New Zealand Crime and Victims survey

HELP CREATE SAFER COMMUNITIES

Methodology Report

Cycle 3 (2019/20)

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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), Cycle 3 (2019/20).

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[1] 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:	5,121
	Māori booster sample:	2,304
	Total sample:	7,425
Response rates	Main sample:	80%
	Māori booster sample:	79%
	Total sample:	80%
Interviewing period	30 September 2019 – 18 November 2020	
Average interview length	22 minutes and 33 seconds	
Questionnaire recall period	12 months preceding the date of the interview[2]	
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: • view some things that happen as crimes • know what are legally considered crimes and what aren't.	

[1] Civilian population excludes members of the permanent defence forces, diplomatic personnel, members of non-New Zealand defence forces and their families stationed in New Zealand.

[2] 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 (e.g. 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 2019-20 was family/whānau 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: • 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 four 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) was 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 are 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 was the first time that the NZCVS was conducted in its current form.

The purpose of this report 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 NZCVS
- Additional technical and analytical information for use of NZCVS findings.

Research objectives

The research objectives of the 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 New Zealanders' experience with and trust in criminal justice system
- 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 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, Cycle 3 process

The high-level NZCVS, Cycle 3 timeline is shown in Table 1.1.

Table 1.1: The NZCVS, Cycle 3 process - stage timeline

Dates	Project activities	Description
May – August 2019	In-depth module for the third Cycle of NZCVS	Questionnaire design, CAPI software programming/testing. Note that because the Cycle 3 module largely repeated the Cycle 1 module, cognitive and pilot testing was not required.
September 2019 – November 2020	Fieldwork	Primary data collection, manual offence coding. Not that the fieldwork period was extended to compensate for disruption caused by the COVID-19 pandemic.
From November 2020	Fieldwork (fourth Cycle)	The fieldwork for the fourth Cycle of NZCVS commenced (due for completion 30 September 2021).
November – December 2020	Data processing	Data cleaning, compiling and formatting datasets, weighting, imputations, data quality assurance processes.
December 2020 – January 2021	Technical report writing	Producing NZCVS technical report.
December 2020 – June 2021	Analysis and annual report writing	Analysis of the cleansed datasets and producing NZCVS, Cycle 3 annual report.
September 2021	Dataset for IDI	Preparing dataset for linking with the Integrated Dataset Infrastructure (Statistics NZ). Note: only records which obtained respondents' consent.
From June 2021	Topical reports	In-depth reporting on prioritised topics.

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 has 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 levels 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 produces a much greater range and depth of information than the previous survey, with the data being more 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	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: 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	Two samples were drawn for NZCVS: • main sample • Māori booster sample. 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.
Primary sampling unit (PSU)	Stats NZ primary sampling units (PSUs[3]). 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[4] 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	In the NZCVS, sample PSUs were selected from Stats NZ's Household Survey Frame (HSF). Within PSUs, two sampling frames were used: • New Zealand Post's Postal Address File (PAF); the most complete and up-to-date database of postal addresses in NZ. • Māori electoral roll.

[3] 2014 PSU definitions were used for the main study sampling.
[4] Due to the impacts of COVID-19 on fieldwork, the sample for cycle three was reduced to 925 PSUs – see below.

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	• 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	• 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 aged 15-17 living 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.

COVID-19

As a result of the COVID-19 pandemic and the associated restrictions, fieldwork for the third Cycle of NZCVS was suspended between 21 March and 2 July 2020. During this hiatus, CBG worked with the Ministry of Justice to develop and conduct a telephone-based 'COVID-19 Justice Sector Survey' in lieu of the full NZCVS. The survey was in field for nine weeks and collected information from over 2600 respondents, on a range of topics including connectedness, feelings of safety, psychological distress, experiences of victimisation, and use of justice sector services.

The target sample size for NZCVS Cycle 3 was reduced from 8,000 to 7,400 interviews in order to accommodate the COVID-19 Justice Sector 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. Note that the figures quoted in Table 2.2 relate to Cycle 3 fieldwork only, and differ from those in Cycles 1 and two.

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)		925
Average number of households selected per PSU	Main sample	8.0	8.1
	Māori booster sample	3.5	3.6
	Total sample	11.5	11.7
Sample loss (proportion of selected addresses which were not occupied private dwellings)	Main sample	12%	13%
	Māori booster sample	12%	11%
	Total sample	12%	13%
Average interviews per PSU	Main sample	5.6	5.5
	Māori booster sample	2.5	2.5
	Total sample	8.1	8.0
Main sample yield	Non-Māori	4,428	4,327
	Māori	782	794
	Total	5,210	5,121
Māori booster sample yield	Non-Māori	1,140	1,073
	Māori	1,140	1,231
	Total	2,280	2,304
Total sample yield	Non-Māori	5,568	5,400
	Māori	1,922	2,025
	Total	7,490[5]	7,425
% of interviews conducted with Māori	Main sample	15%	16%
	Māori booster sample	50%	53%
	Total sample	26%	27%
Response rate	Main sample	80%	80%
	Māori booster sample	80%	79%
	Overall	80%	80%

[5] 7,490 was the projected survey yield based on a sample loss of 12 percent and a response rate of 80 percent. The target number of surveys was 7400.

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 NZ[6]. 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 meshblocks[7] 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 excluded[8].

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 to 10, where one represents the PSUs with the least deprived scores, and 10 represents the areas with the most deprived scores[9].

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.

[6] http://aria.stats.govt.nz/aria/?_ga=2.267855502.1468045959.1613269002-245916575.1611103828#ConceptView:uri=http://stats.govt.nz/cms/Concept/CARS94

[7] 2013 definition.

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

[9] 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 distribution of PSUs in New Zealand by NZDep quintile, the preferred PSU sample for each quintile, and the achieved PSU sample are shown in Table 2.4.

Table 2.4: PSUs per NZDep quintile and sample size preference

NZDep quintile	Number of PSUs in NZ	Preferred PSU sample size	Achieved PSU sample size
1 (least deprived)	3,996	160	136
2	4,768	180	178
3	4,873	200	215
4	4,668	220	239
5 (most deprived)	4,134	240	232

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:

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

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
$Size\ V_{ij}$ = 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 Zealand[10], 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.

The fact that the achieved PSU sample distribution by deprivation did not perfectly align with the preferred distribution is an artefact of the coordinated sampling approach and because implicit, rather than explicit, stratification was employed (per above). However, the final distribution was considered satisfactory for the purposes of the survey.

COVID-19 impact

As discussed earlier, the Cycle 3 PSU sample was reduced from 1,000 to 925 PSUs. This reduction occurred part way through the fieldwork, with CBG consulting with Stats NZ on the best approach to take in order to identify which 75 PSUs to remove. The method agreed upon involved:

1. Identifying the PSUs that were yet to be interviewed in Cycle 3 (250).
2. Ordering these PSUs by the implicit stratification variables; Regional Council, TA, Crime Indicator, and their selection probabilities.
3. Selecting 75 PSUs to remove using systematic sampling method.

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 7.04; that is, the average cluster size of occupied dwellings to be approached in the 925 PSUs for the main sample was 7.04. This cluster size was determined by the number of PSUs sampled (925), the assumed response rate (80 percent) and the final required sample size (5,210). Approaching 6,512

[10] This information was sourced from previous crime surveys and NZ Police administrative database.

occupied dwellings with a response rate of 80 percent would result in 5,210 interviews, so 7.04 occupied dwellings needed to be approached in each PSU. Note that more dwellings than this were actually selected per PSU for the main sample – 8. This was based on the assumption that 12 percent of addresses selected would not be private occupied dwellings (i.e. they were unoccupied private dwellings, businesses or empty sections).

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 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 925 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 50 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 3.2, with a target of 3.5 booster houses to be selected per PSU on average. See page 22 'Process for incorporating address files' for information about the process for selecting Maori booster households.

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	8	3.5	11.5
Total selected dwellings	7,400	3,238	10,638
Occupied dwellings (88%)	6,512	2,849	9,361
Māori interview yield (15% in Main, 50% in Booster)	782	1,140	1,922
Non-Māori interview yield	4,428	1,140	5,568
Total interview yield	5,210	2,280	7,490

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 Manager[11] 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.

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:

Pr(selection of dwellings in the main sample) = Pr(PSU selected) x PrM

Where,

PrM = (main sample dwellings selected) / (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:

Pr(selection of dwellings in the booster sample) = Pr(PSU selected) x (PrM + PrB)

Where,

PrB = (booster dwellings selected) / (ER dwellings in PSU – ER dwellings in main sample))

Alternatively expressed as:

[11] The CBG Sample Manager is a survey administration software platform that runs on interviewers' 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 syncs data back to CBG servers for daily backup of survey data.

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

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

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 / (number of Māori occupants)
- household with no Māori occupants = 1 / (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. Note that for Years 2 and 3, the same 1,000 PSUs will be visited each year. For each cycle, different addresses will be selected in each PSU.

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. In Years 3 and 4, also add in any addresses enumerated into the sample in field, by interviewers.
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.

Step	Purpose	Process description
5	Māori booster selection	In order to select the total number of Māori booster households required, the following process was used: 1. Determine the total number of booster addresses in each PSU and for each PSU, divide this number by 3. This was done to ensure that each PSU could be reused for up to 3 consecutive annual samples. 2. Beginning at a random house, systematically select booster addresses by applying a booster sample skip interval. (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). 3. Set aside all PSUs that resulted in 4 or fewer booster households being selected. 4. Adjust the skip interval to select 5 booster addresses from the remaining PSUs. 5. If the target booster sample is not achieved, set aside all PSUs that could not produce more than 5 booster addresses from step 4 and adjust the skip interval to select 6 addresses from the remaining PSUs. 6. Repeat this process until the total target number of booster addresses is achieved. In 489 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. The overall target number of households was reached by increasing the number of selected households in other PSUs.
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. (For one PSU, the PAF contained no address listings, despite the census showing occupied private dwellings in that PSU. This PSU had to be manually enumerated from scratch by the interviewer when they first visited the PSU).

3. Questionnaire design

Introduction

The NZCVS is modular in nature. This allows the ongoing collection of victimisation prevalence and incidence data, using a core set of questions that changes very little over time, and can be used to establish time trends. The core questions are supplemented by annual rotating in-depth modules, focusing on particular areas of interest to stakeholders. The Cycle 3 in-depth module questions largely replicated those from Cycle 1: (family/whānau violence).

Full details of the Cycle 3 module development are provided in the next chapter[12]. 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 in 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 parts 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 via 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-

[12] For further details of the core survey development, please see: New Zealand Crime and Victims Survey Methodology Report 2018 (Year 1) available at https://www.justice.govt.nz/justice-sector-policy/research-data/nzcvs/resources-and-results/

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.

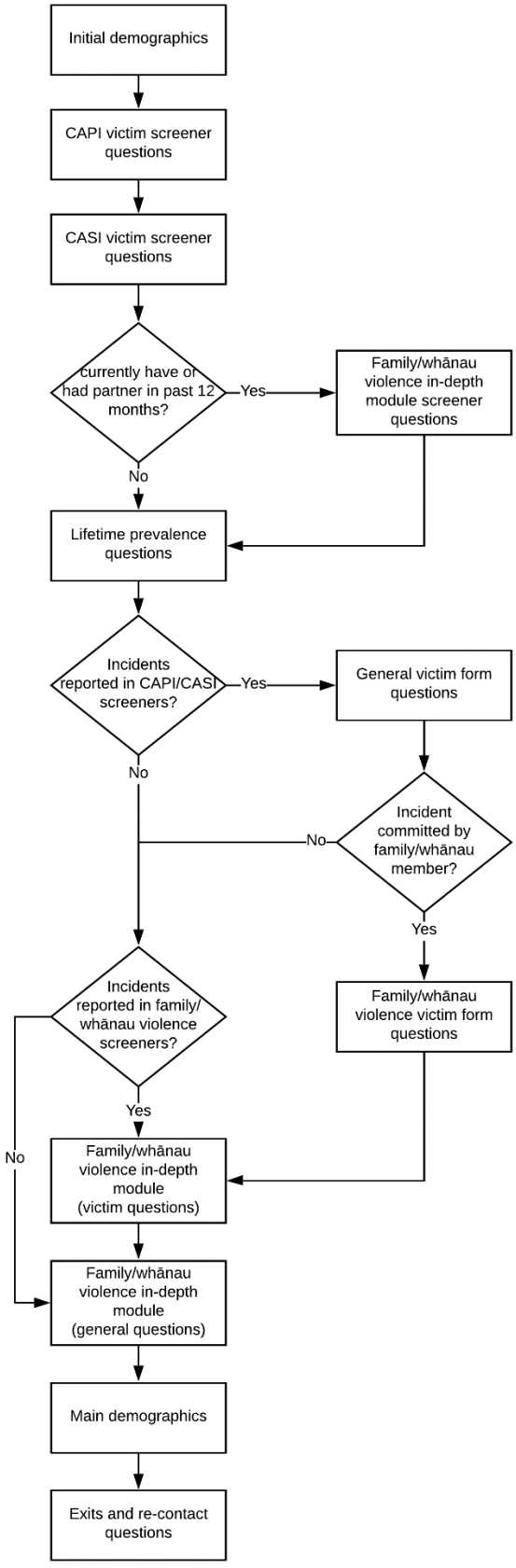


Table 3.1 provides an outline of the questionnaire sections and the topics covered in each section. In-depth module sections are shaded in blue.

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

Section	Questions	Mode
Initial demographics	• sex • age • partnership status • marital status • life satisfaction / satisfaction with safety	CAPI
CAPI Victim screener questions	• household and personal offences screener questions (excludes inter-personal violence (includes sexual violence), harassment and threatening behaviour).	CAPI
CASI Victim screener questions	• inter-personal violence (includes sexual violence), harassment and threatening behaviour.	CASI
Family violence in-depth module screener questions	• controlling partner behaviours	CASI
Lifetime prevalence	• lifetime experience of sexual assault / partner violence	CASI
General victim form questions	• 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 violence victim form questions	• 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 violence in-depth module	• 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 violence incidents • feelings of safety when with family/whānau • knowledge of and involvement with other family/whānau incidents	CASI

Section	Questions	Mode
Main demographics	• 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	• 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 required 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 and every 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 27 follow-on clarification questions. The follow-on questions collected additional information about the incident which enables 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 all the 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 1–46[13], 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 victim 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, where logical, 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 the in-depth module 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, insomuch 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 E 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 are used 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
97	Duplicate incident	N/A
98	Offence not in scope	N/A
99	Not an offence	N/A

Screening questions 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 until the designers, the Ministry, Police and an external expert were satisfied that they adequately captured the offences considered in-scope for the survey.

Data linking

At the end of the survey, respondents were asked 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.

Survey data for people who agree to data linking is incorporated into the Integrated Data Infrastructure[14] (IDI) by Stats NZ using the following process:

1. the Ministry supplies Stats NZ with an encrypted dataset containing the survey responses and respondent identifiers for all respondents that agree to data linking
2. Stats NZ use probabilistic linking methods to determine if information about each respondent already resides in the IDI[15]
3. where a match is found, the survey responses are copied to the IDI record for that person
4. where a match cannot be found, no linking takes place, but the NZCVS data is 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 is removed to ensure the data remains confidential.

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

[14] https://www.stats.govt.nz/integrated-data/integrated-data-infrastructure/
[15] For Cycle 1, Stats NZ were able to match 95.2 percent of survey responses to exiting records in the IDI.

4. Module development and testing

Overview

The focus of the in-depth module for Cycle 3 was family violence.

To enable the comparison of Cycle 3 module data with that collected in Cycle 1, the wording of the module questions was kept consistent. Additionally, new questions were added pertaining to:

- feelings of safety when with family/whānau
- knowledge of, and involvement with family/whānau incidents experienced by other people.

No cognitive of pilot testing was undertaken for Cycle 3 of the NZCVS. Details of the family violence module development can be found in the New Zealand Crime and Victims Survey Methodology Report 2018 (Year 1)[16].

[16] Available at https://www.justice.govt.nz/justice-sector-policy/research-data/nzcvs/resources-and-results/

5. Fieldwork processes

Introduction

Fieldwork period

The fieldwork period for the NZCVS, Cycle 3 was 30 September 2019 to 18 November 2020. This is the timeframe between the completion of the first and last interviews in the sample.

Issuing PSUs

One thousand PSUs were initially divided and allocated into four fieldwork quarters. Each quarter consisted of 250 PSUs, with roughly the same number of PSUs assigned to each quarter at the regional level. This was to try to ensure that fieldwork activity in each region was reasonably evenly distributed throughout the duration of the fieldwork. Due to the impacts of COVID-19, the sample for Cycle 3 was reduced to 925 PSUs, with the first three quarters containing 250 PSUs each, and the final quarter containing 175 PSUs.

PSUs were progressively issued to interviewers as fieldwork advanced. The actual fieldwork interviewing, however, may deviate from the initial assignment for operational reasons.

Table 5.1: Month of issuing PSUs

	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr-Jun	Jul	Aug	Sep	Oct	Nov	Total
PSUs issued	80	102	107	65	75	137	51	0	98	68	98	44	0	925
Interviews Completed	450	760	811	599	528	935	529	0	778	633	757	502	143	7,425
%	6	10	11	8	7	13	7	0	10	9	10	7	2	100

Interviewers and training

Table 5.2: Overview of interviewers and training

	Notes
Interviewers	Forty-four interviewers were involved in delivering Cycle 3 of NZCVS.
General interviewer skills and training	Before working on the survey, all interviewers completed the following CBG baseline training modules: • 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: • purpose of the survey and use of the data

	Notes
	• survey methodology and fieldwork procedures • survey content and areas to pay attention to • orientation of the NZCVS Sample Manager. 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. Interviewers with previous NZCVS experience were also required to deliver the new module content with a field manager via web conference. Interviewers new to the project were required to deliver the entire survey with a manager.
Training day	All interviewers also attended a training day in Auckland on 26 February 2018. The content for the day included: • update from CBG and MoJ on key findings, use of the results to date and future plans for the survey • presentation by Victim Support discussing victims' experiences, reactions and needs • 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)
Assessment	In preparation for fieldwork, all interviewers were assessed by CBG managers to confirm that they were ready to begin delivering the Cycle 3 survey in field. The assessments included an examination of recruitment technique, interview delivery and incident description recording. Interviewers were not permitted to begin interviewing until they had completed all the required training, undertaken the required practice interviews and passed the assessments.

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.

Resource	Description
Consent forms	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. The consent form required the respondent to confirm that they: • 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[17] 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	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. 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.
Information leaflet	A leaflet containing key information about the survey was also mailed with the letter, including (but not limited to): • what the survey is and its purpose • what the information is used for • what type of questions are asked • who conducts the survey and when it will be undertaken

[17] See appendix A.

	• 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 Cycle 3, 9% 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 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

	Total number of interviews completed (cumulative)	Percentage complete (cumulative)
Sep	450	6
Oct	1210	16
Nov	2021	27
Dec	2620	35
Jan	3148	42
Feb	4083	55
Mar	4612	62
Apr-Jun	0	62
Jul	5390	73
Aug	6023	81
Sep	6780	91
Oct	7282	98
Nov	7425	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	The NZCVS sampling process has been carefully designed to ensure that households throughout the country are selected. 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.
2	Incorrect householder sampled	If the required respondent sampling process is not followed, the incorrect person may be selected. For example, if only the people present at the time of visit are entered into the sampling system (rather than all the people living at the address), an incorrect respondent may be selected.
3	Screener questions asked incorrectly	The number of victim forms completed relies on the number of screener questions where a respondent answers affirmatively that they've experienced an incident. 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.
4	Self-completion handover process executed incorrectly	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. 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: 1. Respondent happy to self-complete 2. Respondent unable / refuses to self-complete. 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): 1. Respondent happy to continue and privacy ensured 2. Respondent refuses to continue / privacy not ensured. 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.
5	IT issues occur	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 and report them for resolution.
6	Poor response rates and targeted sample not achieved	If a good response rate of the targeted sample size is not achieved, then the number of victim forms could be lower.
7	Interviewers falsifying surveys	If interviewers falsify surveys, then the integrity of the data could be compromised.

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	At least 15 percent of all respondents, and at least one respondent in every PSU is contacted. A PSU can't be closed without a successful audit. Audits confirm the following: • 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.	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. Data uploaded from the field is used to ensure survey protocols are being followed.

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	Number of houses that were added into the sample by the interviewer whist in-field. Expressed as the proportion of the total selected sample of addresses which were added in-field by the interviewer. In Cycle 3, 698 houses were enumerated by the interviewer team in-field, however only 70 of them were selected for inclusion in the survey. Results analysed at an individual level to ensure that each interviewer is completing the enumeration task.	0.7%	

Incorrect householder sampled	
Risk description	**Quality assurance processes**
If the required respondent sampling process is not followed, an incorrect person may be selected. For example, if only the people present at the time of the interviewer's visit are entered into the sampling system (rather than all the people living at the address), an incorrect respondent may be selected.	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. 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.

Quality measure	Description	Result	Notes/Comments
Total occupants recorded	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. 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.	93%	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 the ethnicity of the selected person recorded on the doorstep (Māori or Other) matched the ethnicity reported in the survey.	96%	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.

Screener questions not asked correctly	
Risk description	**Quality assurance processes**
The number of completed victim forms relies on the number of screener questions where a respondent answers 'yes' they've experienced an incident. 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.	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	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. 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.	94%	The rate was 93% according to the 2018 Census. Survey results closely match this, indicating that screener question ID1.09 was not inadvertently skipped.
Household access to a bicycle	Proportion of respondents that report that their household owns or has the regular use of a bicycle. 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.	49%	Rates of reported bicycle ownership were monitored at the individual interviewer-level, to ensure that screener question ID1.10 was asked correctly.
Victimisation rate	Proportion of respondents that complete at least one victim form. Designed to identify individual interviewers who may not be completing the screener questions correctly.	37%	Victimisation rates were monitored at the individual interviewer-level, to ensure that incident screener questions were asked correctly.
Average victim forms completed per survey	Average number of victim forms completed per respondent. Designed to identify individual interviewers who may not be completing the screener questions correctly.	0.59	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	Proportion of respondents that reported in the telephone audit call that the interviewer used showcards to assist with delivering the survey. Showcards are used throughout the survey to help the respondent answer questions.	93%	Rate indicates that showcards were consistently used in field.

Self-completion handover process executed incorrectly

Risk description	Quality assurance processes
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. 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: 1. Respondent happy to self-complete 2. Respondent unable / refuses to self-complete. 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): 1. Respondent happy to continue and privacy ensured 2. Respondent refuses to continue / privacy not ensured. 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.	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.

Quality measure	Description	Actual	Notes/Comments
CASI section skipped	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). These people skipped the section, with the potential of lost victimisation data.	1.9%	
Reported self-completion	Proportion of respondents that reported in the audit telephone call that they completed a section by themselves using the computer. Independent check to ensure that respondents are given the opportunity to self- complete.	89%	These results are reasonably consistent with the results of OB1.04 data quality check which also suggest that 87% of respondents self-completed to some extent.
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	83%	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. Note that the rates of reported and recorded self-completion for Cycle

	than the data collected where the interviewer administered the questions.		3 are slightly lower than those reported in previous cycles. This can be attributed to a proportion of respondents preferring for the interviewer to administer the questions to minimise the risk of COVID-19 transmission.

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?[18]	Spouse / partner	926	12
		Parent(s)	170	2
		Other adult(s)	321	4
		Child(ren)	511	7
		Completed alone in room	5,740	77
OB1.02	How long were other adults in the room for?	Briefly / in passing	183	13
		Around half of the time	200	15
		Most / all of survey	981	72
		Total	**1,6364**	**100**
OB1.03	Were any of the other adults involved in the survey process?	Yes, to a small extent	205	15
		Yes, to a moderate extent	45	3
		Yes, to a large extent	51	4
		No, not at all	1,063	78
		Total	**1,364**	**100**

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	331	4
		Yes, to a moderate extent	196	3
		Yes, to a large extent	89	1
		Yes, totally (interviewer administered the whole section)	969	13
		No, not at all	5,840	79
		Total	**7,425**	**100**

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

Question		Response	N	%
OB1.05	What type of assistance did you provide?[19]	Helped R enter one or more answers	207	3
		Helped R enter majority / all of answers	104	1
		Helped R move to the next screen	135	2
		Helped R back up to previous screen	7	0
		Answered questions about what a question meant	71	1
		Other	150	2

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 and report them for resolution.	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. There were no occurrences of serious IT failure or laptop theft that resulted in data being unrecoverable. 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.

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. Ensuring that these people take part increases the accuracy and reliability of the results.	Continual response rate monitoring and reporting.

Quality measure	Description	Result	Notes/Comments
Overall response rate	The proportion of eligible respondents that took part in NZCVS.	80%	Main sample = 80%, booster sample = 79%.

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

Quality measure	Description	Result	Notes/Comments
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.	44%	To ensure the survey is representative, male ratios are monitored at the individual interviewer level.

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 question ER1.01.	97%	
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.	2%	
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.	100%	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 interviewer 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 paradata[20] 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.

[20] 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	7,462	3,332	10,794
Estimated eligible	6,397	2,929	9,326
Projected number of interviews	5,210	2,280	7,490
Number of interviews achieved	5,121	2,304	7,425
Interview yield from dwellings visited	69%	69%	69%
% of projected completed (interviews achieved/projected)	98%	101%	99%
% of total sample	69%	31%	100%
Response rate	80%	79%	80%
Data linking consent	92%	91%	91%
Consent for future research	93%	93%	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 fieldwork 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.victimsinfo.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
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
13	Not visited	NV	C

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

* 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	5,121	2,304	7,425
2	Unavailable	63	35	98
3	No reply	219	95	314
4	Access denied/no access	87	35	122
5	Household refusal	752	389	1,141
6	Respondent refusal	60	46	106
7	Not available	62	27	89
8	Appointment	1	0	1
9	Language	15	3	18
10	Incapacitated (infirm/hospitalised)	46	13	59
11	Partial	21	7	28
12	Other	16	12	28
13	Not visited	0	0	0
	Occupied dwellings visited†	6,463	2,966	9,429
	Estimated eligibles	6,397	2,929	9,326
	Response rate (%)	80.1	78.7	79.6
	Vacant*	645	243	888
	Not a dwelling/Empty section*	354	123	477

† '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.

* 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.

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 = 1–925.

Table 6.4: Contact outcomes and categories

Category	Outcomes
Interviews (a_i)	• Interviews (I)
Not eligible (b_i)	• Unavailable (U)
Eligibility not established (c_i)	• No reply (NR) • Access denied/no access (AD) • Not visited
Eligible non-response (d_i)	• 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.

$$\frac{A}{A_i + D_i + \frac{C_i \times (A_i + D_i)}{(A_i + B_i + D_i)}}$$

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	341	39	77
2	Auckland	2,243	287	77
3	Waikato	714	83	81
4	Bay of Plenty	618	65	84
5	Gisborne	124	12	85
6	Hawke's Bay	282	33	86
7	Taranaki	225	27	82
8	Manawatū-Wanganui	454	54	82
9	Wellington	771	100	80
16	Tasman	62	9	87
17	Nelson	848	116	78
18	Marlborough	352	49	83
12	West Coast	148	21	75
13	Canterbury	96	11	87
14	Otago	69	9	83
15	Southland	78	10	79
	Total	**7,425**	**925**	**80**

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)	1,054	135	80
2	1,232	164	80
3	1,463	192	80
4	1,772	213	80
5 (highest)	1,904	221	79
Total	**7,425**	**925**	**80**

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	326	181	145	98	80	71	54	32	29	24	20	2	3	0	0
20–29 years	962	449	513	259	274	129	184	40	61	95	84	9	10	1	1
30–39 years	1,365	552	813	316	461	133	219	35	82	132	163	21	20	3	0
40–49 years	1,187	526	661	352	434	145	230	30	44	71	81	15	8	2	0
50–59 years	1,218	539	679	372	477	155	215	36	41	38	52	14	5	1	0
60–64 years	591	253	338	198	254	62	93	6	20	16	19	1	6	0	0
65 years and over	1,771	758	1,013	638	836	137	197	17	31	33	30	3	12	1	1
Refused	5	1	4	1	4	0	1	0	0	0	0	0	0	0	0
Total	**7425**	**3259**	**4166**	**2234**	**2820**	**832**	**1193**	**196**	**308**	**409**	**449**	**65**	**64**	**8**	**2**

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	5,121	2,287	2,834	1,657	2,028	328	466	124	197	332	378	54	46
Māori booster	2,304	972	1,332	577	792	504	727	72	111	77	71	11	18
Total	**7,425**	**3,259**	**4,166**	**2,234**	**2,820**	**832**	**1,193**	**196**	**308**	**409**	**449**	**65**	**64**

Victim form completion

Respondents could complete up to eight victim forms during the interview. Table 6.9 presents the distribution of victim forms completed per respondent.

Table 6.9: Distribution of victim forms completed per respondent

Victim forms completed	Number of respondents	%
0	4,716	63.5
1	1,733	23.3
2	584	7.9
3	222	3.0
4	100	1.3
5	43	0.6
6	17	0.2
7	7	0.1
8	3	0.0
Total	**7,425**	**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 45 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 6.10: Average interview duration by number of victim forms completed

Number of victim forms	Average interview duration (minutes)
Overall	**22:33**
No victim forms	18:13
One victim form	25:50

Two victim forms	33:17
Three victim forms	37:25
Four victim forms	45:34
Five victim forms	60:44
Six victim forms	60:12
Seven victim forms	83:55
Eight victim forms	75:56
One or more victim forms	30:06

Table 6.11: Average section duration

Section	Average duration (minutes)
Total interview	**22:33**
Initial demographics	1:44
Incident screeners	8:20
Victim forms	8:59
In-depth module	1:37
Main demographics	4:01
Exit questions	3:27

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 replied 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. For this reason, all incidents reported in the NZCVS are manually coded.

Offence coding resources

A number of resources are 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: • 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: • 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	A group of experts from the New Zealand Police, were available to assist the coders 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 good IT literacy
- have a high attention to detail.

The coding supervisor (a Master of Laws graduate) was assisted by a law graduate secondary coder. All coding was completed by the coding supervisor and the secondary coder, with each coding roughly half of the records each. They were supported by experts 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	Reading of: • Coding Workbook • Coding Manual • Questionnaire. Watching of the following presentations from the interviewer training: • introduction to NZCVS • Ministry of Justice address • crime in New Zealand.
Online webinar	• two hours • overview, orientation and demonstration.
Individual practice time	• seven days • using records from the main study (in a separate practice environment).
Observed assessment	Coders were subject to an online, observed assessment. 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: • 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. Coders were able to commence live coding on real data once the supervisor was satisfied that all of the above competencies had been met.

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.[21]

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

[21] 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
97	Duplicate incident[22]
98	Offence not in scope
99	Not an offence

Coding period

Coding was conducted on a continuous basis during fieldwork and was finalised on 25 November, 7 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.

[22] Code 97 (duplicate incident) was introduced for Cycle 3, in response to feedback from the coding team. The code is assigned to records where it is evident that a single incident has been reported across multiple victim forms. One of the forms is coded to the relevant offence code, and any duplicates are coded to 97.

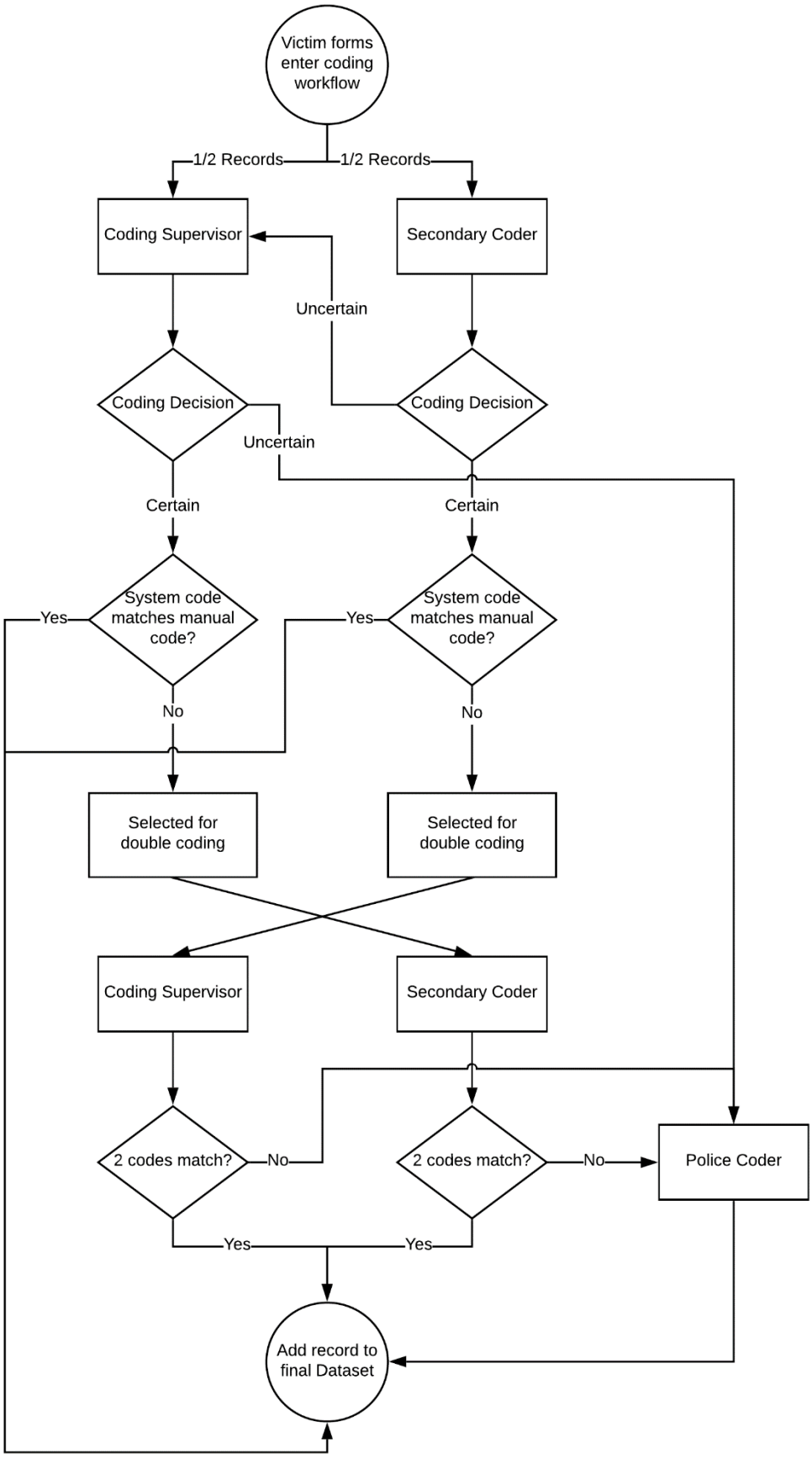
Coding quality assurance

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 secondary 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 secondary 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

		n	%	Notes
Main coding process	**Total number of records coded**	4,357		
	Number of 'Uncertain' records	278	6	Records coded as 'Uncertain' by the secondary coder were reviewed by the coding supervisor. Records coded as 'Uncertain' by the coding supervisor were reviewed by the Police coder.
	Uncertain code match	161	58	Of the uncertain records, how many were assigned the same code by the reviewer as the initial coder.
	Uncertain code mismatch	117	42	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**	2,158	50	One hundred percent of 'Certain' records where the system code did not match the manual code, were selected for double-coding by both the secondary coder and the coding supervisor.
	Codes matched	1,797	83	Number of double-coded records that were coded the same way by the secondary coder and the coding supervisor.
	Codes did not match	362	17	Number of double-coded records that were not coded the same way by the secondary coder and the coding supervisor.
	Records coded by Police coder	957	22	All records that were not coded the same way by the secondary coder and coding supervisor were reviewed by the Police coder. Additionally, 26 records that were coded the same way by the secondary coder and coding supervisor, but where one of them was uncertain, were also reviewed. During the review of these 388 records, the Police coder also reviewed 569 other records that belonged to the same respondents, but were not specifically selected for review.
	Uncertain code match	881	92	Of the records reviewed by the Police coder, how many were assigned the same code by the Police coder as either the coding supervisor or the secondary coder.
	Uncertain code mismatch	76	8	Of the records reviewed by the Police coder, how many were assigned a different code by the Police coder than either the supervisor or secondary 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	2,353
	VF2	778
	VF3	362
	VF4	180
	VF5	105
	VF6	59
	VF7	45
	VF8	31
Cluster victim form	VF1	274
	VF2	65
	VF3	44
	VF4	24
	VF5	15
	VF6	9
	VF7	10
	VF8	3
Total		**4,357**

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 %[23]	Final distribution %
1	Burglary	975	929	81	21
2	Theft of / unlawful takes/converts motor vehicle	52	74	87	2
1+2	Burglary + theft of / unlawful takes/converts motor vehicle	47	50	77	1
3	Theft (from motor vehicle)	159	161	79	4
4	Unlawful interference / getting into motor vehicle	125	41	27	1
5	Damage to motor vehicles	131	153	66	4
6	Unlawful takes/converts/interferes with bicycle	24	29	88	1
7	Property damage (household)	142	126	63	3
8	Property damage (personal)	38	11	21	0
9	Theft (except motor vehicles – household)	144	135	67	3
10	Theft (except motor vehicles – personal)	113	88	65	2
11	Trespass	493	151	24	3
12	Robbery	5	10	80	0
13	Fraud and deception	564	479	82	11
14	Cybercrime	182	140	75	3
15	Sexual assault	205	204	98	5
16	Other assault	292	230	71	5
17	Harassment and threatening behaviour	567	236	36	5
18	Other incidents	99	0	0	0
97	Duplicate incident		40		1
98	Offence not in scope		147		3
99	Not an offence		923		21

[23] 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.

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 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

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	• 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	• 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	• final outcome codes were assigned to all selected dwellings. • unique ID numbers were assigned to each household.
Data linking	• 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	• 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.[24]

Table 9.1: Sample sizes by demographic and geographic classifications

Data item	Categories	Sample size
Personal factors		
Sex	Male	3,259
	Female	4,166
Gender identity	Male	3,242
	Female	4,157
	Gender diverse	11
Age group	15–19 Years	326
	20–24 Years	340
	25–29 Years	622
	30–34 Years	694
	35–39 Years	671
	40–44 Years	566
	45–49 Years	621
	50–54 Years	595
	55–59 Years	623
	60–64 Years	591
	65–69 Years	561
	70–74 Years	496
	75 years and over	714

[24] 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)	European	5,054
	Māori	2,025
	Pacific Peoples	504
	Chinese	248
	Indian	341
	Other Asian	270
	Other ethnicity	129
Legally registered relationship status	Never married and never in a civil union	1,631
	Divorced / marriage dissolved	554
	Widowed / surviving partner	588
	Separated	449
	Married / civil union / de facto (not separated)	4,155
Current partnership status	Partnered – legally registered	4,122
	Partnered – not legally registered	584
	Non-partnered	2,704
Sexual identity	Heterosexual or straight	7,075
	Gay or lesbian	108
	Bisexual	111
	Other	39
Disability status	Disabled[25]	359
	Not disabled	7,064
	Disability status unknown	2
Psychological distress	Low level of psychological distress	6,599
	Moderate level of psychological distress	555
	High level of psychological distress	231
	Psychological distress status unknown	40
Economic factors		
Employment status	Employed	4,519
	Unemployed	375
	Not in the labour force	
	Retired	1,431
	Home or caring duties or voluntary work	395
	Studying	253
	Not actively seeking work / unable to work	302
	Other	124

[25] Has 'a lot of difficulty' with at least one of the six basic activities covered, is defined as disabled using this classification.

Data item	Categories	Sample size
Personal income[26]	Zero income / none / loss	466
	$1–$5,000	235
	$5,001–$10,000	174
	$10,001–$20,000	809
	$20,001–$30,000	1,322
	$30,001–$40,000	743
	$40,001–$50,000	818
	$50,001–$60,000	674
	$60,001–$70,000	583
	$70,001–$100,000	937
	$100,001–$150,000	410
	More than $150,000	256
Household income[27]	Zero income / none / loss	132
	$1–$5,000	135
	$5,001–$10,000	75
	$10,001–$20,000	335
	$20,001–$30,000	921
	$30,001–$40,000	613
	$40,001–$50,000	663
	$50,001–$60,000	567
	$60,001–$70,000	601
	$70,001–$100,000	1,287
	$100,001–$150,000	1,186
	More than $150,000	910
Financial stress: Limited to buy item for $300	Not at all limited	3,412
	A little / quite limited	2,172
	Very limited / couldn't buy it	1,729
Financial stress: Can meet unexpected expense	Yes	5,979
	No	1,298
Household factors		
Household composition	One-person household	1,986
	One parent with child(ren)	547
	One parent with child(ren) and other person(s)	238
	Couple only	1,871
	Couple with no children and other person(s)	207
	Couple with child(ren)	1,620
	Couple with child(ren) and other person(s)	327
	Multiple family household	180
	Other multi-person household	433
	Household composition unidentifiable	5

[26] Includes imputed data.
[27] Includes imputed data.

Data item	Categories	Sample size
Tenure and landlord type	Owned (including with a mortgage)	4,830
	Rented – private	2,080
	Rented – government (local and central)	455
Geographic factors		
Urbanisation	Major urban area	3,456
	Large urban area	1,274
	Medium urban area	648
	Small urban area	787
	Rural settlement	243
	Rural other	9,77
	Other	0
Region	Northland Region	341
	Auckland Region	2,243
	Waikato Region	714
	Bay of Plenty Region	618
	Gisborne Region	124
	Hawke's Bay Region	282
	Taranaki Region	225
	Manawatū-Wanganui Region	454
	Wellington Region	771
	West Coast Region	62
	Canterbury Region	848
	Ōtago Region	352
	Southland Region	148
	Tasman Region	96
	Nelson Region	69
	Marlborough Region	78
NZ Deprivation Index	Quintile 1 (least deprived)	1,071
	Quintile 2	1,247
	Quintile 3	1,451
	Quintile 4	1,784
	Quintile 5 (most deprived)	1,872
Total respondents		**7,425**

Disability and psychological distress derivation

Two different 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 New Zealand 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 restrictions[28].

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 of the six basic activities covered, is defined as disabled using this classification.

Psychological distress

The Kessler Psychological Distress Scale[29] (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 4 weeks across six different areas, using a 5-point Likert scale from ‘all of the time’ (score of 4), to ‘none of the time’ (score of 0).

The scores for all statements are summed. If the combined score is:

- 7 or lower, the person is recorded as having a ‘low level of psychological distress’
- 8–12, the person is recorded as having a ‘moderate level of psychological distress’
- 13-24, the person is recorded as having a ‘high level of psychological distress’

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).

[28] https://www.washingtongroup-disability.com/question-sets/wg-short-set-on-functioning-wg-ss/
[29] https://www.hcp.med.harvard.edu/ncs/k6_scales.php

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 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.[30]

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 relationships to all other occupants in the dwelling[31], then report the inter-relationships of all other members. This was administered as a matrix which assigned 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 selected[32].

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.

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[30] For detail on the 5-digit ethnicity codes see the Stats NZ Level 5 classification http://aria.stats.govt.nz/aria/?_ga=2.76544277.1694749060.1613450286-245916575.1611103828&_gac=1.180384597.1613450315.Cj0KCQiA1KiBBhCcARIsAPWqoSqF0ybsMwM6ILymHJwXa74n2BpaYXWcqjKSvmFFuv-OoJs_BM3Owt0aAgj2EALw_wcB#ClassificationView:uri=http://stats.govt.nz/cms/ClassificationVersion/YVqOcFHSlguKkT17

[31] This was only applicable to dwellings with at least two occupants.

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

Table 9.2: Household composition groupings descriptions

Composition grouping	Description
One-person household	Lives alone.
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 dependent children or not dependent children. People living in the household are defined to be 'children' in the above classification if they do not have 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. In a small number of cases, there was no deprivation score available at the meshblock-level. In these cases, the PSU-level deprivation score has been used, where available.

Urbanisation

The 2018 Urban Rural Classification 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 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 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 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[33]	
14	Cybercrime			
15	Sexual assault		Violent interpersonal offences[34] by relationship to offender[35]	Sexual offences
17	Harassment and threatening behaviour			Threats and damage offences[36]
8	Property damage (personal)			
16	Other assault			Physical offences
12	Robbery			
10	Theft (except motor vehicles – personal)		Thefts and damage offences[37]	
9	Theft (except motor vehicles – household)	Household offences		
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	Residual		
97	Duplicate incident			
98	Offence not in scope			
99	Not an offence			

[33] 'Fraud' are defined as offence codes 13 and/or 14.
[34] '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).
[35] The hierarchy of relationship to offender is provided later in this chapter.
[36] '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).
[37] '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).

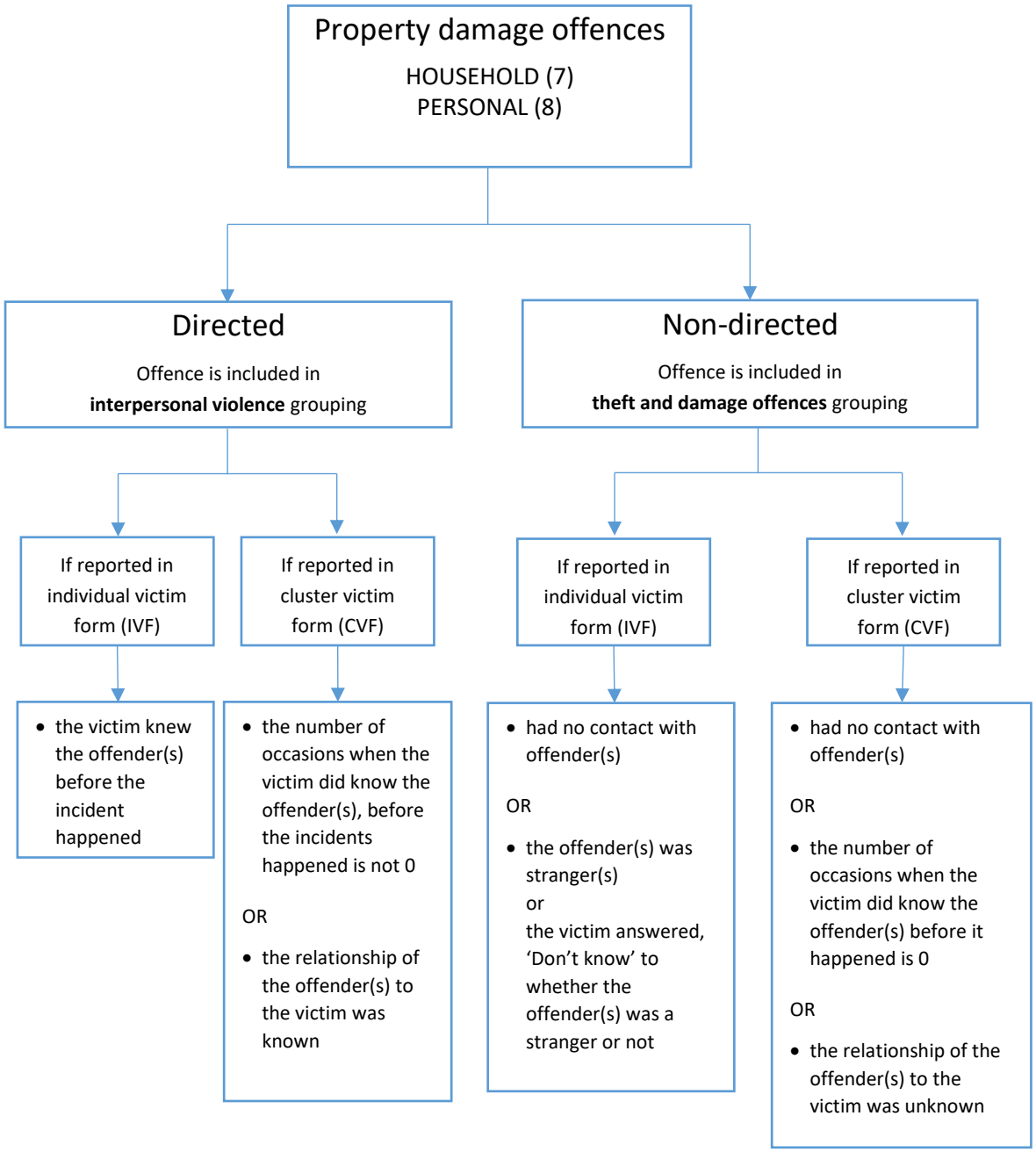
Separating damage offences

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 9.4.

Figure 9.4: Separation of damage offences



Interpersonal violence groupings

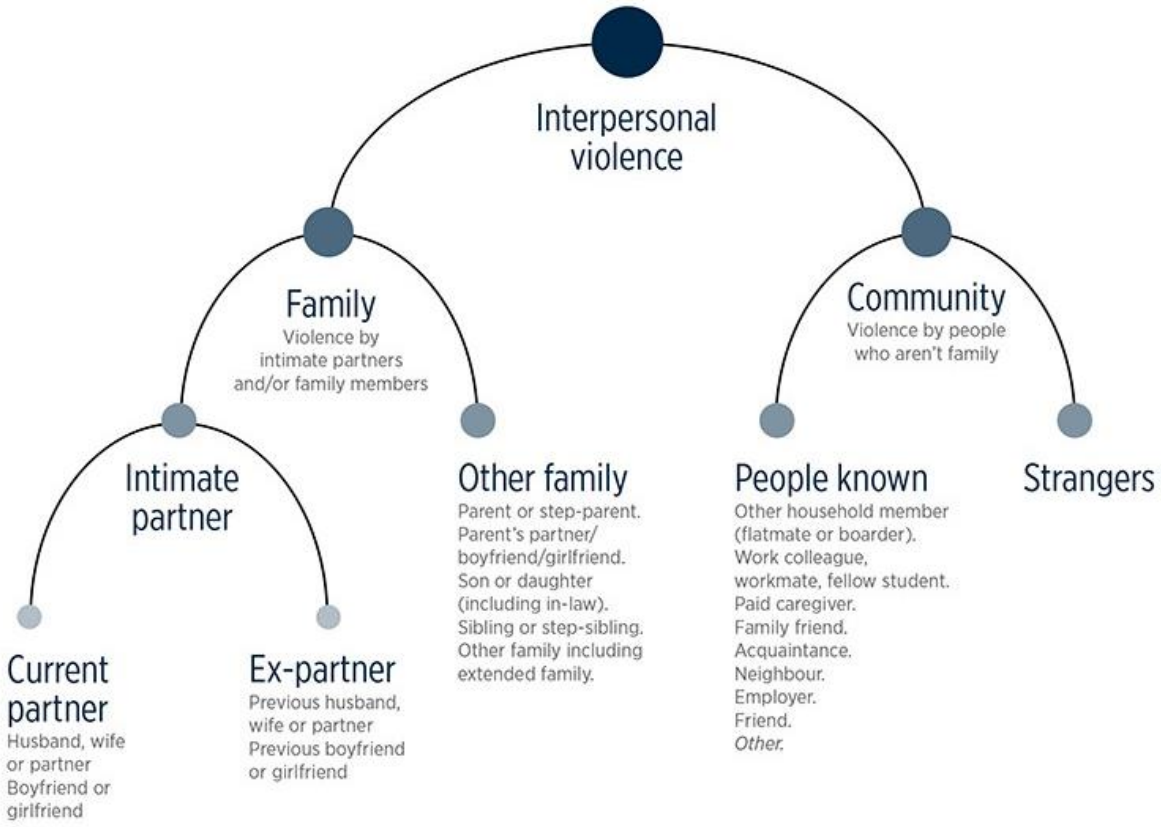
The following is the framework for reporting violent interpersonal offences. The framework aims to portray family/whānau violence in New Zealand in a way that better meets stakeholder needs. The groups in the NZCVS interpersonal violence reporting framework are based on:

- 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 9.5.

Figure 9.5: 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 9.6 shows the NZCVS offences that are in, or out of scope for each of these groups.

Table 9.6: Types of interpersonal violence

Type of violence	In scope	Out of scope[38]
Physical offences	• other assault • robbery	
Sexual offences	• sexual assault	
Threats and damage offences	• 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)	• Coercive & Controlling behaviours[39]
Offences by family members	• other assault • sexual assault • harassment and threatening behaviour • damage to property – personal • damage to property – household • robbery where the offender was a family member as shown in Figure 9.5.	• Coercive and controlling behaviours

[38] Reminder: Children under 15 years old and those living in institutions (such as aged care homes) are out of scope for the NZCVS.
[39] 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:

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

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 thej^{th} household in thei^{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

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

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.

Earlier NZCVS household benchmarks were based on household projections calculated by Statistics NZ in 2017 using Census data from 2013.[40] In recent years estimates of the total number of households at a national level have been considerably lower than these projections. The projections are not due to be revised until 2022, so a new approach to calculating household benchmarks is necessary to produce more reliable benchmarks which are closer to current household estimates.

The new approach involves:

1. Calculating a people-per-household ratio by dividing the number of people aged 15 and over in each regional council area by the number of households in that area using 2018 Census data.
2. Dividing the estimated resident population in each region as at 30 June of the benchmark year by this estimated people-per-household ratio to get a preliminary estimate of households per region.

Adjusting the preliminary estimate of households per region proportionately such that the sum of households across regions matches the estimated number of households nationally as at 30 June of the benchmark year.

The final household weights after post-stratification ranged from 23.0 to 2417.1, with an average of 241.8 and a coefficient of variation of 0.64. These weights can be used for analyses of household characteristics.

Person weights

Person selection 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.

[40] See https://www.stats.govt.nz/information-releases/subnational-family-and-household-projections-2013base2038-update.

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:

$PW_{kji} = HW_{ji}$ *x (number of occupants)* *if a house has no Maori occupants*

$PW_{kji} = HW_{ji}$ *x (number of Maori occupants)* *if a house has any Maori occupants*

Post stratification

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 98.5 percent, so a more complicated non-response adjustment was not applied.

Age and sex benchmarks
Individual NZCVS regional benchmarks by age and sex are based on subnational population estimates produced by Statistics NZ. These estimates are considered provisional when they are first released, as it is not certain whether new arrivals will meet the 'usually resident' definition until they are observed for up to 16 months after their arrival. As such, benchmarks based on these provisional estimates may be revised as population estimates are revised, resulting in changes in the person weights.

Māori/non-Māori benchmarks
Individual NZCVS regional benchmarks by Māori/non-Māori were previously produced by taking regional population estimates and applying to this a percentage Māori in each region calculated from the 2018 Census. These estimates are affected by Census non-response however, which is particularly high for Māori and as such a new approach was recommended by Statistics NZ for 2020.

The new approach involves several steps which are designed to produce the best estimate of the Māori and non- Māori population of each region in each benchmark year. This involves:

1. Calculating the percentage of the adult population who identify as Māori in each age group in each region in 2018 from subnational Māori population and total population estimates.
2. Multiplying these percentages by the estimated age group population of each region in June of the benchmark year to get preliminary estimates of the number of Māori in each age group in that region in the benchmark year.
3. Summing these preliminary estimates to get a total preliminary estimate of the number of Māori in the region in the benchmark year.
4. Dividing these preliminary estimates by the total estimated population of the regional council area to get an age-adjusted estimated percentage Māori in each regional council area population in the benchmark year.
5. Multiplying this age-adjusted estimated percentage Māori in each region by the estimated change in the percentage Māori in the adult NZ population between 2018 and the benchmark year to get a final estimated percentage Māori in each region in that year.
6. Applying this final estimated regional percentage Māori to the estimated population of each region in the benchmark year to get Māori and non-Māori benchmarks.

This approach takes advantage of the most recent regional Māori population estimates from 2018 and adjusts these for the changing age structure and population size of each region, as well as for the estimated change in the total Māori population at a national level.

The final person weights after post stratification ranged from 17.6 to 6835.6, with an average of 554.5 and a coefficient of variation of 0.91.

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 had experienced in the last year. They were asked to say how many times the 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, victim forms in the top 2nd percentile according to incident frequency were censored for each offence type. That is, the top two percent of victim forms with the highest number of incidents reported for each offence type were removed from the analyses.

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 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 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 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. 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' [41]. 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 4.4 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.

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

[41] https://cran.r-project.org/web/packages/hot.deck/hot.deck.pdf

randomly using the proportions of each offence code for that scenario. The result ‘out-of-scope’ was considered to be just another ‘offence code’.

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 produced 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.

The NZCVS results are produced after data collection, cleaning, imputation and weighting being completed. Analyses are produced using SAS surveyfreq and 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 Incident 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 in-depth module questions for a given year. In NZCVS the questions in the module change from year to year.

The Incident 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 dataset also contains 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 heterogonous 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.

Latest population estimates should be used for benchmark weights. Where data is 'pooled' across survey years, averaged benchmark weights for the applicable years should be applied.

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 the previous 12 months?
- what proportion of households experienced a burglary in 2019/20, by area level deprivation?
- what proportion of people experienced a serious assault in 2019/20, 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 number 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=nzcvsyyyy.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 2019/20?
- how many burglaries did the average household experience in 2019/20?
- how many serious assaults did the average person experience in 2019/20?

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=cvs.nzcvsyyyyCORE 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=nzcvsyyyyCORE 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' and '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 supressed 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 (MoE = t-value * standard error of estimate).
- **Relative Sampling Error (RSE):** The RSE is obtained by expressing the standard error as a percentage of the estimate, that is RSE = (standard error of the estimate *1.96/ estimate) * 100. It is the same relative sampling error calculation used by Stats NZ.

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
Used for		*Count estimates (totals) and averages* *E.g. 304,000 burglary offences in 2008*	*Percentages* *E.g. 13% of households experienced a burglary in 2008*
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 NZCVS 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.

Combined weights for pooled dataset

The sample from the NZCVS is too small to provide sufficiently accurate data about crimes with a smaller incidence, nor will it provide good estimates of some subdomains.

In these situations, the usefulness of the survey can be improved by combining two or three years of survey data with a new set of weights.

The calculation of new combined weights was a multi-step process. First a new set of household and person benchmarks was derived by averaging the annual benchmarks.

Then the post-stratification process was repeated. The household weights resulting from the non-response adjustment were post-stratified by Regional Council dwelling counts using the new benchmarks. Following that, the person weights were post-stratified by Regional Council person counts, broad age band, sex, and ethnicity (Māori/non- Māori).

Multivariate analysis

Multivariate analyses use methods for examining more than two variables simultaneously. An important component of these kinds of analyses is the ability to examine the relationship between two variables while controlling for how each of these may be influenced by other variables.

The approach to control for multiple factors at once is termed multiple standardisation. This is similar to other statistical analysis such as regression in the sense to control for multiple factors simultaneously, however the multiple standardisation approach is easier to interpret for the purpose of the NZCVS Key findings report. For example, with regression we discuss how a change in a factor, such as age, would change the probability (or odds) of being victimised/not victimised. Conversely with multiple standardisation, we can discuss the size of the gap in victimisation rates and how much of that gap can be attributed to differences in factors for each ethnic group.

The first step of this analysis is determining which factors to standardised by. A key consideration for NZCVS is the sample size, means we are limited to the number of prominent factors to include. Therefore, we conceptually picked factors that we view as important variables to control for.

Multiple standardisation is conducted to standardise the selected factors simultaneously to give our groups of interest the same factor structure as their combined population. This is to quantify the reduction in the victimisation gap once all factors are accounted for. It is done by multiplying the survey weights by the adjustment required to make that characteristic proportional to the combined interest groups population. As a simple example standardising by just NZ Dep quintiles, let's say there were 20% of the Māori population in each quintile. If the first quintile had 30% Māori, and the

fifth quintile had 10% Māori, we would multiply Māori weights in the first quintile by 0.66 and multiply Māori weights in the fifth quintile by 2.

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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

Help create safer communities

New Zealand Crime and Victims survey
INVITATION

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

MINISTRY OF JUSTICE Tāhū o te Ture
CBG PUBLIC SECTOR SURVEYING
New Zealand Government

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.

Help create safer communities

NEW ZEALAND CRIME AND VICTIMS 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.victimsinfo.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.

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MINISTRY OF JUSTICE | CBG | New Zealand Government

Help create safer communities

NEW ZEALAND CRIME AND VICTIMS SURVEY

MINISTRY OF JUSTICE

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

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.

New Zealand Crime and Victims survey

	2018			2019								
	October	November	December	January	February	March	April	May	June	July	August	September
National Events		Guy Fawkes / Diwali	Christmas		Chinese New Year / Waitangi Day		Easter		Matariki			
School Terms		Term 4			Term 1			Term 2			Term 3	
Your Events												

	2019			2020								
	October	November	December	January	February	March	April	May	June	July	August	September
National Events	Diwali	Guy Fawkes	Christmas	Chinese New Year	Waitangi Day		Easter			Matariki		
School Terms		Term 4			Term 1			Term 2			Term 3	
Your Events												

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).

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.

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.

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.

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.

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.

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.

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.

REPARATION

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.

APPEALS

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.

After court

Once found guilty, an offender could receive a number of sentences, including prison, a community sentence or a fine.

RELEASE FROM PRISON

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.

If an offender's sentence ends, they must be released from prison. They cannot be kept in prison after their sentence ends.

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.

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.

YOU CAN TELL THE PAROLE BOARD HOW YOU FEEL ABOUT THE OFFENDER'S RELEASE

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.

To make sure your contact details are up to date on the register, contact the police, Department of Corrections or your support agency.

You can tell the Parole Board how you feel in writing, by video conference or in person:

- **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.

Key contacts

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.

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

ACC
acc.co.nz
0800 101 996 Claims Helpline
0800 735 566 Sensitive Claims Helpline (for victims of sexual violence)

Court victim advisors
0800 650 654 Victims Information Line

Department of Corrections
04 460 3000
corrections.govt.nz

New Zealand Parole Board
0800 PAROLE (727 653)
paroleboard.govt.nz

Tell your court victim advisor, police officer in charge or support worker if you need hearing, mobility or language translation help.

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.

THE COURT VICTIM ADVISOR

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.

Your court victim advisor, the police officer in charge of your case or your support worker are there to explain anything that is unclear.

You can contact your court victim advisor directly, or through the Victims Information Line on 0800 650 654.

Being a witness

Witnesses are a very important part of court cases. They can provide vital evidence.

BEFORE COURT

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.

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.

Talk to your court victim advisor or officer in charge if you want to arrange:

- 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).

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.

AT COURT

As a witness, you will be asked questions about what happened or what you know about the crime.

When you give evidence, you will usually be able to see the defendant.

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.

The verdict and sentence

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.

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.

If the person is found guilty, they may be sentenced on the day or a date will be set for a sentencing hearing.

RESTORATIVE JUSTICE

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.

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.

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.

If you want to find out more about restorative justice ask your court victim advisor or visit victimsinfo.govt.nz

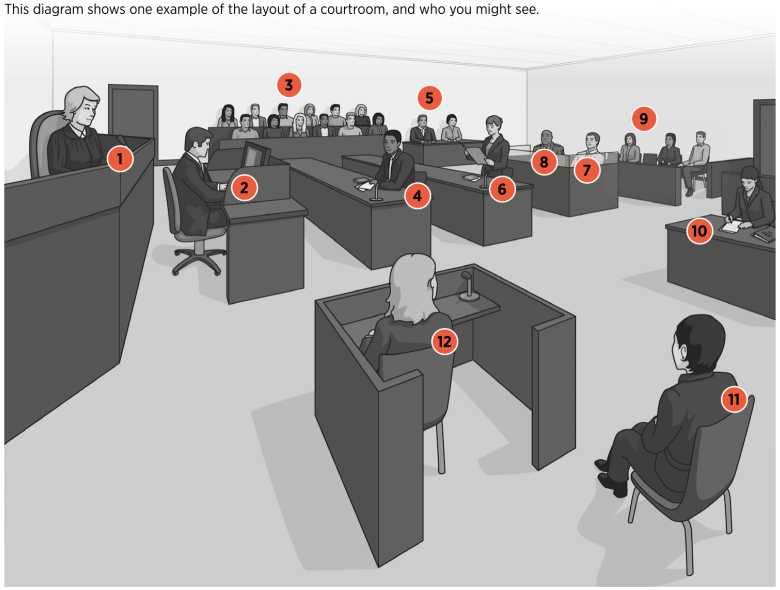
SENTENCING

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.

If the judge agrees, you (or someone you choose) can read out all or part of your victim impact statement in court

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

Victims information line
0800 650 654
victimsinfo.govt.nz

Ministry of Justice

New Zealand Government

MOJ0344.2_FEB17

Thank-you card

FreePost Authority Number 223854

CBG

Free

NEW ZEALAND CRIME AND VICTIMS SURVEY FEEDBACK
CBG Public Sector Surveying
PO Box 45173
Te Atatu
Auckland 0651

To provide feedback please complete the back of this mailer and send freepost
or Freephone 0800 478 783

New Zealand Crime and Victims survey

Ministry of Justice

CBG

Dear Survey Participant,

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.

To report a crime – call or visit your local police station or call the anonymous **Crimestoppers number 0800 555 111.**

In the case of an emergency call 111.

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.

If you would like more information about the survey, please call CBG Public Sector Surveying on 0800 478 783.

If sending feedback remove the top part, fill in comments below, seal closed and pop in the post – no stamp needed.

Please provide us with your feedback or any additional comments below.

Leave your contact details blank if you wish to remain anonymous.

CONTACT DETAILS

NAME/DETAILS OF INTERVIEWER:

FULL NAME:

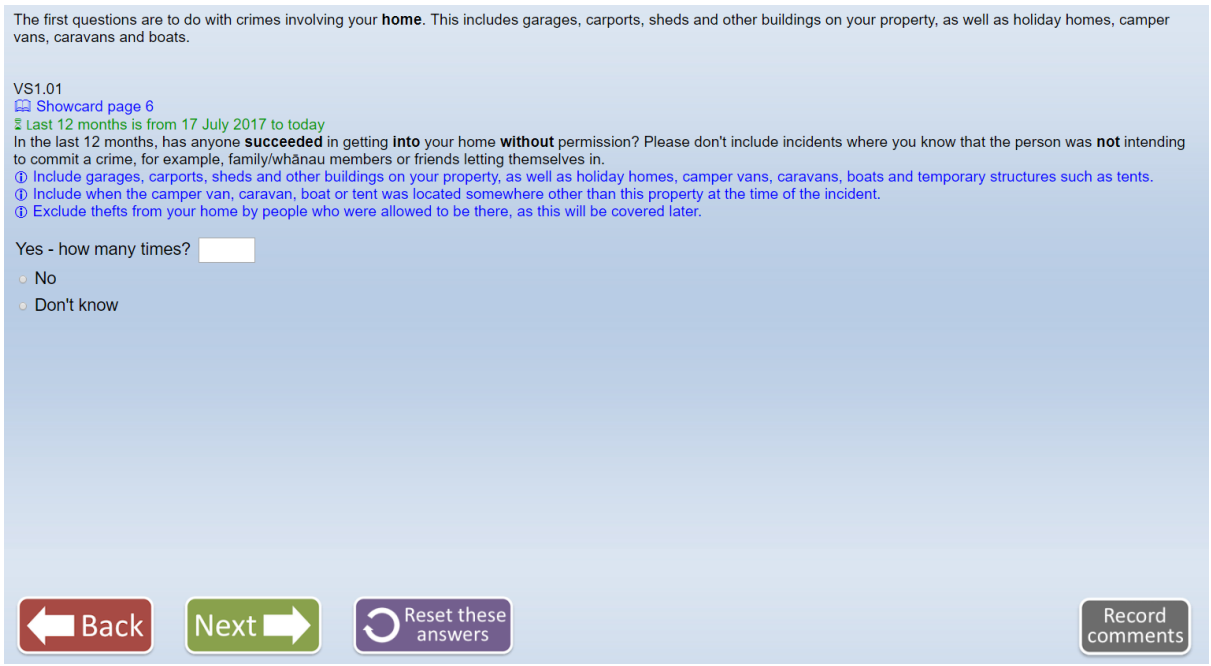
CONTACT NUMBER/S:

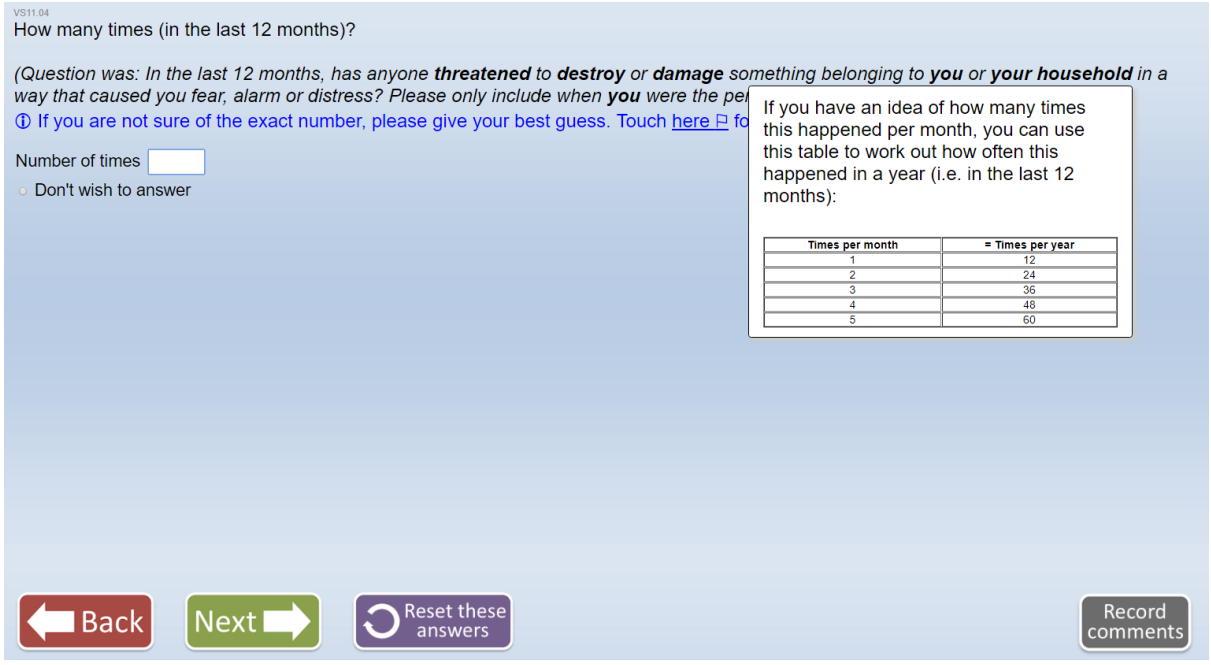
ADDRESS:

EMAIL:

Appendix C: Questionnaire Screenshots

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





VS12.01-VS12.03
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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**?

ⓘ 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.

ⓘ 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.

ⓘ 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	○	○	○	○
A Restraining Order	○	○	○	○
A Police Safety Order	○	○	○	○

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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?

0 5

Slide to select answer 4

○ 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?	○	○		○
...sexuality or sexual orientation?	○	○		○
...age?	○	○		○
...sex?	○	○		○
...religious / ethical beliefs or political opinion?	○	○	○	○
...disability? (if applicable)	○	○	○	○

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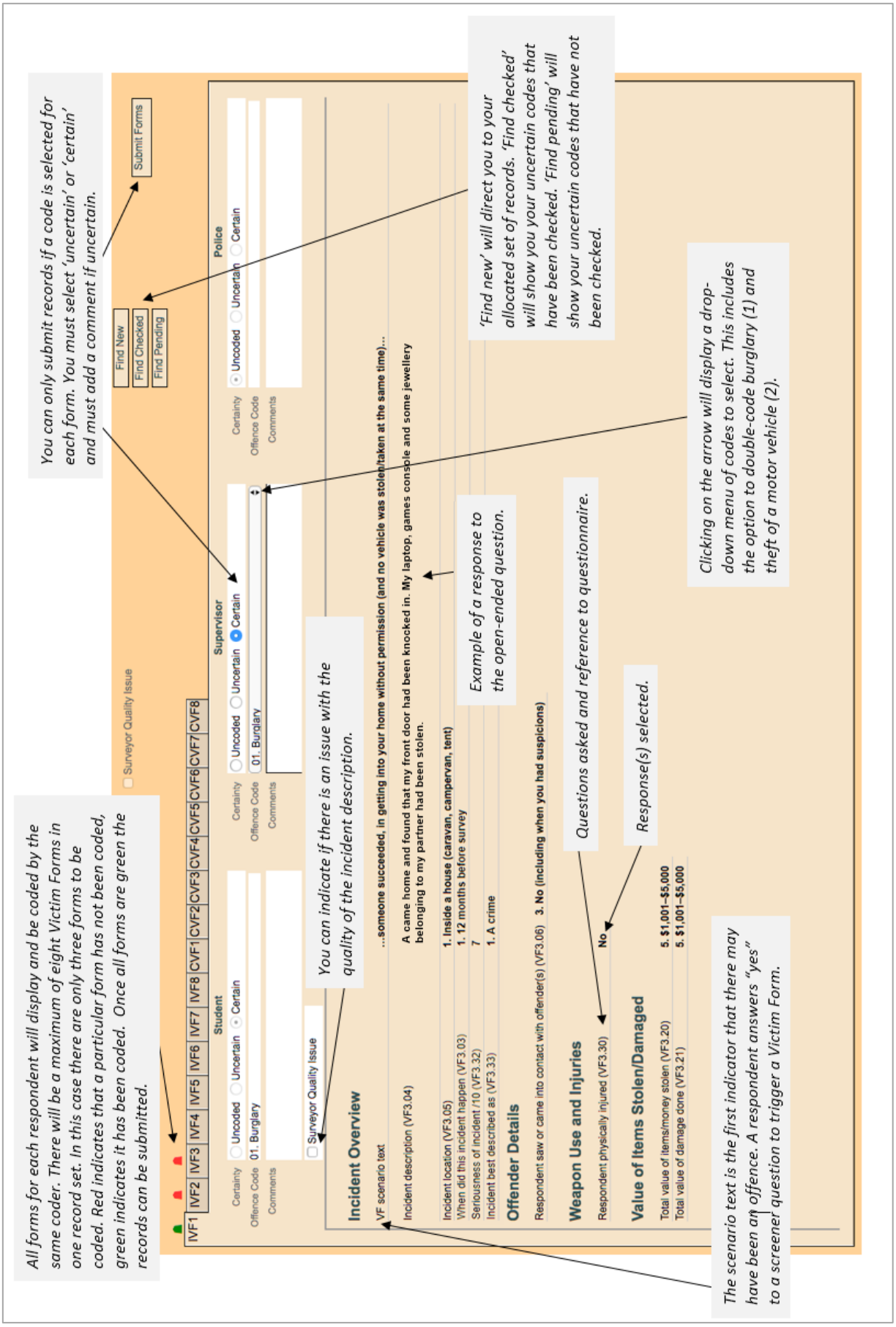
Appendix D: Coding portal



Appendix E: 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