PAF, if these addresses were not already included in the PAF.
2	Prepare the sample data	Remove incomplete and ineligible addresses from the combined file.
3	Main sample selection	Select addresses for the main sample systematically from the combined list by applying the specified main sample skip interval for each PSU. (Within each PSU, addresses were ordered by street address then by street number. A random house was selected in the PSU, then every k^{th} house from there was selected, where k was the specified skip interval for the main sample in that PSU.)
4	Prepare the booster sample data	Remove any addresses already selected for the main sample.
5	Māori booster selection	Select a specified number of addresses for the Māori booster sample systematically from the remainder of the electoral roll by calculating and applying a booster sample skip interval, beginning at a random house. (Addresses were ordered by street address then by street number. A random house was selected in the PSU, then every x^{th} house was selected, where x was the booster sample skip interval for that PSU.) In 79 PSUs, the target number of booster households (four) could not be selected due to insufficient dwellings containing a Māori elector according to the electoral roll. In these PSUs between zero and three booster houses were selected.
6	Enumerated addresses added	Systematically select freshly enumerated addresses (i.e. any enumerated addresses that did not appear in the combined PAF/electoral roll list) using the main sample skip interval. (The PAF contained no addresses for one of the selected PSUs, despite the census showing occupied private dwellings in that PSU.)

3. Questionnaire, incident selection and automated offence coding

Introduction

As mentioned in Chapter 1, following recommendations in a review by Stats NZ, the decision was made to discontinue the NZCASS and to implement a new survey which better met the core requirements of the ministry and key stakeholders. It was decided at an early stage that the survey needed to be modular in nature. This would allow the ongoing collection of victimisation prevalence and incidence data using a core set of questions that would change very little over time, and could be used to establish time trends. The core questions would be supplemented by rotating in-depth modules, focusing on particular areas of interest to stakeholders. The focus of the year one in-depth module questions was family/whānau violence.

Full details of the questionnaire development are provided in the next chapter. The following provides an overview of the survey structure and interview modes.

Mode of interviewing

Interviews as part of the NZCVS were conducted using:

- computer-assisted personal interviewing (CAPI), where interviewers enter respondents' answers into a laptop
- computer-assisted self-interviewing (CASI), where respondents are handed the laptop and can enter their own responses.

There are three key advantages to this mode of interviewing in relation to the NZCVS:

- computer-assisted interviewing software ensures that survey logic is adhered to
- the selection of victim forms can be automated
- respondents can answer sensitive questions confidentially using CASI and reduce bias.

CAPI interviewing has the benefit of the interviewer being able to control the survey process. They are experienced with the survey questions and software, and can use techniques such as probing to verify responses. The main drawback is that it does not afford the respondent privacy when answering sensitive questions. Administering questions by CASI tends to elicit more honest responses to sensitive questions, and affords better protection of the respondent's privacy, however the burden on the respondent is increased as they have to read every question and use computer software they are not familiar with. This burden is increased for those with poor language or computer literacy. Given these constraints, a balance had to be struck between minimising respondent burden whilst improving the general quality of responses, by interviewing in CAPI mode, versus protecting respondent privacy but potentially sacrificing the quality of responses.

Most part of the survey can be considered sensitive to a greater or lesser extent. What one person consider sensitive, may not be considered so to someone else. The survey designers determined that questions relating to sexual assault, other assault, harassment, threatening behaviour and partner controlling behaviours were the most sensitive and as such were all administered by CASI, with the remainder of the questions being administered CAPI.

There were a couple of general exceptions to this division: firstly, prior to the first CASI section containing the questions mentioned above, respondents were also offered the opportunity to self-complete the preceding questions relating to property damage, theft, trespass, robbery, fraud and cybercrime. The rationale being that some of these incidents may have been committed by family members, which respondent may be reluctant to disclose to the interviewer. The other exception was in the CASI sections where the respondent could elect for the interviewer to continue to administer the questions in CAPI mode provided that their privacy was protected. Some examples of the CAPI and CASI software screens are provided in Appendix C.

The questionnaire

Figure 3.1: Overview of the structure and content of the NZCVS questionnaire.

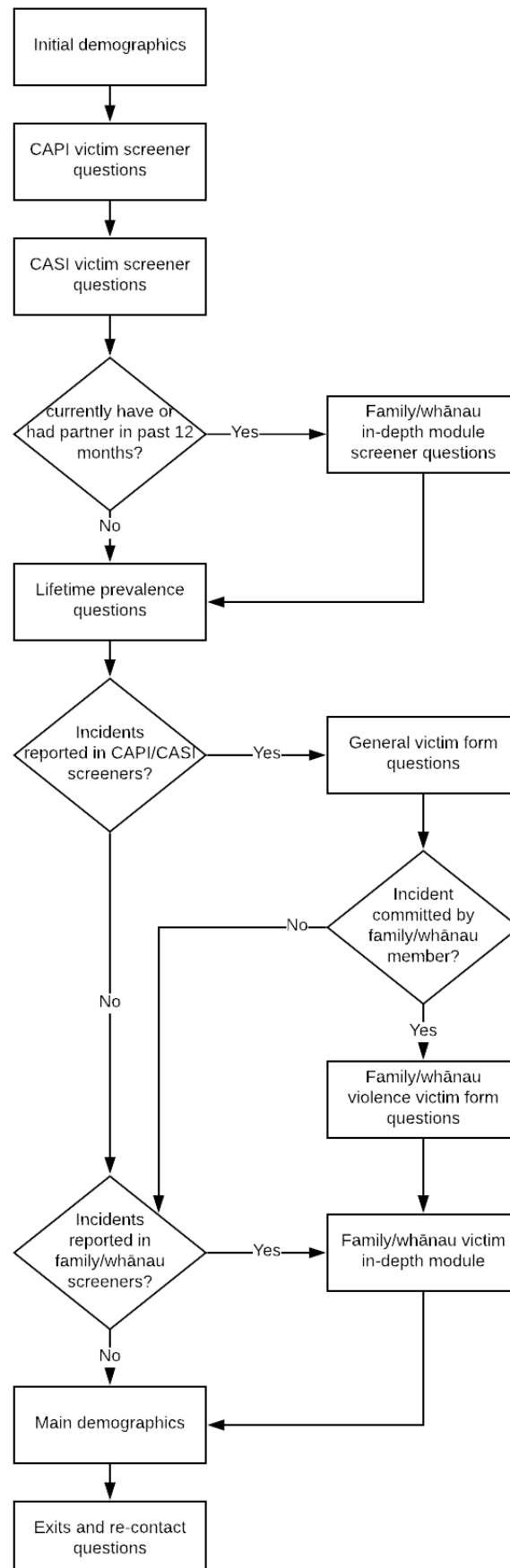


Table 3.1 provides an outline of the questionnaire sections and the topics covered in each section. In-depth module sections are shaded in blue.

Table 3.1: Outline of topics covered in NZCVS questionnaire by section

Section	Questions	Mode
Initial demographics	<ul style="list-style-type: none"> sex age partnership status marital status life satisfaction / satisfaction with safety 	CAPI
CAPI Victim screener questions	<ul style="list-style-type: none"> household and personal offences screener questions (excludes inter-personal violence (includes sexual violence), harassment and threatening behaviour). 	CAPI
CASI Victim screener questions	<ul style="list-style-type: none"> inter-personal violence (includes sexual violence), harassment and threatening behaviour. 	CASI
Family/whānau in-depth module screener questions	<ul style="list-style-type: none"> controlling partner behaviours 	CASI
Lifetime prevalence	<ul style="list-style-type: none"> lifetime experience of sexual assault / partner violence 	CASI
General victim form questions	<ul style="list-style-type: none"> same/series of offences date of offence incident description location of offence contact with the offender existence of Protection, Restraining, or Police Safety Orders offender's attitudes towards victim's race, sexuality, age, sex, religion and disability cost of crime insurance time off work reporting to Police injury and weapon use perceptions of seriousness of incident 	CAPI for incidents relating to CAPI screeners and CASI for incidents relating to CASI screeners
Family/whānau violence victim form questions	<ul style="list-style-type: none"> offender affected by alcohol / drugs victim affected by alcohol / drugs incident triggers type of injury severity of injury medical attention emotional reactions impact of incident on victim presence of children 	CAPI for incidents relating to CAPI screeners and CASI for incidents relating to CASI screeners
Family/whānau violence in-depth module	<ul style="list-style-type: none"> support service awareness contact with support services help / advice received from support services and usefulness reasons for not seeking help from support services help / advice received from family/whānau, friends and neighbours and usefulness reasons for not seeking help from family/whānau, friends and neighbours unmet need for help / advice relating to family/whānau violence incidents 	CASI

Section	Questions	Mode
Main demographics	<ul style="list-style-type: none"> • ethnicity • functional difficulties • psychological distress • employment status • housing and tenure • gender identity • sexual identity • income • financial stress • household composition 	CAPI (with the exception of gender and sexual identity and income which are administered CASI)
Exit and re-contact questions	<ul style="list-style-type: none"> • re-contact for audit • future research consent • data linking • interviewer observations • respondent burden assessment. 	CAPI

Selection of incidents

During the screener questions, respondents were asked how many incidents of each type of crime they had experienced in the past 12 months. As illustrated above in Figure 3.1, respondents were then asked for more detail about some of these incidents via victim forms.

Due to the time it takes for a respondent to complete a victim form, it is not feasible for a heavily victimised respondent to fill in a victim form for each incident they experienced. For this reason, the survey capped the number of victim forms that any individual respondent could complete, at eight. A cap of eight victim forms was chosen as it achieved an optimal balance between survey length and maximisation of incident data collection.

Selection of incident scenarios

The NZCVS consists of 29 screener questions and 17 follow-on clarification questions. The follow-on questions collected additional information about the incident which enabled a provisional incident code to be assigned. For example, question VS2.01 is the screener question which asks if a vehicle has been stolen or taken without permission, and VS2.02 is a follow-on question which checks if the vehicle was parked inside a private yard at the time. The combination of these screeners and follow-on questions, results in a total of 46 unique incident scenarios.

All incident scenarios were prioritised roughly in order of rarity / severity of harm and damage, from 1–46¹³, such that those types of incidents that occurred less-frequently and were more serious, were prioritised above those that were more common / less serious. For example, the assault scenarios were prioritised above the burglary ones. In addition, all scenarios which originated from CASI screeners were prioritised above those originating from CAPI screeners. This was done to minimise the need for the laptop to be handed back and forth between the interviewer and respondent (all CASI victims forms were completed by the respondent independently, before handing the laptop back to the interviewer to administer the CAPI victim forms).

As the respondent completed the screener questions, the survey software populated a table in the background which recorded the frequency of each scenario. It then sorted the scenarios by the pre-determined prioritisation.

¹³ See appendix A

Individual and cluster victim forms

In order to collect as much information about as many incidents as possible, similar incidents were grouped together, and the respondent was asked the victim form questions about the group of incidents as a set. These were termed 'cluster' victim form questions. Where two or fewer incidents were recorded for a particular incident scenario, the respondent was asked about each incident separately. These were termed 'individual' victim form questions, and related to a single incident.

Where a respondent indicated that an incident scenario had occurred three or more times, they were asked to consider if the incidents were similar (where a similar thing was done, under similar circumstances and probably by the same person / people). There were three answer options for this question:

1. yes – all of them were similar
2. yes – some of them were similar
3. no – all were different.

If the respondent reported that all were similar, they were then taken to the cluster victim form questions. If they reported that some (but not all) were similar they were then asked to indicate how many were similar. A cluster victim form was then administered for the group of similar incidents, followed by an individual victim form for the most recent of the remaining 'residual' incidents for that scenario. If the respondent reported that all incidents were different, an individual victim form was administered for the most recent incident. They were then asked if they'd be happy to complete a second individual victim form for the second-most recent incident.

The above process was repeated for all incident scenarios until one of the following occurred:

1. the respondent had completed incident forms for all incidents reported in the screeners, or
2. the respondent reached the cap of eight victim forms.

The respondent then progressed to either the family/whānau violence in-depth module (if eligible), or the main demographics section.

Offence codes

Victim definition

Various victim definitions exist across the Justice sector and other data sources. NZCVS uses the definition consistent with the Police National Recording Standard (NRS) that a victim is when:

- they were the target of the offence; or
- property they own was the target of an offence

This definition differs from the Victims' Right Act, inasmuch as other people, such as family members of homicide victims, are not considered as victims for the purposes of NZCVS. This is because the focus of NZCVS is on the victimisation and experiences of the survey respondent, not third parties.

In-scope NZCVS offences

NZCVS only includes offences against a person or a household. This means the following offences are excluded:

1. when there is no victim or the victim is unidentifiable (e.g. drug offences)
2. the victim is under the age of 15 years
3. victim is not alive (e.g. murder and manslaughter)

4. victimisation happened outside New Zealand
5. victim is a commercial entity / business / public sector agency (e.g. shoplifting, benefit fraud, etc)

As part of the design process, the ministry identified a list of offences from the Australian and New Zealand Standard Offence Classification (ANZSOC) database, that were to be considered in-scope for the survey. However, as there was no need amongst stakeholders to output offence data with this level of granularity, offences were aggregated into more-general classifications, that aligned with the categories expected to be used in the reporting. These broader classifications were designed to also maintain consistency with Police coding practice. See Appendix F for a concordance of ANZSOC classifications to NZCVS offence codes.

The NZCASS coding framework was used as a starting point for developing the NZCVS offence list. In addition, incident frequencies recorded in the 2014 NZCASS were analysed to further amalgamate rarer offences into broader categories. For example, in NZCASS, arson had its own code, but was relatively rare. For this reason, in NZCVS, it was included in the broader offence of property damage. There were also changes to what was considered in-scope for the survey. For example, cybercrime was not included in NZCASS, but now included in NZCVS. As cybercrime becomes more widespread, there is increasing demand to obtain more information about the victims of cybercrime and analyse the drivers behind its increase. In total, 18 codes were created for NZCVS, with additional codes for non-offences and out-of-scope offences (see Table 3.2).

Table 3.2: Offence codes used in NZCVS

Offence code	Offence description	Interview mode
1	Burglary	CAPI
2	Theft of / unlawful takes/converts motor vehicle	CAPI
3	Theft (from motor vehicle)	CAPI
4	Unlawful interference / getting into motor vehicle	CAPI
5	Damage to motor vehicles	CAPI
6	Unlawful takes/converts/interferes with bicycle	CAPI
7	Property damage (household)	CAPI
8	Property damage (personal)	CAPI
9	Theft (except motor vehicles – household)	CAPI
10	Theft (except motor vehicles – personal)	CAPI
11	Trespass	CAPI
12	Robbery	CAPI
13	Fraud and deception	CAPI
14	Cybercrime	CAPI
15	Sexual assault	CASI
16	Other assault	CASI
17	Harassment and threatening behaviour	CASI
18	Other incidents	CAPI
98	Offence not in scope	N/A
99	Not an offence	N/A

The survey designers then wrote screening questions which were designed to capture where such offences had been experienced by a respondent. In designing the screeners, the following information was considered:

- ANZSOC offence definitions
- relevant New Zealand legislation and case law
- Police recoding standards and coding guides.

In addition, to maximise the accuracy of reporting, it was important to:

- word the screener questions in plain English
- avoid legal jargon
- ask about 'things' that had happened, rather than 'offences' or 'crimes'.

The screener questions were iterated under the designers, the ministry, Police and an external expert were satisfied that they adequately captured the offences considered in-scope for the survey.

Automated offence coding

A key objective for NZCVS was to reduce the amount of post-hoc manual offence coding, to help facilitate the timely production of datasets and release of results. In the NZCASS, incidents reported in the survey were assigned offence codes manually by a team of law students, under the supervision of experts from Victoria University, New Zealand Police and the ministry. Whilst many improvements to the process were made in 2014¹⁴, the fact that incidents were coded after the survey data had been collected, meant that there was a small delay between data collection and the production of the QAed coding dataset.

In an attempt to avoid this, an automated offence coding algorithm was developed and programmed into the survey. The algorithm took the inputs from the screeners and follow-on questions to automatically assign an offence code 1–18 (or 98/99 for non-incident / out of scope incidents). For example, if a respondent reported that they had a vehicle stolen, they were then asked if the vehicle was parked inside a private yard at the time. If it was not, then the incident was coded as offence code 2 (Theft of / unlawful takes/converts motor vehicle). If the vehicle was parked inside a private yard, the respondent was then asked if it was taken by someone who was allowed to be at the property (for example, a workman doing a job, or a visitor or a boarder or someone living at home). If yes, the incident was also coded to offence code 2. If the vehicle was taken by someone not allowed to be on the property (or the respondent didn't know who took it), the incident was double-coded as offence codes 1 and 2 (Burglary + Theft of / unlawful takes/converts motor vehicle).

The same method of differentiation was used in other screening questions where an incident could potentially be coded to more than one offence code. For example, theft from a person, could either be coded to offence code 10 (Theft (except motor vehicles – personal)), or code 12 (Robbery), depending on whether force or violence was used to facilitate the theft. For some screeners, it was not necessary to ask any follow-on questions as the screening questions were discreet enough, e.g. sexual assault.

The algorithms used, were reviewed by Police to ensure they reflected Police coding practice. The performance of the automated coding process is detailed in the next chapter.

¹⁴ See 2014 NZCASS Technical Manual.

Data linking

At the end of the survey, respondents were to provide consent for their survey responses to be combined with other data routinely collected by government agencies. The following identifiers were collected from respondents that consented to data linking:

- full name (at least first name and surname, middle name was optional)
- date of birth
- address
- sex.

In 2019, survey data for people who agreed to data linking will be incorporated into the Integrated Data Infrastructure¹⁵ (IDI) by Stats NZ using the following process:

1. the ministry will supply Stats NZ with an encrypted dataset containing the survey responses and respondent identifiers for all respondents that agreed to data linking
2. Stats NZ will use probabilistic linking methods to determine if information about each respondent already resides in the IDI
3. where a match was found, the survey responses will be copied to the IDI record for that person
4. where a match cannot be found, no linking will take place, but the NZCVS data will be retained in the IDI for it to be linked to data which might be added from other sources in the future.

Approved researchers can apply for access to IDI data. Where a request is granted, all identifiable information will be removed to ensure the data remains confidential.

Consent rates for data linking can be found in Chapter 6: Fieldwork statistics.

¹⁵ http://archive.stats.govt.nz/browse_for_stats/snapshots-of-nz/integrated-data-infrastructure.aspx

4. Questionnaire development and testing

Overview

Table 4.1 details the various stages of questionnaire development and testing undertaken for NZCVS.

Table 4.1: Questionnaire development and testing milestones

Stage	Detail
Stakeholder consultation	Key stakeholders were engaged to understand their data needs for the core survey, and to explore topic areas they would like to see focused on in the in-depth module programme.
Questionnaire design	Substantive design phase where the structure of the questionnaire was developed. Questions were selected from existing surveys and written from scratch in order to collect the information required by the stakeholders.
Cognitive testing	Testing of specific questions with a representative audience ahead of field trials.
CAPI / CASI programming and testing	Conversion of the paper questionnaire into electronic copy.
Pre-pilot trial	A trial of the questionnaire with highly-victimised people to evaluate its performance (in particular, the victim screening questions and victim forms), ahead of the full pilot study.
Pilot study	A full dress-rehearsal of the survey and associated systems to ensure all aspects were working as intended ahead of the main study.

Stakeholder consultation

Prior to the questionnaire being designed, key stakeholders identified by the ministry were consulted with to understand:

1. how their organisation had used NZCASS results in the past (if at all)
2. how their organisation intended to use the NZCVS results in the future (if at all)
3. what level / type of reporting was required
4. what variables / indicators were required
5. level of interest in various in-depth module options
6. key improvements they wanted to see implemented in NZCVS.

Answers to the above questions were first elicited via an online survey, distributed to key members of each organisation. Following a review of the survey results, the ministry and CBG facilitated three focus group sessions on 26 May 2017. Attendees from the various organisations were presented with the results of the online survey, with each of the areas above being discussed in depth.

Table 4.2 illustrates which organisations took part in the online survey and focus groups.

Table 4.2: Key stakeholders

Organisation / Agency	Completed online survey	Represented at focus-group
Auckland University	✓	
Department of Corrections	✓	✓
Oranga Tamariki—Ministry for Children	✓	✓
Ministry for Women	✓	✓
Ministry of Justice	✓	✓
Ministry of Social Development	✓	✓
New Zealand Police	✓	✓
Social Investment Unit	✓	✓
Stats NZ	✓	✓
Superu	✓	✓
Te Puni Kokiri	✓	✓
Victim Support	✓	
Women's Refuge	✓	

Key findings from the stakeholder engagement exercises revealed:

- stakeholders anticipated an increased use of the NZCVS data (compared with NZCASS) as a result of it becoming a continuous survey, having access to annual time-series data and its proposed integration in the Integrated Data Infrastructure (IDI)
- high value was placed on profiling of all victims, but not least, those relating to unreported crimes – the information is not available elsewhere and it informs staff training and intervention points for support services
- stakeholders had varied reporting requirements for NZCVS – some required access to unit records through the IDI, whilst others wanted access to top-line results to inform annual agency publications
- most stakeholders had an interest in the first in-depth module comprising family/whānau violence and/or the cost of crime.

Questionnaire design

The NZCVS questionnaire was designed between May and September 2017 by CBG and the ministry, with peer-review provided by Stats NZ and an external expert¹⁶.

During the questionnaire development phase, the project team was mindful of the following key points:

1. the need to ensure that the core statistics collected as part of the NZCVS (e.g. incidence and prevalence) were prioritised over more transient questions, e.g. module questions, and that the

¹⁶ Pat Mayhew was engaged to review the design of NZCVS at various stages. P. Mayhew is a criminology expert and has extensive experience with the design of victimisation surveys.

core questions were thoroughly tested to minimise the need for refinements in future years, as this could impact comparability

2. to keep the NZCVS questionnaire as simple as possible without compromising the robustness or quality of data collected
3. to minimise the need for complex imputation, collect as much information about as many incidents as possible, whilst balancing the need to minimise respondent burden
4. ensure that stakeholder needs / requirements were met wherever possible
5. use tested / validated questions where appropriate, but be open to designing new questions where existing options were not suitable.

One of the key objectives of the NZCVS was to reduce the amount of complex imputation that had historically been required for NZCASS. Imputation is the process of ‘filling-in’ missing answers in a dataset with calculated values according to responses observed in the rest of the dataset. In the 2014 NZCASS, victim form information was collected for only 17 percent of reported incidents. This is because a maximum of six victim forms could be completed by an individual respondent, and each victim form only asked about one specific incident. The effect is most notable for highly-victimised respondents. In NZCASS imputation was required to determine for each of the incidents which was missing a victim form:

1. whether the incident occurred in the recall period for the survey
2. whether the incident was an offence in scope for the survey (as a result of offence coding)
3. which offence code the incident should attract.

In an effort to reduce the level of imputation, a design was proposed for NZCVS whereby, if the respondent reported that they had experienced multiple incidents of the same type, e.g. burglary, assault or theft, they would then be asked to group together similar incidents, and then answer the victim form questions about the group, rather than singling out one incident.

To test the feasibility of this approach, CBG conducted a round of question testing in Auckland and Wellington with 19 highly victimised people recruited by Women’s Refuge. Participants were asked a range of screening questions. For any that reported three or more incidents for a particular screener, they were then asked if they could group similar incidents together. The testing found that for most people who had experience repeated victimisation, most or all of the incidents were similar (i.e. similar circumstance and likely done by the same person). As a result of this testing, the decision was made to incorporate the cluster victim form methodology in the design of the survey¹⁷.

Cognitive testing

Cognitive testing was undertaken by CBG on 24 new or existing questions in order to:

- check participants’ comprehension of wording used
- check participants’ understanding of the concepts associated with each question
- understand how participants recalled information relating to each question
- understand how participants made response decisions for each question.

¹⁷ See: ‘Individual and cluster victim forms’, page 27.

Table 4.3: Key elements of the cognitive testing process

	Details
Testing period	18–29 October 2017
Sample	Forty interviews were undertaken in Auckland, Porirua, Whangarei and Taupo.
Recruitment	Participants were specifically recruited via interviewers' existing professional and personal networks, with a small degree of snowball recruiting.
Questions tested	Twenty-four new and existing questions were tested including the introduction for data linking.
Who conducted the interviews	Five researchers experienced in undertaking cognitive tests conducted the interviews. Each researcher undertook around eight interviews.

Table 4.4 details the number of interviews completed by demographic group. The sample consisted of 15 males and 25 females.

Table 4.4: Cognitive testing number of interviews completed by ethnicity and age

Age group	Māori	Pacific	Asian	Other	Total
15–21	3	3	2	7	15
22–45	3	3	1	6	13
46+	3	3	2	4	12
Total number of interviews	9	9	5	17	40

Based on findings from the cognitive testing process, minor adjustments were made to some of the questions proposed for inclusion, as well as the data linking introduction, which aims to give an overview of the data linking process and seeks informed consent for this process. A number of areas were also identified for potential interviewer training.

CAPI / CASI programming and testing

The paper version of the survey was converted into CBG's chosen interview software 'The Survey System' (TSS). Both CAPI and CASI elements of the questionnaire were programmed as a single survey, with prompts included to notify the interviewer/respondent of when they should pass the computer to the other party. The electronic questionnaire was then tested by professional software testers at CBG. Checks included (but were not limited to):

- question and response text matched the supplied questionnaire document
- multi / single response questions allowed multiple and single responses as applicable
- response ranges were within the boundaries defined by the survey
- text could be entered for questions allowing free-text 'Other' responses
- all previously entered response options were removed when the 'reset answers' button was selected
- unique responses could not be selected along with other responses in multiple choice questions (e.g. you shouldn't be able to select 'Don't know' along with any other response options)
- skip instructions worked correctly for questions with this type of logic instruction

- where a question had no skip instructions, all response options were checked to ensure they went to the next question
- logic test cases were executed
- the ability to go back through the questionnaire to make corrections to previous entries was also tested.

As part of the testing process, ministry personnel also extensively tested an online CAPI / CASI version of the questionnaire and worked with CBG to find and resolve issues.

Programmed checks

In addition to the manual checks noted above, a range of checks were programmed into the survey software to ensure the data was correct and robust. Checks can be categorised as follows:

- **hard error checks:** required interviewers / respondents to change data that they had entered
- **soft error checks:** gave the interviewer / respondent the opportunity to check, and if applicable, change the data they had entered.

The three main types of checks conducted were:

1. logic checks
2. range checks
3. confirmation checks
4. completeness checks.

Logic checks

This type of check is commonly applied in multiple choice questions where a list of response options is given along with a 'non-response' option (e.g. 'Don't know' or 'Refused') and where that non-response option is considered 'a unique code' (i.e. cannot be selected together with any of the other responses).

For example, one of the questions in the victim form asks why the police did not get to know about the incident. There were two answers within the response framework which could not be selected in conjunction with any other answer: 'No particular reason' and 'Don't know'.

Range checks

For some questions, the data entered has to be within a certain range. Range checks prompted interviewers (or respondents in the CASI section) to change their answer where an answer outside of the acceptable range had been entered.

For example, the numerical range for all of the victimisation screener questions was 0–99.

Confirmation checks

For some questions, the survey prompted respondents to check their answer to ensure that it was correct. This type of check was applied to some of the more important 'slider' style questions.

Sliders were used primarily in the cluster victim form for respondents to indicate the proportion of times that certain things had happened, for example, how many times they reported the incident to the police. If the respondent did not move the slider (response remained at zero), they were presented with a pop-up message, asking them to confirm their answer.

Completeness checks

For grid-style questions, where multiple items / statements are combined into a table, a response must be provided for each row in the table. Where a row was missed, the survey generated a prompt for the interviewer / respondent to go back and answer each row. The survey did not permit the person to progress until this was completed.

Change control process

Throughout the CAPI / CASI testing process, a working register of all issues, discussions and resolutions was maintained by CBG and the ministry.

Pre-pilot trial

The purpose of the pre-pilot trial was to test the questionnaire ahead of the pilot study – it was not designed to completely replicate the rest of the survey methodology, e.g. sampling. In particular, the survey designers wanted to better-understand how easily people who were heavily victimised, could group together similar experiences, and then answer questions about these groups of incidents in the cluster victim forms. Insights from testing earlier in the development of the questionnaire indicated that most people were able to group incidents relatively easily, however the ability to answer the victim form questions about these groups of incidents had not been tested with this audience.

The pre-pilot trial was used as an opportunity to test other aspects of the survey which could be further refined prior to the pilot study. The broad objectives of the trial were to:

- ensure that the questionnaire performed as expected with routing, edits and consistency checks largely working as intended
- identify problems with individual questions or sections
- evaluate how well respondents could group similar incidents together
- evaluate how easily respondents could answer the cluster victim form questions about groups of incidents, including where residual incidents were grouped together
- analyse the number of victim forms completed and unanswered victim forms for each respondent
- determine the average duration for each element of the questionnaire, as well as the survey process overall
- analyse the accuracy of the automated offence coding process
- identify any risks to the fieldwork
- evaluate how well respondents engaged with the survey.

Table 4.5: Methodology and key information

	Details
Overview	The questionnaire used was highly-refined by this point. It was not expected that major changes would be made as the result of the trial, however it was deemed prudent to test it on people who had experienced repeated victimisation in the preceding 24 months. This was done to test the victim screening process, and also the ability of respondents to group together similar incidents, and then answer the victim form questions about those groups of incidents.
Target population	Adults aged 18 years and over.
Sample design	Respondents were recruited by Victim Support, Women's Refuge and Age Concern. The sample was not designed to be representative.
Sampled areas	Auckland and Wellington.
Sample size	48

	Details
Interviewing period	6–12 November 2017.
Average interview length	63 minutes and 10 seconds.
Offence coding	All incidents were manually coded and compared against the automatic system-generated offence code to assess the accuracy of the automatic system.

Interviewers and training

Four interviewers were involved in the pre-pilot trial and were trained remotely over a two-week period consisting of a period of mentored self-directed learning, webinars and assessments.

For more information on interviewers and interviewer training please refer to Chapter 5: Fieldwork processes.

Key findings

Areas which performed well, or with little issue:

- the wording of questions and answer options worked well and were understood, with the exception of five questions where further clarification was sought, or where the respondent struggled to provide an answer
- mean survey duration deemed reasonable for the sample interviewed
- seventy-nine per cent of respondents completed the self-completion sections with no, or a small degree of assistance from the interviewer
- consent to data linking and future research were both strong (89 percent and 98 percent respectively)
- strong respondent satisfaction ratings across all key measures (survey length, number / complexity / intrusiveness of questions), although ratings were less-favourable for those with survey durations in excess of 60 minutes
- thank you card and information booklet were well-received by respondents
- interviewer training and prompts in the survey.

Areas which did not perform as well as expected, or which presented problems:

- CAPI programming – on the whole performed well, however some logic errors were evident
- whilst the majority of people who experienced four or more incidents for a particular incident scenario question, reported that they were all similar (69 percent), for the remainder, many struggled to group similar incidents and/or answer the victim form questions about each group
- some frustration was evident with completing multiple individual victim forms for incidents which were part of a series
- automated offence coding was only correct in 71 percent of cases, that is the system assigned code matched the final code assigned by the human coder in 71 percent of cases. It also revealed a number of areas where clarification could be added to the questionnaire.

Changes after pre-pilot trial

As a result of the trial, a number of changes were made to improve the survey / methodology:

1. respondents were generally able to answer victim form questions about a group of similar incidents, however the approach was less successful when they were asked to answer the victim form questions about a group of incidents that were not similar. For this reason, the decision was made to only ask the cluster victim form questions for incidents the respondent reported as similar.
1. the threshold of incidents required to trigger the cluster victim form questions was lowered from four to three¹⁸
2. a number of minor wording changes were made to various questions to avoid misinterpretation
3. the 'cost of crime' questions located in the victim forms were simplified
4. conditions relating to the self-complete sections were relaxed to permit the interviewer to administer the questions, where the respondent refused, or was unable to use the laptop, and where the respondent was happy for the interviewer to continue, and their privacy was protected
5. decision made to explore the possibility of manually coding some or all incidents in the main study (pending results of the pilot study), rather than rely on the automated incident coding built into the questionnaire.

In addition to the above, enhancements were made to the CAPI/CASI software to make it more robust and stable. More rigorous testing was also undertaken ahead of the pilot study.

Pilot study

The purpose of the pilot study was to mimic the main study as closely as possible, to ensure that the questionnaire and associated survey processes were robust and functioning correctly. In particular, the pilot aimed to:

- ensure that the questionnaire performed as expected with routing, edits and consistency checks working as intended
- ensure that the electronic sample management worked as intended
- identify problems with individual questions or sections
- analyse the number of completed and skipped victim forms for each respondent, and the distribution of reported incidents across the different offence groups
- evaluate the accuracy of the automated offence coding process
- determine the average duration for each element of the questionnaire, as well as the survey process overall
- understand how well respondents engaged with the survey
- collect feedback on the survey communications
- identify any risks to the main fieldwork.

¹⁸ The effect of which, was to reduce the number of individual victim forms completed for very similar incidents. For example, if three incidents were reported, which were similar, the respondent would now only need to complete one cluster victim form, rather than three separate individual victim forms.

Table 4.6: Methodology and key information

	Details
Overview	<p>Most methods and processes used as part of the pilot study were in line with those planned as part of the main study.</p> <p>The main difference between the pilot and main studies was the PSU sampling process. PSUs used as part of the pilot study were chosen (rather than randomly selected) to:</p> <ul style="list-style-type: none"> • provide a mix of urban and rural areas • ensure that high crime areas were over-represented. <p>This was done to maximise the probability of encountering respondents who had experienced crime and thus test both the victim screening process and the questions asked in the victim forms.</p>
Target population	Total usually resident, non-institutionalised, civilian population of New Zealand aged 15 years and over.
Sample design	Six PSUs were sampled, all of which were classified as 'high-crime areas' ¹⁹ . From within the PSUs, 222 addresses were randomly selected.
Sampled areas	Auckland, Tauranga, Upper Hutt, Porirua.
Dwellings included	Permanent, private dwellings.
Sample size	139
Response rates	71.1%
Interviewing period	10–21 January 2018.
Average interview length	23 minutes and 18 seconds.
Offence coding	All incidents were manually coded and compared against the automatic system-generated offence code to assess the accuracy of the automatic system.

Interviewers and training

Six interviewers were involved in the pilot study and were trained remotely over a two-week period consisting of mentored self-directed learning, webinars and assessments. Four of the interviewers also worked on the pre-pilot trial.

Key findings

Areas which performed well, or with little issue:

- respondent screening and selection worked well, with people happy to provide the required information on the doorstep
- no CAPI / CASI or Sample Manager programming errors detected
- the wording of questions and answer options worked well and were understood by respondents, with the exception of a few areas where improvements to the flow / question clarity were suggested
- grouping of similar incidents, and answering the cluster victim form questions about these groups did not appear to be problematic for those respondents that were asked to so
- mean survey duration deemed reasonable, with 99 percent of respondents experiencing a survey duration of under an hour

¹⁹ Selected by Stats NZ, based on aggregate burglary and assault data.

- eighty-seven percent of respondents completed the self-completion sections with no, or a small degree of assistance from the interviewer
- consent to data linking and future research were both strong (91 percent and 94 percent respectively)
- strong respondent satisfaction ratings across all key measures (survey length, number / complexity / intrusiveness of questions), especially for those with surveys under 30 minutes
- survey communications well received by respondents, with the letter and information pamphlet scoring highly on clarity and content
- interviewer training, and interviewer instructions provided in the survey.

Areas which did not perform as well as expected, or which presented problems:

- ten people skipped one or more self-completion sections, due to their inability to use the laptop and a lack of privacy preventing the interviewer from asking the questions
- automated offence coding was only correct in 59 percent of cases, and confirmed the need to retain manual offence coding for the main study.

Changes after pilot

As a result of the pilot, a number of changes were made to improve the survey / methodology:

1. lifetime sexual incidents / partner violence questions were moved from the end of the in-depth module, to follow the CASI incident screeners to improve survey flow
2. a number of minor wording changes were made to various questions to avoid misinterpretation and improve clarity
3. fieldwork protocols were developed to clarify when/if family and professional interpreters could be used
4. survey logo added to the advance letter and envelope sent to households to reassure respondents of the nature of the letter
5. decision was made to implement manual incident coding at least for the first year of fieldwork in the main study, with a review of the process scheduled following year one, to determine if manual coding of all incidents should continue beyond this point.

5. Fieldwork processes

Introduction

Fieldwork period

The fieldwork period for the 2018 NZCVS was 1 March to 7 October 2018. This is the timeframe between the completion of the first and last interviews in the sample.

Issuing PSUs

One thousand PSUs were divided and allocated into two fieldwork ‘quarters’. Each quarter consisted of 500 PSUs, with roughly the same number of PSUs assigned to each quarter at the regional-level. This was to ensure that fieldwork activity in each region was evenly distributed throughout the duration of the fieldwork. PSUs were progressively issued to interviewers as fieldwork advanced.

Table 5.1: Month of issuing PSUs

	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
PSUs issued	136	191	138	116	220	185	14	1,000
Response rate	83%	82%	81%	78%	80%	78%	66%	81%

Interviewers and training

Table 5.2: Overview of interviewers and training

	Notes
Interviewers	Twenty-five interviewers were selected from a pool of experienced CBG interviewers who had a proven track record working on other large government surveys. These interviewers formed the team that launched the survey in March 2018. Additionally, 21 interviewers joined the NZCVS team during the course of fieldwork, either from CBG’s other household surveys, or via new appointments. The need for such a large field team was driven by the requirement to complete all fieldwork in a seven-month timeframe. For year two and beyond, the fieldwork will be spread over 12 months.
General interviewer skills and training	All interviewers completed the following CBG baseline training modules: <ul style="list-style-type: none"> • public sector surveying • maximising response rates • cultural awareness • enumeration • safety management.
Preparatory study	Prior to the face-to-face training day, interviewers completed online training modules focusing on: <ul style="list-style-type: none"> • purpose of the survey and use of the data • survey methodology and fieldwork procedures • survey content and areas to pay attention to • orientation of the NZCVS Sample Manager.

	Notes
	Interviewers were required to spend time prior to the training day studying this material and becoming familiar with interviewing processes.
Practice	As part of the preparatory study, interviewers were required to practice administering the NZCVS survey on friends / family to help become familiar with its application and layout.
Training day	<p>As part of the NZCVS main study, all 25 CBG interviewers in the launch team attended a training day in Auckland on 26 February 2018. The day consisted of:</p> <ul style="list-style-type: none"> • introduction and background to the NZCVS • presentation by the ministry (NZCVS project team) on the use of the results • presentation by New Zealand Police on the use and importance of the NZCVS data • presentation by Victim Support discussing victims' experiences, reactions and needs • presentation by the ministry (Multi Agency team) on the picture of family/whānau violence in New Zealand and how the in-depth module results would be used in this area • recruitment for the NZCVS, including strategies to maximise response rates and overcome reluctance • the questionnaire, with a focus on the most important questions, the more complicated parts of the questionnaire, and things to note (including how to record accurate, concise incident descriptions) • discussion of situations that might be encountered during the administration of the NZCVS and different ways to handle these (e.g. if a respondent is fearful of answering due to the presence of a family member, or if a respondent becomes upset due to the nature of the questions) • interviewers were reminded of CBG's reporting protocols regarding concerns they may have about the safety of a respondent or their family, and what to do where a respondent disclose family violence/abuse • audit and quality assurance processes that would be employed during the fieldwork • overview of the specialist offence coding process.
Assessment	<p>In preparation for fieldwork, all interviewers were assessed by CBG managers to confirm that they were ready to begin interviewing as part of the NZCVS. The assessments included an examination of recruitment technique, interview delivery and incident description recording.</p> <p>Interviewers were not permitted to begin interviewing until they had completed all the required training, undertaken the required practice interviews and passed the assessments.</p>

Fieldwork resources

Interviewer resources

Interviewers were provided with a number of resources to assist them during the fieldwork period. Table 5.3 provides a summary of these resources.

Table 5.3: Interviewer resources

Resource	Description
Laptop	Sample management and respondent selection took place within CBG's Sample Manager software. Electronic copies of PSU maps and participant information sheets were also incorporated into the programme. The Sample Manager also launched the survey.
Consent forms	<p>Consent forms were in electronic format on the interviewing laptops. Respondents signed electronically using their finger or a stylus to record consent. Paper copies of the consent forms were left with respondents for future reference.</p> <p>The consent form required the respondent to confirm that they:</p> <ul style="list-style-type: none"> • had read and understood the information pamphlet • were aware that they could contact CBG or the ministry if they had any questions • knew they could stop the interview at any time and did not have to answer every question • knew that their participation was confidential, no identifiable information would be included in any reports and that their answers were protected by the Privacy Act 1993.
Electronic showcards	Interviewers were issued with a tablet computer, which was pre-loaded with the showcards for the survey. The showcards contained the answer options applicable for each question in the survey, to assist respondents with answer selection. The tablet showcard was provided to the respondent at the beginning of the survey and remained with them for the duration. Interviewers also carried a copy of the showcards in printed form as a back-up, in the event that the electronic showcards were not available for use.
Life events calendars	A life events calendar ²⁰ was developed for the survey. The calendar was introduced to the respondent towards the beginning of the survey just before the victim screening questions. It depicted major national events/holidays, as well as school term times. Interviewers encouraged respondents to record key events on the calendar that had occurred over the past 12 months. For example, birthdays, anniversaries, or other events, such as moving home or starting a new job. The calendar was used as a memory aid during the victim screening questions to help the respondent work out when a particular incident happened, and whether or not it occurred in the 12-month recall period for the survey.

Respondent resources

As shown in Table 5.4, a number of fieldwork resources were produced as part of the survey to assist interviewers when engaging households / respondents and to help answer respondent queries. Copies of these are available in Appendix B.

Table 5.4: Respondent resources

Resource	Description
Letter to household	<p>A letter was sent on ministry letterhead introducing the survey and CBG as the ministry's fieldwork provider, and encouraging participation when the interviewer visited.</p> <p>The letter was sent out to households in batches 7–10 days before the interviewer was due to call. This was done in order to improve householders' recall of the letter. Interviewers were also given spare copies of the letter to help engage respondents at the door if they didn't remember receiving it in the mail.</p>
Information leaflet	A leaflet containing key information about the survey was also mailed with the letter, including (but not limited to):

²⁰ See appendix A.

	<ul style="list-style-type: none"> • what the survey is and why we do it • what the information collected is used for • what type of questions are asked • who conducts the survey and when it will be undertaken • who will be asked to participate • 0800 number for CBG and email address for the ministry, should participants want to confirm the validity of the research or ask questions.
Thank-you card	At the end of the interview, a thank-you card was offered to participants. The thank-you card contained contact details for the Victims Information Line, and also incorporated a feedback card which the respondent could complete and mail back to CBG free of charge.
People affected by crime information factsheet	A factsheet was also offered at the end of the survey. The factsheet provided an explanation of the criminal justice system and services available to support victims. The respondent also had the option of having the thank you card and information sheet emailed to them (see Appendix B). In the main study 12 % of respondents chose this option.

Fieldwork procedures

Table 5.5: Fieldwork procedures

	Details
Visiting days and times	Interviewers approached households seven days a week between the hours of 9:00am to 8:00pm. Occasionally, respondents requested an appointment time outside of these hours with the interviewer accommodating wherever possible. In order to increase the likelihood of finding a resident at home, interviewers visited households on a mixture of weekdays and weekends and at different times of the day. There were no differences in visiting days or times between urban and rural areas.
Visits to PSUs	Each PSU was visited by an interviewer a minimum of five times unless the interviewer had achieved or recorded a final contact outcome for all selected households in a PSU prior to this. Typically, trips to each PSU were spread over an average of four weeks.
Calls	Up to a maximum of 10 calls were made in person to selected dwellings.
Electronic sample management	All fieldwork activity was recorded in CBG's Sample Manager software installed on the laptop computer of each interviewer. The software contained records for every selected house in the sample and provided the ability to perform respondent selection at the door according to survey protocols. The Sample Manager also provided the interviewer with access to PSU maps and links to launch the survey.

Fieldwork management

A number of processes were put in place to ensure that interviewers were supported throughout the fieldwork process and interviewing was completed on time and to the required standard.

Interviewers were monitored during fieldwork by the CBG field management team. Survey completion rates and data quality were examined regularly at the individual interviewer level to ensure that all interviewing was completed within the required timeframe and to a high quality.

Interviewers attended weekly teleconference meetings where the survey management team communicated key messages and shared learnings. The meetings were also used to discuss overall progress and celebrate successes. Each interviewer was also able to monitor their own progress and performance throughout the fieldwork via their own personal web portal. Where it was identified that an interviewer required additional training or support, this was provided.

Fieldwork progress, monitoring and reporting

As part of monitoring practices and reporting to the ministry, an online dashboard was set up by CBG so that fieldwork statistics could be viewed in real time by project staff.

Table 5.6 provides an overview of cumulative number of interviews throughout fieldwork.

Table 5.6: Number of interviews completed, by month

	Mar	Apr	May	June	July	Aug	Sep	Oct
Total number of interviews completed (cumulative)	792	2,107	3,268	4,170	5,598	7,033	7,927	8,030
Percentage complete	10%	26%	41%	52%	70%	88%	99%	100%

Fieldwork quality assurance

A number of quality assurance processes were in place for the fieldwork. These processes ensured that all risks were managed and fieldwork progressed on time and to the required standard. Fieldwork processes were implemented and managed by the ministry's contracted fieldwork provider, CBG.

Overview of fieldwork quality risks

There are a number of risks that can have an impact on the quality of the data collected and potentially the number of victim forms completed. Table 5.7 provides a list of some of these risks.

Table 5.7: Overview of fieldwork quality risks

	Risk	Description
1	Interviewers do not visit sampled households as required	<p>The NZCVS sampling process has been carefully designed to ensure that households throughout the country are selected.</p> <p>If interviewers do not visit households according to the required sampling process, there is the risk that biases will be introduced which may impact the number of victim forms being collected.</p>
2	Incorrect householder sampled	<p>If the required respondent sampling process is not followed, the incorrect person may be selected.</p> <p>For example, if only the people present at the time of visit is entered into the sampling system (rather than all the people living at the address), an incorrect respondent may be selected.</p>
3	Screener questions asked incorrectly	<p>The number of victim forms completed relies on the number of screener questions where a respondent answers affirmatively that they've experienced an incident.</p> <p>The number of victim forms selected can also be affected if the interviewer does not ask the screener questions correctly, for example, not inserting emphasis on the correct words.</p>
4	Self-completion handover process executed incorrectly	<p>During the victimisation screening section, interviewers are trained to introduce the CASI section of the questionnaire and encourage respondents to participate – even if they haven't experienced a crime.</p> <p>At this point interviewers are asked to enter a response to VS9.01_Intro1, which asks whether the respondent is happy / able to self-complete or not:</p> <ol style="list-style-type: none"> 1. Respondent happy to self-complete 2. Respondent unable / refuses to self-complete. <p>If the respondent is unable, or refuses to self-complete, a follow-on question is asked (VS9.01_Intro2) to check if the respondent is happy for the interviewer to administer the questions (provided their privacy is ensured):</p> <ol style="list-style-type: none"> 1. Respondent happy to continue and privacy ensured 2. Respondent refuses to continue / privacy not ensured. <p>If an interviewer is not skilled at handling respondents' concerns or hesitation – even if the respondent hasn't experienced a crime – respondents can drop out at this point of the questionnaire and hence the number of CASI victim forms could fall.</p>
5	IT issues occur	<p>There are a number of IT issues that could impact the number of victim forms being submitted. It is up to interviewers to identify if and when these are happening (if they occur during the CASI section, identification will be trickier) and report them for resolution.</p>
6	Poor response rates and targeted sample not achieved	<p>If a good response rate of the targeted sample size is not achieved, then the number of victim forms could be lower.</p>
7	Interviewers falsifying surveys	<p>If interviewers falsify surveys, then the integrity of the data could be compromised.</p>

Quality assurance processes

Table 5.8 lists the main types of processes in place during the fieldwork.

Table 5.8: Quality assurance processes

Process	Description/Purpose
In-field data quality	Monitor key statistics that indicate whether or not surveys are being completed according to the required protocols.
Analysis of survey data	Assess the quality of the data being collected.
Telephone audits	<p>One in every 7 respondents and at least one respondent in every PSU is contacted. A PSU can't be closed without a successful audit.</p> <p>Audits confirm the following:</p> <ul style="list-style-type: none"> the interview took place and at the correct address the number of occupants living at the address at the point of recruitment respondent selection procedures were completed correctly including the correct recording of ethnicity information a consent form was signed by the respondent prior to the interview taking place the respondent was happy with the way the survey went and with the interviewer if the respondent had any problems or issues when answering the questions the respondent completed some questions by themselves using the computer if the interviewer assumed any of the respondent's answers, without asking them properly showcards were used reason for participation.

Quality assurance – management and statistics

Table 5.9: Fieldwork quality assurance – management and statistics

Interviewers do not visit sampled households as required			
Risk description	Quality assurance processes		
The sampling process has been carefully designed to ensure that households throughout the country are selected.	All sampled houses are pre-selected using the NZ Post address database. Selected addresses are pre-loaded into the Sample Manager database used by each interviewer.		
If interviewers do not visit households according to the required sampling process, there is the risk that biases will be introduced which may impact the number of victim forms being collected.	<p>The Sample Manager will only allow contact, outcome and survey data to be entered into selected address records. This data is uploaded on a daily basis.</p> <p>Data uploaded from the field is used to ensure survey protocols are being followed.</p>		
Quality measure	Description	Result	Notes/Comments
Survey completed in the correct address	Respondents are asked during audit telephone calls to confirm that they live at the sampled address where the survey was completed.	98%	Occasionally the interviewer will enter data into another sampled address record. Where the respondent reports that the

	Ensures that the random sample is protected and the correct houses are surveyed.		address is not correct, CBG checks to ensure that they indeed live in another sampled house.
Houses enumerated in-field	<p>Number of houses that were added into the sample by the interviewer whilst in-field.</p> <p>Expressed as the proportion of the total selected sample of addresses which were added in-field by the interviewer. In Year 1, 573 houses were enumerated by the interviewer team in-field, however only 78 of them were selected for inclusion in the survey.</p> <p>Results analysed at an individual level to ensure that each interviewer is completing the enumeration task.</p>	0.7%	

Incorrect householder sampled

Risk description	Quality assurance processes
<p>If the required respondent sampling process is not followed an incorrect person may be selected.</p> <p>For example, if only the people present at the time of visit is entered into the sampling system (rather than all the people living at the address), an incorrect respondent may be selected.</p>	<p>Respondent selection requires the interviewer to list all occupants into the Sample Manager. Ethnicity information is also collected. Once all occupants have been added, the Sample Manager automatically selects the person to be approached for the interview based on sampling rules for the survey, thus reducing the possibility of human error resulting in an incorrect occupant being selected.</p> <p>Occupancy information for every household is sent back to CBG where it can be used in further auditing processes/analysis to ensure survey protocols have been followed.</p>

Quality measure	Description	Result	Notes/Comments
Total occupants recorded	<p>Respondents are asked in the audit telephone call to report the number of people that were living in the household at the time of the interviewer's visit. This measure sums all of the reported occupants from the audit calls and compares the figure to the number of occupants recorded in the Sample Manager for all of the audited houses.</p> <p>This is a high-level check to ensure that occupants in all selected houses are included in the Sample Manager database and have a chance of being selected.</p>	95%	This check evens out any household-level discrepancies and indicates that almost every eligible occupant in the sampled houses had a chance of being selected.
Māori ethnicity correctly recorded	Proportion of houses where selected person was recorded on the doorstep as being Māori and later reported in the survey that Māori was one of their ethnic groups.	94%	Rate indicates that in the vast majority of cases, the respondent's ethnicity was coded correctly during the screening process. The screening information is provided by one person in the household on behalf of the others, and

	Because Māori occupants are preferentially selected over occupants of other ethnicities within a household (see chapter 2), this check ensures that the correct person is being selected		occasionally this information is incorrect. For example, the person providing the details may not be aware of which ethnic groups the other household members identify as.
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Screener questions not asked correctly

Risk description	Quality assurance processes
<p>The number of completed victim forms relies on the number of screener questions where a respondent answers 'yes' they've experienced an incident.</p> <p>The number of victim forms selected can also be affected if the interviewer does not ask the screener questions correctly, for example, not insert emphasis on the correct words.</p>	Victim form completion rates were monitored closely at the individual interviewer level as low rates may indicate that the interviewer was not administering the screener questions correctly.

Quality measure	Description	Actual	Notes/Comments
Household access to a vehicle	<p>Proportion of respondents that report that their household owns or has the regular use of a car, motorcycle, van, truck, caravan, camper van, boat, quad bike, tractor or trailer.</p> <p>If this question is not asked / answered correctly, the respondent skips the screener questions relating to vehicle offences with the potential to lose victimisation data. Vehicle-related crime makes up a significant proportion of crime reported in the survey.</p>	94%	The rate was 92.5% according to the 2013 Census. Survey results closely match this, indicating that screener question ID1.09 was not inadvertently skipped.
Household access to a bicycle	<p>Proportion of respondents that report that their household owns or has the regular use of a bicycle.</p> <p>If this question is not asked / answered correctly the respondent skips the screener questions relating to bicycle offences with the potential to lose victimisation data.</p>	48%	Rates of reported bicycle ownership were monitored at the individual interviewer-level, to ensure that screener question ID1.10 was asked correctly.
Victimisation rate	<p>Proportion of respondents that complete at least one victim form.</p> <p>Designed to identify individual interviewers who may not be completing the screener questions correctly.</p>	36%	Victimisation rates were monitored at the individual interviewer-level, to ensure that incident screener questions were asked correctly.
Average victim forms completed per survey	<p>Average number of victim forms completed per respondent.</p> <p>Designed to identify individual interviewers who may not be completing the screener questions correctly.</p>	0.68	Rates were monitored at the individual interviewer-level, to ensure that incident screener questions were asked correctly, and also that victim forms were not being incorrectly skipped.

Showcard use	<p>Proportion of respondents that reported in the telephone audit call that the interviewer used showcards to assist with delivering the survey.</p> <p>Showcards are used throughout the survey to help the respondent answer questions. One card in particular is left visible during the victim form screener questions as a prompt.</p>	95%	Rate indicates that showcards were consistently used in field.
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Self-completion handover process executed incorrectly

Risk description	Quality assurance processes
<p>During the victimisation screening section, interviewers are trained to introduce the CASI section of the questionnaire and encourage respondents to participate – even if they haven’t experienced a crime.</p> <p>At this point interviewers are asked to enter a response to VS9.01_Intro1, which asks whether the respondent is happy/able to self-complete or not:</p> <ol style="list-style-type: none"> 1. Respondent happy to self-complete 2. Respondent unable / refuses to self-complete. <p>If the respondent is unable, or refuses to self-complete, a follow-on question is asked (VS9.01_Intro2) to check if the respondent is happy for the interviewer to administer the questions (provided their privacy is ensured):</p> <ol style="list-style-type: none"> 1. Respondent happy to continue and privacy ensured 2. Respondent refuses to continue / privacy not ensured. <p>If an interviewer is not skilled at handling respondents’ concerns or hesitation – even if the respondent hasn’t experienced a crime – respondents can drop out at this point of the questionnaire and hence the number of CASI victim forms could fall.</p>	<p>Refusal rates at the individual interviewer level were closely monitored and support was provided to any interviewer who appeared to be struggling to encourage people to take part.</p>

Quality measure	Description	Actual	Notes/Comments
CASI section skipped	<p>Proportion of respondents who refused to complete the section, or who were unable to complete and there was not sufficient privacy for the interviewer to administer the questions (i.e. VS9.01_Intro2 = 2).</p> <p>These people skipped the section, with the potential of lost victimisation data.</p>	1.8%	
Family/whānau violence in-depth module skipped	<p>Proportion of respondents who refused to complete the section, or who were unable to complete and there was not sufficient privacy for the interviewer to administer the questions (i.e. FV4.01_Intro2 = 2).</p> <p>These people skipped the section, with the loss of data for these questions.</p>	6.8%	
Reported self-completion	<p>Proportion of respondents that reported in the audit telephone call that they completed a section by themselves using the computer.</p>	92%	These results are consistent with the results of OB1.04 data quality check which also suggest that 82.8% of respondents self-completed to some extent.

	Independent check to ensure that respondents are given the opportunity to self- complete.		
Recorded self-completion	Proportion of respondents that completed the CASI section with no, or help to a small extent, from the interviewer (OB1.04 = 1 or 5). Data collected from respondents that self-completed with little or no assistance from the interviewer is likely to be more honest and accurate than the data collected where the interviewer administered the questions.	88%	Given that the CASI section is being completed with no or little help from the interviewer in the majority of cases, it is likely that the responses recorded are true and accurate.

Key exit questions

A series of interviewer observations were recorded at the end of the survey to help monitor and understand who else was present during the survey process, as the presence of other people (particularly adults) could impact the honesty with which respondents answer. Detail was also recorded on the level of assistance provided by the interviewer to support the completion of the CASI sections and the type of assistance provided.

The following observations were coded by the interviewer without asking the respondent.

Table 5.10: Interviewer observations (presence of other people during interview)

Question		Response	N	%
OB1.01	Were any other people in the room during any part of the survey? ²¹	Spouse / partner	1,041	13
		Parent(s)	179	2
		Other adult(s)	474	6
		Child(ren)	712	9
		Completed alone in room	5,971	74
OB1.02	How long were other adults in the room for?	Briefly / in passing	397	24
		Around half of the time	223	14
		Most / all of survey	1,001	62
		Total	1,621	100
OB1.03	Were any of the other adults involved in the survey process?	Yes, to a small extent	230	14
		Yes, to a moderate extent	66	4
		Yes, to a large extent	57	4
		No, not at all	1,268	78
		Total	1,621	100

²¹ Percentages sum to more than 100%, as the selection of multiple answers was possible.

Table 5.11: Interviewer observations (self-completion assistance)

Question		Response	N	%
OB1.04	Self-complete section completed with help from the interviewer.	Yes, to a small extent	321	4
		Yes, to a moderate extent	112	1
		Yes, to a large extent	129	2
		Yes, totally (interviewer administered the whole section)	724	9
		No, not at all	6,744	84
		Total	8,030	100
OB1.05	What type of assistance did you provide? ²²	Helped R enter one or more answers	251	45
		Helped R enter majority / all of answers	146	26
		Helped R move to the next screen	87	15
		Helped R back up to previous screen	22	4
		Answered questions about what a question meant	89	16
		Other	63	11

Table 5.12: Fieldwork risks, quality assurance processes and outcomes

IT issues occur	
Risk description	Quality assurance processes
There are a number of IT issues that could impact the number of victim forms being submitted. It is up to interviewers to identify if and when these are happening (if they occur during the CASI section, identification will be trickier) and report them for resolution.	<p>Where serious IT malfunction occurred in the field, and the interviewer was able to successfully reboot the laptop, they were able to re-launch the survey from the last question that was answered. This happened very rarely and there were no reports of surveys being abandoned because of this.</p> <p>There were no occurrences of serious IT failure or laptop theft that resulted in data being unrecoverable.</p> <p>Interviewers were trained to monitor respondents when completing the CASI section and were instructed to offer assistance if the respondent appeared to be stuck. There were no reports of any respondents starting the CASI section and not completing it due to IT issues.</p>
Poor response rates	
Risk description	Quality assurance processes
A low response rate can lead to non-response bias, where the target population is not adequately represented in the survey. Non-response broadly comprises those people that refuse to take part in the survey and those that cannot be contacted.	Continual response rate monitoring and reporting.

²² Percentages sum to more than 100%, as the selection of multiple answers was possible.

Ensuring that these people take part increases the accuracy and reliability of the results.			
Quality measure	Description	Result	Notes/Comments
Overall response rate	The proportion of eligible respondents that took part in NZCVS.	81%	Main sample = 81%, booster sample = 80%.
Male respondent proportion	Census data shows that males make up 49 percent of the adult population in New Zealand. Females live in smaller households on average than males, so will tend to predominate in the NZCVS because only one respondent is selected from each household. The unweighted proportion of males in the sample is thus expected to be lower than the census figure. To ensure the survey is representative, male ratios are monitored at the individual interviewer level.	43%	

Table 5.13: Other fieldwork quality measures

Quality measure	Description and purpose	Result	Notes/Comments
Adult phone number supplied in exit questions	Proportion of surveys with a phone number recorded in the exit questions for audit purposes. In order to conduct telephone audit calls, permission is requested from the respondent at ER1.01.	96%	
Phone number invalid or incorrect	Proportion of respondents with an incorrect or invalid phone number when contact was attempted by the auditing team. Phone numbers are used to conduct audit calls. A high level of accuracy is required when recording contact details to ensure all respondents have an opportunity to provide feedback via these calls.	6%	
Remembering completing survey	Proportion of respondents that remembered completing the survey when asked in the telephone audit. Used to ensure that the survey was completed with the selected respondent recorded in the Sample Manager.	98%	Very occasionally a respondent will report that they did not remember the survey. This is more prevalent with elderly respondents or those that want to avoid answering any further questions. Where a respondent reports not remembering the survey, a GPS check is conducted to confirm that

			the surveyor was at the address for the duration of the survey.
Interview falsifying surveys			
Risk description		Quality assurance processes	
If interviewers falsify surveys then the integrity of the data is compromised.		No evidence of survey falsification was detected.	

Electronic audits

Electronic audits of data such as interview durations and question timings were also carried out; that is, survey paradata²³ was analysed. In particular, the electronic audits related to timings of interviews overall, and timings of sections of questions within the questionnaire. This data was analysed to check for outliers and anomalies that suggested problematic interviewer or questionnaire performance.

Individual interviewer performance was analysed with respect to interview durations, timing for specific questions, timing for groups of questions, and any questions or interviews which appeared to be entered or conducted out of hours (between 10:00pm and 8:00am).

Checks of interview data

CBG conducted a number of ongoing checks of interview data throughout the fieldwork period and appropriate action was taken if any anomalies were discovered. Most of these checks were carried out on a weekly basis.

- Checks ensured that each laptop's date and time settings were correct by examining this data within each interview record.
- Checks were carried out for interview completeness, to ensure the last question in the re-contact section had been answered in all interviews. Incomplete interviews were not included in the dataset.
- Checks were made to detect interviews with both very short, and very long, interview durations. CBG defined these as questionnaires with durations less than 10 minutes, and more than 120 minutes respectively. These surveys were automatically selected for a telephone audit call.

²³ Survey paradata is information about the process of survey data collection.

6. Fieldwork statistics

Introduction

This chapter provides detail about response rates and other key fieldwork statistics used as part of the NZCVS. Fieldwork statistics provide:

- measurement and monitoring information for research / fieldwork management
- useful information for planning future research
- an indication of issues or biases that may be present in the data and need to be noted or addressed.

Table 6.1: Summary of key fieldwork statistics by sample

	Main	Māori booster	Overall
Dwellings visited	6,633	3,481	10,114
Estimated eligible	6,528	3,441	9,968
Projected number of interviews	5,400	2,880	8,280
Number of interviews achieved	5,273	2,757	8,030
Interview yield from dwellings visited	79%	79%	79%
% of projected completed (interviews achieved/projected)	98%	96%	97%
% of total sample	66%	34%	100%
Response rate	81%	80%	81%
Data linking consent	93%	92%	92%
Consent for future research	93%	92%	93%

Response rates

Maximising response rates

To maximise the response rate, the following fieldwork procedures were implemented:

- a pre-survey letter and information leaflet was sent to households prior to the interviewer calling
- interviewer performance was monitored throughout the project with additional training and support being provided where required
- a maximum number of calls (10) to each household was used
- these (up to 10) calls were spread on different days, and at different times of the day

- using well-designed publicity and promotional materials – in particular, the design and use of an information leaflet in a question and answer format, potential respondents could request an interviewer of the same gender or ethnicity as themselves, and make / change appointment times
- 0800 numbers for CBG, Crimestoppers, and the Victims of Crime information line were prominently displayed on the leaflet. The Victims of Crime website (www.victiminfo.govt.nz) was also shown on the leaflet, along with a ministry contact email address.
- respondents were informed about where and when they would be able to find the survey results
- promotion of the survey on the ministry's website was in place to increase awareness of the survey and provide evidence of authenticity.

Contact outcomes

Interviewers recorded the outcome of the final call to each sampled dwelling as a code in the Sample Manager. These outcome codes were then used in the response rate calculations. Note that these were the final outcomes, as interviewers could call at a selected dwelling up to a maximum of 10 times.

Table 6.2: Contact outcomes, associated codes and categories

No.	Contact outcome	Code	Category
1	Interview	I	A
2	Unavailable**	U	B
3	No reply	NR	C
4	Access denied/no access	AD	C
5	Household refusal	HR	D or C
6	Respondent refusal	RR	D
7	Not available**	NA	D
8	Appointment	APT	D
9	Language††	L	D
10	Incapacitated (infirm/hospitalised)	INC	D
11	Partial	P	D
12	Other	OTH	D
	Dwellings visited†		
13	Not visited	NV	C
	Estimated eligibles		
	Response rate (%)		
	Vacant*	V	*
	Not a dwelling/Empty section*	NDE	*

† 'Dwellings visited' was the sum of the 12 contact outcomes listed above. These were the occupied dwellings; the unoccupied dwellings (vacant dwellings) were listed separately.

†† This referred to English language difficulties; that is, household members could not understand the interviewer or the printed leaflet.

* These contact outcomes (V and NDE) were not included in either the response rate calculation or the calculation of (occupied) dwellings visited, but has been included in this table for completeness.

** The difference between the 'Unavailable' and 'Not available' outcomes is that 'Unavailable' referred to usual residents who were living away from the household for the duration of the survey, whereas 'Not available' referred to selected usual residents who were not available for the interview at the time of call by the interviewer.

Table 6.3: Summary of contact outcomes by sample

No.	Contact outcome	Main sample	Māori booster sample	Overall sample
1	Interview	5,273	2,757	8,030
2	Unavailable	98	34	132
3	No reply	293	170	463
4	Access denied/no access	125	57	182
5	Household refusal	590	309	899
6	Respondent refusal	77	53	130
7	Not available	57	43	100
8	Appointment	2	3	5
9	Language	22	7	29
10	Incapacitated (infirm/hospitalised)	45	22	67
11	Partial	25	9	34
12	Other	26	17	43
13	Not visited	0	0	0
	Dwellings visited	6,633	3,481	10,114
	Estimated eligibles	6,528	3,441	9,968
	Response rate (%)	80.8	80.1	80.6
	Vacant	599	258	857
	Not a dwelling/Empty section	342	119	461

Response rate calculations

The response rate calculations used the outcome of the final call to each sampled dwelling that interviewers recorded. These outcomes were allocated to categories in the following manner for each of the PSUs in the sample: $i = 1-1,000$.

Table 6.4: Contact outcomes and categories

Category	Outcomes
Interviews (a_i)	<ul style="list-style-type: none"> Interviews (I)
Not eligible (b_i)	<ul style="list-style-type: none"> Not eligible (NE) Unavailable (U)

Category	Outcomes
Eligibility not established (c_i)	<ul style="list-style-type: none"> • No reply (NR) • Access denied/no access (AD) • Not visited
Eligible non-response (d_i)	<ul style="list-style-type: none"> • Respondent refusal (RR) • Not available (NA) • Appointment (APT) • Language (L) • Incapacitated (INC) • Partial (P) • Other (OTH) • Household refusal (HR)

An estimate of the eligible households within the PSU was calculated:

$$a_i + d_i \frac{c_i \times (a_i + d_i)}{(a_i + b_i + d_i)}$$

The response rate was the number of interviews achieved divided by the estimated eligible households, as shown below. This was the formula for calculating the response rate for each of the main and booster sample components within each PSU.

$$\frac{a_i}{a_i + d_i + \frac{c_i \times (a_i + d_i)}{(a_i + b_i + d_i)}}$$

This reduced, or simplified, to the following:

$$\frac{a_i \times (a_i + b_i + d_i)}{(a_i + d_i)(a_i + b_i + c_i + d_i)}$$

Response rates by demographic and geographic factors

Tables 6.5–6.9 show response rates broken down by various factors.

Table 6.5: Response rates by Stats NZ region

Region number	Region	Number of interviews	Number of PSUs	Overall sample response rate (%)
1	Northland	302	40	80
2	Auckland	2,358	301	78
3	Waikato	825	100	82
4	Bay of Plenty	626	72	84
5	Gisborne	76	9	84
6	Hawke's Bay	310	39	89
7	Taranaki	223	28	78
8	Manawatū-Wanganui	435	58	78
9	Wellington	960	113	83
16	Tasman	104	11	81

17	Nelson	74	10	76
18	Marlborough	71	10	80
12	West Coast	60	8	87
13	Canterbury	1,018	128	81
14	Otago	380	49	81
15	Southland	208	24	81
	Total	8,030	1,000	81

Table 6.6: Response rates by PSU deprivation

Level of area deprivation (NZDep2013)	Number of interviews	Number of PSUs	Overall sample response rate (%)
1 (lowest)	1,250	155	82
2	1,525	191	82
3	1,676	207	81
4	1,693	213	79
5 (highest)	1,886	234	80
Total	8,030	1,000	81

Interview counts by age, ethnicity and sex

Table 6.7: Ethnicity by total response

				Ethnicity											
				European		Māori		Pacific		Asian		Other		Don't know / Refused	
Age group	Total	M	F	M	F	M	F	M	F	M	F	M	F	M	F
15–19 years	334	164	170	98	107	61	67	25	23	21	17	3	1	0	0
20–29 years	1,176	535	641	304	375	159	209	55	62	101	89	13	10	2	0
30–39 years	1,410	580	830	343	453	146	268	42	89	116	139	16	15	1	1
40–49 years	1,355	552	803	352	536	172	293	40	49	51	64	11	8	1	2
50–59 years	1,407	598	809	433	570	174	269	24	31	42	43	7	13	1	2
60–64 years	622	254	368	187	273	55	107	14	8	15	17	4	4	0	1
65 years and over	1,724	740	984	617	795	135	189	8	23	17	26	9	11	5	0
Refused	2	0	2	0	0	0	1	0	0	0	0	0	0	0	0
Total	8,030	3,423	4,607	2,334	3,109	902	1,403	208	285	363	395	63	62	10	6

Table 6.8: Gender by total response

				Ethnicity									
				European		Māori		Pacific		Asian		Other	
Sample	Total	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Main	5,273	2,248	3,025	1,584	2,166	349	550	121	181	293	306	45	41
Māori booster	2,757	1,175	1,582	750	943	553	853	87	104	70	89	18	21
Total	8,030	3,423	4,607	2,334	3,109	902	1403	208	285	363	395	63	62

Table 6.9: Interviews completed by month

Month	Number of interviews	%
1–31 March 2018	792	9.9
1–30 April 2018	1315	16.4
1–31 May 2018	1161	14.5
1–30 June 2018	902	11.2
1–31 July 2018	1428	17.8
1–31 August 2018	1435	17.9
1–30 September 2018	894	11.1
1–7 October 2018	103	1.3
Total	8,030	100.0

Victim form completion

Respondents could complete up to eight victim forms during the interview. Table 6.10 presents the distribution of victim forms completed per respondent.

Table 6.10: Distribution of victim forms completed per respondent

Victim forms completed	Number of respondents	%
0	5,026	62.6
1	1,733	21.6
2	694	8.6
3	277	3.4
4	147	1.8
5	94	1.2
6	32	0.4
7	24	0.3
8	3	0.0
Total	8,030	100.0

Completion of the questionnaire

A questionnaire was considered ‘complete’ for the purpose of inclusion in the final dataset if a respondent had completed up to and including OB1.05 – that is, completed the exit question section.

There were 34 interviews that were started, but not completed (recorded as ‘partial’ in table 6.3). This typically occurs when the respondent elects to terminate the interview prior to completion, for example something occurs which requires their attention, or they experience an adverse reaction to the questions and decide to stop. Where appropriate, the interviewer arranges to return at a later

date, to complete the remainder of the survey. Where this is not possible, or appropriate, the interview remains incomplete.

Interview duration

The total average interview duration includes the time to complete all questions in the survey including the exit questions and data linking consent process.

Table 6.11: Average interview duration by number of victim forms completed

Number of victim forms	Average interview duration (minutes)
Total	21:33
No victim forms	16:40
one victim form	24:34
two victim forms	31:22
three victim forms	36:45
four victim forms	43:38
five victim forms	51:15
six victim forms	54:42
seven victim forms	60:19
eight victim forms	94:31
one or more victim forms	29:42

The average interview durations noted above do not include the time required to recruit the household, complete the respondent selection and consent processes, or disengage / exit the household following the interview. This time averages around 10 minutes.

7. Offence coding

Introduction

Offence coding is an important part of NZCVS. Offence codes are based on the responses provided in the victim forms, including a short description in the respondent's own words (except for sexual offences). Coding also draws to some extent on other questions throughout the questionnaire. Offence coding is relied upon for victimisation prevalence and incidence statistics produced by the survey.

Accurate offence coding is of critical importance to the overall quality of the survey outputs including incidence and prevalence rates. As mentioned in Chapters 3 and 4, an automated coding algorithm was built into the survey software, however the degree of accuracy was not at an acceptable level for it to be relied upon completely for the main study. For this reason, it was decided to manually code all incidents for at least the first year of fieldwork. For subsequent survey years, a decision could then be made to:

- retain automated coding in its existing form and continue to use it as part of the manual coding QA process (described below)
- attempt to further improve the accuracy of the automated coding algorithms, with a view to reducing the amount of manual coding
- discontinue automated coding completely

Offence coding resources

A number of resources were provided to coders both as part of their training and for use during coding activities.

Table 7.1: Offence coding resources

Resource	Description
Offence Coding Workbook	The workbook provided: <ul style="list-style-type: none"> • contextual information about the survey • guidelines on work practice • a user guide to the coding system/interface.
Offence Coding Manual	The purpose of the manual was to: <ul style="list-style-type: none"> • explain the principles of offence coding as part of the NZCVS • document coding practices and procedures.
Questionnaire	A copy of the final questionnaire that was being used as part of fieldwork.
Crimes Act	Link to the Crimes Act so that coders could look up or check details should they need to.
Experts/Supervisors	An expert from the New Zealand Police as well as a coding supervisor, both of whom were part of the 2014 NZCASS coding team, were available to assist the student coder as and when required throughout the coding process.

Coders and training

Because offence coding requires a foundation in legal theory, the coders working on the survey had to:

- be fourth-year honours students (law), or have graduated from an honours law degree
- have completed the criminal law module and legal reasoning / research modules at a B grade or above
- be able to give evidence of IT literacy
- have a high attention to detail.

The coding supervisor (a Master of Laws student) completed the coding for the pre-pilot trial and the pilot study. An additional undergraduate student coder was hired by CBG for the main study. All coding was completed by the student coder and the coding supervisor, with each coding roughly half of the records each. They were supported by an expert from New Zealand Police.

Training as part of the offence coding process took place in a number of stages (Table 7.2).

Table 7.2: Training undertaken for offence coding

Resource	Description
Self-directed study	<p>Reading of:</p> <ul style="list-style-type: none"> • Coding Workbook • Coding Manual • Questionnaire. <p>Watching of the following presentations from the interviewer training:</p> <ul style="list-style-type: none"> • introduction to NZCVS • Ministry of Justice address • crime in New Zealand.
Online webinar	<ul style="list-style-type: none"> • two hours • overview, orientation and demonstration.
Individual practice time	<ul style="list-style-type: none"> • seven days • using records from the main study (in a separate practice environment).
Observed assessment	<p>Coders were subject to an online, observed assessment by the coding supervisor. A minimum of 20 CAPI / CASI victim forms were selected for coding during the assessment, which aimed to ensure that the coder could demonstrate the following competencies:</p> <ul style="list-style-type: none"> • assign standard offence codes with a high degree of accuracy • coding decisions are based on a review of all the detail provided for each offence, including all forms for that victim • knowledge of when to submit a record as certain and when to submit as uncertain and enter sensible, succinct and understandable comments as appropriate • refer back to the Coding Manual before applying a code, in particular where an offence is borderline • ability to code with a high degree of accuracy common ambiguous and/or difficult offence scenarios, including 98/99 codes. <p>Coders were able to commence live coding on real data once the supervisor was satisfied that all of the above competencies had been met.</p>

Coding practice and processes

The following section provides an overview of the offence coding and quality assurance process undertaken. Details of how offences were coded are provided in the NZCVS Offence Coding Manual.²⁴

Overview

1. One of the NZCVS research objectives requires comparison with levels of reported crime. As such, it's important that offence coding for NZCVS mirrors Police recording practice as closely as possible.
2. An exact match with Police recording practice is unlikely given that:
 - a. different Police officers may make different judgements when deciding:
 - i. whether to record an incident as an offence
 - ii. which category it should be placed in.
 - b. Police continuously review and refine recording rules, which means some practice change occurs between surveys.
3. As a general principle, offences in the NZCVS are coded:
 - a. in accordance with current legal theory
 - b. in line with current Police recording procedures.
4. In most circumstances these two requirements will be met and there will be no conflict (i.e. Police recording practice will be in line with the legal theory and definitions).

Offence codes

Table 7.3 lists the offence codes collected in the NZCVS.

Table 7.3: Offence codes collected in the NZCVS

Offence code	Offence description
1	Burglary
2	Theft of / unlawful takes/converts motor vehicle
3	Theft (from motor vehicle)
4	Unlawful interference / getting into motor vehicle
5	Damage to motor vehicles
6	Unlawful takes/converts/interferes with bicycle
7	Property damage (household)
8	Property damage (personal)
9	Theft (except motor vehicles – household)
10	Theft (except motor vehicles – personal)
11	Trespass
12	Robbery

²⁴ The NZCVS Offence Coding Manual is available from the ministry on request.

Offence code	Offence description
13	Fraud and deception
14	Cybercrime
15	Sexual assault
16	Other assault
17	Harassment and threatening behaviour
18	Other incidents
98	Offence not in scope
99	Not an offence

Coding period

Offence coding for the pre-pilot trial and pilot study were completed shortly after data collection using a manual process. Once the decision had been made to retain manual coding for the main study, CBG began work on re-programming an online coding portal that was used for the 2014 NZCASS. Programming and testing of the online portal was completed in May 2018. Coding the backlog of incident forms collected from field between March and May began on 6 June. The backlog of incidents were coded by the end of July and from that point records flowing into the system were coded in 'real time'.

Coding for the main study was finalised on 11 October, 4 days after the conclusion of fieldwork – this included the completion of all quality assurance processes.

Coding portal

The coding portal was an online, web-based system designed by CBG. This system allowed coders to work remotely and around their other work and study commitments.

The advantages of the portal include:

- ease of navigation and ability to view all the information on one page for each respondent
- ease of moving between forms, an important consideration in ensuring all forms are reviewed before a final coding decision is made, to ensure that identical incidents are not coded more than once and to easily see any patterns of victimisation
- no delay in the survey data collected by the interviewer being made available to the coder – new records were loaded on a daily basis as interviewing progressed, thus reducing time pressure on the coding activity
- easier analysis and quarantine of coding decisions
- ability to limit access, tailor separate views for specific coders or users (e.g. only the Police expert could write in the Police comments box and each coder sees their own individual list of records to be coded)
- instant reports in real time of the number of records submitted, selected for double-coding and outstanding.

A screenshot of the coding portal has been provided in Appendix D.

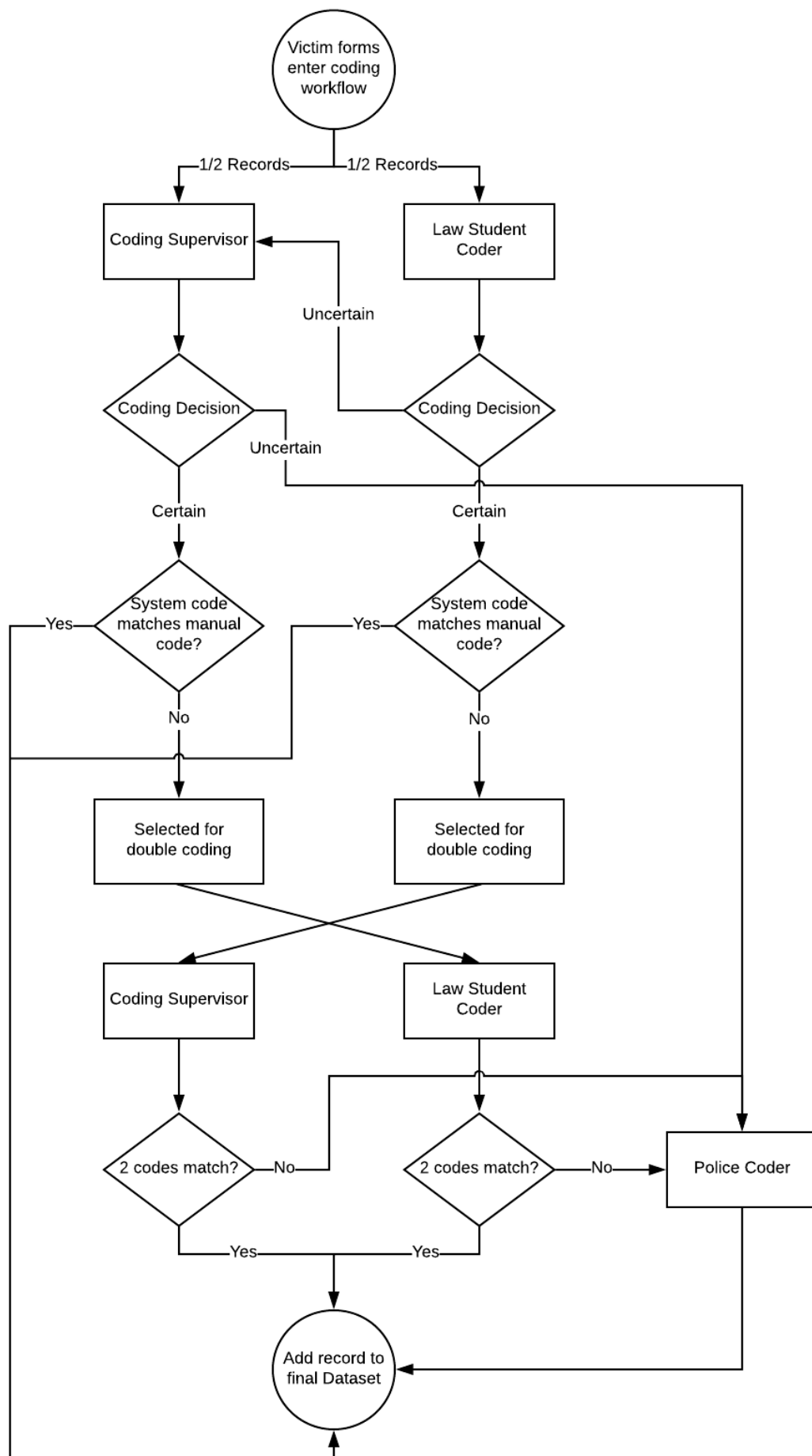
Coding quality assurance

To ensure that coding decisions were correct, a number of quality assurance steps were put in place (Table 7.4). Figure 7.1 also presents a flow chart of the coding workflow.

Table 7.4: Offence coding quality assurance process

Step		Description
1	Forms sent to coder	One interview could have up to eight forms to code. All the forms in an interview were individually coded, but grouped together as a set.
2	Certain vs Uncertain	Each coding decision needed to be marked as either 'Certain' or 'Uncertain' by the coder. 'Uncertain' codes had to be accompanied by a comment from the coder.
3	Uncertain codes	All decisions where the student coder was uncertain of the offence code assigned were reviewed by the coding supervisor. Any cases the supervisor was uncertain of were reviewed by the Police coder.
4	Double-coding	Records could be selected for double-coding, by both the student coder and the coding supervisor. This occurred where the offence code selected by the first coder did not match the automated system-assigned code, and where the coder also marked the record as 'Certain'.
5	Double-coding agreement	Where the record had been double-coded and the codes assigned by each coder did not match, the Police coder was required to review and decide on the final code to be assigned.
6	Expert discussion	Where the Police coder was uncertain of the code to assign, the record was discussed with the coding supervisor and ministry (if required). An online record of all cases being discussed was kept with the outcome and rationale recorded.

Figure 7.1: Offence coding workflow



Quality assurance statistics

Quality assurance statistics were reported to the ministry monthly throughout the fieldwork period. Table 7.5 shows the final number of coding decisions that were reviewed along with pass rates.

Table 7.5: Offence coding quality assurance statistics

			Notes
Main coding process	Total number of records coded	5,460	
	Number of 'Uncertain' records	236	Records coded as 'Uncertain' by the student coder were reviewed by the coding supervisor. Records coded as 'Uncertain' by the coding supervisor were reviewed by the Police coder.
	Uncertain code match	141	Of the uncertain records, how many were assigned the same code by the reviewer as the initial coder.
	Uncertain code mismatch	95	Of the uncertain records, how many were assigned a different code by the reviewer compared with the initial coder.
Double-coding process	Number of records selected for double-coding	2,991 (55%)	One hundred percent of 'Certain' records where the system code did not match the manual code, were selected for double-coding by both the student coder and the coding supervisor.
	Codes matched	2,464 (82%)	Number of double-coded records that were coded the same way by the student coder and the coding supervisor.
	Codes did not match	527 (18%)	Number of double-coded records that were not coded the same way by the student coder and the coding supervisor.
	Records coded by Police coder	1,232	All records that were not coded the same way by the student coder and coding supervisor were reviewed by the Police coder. Additionally, 58 records that were coded the same way by the student and supervisor, but where one of them was uncertain, were also reviewed. During the review of these 585 records, the Police coder also reviewed 647 other records that belonged to the same respondents, but were not specifically selected for review.
	Uncertain code match	1,164 (94%)	Of the records reviewed by the Police coder, how many were assigned the same code by the Police coder as either the supervisor or the student coder.
	Uncertain code mismatch	68 (6%)	Of the records reviewed by the Police coder, how many were assigned a different code by the Police coder than either the supervisor or student coder.

Offence coding statistics

Number of forms coded

Table 7.6 presents the number of forms coded in each of the victim form templates. A total of 16 victim form templates were programmed into the survey as each respondent could complete a maximum of eight victim forms, being all individual victim forms, all cluster victim forms, or any combination of the two.

Table 7.6: Total number of forms coded per victim form template

Type of Form	Template	
Individual victim form	VF1	2592
	VF2	1050
	VF3	507
	VF4	305
	VF5	188
	VF6	122
	VF7	91
	VF8	62
Cluster victim form	VF1	313
	VF2	76
	VF3	69
	VF4	41
	VF5	21
	VF6	11
	VF7	9
	VF8	3
Total		5,460

Distribution of offence codes

Table 7.7 examines the distribution of offence codes assigned by the automated algorithm versus the codes manually assigned by the coding team and the degree to which the automated system code matched the manual code. The last column presents the distribution of codes assigned by the coding team.

Table 7.7: Distribution of offence codes assigned automatically by the system versus the coding team, the match rate and final distribution

Offence code	Offence description	System code	Manual code	System match % ²⁵	Final distribution %
1	Burglary	1,284	1,249	83	23
2	Theft of / unlawful takes/converts motor vehicle	68	74	75	1
1+2	Burglary + theft of / unlawful takes/converts motor vehicle	63	67	73	1
3	Theft (from motor vehicle)	155	165	81	3
4	Unlawful interference / getting into motor vehicle	129	39	28	1
5	Damage to motor vehicles	155	185	63	3
6	Unlawful takes/converts/interferes with bicycle	33	40	91	1
7	Property damage (household)	232	158	53	3
8	Property damage (personal)	43	13	28	0
9	Theft (except motor vehicles – household)	207	176	65	3
10	Theft (except motor vehicles – personal)	155	129	68	2
11	Trespass	474	162	25	3
12	Robbery	12	18	58	0
13	Fraud and deception	625	474	70	9
14	Cybercrime	289	212	70	4
15	Sexual assault	275	281	100	5
16	Other assault	395	305	64	6
17	Harassment and threatening behaviour	766	300	33	5
18	Other incidents	100	1	1	0
98	Offence not in scope		184		3
99	Not an offence		1,228		22

Double coding

There was one scenario where an incident could be coded with two offence codes. This was burglary combined with theft of / unlawfully taking/converting a motor vehicle. In the NZCASS other double-code combinations were possible, however following consultation with Police, it was decided to only

²⁵ This is calculated at the individual victim form level, e.g. of those incidents coded by the system as burglary, what proportion of these ended-up being manually coded as burglary also.

allow double-coding for this one scenario for NZCVS. This approach was taken as it maintained the most consistency with Police coding practice.

8. Data processing

Datasets

Each interviewer was required to upload encrypted survey data to CBG servers every day they were active in the field. The files consisted of all changes that had been made to the Sample Manager database residing on the interviewer's laptop since the last upload. For example, this could include new survey data, information on contact attempts or new household outcome coding.

Once received at CBG, the files were decrypted and checked before being processed into a SAS data warehouse. A number of datasets resided within the warehouse pertaining to survey data collected via the TSS questionnaire, exit questions (recorded directly into the Sample Manager) and other survey metrics recorded by the interviewer (e.g. respondent information and outcome coding).

The contents of each export file were analysed and directed to the relevant datasets ready for further formatting and cleaning. Data pertaining to the offence coding process was entered directly into a secure web interface which wrote directly to its own SAS dataset.

Once the survey data had been formatted and cleaned, several output datasets were created for delivery to the ministry (see Table 8.1).

Table 8.1: Datasets delivered to the ministry by the fieldwork provider

Dataset	Description	Supplied format
Core	Contains all variables relating to the questionnaire and derived variables, with the exception of victim forms and data related to specific incidents. Also contains variables summarising offence prevalence and incidence.	SAS dataset
Module	Contains all variables relating to the in-depth module questions.	SAS dataset
Incidents	Contains victim forms and original and final offence codes assigned to all incidents recorded in the questionnaire along with information on the auditing process and outcome, whether an original code was out of scope and whether a code was imputed.	SAS dataset
Household outcomes	Contains information on the final contact outcomes of all selected addresses in the sample.	SAS dataset
Data linking	Contains information collected as part of the data linking consent process for those respondents that agreed to this part of the survey.	SAS dataset
Re-contact	Contains information collected as part of the re-contact consent process for those respondents that agreed to being contacted to take part in further research.	SAS dataset

Formatting

Questionnaire responses arrive from the field as raw survey files. Formatting of this raw data was performed to ensure that the supplied datasets were consistent with the questionnaire document. The following tasks were undertaken during the formatting stage:

- variables were renamed to match the question numbers used in the questionnaire document
- unwanted variables were removed. These were usually ‘dummy’ variables that were included in the survey in order to achieve desired functionality and behaviour required (e.g. complex skip logic and consistency checks)
- question responses were re-coded to match the questionnaire document. Occasionally, response options were assigned different numbers to the questionnaire document
- multiple response questions were converted into binary flag variables where every response in the answer framework was assigned zero or one to indicate if the response had been selected
- survey responses recorded in Sample Manager were merged into the main dataset. The exit and re-contact questions were administered in CBG’s Sample Manager software. The responses to these questions needed to be combined with the responses recorded in the survey software
- variables were reordered to match the questionnaire document
- derived variables were added to the main dataset.

Automatic skip cleaning

During the interview process, respondents sometimes decided to go back to a previous question and change the response that was originally provided. Occasionally when the response is changed, the respondent may branch off to a different part of the survey as a result of this. Automatic skip cleaning was implemented to clean the response recorded on the old logic path.

Data quality assurance

Interim datasets were provided to the ministry upon the completion of 2,500 interviews. The purpose of these interim datasets was to check the quality of the data provided and, where necessary, resolve issues or strengthen quality assurance processes ahead of the final dataset delivery.

Prior to delivery, all datasets were subject to a number of checks developed by the ministry, and CBG. The checks were completed by CBG using SAS with the results being provided to the ministry in a report accompanying the datasets. Table 8.2 summarises the main checks that were conducted on each of the datasets supplied. (Note: This is not an exhaustive list of all checks that took place.)

Table 8.2: Data from fieldwork provider quality assurance checks

Dataset	Checks undertaken
Main and Module	<ul style="list-style-type: none"> • sample sizes were as expected • question outliers were identified and investigated • inconsistencies within and between questions were identified and investigated • missing or unexpected values were identified and investigated • questionnaire sections were complete • victim forms were complete for all selected incidents • question timings were recorded for all questions and question sections • refusal rates were at or below expected levels.
Incident	<ul style="list-style-type: none"> • offence codes were assigned to all suitable incidents recorded in the victim forms • records were reviewed per the agreed algorithm • information on the outcome of the checking / double-coding was recorded, including details of any updated offence code
Household outcomes	<ul style="list-style-type: none"> • final outcome codes were assigned to all selected dwellings. • unique ID numbers were assigned to each household.
Data linking	<ul style="list-style-type: none"> • date of birth information provided for the purpose of data linking was consistent with age group recorded in survey • date of birth provided was within a sensible range • surname, address and sex details were provided for the vast majority of respondents that agreed to data linking.
Re-contact	<ul style="list-style-type: none"> • contact details were recorded for all respondents who agreed to take part in future research.

9. Classifications, coding and groupings

Introduction

This chapter provides detail about the classifications used to output the data and how offences were grouped together for analysis.

Classifications

A statistical classification is a way to group a set of related categories in a meaningful, systematic and standard format. The value of statistical data is maximised when classified in a consistent way across data sources.

Table 9.1 shows the final demographic and geographic classifications used for the NZCVS reporting, along with the sample sizes for each category.²⁶

Table 9.1: Sample sizes by demographic and geographic classifications

Data item	Categories	Sample size
Personal factors		
Sex	Male	3,423
	Female	4,607
Gender identity	Male	3,430
	Female	4,581
	Gender diverse	11
Age group	15–19 Years	334
	20–24 Years	503
	25–29 Years	673
	30–34 Years	733
	35–39 Years	677
	40–44 Years	651
	45–49 Years	704
	50–54 Years	688
	55–59 Years	719
	60–64 Years	622
	65–69 Years	527
	70–74 Years	458
	75 years and over	739

²⁶ Residual categories not output (such as ‘Don’t know’ and ‘Refused’) are not presented, hence the sample sizes for each data item may not sum to the total number of respondents.

Data item	Categories	Sample size
Ethnicity (total)	New Zealand European	5,048
	Māori	2,303
	Samoan	233
	Cook Island Māori	106
	Tongan	85
	Niuean	32
	Chinese	244
	Indian	264
	Other ethnicity	995
Legally registered relationship status	Never married and never in a civil union	1,912
	Divorced / marriage dissolved	553
	Widowed / surviving partner	591
	Separated	445
	Married / civil union / de facto (not separated)	4,504
Current partnership status	Partnered – legally registered	4,445
	Partnered – not legally registered	741
	Non-partnered	2,836
Sexual identity	Heterosexual or straight	7,636
	Gay or lesbian	89
	Bisexual	116
	Other	35
Disability status	Disabled	205
	Not disabled	7,825
	Disability status unknown	0
Psychological distress	No probable serious mental illness	7,892
	Probable serious mental illness	93
	Mental illness status unknown	45
Economic factors		
Employment status	Employed	4,986
	Unemployed	368
	Not in the labour force	
	Retired	1,431
	Home or caring duties or voluntary work	465
	Studying	309
	Not actively seeking work / unable to work	205
	Other	246

Data item	Categories	Sample size
Personal income	Zero income / none / loss	387
	\$1–\$5,000	293
	\$5,001–\$10,000	181
	\$10,001–\$20,000	839
	\$20,001–\$30,000	1,240
	\$30,001–\$40,000	786
	\$40,001–\$50,000	718
	\$50,001–\$60,000	631
	\$60,001–\$70,000	555
	\$70,001–\$100,000	755
	\$100,001–\$150,000	376
	More than \$150,000	230
Household income	Zero income / none / loss	298
	\$1–\$5,000	157
	\$5,001–\$10,000	68
	\$10,001–\$20,000	402
	\$20,001–\$30,000	793
	\$30,001–\$40,000	592
	\$40,001–\$50,000	517
	\$50,001–\$60,000	523
	\$60,001–\$70,000	509
	\$70,001–\$100,000	965
	\$100,001–\$150,000	977
	More than \$150,000	519
Financial stress: Limited to buy item for \$300	Not at all limited	3,503
	A little / quite limited	2,327
	Very limited / couldn't buy it	2,074
Financial stress: Can meet unexpected expense	Yes	6,326
	No	1,540
Household factors		
Household composition	One-person household	2,392
	One parent with child(ren)	545
	One parent with child(ren) and other person(s)	229
	Couple only	1,979
	Couple with no children and other person(s)	338
	Couple with child(ren)	1,462
	Couple with child(ren) and other person(s)	318
	Multiple family household	179
	Other multi-person household	482
	Household composition unidentifiable	106

Data item	Categories	Sample size
Family type	Couple without children	2,552
	Couple with child(ren)	
	Couple with dependent child(ren) under 18 only	1,179
	Couple with adult child(ren) only	464
	Couple with adult child(ren) and dependent child(ren) under 18	245
	Couple with some or all child(ren) of unknown dependency status	0
	One parent with child(ren)	
	One parent with dependent child(ren) under 18 only	530
	One parent with adult child(ren) only	278
	One parent with adult child(ren) and dependent child(ren) under 18	128
	One parent with some or all child(ren) of unknown dependency status	0
	Not in a family nucleus	2,669
	Family type unidentifiable	0
Tenure and landlord type	Owned (including with a mortgage)	5,166
	Rented – private	2,287
	Rented – government (local and central)	538
Geographic factors		
Urbanisation	Major urban area	4,011
	Large urban area	1,196
	Medium urban area	824
	Small urban area	817
	Rural settlement	257
	Rural other	925
	Other	0
Region	Northland Region	302
	Auckland Region	2,358
	Waikato Region	825
	Bay of Plenty Region	626
	Gisborne Region	76
	Hawke's Bay Region	310
	Taranaki Region	223
	Manawatū-Wanganui Region	435
	Wellington Region	960
	West Coast Region	60
	Canterbury Region	1,018
	Ōtago Region	380
	Southland Region	208
	Tasman Region	104
	Nelson Region	74
	Marlborough Region	71

Data item	Categories	Sample size
NZ Deprivation Index	Quintile 1 (least deprived)	1,250
	Quintile 2	1,525
	Quintile 3	1,676
	Quintile 4	1,693
	Quintile 5 (most deprived)	1,886
Total respondents		8,030

Disability and psychological distress derivation

Two international scales were used in NZCVS to indicate if the respondent was disabled and if they were likely to suffer from psychological distress. They were selected due to their widespread application in similar international and local surveys. For example, both scales are used in the New Zealand Health Survey and the disability questions were also used in the 2018 Census. Both scales have also been widely tested and validated.

Disability

The Washington Group Short Set of disability questions (WGSS) was incorporated into the main demographics section of the questionnaire. The questions ask if the respondent has experienced difficulties performing basic universal activities (walking, seeing, hearing, cognition, self-care and communication). The questions were not designed to measure all aspects of difficulty in functioning that people may experience, but rather those domains of functioning that are likely to identify a majority of people at risk of participation restrictions²⁷.

For each activity, the respondent reports to what extent they have difficulty on the following scale:

- no difficulty
- some difficulty
- a lot of difficulty
- cannot do it at all.

Someone who reports 'a lot of difficulty' with at least one, or at least 'some difficulty' with at least two of the six basic activities covered, is defined as disabled using this classification.

Psychological distress

The Kessler Psychological Distress Scale²⁸ (K6) was also incorporated into the main demographics section of the survey. The K6 is a psychometric scale which asks the respondent to report how they have been feeling over the past 30 days across six different areas, using a 5-point Likert scale from 'all of the time' (score of 5), to 'none of the time' (score of 1).

The scores for all statements are summed. If the combined score is 16 or higher, the person is recorded as 'probable serious mental illness' using the classification.

Demographic coding

The two demographic questions coded as part of the NZCVS data processing were ethnicity and household composition. This section also describes how 'Other – Specify' options were handled.

Ethnicity

CBG coded the responses to the ethnicity question MD1.01 to the Stats NZ 5-digit Ethnicity Standard Classification (2005).

The survey was pre-loaded with the Stats NZ database of ethnicity classifications. If a respondent selected the 'Other' ethnicity response option at MD1.01, they were taken to a second screen where the 'Other' ethnic groups were recorded. As the interviewer started to type into the text box, a list of

²⁷ <http://www.washingtongroup-disability.com/washington-group-question-sets/short-set-of-disability-questions/>

²⁸ https://www.hcp.med.harvard.edu/ncs/k6_scales.php

matches from the database were displayed, and the correct ethnic group could be selected. This process provided CBG with a 5-digit ethnicity classification.

In accordance with the Stats NZ classification, the 5-digit ethnicity codes were assigned to broader categories as follows according to the first two digits of the code:

- European – 10, 11, 12, 61
- Māori – 21
- Pacific peoples – 30, 31, 32, 33, 34, 35, 36, 37
- Chinese – 42
- Indian – 43
- Other Asian – 40, 41, 44
- Other ethnicity – 51, 52, 53.²⁹

These are multiple assigned ethnic groups, in that a respondent can be assigned to multiple groups. For example, if a respondent reported being Māori and European ethnicity, they are assigned to both categories.

Household composition

The questions used to derive household composition were the same as those used by Stats NZ in their other household surveys, however the implementation in NZCVS was slightly different. The two questions (MD5.01 and MD5.02) required respondents to first review the list of occupants that was provided when the household was first contacted / recruited. The list consisted of the initials, age and sex of all usual occupants. The interviewer could update the list if there were any errors, e.g. occupants who were missed at the point of recruitment, or incorrect age / sex. Once this task had been completed, the respondent was requested to report their own relationships to all other occupants in the dwelling³⁰, then report the inter-relationships of all other members. This was administered as a matrix which listed each occupant to a different row and then again to each column of the table. Where each occupant pairing intersected, a drop-down menu was programmed where the relationship could be selected³¹.

Seventeen edit checks were programmed into the Sample Manager which alerted the interviewer to unlikely scenarios, which could be checked, e.g. where someone was recorded as having more than one spouse / partner, or where someone was recorded as having more than two parents. The checks were 'soft', meaning that the interviewer could override the alert if the response recorded was correct.

Responses recorded to the household composition questions were formatted into their own dataset with one row per occupant. This dataset was then used to derive family type categories using programming code provided by Stats NZ. Once the family type categories had been assigned, the household composition variable could also be derived (using the family type data).

Table 9.2 provides descriptions of each household grouping.

Table 9.2: Household composition groupings descriptions

Composition grouping	Description
One-person household	Lives alone.

²⁹ For detail on the 5-digit ethnicity codes see the Statistics NZ Level 5 classification <http://www.archive.stats.govt.nz/methods/classifications-and-standards/classification-related-stats-standards/ethnicity.aspx>

³⁰ This was only applicable to dwellings with at least two occupants.

³¹ Stats NZ do not use a matrix, instead all relationships are asked as separate question screens in CAPI.

Composition grouping	Description
One parent with child(ren)	One person living with their son(s) and/or daughter(s) (natural, step, adopted or foster).
One parent with child(ren) and other person(s)	This household could include another person that is unrelated, such as a flatmate or boarder or could be related but not part of the immediate family unit, such as parent's sibling/children's aunt.
Couple only	Two persons who are either opposite-sex or same-sex spouses/civil union partners/partners.
Couple with no children and other person(s)	This household could include another person, such as a flatmate, boarder or a family member, such as a parent of one couple member.
Couple with children	Two persons who are either opposite-sex or same-sex spouses/civil union partners/partners, living with their son(s) and/or daughter(s) (natural, step, adopted or foster).
Couple with children and other person(s)	This household could include another person that is unrelated, such as a flatmate or boarder or could be related but not part of the immediate family unit, such as parent's sibling/children's aunt.
Multiple family household	This is when multiple families are living in the same household – for example, two married couples flatting together or a married couple plus one partner's mother and father (which is considered a second family unit).
Other multi-person household	This comprises households of related and/or unrelated people, where there are no couples or parents with a child. It consists, for example, of flatting arrangements, two siblings living together or one person with a boarder.

- **Note:** The terminology of 'children' can relate to young children or adult children, but are defined to be children if they do not have their own partners or children of their own living in the household.

'Other – Specify' responses

A number of questions in the NZCVS questionnaire allowed the respondent to provide an 'Other – Specify' response. Where possible, there were back-coded to the existing response framework. Response that could not be back-coded were analysed to identify opportunities where the questionnaire could be improved to capture any common responses for future iterations.

Geographic derivations

Three geographic data items were merged onto the NZCVS datasets for analysis:

1. the New Zealand Deprivation Index
2. urbanisation
3. regional classifications.

The New Zealand Index of Deprivation

The New Zealand Index of Deprivation 2013 (NZDep2013) was obtained from Stats NZ and merged onto the NZCVS datasets by PSU. The deciles were converted to quintiles through combining deciles 1 and 2, 3 and 4, etc.

Urbanisation

The Urban Rural Classification 2018 was obtained from Stats NZ and merged onto the NZCVS datasets by PSU. The 2-digit urban area code was assigned to output categories as follows:

- major urban area – code 11
- large urban area – code 12
- medium urban area – code 13
- small urban area – code 14
- rural settlement – code 21
- rural other – code 22
- other – codes 31, 32, 33.

Regional Classifications

Where the number of responses permits results are presented aggregated by regional council. Some merging of regional council data may be necessary for councils with smaller samples

Offence groupings

Offences often need to be grouped together rather than output as individual offence codes.

Offences are grouped together in different ways for different purposes. The 2018 NZCVS project team undertook the following process to determine how offences were to be grouped together:

- proposed a set of four offence groupings to be used for 2018 reporting, with consistent naming and labelling
- sought stakeholder feedback on whether proposed groupings meet their current needs, balanced with what is possible due to sample sizes.

Table 9.3 presents this standard set of four offence groupings used throughout 2018 NZCVS reporting.

The grouping of offences was based on the final offence codes (see Section 7 Offence Coding for description of coding process).

Table 9.3: Offence groupings used in analysis

Offence code	Grouping 1 All offences - detailed	Grouping 2 Personal and Household	Grouping 3 All offences - broad	Grouping 4 Type of violence
13	Fraud and deception	Personal offences	Fraud ³²	
14	Cybercrime			
15	Sexual assault		Violent interpersonal	Sexual offences
17	Harassment and threatening behaviour			

³² 'Fraud' are defined as offence codes 13 and/or 14.

8	Property damage (personal)		offences ³³ by relationship to offender ³⁴	Threats and damage offences ³⁵
16	Other assault			Physical offences
12	Robbery			
10	Theft (except motor vehicles – personal)	Household offences	Thefts and damage offences ³⁶	
9	Theft (except motor vehicles – household)			
7	Property damage (household)			
6	Unlawful takes/converts/interferes with bicycle			
2	Theft of / unlawful takes/converts motor vehicle		Vehicle offences	
3	Theft (from motor vehicle)			
4	Unlawful interference / getting into motor vehicle			
5	Damage to motor vehicles			
1	Burglary		Burglary	
11	Trespass			
18	Other incidents			
98	Offence not in scope	Residual		
99	Not an offence			

Separating damage offences

As presented in Table 9.3, household and personal damage offences (offence codes 7 and 8 respectively) were classified into either:

- ‘threats and damage offences’ (as part of interpersonal violence); or
- ‘thefts and damage offences’.

The criteria used to separate these offences are presented in Figure 9.1.

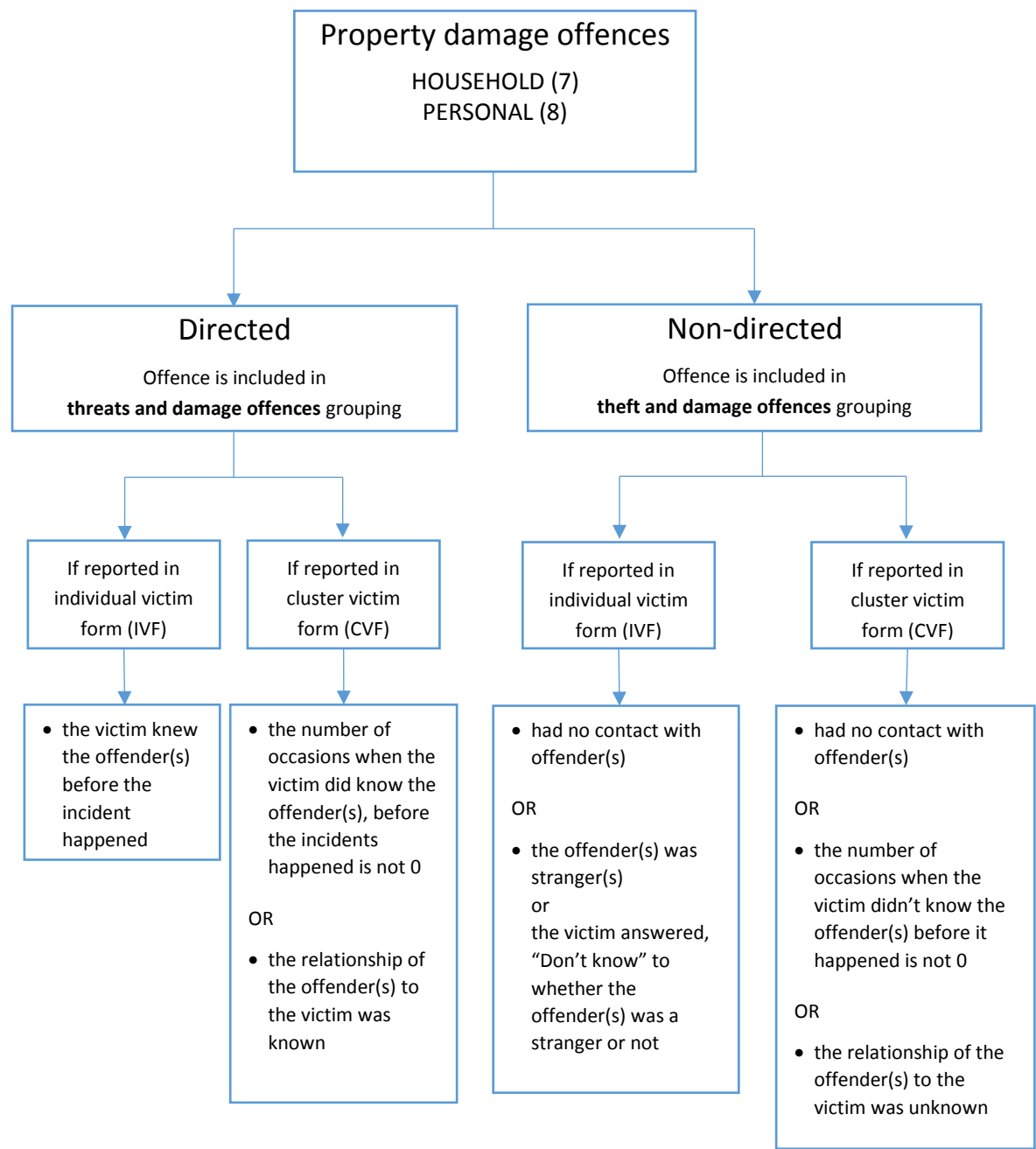
³³ ‘Violent interpersonal offences’ are defined as offence codes 12, 15, 16, 17 and/or (7, 8 classified as ‘directed’, i.e. the victim knew the offender(s) before the incident happened, see Figure 9.1).

³⁴ The hierarchy of relationship to offender is provided later in this chapter.

³⁵ ‘Threats and damage’ are defined as offence codes 17 and/or (7, 8 classified as ‘directed’, i.e. the victim knew the offender(s) before the incident happened, see Figure 9.1).

³⁶ ‘Thefts and damage offences’ are defined as offence codes 6, 9, 10 and/or (7, 8 classified as ‘non-directed’, i.e. had no contact with offender(s) or the offender was a stranger, see Figure 9.1).

Figure 9.1: Separation of damage offences



Interpersonal violence groupings

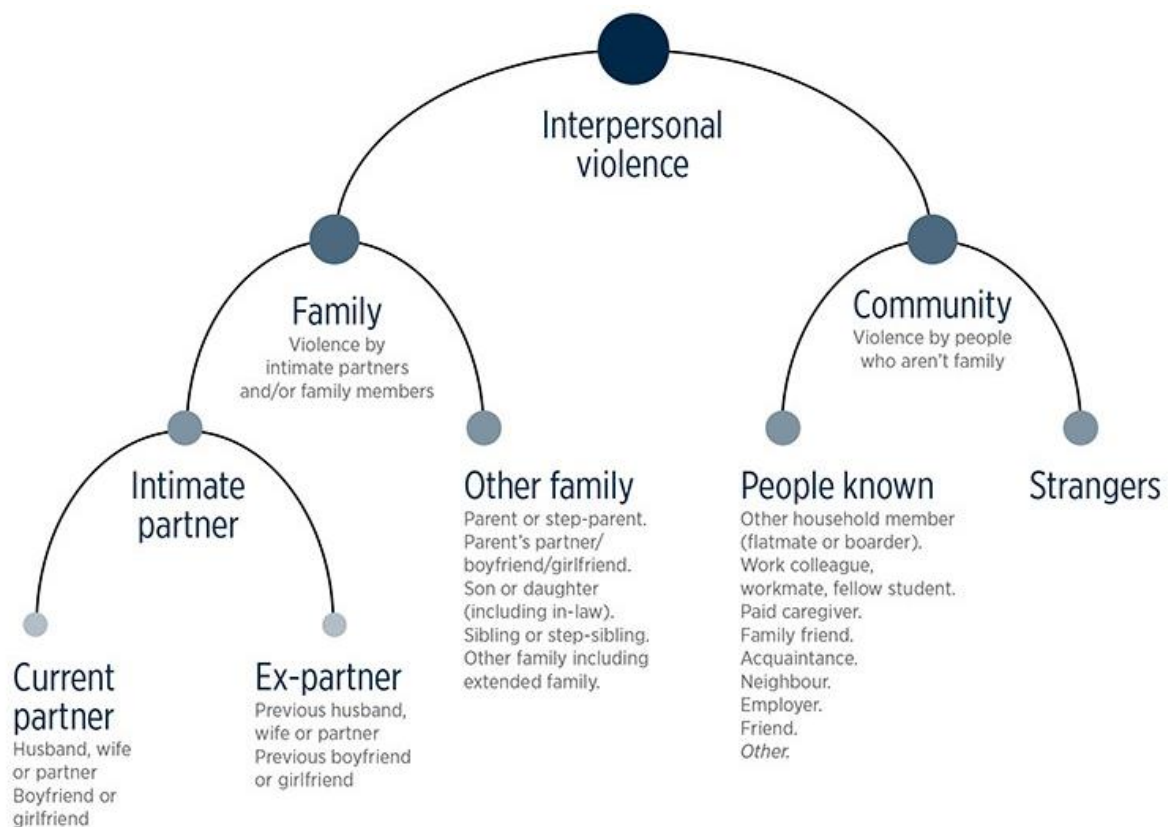
The following is the framework for reporting violent interpersonal offences. In 2018, family/whānau violence was chosen as the priority topic for the in-depth module. The framework aims to portray family/whānau violence in New Zealand in a way that better meets stakeholder needs. The groups in the NZCVS interpersonal violence reporting framework are based on:

- the victim's relationship to the offender
- the type of violence experienced.

Victim's relationship to the offender

Where a victim had contact with the offender or came to know who committed the offence, they are asked: 'What were their relationships to you at the time it happened?' This information is used to group relationship types as shown in Figure 9.2.

Figure 9.2: Interpersonal violence relationship to offender framework



In reporting, the group used for analysis largely depends on the sample size. For example, if the sample is too small to look at estimates for 'Intimate partner' and 'Other family', analysis will be done at the next level in the hierarchy – 'Family' (violence by intimate partners or other family members).

Type of offences experienced

The groupings used in the NZCVS are as follows: physical offences, sexual offences, threats and damage offences. Table 9.4 shows the NZCVS offences that are in or out of scope for each of these groups.

Table 9.4: Types of interpersonal violence

Type of violence	In scope	Out of scope ³⁷
Physical offences	<ul style="list-style-type: none"> • other assault • robbery 	
Sexual offences	<ul style="list-style-type: none"> • sexual assault 	
Threats and damage offences	<ul style="list-style-type: none"> • threats • damage to property – personal • damage to property – household (when the victim had contact with the offender, or if the victim was given information about who the offender was) 	<ul style="list-style-type: none"> • Coercive & Controlling behaviours³⁸

³⁷ Reminder: Children under 15 years old and those living in institutions (such as aged care homes) are out of scope for the NZCVS.

³⁸ Some coercive & controlling behaviours are collected as part of the NZCVS however, these are collected differently from offences.

10. Weighting

Introduction

This chapter describes the methods used to produce weights and replicate weights for NZCVS. The project team worked with Stats NZ to design a weighting methodology for NZCVS that was robust and clearly defined.

Weights are usually applied to sample survey data during its analysis to adjust for factors such as differential selection probabilities, non-response patterns and sample skews relative to population figures.

The sample design for the NZCVS incorporated four levels: PSUs, households, people, and victimisation incidents. Weights have been calculated to enable analysis of the NZCVS data at three of these levels: households, people, and incidents. These weights incorporate adjustments for each of the factors listed above.

Household weights

Household selection weights

Initial household weights were calculated as the reciprocal of each household's estimated probability of inclusion in the sample, across both the Māori booster sample and the main sample.

The sampling weight of the j^{th} household in the i^{th} PSU (HW_{ji}) can be calculated by the following formula, where P is the probability of a dwelling being selected:

$$HW_{ji} = \begin{cases} \frac{1}{P_{ji,1}} & \text{if household } j \text{ in the } i^{th} \text{ PSU is selected for the main sample} \\ \frac{1}{P_{ji,2}} & \text{if household } j \text{ in the } i^{th} \text{ PSU is selected for the booster sample} \end{cases}$$

Adjustment for non-response

A non-response adjustment was made to these initial household weights, to allow for differential household level non-response. Household selection weights were scaled up by the reciprocal of the PSU level response rate.

The adjusted weight for the j^{th} household in the i^{th} PSU (HW_{ji}^*) can be calculated by:

$$HW_{ji}^* = HW_{ji} \times \frac{\sum_j HW_{ji}}{\sum_j HW_{ji} \times I_{ji}}$$

where

$$I_{ji} = \begin{cases} 1 & \text{if household } j \text{ in the } i^{th} \text{ PSU takes part in the survey} \\ 0 & \text{if household } j \text{ in the } i^{th} \text{ PSU does not take part in the survey} \end{cases}$$

Post stratification

The household weights resulting from the non-response adjustment were then post-stratified by regional council based on the estimated number of dwellings in each regional council.

The final household weights after post-stratification ranged from 10.0 to 3755.5, with an average of 222.0 and a coefficient of variation of 0.68. These weights can be used for analyses of household characteristics.

Person weights

Person weights were calculated using a similar process to that described above for the household weights. Each person's weight was set as the reciprocal of each person's estimated probability of selection.

The only differences were that the selection probabilities incorporated an extra factor to account for the selection of one person from those in the household who were eligible to be interviewed.

The sampling weight of the k^{th} person in the j^{th} household in the i^{th} PSU (PW_{kji}) is:

$$PW_{kji} = HW_{ji} \times (\text{number of occupants}) \quad \text{if a house has no Maori occupants}$$

$$PW_{kji} = HW_{ji} \times (\text{number of Maori occupants}) \quad \text{if a house has any Maori occupants}$$

The person weights were then post stratified by combinations of region age (four age groups) and sex, and then by the proportion of Maori in each region. The person level response rate was very high at 95 percent, so a more complicated non-response adjustment was not applied.

The person weights ranged from 6.9 to 1562.0, with an average of 339.4, a coefficient of 105.5, and a variation of 0.76. The final person weights after post stratification ranged from 6.9 to 21986.5, with an average of 490.8 and a coefficient of variation of 1.1.

Person weights can be used in the calculation of incidence and prevalence figures for personal offences, and for the analysis of self-completion lifetime prevalence data and of most data from the CAPI section.

Incident weights

In NZCVS respondents are asked about incidents that they have experienced in the last year. They are asked to say how many times this incident happened.

To estimate the number of offences experienced by people in the survey period the weighted incident counts can be summed, using person weights.

Incidents can also be analysed at a household level. In this case the incident counts would be summed using household weights.

Very high frequency incidents were censored or “capped” to stabilise wide swings in offence incidence that can occur as a result of a small number of respondents reporting very high victimisation. In line with international practice, capping removed the two percent most frequently incidents.

Replicate weights

Replicate weights are used to calculate standard errors for estimates derived from NZCVS data. The sampling design for NZCVS is complex and deriving exact formulas for estimates is problematic. In addition, using replicate weights mean that a membership of a PSU does not have to be provided to the analyst, providing further protection of respondent identity.

Replicate weights were calculated using the delete-a-group jackknife method (Kott 1998) to accommodate the sample design and weighting for the NZCVS.

The delete-a-group jackknife, like other resampling methods, uses the variation between the results for many sample ‘replicates’ to estimate sampling variances (excluding imputation effects).

Replicates were created by first randomly dividing the PSUs into equal groups, then omitting one group from the sample to form each replicate. Each replicate can equivalently be thought of as assigning the ‘omitted’ group zero weight (and increasing the weights for other respondents to compensate) instead of actually removing them from the dataset. For the NZCVS, 100 replicates were used. That is, the 1,000 PSUs, were randomly divided into 100 groups of 10 PSUs, each of which formed the omitted group for one replicate.

Quality assurance

As part of the NZCVS quality assurance, a line-by-line review of the weighting code was undertaken by Stats NZ.

This process was to ensure that the code was undertaking weighting as prescribed and was fit for purpose before the weighting was implemented and analysis was undertaken.

11. Imputation

The NZCVS design is significantly different from earlier NZCASS surveys. In the 2014 NZCASS the information required to assign offence codes to incidents was collected for only 17 percent of incidents. The estimation of rates of offences at household and person level required complex imputation of missing data. The production of output datasets and their subsequent analysis required the use of specialist multiple imputation software.

The new design of NZCVS has to a large extent eliminated this requirement, although some imputation is still needed so that all the information collected in the survey can contribute to the analysis of results. If surveys from respondents who did not answer some questions are excluded then:

- the number of survey responses is reduced
- all the non-missing data from respondents with any missing data are not analysed.
- the remaining data may produce biased estimates of population values if the respondents with any missing data differed from the overall sample.

Imputation may itself introduce biases, or reduce variation, however in NZCVS the amount of data that has to be imputed is much less than in previous surveys due to changes in survey design (see page 34). Imputation has been used for missing income data and for assigning some final offence codes when a victim form was not completed. The imputation methods employed for NZCVS were designed in consultation with Stats NZ.

Imputation of missing demographic data

Nearest neighbour hotdeck imputation was used to impute missing income data, using the R package “hotdeckimputation”³⁹. The effect of this process is to replace missing values with a value from a respondent with similar responses to other variables. All available demographic, deprivation score (NZDep) and urbanisation variables were used to impute income responses. Household income data was missing for 21.3 percent of respondents and personal income data was missing for 12.9 percent of respondents.

Imputation of offence codes

Victim forms were not completed for 5.1 percent of incidents. However, the scenario that described the incident was known. For each scenario, the final offence codes that were assigned were known for all coded incidents, as was the proportion of incidents from that scenario that were subsequently described as out-of-scope.

³⁹ <https://cran.r-project.org/web/packages/HotDeckImputation/HotDeckImputation.pdf>

Each un-coded incident was either a single incident or a set of incidents. To assign an offence code to un-coded incidents an offence code distribution was tabulated for each scenario from the coded incidents. The offence code for an un-coded incident from a given scenario was then assigned randomly using the proportions of each offence code for that scenario. The result “out-of-scope” was considered to be just another “offence code”.

Heavy victimisation cut-off

Within each offence code there may be respondents that report a large number of incidents. In Crime and Victims surveys in other countries the incident counts have been censored so that in any single survey the very heavily victimised do not contribute to the data analysis. A cut-off of 98 percent has typically been employed. In NZCVS incident frequencies have been “capped” at the 98th centile for each offence type.

12. Producing analyses from NZCVS

Overview

In NZCVS two types of statistics are reported:

- “prevalence” measures what proportion of the population experiences a certain event at least once.
- “incidence” measures how many events of a certain type were experienced.

These measures can be obtained quickly and simply from NZCVS datasets using out of the box procedures in most common statistical packages. There is no need to merge multiple imputed datasets to obtain standard errors.

Each record in the Core and Module NZCVS datasets has a household and a person weight that can be used to produce estimates that are representative of the households or population.

Each record also has two series of jackknife weights. These can be used by standard statistical procedures to estimate the standard errors of estimates of prevalence and incidence. The standard errors are used to produce confidence intervals for any estimates.

NZCVS also provides descriptive “topline” results. The topline results present simple descriptive statistics, adjusted for sample design and with imputed values for missing data.

The topline results for NZCVS are produced within a few weeks of data collection, cleaning, imputation and weighting being completed. Analyses are produced using SAS `proc surveyfreq` and `proc surveymeans` procedures. The estimates are presented using the SAS Visual Analytics on the SAS Viya platform.

Datasets

There are three main NZCVS datasets, and a number of supporting datasets. The main datasets are Core, Module and Incidents datasets.

The Core dataset contains person level information, and all responses to all survey questions from the Core NZCVS questionnaire. The content of the Core dataset will not change significantly across years.

The Core dataset contains summary information from the incident dataset so that analyses of prevalence and incidence of offences can be produced from this dataset without having to merge any other data.

The Module dataset contains responses specifically from the Module questions for a given year. In NZCVS the questions in the Module will change from year to year.

The Incidents dataset contains information on all incidents, including original offence codes, final offence codes (assigned after manually examining all available data) and additional information on the coding process. This dataset also has an incident count. This is simply the number of times this

incident was reported in NZCVS. The incident datasets also contain a subset of person level data so that they can usually be analysed without having to merge them with the person level dataset.

Weighting

Importance of weights

The sample design used in this survey means that respondents do not have the same probability of selection and so cannot be treated equally. For example, NZCVS incorporates a Māori booster sample which gives Māori a higher chance of being selected for the survey. If this was not adjusted for, the overall survey results would be biased towards the outcomes that are correlated with being Māori. Moreover, complex estimators have been used to account for non-response and missing information. Therefore, **analysis should always be performed using weights**. Using weights for selected demographic variables will also ensure that the weighted sample proportions match known population proportions.

Types of weights

In NZCVS there are household and personal level weights. Each weight is used for different analysis purposes:

- the **household weight** relates to the percentage of total households in NZ. To be used for household crime or attributes
- the **person weight** relates to the percentage of total adults in NZ. To be used for personal crime or attributes.

There are 100 replicate weights generated for each weight type. The replicate weights are used in the calculation of the jackknife method for standard error estimation. The replicate weights are also on the appropriate datasets along with the weight, and they are denoted by the suffixes `_1` to `_100`. Any survey estimate can be recalculated using each set of replicate weights, and the variability of the estimates between the replicates gives a good measure of the sampling error for that result.

Table 12.1 Description of weights and replicate weights

Weight type	Weight name	Description	Dataset
Personal	personweight	Weight used for 'personal' crime or attributes	Core / Module
Personal – replicates	personweight_rep1- personweight_rep100	100 replicate weights used for 'personal' crime or attributes	Core / Module
Household	hholdweight	Weight used for 'household' crime or attributes	Core / Module
Household – replicates	hholdweight_rep1- hholdweight_rep100	100 replicate weights used for 'household' crime or attributes	Core / Module

Which weights to use?

Which weights should be used for each set of analysis? The following general rules can be applied:

- **demographic data** can either be considered as personal or household depending on their nature. For example, gender, age and ethnicity are personal characteristics, whereas household composition, tenure, NZ Deprivation, urbanisation and region are household characteristics.
- **offence data** can also be considered as personal or household depending on their nature. For example, assaults are considered a personal offence, whereas burglary is considered a household offence. Table 9.3 includes detail on the offences classified as personal and household offences.
- use the incident count for any **incident dataset** analysis (such as Victim's Experiences and Needs and Reporting to Police). These counts should then be summed after weighting by personal or household weights.

Mixed level analysis

The complexity is for mixed level analysis – when analysing two data items on different levels. For example, analysing fear of burglary (person unit) by household composition (household unit). The general rule is that the smaller unit takes priority. People take priority over households and incidents take priority over people as illustrated in Figure 12.1.

Figure 12.1: Mixed level analysis prioritisation



In the fear of burglary by household composition example, the correct unit to use is people as this is the smaller unit. Similarly, when analysing reporting to police (incident level) by age (person unit), the correct unit of analysis is incidents.

However, take note that this is only a *general rule* and not an *absolute rule*. There are situations that involve household offences cross-tabulated by personal characteristics where it is not sensible to use this general rule. For example, consider the case of whether the household experienced a burglary by the range of factors comprise of both personal characteristics (such as sex, age and ethnicity) and household characteristics (such as household income, tenure and region). If the general rule was applied for this table this would involve using mixed-unit weights within the same table, and comparisons being made to two different NZ averages – one of which is person weighted and the other which is household weighted. This was assessed as too complicated for users to understand what each average represents. Therefore, for situations like these, it was decided to base the choice of weight on the offence type and to use the household weight for the whole table.

In addition, it is especially important to include clear footnotes with the caveats on interpreting the data and omitting selected factors. The interpretation of personal characteristics weighted by the household weight is that the statistics reflect the average profile of the household members across the various factors. For certain factors, this is a relatively sensible interpretation as for example if the

respondent identified as Māori, it is likely that other household members will also identify as Māori. Conversely, if a respondent is female, it would not be likely that other household members would also be female - in fact it is more likely they will be male. For this reason, in the tables where the personal characteristics have been weighted using the household weight, selected factors that were assessed as relatively heterogenous amongst household members need to be omitted – namely sex, personal income, employment status and financial stress (limited to buy item). Footnotes need to be also provided to advise caution on the interpretation of age and financial stress (can meet unexpected expense).

When conducting analysis in the future, the analyst should firstly take into consideration the general rule, but if this is not appropriate then the approach described above should be adopted, accompanied with appropriate caveats and care on what data items are analysed.

Walkthrough of process for producing an estimate

Prevalence estimates

When we want to know what proportion of the population experiences a certain event at least once in a given time period we are interested in the prevalence of an event.

- How many people experienced one or more offences in 2018
- what proportion of households experienced a burglary in 2018, by area level deprivation
- what proportion of people experienced a serious assault in 2018, by age and gender?

Prevalence should only be reported if enough people report an event. The circumstances under which results should not be published are described in the “Flagging and Suppression rules” section below. If the numbers of people reporting an event are too small the estimate of the prevalence will be too unreliable to be meaningful.

To produce a prevalence estimate for a particular variable, for example a particular household offence type, the user follows these steps:

1. Access the Core NZCVS dataset for the year of interest “NZCVSYYYY.CORE”, where YYYY is the year.
2. Identify the variable that corresponds with offence type prevalence of interest in the data dictionary “<ANALYSIS VARIABLE>”
3. Identify which variables correspond to the tabulations that are required “<TABULATION VARIABLES>” if any.
4. Use the correct weights for the analysis being undertaken. When we are interested in the proportion of households that experience an event we should use the household weight. This gives how many households in the population are represented by this survey response.

Once the user has completed the above steps they can produce the analysis by running the following SAS code:

```
proc surveymeans data=nzcvsyxxx.core varmethod=jackknife
```

```

mean clm sum clsum;

weight hholdweight;

repweights hholdweight_rep1 - hholdweight_rep100;

var <ANALYSIS VARIABLE>;

domain <TABULATION VARIABLES>;

run;

```

Because we are calculating a personal offence code we use person weights

```

weight hholdweight;

repweights hholdweight_rep1 - hholdweight_rep100;

```

Because we are calculating a prevalence estimate we use an offence prevalence analysis variable. These have a value of 1 or 0. We then use sas proc surveyfreq to calculate the prevalence.

Example Output:

Variable	Label	Mean	Std Error of Mean	95% CL for Mean		Sum	Std Dev	95% CL for Sum	
OFFCOD01_PREV	1. Burglary prevalence	0.120650	0.004168	0.11238117	0.12891948	215047	7429.004180	200308	229786

Incidence estimates

When we want to know how many events of a certain type were experienced by households or population groups we are interested in the incidence of an event.

- how many offences did people experience in 2018
- how many burglaries did the average household experience in 2018?
- how many serious assaults did the average person experience in 2018?

As with incidence, the incidence of an event should only be reported if enough people report an event. See the “Flagging and Suppression rules” section below for further guidance.

To produce an incident estimate for a particular variable, for example a household offence type, the user follows these steps:

- access the Core NZCVS dataset for the year of interest “NZCVSYYYY.CORE”
- identify the variable that corresponds with offence type prevalence of interest in the data dictionary “<ANALYSIS VARIABLE>”
- identify which variables correspond to the tabulations that are required “<TABULATION VARIABLES>”, if any.
- use the correct weights for the analysis being undertaken. When we are interested in the number of events experienced by a household we should use the household weights. This gives how many households are represented by this person’s survey responses.

Once the user has completed the above steps they can produce the analysis by running the following SAS code:

```
proc surveymeans data=cvvs.nzcvssyyyyCORE varmethod=jackknife
  mean clm sum clsum;
  weight personweight;
  repweights personweight_rep1 - personweight_rep100;
  var OFFCOD13_INC;
run;
```

Because we are calculating incidence for a personal offence code we use person weights

```
weight personweight;
repweights personweight_rep1 - personweight_rep100;
```

Because we are calculating an incidence estimate we use an incident prevalence analysis variable. These variables have an integer value that gives the number of times an incident occurred in the survey year. We then use sas proc surveymeans to calculate the prevalence.

If desired we use a “domain” analysis for the tabulation variables e.g. age group or income.

```
domain <TABULATION VARIABLES>;
```

It is not correct to simply subset the dataset to the specific population of interest. This can underestimate the size of the confidence interval.

We request the mean and the sum to estimate both the average number of offences and the total number of offences:

```
proc surveymeans data=nzcvssyyyyCORE varmethod=jackknife sum clm mean clsum;
```

Example Output:

Variable	Label	Mean	Std Error of Mean	95% CL for Mean	Sum	95% CL for Sum
OFFCOD13_INC	13. Fraud and deception incidence	0.069176	0.005175	0.05890790 0.07944333	272640	232176 313103

Residual Responses

All residual response categories have been retained in the dataset, including “don’t know”, “refused”, “can’t remember”. The way these categories are best handled will be specific to the analysis required. For example, residual categories could be handled by either:

- including residual category in percentage denominator
- including residual category as a separate output category
- merge residual category with another response category as appropriate

Which option is used depends on the sample sizes of the residual category and what is conceptually appropriate for the data item of interest.

Flagging and suppression rules

Sometimes the confidence interval around an estimate may be so large that an estimate does not provide useful information. This fact can be flagged in reporting or the estimate can be suppressed i.e. not reported.

The flagging and suppression rules are based on two measures of sampling error:

- **Margin of Error (MoE):** The 95 percent margin of error indicates there are about 19 chances in 20 that the value for the ‘real’ population will fall within the margin of error of the survey’s estimate. The 95 percent margin of error is used in NZCASS reporting, and is calculated as the t-value (approximately 1.96) multiplied by the standard error ($\text{MoE} = \text{t-value} * \text{standard error of estimate}$).
- **Relative Standard Error (RSE):** The RSE is obtained by expressing the standard error as a percentage of the estimate, that is $\text{RSE} = (\text{standard error of the estimate} / \text{estimate}) * 100$.

The MoE is used for percentages, and the RSE is used for count estimates and averages (including incidence rates). Table 12.2 presents the flagging and suppression rules used for reporting:

Table 12.2: Flagging and Suppression Rules

		RSE	MoE
<i>Used for</i>		<i>Count estimates (totals) and averages</i> <i>E.g. 304,000 burglary offences in 2008</i>	<i>Percentages</i> <i>E.g. 13% of households experienced a burglary in 2008</i>
Flag	Accompany the statistic with a hash (#) to advise the user to use the statistic with caution.	≥ 20%	≥ 10 percentage points
Suppress	Do not publish the statistic and replace with an ‘S’ as the statistic is considered too unreliable for general use.	≥ 50%	≥ 20 percentage points

It is recommended that all analysts of NZCVS adopt these flagging and suppression rules.

Significance testing

For the production of topline results, to test whether differences between groups are significant the confidence intervals around point estimates should be examined. Differences between groups are likely to be significant if the confidence intervals do not overlap. These analyses can be produced using statistical procedures that estimate the standard error of point estimates using the supplied jackknife weights.

When there are a large number of categories some adjustment for multiple comparisons should be considered.

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Appendix A: Incident scenario prioritisation

Scenario reference	Conditions	Victim form scenario text	Offence codes	Priority
1	VS1.01=1 AND VS1.02=2	"...someone succeeded , in getting into your home without permission (and no vehicle was stolen/taken at the same time)..."	1	15
2	VS1.01=1 AND VS1.02=1	"...someone succeeded , in getting into your home without permission, and a vehicle was also stolen/taken at the same time..."	1, 2	12
3	VS1.03=1 AND VS1.04=2	"... someone tried to get into your home without permission but did not succeed in getting in (and no vehicle was stolen/taken at the same time)..."	1	16
4	VS1.03=1 AND VS1.04=1	"... someone tried to get into your home without permission but did not succeed in getting in, but a vehicle was also stolen/taken at the same time..."	1, 2	13
5	VS2.01=1 AND VS2.02=2	"...you or someone else living in your household had a vehicle stolen/taken without permission, (and the vehicle was not parked inside a private yard at the time)..."	2	23
6	VS2.01=1 AND VS2.02=1 AND VS2.03=2	"...you or someone else living in your household had a vehicle stolen/taken without permission, (when the vehicle was parked inside a private yard at the time, and the person who did it was not allowed to be there)..."	1, 2	14
7	VS2.01=1 AND VS2.02=1 AND VS2.03=1	"...you or someone else living in your household had a vehicle stolen/taken without permission, (when the vehicle was parked inside a private yard at the time, and the person who did it was allowed to be there)..."	2	24
8	VS2.04=1 AND VS2.05=2	"... you or someone else living in your household had something stolen from inside , or stolen off a vehicle, (when the vehicle was not parked inside a private yard at the time)..."	3	37
9	VS2.04=1 AND VS2.05=1 AND VS2.06=2	"... you or someone else living in your household had something stolen from inside , or stolen off a vehicle, (when the vehicle was parked inside a private yard at the time, and the person who did it was not allowed to be there)..."	1	17
10	VS2.04=1 AND VS2.05=1 AND VS2.06=1	"... you or someone else living in your household had something stolen from inside , or stolen off a vehicle, (when the vehicle was parked inside a private yard at the time, and the person who did it was allowed to be there)..."	3	38
11	VS2.07=1 AND VS2.08=2	"... you or someone else living in your household had a vehicle tampered with, (when the vehicle was not parked inside a private yard at the time)..."	4	39
12	VS2.07=1 AND VS2.08=1 AND VS2.09=2 or K	"... you or someone else living in your household had a vehicle tampered with, (when the vehicle was	1	18


Scenario reference	Conditions	Victim form scenario text	Offence codes	Priority
		parked inside a private yard at the time, and the person who did it was not allowed to be there)..."		
13	VS2.07=1 AND VS2.08=1 AND VS2.09=1	"... you or someone else living in your household had a vehicle tampered with, (when the vehicle was parked inside a private yard at the time, and the person who did it was allowed to be there)..."	4	40
14	VS2.10=1 AND VS2.11=2	"... you or someone else living in your household had a vehicle deliberately damaged or vandalised , (when the vehicle was not parked inside a private yard at the time)..."	5	41
15	VS2.10=1 AND VS2.11=1 AND VS2.12=2 or K	"... you or someone else living in your household had a vehicle deliberately damaged or vandalised , (when the vehicle was parked inside a private yard at the time, and the person who did it was not allowed to be there)..."	1	19
16	VS2.10=1 AND VS2.11=1 AND VS2.12=1	"... you or someone else living in your household had a vehicle deliberately damaged or vandalised , (when the vehicle was parked inside a private yard at the time, and the person who did it was allowed to be there)..."	5	42
17	VS2.13=1 AND VS2.14=2	"... you or someone else living in your household had a bicycle stolen/taken without permission, (when the bicycle was not located inside a private yard at the time)..."	6	43
18	VS2.13=1 AND VS2.14=1 AND VS2.15=2 or K	"... you or someone else living in your household had a bicycle stolen/taken without permission, (when the bicycle was located inside a private yard at the time, and the person who did it was not allowed to be there)..."	1	20
19	VS2.13=1 AND VS2.14=1 AND VS2.15=1	"... you or someone else living in your household had a bicycle stolen/taken without permission, (when the bicycle was located inside a private yard at the time, and the person who did it was allowed to be there)..."	6	44
20	VS2.16=1 AND VS2.17=2	"... you or someone else living in your household had a bicycle deliberately damaged or vandalised , (when the bicycle was not located inside a private yard at the time)..."	7	35
21	VS2.16=1 AND VS2.17=1 AND VS2.18=2 or K	"... you or someone else living in your household had a bicycle deliberately damaged or vandalised , (when the bicycle was located inside a private yard at the time, and the person who did it was not allowed to be there)..."	1	21
22	VS2.16=1 AND VS2.17=1 AND VS2.18=1	"... you or someone else living in your household had a bicycle deliberately damaged or vandalised , (when the bicycle was located inside a private yard at the time, and the person who did it was allowed to be there)..."	7	36
23	VS3.01=1	"...someone deliberately damaged your home, or anything inside or outside your home, belonging to your household ..."	7	34

Scenario reference	Conditions	Victim form scenario text	Offence codes	Priority
24	VS3.02=1	"...someone deliberately damaged something belonging to you personally ..."	8	33
25	VS4.01=1 AND VS4.02=2	"...something was stolen from the outside of your home, (which was not located within a private yard at the time)..."	9	30
26	VS4.01=1 AND VS4.02=1 AND VS4.03=1	"...something was stolen from the outside of your home, (which was located within a private yard , and the person who did it was allowed to be there)..."	9	31
27	VS4.01=1 AND VS4.02=1 AND VS4.03=2	"...something was stolen from the outside of your home, (which was located within a private yard , and the person who did it was not allowed to be there)..."	1	22
28	VS4.04=1	"...something was stolen from inside your home or garage by someone who was allowed to be there..."	9	32
29	VS5.01	"...someone came into your house or onto the surrounding grounds, without permission or a fair reason to be there..."	11	45
30	VS6.01=1 AND VS6.02=1	"...someone stole , or tried to steal, something you were carrying , (and the person used, or threatened to use, force or violence at the time)..."	12	11
31	VS6.01=1 AND VS6.02=2	"...someone stole , or tried to steal, something you were carrying , (and the person did not use, or threaten to use, force or violence at the time)..."	10	28
32	VS6.03=1	"...someone stole, or tried to steal, something else that belongs to you personally , such as from an office or anywhere else..."	10	29
33	VS7.01	"...someone tricked or deceived you, in order to obtain money, goods or a service ..."	13	25
34	VS7.02=1	"...someone used or attempted to use a bank card, credit card, cheque or other document belonging to you without your permission, in order to obtain money or credit, or to buy goods or services..."	13	26
35	VS8.01=1	"...a computer or Internet-enabled device belonging to you or a member of your household, was infected or interfered with, (for example by a virus or someone accessing it without your permission)..."	14	27
36	VS9.02=1	"...someone forced you, or tried to force you, to have sexual intercourse when you did not want to..."	15	1
37	VS9.04=1	"...someone forced you, or tried to force you, to perform a sexual act (excluding sexual intercourse), when you did not want to..."	15	2
38	VS9.06=1	"...someone touched you sexually , or tried to touch you sexually , when you did not want them to..."	15	3
39	VS9.08=1	"...someone threatened you face-to-face, to do something to you of a sexual nature , that actually frightened you..."	15	4

Scenario reference	Conditions	Victim form scenario text	Offence codes	Priority
40	VS10.02=1	"...someone deliberately used force or violence on you..."	16	5
41	VS10.04=1	"...someone tried to use force or violence on you, or physically harm you, in some way..."	16	6
42	VS11.02=1	"...someone threatened to use force or violence on you , or to physically harm you in a way that actually frightened you..."	17	7
43	VS11.04=1	"...someone threatened to destroy or damage something belonging to you or your household in a way that caused you fear, alarm or distress..."	17	8
44	VS11.06=1	"...someone made a threat to you , to injure any member of your family or whānau , in a way that caused you fear, alarm or distress?"	17	9
45	VS11.08=1	"...someone acted in a way that caused you fear, alarm or distress..."	17	10
46	VS13.01=1	"...you experienced some other types of crime..."	18	46

Appendix B: Fieldwork products

Letter to household



New Zealand
Crime and Victims **survey**
INVITATION

Help create safer communities

New Zealand Crime and Victims Survey Invitation

Dear Householder

Invitation to participate in the New Zealand Crime and Victims Survey

I am writing to invite your household to take part in the New Zealand Crime and Victims Survey.

By talking to New Zealanders, we are able to better understand how much crime occurs, what is reported, who experiences crime and how people are affected by it. The survey is completely confidential. Your participation in the survey is completely voluntary.

The survey is being undertaken for the Ministry by CBG Public Sector Surveying. Your household has been randomly selected to take part, and in the next few weeks an interviewer [name in here], wearing an identification badge will call at your address. The interviewer will explain more about the survey and will be able to answer any questions.

The enclosed pamphlet provides further information about the survey. If you have questions or would prefer to arrange a time for the interviewer to visit you, please call the survey helpline between 8.30am and 9pm seven days per week on 0800 478 783, or email info@cbg.co.nz. Alternatively, text 'SURVEY' + your name + address to 875 and a representative will call you to arrange a time (texts cost 20c).




By taking part in this survey, you will be helping us to better understand the nature of crime and victimisation in New Zealand. With the information gathered, we will be able to improve our services with the aim of reducing crime and making our communities more safe and secure.

Please share this information with other members of your household.

Thank you in advance.

Andrew Bridgman
Secretary for Justice and Chief Executive

Justice Centre | 19 Aitken Street | SX 10088 | Wellington | T 04 918 8800 | justice.govt.nz

Information leaflet

Please help us to find out more about New Zealanders' experience of crime.

You can provide valuable information that helps government agencies create safer neighbourhoods and communities and reduce crime.

The Ministry of Justice is carrying out this important survey around New Zealand every year from 2018 and will publicly report the results.

Your views and experiences are **very important**. Please share them with us.

Thank you very much for helping us with this survey.



Where can I request more information about this survey?

CBG Public Sector Surveying (CBG)
0800 478 783 toll free

Ministry of Justice NZCVS@justice.govt.nz

Who can I call for support if I have been a victim of crime?

Call the Victims of Crime Information Line toll on
0800 650 654 or visit www.victiminfo.govt.nz.

If I have been a victim of crime and I want to report it, who should I contact?

You can call or visit your local police station or call the anonymous Crimestoppers number
0800 555 111.

In the case of an emergency call 111.



New Zealand Government



MOJ01827_M43B8

WHAT IS THE NEW ZEALAND CRIME AND VICTIMS SURVEY?

The New Zealand Crime and Victims Survey collects information about New Zealanders' experience of crime. This new survey will run every year from 2018 asking 8,000 New Zealanders from all walks of life about their experiences.

Why should I take part?

This survey is the only reliable way for the Ministry of Justice to understand the full picture of victimisation in New Zealand as not all crimes are reported to the Police. Without the survey we would have little reliable information on New Zealanders' experiences with crime.

The results from the survey will help government agencies to create safer neighbourhoods and communities.

What questions will be asked?

We will be asking if you have experienced any crimes and if so:

- how it affected you
- whether you have told anyone about them
- how helpful any agencies were.

Who is carrying out the survey?

The survey is being carried out on behalf of the Ministry of Justice by CBG Public Sector Surveying which is an independent, New Zealand-based research company.

Who will be asked to take part?

One person from your household aged 15 years or over will be randomly selected to take part in the survey.

Your contribution will help make our communities safer – and we greatly appreciate your participation – but you can refuse if you wish.



What if I have not experienced any crime?

Even if you have not been the victim of a crime we would still like to hear from you. Your participation will help us to better understand which people are more likely to be at risk in the future.

How will the questions be asked?

An interviewer will visit your house and use a laptop to ask the questions. If there is anything you don't want to talk about you can type it into the laptop yourself so that your answer is private.

How long will the interview take?

This depends on if you have been a victim of crime. If you have not experienced any crime it will probably last 30 minutes. If you have been a victim it may take longer. The interview can be held at a date and time that suits you.

Is my privacy protected?

The information you provide to the interviewer is confidential and protected by the Privacy Act 1993. The interviewer cannot discuss your information with anyone else. Your individual responses will never be identified and only approved researchers can use the data.

Your name and any identifying details will not be included in the published material.

WHERE CAN I FIND THE SURVEY RESULTS?

The results of the survey will be published on the Ministry of Justice website www.justice.govt.nz
The key findings will be available by early 2019.

Life events calendar



Life Events Calendar


To make it easier for you to remember when particular things have happened over the past 12 months, please record events on the calendar below, such as birthdays, anniversaries, holidays, moving house, starting a new job etc.

2017											
January	February	March	April	May	June	July	August	September	October	November	December
National Events	Chinese New Year ↑ Waitangi Day		Easter		Matariki				Diwali	Guy Fawkes	Christmas
School Terms	Term 1				Term 2		Term 3			Term 4	
Your Events											

2018											
January	February	March	April	May	June	July	August	September	October	November	December
National Events	Chinese New Year ↑ Waitangi Day	Chinese New Year	Easter		Matariki					Guy Fawkes / Diwali	Christmas
School Terms	Term 1				Term 2		Term 3			Term 4	
Your Events											

2018 - Year 1

People affected by crime information sheet


Victims Information

For people affected by crime

MOVING THROUGH THE CRIMINAL JUSTICE SYSTEM
WHAT HAPPENS AND HOW TO GET SUPPORT

This factsheet explains the criminal justice system and the support you can get as a victim of crime.

Reporting a crime

If it's an emergency, call 111 and ask for the police.

When it's not an emergency you can call or visit your local police station. You can take a support person or you can ask Victim Support to meet you (Victim Support 0800 842 846).

The police officer will write down what you say. Afterwards, they will send you a letter or a complaint acknowledgement form with a file reference number. Keep the form and number in a safe place – you will need them so you can be updated on your case, and for other things like insurance claims.

The police will also put you in touch with Victim Support or another specialist agency that can give you the help that's right for you.

The police will focus on your safety and the safety of your family and whānau. The police have different processes depending on the type of crime being reported – the officer in charge of your case can tell you more. Let them know if you have any worries.

You can call the Victims Information Line on 0800 650 654 to find out about more resources and support agencies in your area.

The investigation

The police will talk to you and anyone else who knows something about the crime. They may also photograph evidence or take away items as evidence to help with the case. If the police have enough evidence, they will make an arrest and charge the person with a criminal offence.

Victims' rights

You have the right to be told about services that can help you, to be kept informed of the progress of the case through court and to know what to expect when you go to court.

You have the right to tell the court about how the crime has affected you. If you're the victim of an offence by a child or young person, you have the right to attend a family group conference and have a say in what you'd like to see happen.

In some cases, you or your representative has the right to have a say on things like name suppression, bail, extended supervision orders or parole.

You can expect courteous, compassionate and respectful service from court officers, the police and anyone else involved in the case. You have the right to privacy.

Read the Victims Code for more information about your rights and the treatment you can expect. It's on our website at victimsinfo.govt.nz along with other useful information.

If you think your rights have not been met, or you have not received the standard of service you expect, you can make a complaint. Visit victimsinfo.govt.nz or call the Victims Information Line on 0800 650 654.

Being a victim of crime

Being a victim of crime can be a difficult, stressful and sometimes traumatic experience. Everyone deals with it in their own way. There is support to help you deal with the practical and emotional effects of the crime, at each stage of the criminal justice process, and afterwards.

Please see the end of this factsheet for key contacts and a glossary.

BAIL

Once someone has been arrested, they may be released until they have to go to court. This is called bail. Sometimes there are conditions about where the person has to live and they may have a curfew. If the police think you or other people in the community are in danger, the person may be held in custody until they come to court, when they can apply for bail again.

If you have been a victim of a serious crime (see the glossary at the end of this factsheet), you can give your views about the release of the person on bail. You can also choose to be part of the victim notification register. To learn more about these, visit victimsinfo.govt.nz

VICTIM IMPACT STATEMENT

You will be asked if you want to make a victim impact statement. This tells the court how the crime has affected you. The police officer in charge of your case, Victim Support or another support agency can help you write this statement. See more about your victim impact statement under *The verdict and sentence*.

Sometimes, no matter how thorough the investigation, there is not enough evidence to make an arrest or take a case to court. This does not mean that you were not believed.

Support

You can get support while your case is being investigated. To get emotional support or support for practical things (like finding out about insurance) contact Victim Support on 0800 842 846 or call the Victims Information Line on 0800 650 654 to find out about other support agencies in your area.

You may be eligible to get assistance from the Accident Compensation Corporation (ACC). Call the ACC Claims Helpline on 0800 101 996 or the Sensitive Claims Helpline on 0800 735 566 (for claims relating to sexual violence).

At court

The defendant (the person accused of the crime) will probably appear at court several times, for example to plead guilty or not guilty or for the judge to look at the evidence of the case. It is unlikely you will have to attend all of these hearings, but you can go if you want to.

If the defendant pleads guilty, they will be sentenced that day, or a date will be set for a sentencing hearing.

If the person pleads not guilty, the case will go to trial. A police prosecutor or a Crown prosecutor will present the case to the court, depending on the type of case and the type of court it is heard in.

As crime affects the whole community, the prosecutor works for the government and is responsible for prosecuting cases on behalf of the Crown, the police and the public.

You may need to be a witness for the Crown to help prove the case against the defendant (see *Being a witness*).

Court cases can be long and complicated. They are not like on tv. A lot of people are involved, and language can be unfamiliar. You can talk to your court victim advisor, the police officer in charge of your case or your personal support worker about anything you are unsure about.

YOUTH CRIME

If the crime was committed by someone younger than 17 years old the matter will be dealt with quite differently through the youth justice process. Victims are a very important part of the youth justice process and you have a right to attend a family group conference.

A range of resources are available from Child, Youth and Family (CYF) and the courts about the youth justice system. A family group coordinator from CYF will contact you.

FINANCIAL SUPPORT

Financial grants are available for victims of serious crimes (see the glossary at the end of this factsheet).

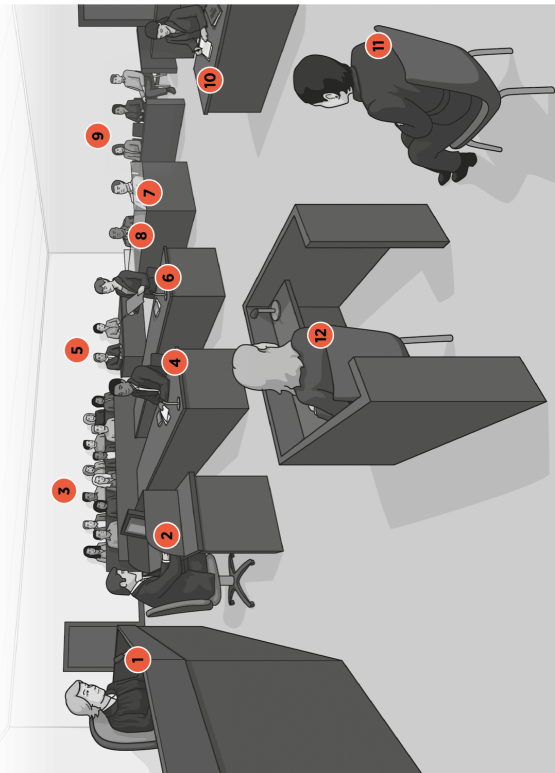
- These grants can help cover some of the costs of dealing with the impacts of the crime. There are eligibility criteria for each grant and maximum limits apply.
- Please contact Victim Support on 0800 842 846 to find out what information you will need to apply.

For the most up-to-date information on financial grants please go to victimsinfo.govt.nz or call Victim Support.

<p>at the sentencing hearing. Ask your court victim advisor or officer in charge to ask the judge for you. The judge is required to consider your victim impact statement when sentencing the offender.</p> <p>REPARATION</p> <p>Sometimes the judge will order the offender to pay you money, called reparation, if you suffered harm or your property was lost or damaged because of the crime. You can call the court on 0800 909 909 to organise the best way to receive your reparation.</p> <p>APPEALS</p> <p>Both the prosecutor and the offender have the right to appeal the verdict and the sentence. This means a higher court looks at the case again. If this happens, the prosecutor will let you know about the process.</p> <p>After court</p> <p>Once found guilty, an offender could receive a number of sentences, including prison, a community sentence or a fine.</p> <p>RELEASE FROM PRISON</p> <p>Offenders are released from prison either on parole or when their sentence ends. This may be earlier than you expect, because time they spent in custody before they were convicted and sentenced is counted as part of their sentence.</p> <p>If an offender's sentence ends, they must be released from prison. They cannot be kept in prison after their sentence ends.</p> <p>An offender can be released from prison before their sentence ends if they are granted parole. The New Zealand Parole Board will look at the case of most offenders and decide if the offender's early release will pose an undue risk to the safety of the community.</p> <p>Offenders often have to meet certain conditions for at least the first six months after they are released on parole. The conditions are set by the Parole Board or by the judge who sentenced the offender. These conditions may cover where they can live, who they can contact, whether they have a curfew, and other factors that will help protect the community.</p>	<p>YOU CAN TELL THE PAROLE BOARD HOW YOU FEEL ABOUT THE OFFENDER'S RELEASE</p> <p>To have your say about an offender's early release from prison, you need to be registered on the victim notification register so the Parole Board can contact you whenever the offender is going to have a Parole Board hearing.</p> <p>To make sure your contact details are up to date on the register, contact the police, Department of Corrections or your support agency.</p> <p>You can tell the Parole Board how you feel in writing, by video conference or in person:</p> <ul style="list-style-type: none">• In writing or by video conference. Talk to your Parole Board contact.• In person. The Parole Board will meet with you. You will speak to the same people who will be seeing the offender, but the hearing you attend will not be in a prison and the offender will not be there. You can have support people with you at the hearing. <p>Key contacts</p> <p>There is support for you whatever stage you are at in the criminal justice system, and personal support to help you deal with the impacts of the crime.</p> <p>Here are the contact details for some key services for victims and people affected by crime. You can find more information about services by calling the Victims Information Line on 0800 650 654 (24 hours a day) or by visiting victimsinfo.govt.nz</p> <p>ACC acc.co.nz 0800 101 996 Claims Helpline 0800 735 566 Sensitive Claims Helpline (for victims of sexual violence)</p> <p>Court victim advisors 0800 650 654 Victims Information Line</p> <p>Department of Corrections 04 460 3000 corrections.govt.nz</p> <p>New Zealand Parole Board 0800 PAROLE (727 653) paroleboard.govt.nz</p>
<p>AT COURT</p> <p>As a witness, you will be asked questions about what happened or what you know about the crime.</p> <p>When you give evidence, you will usually be able to see the defendant.</p> <p>It is important to have support when you are a witness, both before and on the day. Talk to your court victim advisor or support worker about getting the support that's right for you.</p> <p>The verdict and sentence</p> <p>At the end of the court case, the jury (for a jury trial) or the judge (where there isn't a jury) decides whether the defendant is guilty or not guilty. In some cases, such as when a jury cannot reach a decision, there may be another trial.</p> <p>If the defendant is found not guilty, they are free to go. This can be unexpected for you and you may want to talk this over with your court victim advisor or support worker.</p> <p>If the person is found guilty, they may be sentenced on the day or a date will be set for a sentencing hearing.</p> <p>RESTORATIVE JUSTICE</p> <p>A restorative justice conference is an informal facilitated meeting between the victim, offender, support people, and any other approved people, such as community representatives or interpreters.</p> <p>Restorative justice enables victims to tell the offender how they have been affected, have a say in how the harm can be repaired, and begin to resolve some of the effects of the crime.</p> <p>For your case to be considered for restorative justice the offender has to be found guilty or plead guilty to the offence, and you both must be willing to take part.</p> <p>If you want to find out more about restorative justice ask your court victim advisor or visit victimsinfo.govt.nz</p> <p>SENTENCING</p> <p>The judge is required by law to take many factors into account when sentencing the offender, such as what sentences have been given for other similar crimes and reports about the offender.</p> <p>If the judge agrees, you (or someone you choose) can read out all or part of your victim impact statement in court</p>	<p>Tell your court victim advisor, police officer in charge or support worker if you need hearing, mobility or language translation help.</p> <p>Your safety is important. If at any time you are concerned about your safety at court, talk to a police officer or court security officer.</p> <p>THE COURT VICTIM ADVISOR</p> <p>Once the defendant has made their first appearance in court, a court victim advisor will get in touch with you. It is their job to keep you informed about the progress of your case and what part you can play. They can also tell you where to get emotional and financial support. The pamphlet Court services for victims has more information about the service.</p> <p>Your court victim advisor, the police officer in charge of your case or your support worker are there to explain anything that is unclear.</p> <p>You can contact your court victim advisor directly, or through the Victims Information Line on 0800 650 654.</p> <p>Being a witness</p> <p>Witnesses are a very important part of court cases. They can provide vital evidence.</p> <p>BEFORE COURT</p> <p>If you are needed as a witness, the police officer in charge or court victim advisor will tell you when and where you need to be at court. You will also get an official notice delivered to you at home.</p> <p>The prosecutor or officer in charge will talk with you about what you need to do as a witness. You can ask to visit the courtroom ahead of time. Speak to your court victim advisor, officer in charge or support worker to arrange this.</p> <p>Talk to your court victim advisor or officer in charge if you want to arrange:</p> <ul style="list-style-type: none">• someone to meet you at or outside the court• a support person to sit with you when you give evidence• a screen or closed circuit tv, so you don't have to look at the defendant when giving evidence (this is only for some cases). <p>Most courts have separate waiting areas for people who have been called as witnesses, but it is possible that you will see the defendant's family and friends in and around the court.</p>

The courtroom

This diagram shows one example of the layout of a courtroom, and who you might see.



1. **Judge** is in charge of the court. They decide if the defendant is guilty, or if there is a jury, the jury will decide this instead.
2. **Registrar** helps the judge and makes sure that court processes are followed.
3. **Jury** is made up of 12 people who decide if the defendant is guilty.
4. **Prosecutor** takes the case on behalf of the Crown and presents the case against the defendant.
5. **Media** are journalists who report on the case.
6. **Defendant's lawyer** represents the defendant.
7. **Defendant** is the person accused of the crime.
8. **Prisoner's escort** accompanies the defendant.
9. **Public gallery** is where members of the public and victims' families and whānau can sit, and where witnesses can sit after they have given evidence.
10. **Court victim advisor** helps the witness understand the court process. They may not always be in the courtroom.
11. **Witness' support person** is the person who the judge has agreed can support the witness in court.
12. **Witness** gives evidence on what happened or what they know about the crime.

Personal support

See victimsinfo.govt.nz or the personal help services section in the phone book

Police

You can find your local police station at police.govt.nz or in the blue pages at the front of the phone book

Victim Support

0800 VICTIM (842 846) 24 hours a day
victimsupport.org.nz

Women's Refuge

0800 REFUGE (733 843) 24 hours a day
womensrefuge.org.nz

Language line translation services

0800 656 656
9am–6pm Monday–Friday, 9am–2pm Saturday

Glossary

Bail

When police release someone who's charged with a crime on the condition that they go to court.

Court victim advisor

A Ministry of Justice staff member who can explain the court process and keep victims informed on the progress of their case.

Defendant

The person accused of the crime.

Homicide

When a person is killed by another person.

Offender

The person convicted of the crime. (Before being found guilty, the person charged with the offence is called the 'defendant'.)

Parole

When an offender is allowed out of prison to finish their sentence in the community. They must follow certain conditions.

Restorative justice

Restorative justice lets victims tell an offender how they have been affected, have a say in how the harm can be repaired, and begin to resolve some of the effects of the crime. A meeting is called a restorative justice conference.

Serious crime

- A crime of a sexual nature or other serious assault.
- A crime that has resulted in serious injury or death.
- A crime that has led the victim to have ongoing fears for their safety or the safety of one or more of their immediate family.

Victim notification register

A confidential list used by criminal justice agencies to keep victims informed about the offender, such as where the case is in the court process, if there is a temporary release from prison and when the offender is up for parole.

Register your details with the police officer in charge of the case.

Victim impact statement

A record of how the crime has affected a victim. A victim impact statement is usually in writing, but can include photographs, drawings or poems. A judge must consider it when sentencing an offender. The victim can read the statement to the court just before sentencing.



Victims information line
0800 650 654
victimsinfo.govt.nz



New Zealand Government

MOJ03442_FEB17

Thank-you card

<p>FreePost Authority Number 223854</p> <p>Free </p> <p>NEW ZEALAND CRIME AND VICTIMS SURVEY FEEDBACK CBG Public Sector Surveying PO Box 45173 Te Atatu Auckland 0651</p> <p>To provide feedback please complete the back of this mailer and send freepost or Freephone 0800 478 783</p>		 <p>Thank you for taking part in the New Zealand Crime and Victims Survey</p> <p>  </p>
<p>Dear Survey Participant,</p> <p>Thank you very much for participating in the New Zealand Crime and Victims Survey. Information from this and previous surveys is used to support work by justice sector agencies to create safer neighbourhoods and communities. We appreciate your time and effort – you have made a difference through your contribution.</p> <p>To report a crime – call or visit your local police station or call the anonymous Crimestoppers number 0800 555 111.</p> <p>In the case of an emergency call 111.</p> <p>If you are a victim of crime and need support please contact Victims Information on 0800 650 654 or visit victimsinfo.govt.nz and they can put you in touch with the right agency to support you.</p> <p>If you would like more information about the survey, please call CBG Public Sector Surveying on 0800 478 783.</p>	<p>If sending feedback remove the top part, fill in comments below, seal closed and pop in the post – no stamp needed.</p> <p>Please provide us with your feedback or any additional comments below.</p> <p>Leave your contact details blank if you wish to remain anonymous.</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>	<p>CONTACT DETAILS</p> <p>NAME/DETAILS OF INTERVIEWER:</p> <p>FULL NAME:</p> <p>CONTACT NUMBER/S:</p> <p>ADDRESS:</p> <p>EMAIL:</p>

Appendix C: Questionnaire Screenshots

The following screenshots aim to demonstrate the look and feel of the questionnaire.

The first questions are to do with crimes involving your **home**. This includes garages, carports, sheds and other buildings on your property, as well as holiday homes, camper vans, caravans and boats.

VS1.01

[Showcard page 6](#)

[Last 12 months is from 17 July 2017 to today](#)

In the last 12 months, has anyone **succeeded** in getting **into** your home **without** permission? Please don't include incidents where you know that the person was **not** intending to commit a crime, for example, family/whānau members or friends letting themselves in.

① Include garages, carports, sheds and other buildings on your property, as well as holiday homes, camper vans, caravans, boats and temporary structures such as tents.

② Include when the camper van, caravan, boat or tent was located somewhere other than this property at the time of the incident.

③ Exclude thefts from your home by people who were allowed to be there, as this will be covered later.

Yes - how many times?

- ☐ No
- ☐ Don't know

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[Record comments](#)

VS11.04

How many times (in the last 12 months)?

(Question was: In the last 12 months, has anyone **threatened to destroy or damage** something belonging to **you** or **your household** in a way that caused you fear, alarm or distress? Please only include when **you** were the person who was threatened or damaged.)

① If you are not sure of the exact number, please give your best guess. Touch [here](#) [here](#) for more information.

Number of times

- ☐ Don't wish to answer

If you have an idea of how many times this happened per month, you can use this table to work out how often this happened in a year (i.e. in the last 12 months):

Times per month	= Times per year
1	12
2	24
3	36
4	48
5	60


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VS12.01-VS12.03
Showcard page 17

 Last 12 months is from 17 July 2017 to today.

At any time in the last 12 months, have you been protected from anyone by a **Protection Order**, a **Restraining Order**, or a **Police Safety Order**?

① Protection Orders apply to people you are (or have been) in a domestic relationship with. They contain conditions which prevent the bound person from contacting and/or being violent towards you or your children.


① Restraining Orders apply to other people who have harassed you at least twice in the past 12 months. They contain conditions which prevent the bound person from contacting or following you, or loitering around your home / work.

① Police Safety Orders also apply to people you are (or have been) in a domestic relationship with. They are issued by the police when they believe you are at risk, and usually last 1-2 days. They require the bound person to leave the address for the duration of the Order.

	1. Yes	2. No	Don't know	Don't wish to answer
A Protection Order	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A Restraining Order	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A Police Safety Order	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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VF2.04

Thinking about the group of 5 similar incidents when ...someone succeeded, in getting into your home without permission (and no vehicle was stolen/taken at the same time)...


Before we ask more detailed questions about this group of incidents, can you tell us what happened in the **most recent** incident? Please record key details such as:

- What happened,
- Who was involved,
- If you were threatened or injured,
- If anything was stolen or damaged.

Incident description

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VF2.06

Thinking about the group of 5 similar incidents when ...someone succeeded, in getting into your home without permission (and no vehicle was stolen/taken at the same time)...

On how many occasions did you come into contact with, or find out about, the person or people that committed these incidents?

Slide to select answer

0 5

☐ Don't know

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VF2.13

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Thinking about the group of 5 similar incidents when ...someone succeeded, in getting into your home without permission (and no vehicle was stolen/taken at the same time)...

Do you think that the incidents **usually** happened, at least partly, because of the offender's attitudes towards your...

	1. Yes	2. No	N. Not applicable	Don't know
...race / ethnicity / nationality?	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>
...sexuality or sexual orientation?	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>
...age?	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>
...sex?	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>
...religious / ethical beliefs or political opinion?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...disability? (if applicable)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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FV4.01
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Which of the following services or organisations are you aware of?

① Select all that apply.

- ☐ 1. Victim Support
- ☐ 2. Women's Refuge
- ☐ 3. Rape Crisis
- ☐ 4. Citizens Advice Bureau
- ☐ 5. Lifeline Aotearoa
- ☐ 6. Family Violence website or helpline (www.areyouok.org.nz)
- ☐ 7. Victims of Crime Information Line
- ☐ N. None of the above
- ☐ Don't know

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Record comments

MD4.03
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What is the total income that **you yourself** got from **all sources**, before tax or anything was taken out of it, in the last 12 months?

If you know your weekly or fortnightly income **after tax**, you can touch [here](#) to work out your annual income **before tax**.

① If you are not sure, please give your best guess.

- ☐ 1. Zero income / none / loss
- ☐ 2. \$1-\$5,000
- ☐ 3. \$5,001-\$10,000
- ☐ 4. \$10,001-\$20,000
- ☐ 5. \$20,001-\$30,000
- ☐ 6. \$30,001-\$40,000
- ☐ 7. \$40,001-\$50,000
- ☐ 8. \$50,001-\$60,000
- ☐ 9. \$60,001-\$70,000
- ☐ 10. \$70,001-\$100,000
- ☐ 11. \$100,001-\$150,000
- ☐ 12. More than \$150,000
- ☐ Don't know
- ☐ Don't wish to answer

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↻ Reset these answers

Record comments

Appendix D: Coding portal

All forms for each respondent will display and be coded by the same coder. There will be a maximum of eight Victim Forms in one record set. In this case there are only three forms to be coded. Red indicates that a particular form has not been coded, green indicates it has been coded. Once all forms are green the records can be submitted.

You can only submit records if a code is selected for each form. You must select 'uncertain' or 'certain' and must add a comment if uncertain.

'Find new' will direct you to your allocated set of records. 'Find checked' will show you your uncertain codes that have been checked. 'Find pending' will show your uncertain codes that have not been checked.

Clicking on the arrow will display a dropdown menu of codes to select. This includes the option to double-code burglary (1) and theft of a motor vehicle (2).

You can indicate if there is an issue with the quality of the incident description.

Example of a response to the open-ended question.

Questions asked and reference to questionnaire.

Response(s) selected.

The scenario text is the first indicator that there may have been an offence. A respondent answers "yes" to a screener question to trigger a Victim Form.

☐ Surveyor Quality Issue

Find New
Find Checked
Find Pending
Submit Forms

Student
Certainty: ☐ Uncoded ☐ Uncertain ☒ Certain
Offence Code: 01, Burglary
Comments:

Supervisor
Certainty: ☐ Uncoded ☐ Uncertain ☒ Certain
Offence Code: 01, Burglary
Comments:

Police
Certainty: ☐ Uncoded ☐ Uncertain ☐ Certain
Offence Code:
Comments:

Incident Overview
VF scenario text
Incident description (VF3.04)
...someone succeeded, in getting into your home without permission (and no vehicle was stolen/taken at the same time)...
A came home and found that my front door had been knocked in. My laptop, games console and some jewellery belonging to my partner had been stolen.
Incident location (VF3.05)
When did this incident happen (VF3.03)
Seriousness of incident /10 (VF3.32)
Incident best described as (VF3.33)
1. Inside a house (caravan, campervan, tent)
1. 12 months before survey
7
1. A crime

Offender Details
Respondent saw or came into contact with offender(s) (VF3.06) 3. No (including when you had suspicions)

Weapon Use and Injuries
Respondent physically injured (VF3.30)
No

Value of Items Stolen/Damaged
Total value of items/money stolen (VF3.20) 5. \$1,001-\$5,000
Total value of damage done (VF3.21) 5. \$1,001-\$5,000

Appendix E. Variables

Draft data dictionary – attached excel sheet

Appendix F: NZCVS-ANZSOC concordance

NZCVS Offence Code	NZCVS Offence Description	Personal or Household	ANZSOC concordance
1	Burglary	Household	07 Unlawful entry with intent/burglary, break and enter
2	Theft of / unlawful takes/converts motor vehicle	Household	0811 Theft of a motor vehicle 0812 Illegal use of a motor vehicle 0810 Motor vehicle theft and related offences not further defined
3	Theft (from motor vehicle)	Household	0813 Theft of motor vehicle parts or content
4	Unlawful interference / getting into motor vehicle	Household	0812 Illegal use of a motor vehicle 1219 Property damage, nec
5	Damage to motor vehicles	Household	12 Property damage
6	Unlawful takes/converts/interferes with bicycle	Personal	0841 Illegal use of property (except motor vehicles)
7	Property damage (household)	Household	121 Property damage and environmental pollution
8	Property damage (personal)	Personal	
9	Theft (except motor vehicles – household)	Household	0821 Theft from a person (excluding by force)
10	Theft (except motor vehicles – personal)	Personal	0822 Theft of intellectual property 0829 Theft (except motor vehicles), nec 0820 Theft (except motor vehicles) not further defined
11	Trespass	Household	1311 Trespass
12	Robbery	Personal	061 Robbery
13	Fraud and deception	Personal	091 Obtain benefit by deception 0922 Forgery of documents 099 Other fraud and deception offences
14	Cybercrime	Personal	No direct ANZSOC mapping, but includes: 0911 Obtain benefit by deception 1312 Criminal intent 1612 Offences against privacy

NZCVS Offence Code	NZCVS Offence Description	Personal or Household	ANZSOC concordance
15	Sexual assault	Personal	031 Sexual assault 0323 Sexual servitude offences 0329 Non-assaultive sexual offences, nec 0300 Sexual assault and related offences not further defined
16	Other assault	Personal	021 Assault 0299 Other Acts intended to cause injury, nec 0290 Acts intended to cause injury not further defined 012 Attempted murder
17	Harassment and threatening behaviour	Personal	05 Abduction, harassment and other offences against the person 0291 Stalking 0621 Blackmail and extortion
18	Other incidents	Household or Personal	Other incidents that are regarded as 'in-scope' for the survey, but which are not covered by the above offence codes.

Acronym List

ANZSOC	Australian and New Zealand Standard Offence Classification
CAPI	computer-assisted personal interviewing
CASI	computer-assisted self-interviewing
CBG	CBG Public Sector Surveying
CVF	Cluster Victim Form
CI	confidence interval
HSF	Stats NZ's Household Survey Frame
IVF	Individual Victim Form
MoB	month of birth
MoE	margin of error
NZCASS	the New Zealand Crime and Safety Survey
NZCVS	the New Zealand Crime and Victims Survey
NZDep	New Zealand Index of Deprivation 2013
PAF	Postal Address File
PPS	probability proportional to size
PSU	primary sampling unit
RSE	relative standard error
SC	self-completion
TSS	The Survey System
VF	victim form