# 2016 KAIKŌURA/HURUNUI EARTHQUAKE CLAIMS SETTLEMENT RESEARCH:

## Claimant and community experiences and impacts from the Kaikōura/Hurunui earthquake residential repair process

**IMPACTS REPORT**

**May 2023**

Resilient ORGANISATIONS
kestrel group
Tonkin+Taylor
Infometrics
Funded by Toka Tū Ake EQC

## Authors

Cameron Eade, Resilient Organisations Ltd
Charlotte Brown, Resilient Organisations Ltd
Sophie Horsfall, Resilient Organisations Ltd


## Reviewers

Eric Bird, Tonkin & Taylor Ltd
Dave Brunsdon, Kestrel Group
Nick Brunsdon, Infometrics


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## 2016 Kaikōura/Hurunui earthquake claims settlement research
## Summary of research stages

*Full references and weblinks to these reports can be found in Section 8*

| TITLE | SUMMARY |
|---|---|
| **Understanding the Outcomes of Managed Residential Repair Following the Canterbury Earthquakes** (*Literature Review Report*) | This report summarises the outcomes, challenges, and benefits of the managed repair process following the Canterbury earthquakes of 2010/11, as a basis for informing broader considerations of appropriate insurance settlement models in future large-scale disasters and supporting research method design. |
| **Evaluating the Impacts of Cash Settlements on the Long-Term Quality of the Housing Stock** (*Housing Quality Report*) | This report investigates the impacts of cash settlement of insurance claims following the 2016 Kaikōura/Hurunui earthquake. In particular, the report focuses on the impact on the long-term quality of housing.<br>The research draws on insurance claims data, building consent data, real estate data, and results from a 2022 claimant survey carried out by the research team. The analysis in this report focuses on the most significantly impacted districts of Kaikōura, Hurunui and Marlborough. |
| **Claimant and Community Experiences and Impacts from the Kaikōura/Hurunui Earthquake Residential Repair Process (*Impacts Report*)** | This report builds on this previous work by exploring the wider impacts of cash settlement. It looks at the process of cash settlement from multiple stakeholder perspectives (claimants, builders, professional services, building control authorities, insurers (including assessors), and real estate agents). The analysis is based on a series of interviews with key stakeholders and is complemented by results from a 2022 claimant survey carried out by the research team. The analysis explores issues such as timeliness of repair works, cost, claimant experience (including impacts on claimant wellbeing) and property transactions. |
| **Key Principles and Considerations for Future Residential Recovery** (*Discussion Paper*) | This discussion paper outlines key principles and considerations to inform decision-making for future residential recovery strategies. This draws on findings from previous reports and evaluates the advantages and disadvantages of cash settlement following a major disaster. The features and attributes that underpin an effective residential claim settlement approach are suggested, acknowledging the spectrum of approaches from claimant-led to third party-led. Key factors for early-stage decision-making as to the optimum claims settlement approach for a given event are also proposed. |

# EXECUTIVE SUMMARY

## Overview

In New Zealand, damage to residential dwellings and land from natural hazards is covered by a combination of private insurance and the state insurance entity, Toka Tū Ake EQC (Earthquake Commission). Following on from the challenges experienced during the residential recovery after the Canterbury earthquakes, the currently preferred method of Toka Tū Ake EQC and private insurers for resolving residential insurance claims following an event is through cash settlement (Public Inquiry into the Earthquake Commission, 2020).

Cash settlements typically provide for faster settlements and can be easily adjusted where missing or inaccurate damage or costs are identified. There is, however, some uncertainty over the extent to which cash-settling insurance claims could lead to poor outcomes for housing quality. Potential risks of using cash settlement in large-scale disasters include cost inflation, limited and inequitable access to building professionals and materials, and settlement money not being used by claimants to complete insurer-assessed repairs or rebuilds. These factors could result in reduced housing quality, leaving communities vulnerable to future hazards (Public Inquiry into the Earthquake Commission, 2020; Earthquake Commission, 2019b).

The Public Inquiry into Toka Tū Ake EQC[1] – referred to hereafter as the Public Inquiry – was tasked with investigating and reporting lessons from the entity's operational practices, past claim settlement approaches, and to "make recommendations to improve the Commission's readiness to respond to future events". Within the report's recommendations relating to the process for settling claims, two related to research on the impact of cash settlements of insurance claims:

> ***[5.1.3]*** *Conduct a detailed assessment of the impacts of cash settlement of claims in the example of the Kaikōura/Hurunui earthquake, including the longer-term impact on quality of the housing stock.*
>
> ***[5.1.4]*** *Incorporate the findings of the detailed assessment of cash settlement for the Kaikōura/ Hurunui earthquake into a larger and ongoing study that tests the advantages and disadvantages of cash settlement, the results of which could be drawn on when deciding the best response to future natural disaster events.*

This report is part of a body of work funded by Toka Tū Ake EQC. The overall project aims to understand the impacts of applying a cash settlement model following the 2016 Kaikōura/Hurunui earthquake, with particular consideration to the long-term quality of housing stock; and provide lessons for residential recovery following future events in Aotearoa New Zealand. The aim of *this* report is to investigate the wider impacts and experiences of cash settlement of insurance claims following the 2016 Kaikōura/Hurunui earthquake. This *Impacts Report* builds upon the previous *Housing Quality Report*, which examined the impact of cash settlement of claims on housing quality.

The report examines the process of cash settlement from multiple perspectives (i.e., claimants, builders, professional services, building control authorities, insurers (including assessors), and real estate agents). It explores impacts and experiences at each stage of the claim settlement and repair process from the

[1] Public Inquiry into the Earthquake Commission. (2020). Report of the Public Inquiry into the Earthquake Commission.

claim assessment through to the completion of repairs and property transactions. The research draws on interview data and results from a 2022 claimant survey carried out by the research team. In addition, 27 interviews were completed with 28 people. These focused on experiences from Hurunui, Kaikōura and Marlborough districts, following the focus on these districts in the *Housing Quality Report* as having the most significant property damage from the Kaikōura/Hurunui earthquake. In total, 5,756 claims for building damage were paid by Toka Tū Ake EQC in these three districts.

Both the *Housing Quality* and *Impacts Reports* contribute to addressing recommendation 5.1.3.

## Impacts of cash settlement from the 2016 event

There were a range of stakeholders involved in the Kaikōura/Hurunui claim settlement and residential repair process, from insurers, banks and government agencies to professionals and tradespeople, community groups and claimants themselves. Each contributed different functions, services, and decisions. Identified challenges and issues arising from the process are therefore consequences of the entire system, rather than of individual entities involved. A systems-wide perspective is therefore important when considering these findings.

For each key stage of the claim settlement and repair process following the Kaikōura/Hurunui earthquake, potential issues were identified that impacted housing quality and claimant wellbeing. The following table summarises the key stages and their associated issues and impacts, along with examples of mechanisms identified during the research as possible ways to mitigate these impacts in future events.

Although the sale and purchase of houses is not directly part of the claim settlement and repair process, it has been included in the table because of the potential housing quality implications which arise directly as a result of the process.

The key findings relating to each stage of the claim settlement and repair process are highlighted below.

### Lodging a claim

The extent to which insured homeowners did not make a claim following this event, despite having earthquake damage, is unknown. While lodging a claim is the responsibility of insured individuals, it is the first step in a successful residential repair process. Failure to claim may have downstream impacts on housing quality and claimant wellbeing, through unrepaired damage, or lost capital. The number of uninsured homeowners is also not known.

### Assessing damage

The damage assessment process came through as a critical part of the recovery process that, when done well, enabled quality repair outcomes, trust, and confidence. The detail and accuracy of the damage assessments following the Kaikōura/Hurunui event were reported as having varied considerably. The invasiveness of initial damage assessments depended on the nature of the damage. Generally, where top-ups were available to claimants for subsequent damage discovery, non-invasive assessments were favoured for expedience. While this enabled a quicker undertaking of assessments and appropriate use of resource, it was also confusing and at times frustrating for claimants. Some claimants were perplexed by the multiple and varied damage scopes received; they endured longer settlement times; and, for those either unaware or unable to get a claim top-up, they had insufficient funds to complete repairs.

| STAGE | POTENTIAL ISSUE | POTENTIAL IMPACT | EXAMPLES OF TOOLS TO MANAGE POTENTIAL ISSUES |
|---|---|---|---|
| LODGING CLAIM | Damage not identified by claimant | Unrepaired damage | Additional support for vulnerable individuals<br>Individual follow-up with claimants<br>Clear communication of claims processes |
| ASSESSING DAMAGE | Damage not fully identified by insurer | Unrepaired damage<br>Claimant loss of trust and increased time in insurance process | Appropriately detailed damage assessment processes<br>Triaging damage to use most experienced assessors for more complex damage |
| ACCEPTING OFFER | Full and final claim discharges resulting in later-discovered damage that cannot be covered<br>Delay in claimants accepting offers | Unrepaired damage where claimants cannot cover additional damage<br>Financial hardship and stress for claimants<br>Pressure on building sector to provide quotes<br>Repair delays | Opportunity for reopening of claims where appropriate<br>Discharge waivers to give claimants greater confidence in accepting initial claim offers |
| DECIDING TO REPAIR | Claimants deciding not to complete repairs | Unrepaired damage | Information from insurers on impacts of not completing repairs<br>Payment of claim directly to banks for those with mortgages |
| COMPLETNG REPAIR | Lack of claimant confidence / experience with repair management | Stress for claimants<br>Reliance on professionals for quality repair leaving claimants to assess adequacy/ quality of repair and vulnerable to poor quality work | Provision of information on suitable local tradespersons<br>Information on how to undertake repair processes, how to monitor quality and where to get help |
| CLARIFYING BUILDING CONSENT/ EXEMPTIONS | Lack of clarity about whether a Building Consent or Consent Exemption is required | Poor quality repair outcomes due to lack of regulatory oversight | Clear information from regulator/councils on consent requirements |
| MANAGING THE REPAIR | Limited oversight of repair completion | Incomplete/inadequate repairs | Insurers follow-up with claimants<br>Repair invoices paid directly by bank<br>Insurance disclosure requirements<br>Claimants/tradespeople required to lodge evidence of repair completion with local councils/insurers |
| HOUSE SALE | Sale of properties with inadequately (or un-) repaired damage | Purchase of property with unrepaired/unidentified damage with no recourse for funding to complete repairs | Disclosure requirements associated with real estate transactions |

## Accepting settlement offers

The trajectory of repairs was often determined by the claimant's level of building experience. Claimants without building experience indicated that they placed a lot of trust in the quality of the damage assessments, with some claimants accepting settlements without undertaking their own independent check on scope and value. Other claimants would only accept settlements after they had received an independent quote for building work. This put pressure on local contractors, with some electing to charge clients for providing a quote for repair work.

For those with under-cap claims, there was generally low risk in accepting an offer without due diligence, as under-cap claims were not full and final. However, early in the process some insurers required claimants with over-cap claims to accept offers as full and final. Some claimants who accepted these offers straight away found themselves with insufficient funds to complete all repairs. Generally, this was due to the discovery of additional damage, rather than the insufficient value of scoped work. Some insurers later introduced measures such as discharge waivers, to enable claimants to accept settlements with the confidence that discovery of additional damage would be covered. This meant that claimants did not have to wait for a quote for repair work, and insurers could settle claims faster.

## Deciding to repair

Most claimants elected to complete their repairs. For claimants that chose not to complete repairs, this decision was generally made for financial reasons (for example, claimants identified other financial priorities or had insufficient funds to complete all repairs), or because of lack of access to tradespeople. Some also decided to sell their property unrepaired. Claimants that elected to not undertake repairs were more likely to have larger claims and reported structural damage. For those that decided to fully repair their properties, the motivation for repair included the desire to sell their property in the future, habitability, ongoing insurability, and receiving insurance money paid directly to the bank.

## Management of repairs

The availability of contractors/tradespeople was cited as a challenge for those managing their own repairs. In smaller communities, claimants tended to look for local contractors to undertake repair work as there was a heightened sense of familiarity and/or trust with someone who lived in their own community. Some claimants were willing to wait several months or even years for a trusted builder.

Some individuals opted to complete their own repairs. Claimants generally reported doing this to make efficient use of funds, or because they had construction experience and/or enjoyed doing work to their property.

Up to 45% of claimants believed the repair scope of their initial insurance claim did not cover all earthquake damage, with 53% of those unaware they could request a claim top-up. For some claimants, this meant full repairs were not completed. Claimants on lower incomes tended to be more likely to report that their insurance settlement was insufficient than those on higher incomes.

## Building consents

For those properties with structural damage, there was confusion about whether works required a building consent or consent exemption, or neither. The lack of clarity extended from insurance assessors, builders, and claimants through to building control authorities. From our data, it appears that claimants

and builders generally wanted to do the right thing but found it difficult to get definitive information about consent requirements. This potentially creates long term quality and sale and purchase issues if earthquake damage has been inadequately repaired or without the necessary approvals.

## Completion of repairs

There was no consistent follow-up with claimants across the board to understand or document whether repairs had been completed. Most insurers followed up passively at the time of policy renewal, requiring a declaration (but no evidence) from the claimants that repairs had been completed. For those with mortgages and significant value repairs, evidence of repair was required to release insurance funds. A lack of clear evidence to know whether repairs were completed highlights a potential future risk for claimants, as well as liability risks for both insurers and banks if a future event were to occur.

## House sales

The sale of damaged homes where damage was unrepaired or inadequately repaired also presents a risk to homeowners in the future sales process, and long-term housing quality. Instances of inadequate repairs causing issues at the time of sale were highlighted throughout the interviews, such as impacting the sale value of the property. It was reported that, generally, there was a reliance on claimants to disclose completion of repairs at the time of sale. The real estate agents interviewed indicated some recent process changes have been made regarding claim and repair information disclosure requirements at the time of sale and purchase, though it is uncertain to what extent this has been implemented.

## Claimant wellbeing

The insurance settlement and subsequent residential repair process also had an impact on claimant wellbeing. Over 70% of survey respondents reported that they experienced stress at some point during the claim settlement and repair process, and over 30% indicated this had a moderate to major negative impact on their wellbeing. While it is not possible to attribute these outcomes solely to the residential repair process, those reporting challenges in engaging contractors were more likely to report stress having a major negative impact on them. The time taken to undertake repairs was also a factor impacting wellbeing.

Despite some of the negative reported wellbeing outcomes, claimants were generally satisfied with the quality of repairs and time taken to undertake repairs (given the size of the event). Claimants also generally chose to continue their insurance cover, even if they indicated they did not have a positive experience dealing with their insurer or repair process. The positive sentiment toward the cash settlement model was reinforced when claimants were asked their preferred claim settlement approach following a future event: most (70%) indicated they would prefer to manage repairs themselves (through cash settlement), while the remainder (30%) indicated a preference for a third-party to manage repairs.

## Key themes from the residential repair process

Four key themes consistently emerged that enabled positive residential recovery experiences and outcomes. These are summarised below.

### Access to Information

First, access to information on the recovery process is an integral part of ensuring claimants can confidently manage their recovery. This ranges from information on how to interpret and evaluate an insurance settlement through to guidance on selecting building contractors, obtaining consents, and managing future house sales. Ensuring this information is available, accessible, and known to claimants who may benefit from it, is a core component of helping claimants have a smoother overall claim and repair process.

### Autonomy and choice

Second, providing a sense of control, choice, and autonomy is considered highly valuable by those with earthquake damaged properties; even if it is the choice to manage the process themselves or allow a third party to manage repairs. Autonomy through the repair process helped some claimants to have greater trust that repairs would be completed properly. The degree of autonomy desired by claimants is likely to change based on a range of factors, including the personal circumstances of claimants and external factors at the time of an event, as well as the nature of the event itself.

### Quality damage assessment process

Third, at the outset of the claims settlement process, ensuring that damage assessment processes provide full and comprehensive assessments of damage is very important. Quality assessments provide a template for repair work, increasing the likelihood of damage being repaired. It also builds confidence in the settlement process and reduces conflict and time spent negotiating a revised settlement (for claimant, insurers and building contractors alike). Quality assessments are particularly important for those that do not have experience and/or confidence in managing their own repair work.

### Repair quality assurance process

Fourth, it is important that processes are in place to ensure the quality and completion of repair work (or identification of poor repairs, or non-repaired damage). This enables claimants, and other key stakeholders, such as insurers and banks, to have confidence in the repair work completed. This reduces risk to occupants in future earthquake events and ensures properties remain fully insured and helps to maintain the capital value of the property.

There are a number of lessons to reflect upon from the residential repair process following the 2016 Kaikōura/Hurunui earthquake. These lessons are important for helping to inform residential recovery options in preparation for and following future disasters in New Zealand. While the focus of the research was on the impacts of cash settlement, the research has also identified some findings that are applicable regardless of the model used to manage insurance claims and subsequent repairs.

The implications of this research for residential recovery programmes following future disaster events are discussed in the *Discussion Paper.*

# TABLE OF CONTENTS

# 1.0 INTRODUCTION

In New Zealand, damage to residential dwellings and land from natural hazards is covered by a combination of private insurance and the state insurance entity, Toka Tū Ake EQC (Earthquake Commission). Toka Tū Ake EQC is established under the Earthquake Commission Act 1993 (the Act) and provides cover, up to a cap, for all property owners who hold a private house insurance policy that includes cover for fire damage.[2] The Act covers damage resulting from a specific list of natural hazards: earthquakes, natural landslips, volcanic eruptions, hydrothermal activity, and tsunamis, as well as fire resulting directly from any of these hazards. Damage from storms and flooding is also covered, but this is strictly in relation to claims made for residential land, not dwellings.[3]

The current preferred method for resolving residential insurance claims is through cash settlement (Public Inquiry into the Earthquake Commission, 2020). Cash settlements typically provide for faster settlements and can be easily adjusted where missing or inaccurate damage or costs are identified. There are, however, some concerns that cash-settling insurance claims may lead to poor outcomes for housing quality. Potential risks of using cash settlements in large-scale disasters include cost inflation, limited and inequitable access to building professionals and materials, and settlement money not being used by claimants to complete insurer-assessed repairs or rebuilds. These factors could result in reduced housing quality and leaving communities vulnerable to future hazards (Public Inquiry into the Earthquake Commission, 2020; Earthquake Commission, 2019b).

The Public Inquiry into Toka Tū Ake EQC (referred to hereafter as the Public Inquiry) was tasked with investigating and reporting lessons from the entity's operational practices, past claim settlement approaches, and making "recommendations to improve the Commission's readiness to respond to future events" (Public Inquiry into the Earthquake Commission, 2020, p. 7). The final report, published in March 2020, included a range of recommendations, including two (5.1.3 and 5.1.4) which provides the core basis for this research. It states (Public Inquiry into the Earthquake Commission, 2020, p. 32):

> *[5.1.3] Conduct a detailed assessment of the impacts of cash settlement of claims in the example of the Kaikōura/Hurunui earthquake, including the longer-term impact on quality of the housing stock.*
>
> *[5.1.4] Incorporate the findings of the detailed assessment of cash settlement for the Kaikōura/ Hurunui earthquake into a larger and ongoing study that tests the advantages and disadvantages of cash settlement, the results of which could be drawn on when deciding the best response to future natural disaster events.*

In December 2021, Toka Tū Ake EQC engaged Tonkin + Taylor, Resilient Organisations, Kestrel Group and Infometrics to address 5.1.3 and contribute to the response to recommendation 5.1.4. The project aims to understand the potential risks and benefits of applying a cash settlement model for claimants following future disaster events. This report draws and builds upon the previous *Housing Quality Report*

[2] Claimants who are covered by Toka Tū Ake EQC currently receive a claim settlement value up to 'cap' plus GST (15%) for house damage. Claims of up to this value are referred to as 'under-cap', while claims which exceed this value are referred to as 'over-cap'. If a claim is 'over-cap' the balance is assessed and paid for by private insurers. At the time of the Kaikōura/Hurunui earthquake, the 'cap' was $100,000 plus GST (15%).

[3] Damage to residential land is also covered by Toka Tū Ake EQC, however the sum of this is calculated separately from the residential building damage cap, see Earthquake Commission Act 1993, Section 19.

which evaluated the impacts of cash settlements from the Kaikōura/Hurunui earthquake on the long-term quality of the housing stock.

This report, the *Impacts Report,* explores the wider experiences and impacts of cash settlement from the Kaikōura/Hurunui event. It looks at the process of cash settlement from multiple stakeholder's perspectives (claimants, builders, professional services, building control authorities, insurers (including assessors), and real estate agents). The analysis is based on a series of interviews with key stakeholders and is complemented by results from a claimant survey carried out in April 2022. It explores topics from the claim settlement and repair process, such as the assessment process, accepting settlement offers, the completion of repairs and sourcing of relevant people, cost of repairs, the claimant experience (including impacts on claimant wellbeing and satisfaction), and property transactions. As with the *Housing Quality Report*, analysis in this document focuses on the three most significantly impacted districts regarding earthquake damage to property (Kaikōura, Hurunui, and Marlborough).

The report comprises five main sections:

**Section Two** outlines the method used to complete this research, combining interview analysis with claimant survey data.

**Section Three** details the experiences of those involved in the claim settlement and repair process from the Kaikōura/Hurunui earthquake. It outlines the process in order of key events, including lodging a claim, damage assessment, receiving a settlement offer, different aspects to organising and managing the repair process, and completing repairs.

**Section Four** discusses the impacts of the Kaikōura/Hurunui cash settlement process. This encompasses claimant wellbeing and health impacts, satisfaction with the claim and repair process, potential impacts relevant to housing quality, and the future insurability of houses and insurance behaviour of claimants.

**Section Five** looks beyond the Kaikōura/Hurunui experience and considered future residential repair processes, including general attributes of a repair process. This covers access to relevant information to manage the repair process, autonomy, and capability of claimants in the repair process, and the relevance of a quality damage assessment process to enable a successful recovery process. Secondly, we provide some brief reflections on claimant-led vs coordinated residential repair models, primarily based on interviewee data.

**Section Six** provides a summary of the findings from this report.

# 2.0 METHOD

## 2.1 Interviews

Between August and September 2022, we interviewed a range of individuals who were involved in the claim settlement and repair process following the Kaikōura/Hurunui earthquake. Interviewees included insurers, insurance assessors, building control authorities, builders, architects, engineers, real estate agents, as well as claimants themselves. Interviewees were located in the three districts that experienced the highest damage (Kaikōura, Hurunui and Marlborough), in keeping with the study area focus identified in the *Housing Quality Report*.

Interviewees were identified through a range of methods. Individuals representing building consent authorities and insurers were identified and approached based on their professional role. Real estate agents were initially identified through CoreLogic data and those associated with sale of As-is-Where-Is (AIWI) properties post-earthquake (from data used in the *Housing Quality Report*). Major real estate companies in the districts of interest were also approached. Builders, insurance assessors, architects and engineers were largely identified through a snowballing technique where interviewees (largely building consent officers and insurers) were asked to nominate key people to contact. Interviewee availability and willingness to participate also factored into the final interviewee selection.

To capture some first-hand experiences from those at the very centre of the cash settlement and repair process itself, we interviewed a range of claimants who had previously completed the claimant survey. In the initial claimant survey, respondents were asked to indicate whether they would be willing to be interviewed. In August, we sent out a short survey to these claimants to ensure we captured a balanced range of experiences and perspectives from our interviews. Questions included:

- District / region where the damaged property is located
- Claim value
- Status of cash settlement
- Status of repair work
- Use of qualified professionals to complete repairs
- Use of a building consent
- House sale or purchase
- Satisfaction with the settlement and repair process.

Respondents were also asked their preference for the mode of a follow up interview: in person, by telephone or by video conference; as well as their availability.

Responses were filtered to ensure we captured as balanced of a range as possible across the screening variables above. Ultimately, we selected 12 individuals, with an even spread of interviews across the three districts of focus as well as a range of claim value, repair completion, and satisfaction. See Appendix A for a high-level description of each of the claimant interviewees.

In total, 27 interviews were completed with 28 people. As with the claimants, interviews were focused on experiences of key stakeholders in Hurunui, Kaikōura, and Marlborough districts.

Interviews were approximately one hour in length and conducted via phone call, video conferencing software, or in person. Each interview was recorded and transcribed for analysis.

Some interviews involved people who performed more than one role in the claim settlement and/or residential repair process, providing dual perspectives from these roles within the same interview. This included a **claimant** who is also a builder and completed repairs for earthquake-damaged houses, a **builder** who completed repairs as well as assessed damages houses, and a **real estate agent** and **architect** who also shared their own experiences as a claimant. Table 1 shows a list of interviewees according to their role for which we *principally* contacted them (i.e., the role bolded above).

Table 1: Interviewees by role in the claim and repair process, and sector

| Category | Sub-category | Number interviewed |
|---|---|---|
| **Claimant** | *Claimant* | 12 |
| | *Claimant representative* | 1 |
| **Homeowner Repairs** | *Builder* | 2 |
| | *Architect* | 1 |
| **Insurance Assessment** | *Builder* | 1 |
| | *Engineer* | 1 |
| **Building Control Authority** | | 3 |
| **Insurer** | | 5 |
| **Real Estate Agent** | | 2 |

The semi-structured interviews covered a range of topics, dependent on the role of the interviewee. The interview questions (including follow up prompts) are included in Appendix B. In general, the topics covered included:

- Interviewee role in insurance/repair process
- Insurance claim process (including timing and information provided)
- Repair process (including selecting and sourcing tradespersons, costs, timing, consents, quality)
- Claimant management of repairs
- Damaged house sale process
- General observations and reflections on the cash settlement process, and reflections for future residential repair processes

While we made a deliberate effort to obtain a diverse range of experiences through the interviews, there are some limitations to the information obtained.

12 of the 14 claimant perspectives we heard via interviews had either completed full or partial repairs. Many interviewees provided anecdotal stories of claimants who received a cash settlement and have not completed repairs; however, we were unable to talk to a range of individuals that have elected not to undertake repairs. As noted in the *Housing Quality Report*, the data we are drawing

from has a bias towards claimants who 'did the right thing'. As far as possible, this limitation in data has been acknowledged in our analysis.

Additionally, while our research is focussed on the cash settlement process, there were some claimants from the 2016 Kaikōura/Hurunui earthquake who had their damage repaired via an insurer-led managed repair process. The interviews included an insurer who carried out managed repairs for this event, and we also heard from one claimant who was provided a managed repair through their insurance company. While acknowledging some experiences and reflections are shared between the two processes, we are not focusing on the managed repair experience.

We also made efforts to interview representatives from the banking sector but were ultimately unsuccessful in doing so at the time of writing this report. This is an area that would benefit from future research, to better understand the procedures of banks regarding the management of insurance settlement funds and the impacts of this on impacts such as housing quality.

## 2.2 Claimant survey

The interview findings presented in this report are supported by an April 2022 claimant survey, carried out by the research team. The online survey was developed to elicit claimants' experiences of the claims settlement and repair process. The survey was sent, via email, to 13,175 claimants. Email addresses provided by Toka Tū Ake EQC included anyone who had lodged an insurance claim with the agency in the three-month period following the Kaikōura/Hurunui earthquake.[4]

For this research, only survey responses that indicated damaged property in Kaikōura, Hurunui, and Marlborough have been included. 293 valid survey responses were received from successful claimants in these three districts, constituting 5% of total Toka Tū Ake EQC claims made for residential building damage in Kaikōura, Hurunui, and Marlborough (5,756 claims). The margin of error for the survey results is 6%, with a confidence level of 95%.

The survey explored claimants' perceptions of the repair/rebuild process, whether repair/rebuild work was undertaken and when, who undertook the repair/rebuild work, experiences with access to contractors and other building-related resources, house sale information, ongoing insurance implications, and reflections of the cash settlement process itself. The survey included a range of multiple choice and open-text questions. Some comments made by survey respondents in open - text questions are included in this report. Where included, they are identified as "survey respondent(s)".

Further details of the survey including questions, survey representation and analysis specific to impacts on housing quality are provided in the *Housing Quality Report* and the *Supplementary Data Report for the Claimant Survey*.[5]

The survey analysis presented in this report complements and builds upon the previous analysis.

[4] Toka Tū Ake EQC provided a list of email addresses only to Resilient Organisations Ltd for this purpose. This list contained no other claims data.

[5] Refer to the supplementary data report titled: *2016 Kaikōura/Hurunui earthquake claims settlement research: Claimant survey analysis on housing quality*.

# 3.0 CLAIM SETTLEMENT AND REPAIR PROCESS

## 3.1 Lodging an insurance claim

From the time of an event, insured claimants have a three-month period to lodge a claim for any damage they may have incurred. Following the 2016 Kaikōura/Hurunui earthquake claims could be lodged either directly with Toka Tū Ake EQC or private insurers (acting as an agent for Toka Tū Ake EQC). In total, 19,204 claims were paid for residential building damage (excluding land and contents), 5,756 of which were in Hurunui, Kaikōura, and Marlborough districts.[6]

Lodging a claim relies on an individual to be able to identify damage, to understand that they need to or should lodge a claim and be willing to lodge a claim. Some interviewees cited examples where individuals did not realise that they should lodge a claim in the first instance. One real estate agent, speaking of their experience as a claimant, said they only lodged a claim on advice from a relative working with Civil Defence. Another shared similar encounters of homeowner ignorance about lodging a claim, particularly among elderly homeowners.

> *"I probably wouldn't have put an EQC [claim] on my house if [the relative] hadn't have told me… I didn't think I had enough damage… I put an EQC [claim] on my house and I had $100,000 worth of damage on it that I didn't know I had." (Real Estate Agent).*
>
> *"…a lot of elderly people thought 'I can't see anything wrong' and didn't put in an EQC claim…we saw a wee bit of that as well." (Real Estate Agent)*

It is evident that efforts were made to encourage homeowners to lodge claims following the earthquake. For example, one insurer noted they directly followed up with their customers, by phone, from the morning after the earthquake to ask whether their properties had any damage.

As both the interviews and claimant survey focussed on those that had successfully made a claim, data is limited on those that experienced damage but did not claim. The claimant survey captured a small number of individuals (n=7) who indicated they were unable to make a claim. Most of these respondents reported having damage that was outside the scope of their insurance (43%). A further 14% indicated they had minimal damage and/or the excess cost was greater than repair cost, and 14% indicated they discovered damage after the claim lodgement period of three months had closed. The remaining 29% indicated 'other' reasons.

The extent to which insured homeowners did not make a claim, despite having earthquake damage, is unknown. While lodging a claim is the responsibility of insured individuals, it is the first step in a successful repair process. Failure to claim may have potential downstream impacts on housing quality, and homeowner wellbeing (present and future). It is crucial that the reach and success of efforts made to communicate with homeowners to lodge a claim where damage may have occurred are well understood, and homeowners are supported to lodge claims where necessary.

[6] Refer to the supplementary data report titled: *Claims and Consent Data Report for 2016 Kaikōura/Hurunui Earthquake Claims Settlement Research* (2023).

## 3.2 Assessing damage and scoping repairs

Once a claim had been lodged, the next step in the process involved insurance assessors physically visiting the damaged properties and scoping the extent of damage to inform cash settlement offers.

There was typically a two-staged approach for completing assessments. Initial inspections were generally non-invasive and aimed at determining the likely extent of damage, and whether a claim was under or over the Toka Tū Ake EQC cap.[7] If the extent of damage and subsequent repair work was assessed as being over cap, a subsequent more detailed inspection was carried out. However, if damage was estimated to fall below the Toka Tū Ake EQC cap, no further assessments were generally undertaken.

The premise behind initial high-level assessments for under-cap claims (paid out by Toka Tū Ake EQC) is that these claims are not necessarily full and final; if further damage is later identified, claimants may request for additional funds (top-ups). This process allows assessments to be completed and settlements paid out sooner. Specialist resources, like engineers, can be strategically deployed and unnecessary disruption (and further damage) to claimants' properties can be reduced. This approach comes with the trade-off that additional assessments may be required, reducing the confidence and trust claimants have in the process and prolonging the time claimants spend in the insurance settlement process. In this sense, the first assessment sets the tone for the claimant experience. As one insurer commented, initial high-level assessment sometimes provided claimants with less initial certainty over the actual scope of works and cost of their repairs, potentially impacting their ability to move forward in the claims and repair process.

> *"…the [under-cap] assessment approach [was] very light, to allow for a reasonably quick assessment, but it didn't necessarily give clients all the detail or ability to move forward." (Insurer)*

The difference in assessment approach is illustrated by the management of asbestos in houses. When a claim was believed to be under-cap an allowance for asbestos testing was provided as part of the insurance settlement. Whereas for an over-cap claim the asbestos testing was typically undertaken by the insurer before the settlement was finalised.

The professionals who carried out assessments varied between insurance companies. This ranged from current or former certified builders or tradespeople to senior loss adjusters including some who had previous experience from the Canterbury earthquakes or other events. Some insurers had internal assessment teams they were able to draw upon for assessments of over-cap claims, while others outsourced insurance assessment duties to third parties.

The involvement of engineers in the assessment process (or lack of) often came up in interviews as a key challenge during damage assessments. Typically, engineers were only involved in the assessment stage if it was "required" or they "needed to be" based on the extent or type of damage observed by assessors. This was typically based on whether there was any indication of structural damage to a property, such as foundation damage or off-level floors. However, the threshold for engineer involvement seemed to vary.

[7] Homeowners who are covered by Toka Tū Ake EQC currently receive a claim settlement value of a 'cap' plus GST (15%) for house damage. Claims of up to this value are referred to as 'under-cap', while claims which exceed this value are referred to as 'over-cap'. If a claim is 'over-cap' the balance is assessed and paid for by private insurers. The cap at the time of the Kaikōura/Hurunui earthquake was NZ$100,000.

*"Typically, loss adjustors and insurers will identify when an engineer needs to be involved. And that's pretty experiential, you know, the people who do that work. If they see something that's moved or broken or twisted in a certain way, it'll trigger a thought for them that they need to talk to a structural engineer. That's a pretty organic process." (Insurance Assessor, Builder)*

One engineer who was heavily involved in the insurance assessment process, described the inconsistency as to whether they were involved in property assessments. They noted that the decision around whether engineers were engaged "*may be down to the individual assessor on their comfort with risk*". In such instances, the assessors would contact the engineers to visually inspect and determine whether the damage was structural and required engineering. The visual inspections by engineers, however, did not necessarily provide the detail and evidence required to accurately assess property damage.

*"…those judgement calls without the full, say level survey, without the full verticality survey, and those different tools that we would consider to be basic, but are time consuming, weren't carried out [by engineers in initial assessments]. And so, it was just, I suppose, it's a visual assessment by an engineer as opposed to a visual assessment by a loss adjustor." (Engineer)*

The engineer noted this visual approach created potential uncertainty and ambiguity for claimants. They spoke of instances where secondary engineering reports contradicted earlier reports from light-touch assessments, which had implications for claimant confidence in the engineering.

*"…whenever a claimant essentially gets a report from an engineer, they… expect it to be on the money… But typically, whenever you come back and perhaps have to redefine or refine your judgements… it creates that ambiguity [for claimants] and say, 'look, this report said one thing and then the next report says another'. Which, look, didn't help in the long term." (Engineer)*

Some claimants reflected on what they considered inadequate practices used by assessors to inspect for damage to their property. One claimant noted that their assessors did not check the piles under the house, yet damage was discovered by their builder following claim settlement. Another claimant had a builder declare their chimney to be dangerously loose, despite assessors not noting any damage when viewing their roof space. This led the claimant to question the quality of the rest of the damage assessment. Both examples feed into a wider narrative of distrust and lack of confidence some had in the quality of the damage assessment process. There is an expectation from claimants that the people who assess and scope damage adequately identify earthquake damage within reason, as claimants rely on these assessments to draw appropriate conclusions as to the extent of damage and the settlement amount necessary for remediation.

This created a power imbalance between claimants and assessors, especially where claimants did not have the luxury of knowledge and/or experience to question findings. A great deal of trust and faith was placed on assessors to get it right for claimants. This sentiment was expressed by some in the claimant survey, including perceived discrepancies in assessments.

*"I had to rely on the assessors supplied by the insurance company [and] have no idea if they were truly doing the assessment fairly…" (Survey Respondent)*

*"It seems that the quality for the initial assessment for scope of works depended on your insurance company." (Survey Respondent)*

Damage assessments are an essential part of the entire claim settlement and repair process, with initial assessors and assessments setting the tone of the entire process. A thorough assessment process enables a greater confidence in the identified damage and scope of works, which helps

provide confidence and assurance to the claimant as they progress through their repairs. It also reduces the risk of claimants having to follow up for further assessments because damage was not appropriately identified in the first instance. From the claimants' perspective, poor quality assessments call into question the competency of those involved. The current system also assumes that claimants know they can request a claim top-up if further damage is found following initial settlement (see Section 3.4.5). There is a fine balancing act when it comes to assessments, between working as quickly as possible to ensure claimants receive settlements promptly and can start the repair process; while also taking time to do thorough assessments to provide claimants with some degree of certainty and confidence in the settlement process and reducing their time in the claim settlement and repair process overall.

## 3.3 Receiving and responding to a settlement offer

### 3.3.1 Accepting an offer

Following the damage assessment process, insurers used this information to cost repairs and present claimants with a settlement offer. At this stage of the claim settlement process, it is up to claimants to decide whether they will accept the offer.

There were a range of responses to initial settlement offers, often due to the individual circumstances of the claimant. If claimants themselves or someone close to them, had experience in construction they were more confident in their ability to determine if the claim value was sufficient to accept. Conversely, some claimants accepted their offer based on the confidence they placed in those determining the value of the offer.

> *"After the assessment, [my insurer] came back with a figure… and I just went straight back and said, 'that'd be fine'. It was around what I was expecting." (Claimant Seven)*

Some claimants were not aware they could dispute their settlement offer.

> *"…once their initial scope of works came back, they would look at it… and people didn't realise you could negotiate. They just thought, 'Oh, here's my offer'." (Architect)*

For under-cap claims, accepting a settlement outright was typically low risk because it was possible to receive a claim top-up if the settlement value was insufficient. However, for some larger claim settlements, some claimants reported in the interviews that they were asked to sign a discharge form that meant the settlement they were accepting was full and final. A discharge form confirms the agreement to a settlement offer between parties and is common practice for releasing insurance funds to claimants.

A potential risk of agreeing to a settlement offer upfront is that it may complicate the ability of claimants to request additional funds if the offer is ultimately of an insufficient value to complete repairs. A few claimants we interviewed reported that they discovered further damage only after signing their settlement discharge and were subsequently unable to receive additional funds. The claimant representative interviewee recalled that some claimants who had accepted their offer in the first few months following the earthquake, to "get on with it", were ultimately caught short with no resource "to repair any extra damage that was found once the repairs were started".

### 3.3.2 Delaying acceptance and/or disputing an offer

It appears that many claimants from the Kaikōura/Hurunui earthquake chose to either dispute the settlement offer presented to them, or to delay acceptance of their offer.

There were multiple reasons for why claimants disputed their initial settlement offer. According to one insurer we interviewed, the main reasons included where there was a disagreement with or misunderstanding of the scope of works, dispute over what was earthquake damage and non-earthquake damage, and where damage was not covered by insurance policies. Additionally, some claimants were hesitant to accept a cash settlement because they did not have appropriate support to know what to do with and how to spend the money, or because they first wanted a second independent opinion about the offered settlement value.

It was also common for claimants to seek a second independent opinion about their settlement offer, not because they disputed the value, but because it provided them with additional confidence that the value was in fact appropriate to complete repairs. Claimants who took this approach therefore delayed acceptance of their offer until these independent assurances could be provided. This appeared especially common among claimants who were more knowledgeable about building and construction or who could access support or additional information about their claim.

> *"I had no idea of, you know, how much things were going to cost unless I got people to come in [and provide an independent quote]." (Claimant 12)*

Some claimants told us they had sought independent quotes and were subsequently confident with the value of their settlement offer, while others noted their independent quotes concluded a higher value for repairs than their insurance offer. Subsequently, claimants would negotiate an increased settlement value with their insurer.

Two insurers we interviewed indicated they were fully aware of the extra confidence independent quotes gave claimants, and noted they sometimes proactively delivered such quotes alongside settlement offers. They recalled that this helped provide additional assurances to claimants that the value was sufficient and/or to ease some observed distrust claimants had toward insurers either through their own experiences or others in the Canterbury earthquakes.

> *"So, it was naturally a reluctance to accept a number as soon as provided. They want some guarantee, variety [of opinions] in the quotes from builders, that gave them that level of comfort that it was the right price." (Insurer)*

The reluctance of some claimants to accept settlement offers, either because they sought independent quotes or for other reasons noted above, led at least one insurance company to change their approach to settlements being full and final when agreed to. One insurer recalled changing their process 3-6 months following the earthquake, by introducing a discharge waiver to allow claimants to accept their offer but also come back for further money if necessary. This came after the company had trouble getting claimants to accept their cash settlement offers, and meant it was taking longer for the insurer to be able to get money out to those who needed it, in a timely fashion.

> *"[the discharge waiver] was really, really successful. So, we were able to give customers funds, they were still able to get their consultants and then review those with us. And we were still able to pay funds out after that initial settlement." (Insurer)*

Multiple claimants seeking independent quotes for their repairs created significant work for builders. One builder noted spending time and resources to prepare multiple quotes for claimants

without ultimately being contracted to complete their repairs. As a result, many builders opted to charge a fee for completing repair quotes.

> *"Builders were getting sick of pricing up work and not getting it, and they started charging for it" (BCA)*

> *"I got to the point where I realised that a lot of them were using you to get prices and it was actually taking up a lot of my time." (Builder)*

While some claimants who sought independent quotes subsequently accepted their cash settlement offer, others further disputed the offer especially where there was a wide variation between the offer presented to them and the value established by the independent quote(s). One claimant told us they disputed their settlement value for several years, which was significantly less than the value assessed by an independent contractor, but ultimately accepted the offer to move forward.

> *"I battled on for a wee bit longer, but after three years it gets a bit tedious." (Claimant Eleven)*

While getting settlement money to claimants as quick as possible is desirable for enabling a swift recovery process, it is also important to enable claimants to be confident in moving through the process. Accounting for and allowing claimants to gain this confidence, whether through taking time to get independent opinions or providing the opportunity for claimants to easily come back for top-ups, if necessary, were essential components of the Kaikōura/Hurunui earthquake recovery.

### 3.3.3 Payment of settlement money to claimants

The method in which settlement funds were distributed to claimants differed, primarily according to whether the claimant had a mortgage. For claimants with no mortgage, settlements were typically paid directly into personal bank accounts. For mortgagee claimants, settlements were typically paid to their bank and the bank ultimately controlled the distribution of those funds to the claimant, as repairs were completed. One insurer indicated that smaller value claims (i.e., less than approximately a few tens of thousands of dollars) were paid directly to the mortgagees' bank account, while claims over this value were paid to the bank.

Based on the claimant survey, 36% of successful cash settlement claimants indicated they had a mortgage on their damaged property at the time of the survey, while 64% indicated they did not have a mortgage (n=159).[8] Figure 1 shows the breakdown of cash settled survey respondents' mortgage status according to their claim value. A majority indicated they had no mortgage across all claim value bands, with less than 20% of claimants with over $200,000 worth of damage having a mortgage.

[8] The survey asked claimants "*Do you have a mortgage on the property in question?*". This data may therefore not capture claimants who had a mortgage at the time of the earthquake, but not at the time of completing the survey.

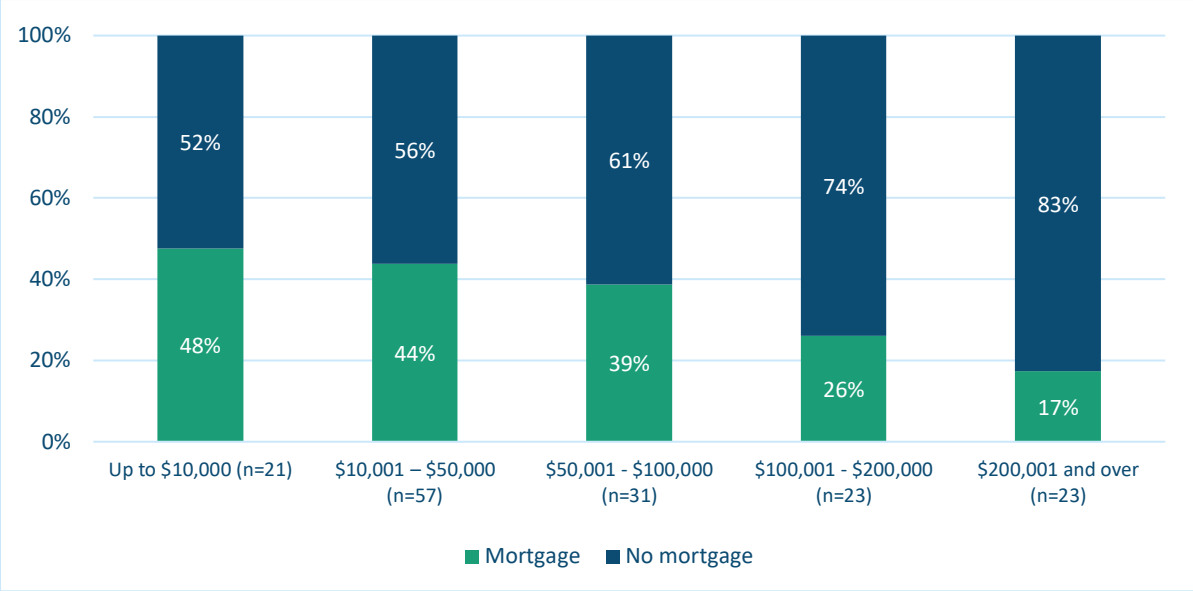


Figure 1: Cash settled claimants with or without a mortgage according to claim value (n=155)

This indicates that most claimants received insurance settlement money directly. The implications of this, and whether funds were subsequently used to complete repairs, are discussed in the following section.

## 3.4 Organising and managing repairs

### 3.4.1 Deciding whether to do repairs

Once a settlement was agreed to and paid out, claimants had a decision to make regarding whether to complete their repairs. Findings from the *Housing Quality Report* indicate that 9% (+/- 6%)[9] of cash settled claimants opted to not undertake repairs and a further 2% were undecided.

Figure 2 illustrates the different reasons reported by cash settled claimants for why they chose to not complete repairs. Statistically significant factors affecting people's decision not to repair their property included insufficient personal funds, the cost of tradespeople and building materials being too high, the availability of tradespeople being scarce, and claimants having other financial priorities.[10]

[9] 2% of respondents were undecided.

[10] Insufficient personal funds - M = 31.25, SD = 70.415, t(15) = 1.775, p = 0.048.
Cost of tradespeople - M = 42.86, SD = 75.593, t(13) = 2.121, p = 0.027
Cost of building materials - M = 53.57, SD = 63.441, t(13) = 3.160, p = 0.004.
Amount of tradespeople available - M = 34.62, SD = 65.779, t(12) = 1.897, p = 0.041
Other financial priorities - M = 28.57, SD = 50.817, t(13) = 2.104, p = 0.028

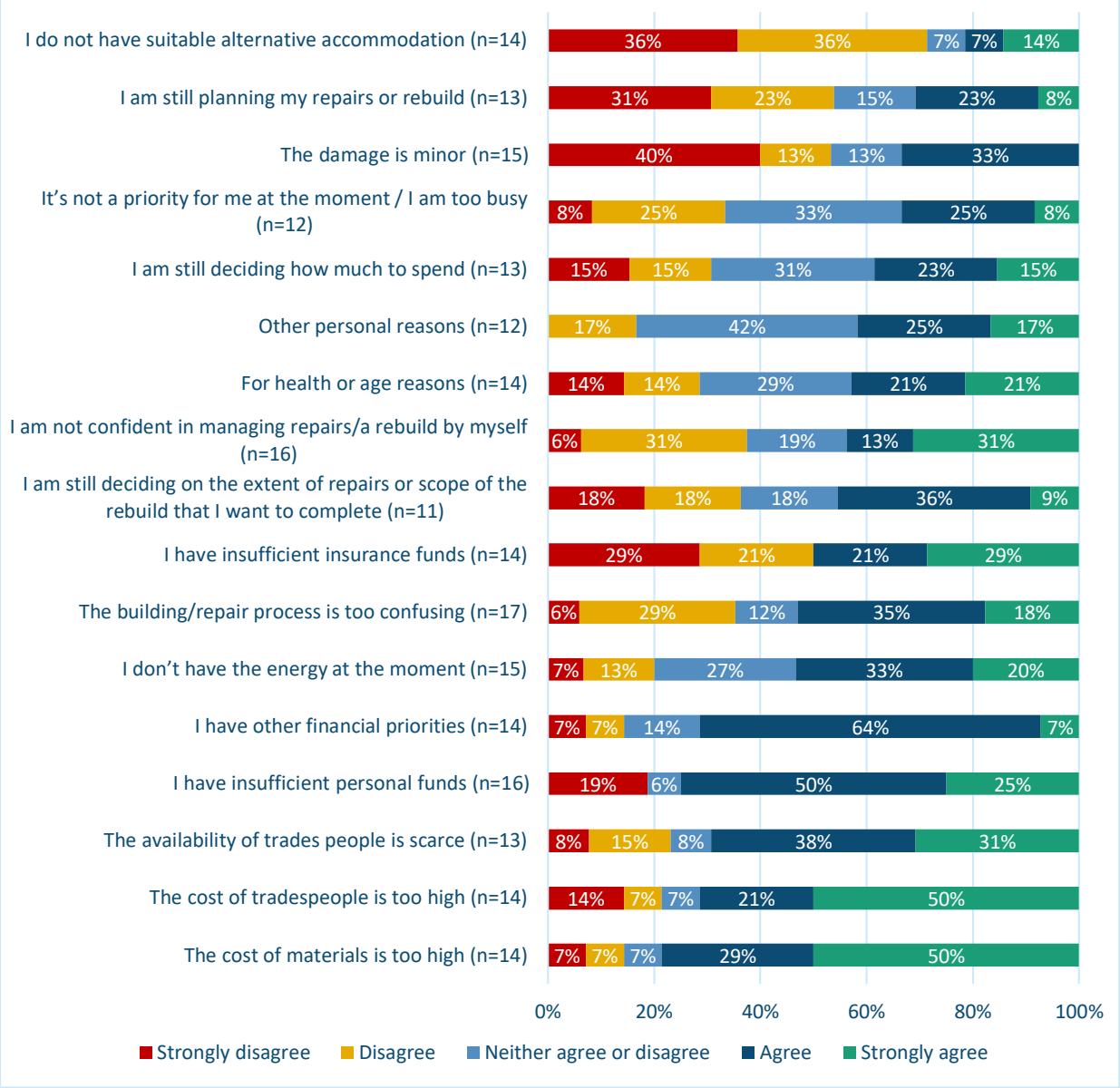


Figure 2: Successful cash settled claimants, reasons for not completing repairs (claimant survey) (n=12-17)

Those who chose not to undertake repairs were (statistically significantly) more likely to have experienced damage over $100,000 (Figure 3).[11] They were also more likely to have indicated their property had structural damage (approximately 70% of cash settled claimants not completing repairs indicated they had structural damage, compared to 40% of those who had or were planning on completing repairs/rebuilds).[12]

[11] Repairs/no repairs and claim value - U=1617.000, p=0.001
[12] Repairs/no repairs and structural damage - $\chi 2$ (1) = 7.775, p = 0.005

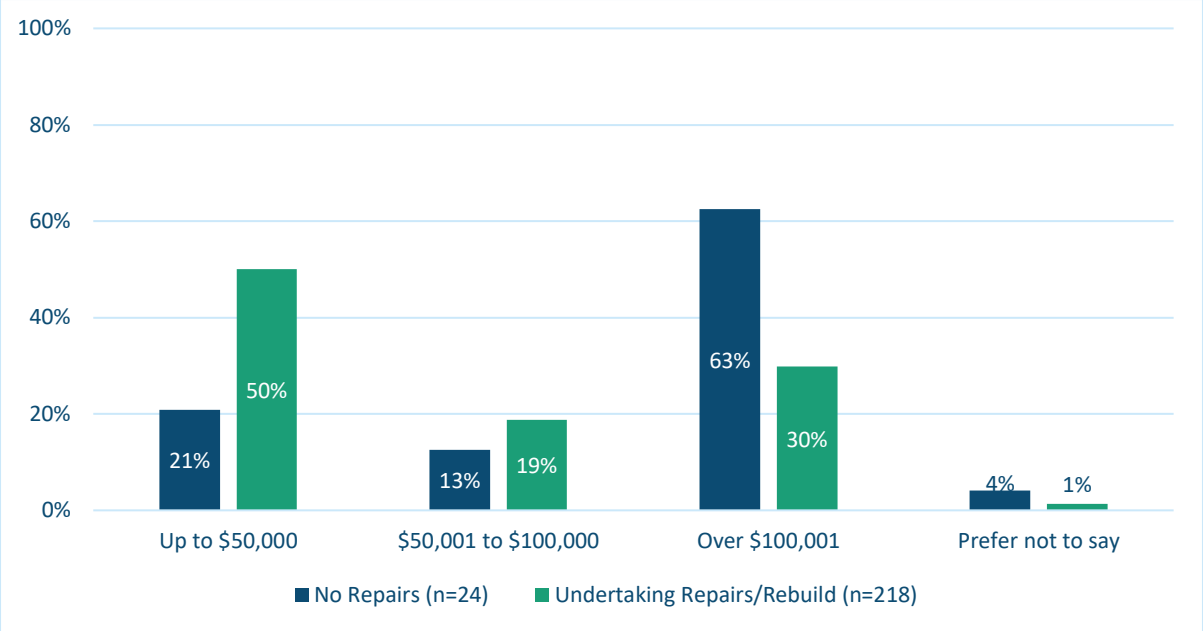


Figure 3: Successful cash settled claimants, no intention to repair by claim value (claimant survey) (n=244)

Claimants who had not completed repairs were, statistically significantly, more likely to have sold their property compared to those who completed repairs.[13] When comparing reasons for selling, it was more likely for those who completed repairs to sell because they relocated out of the region.[14] While claimants who did not complete repairs were more likely to sell because the claims process was too challenging, they had a lack of confidence in the ability to repair/rebuild, and/or a lack of energy.[15]

Various interviewees cited anecdotal evidence of claimants, whom they either knew personally or indirectly, receiving a cash settlement and opting to not complete repairs. A variety of reasons were provided from claimants in interviews about why repairs were not completed. Some claimants chose to simply live with the damage and save the money or spend it on unrelated purchases. In other cases, claimants chose not to go through a repair or rebuild process, and instead sold their damaged property (at a reduced rate) AIWI. Alternative reasons were directly related to the insurance settlement process. One claimant we spoke with had accepted an insufficient settlement offer after several years because they wished to move forward with their life. Consequently, they had not completed repairs (aside from small cosmetic repairs) because they simply did not have enough money to get the job done properly.

> *"[the property is] still habitable so it is what it is. Probably, long term if I win Lotto, it'll get knocked over and rebuilt completely. With the settlement amount the funds aren't there to sort of do that, so, to half repair is to be throwing good money after bad." (Claimant 11)*

Rather than leave all repairs uncompleted, some claimants instead opted to do partial repairs to their property. Data from the claimant survey indicates that 17% of cash settled claimants chose to complete partial repairs only.

[13] Repairs/no repairs and sold house - $\chi 2$ (1) = 11.056, $p < 0.001$

[14] Repairs/no repairs and moving out of region - $\chi 2$ (1) = 5.294, $p = 0.021$

[15] Repairs/no repairs and claims settlement process was too challenging – $\chi 2(1) = 19.038$, $p < 0.001$
Repairs/no repairs and lack of confidence in ability to repair/rebuild property - $\chi 2$ (1) = 8.182, $p = 0.004$
Repairs/no repairs and lack of energy to go through repair/impact on mental health - $\chi 2$ (1) = 4.801, $p = 0.028$

Claimants we interviewed that undertook partial repairs chose to do so primarily because they reported that their settlement value was insufficient to cover all work. This is consistent with responses in the survey where partial repairs were primarily driven by insufficient insurance settlement funds, but also from a desire to direct claim money towards house improvements not related to earthquake damage (such as renovations).

Some builders we interviewed also provided reflections on their engagement with claimants who wanted only part of the repair scope to be completed. One estimated approximately half of the claimants who sought to engage with their building company wanted to "hold back [settlement money]" and "wouldn't complete the full scope of repairs".

> *"[claimants] would say, 'Oh, I don't really need to do that. I'll just live with that thing that's been damaged'… it wasn't so much about trying to get a contractor cheaper, it was more about they would reduce scope, to hang on to the outstanding money." (Builder)*

There was a variation in reflections about the types of damage this included. One builder indicated most of the work not completed included hard landscaping and/or cosmetic house damage, such as plasterboard cracking and paint jobs. Another builder indicated they were aware of more significant work being left incomplete or claimants doing it themselves. This included chimney removals, removal of internal linings, pile replacement, and attempts to jack up homes.

> *"I contacted [claimants] within four weeks [of pricing repairs] to see if they [wanted] to carry out the work and quite a few of them said that they [would] try and do the work themselves. Others said [they wanted us to] do parts of it, but they [didn't] want to spend all the money, they want to basically just do a cosmetic fix up." (Builder)*

Both builders indicated they only completed repair work for claimants if it was the full scope of works provided by the insurer, not a reduced scope at the request of claimants. Professional reputations were cited as a reason for not engaging with claimants wanting only partial repairs completed.

> *"I just said, I'm not touching it because it's my reputation on the line." (Builder)*

> *"If the [scope] allowed for painting two rooms… we wouldn't only paint one room and give [claimants] the cash for the rest." (Builder)*

This indicates that, when engaging builders to complete repairs, having only partial repairs completed was dependent on the willingness of individual builders to contract on a reduced scope of works.

### 3.4.2 Reasons for completing full repairs

Approximately 72% of cash settled claimants from the Kaikōura/Hurunui earthquake elected to fully repair or rebuild their property (*Housing Quality Report*). The interviews provided insight into the rationale and key motivators of claimants for doing so.

Some emphasised they did so for safety and general habitability reasons, especially where the claimant intended to remain in their home indefinitely or held a high standard for the quality of their home. Additionally, some claimants simply expressed a desire to restore their house to a state without damage.

> *"…we had no intention of moving [and] we basically, you know, put the house back to how we wanted it… so that it was weathertight and not leaking and not drafty." (Claimant Three)*

A few interviewees indicated they "had no choice" but to do a full repair as settlement money was paid to their respective banks, who released the money only when invoices for repair work undertaken were provided. Data from the claimant survey indicated that 74% of successful cash settled claimants with a mortgage on their damaged property completed or intend to complete full repairs (n=58). Almost half of these claimants had a claim value exceeding $50,000 (n=20).

The potential of losing insurance cover was a further reason why claimants chose to complete repairs. One interviewee noted that their insurer indicated they would reduce the claimant's cover unless they provided evidence for completed repairs.

Additionally, choosing to complete full repairs was informed by an intention, or likely intention, of some claimants to sell the damaged property in the future. Interviewees who considered themselves likely to sell their house at some stage were cognisant of the potential issues if they failed to complete repairs.

> *"I suppose I could have ignored the crack in the ceiling and that sort of stuff. But if it's not done, then when you come to sell the house, you've got a problem. So, I just did it." (Claimant Twelve)*

A real estate agent we interviewed commented about instances where claimants had not properly repaired their home and it had caused issues when trying to sell. Prospective purchasers did not want to purchase houses that had not been (or were not perceived to have been) professionally repaired.

> *"…that's come back to bite [the claimant]. Because the purchaser has said, 'this hasn't been done professionally'… [the purchasers] want [repairs] done properly…" (Real Estate Agent)*

Retaining the value of one's property when going to sell also came up as a key reason for completing full repairs. For instance, one claimant spoke of a previous experience selling their home that had been damaged in the Christchurch earthquake. In this case all repairs had been completed bar one small area on the exterior of the home that had been unknowingly missed. The prospective buyers ultimately wanted a reduction in price as a result.

> *"…you want good quality repairs, because you don't want it to negatively impact on the value of your property… if you don't get the repairs done by an expert, or somebody with very good skills, your home could be picked apart when it comes time for sale, and you'll get [prospective buyers] out there who will try knock a lot off the price and get a bargain because they feel that it hasn't been properly repaired." (Claimant Nine)*

The reasons reported by claimants for completing full repairs largely depended on the circumstances of individuals. Some intended to remain in their home long-term and wanted a repaired home, others were thinking shorter term in relation to a potential house sale and ability to retain insurance cover, and others factored in a combination of both.

### 3.4.3 Sourcing professionals / contractors

The survey and interviews indicated there was some constraint in the availability of building contractors and professional services following the Kaikōura/Hurunui earthquake, but this did not appear to result in significant cost increases. In the claimant survey over 40% of respondents indicated they did not think there was a suitable number of building contractors and tradespeople to choose from, while just under 50% indicated there was (n=157).[16] Approximately 50% and 62% of respondents indicated they thought that professionals and tradespeople/contractors were affordable, respectively (Figure 4).

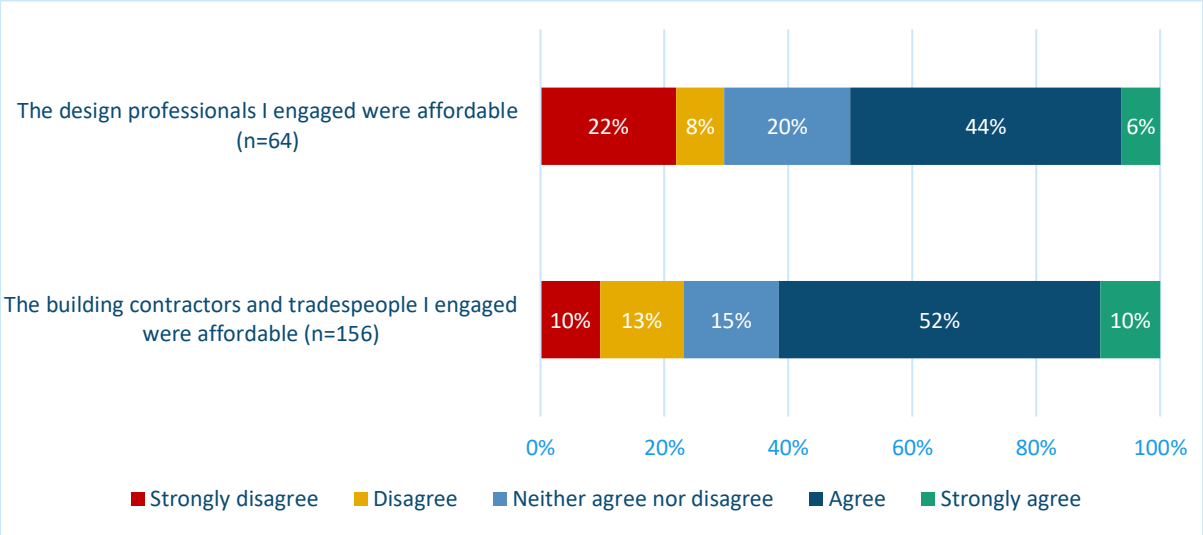


Figure 4: Affordability of tradespeople/contractors and professionals (claimant survey) (n=220)

There was a shared acceptance among interviewees that building contractors were in high demand at the time. Generally, claimants were happy to wait a longer period to have their repairs completed if it meant getting the contractors they desired.

> *"[claimants] were quite happy to sit tight and wait for the chap they always use to do the work." (Building Control Authority)*

> *"A lot of people were prepared to wait [for their local builder]. Some clients of mine sometimes waited up to even 18 months before I could come in and complete any work." (Builder)*

Some claimants were insistent on waiting, up to three or more years in some instances, if it meant they could engage those who they already knew and trusted. At the time, one local council saw this impacting on the recovery process and took the unusual step of identifying and assuring claimants about the quality and reliability of other contractors.

[16] See Appendix C for statistical analysis of impacts regarding interactions with professionals / contractors.

*"The local [builders] were booked out for three years… And people are very reticent using somebody they don't know… so [council] went in and said, 'Look, these guys are all good [to use]'." (Claimant Representative)*

The desire to wait for trusted contractors was more evident in rural settings. Claimants living in rural areas were more likely to want to engage local contractors. This meant they had limited options compared to those residing in more urban environments and consequently had to wait longer for repairs. Figure 5 and Figure 6 validate this observation to some extent, by showing how satisfaction with contractor/tradesperson availability and timeliness varied across city (>20,000 people), town (<20,0000), and rural settings in survey responses.

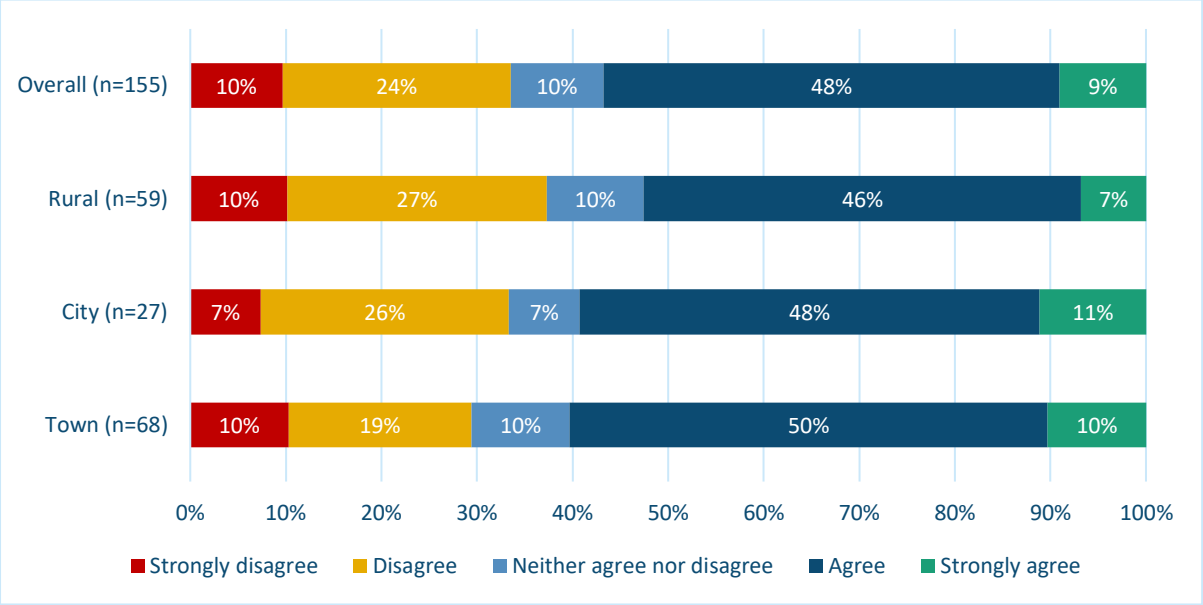


Figure 5: Engaging building contractors/tradespeople within a suitable timeframe (claimant survey) (n=155). Claimants were asked to what extent did they agree or disagree with the statement *"I was able to engage building contractors and tradespeople within a suitable time frame"*.

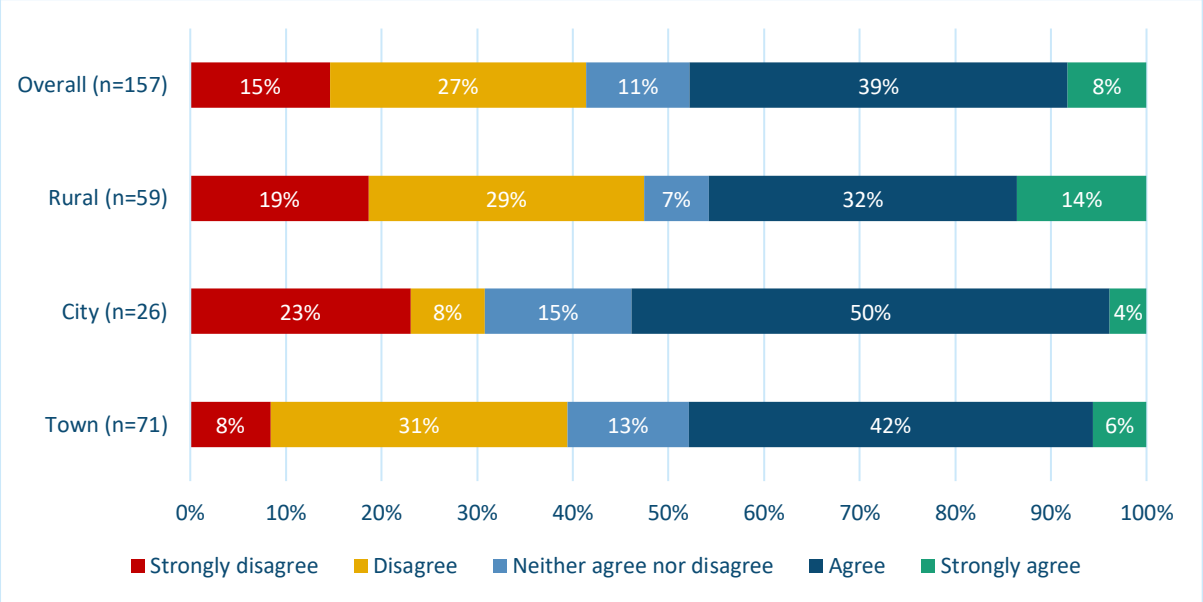


Figure 6: Suitable number of contractors/tradespeople to choose from (claimant survey) (n=157). Claimants were asked to what extent did they agree or disagree with the statement *"There was a suitable number of building contractors and tradespeople to choose from"*.

Some claimants with smaller value claims reported having difficultly accessing professionals as some contractors were reluctant to prioritise low value repairs. They noted that larger repair work was generally more attractive to contractors and if a claimant had a comparatively small amount of damage, then they would be put "in the queue". One claimant we spoke with recalled their experience, explaining they had struggled to find a contractor to carry out work valued in the low tens of thousands, compared to much larger claims.

> *"[tradespeople were] doing all the big jobs. So, by the time the tradespeople have got time to do these little jobs, you know, they're just not going to cover it." (Claimant Eight)*

One builder recalled communicating this clearly with their clients at the beginning, to try and provide claimants with a degree of certainty.

> *"…it was like, 'okay, if you'd like us to do your work, you're a year down the track… we've got [other houses] in worse condition than you, if you don't mind?'. And we were just pretty open about the timeframes, and everyone was fine." (Builder)*

One insurance company reflected on this as one of their key learnings from the 2016 claim settlement process, in particular the impact contractor availability had on people's expectations on the likely timeline for completing repairs. They noted, in hindsight, expectations could have been better managed and communicated with claimants.

> *"I certainly know with some people we paid them the money and they thought, 'I'll phone up Jim tomorrow, and we can have it done by Thursday'. So, the whole timeline… wasn't explained from our point of view, wasn't understood from [the claimants'] point of view, about how long it takes to do some of those things. But that was… more communication, rather than an issue." (Insurer)*

Some of the claimants we spoke with had existing networks within the building industry and utilised their services or networks to complete repairs. Meanwhile some claimants, especially those without the luxury of personal networks, struggled more to find contractors to engage.

> *"You struggled to get hold of the people, then you struggled to find someone that was available even just to come out and look at the job." (Claimant Four)*

There also appeared to be a preference from claimants to engage builders who were capable of organising all the trades necessary for the repairs, to minimise points of engagement.

> *"[there was] a real preference for someone that can do an entire project. So, a builder that says, 'I'll just do the carpentry, but you've got to sort out your own roofer and plumber and sparky' isn't going to do as well as someone who can deal with the entire contract." (Builder)*

As well as the challenge of finding contractors to undertake the work, there was some concern over the quality of available contractors. Several people spoke of "cowboys" entering affected communities. There were mixed views on their prevalence. In Kaikōura district, for instance, there was a sentiment that there weren't too many, largely due to a lack of available accommodation for them to take hold.

> *"Small town New Zealand, there will not be enough housing for the 'cowboys' to really take a hold. So, I don't think it's a concern for small or rural [areas]." (Builder)*

In relation to construction material costs, no significant observations or challenges were raised, except for those that indicated delays in the claims settlement process. Many referred to the

present-day supply chain shortages and inflationary pressures on the industry, commenting that it would have been a very different story if the earthquake had occurred today in the COVID/post-COVID environment.

> *"… COVID has helped [cause] disruption and price rises and I have no idea how the bills will compare with the quote when it is finished." (Survey Respondent)*

> *"Delays due to lack of tradies, leading to busyness of tradies. Delays due to Covid and [building] materials." (Survey Respondent)*

### 3.4.4 Claimants completing their own repairs

Both the survey and interviews indicated there were "plenty" of claimants who undertook some or all their own earthquake repairs. This was primarily non-structural work such as repairing plaster board, painting, and re-carpeting, although there was some indication of more significant, structural repairs being completed by claimants themselves.

Claimants indicated a range of reasons in the interviews for why they had completed or intended to complete at least some of their own repair work. This included settlement values not being sufficient to cover the work necessary, claimants seeking to "be efficient with the [settlement] money", and claimants utilising their own expertise / capacity to do the work. A by-product of self-completion of repairs was saving overall costs, though this was not necessarily the main motivator. For instance, one claimant noted their reasoning for completing cosmetic repair work to their home was simply because they desired to.

> *"I just do that sort of stuff. I've always done it… rather than get a tradesperson in, I've done it myself." (Claimant Eight)*

The claimant survey data shows that there was a relatively consistent proportion of claimants undertaking repairs themselves across all value of cash settlements (Figure 7). Among claimants who were completing repairs and had structural damage, less than 10% indicated they did the repairs themselves (compared to the more than half who used suitably qualified / experienced contractors) (n=56). 33% of claimants who did their own repairs indicated their settlement value was sufficient to cover the repair work, while another 33% indicated their settlement value was insufficient to cover repairs. This suggests self-repair could have been due to a mixture of both a desire to undertake work and due to a lack of settlement funds.

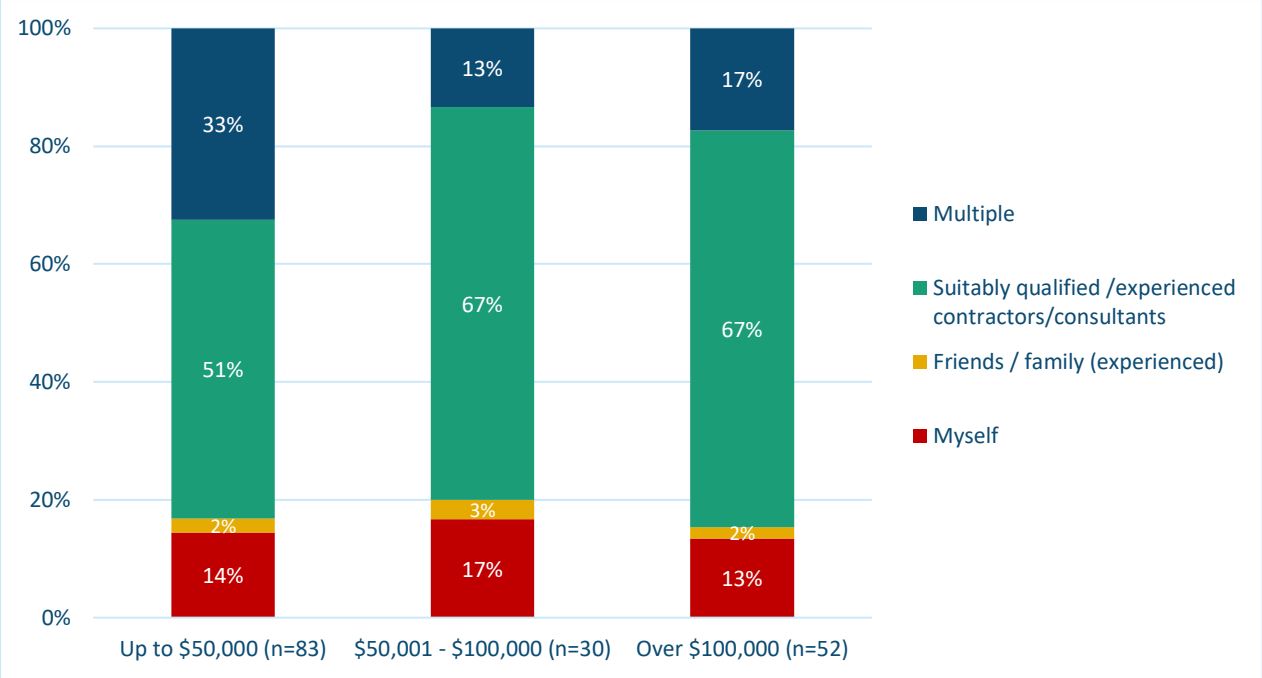


Figure 7: Personnel engaged to undertake the physical repairs for each claim value for the three districts (Kaikōura, Hurunui and Marlborough) (n=149). (Excludes cash settled rebuilds).

### 3.4.5 Sufficiency of settlements

As noted above, a key factor that influenced whether repairs were completed, to what extent they were completed, and who undertook the repair work was the sufficiency of claim settlement values.

Overall, the survey data showed that 53% of claimants believed their initial insurance claim scope matched or exceeded the repair work required (n=182) (Figure 8). In contrast, 45% of claimants reported there was more repair work required than allowed for in their initial insurance claim scope. Claimants who indicated they had more damage than was assessed in their initial insurance claim were more likely to have experienced structural damage, and damage to auxiliary features (e.g., garages, main accessways to the building).[17] Among the 45% of claimants who reported requiring more repair work than covered in their initial insurance scope, only 33% reopened their claim to have their damage scope reassessed. The majority of these claimants (77%) indicated their re-opened claim was subsequently accepted.

[17] Survey respondents were asked to indicate what type of damage they made an insurance claim for, including "auxiliary buildings/features (i.e., garages, main accessways that are integral to the building, etc.)" and "External damage not covered by the Act (i.e., driveways, paths, swimming pools, etc.)". Despite asking directly, it is possible claimants may have misinterpreted the types of damage and indicated auxiliary damage where it was not covered under the Act.

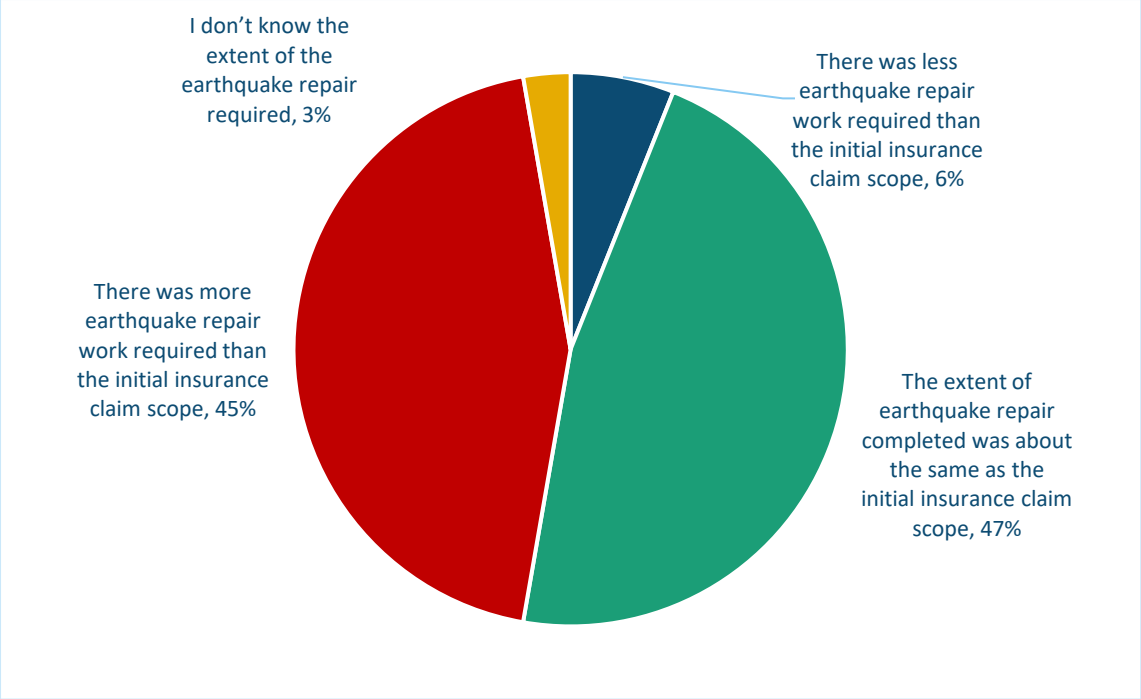


Figure 8: Sufficiency of assessed insurance scope compared to completed repairs (claimant survey) (n=182)

Despite the high proportion of claimants (45%) who reported having more repair work than their initial insurance claim scope, 59% of cash settled claimants indicated their initial claim settlement was sufficient to complete insurer-assessed earthquake repair work (Figure 9). This compares to just 26% who indicated their initial settlement value was insufficient to complete insurer-assessed earthquake repair work.

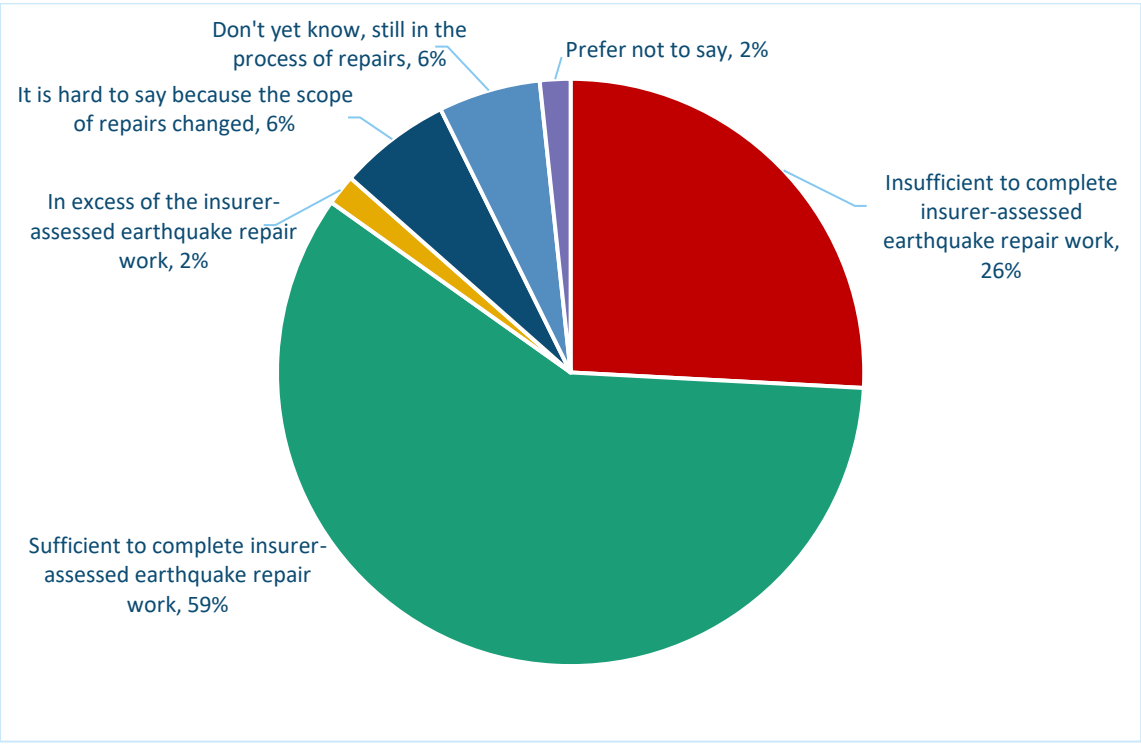


Figure 9: Sufficiency of cash settlement value for cash settled repairs (claimant survey) (n=178)

Potential reasons for this discrepancy may include claimants who completed at least some of their own repairs (refer above), or claimants who did not complete their full scope of repairs. It is notable that some interviewees also noted the "generous" pricing of repairs by insurers, which allowed them to offset other costs (especially where they completed some of their own work).

> *"[the insurer was] very generous with the settlement money for fixing stuff… I looked at it and went 'Oh, that's a lot of money for that'… so even though [the insurer had missed damage in the scope], I wasn't short of money to actually [fix the missed damage]. But that was based on the fact that I could do a lot of the other stuff myself." (Claimant Four)*

Figure 10 shows the reasons for insufficiency of settlement values, as captured in the claimant survey. The most common reason was due to the repair scope being larger than what had been assessed, as discussed in Section 3.2. Other key reasons reported for insufficient settlement values included cost differences between what the repairs were valued at and what they ultimately cost, and because further damage was discovered once repair had begun.

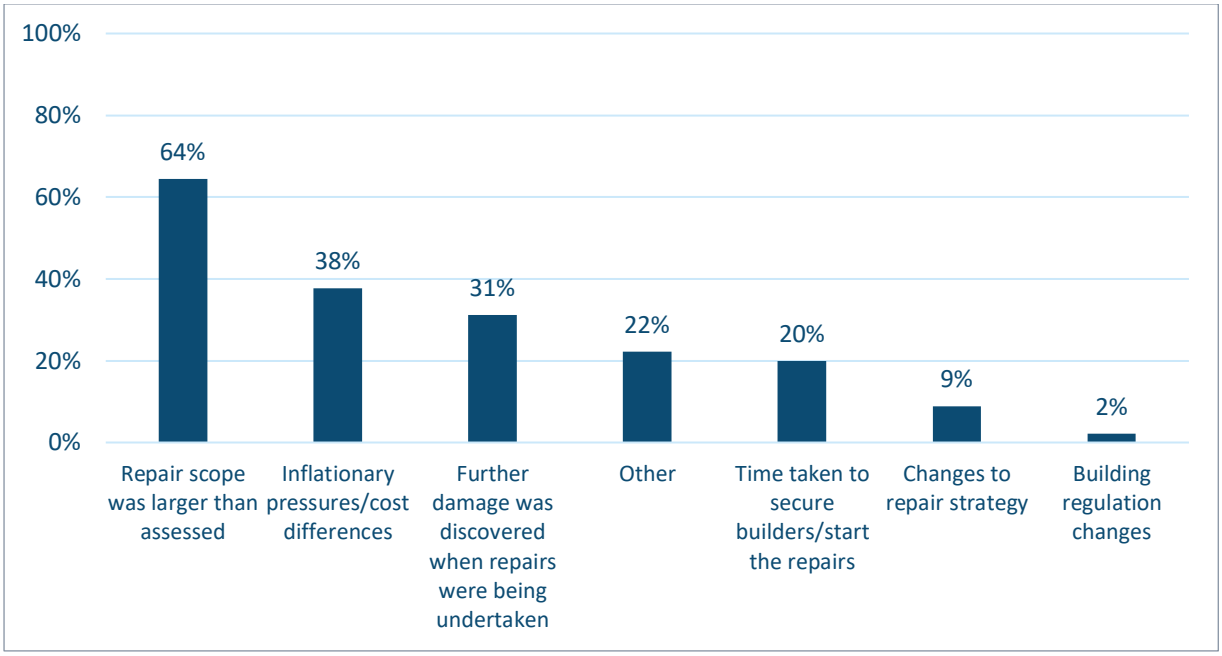


Figure 10: Reported reasons for why settlement values were insufficient to complete repairs (claimant survey) (n=45)

The claimant survey also showed a relationship between household income and the perception of settlement sufficiency. Those with lower incomes were more likely to indicate insufficiency of claim settlement value than those with higher incomes (Figure 11).[18]

[18] Mantel-Haenszel test of trend showed a statistically significant linear association between income and sufficiency of settlement, $\chi^2$ (1) = 5.892, p = 0.015, r = 0.190.

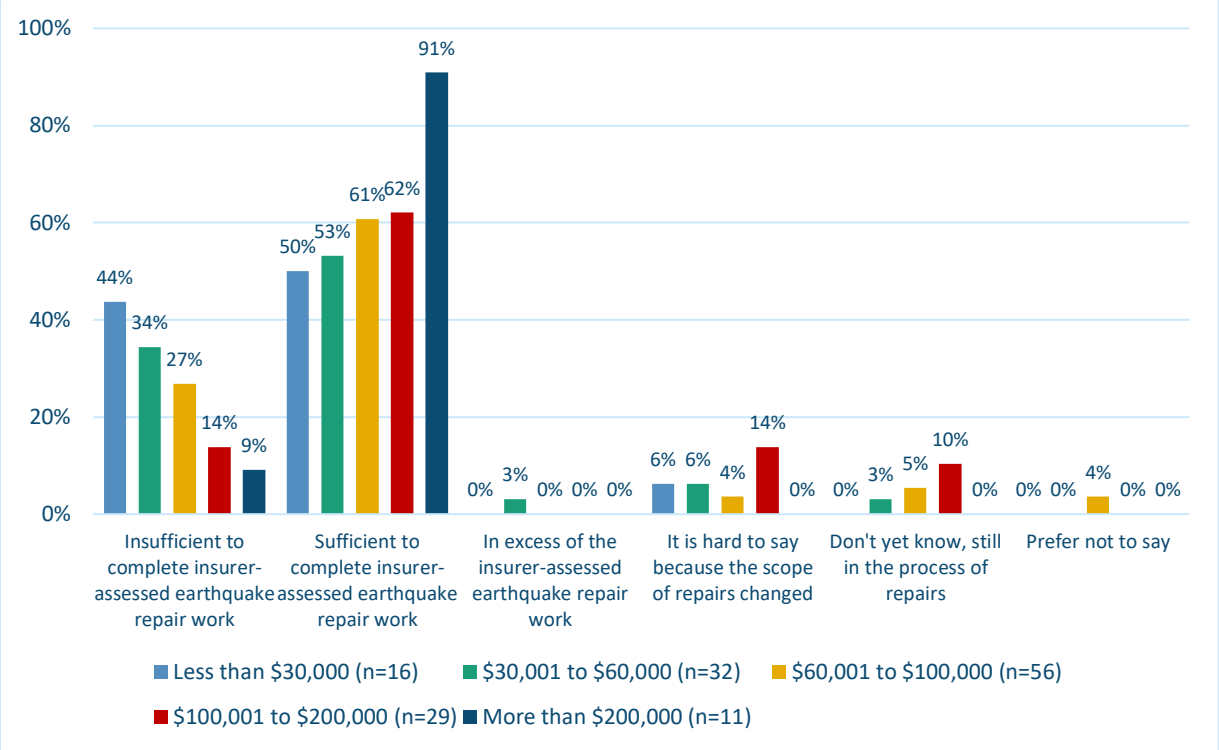


Figure 11: Reported settlement sufficiency relative to income level (claimant survey) (n=144)

The insurers we interviewed said they set an expectation with claimants that settlements may be topped-up if further damage was discovered following settlement or repair costs exceeded the settlement value, though this varied in application. Each insurer had their own processes for facilitating this, with one insurer saying the benchmark was the requested top-up was "justified and reasonable". It appears most disagreements between claimants and insurers about top-ups related to disputes over damage (i.e., what was and was not earthquake damage), or where claimants had agreed to their settlement prior to the discharge waiver discussed above being introduced.

> *"Now I know to go out and get work quoted before it's on the discharge, you know that's what put me in the position of having to pay [my own money for repair work]." (Claimant Four)*

Despite this, the survey showed that the majority of claimants who indicated their settlement value was insufficient were not aware they could reopen their claim for a top-up (53%) (Figure 12). All of these claimants had under-cap claims.

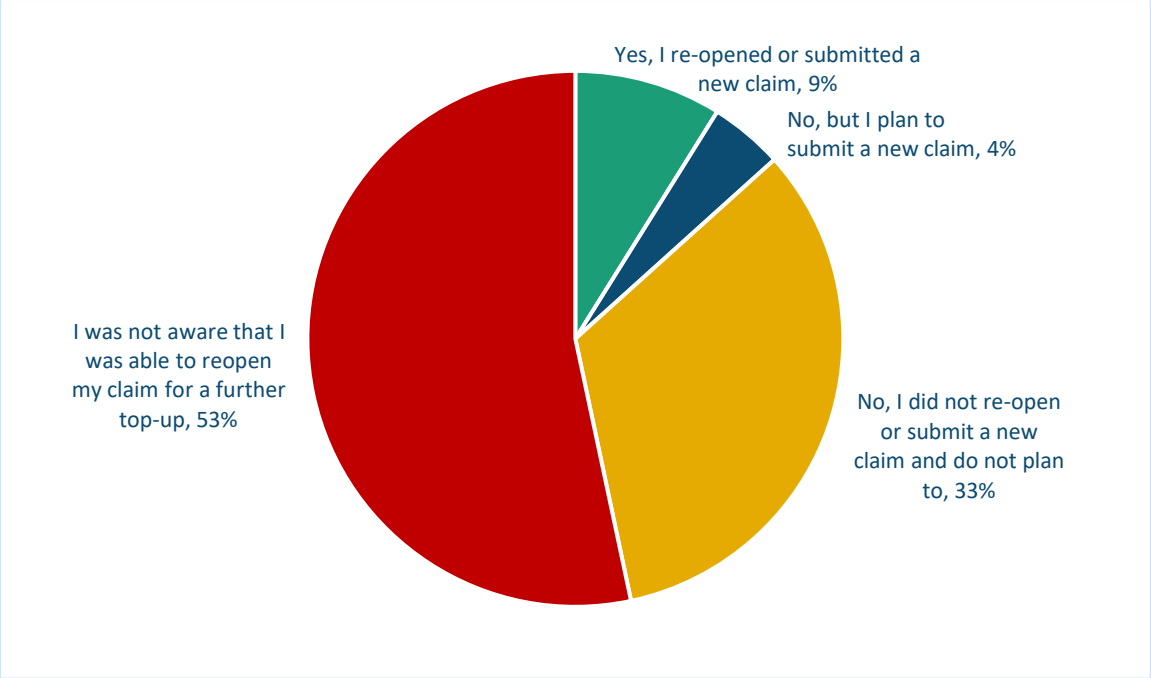


Figure 12: Re-opened insurance claims for insufficient cash settlements (claimant survey) (n=45)

### 3.4.6 Building consents

As identified in the second phase of this research (*Housing Quality Report*) building consents (or exemptions) are generally required to repair structural damage caused by an earthquake. Building consents provide a layer of quality control over building construction in New Zealand.

As expected, due to the nature and extent of earthquake damage, building consent numbers being processed by building control authorities (BCA) increased. Each of the building control authorities (BCA) we interviewed remarked that the number of consent applications they were tasked with managing following the Kaikōura/Hurunui earthquake was "manageable". One recalled employing a few additional staff and external contractors to help with workload. The same BCA commented that while it was a very busy period for their office, there were ultimately a lesser number of consent applications than they had anticipated.

> *"I was expecting to be completely overwhelmed with building consents, but I really wasn't, and that's kind of worrying for me… In saying that, it was one of the busiest times ever, but still not what I was expecting." (Building Control Authority)*

As noted in the *Housing Quality Report*, in the order of half the properties which likely required a consent for repairs (based on self-reported 'structural' damage or value of insurance settlement in the claimant survey) did not obtain one. The interviews undertaken for this report provide some context around the factors for this occurring.

The interviews highlighted general confusion and lack of clarity around what earthquake repairs do and do not require a building consent, a building consent exemption, or are exempt work. This confusion was expressed across claimants, building contractors, and building consent authorities alike.

The way building consent requirements and obligations are interpreted and implemented varied significantly between individuals, according to their interpretation of the requirements of the

Building Act and associated guidance. This created an inconsistent application between different regions across the country and different individuals/groups involved in the repair process. This confusion was acknowledged by the BCAs we interviewed and was cited as a possible explanation for why some people may not have obtained a consent where one was warranted.

> *"I think the building code is grey for most people, even building control. You know, we struggle to understand what is actually trying to be said, so it is very hard for the public [to understand]" (Building Control Authority)*

> *"[claimants] need to do that research themselves. And sometimes, that's where they'll read what they want to read… And I can understand why sometimes people don't get a consent when they actually [need one]." (Building Control Authority)*

> *"You know, it's an individual's call at the end of the day and, it's made it quite tricky. So, I'm guessing that there's a lot of undocumented repairs…" (Building Control Authority)*

Many claimants leant on their local council for guidance and support around whether certain repair work required a consent, exemption, or neither. The three BCAs we interviewed each fielded consent queries from claimants. One noted that an outreach team was established, and specific guidance developed to provide claimants with relevant information, including for navigating the building consent process with their repairs.

> *"we [were] inundated with inquiries, we answered the questions where we could, but even for us, it's hard to make a call on what was a major repair and what's a minor one, and which ones need consents." (Building Control Authority)*

> *"It's the claimant's decision whether they get a consent or not, it's not a council's decision… So we are always very cautious about the answers we give out, saying at the end of the day, 'it's your decision, you need to read the guidance whether you need a building consent, and you need to consider all the factors'…" (Building Control Authority)*

Claimants also sought and relied upon advice from building contractors and assessors to make decisions on whether a consent was required. A few people relied solely on this external advice, while others (mainly those with personal experience or close networks within the construction industry) did their own research too, utilising the likes of council website information, MBIE guidance (MBIE, 2020), and the building code.

> *"A lot of customers just were relying on the tradesperson that comes in to carry out the work really." (Builder)*

Correspondingly, there were differing interpretations of building consent requirements between claimants, contractors and even councils. For instance, two claimants explained how their contractors insisted on the need for a consent while the claimants had sought advice from their local council, who explained a consent was not required.

> *"I said, 'I've already rung the council and I've confirmed that [a building consent is not] needed'. You know, we're just replacing like for like… and [the contractor] was a bit cross that I'd already rung the council and cleared everything with them." (Claimant Nine)*

Conversely, a builder we spoke with recalled instances where claimants insisted a full building consent was required, even where the scope of works stated only a building consent exemption was needed or that neither a consent nor consent exemption were required (exempt work).

> *"…the owner, you know, had a cousin's uncle's brother who was a builder and had told them that they need a consent… and we were saying to them, 'no, here's the guidance'… if you want a full consent, that's fine. We can apply for one, but your insurer is not going to pay for it." (Builder)*

Two BCAs we interviewed said they took a conservative approach to issuing building consent exemptions for earthquake repair work. This was largely influenced by their observations from consent exemptions as applied in the Canterbury earthquake repair process.

> *"…every BCA now is slightly different in terms of their exemption rules. So, you know, some will have slightly, I guess, more relaxed views on what is [and isn't] exempt work." (Insurance Assessor, Builder)*

Others we interviewed applied their own unique approaches to building consents and repair work in general. For instance, one builder said they left a paper trail of repair work undertaken with local building control authorities to indicate what had been completed and how, regardless of whether a consent was involved or not. They were motivated by ensuring the value of their customers' homes was maintained, and to make the nature and extent of the work clear for future purchasers, by maintaining a clear evidential trail of repair work. This exemplifies the different approaches taken toward repair work and building consents between individual builders.

> *"[we left] a trail with Council that we had undertaken these repairs, these are what the repairs were, and [that] they've been done to this standard and signed off by a builder. Whether or not it required a consent or not, in most cases." (Builder)*

While not captured in our data, it is possible (or even likely) that some claimants and builders may have deliberately avoided obtaining a building consent where one was required. However, the interviews clearly demonstrate the ambiguity of the current system and lack of clarity over whether consents are required for earthquake repairs.

## 3.5 Completion of repairs

There is little data available from the Kaikōura/Hurunui earthquake claims to indicate whether cash settlement money was used to complete scoped repairs, and to a satisfactory quality. Results from the *Housing Quality Report* suggest the majority of cash settled claimants completed at least some repairs, while up to 15%[19] did not. However, there appear to be no comprehensive systems in place to follow up and verify completion of repairs by interested stakeholders (including insurers and banks).

By and large, insurers did not have any significant follow-up processes in place to check whether claimants had completed their repairs. For most insurers, their role in the claim process ended once claimants accepted their settlement (excluding disputes). One insurer noted some under-cap claimants inquired whether they were required to let the insurer know when they had finished repairs. For those who did notify their insurer, it was recorded on their customer file alongside any relevant invoices provided. However, this was at the discretion of claimants and not a requirement.

A reliance on passive follow-ups was (and remains) the more common method of capturing whether repairs have been completed, primarily at the time of insurance policy renewals. Customers are

[19] The relates to the 9% of cash settled claimants who indicated they did not intend to undertake repairs plus the 6% margin of error.

obligated to inform their insurer about whether their scoped damage has been completed, to inform ongoing cover. Ultimately, however, this is reliant on customers being forthcoming about their actions and will largely only become visible in a future claim.

> *"We do tell customers that they need to let us know what repairs they have completed at renewal times. Every time your policy renews, you're obligated to tell us if you've completed the repairs or not. So that was probably our only kind of safety net... [however] you're relying on the customer to tell you. All we can really look for is if the customer makes another claim in the future." (Insurer)*

Each of the insurers emphasised that they made it very clear to claimants at the time of settlement that the funds were intended for completing repairs and outlined that failing to do so may affect their ability to make a claim in the future, if required. One insurer noted that the uncertainty over whether claimants had completed repairs would potentially create a significant amount of work when dealing with future claims, to understand what damage can and cannot be covered.

> *"… it's a lot of work [following a future event] working out whether we can cover them or not. If they haven't disclosed something, was it intentional, or was it just that, you know, they can't be expected to know that, and we didn't ask the right questions?" (Insurer)*

Interviewed claimants reported inconsistency in whether they were followed up with to ascertain whether repairs had been completed and/or the evidence required to prove this. Some said they were asked, sometimes on more than one occasion, whether they had completed repairs, while others said they were not asked by anyone to provide evidence of repairs. One claimant (who is also a builder) said they chose to inform their local council that they had completed their repairs, as well as verbally to their insurer when they sold their home.

> "*Strictly speaking I wouldn't have had to [provide evidence of repairs]. But I did put a thing into Council just to say, 'this is what happened, and this is what we've done'… It was remarkably straightforward. Possibly a little too straightforward.*" (Claimant Seven)

Some claimants who had a mortgage reported having to provide proof of repairs to their bank, to enable release of insurance funds. However, there were varying reports of requirements for providing proof of repairs to banks. For instance, one claimant reported having to provide invoices for completed repair work to their bank, before funds were released to the claimant. In contrast, another claimant reported their bank requested mortgage holders sign off on completed repairs before making payments directly to contractors/tradespeople on behalf of the claimant. The processes and rigor of banks in requiring proof of repairs in relation to managing and releasing funds to mortgagees is an area that would benefit from further exploration.

Ad-hoc processes were used by insurers and banks alike to validate the completion of repairs. While most claimants were not followed up, claimants who were followed up were asked to provide a range of proof – from verbal confirmation of repair completion to full proof of invoices. A lack of clear evidence of whether repairs were completed highlights a potential future risk for claimants, as well as liability risks for both insurers and banks if a future event were to occur.

## 3.6 House sales

Many properties damaged by the Kaikōura/Hurunui earthquake have since been sold. The sale of damaged homes where the damage was unrepaired or inadequately repaired presents a risk to homeowners and, more broadly, to the long-term quality of housing. Some properties damaged in the 2016 event were sold AIWI, where risk associated with unrepaired damage is knowingly adopted by the purchaser (*Housing Quality Report*). However, other houses were sold on the understanding that damage had been partially or fully repaired, both with and without the assignment of an insurance claim to the new owner (*Housing Quality Report*). Such instances pass the risk for any poorly repaired or undisclosed damage to the new property owner.

The real estate agents we interviewed noted that at the time of the earthquake, there were a lack of robust measures in place to capture whether a house had been damaged and/or whether repairs had been completed. A lot of this was generally captured based on what the vendor disclosed in the sales process.

> *"I just think that [claimants] were a wee bit… like, 'I'll get the scope to you' [and] 'Yeah, that's been done'." (Real Estate Agent)*

It took a while for real estate agents to find their footing in the sale of earthquake damaged properties, in particular understanding the information necessary to provide evidence of damage and subsequent repair. Knowledge was reported to have been drawn upon from solicitors, as well as agents with experience in selling homes damaged in the Canterbury earthquakes.

Generally, there was a significant reliance on claimants disclosing this information when selling their house. One real estate agent noted that while they attempted to be as rigorous as possible, there was only so much they could do beyond relying on claimants to be forthcoming with information, as well as prospective purchasers exercising due diligence in the form of building inspections.

> *"I'm not there to look through 16 pages of detail, that's not my job. When [claimants] say they've done [their repairs], I believe them. But when a builder's report brings up things that have not been done… we look at a fair [value] that they'd be happy with to make the transaction go through." (Real Estate Agent)*

The claimants we interviewed who sold their damaged homes through a real estate agent expressed general content with the knowledge of the agents they used. They reported signing a disclaimer regarding the existence of a claim and completion of repair work, as well as providing invoicing and other information pertaining to the repairs.

Having claim and repair information on hand to provide evidence of repairs was valuable for house vendors. Some claimants we interviewed said they kept a folder of these documents and still have them, while others indicated they have since disposed of them. As noted by a Real Estate Agent, it becomes increasingly more difficult to obtain this information over time.

> *"…as we're getting further on down [since the earthquake], it's getting a little harder to get [scopes of works and evidence of repairs]." (Real Estate Agent)*

Instances of inadequate repairs causing issues at the time of sale were highlighted throughout the interviews. The claimant representative we interviewed was aware of some claimants who encountered issues with inadequate repairs. They indicated that the inadequate repairs were a combination of instances of deficient repair work by way of ignorance, as well as deliberate

(in)action. In some instances, this had a subsequent impact on the sale value of the property. One claimant we spoke with recalled a similar experience when selling their property damaged in the Christchurch earthquake, where a small piece in the exterior had been unintentionally missed. The purchasers ultimately negotiated a reduction in sale price. In other cases where inadequate repairs were identified, prospective purchasers required vendors to re-do repair work before the house purchase was complete.

One real estate agent noted that their company responded to the lack of clarity around damage and repair information in late 2021/early 2022. This included introducing a clause into agency agreements which explicitly requested vendors to supply information related to their earthquake claim, including supporting documents. The other agent interviewed reported that their company had developed a booklet, outlining all the information required and expected to be disclosed about a claim and the completion of repair work. This indicates some degree of changing practices based on lessons learned from the Kaikōura/Hurunui earthquake. It is uncertain to what extent this is the case, including whether it is across all or some districts/regions and by all or some real estate agents/real estate agencies.

# 4.0 IMPACTS OF CASH SETTLEMENT FOR THE KAIKŌURA/HURUNUI EARTHQUAKE

## 4.1 Wellbeing and health

As with any damaging event, the Kaikōura/Hurunui earthquake and resulting claim settlement / repair process had a significant effect on the general wellbeing and health of those directly impacted. While several comments were made by interviewees around the resilience and comradery of affected communities, especially in the initial weeks and months following the earthquake, the event unsurprisingly took a toll on some people over time.

> *"…people are quite resilient on the initial outset of an earthquake it's over a longer period of time that you see the cracks starting to appear when things aren't happening… that's when people's mental [health] issues start coming through." (Building Control Authority)*

Other interviewees noted that while they ultimately coped with managing repairs, it caused a great deal of stress and exhaustion at the time to try and juggle it around jobs and other life commitments.

> *"…the capacity for claimants who had all sorts of their own mental health issues with, you know, the house broken, the business closed, kids acting up at school, you know, they were impacted from the earthquake themselves. And then they had to run their own repair process. Still having to live their normal life, was huge." (Claimant Representative)*

In the claimant survey, claimants were asked to indicate the extent to which stress, burnout, reduced energy levels, and other mental and physical health impacts affected their everyday life directly as a result of the claim settlement and/or repair process. Among these factors, stress was the most reported impact among cash settled respondents who completed repairs (Figure 13). Over 70% reported experiencing stress at some point during the claim settlement and/or repair process, and over 30% indicated this had a moderate to major negative impact on their wellbeing (n=172).

An example of stress reported in some interviews was in relation to claimants finding it difficult at times to manage the repair process around their day-to-day lives.

> *"...at the time of the earthquake [my spouse] was working full time. So [they were] having to organise people to come in and do stuff around [their] job. And there [was] really [no] allowance for that [with the cash settlement]." (Claimant Two)*

Other mental health impacts were also evident in surveyed claimants with 41-44% experiencing some degree of burnout (n=165), reduced energy levels (n=168), or 'other' mental health issues (n=166). Less than 40% reported having experienced physical health impacts. 16-19% of those experiencing mental and physical health impacts reported it having a moderate to major negative effect on their everyday life.

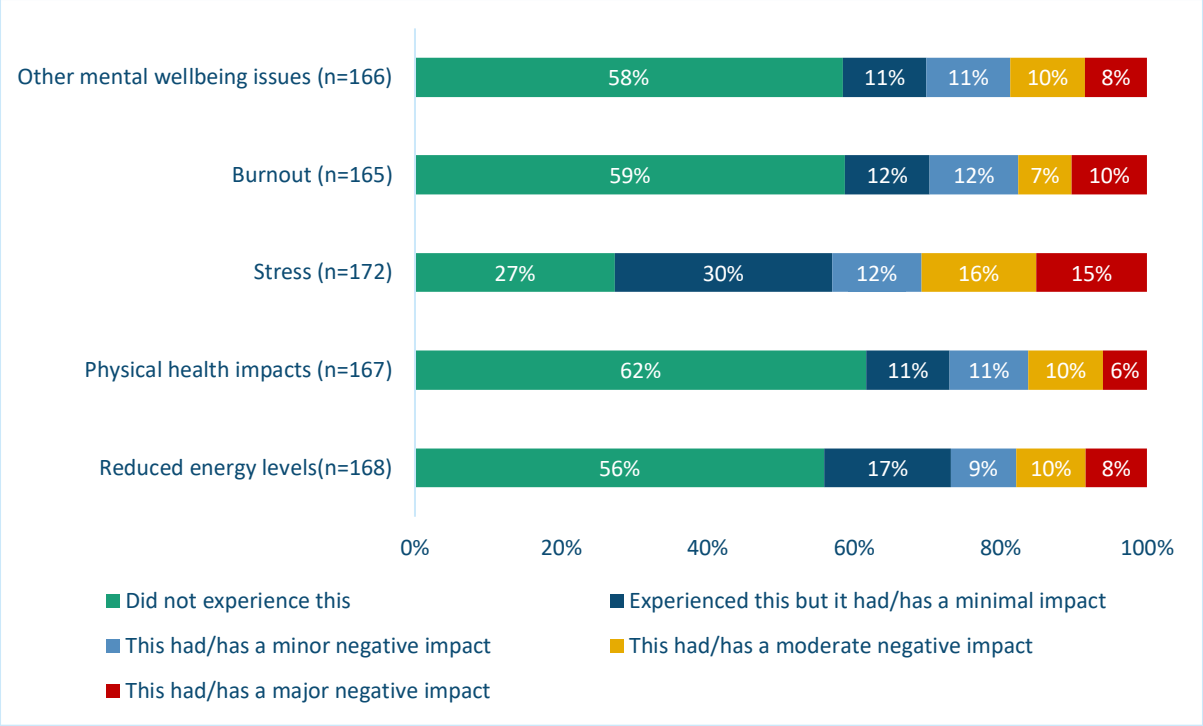


Figure 13: Wellbeing impacts from claim settlement / repair process (claimant survey) (n=165-172)

Some comparison can be drawn to wellbeing impact data of Canterbury Earthquake claimants, gathered through wellbeing surveys carried out by the Canterbury Earthquake Recovery Authority (CERA) (Canterbury District Health Board, 2016). 37% of claimants surveyed in September 2012 by CERA reported experiencing a continued negative moderate or major impact on their everyday life because of dealing with "EQC/insurance issues", which gradually declined over time to 8% in September 2016. Damage, repair, and relocation decisions also had a continued negative moderate or major impact on the everyday life of claimants, gradually declining from a 29% peak in September 2012 to 7% in September 2016. Those more likely to report these results six years after the September 2010 earthquake were those with unresolved claims or dealing with over-cap claims.

While the Kaikōura/Hurunui earthquake wellbeing findings cannot be solely attributed to the residential repair process, wellbeing was found to be significantly correlated with several factors directly related to the claim and repair process, including:[20]

- Ability to engage contractors/professional services (i.e., availability, affordability, timeliness)
- Satisfaction with repairs (i.e., at the time of completion and completing the survey)
- Timeliness of settlement and repairs
- Insufficiency of settlement
- Missed scope or new damage discovered (i.e., more damage than initially scoped)
- Claimant confidence in managing repairs

One of these factors, timeliness of settlement and repairs, came up in multiple interviews. There was a general acknowledgement that the event itself was very large, and perceptions of timeliness were linked to this. The relatively timely settlement of most claims, within the first few months to year following the earthquake, was highlighted as a success of the event response. However, it was also evident that, for some, having a settlement offer presented to them was not the end of their

[20] For full statistical analysis of wellbeing factors, see Appendix D.

experience. For instance, some claimants who disputed their settlement offer because they felt it was insufficient indicated they "gave up" disputing the claim after a certain period because of the toll it was having on their wellbeing.

> *"In the end, basically, we agreed to the settlement just to get it all over and done with and get the repairs done… We just got to the stage where we did it with some other work we were going to get done. So, I was actually past caring with them by that stage." (Claimant Three)*

The claimant survey also identified that income was a key factor in wellbeing outcomes. Those with an income of less than $30,000 were more likely to report having experienced major negative impacts from financial stress in managing repairs (Figure 14). Additionally, lower income claimants were more likely to have reported negative impacts on wellbeing related to timeliness of repairs.[21]

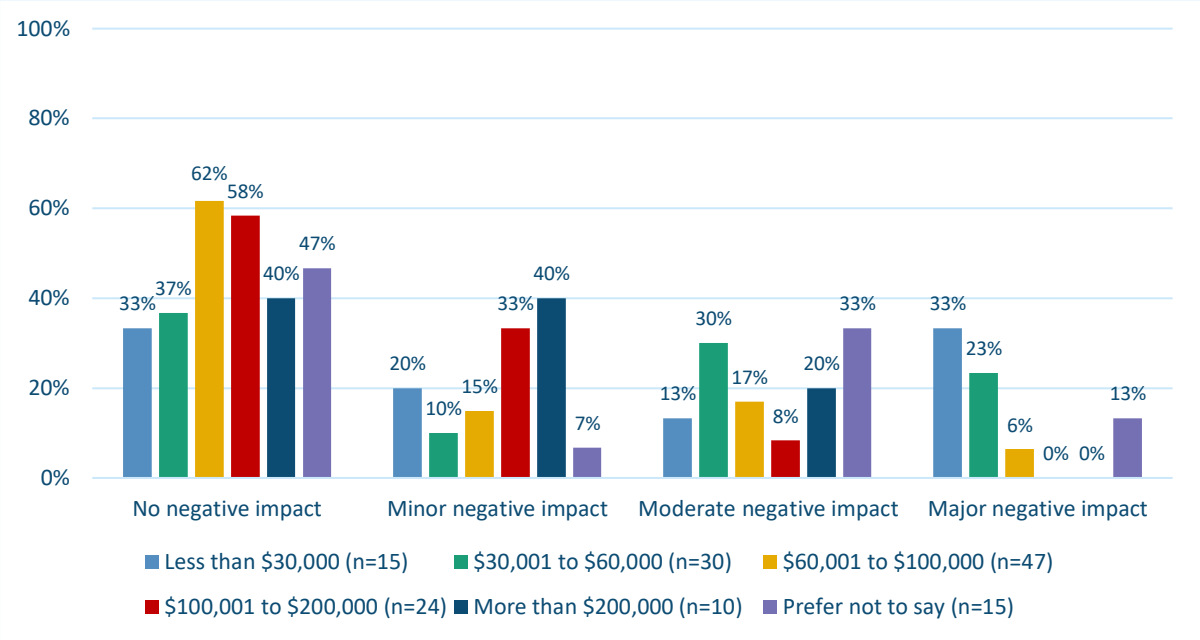


Figure 14: Financial stress impact on everyday life relative to reported income (claimant survey) (n=141)

Claimant survey data also captured the impact of claimant age on wellbeing factors. In general, impacts on wellbeing decreased with age (i.e., older claimants were less likely to report impacts on wellbeing compared to younger claimants). However, there were some areas where this trend differed. For example, claimants of age 60-64 were more likely than not to have experienced some form of stress, burnout, and other mental wellbeing factors (Figure 15).

[21] For full statistical analysis of wellbeing factors, see Appendix D.

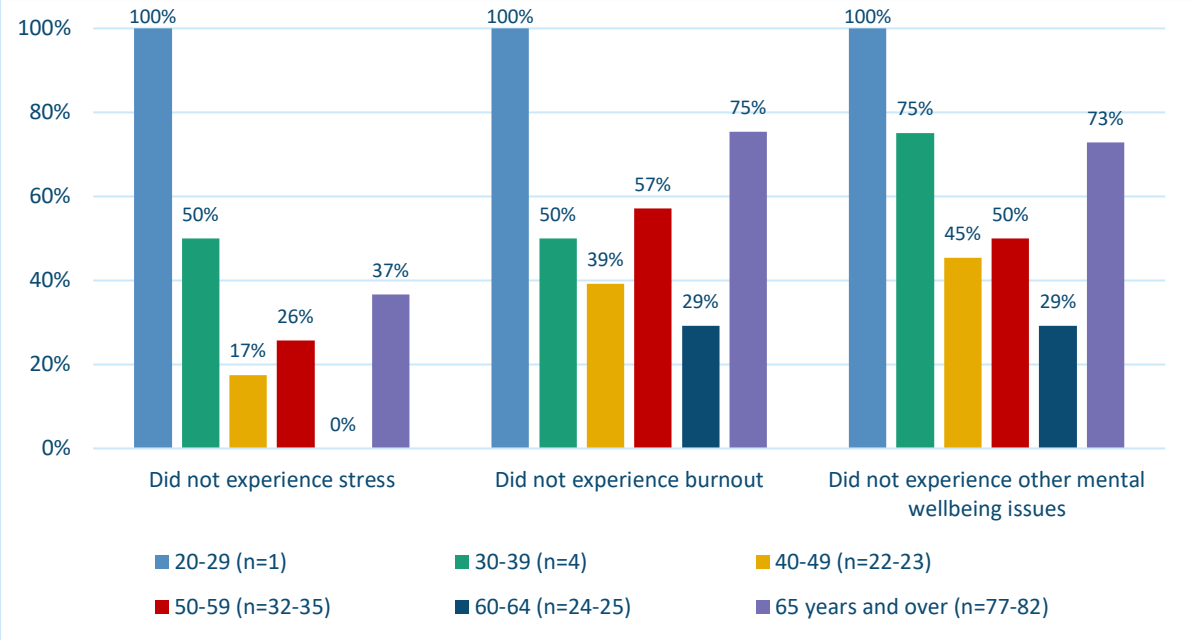


Figure 15: Claimants who reported experiencing *no* impact from stress, burnout, and other mental wellbeing issues (claimant survey) (n=164-170)

Insurers we interviewed had processes in place for identifying and prioritising claimants identified as vulnerable or experiencing vulnerability. This was largely a combination of the Human Rights Commission (HRC) *Best Practice Guidelines* criteria, and other internal processes. The HRC guidelines highlight factors such as health, age, welfare, and other geographic, environmental, or cultural factors that make people "less able than other people to cope with and recover from stresses and pressures" (MacDonald & Carlton, 2016, p. 2). A few insurers we interviewed said they understood vulnerability of their customers through use of direct outreach measures and by information gathered throughout the assessment and/or settlement process. House damage was also generally used to prioritise assessments and settlements, mainly according to whether a home was habitable.

> *"…we found with our clients, you could have half the house missing, yet they would say that they're perfectly fine and [to] deal with everyone else first. So, there's situations where the property was marked as severely damaged, but the client isn't vulnerable for various reasons." (Insurer)*

Health and wellbeing are important factors to consider in any disaster. Negative impacts can impact individuals' ability to recover, both in terms of downstream health affects as well as their ability to engage in the claim settlement / repair process. Factors such as identifying vulnerability and appropriately settling claims within a reasonable timeframe to enable claimants to move forward with their recovery, were important for managing the impact on health and wellbeing following the Kaikōura/Hurunui event. However, this was not without some challenges. Claimants who reported being in the claim settlement process for longer due to disputes and/or mistakes were especially impacted.

## 4.2 Satisfaction

The reported satisfaction among claimants with the claim settlement and repair process is an important impact to consider, and one that was used as a key test for repair quality in the *Housing Quality Report*. While acknowledging the limitations of measuring claimant satisfaction (Controller and Auditor-General, 2015; BRANZ, 2014), reported satisfaction is a useful way of understanding the more subjective aspects of factors such as housing quality.

Most interviewed claimants who had completed repairs reported they were generally satisfied with the quality of these repairs at the time of completion. Only a few said they had to get contractors back in to re-do or touch up repairs, including one who had issues with roofing.

Claimant survey data shows that most cash settled claimants indicated satisfaction with the standard and quality of their repairs, both at the time repairs were completed (88%) and at the time of completing the survey (82%) (Figure 16). There is a slight drop in reported satisfaction with repairs between these two periods, with a corresponding increase in those reporting being neither satisfied nor dissatisfied (up 6% between the two periods). This likely accounts for instances of remediation work or additional damage being discovered.

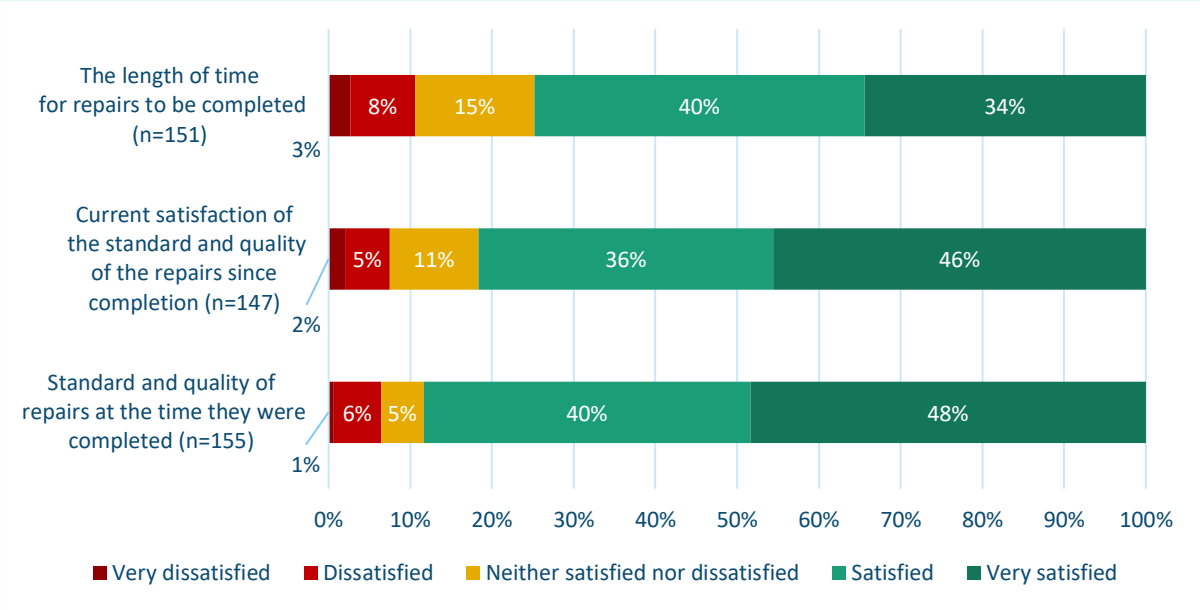


Figure 16: Satisfaction with repair quality and time taken to complete (claimant survey) (n=147-155)

Figure 16 also shows that most respondents (74%) indicated satisfaction with the length of time for their repairs to be completed, 11% were dissatisfied, while the remaining 15% were neither satisfied nor dissatisfied. This reflects what was generally observed through the interviews, as discussed in Section 3.4. Claimants we interviewed acknowledged the scale of damage caused by the earthquake and the lack of supply of contractors to complete repairs. They were typically cognisant of this when considering their satisfaction with the time taken.

> *"I didn't mind the length of time for [my] claim to be settled because I understood that it was a major event affecting thousands of properties" (Claimant Four)*

As would be expected, claimants who disputed their settlement or had troubles following settlement, reported being less satisfied with the time taken. This included claimants who reported

disputes over the scope of damage with their insurers and/or contractors. One claimant noted that they were fine with the time it took for their claim to be settled, in hindsight, but emphasised the stress they experienced at the time "probably [made the settlement process feel] like it took forever".

## 4.3 Housing quality impacts

Based on the findings in the *Housing Quality Report*, most cash settled claimants from the Kaikōura/Hurunui earthquake chose to repair their homes. Long-term housing quality concerns primarily arise from claimants who 1) deliberately chose not to complete repairs, 2) sold their house as is where is, 3) damage was missed during assessment process or repair, or 4) where repairs were completed but may not have been completed to an adequate or appropriate standard.

Inadequate repairs are possible where claimants and/or tradespeople cut corners and complete repairs inadequately or complete a reduced repair scope, whether to reduce costs or otherwise. Insights from the interviews indicate the main reasons for incomplete repairs were claimants deliberately making a choice to save money. This included choosing to 1) "live" with the damage, 2) complete a cosmetic patch-up, or 3) prioritise certain repairs due to insufficient funds. Additionally, there may have been instances where claimants and/or tradespeople produced inadequate repair work due to a lack of awareness of appropriate repair methods. This was raised in interviews with a builder and a BCA, especially in relation to internal wall bracings.

> "*A lot of people just plastered up, basically, bracing walls that should have been replaced, and things like that… Some of those are re-cracking already and things. So those people need to be very aware of the gib rules, I guess, of what can and can't be repaired.*" (Builder)

Additionally, there were varied interpretations of building consent guidelines which may have led to individual builders, local councils, and claimants reaching different interpretations or approaches to repairs. Findings from the *Housing Quality Report* suggest between 10-15% (+/- 6%) of all claimants undertook structural repairs but without a building consent when one was likely required.

Repair quality outcomes were also influenced by the capability of homeowners to arrange and/or manage the repair process including identification of quality issues; as well as the capability of those entrusted to complete repairs to an adequate standard.

Data from the claimant survey shows that most cash settled claimants had some confidence in managing their repairs. Overall, 72% said they were either mostly or very confident in managing their repairs, 15% were slightly confident, and 12% were not confident (n=182). Survey results also indicated a trend related to income. Generally, the lower a claimants' income the more likely they were to have reported lower confidence in managing their repairs, while the higher a claimants' income the more likely they were to have reported greater confidence in managing their repairs. For example, 19% of those earning less than $30,000 were not confident in managing their repairs compared to only 3% of those earning $100,000 to $200,000.

Claimants interviewed reported varied levels of confidence in managing their repairs. Those with greater confidence were typically able to get started sooner. The ability to simply get started with the process, and knowing where to start, generally arose where claimants had prior knowledge and/or experience with construction, and/or knew of people within the industry to contact or to get advice from.

*"...once [the settlement funds were paid] I just [engaged] my builder friends, and at that point it was fine…because of the [construction] experience I had, because I trusted [and knew] the builders [and sub-trades]." (Claimant Five)*

*"...we were lucky because my [spouse is] a builder… and we [know] our electrician and plumber." (Claimant Two)*

In contrast, those who reported having less confidence generally found it more difficult to begin the repair process, and significantly relied on the aid and trust of others to navigate the process. Some claimants with personal experience or close networks within the construction industry explained how they imagined it would likely be difficult for people without such experience or knowledge to manage repairs. Unlike situations where claimants actively decide to engage with renovations or construction, earthquake repairs are something claimants are forced into, unexpectedly.

*"There's a double-edged sword, isn't there if you're not confident in getting the repairs done yourself, you know, you might feel much more comfortable in having a third party do it. And you feel safer that way. I felt safer [with managing my own repairs]." (Claimant Twelve)*

*"All I wanted was for someone to say, 'yeah, we'll take your hand and get you through this'. You know, we'll do this, this, and this firm are good…" (Claimant Six)*

*"For someone who's never had to hardly make [an insurance] claim in my life, [managing my repairs] was sort of overwhelming because it was just so big, you know, you didn't know where to start." (Claimant Eight)*

Claimants who did not have experience, knowledge, and/or confidence in completing construction projects struggled more in the management of their repairs. This included not knowing who to engage (or trust) to complete repairs adequately. One interviewed claimant noted the difficulty they experienced in confronting their builder regarding the scope of works they were completing.

*"... it was quite intimidating… because I'd have to call the builder out [regarding what was on the scope of works] … it's quite confrontational." (Claimant Nine)*

Trust was an important component of achieving quality repair outcomes. It is notable that following a traumatic and/or life-changing experience, as was the case for many with the Kaikōura/Hurunui earthquake, there is a heightened dependence on others to help repair damaged houses to an adequate standard. Having to depend significantly on others to achieve quality repair outcomes leaves less-capable claimants susceptible to potentially poor housing quality outcomes, whether these outcomes are intentional or not.

Some claimants reported having greater trust in the repair process because they were able to choose builders and other contractors they knew, and therefore had more confidence that repairs would be properly completed. Claimants who reported having lower capability to manage repairs, either through their own lack of construction knowledge, experience, and/or personal networks, had no choice but had to trust people and a process they were not familiar with.

*"…recovery from an earthquake does involve [claimants] having… autonomy again. When the earth shakes without your permission, it is a very soul-destroying thing because you have to question everything if you can't trust the Earth you stand on, what can you trust?" (Claimant Five).*

*"I just had to trust [the contractors I hired]], there was no choice. Whoever I [engaged], there just didn't seem to be a choice but to trust them." (Claimant Six)*

*"My son is a builder… I personally breezed through the whole process only because of my son's knowledge, involvement, and support. If it wasn't for him, I would be totally out of my depth." (Survey Respondent)*

An influence on the trust placed in local builders to complete repairs to an adequate standard was their reputation among customers and local communities. For instance, some claimants reported trusting their contracted builder, in part, because the builders' customer base was the local community and bad repair work may reflect negatively on their future business in the area. A few builders we interviewed expressed the same sentiment, reporting they were aware their reputation was on the line, which influenced their approach and standard for completing repair work.

*"…because we live in a small town, we have to stand behind our work. We can't make one mistake because the little grapevine will [hear about it]." (Builder)*

*"The key thing [with cash settlement] is people get to choose their own repairer. It's not forced upon them. And in an environment like small town New Zealand, that's important. So, they know that whoever is walking into their house, they can trust. They know that who's walking into town will… stand behind their work." (Builder)*

*"I was very happy with the repairs, because I trusted the builder. I had some authority over the builder because I had been in charge of giving him work in the past and I have contacts that if he'd done a bad job at my place, I could talk to other people that would mean he would get less work in the future, and he was probably aware of that, too." (Claimant Five)*

Multiple factors played into housing repair quality outcomes from each stage of the Kaikōura/Hurunui earthquake claim and repair process. This included damage not adequately scoped in the damage assessment process leading to poor quality outcomes, or the decision of claimants to not repair (or partially repair) damage to their property. The capability of claimants to manage their own repairs also played a role in influencing housing repair quality outcomes. Where claimants were less capable to manage their own repairs, there was a significant reliance on and need to trust others to ensure quality repair outcomes. This increased the susceptibility of some claimants to poor repairs.

## 4.4 Insurability

A potential risk for future events is whether claimants remain insured and can therefore claim for any resulting damage. Ongoing insurability can be influenced by multiple factors, including whether damage was repaired or not, and whether a property owner chooses to continue to hold insurance.

Claimant survey data shows most (89%) successful cash settled claimants reported that their house remains insured following the Kaikōura/Hurunui earthquake, while 8% indicated their house was no longer insured (Figure 17).

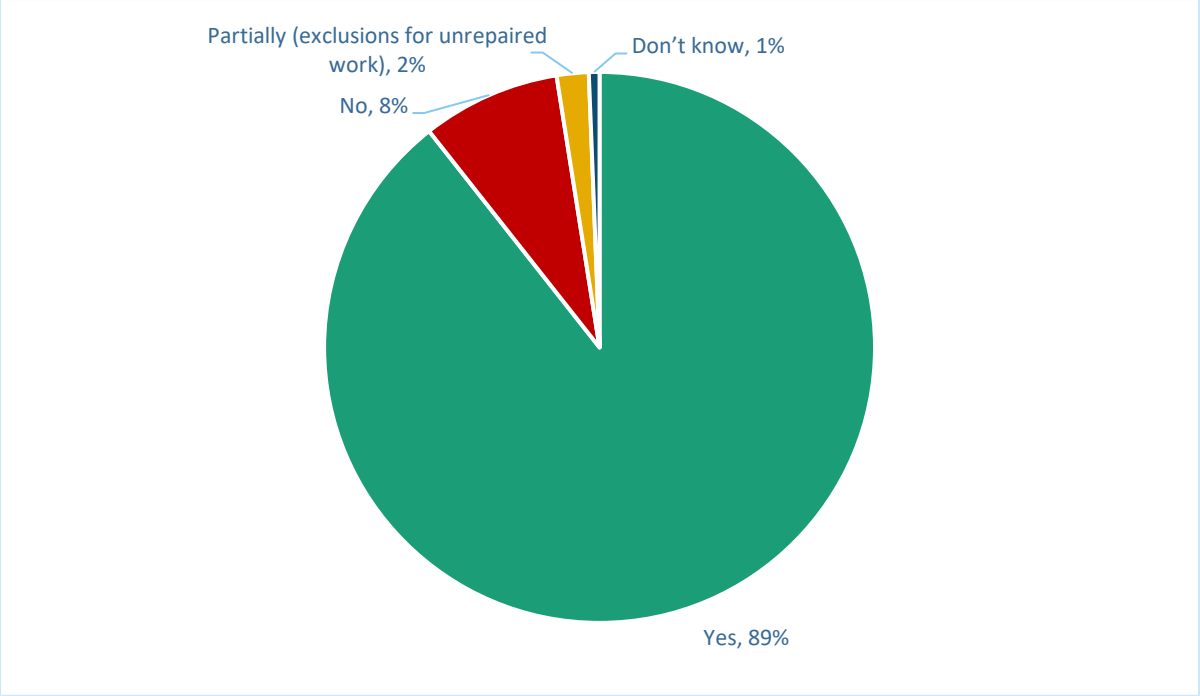


Figure 17: Cash settled claimants and continued insurance cover following settlement, excluding rebuilds (claimant survey) (n=201)

As noted in the *Housing Quality Report*, this suggests approximately 4% (+/- 6%) of all cash settled claimants (as a proportion of all survey respondents) are no longer insured for their property, while between 2-10% (+/- 6%) may unknowingly not have cover due to incomplete or inadequate repairs.

Some claimants we interviewed reported that their experience with the Kaikōura/Hurunui claim settlement process reduced their faith and/or trust toward their insurer. Reasons included instances where claimants had disputes with their insurers and where damage was inadequately scoped. One claimant who disputed an element of their claim noted their confusion regarding the terminology used in their policy.

> *"I just find some of the wording and the complexity around insurance as just plain scary, really… I don't trust them." (Claimant Twelve)*

In some cases, this led individuals to reduce their insurance coverage. Some claimants remained with the same company, while others shopped around in search of cheaper premiums or for a better customer experience. One claimant we interviewed explained how they removed their contents insurance cover entirely because of a dispute regarding the amount paid out to them.

> *"…I cancelled [my contents insurance] straightaway." (Claimant Eleven)*

> *"We've ensured our building can be replaced knowing full well that we wouldn't get paid out for the section anyway." (Claimant Two)*

This reduced trust was targeted at both Toka Tū Ake EQC and individuals' private insurers. Despite some individuals changing their insurance cover as noted above, most claimants chose to keep their house insured. Among the claimants we interviewed, there was a general understanding that maintaining ongoing insurance for their property was important in case of future events.

*"I am very aware that you do need full insurance. And I would never own a property without it." (Claimant Three)*

*"…probably the only reason I maintain it is because of the EQC cover. Because I live in a place that's more prone to earthquakes, and you've got to be pragmatic about that." (Claimant Five)*

However, there is a potential change in insurance cover following the Kaikōura/Hurunui event that is less visible. As mentioned, this includes homeowners who may believe they are insured but, due to inadequate repairs, may not be fully covered in a future event. This may be realised only in a future event, where a claim is made. Based on the interviews and findings in the *Housing Quality Report*, there is reasonable evidence to suggest this will be an issue for some claimants.

## 4.5 Impact summary

Throughout the insurance settlement and repair process there are multiple avenues for reducing the impacts of the residential recovery process. Table 2 summarises the key stages in the claims settlement and repair process and the associated issues and impacts as discussed in Sections 3 and 4. The table also identifies examples of mechanisms that may mitigate these impacts in future events. Although the sale and purchase of houses is not directly part of the claim settlement and repair process, it has been included in the table because of the potential housing quality implications which arise directly as a result of the process.

Table 2: Claim / repair process stages, impacts and management tools

| STAGE | POTENTIAL ISSUE | POTENTIAL IMPACT | EXAMPLES OF TOOLS TO MANAGE POTENTIAL ISSUES |
|---|---|---|---|
| LODGING CLAIM | Damage not identified by claimant | Unrepaired damage | Additional support for vulnerable individuals<br>Individual follow-up with claimants<br>Clear communication of claims processes |
| ASSESSING DAMAGE | Damage not fully identified by insurer | Unrepaired damage<br>Claimant loss of trust and increased time in insurance process | Appropriately detailed damage assessment processes<br>Triaging damage to use most experienced assessors for more complex damage |
| ACCEPTING OFFER | Full and final claim discharges resulting in later-discovered damage that cannot be covered<br>Delay in claimants accepting offers | Unrepaired damage where claimants cannot cover additional damage<br>Financial hardship and stress for claimants<br>Pressure on building sector to provide quotes<br>Repair delays | Opportunity for re-opening of claims where appropriate<br>Discharge waivers to give claimants greater confidence in accepting initial claim offers |
| DECIDING TO REPAIR | Claimants deciding not to complete repairs | Unrepaired damage | Information from insurers on impacts of not completing repairs<br>Payment of claim directly to banks for those with mortgages |
| COMPLETNG REPAIR | Lack of claimant confidence / experience with repair management | Stress for claimants<br>Reliance on professionals for quality repair leaving claimants to assess adequacy/ quality of repair and vulnerable to poor quality work | Provision of information on suitable local tradespersons<br>Information on how to undertake repair processes, how to monitor quality and where to get help |
| CLARIFYING BUILDING CONSENT/ EXEMPTIONS | Lack of clarity about whether a Building Consent or Consent Exemption is required | Poor quality repair outcomes due to lack of regulatory oversight | Clear information from regulator/councils on consent requirements |
| MANAGING THE REPAIR | Limited oversight of repair completion | Incomplete/inadequate repairs | Insurers follow-up with claimants<br>Repair invoices paid directly by bank<br>Insurance disclosure requirements<br>Claimants/tradespeople required to lodge evidence of repair completion with local councils/insurers |
| HOUSE SALE | Sale of properties with inadequately (or un-) repaired damage | Purchase of property with unrepaired/unidentified damage with no recourse for funding to complete repairs | Disclosure requirements associated with real estate transactions |

# 5.0 REFLECTIONS FROM THE KAIKŌURA/HURUNUI EARTHQUAKE RESIDENTIAL REPAIR PROCESS

## 5.1 General

In this section we provide reflections that span across the specific experiences and processes of the Kaikōura/Hurunui event discussed in this report. Several key insights have emerged from this analysis that have application to events beyond the Kaikōura/Hurunui event.

First, we provide some brief reflections on claimant-led vs coordinated residential repair models. These reflections are primarily based on interviewee data, where interviewees were asked directly about their reflections on the cash settlement process and whether they would consider an alternative approach following a future event. It should be noted that a full spectrum of claimant experiences following the Canterbury earthquakes remain front of mind for many when considering their preferred approach to repairing damaged homes. More than a decade later, the direct and indirect experiences and knowledge from that disaster clearly had an influence on the reflections provided by interviewees about the Kaikōura/Hurunui event. This is important to bear in mind when considering preferences and reflections from this event.

Second, we reflect on the key themes from the Kaikōura/Hurunui earthquake residential repair process. These are derived from the data presented in the previous sections. More broadly, these are factors that are likely to contribute to an effective residential recovery process, regardless of the insurance claim settlement model used.

## 5.2 Claimant-led and coordinated repair processes

Based on data from the claimant survey, approximately 70% of cash settled claimants reported they would prefer to manage repairs themselves if they were to incur damage in a future event, while 30% indicated a preference for a third-party to manage repairs.[22] Across all dwelling settings (i.e., city or rural), the majority of claimants reported a preference for managing their own repairs in a future event. However, a slightly higher proportion of claimants located in rural areas (80%, n=64) reported a preference for self-managed repairs compared to claimants located in towns (62%, n=82). Among those who indicated they would prefer a third party to manage their repairs, most (71%) had a claim value of less than $50,000 (n=52).

A number of interviewees reflected on the value of choice (as discussed above): that simply having the ability to decide the process for completing their repairs whether self-managed or through a third party would be valuable. Having a choice allows all factors and options to be considered, and a decision made around what the best option is for an individual based on their circumstances at the time and the nature of the event itself.

[22] Survey respondents were asked, if they were to experience property damage in a future event, whether their preferred method for undertaking repairs would be to self-manage the process, or have a third party manage the process on their behalf? (n=172 answers).

*"…even though I liked the whole concept of a cash pay-out… I think maybe it should be an option… 'we can project manage all these repairs, but if you want you can opt for a cash payment', because you might be a builder… give people a choice." (Claimant Four)*

This sentiment was shared by one insurer that carried out some repairs on behalf of claimants. The insurer recognised that some claimants desired greater support and spoke positively of being able to provide a managed repair where it was desired.

*"…for most clients, [cash settlement] is their preference. But some want to have a managed repair, and it's nice to be able to give them that if that's the support that they need." (Insurer)*

Interviewees were asked to consider factors which might indicate a greater need for a coordinated repair process for claimants. For instance, some claimants we interviewed who liked the cash settlement approach for the 2016 event remarked that, had their damage been more significant or complex, they would have preferred a third party to manage repairs. Other considerations highlighted included the vulnerability of claimants, the density and geography of damage (i.e., extensive damage in urban centres), and external economic factors at the time of the disaster (i.e., inflation, access to resources).

*"Depending on where, and the severity and the breadth and the spread of the impact of an event… you're [going to] have a whole bunch of different issues because you're dealing with a whole bunch of different demographics… you've got to look at every event as an event in itself, because they're going to have so many unique scenarios going on." (Insurer)*

The availability of professionals and tradespeople to support the residential repair process was also raised by some interviewees as a key consideration for future responses. Some BCAs also noted resourcing was the most significant factor in determining their capability of managing building consent applications in future large events. Each noted they were stretched for resources even in times of business-as-usual. One BCA reflected that the requirements for processing building consents under the Building Act are insufficient for addressing times of disaster. While it was a difficult figure to anticipate, one BCA estimated an additional 10% workload would make their ability to perform unsustainable.

*"I think you'll find most building control departments in the country have just got their heads above the water, pretty much, there's no fat." (Building Control Authority)*

*"The Building Act certainly thinks it was [manageable] because it doesn't recognise the difference between an actual disaster and statutory timeframe of 20 days to issue a building consent. It just thinks that life goes on as normal." (Building Control Authority)*

Consideration of claimant preferences regarding the management of their repairs are, again, influenced by both personal circumstances and the nature of the disaster. While most claimants from the Kaikōura/Hurunui earthquake indicated they preferred the cash settlement approach, there were also some who did not, as evidenced through the survey and interviews. Undoubtedly the geographic context, nature of damage, and individual experiences influenced these results, and the reported preference for a given model will have been different following another events. In addition, and as evidenced in this report, the mechanism for settling insurance claims does not just impact claimants, but also building contractors, building consent authorities, banks and insurers. The insurance settlement process after a given event, needs to consider from this wider systems perspective.

## 5.3 Key themes from the residential repair process

### 5.2.1 Access to Information

Access to information on the claim settlement and property repair process is an integral part of ensuring claimants can manage their recovery. It was evident that some claimants were extremely unsure how to approach different aspects of their claim settlement and repair process. The architect we interviewed went so far as to say, "*uninformed claimants were vulnerable*".

> *"a lot of [claimants]… were really out of touch with the cost of things… Some of them might have rented and never built a house before, so they don't have an understanding of what's involved. And they don't know the consent process… it's quite overwhelming for some people." (Architect)*

Information needs depend on the circumstances and capability of individuals concerned. As noted, some claimants were thrust into the settlement and repair process with little to no previous experience in or confidence about what they were required to navigate. Examples of useful information content for claimants were provided through the interviews, including:

- How to dispute a settlement offer
- Potential implications of not undertaking adequate repairs
- Guidance on how to identify contractors and/or professionals for repairs, and some references/examples of who to approach
- The order in which certain repair work may need to be arranged
- Guidance on the need for building consent
- Suggestions about retaining documents related to settlements / repairs, including the benefits of doing so

Aside from specific pieces of information, access to support services through different key organisations and stakeholders is also useful. There were various examples of support which claimants leant on throughout the Kaikōura/Hurunui earthquake repair process, including local and central government initiatives, community groups, and personal networks. For instance, one council we spoke with noted that they created informational flyers for claimants to better understand the process of who and how to contact relevant people. Community meetings were also arranged where representatives from insurers, councils, and other groups made themselves available to answer any questions claimants may have had.

Ensuring this information is available, accessible, and known to claimants who may benefit from it is a core component of helping claimants have a smoother overall claim and repair process.

### 5.2.2 Autonomy and choice

Providing claimants with some degree of control, choice, and autonomy to make decisions in their recovery is highly valued as such. As one claimant noted, damaging events that put someone in a position where their house needs to be repaired in the first place is, for many, traumatic. Autonomy is an important component of the personal recovery process.

"*There shouldn't be barriers to people [in their recovery process] because you've already gone through a traumatic experience.*" (Claimant One)

Many claimants positively reflected on the autonomy and flexibility that their Kaikōura/Hurunui earthquake repair experience provided them. They noted that these factors gave them greater confidence in the process and helped their trust because they could either engage who they chose to complete the repairs or have a direct role in the process.

> *"Let the claimants decide how they're going to manage where they live." (Claimant One)*
>
> *"[cash settlement] just opens up a world of choices about timing, about who, about everything." (Claimant Seven)*
>
> *"[cash settlement] gave me the control to choose who I wanted to do the repairs… and I knew I trusted the [tradesperson]… I felt safer." (Claimant Twelve)*

Many of those who emphasised the benefit of autonomy and control in the repair process typically considered themselves capable of managing such process. This was either due to personal experience and knowledge, or access to experienced / knowledgeable networks around them.

> *"I think it's easier to interact directly with those people. Because I didn't have any problem with dealing with tradesmen. And I think as I've got older, I've got a bit tougher at questioning things." (Claimant Three)*
>
> *"If one is moderately well informed and has the time and enough interest, then it's advantageous to do it yourself." (Claimant Ten)*
>
> *"There's an art to project management and skill to it as well. And so, yeah, I didn't face that problem because I've done it professionally before." (Claimant Five)*

The autonomy that cash settlement provided claimants, whether decisions regarding repair scope, who to use to complete repairs, or otherwise, was appreciated by many. There was a general appreciation for cash settlement allowing these decisions to be ultimately placed in the claimant's hands, allowing them to have a stake in their own repair process. Autonomy also helped to develop a greater sense of trust for some claimants, because they had the ability to influence who would complete their repairs. This was especially important among those who had personal negative experiences in the Canterbury Recovery or knew of others who did.

The value of autonomy in residential repairs extends beyond simply allowing claimants to manage repairs themselves. For some, this comes from having the ability to decide whether they would like to manage their own repairs, or whether a third party might be preferable, based on their individual circumstances.

> *"I think it would have been nice to have been given the choice. Because then my husband and I could have sat down and talked it through… if we were given the choice, then of course I would have asked questions about 'well, how does that actually work?'." (Claimant Nine)*

Providing claimants with the opportunity to choose or input into decisions about their recovery from a disaster is beneficial to the overall repair process. This means looking at ways in which autonomy and choice can be built into the process from the very outset, to make sure the right decisions can be made for an individuals' circumstances.

### 5.2.3 Quality damage assessment process

One of the key steps in the process that sets claimants up for a successful repair process starts with the damage assessment(s). It is crucial that damage assessment processes, as far as reasonably practical, provide a full and accurate assessment of damage. Doing so better enables claimants to move forward with the settlement and repair process in a swift but robust manner, while building confidence among claimants in the entire process.

Less detailed assessment processes, by contrast, work to negatively impact claimant confidence in the process. It also increases the likelihood of conflict and time (and resource) spent disputing and negotiating damage scopes and settlement values (for claimants, insurers, and building contractors alike). Inadequate assessments also contribute to a loss in trust between claimants and other parties, which may lead to downstream consequences related to health and wellbeing.

Less confident or less informed claimants, in particular, may struggle to dispute any situations where they feel their assessment(s) were inadequate, or understand their ability to do so in the first place. They may also not be aware that an assessment is inadequate in the first place. In some cases, this can have downstream impacts where damage goes unrepaired. Therefore, quality assessments are particularly important for those that do not have experience and/or confidence in managing their own repair work. For these claimants, there is a higher reliance and degree of trust placed in others to identify all damage and set a clear path forward for repair.

Naturally, there is a balance to be struck between completing assessments as fast as possible to enable claimants to move forward in the process, while also ensuring they are completed to a standard that claimants (and insurers) can have confidence in.

### 5.2.4 Repair quality assurance process

A successful residential repair process, and in particular quality housing repair outcomes, depends upon the completion of repairs to a sufficient standard. Experiences from the Kaikōura/Hurunui event highlighted ad hoc approaches from insurers and banks to understand whether repairs had been satisfactorily completed. This gap in quality assurance raises potential issues with insurance coverage of future earthquakes and can cause issues for claimants when selling their house in the future.

There were a number of suggestions made by interviewees on how this risk may be mitigated. At minimum, this included keeping an evidential trail of repair completion and requesting local BCAs add this to the council property file (refer Section 3.5).

A further suggestion was a potential change in payment method structure where claimants are managing their own repairs. This may look similar to the processes currently used by banks for mortgagee claimants, whereby funds are released either to claimants or persons completing repairs based on evidence of repair completion, such as invoices.

Regardless of the residential repair process (claimant-led or coordinated repair process), the extent and quality of housing repairs is difficult to measure in the absence of processes to provide robust oversight. This has implications for individual claimants, insurers, building authorities and other key stakeholders, such as banks. Poor quality repairs can impact the safety of occupants, exacerbate damage in future earthquake events, or mean that insured persons are unable to claim insurance future events. It can also impact the value of properties and affect future house sales.

# 6.0 SUMMARY

There are a number of lessons to reflect upon from the residential repair process following the 2016 Kaikōura/Hurunui earthquake. These lessons are important for helping to inform repair process options in preparation for and following future disasters in New Zealand.

There were a range of stakeholders involved in the Kaikōura/Hurunui claim settlement and residential repair process, from insurers, banks, and government bodies to professionals and tradespeople, community groups, and claimants themselves. Each contributed different functions, services, and decisions. Identified challenges and issues arising from the process are often consequences of the entire system, rather than of individual entities involved. A systems-wide perspective is therefore important when considering these findings.

The aim of this analysis was to explore the experiences and impacts of cash settlement from the earthquake. This was based on a combination of key stakeholder interviews (claimants, builders, professional services, building control authorities, insurers (including assessors), real estate agents), and data from the preceding claimant survey. The work draws and builds upon analysis in the *Housing Quality Report*, which examined impacts on housing repairs and repair quality as a result of cash settled claims from the Kaikōura/Hurunui event.

Using data gathered through the interviews and claimant survey, a few key impacts of cash settlement from the Kaikōura/Hurunui earthquake were identified. These include the impacts on claimant wellbeing, satisfaction with the repair process, housing quality, and future insurability of houses.

## 6.1 Wellbeing

The residential repair process from the Kaikōura/Hurunui earthquake had an impact on claimant wellbeing and health. Stress was by far the most common impact reported by claimants: 70% of survey respondents indicated stress at some stage during the process and more than 30% indicated this had a moderate to major impact on their everyday life. Wellbeing was negatively impacted by challenges in engaging contractors and professionals, dissatisfaction in repair quality, settlement and repair delays, settlement insufficiency, missed scope or new damage discovered, and low confidence in managing repairs. Generally, claimants reporting stress were those on lower incomes and who were younger in age.

## 6.2 Satisfaction

Despite some of the negative reported wellbeing outcomes, claimants generally reported being satisfied with quality of repairs and time taken to undertake repairs. 88% of survey respondents reported satisfaction with repair quality at the time of completion, which dropped to 82% at the time of completing the survey. This likely accounts for instances of remediation work or additional damage being discovered. Additionally, 74% of survey respondents indicated satisfaction with the length of time for repairs to be completed. This sentiment was largely shared by interviewees, many of whom acknowledged the size of the event when considering timeliness.

## 6.3 Housing quality

The analysis also highlights a number of stages of the claim and repair process that have the potential to impact the scope and quality of repairs. Damage assessments emerged as a critical part of the recovery process that, when done well, enabled quality repair outcomes, trust, and confidence in the process. When done poorly, created uncertainty and ambiguity for claimants and potentially impacted repair outcomes. There is also a risk to housing quality in the future sales process, where purchasers may unknowingly buy inadequately or unrepaired properties.

The confidence of claimants in managing repairs also played a significant role in achieving housing quality outcomes. Most cash settled claimants (72% based on the claimant survey) indicated they were mostly or very confident in managing their own repairs. Claimants with less capability (whether directly through their own knowledge and experience or through personal networks) placed a higher degree of trust in others (e.g., builders/contractors, assessors) to get them through the process. The capability of claimants to manage their own repairs, and level of trust placed in others to identify and complete adequate repairs, played a role in the susceptibility of claimants to potentially inadequate housing quality outcomes.

## 6.4 Insurability

Continued insurability of damaged houses was also a key consideration. Most claimants (89%) reported in the survey that their property remains insured following the earthquake, while 8% reported their property is no longer insured (Figure 17). In relation to claimant behaviours and attitudes toward insurance following the earthquake, some claimants reported reduced faith and/or trust in their insurer based on their experience. While in some cases this resulted in action such as changing provider or reducing cover, claimants were generally aware of the potential future risks of not having property insurance and, therefore, the importance of completing adequate repair work. A less visible issue may exist when claimants believe they are insured but may not be covered in a future event because of (unknowingly) inadequate repairs.

## 6.5 Key themes from the residential repair process

There were four key areas from the interviews and survey data which consistently emerged as important attributes of the Kaikōura/Hurunui residential repair process and are considered equally important considerations to future residential repair processes.

### 6.5.1 Access to Information

One of these was access to information on the claim and repair process. Accessible and quality information is an integral part of ensuring claimants are able to manage their recovery with greater confidence and certainty. Some claimants from the Kaikōura/Hurunui event had little or no knowledge or experience with managing construction processes, and some struggled knowing simply where to begin. Information passed to claimants from this event to support them was ad hoc and appeared to vary between districts and insurers. The information needs of claimants may include how to interpret, evaluate, and if necessary dispute, an insurance settlement, through to guidance on selecting building contractors, obtaining consents for repair work, and how to approach certain types of repair work. Ensuring this information is available, accessible, and known to

claimants who may benefit from it is a core component of helping claimants have a smoother overall claim and repair process.

### 6.5.2 Autonomy and choice

Ensuring claimants have some degree of autonomy and choice over decision making in their repair process was also commonly highlighted in interviews as an important attribute. Allowing claimants to decide key elements of their recovery help to develop trust in the process. Autonomy and choice can be provided along a spectrum from full control, including decisions over what is repaired and/or who undertook the work, through to providing claimants with a choice of whether they would feel more comfortable with a third party managing their repairs or some other form of support through the process. These decisions are influenced by an individual's personal circumstances at the time of an event and/or the nature of the event itself.

### 6.5.3 Quality damage assessment processes

It was also clear that ensuring damage assessments are adequately detailed at the outset lays the foundations for a successful recovery process. Robust damage assessments provide a clear template for repair work and increases the likelihood that repairs are completed, as well as instilling confidence in claimants regarding the overall process. This is especially important for those who are less confident in managing repairs, as a significant degree of trust and reliance is placed on those assessing damage and scoping repairs.

### 6.5.4 Repair quality assurance process

Finally, quality assurance processes are needed to ensure the quality and completion of repair work (or not). A lack of clear evidence of whether repairs were completed highlights a potential future risk for claimants, as well as liability risks for both insurers in banks if a future event were to occur. Greater oversight in this area would enable claimants to be more confident in repair work completed, as well as provide an enhanced ability to identify and resolve potential quality concerns.

The findings from this research provide insight into the appropriate processes for residential housing repairs in future disasters. Though each event is unique and presents its own range of circumstances, observations from the cash settlement insurance process following the 2016 Kaikōura/Hurunui earthquake provide lessons that are transferrable across disaster events and community contexts. In particular, a number of factors have been identified that ideally should be in place to support claimants regardless of the model used to manage insurance claims and subsequent residential repairs.

The implications of this research for the management of housing repair following future disaster events is the subject of a separate *Discussion Paper*.

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# APPENDIX A: CLAIMANT INTERVIEWEE PROFILES

Table 3: Claimant interview selection survey responses from interviewed claimants

| CLAIMANT | DISTRICT | CLAIM VALUE BAND ($1,000) | STATUS OF SETTLEMENT | REPAIR WORK | USE OF QUALIFIED PROFESSIONALS | BUILDING CONSENT OBTAINED? | SALE/PURCHASE OF DAMAGED/ REPAIRED HOUSE | SATISFACTION WITH SETTLEMENT AND/OR REPAIR PROCESS |
|---|---|---|---|---|---|---|---|---|
| **1** | Kaikōura | 10-50 | Accepted and received the money | No intention to repair/rebuild | n/a (no repairs) | Yes | Yes (sold) | Very dissatisfied |
| **2** | Marlborough | 10-50 | Accepted and received the money | Chose to / planning to complete full repairs as per insurance assessment | Yes, for all repair work | No | Yes (sold) | Satisfied |
| **3** | Hurunui | 10-50 | Accepted and received the money | Chose to / planning to complete full repairs as per insurance assessment | Yes, for some repair work | No | Yes (sold) | Somewhat satisfied |
| **4** | Marlborough | >100 | Accepted and received the money | Chose to / planning to complete partial repairs | Yes, for some repair work | Yes | No | Dissatisfied |
| **5** | Hurunui | 10-50 | Accepted and received the money | Chose to / planning to complete full repairs as per insurance assessment | Yes, for all repair work | Building consent exemption | No | Very dissatisfied |
| **6** | Marlborough | >100 | Accepted and received the money | Chose to / planning to complete full repairs as per insurance assessment | Yes, for all repair work | Yes | No | Very dissatisfied |
| **7** | Kaikōura | >100 | Accepted and received the money | Chose to / planning to complete full repairs as per insurance assessment | Yes, for all repair work | No | Yes (sold) | Satisfied |
| **8** | Kaikōura | <10 | Accepted and received the money | Chose to / planning to complete full repairs as per insurance assessment | No | Building consent exemption | No | Dissatisfied |

| CLAIMANT | DISTRICT | CLAIM VALUE BAND ($1,000) | STATUS OF SETTLEMENT | REPAIR WORK | USE OF QUALIFIED PROFESSIONALS | BUILDING CONSENT OBTAINED? | SALE/PURCHASE OF DAMAGED/ REPAIRED HOUSE | SATISFACTION WITH SETTLEMENT AND/OR REPAIR PROCESS |
|---|---|---|---|---|---|---|---|---|
| **9** | Hurunui | >100 | Insurer repaired | Chose to / planning to complete full repairs as per insurance assessment | Yes, for all repair work | No | Yes (sold) | Somewhat satisfied |
| **10** | Hurunui | >100 | Accepted and received the money | Chose to / planning to complete partial repairs | Yes, for all repair work | Unsure / (n/a) | No | Somewhat satisfied |
| **11** | Kaikōura | >100 | Accepted and received the money | No intention to repair / rebuild | n/a (no repairs) | Unsure / (n/a) | No | Dissatisfied |
| **12** | Marlborough | 10-50 | Accepted and received the money | Chose to / planning to complete full repairs as per insurance assessment | Yes, for all repair work | No | No | Satisfied |

NB: There were no survey respondents from the interview screening survey that indicated a claim value of $50,00-100,000

# APPENDIX B: INTERVIEW QUESTIONS (INCLUDING QUESTION PROMPTS)

## Claimant

### YOUR EXPERIENCE

1. Thinking about your experience following the 2016 Kaikōura/Hurunui earthquake, including damage to your property and subsequent repair process, please describe your experience.

### THE HOME REPAIR PROCESS

2. Reflecting on your repair/rebuild experience, what information did your insurer provide to you?
    - Settlement, scope of repairs, standard rates for repair work
3. What earthquake damage did you choose to repair?
    - Reflecting on your decisions around scope of repair work to your house, what were the factors you considered when making these decisions (e.g., scope provided by insurer, based on long-standing improvement plans, based on contractor quotes/suggestions, owners' views of damage from the earthquake)?
4. In your experience, did you have any challenges with accessing / engaging people to help do the repairs?
    - Tradespeople, engineers and other professionals, building materials
5. When determining the qualification of contractors for completing repair/rebuild work for your house, what were the key factors you considered?
    - E.g., seeking licensed practitioners, utilising contractors you personally knew?
6. Did you undertake any earthquake repairs/rebuilds yourselves? If so, what type of work did you do?
    - What were the main factors for choosing to do this (e.g., saving money, settlement value insufficient)?
7. Drawing on your experience with repairing your house, what was your understanding about building consent requirements for undertaking earthquake repairs?
    - What information did you rely on to understand the consent process? Was it clear to you whether a consent was required for your earthquake repairs?
8. To the best of your knowledge, did you, or are you aware of any homeowners who incurred house damage from the 2013 Cook Strait earthquake and had not completed repairs at the time the 2016 earthquake occurred? If so, are you aware of whether this affected their insurance settlement?

### SATISFACTION WITH REPAIR PROCESS

9. From your own perspective, what are your thoughts regarding the quality/standard/satisfaction of your repairs/rebuilds at the time repairs/rebuilds were completed?
    - Have you had any repair defects / new damage requiring remedial work in the time following the initial completion of repairs?
10. In your own opinion, what are your thoughts about the speed of your insurance settlement and subsequent repairs?

- Your house damage being scoped and claim settled
- Your cash pay-out being received
- Your repairs/rebuild being completed (from contracting tradespeople to completion)

11. Thinking about the value of the cash settlement you received, what was/is your experience with this being sufficient for repairing damage as assessed? If not, why not, and were costs and/or scope insufficient?
12. From your perspective as a homeowner, did you face any challenges in relation to your own capacity to manage earthquake repairs?

### CHALLENGES FOLLOWING REPAIRS

13. Did you personally face, or are you aware of others who faced issues on-selling damaged properties?
    - Were you required to provide any evidence of repairs?
    - As far as you are aware, what was your general understanding of the knowledge held by real estate agent professionals?
14. Did you personally, or are you aware of other homeowners who experienced any issues with needing to / having trouble providing evidence of repairs to insurers or banks, or prospective purchasers?
15. Has your experience changed your behaviour / attitude toward insurance (e.g., how much insured for)?

### REFLECTIONS FOR FUTURE EVENTS

16. As a homeowner, what is your understanding of the implications for not repairing your damaged property to an adequate standard (e.g., future insurance cover, re-sale implications)?
17. Thinking about potential future events, based on your own experience with receiving a cash settlement following the 2016 earthquake, would you personally prefer any future insurance claims to be cash settled and you manage your own repairs, or would you prefer some alternative approach? Please explain?
18. Do you have any further reflections on housing repairs following the 2016 event and/or in consideration to future events?

## Building

### YOUR ROLE IN THE RESIDENTIAL RECOVERY

1. Thinking about the residential recovery (home repair and rebuild) following the 2016 Kaikōura/Hurunui earthquake, can you describe your organisation's contribution to it, and your own role within it?

### THE RESIDENTIAL REPAIR PROCESS

2. What is your understanding of how homeowners generally procured / selected / found contractors for earthquake repairs?
    - Are you aware of any homeowners who faced challenges engaging contractors to complete earthquake repairs? Please explain.
    - What about engaging engineers, tradespeople, or other services?
    - How common was word of mouth for choosing building professionals?

- Did homeowners rely on builders to manage subtrades or did they use a builder or project manager to manage repair works? How successful was this?
- Did any contractors come from out of town? If so, were there any issues with this?

3. In your experience, what type of information was provided to contractors by homeowners about their insurance settlement (e.g., scope of repairs, schedule of rates)?
    - (if applicable) In general, how did the scope of repairs compared to the work required?
    - (If applicable) Do you think the rates used in insurance settlements were suitable for the work undertaken?
    - After works were completed, what type of information did you typically provide to homeowners about the completion of repairs?
4. From your own experience in this role, can you describe how you navigated building consents for earthquake repairs?
    - Was it clear to you and others in the sector what earthquake repairs required consent? Who / what information was available to help builders and homeowners understand the consent process?
    - Did property owners ask for repair works to be undertaken without obtaining consents? If so, what were the main factors for this?
    - Conversely, were some builders not obtaining consents when they should have? Were there any specific reasons for this?
5. Looking back, what is your own perspective about the quality of repairs undertaken for houses damaged in the 2016 event?
    - Across the building sector, do you feel building contractors were suitable qualified and experienced to deal appropriately with earthquake damage repairs? If not, please describe some of the issues / challenges you observed.
    - Are you aware of homeowners undertaking their own repairs? If so, do you have any concerns about quality?
6. In your experience, did you observe any impacts on the cost of building works during the repair process? If so, please explain.
    - Cost of labour, material, professional services, additional supply or demand driving prices up or down
7. Among the homeowners you interacted with, what is your perception of how they coped with managing their own earthquake repairs?
8. Were you involved in, or are you aware of, any repairs that were not managed by homeowners (e.g., project managed)?
    - Are you aware of any experiences of claimants who struggled with the process? If so, why do you think this was?

### REFLECTIONS ON THE OVERALL PROCESS

9. Reflecting on your experiences and observations following the Kaikōura earthquake, what would your key lessons be for residential repair following future disasters?
    - Are there any circumstances or situations that you think might require a different approach to residential recovery? If so, what are the circumstances and how might that change the response needed?
10. Do you have any further reflections on housing repairs following the 2016 event and/or in consideration to future events?

## Real estate

### YOUR ROLE IN THE RESIDENTIAL RECOVERY

1. Can you describe your organisation, and your own role within it? In particular, can you please tell us your role related to properties damaged and affected by the Kaikōura/Hurunui earthquake?

### SALE OF EARTHQUAKE DAMAGED PROPERTIES

2. What were/are your observations of sale patterns of partially damaged properties in the 2016 earthquake?
3. In your experience, how did you find the experience obtaining information from the owners of repaired or partly repaired properties about the scope of settlements and repairs undertaken?
    - What sort of information was provided to you?
4. Looking back, are you personally aware of any issues with homeowners disclosing relevant information about their property / the repairs?
    - What disclosure information was typically provided to prospective purchasers?
    - What is the general awareness of purchasers about earthquake damage and claim/repair status of the property they are purchasing?
5. From your role, what were/are your observations of sale patterns of 'as is, where is' properties damaged in the 2016 earthquake?
    - What was the typical extent of damage among houses sold AIWI that you encountered?
6. As far as you are aware, have you encountered any guidance for undertaking sales of as is, where is properties?
    - What was the typical pathway for recovery of AIWI houses (e.g., purchased by contractors to be fixed straight away, purchased by land-bankers who may not complete immediate repairs)?
7. From your experience, are you aware of individuals trying to sell poorly repaired properties?
    - Are you aware of any properties sold where the vendor indicated that repairs were completed, but building inspections show there is still earthquake damage / or poor-quality repair work? If so, could you please explain what has been observed?
8. From your experience, are you aware of any sales of deceased estates or mortgagee sales with earthquake damage? If you have been involved in these sales, how was earthquake damage information dealt with?
9. In your experience, have you encountered, or are you aware of, any challenges with house purchasers obtaining insurance for properties?
10. Drawing on your experience in the sale of homes damaged in the 2016 earthquake, did you observe, or are you aware of, implications on the availability and/or quality of rental homes in affected areas?

### REFLECTIONS ON THE OVERALL PROCESS AND LESSONS FOR FUTURE

11. Do you have any further reflections on housing repairs following the 2016 event and/or in consideration to future events?

## Architecture (working for claimants)

### YOUR ROLE IN THE RESIDENTIAL RECOVERY

1. Thinking about the residential recovery (home repair and rebuild) following the 2016 Kaikōura/Hurunui earthquake, can you describe your organisation's contribution to it, and your own role within it?
2. What is your understanding of how homeowners generally procured / selected / found architects for earthquake repairs?
    - Did homeowners face any challenges engaging architects to support earthquake repairs? If so, please explain.
    - Did you generally work directly for a homeowner or through a building contractor?

### THE RESIDENTIAL REPAIR PROCESS

3. In your experience, what type of information was provided to engineers by homeowners about their insurance settlement (e.g., scope of repairs, schedule of rates)?
    - (If applicable) In general, how did the scope of repairs compare to the work required?
    - (If applicable) do you think the rates used in insurance settlements were suitable for the work undertaken?
4. From your own experience in this role, how did you determine the need for building consents for earthquake repairs?
    - Did you recommended building consents be obtained for structural damage?
    - Did you provide PS1 (Producer Statement Design) to accompany your repair designs, drawings and specifications?
    - Was it clear to you and others in the sector, which earthquake repairs required consenting? What information was available to help understand this?
    - Did claimants ask for repair works to be undertaken without obtaining consents? If so, what were the key factors for this?
5. Reflecting on your experience in the residential repair process, what was your involvement in the construction phase of repairs?
    - Did you provide PS4 upon completion of the work?
    - After work were complete, what type of information did you typically provide to homeowners about the completion of repairs?
6. Looking back, what is your own perspective about the general quality of repairs undertaken for houses damaged in the 2016 event?
    - Across the building sector, do you feel building contractors were suitably qualified and experienced to deal appropriately with earthquake damage repairs? If not, please describe some of the issues you observed?
    - Are you aware of homeowners undertaking their own repairs? If so, do you have any concerns about quality?
7. Did you observe any signs of unrepaired damage from the 2013 Cook Strait earthquakes?
8. In your experience, did you observe any impacts on the cost of building works during the repair process? If so, please explain.
9. Drawing from your own experiences throughout the repairs process, do you have any reflections on your interactions/engagements with:
        - Homeowners
        - Insurers / loss adjustors

- Council Building Control Officials
- Others?

10. Among the homeowners you interacted with, what is your perception of how they coped with managing earthquake repairs?
    - Are you aware of any experiences of claimants who struggled with the repair process? If so, what were the key factors for this?

### REFLECTIONS FOR THE FUTURE

11. Reflecting on your experiences and observations following the Kaikōura earthquake, what would your key lessons be for residential repair following future disasters?
    - Are there any circumstances or situations that you think may require a different approach to residential repairs? If so, what are the circumstances and how might that change the response needed?
12. Do you have any further reflections on housing repairs following the 2016 event and/or in consideration to future events?

## Engineering (working for insurers)

### YOUR ROLE IN THE RESIDENTIAL RECOVERY

1. Thinking about the residential recovery (home repair and rebuild) following the 2016 Kaikōura/Hurunui earthquake, can you describe your organisation's contribution to it, and your own role within it?

### THE RESIDENTIAL REPAIR PROCESS

2. Could you describe the typical scope of your personal involvement in individual claims, as well as the process you worked through / outputs you produced for claims related to the 2016 event?
3. In your experience what type of information was provided by engineers to insurers?
    - E.g., nature and extent of damage, scope of repairs, repair methods?
    - Do you know whether this information was typically passed on to homeowners?
    - Did you have any further involvement in claims after providing your report(s) to the insurer?
4. In your experience, what level of confidence do you have that the scope of settlement was adequate for repairs?
5. From your own experience in this role, what was your expectation that a building consent would need to be obtained for repairs where you observed structural house damage?
    - Did you recommend building consents be obtained for structural damage?
    - Was it clear to you and others in the sector what earthquake repairs required consent? What information was available to help you to understand the consent process?
6. Drawing from your own experiences throughout the insurance settlement process, do you have any reflections on your interactions/engagements with:
    - Homeowners
    - Insurers / loss adjustors
    - Council Building Control Officials
    - Others?

7. If you were also involved in residential work following the Canterbury earthquakes, do you have any observations or reflections about the differences in processes used?

### REFLECTIONS FOR THE FUTURE

8. Reflecting on your experiences and observations following the Kaikōura earthquake, what would your key lessons be for residential repair following future disasters?
    - Are there any circumstances or situations that you think might require a different approach to residential repairs? If so, what are the circumstances and how might that change the response needed?
9. Do you have any further reflections on housing repairs following the 2016 event and/or in consideration to future events?

## Insurance

### YOUR ROLE IN THE RESIDENTIAL RECOVERY

1. Thinking about the residential recovery (home repair and rebuild) following the 2016 Kaikōura/Hurunui earthquake, can you describe your organisation's contribution to it, and your own role within it?
2. Can you please describe the process of cash settlement (from initial claim receipt to final interaction with homeowner)?
    - How was repair scope and schedule of rates determined?
3. What are your general reflections on the process, from the perspective of [insurance company]?
    - What processes, if any, did [insurance company] use to follow up on cash settled claimants, to understand whether repairs had been completed or material steps had been taken to repair?
    - From your perspective, what are the potential implications of future insurance cover where repairs of cash settled claimants have not been completed?

### THE RESIDENTIAL REPAIR PROCESS

4. What was the process you used for assessing and managing claim top-ups, if any?
    - As far as you are aware, what was the nature of homeowners requesting top-ups?
    - What reasons for seeking a top-up did you typically encounter or are aware of?
    - Were there any patterns that you are aware of (i.e., type of location of customers, type of damage, etc.)?
    - Were there any time limits for top-ups?
5. What is your understanding of the type of information provided to homeowners by [insurance company] about their cash settlement value?
    - Scope of repairs
    - schedule of costs with rates (how was scope of damage costed?)
    - engineering reports
    - requirements for consents
    - travel costs
    - professional fees
6. As far as you are aware, what processes, if any, were used by [Insurance company] to identify and support the claims of 'vulnerable' customers?

- What criteria was used? E.g., anything other than just demographics (thinking type of damage, etc.)?
- Are you aware of any needs that weren't met by the processes used?

7. What is the general feedback that you encountered from homeowners about the cash settlement and subsequent repair process from this event? Explain.
   - Aware of any info gathered through customer feedback surveys, call centre feedback (etc.)?
   - Do you have any reflections about homeowners managing their own repairs?
   - Did you observe any particular benefits or drawbacks for homeowners in the process?
   - Do you have any reflections about homeowners obtaining insurance for their properties which were damaged in the 2016 event and subsequently on-sold (claim transferred to purchaser)?
8. Were you involved in the claims process for homes damaged in the 2013 Cook Strait earthquakes?
   - If so, what are your reflections of how the claims process played out for that event and the 2016 Kaikōura/Hurunui earthquake?
9. Did you encounter any properties with damage due to the 2013 Cook Strait earthquakes that may not have been fully repaired?

### REFLECTIONS ON THE OVERALL PROCESS AND LESSONS FOR FUTURE

10. Do you have any further reflections on housing repairs and/or the cash settlement process from the 2016 event?
    - What about in consideration of future events?

## Building control authority

### YOUR ROLE IN THE RESIDENTIAL RECOVERY

1. Thinking about the residential recovery (home repair and rebuild) following the 2016 Hurunui/Kaikōura earthquake, can you describe your organisation's contribution to it, and your own role within it?
2. Reflecting on the residential recovery, what are your general perceptions of the repair/rebuild of properties following the 2016 event?

### THE RESIDENTIAL REPAIR PROCESS

3. Drawing on your own experience as a building consent authority, what is your understanding regarding the level of earthquake damage that may require a building consent to repair?
   - Does [council] have / have [council] provided specific guidance / advice to builders and/or homeowners for determining this?
4. Based on your observations, what are your general reflections about the quality of repairs undertaken for houses damaged in the 2016 event?
   - Across the building sector, do you feel building contractors were suitable qualified and experienced to deal appropriately with earthquake damage repairs? If not, please describe some of the issues you observed.
   - Are you aware of homeowners undertaking their own repairs? If so, do you have any concerns about quality?

5. From your involvement in the residential recovery, are you aware of any impacts on the cost of building works during the repair process? If so, please explain.
    - E.g., cost of labour, materials, professional services, additional demand or supply driving prices up or down
6. From your involvement in the residential recovery, what is your perception of how homeowners coped with managing earthquake repairs?
    - Are you aware of any experiences of claimants who struggled with the process? If so, why do you think this was?
7. Were you involved in the residential repair/rebuild of homes damaged in the 2013 Cook Strait earthquakes? If so, what are your reflections on how the process played out for that event compared to the 2016 Kaikōura/Hurunui event?

### REFLECTIONS FOR FUTURE EVENTS

8. In your opinion, what are the future regulatory implications for [council] of potential 'sub-standard' quality of repairs?
9. From your experience as a building consent authority, what was your understanding of the capacity of [council] to deal with managing and issuing consents both for earthquake repairs/rebuilds from the 2016 event, and in general?
    - What might be the reasonable maximum number of consents [council] could manage before it would become unsustainable?
10. Reflecting on your experiences and observation following the 2016 event, what are some key lessons for residential repair following future disaster events?
    - Are there any circumstances or situations that you think might mean a different approach to residential repair is needed? If so, what are the circumstances and how might that change the response needed?
11. Do you have any further reflections on housing repairs following the 2016 event and/or in consideration to future events?

# APPENDIX C: STATISTICAL ANALYSES OF INTERACTION IMPACTS

Survey respondents were asked to indicate the extent (from 'no negative impact' to 'major negative impact') that the following interactions and factors had or continue to have on their everyday life as a result of the insurance claim and repair process:

- Dealing with tradespeople
- Dealing with local/district council
- Financial stress
- Concerns over quality
- Concerns over timeliness or delay

The following analysis looks at the relationship between respondents' responses to the above question and their responses to questions regarding:

- Claimant confidence in managing repairs themselves
- Demographics of claimant (i.e., age, income)

**Note:** this appendix only includes statistically significant results.

## Claimant confidence in managing repairs

Survey respondents were asked how confidence they felt in managing the earthquake repair process (from 'not confident at all' to 'very confident').

Table 4 looks at the relationship between confidence in managing the earthquake repair process and interaction impacts.

Table 4: Analysis of the relationship between interaction impacts and 'How confidence did you feel managing the earthquake repair process?'.

| Wellbeing Factor | Statistical Test | Statistical Statement |
|---|---|---|
| **Dealing with tradespeople** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 17.201$, $p < .001$, $r = -0.342$ |
| **Dealing with local/district council** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 13.807$, $p < .001$, $r = -0.358$ |
| **Financial stress** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 29.960$, $p < .001$, $r = -0.453$ |
| **Concerns over quality** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 29.993$, $p < .001$, $r = -0.466$ |
| **Concerns over timeliness or delay** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 32.633$, $p < .001$, $r = -0.485$ |

## Demographics

Survey respondents were asked to indicate their age (from 'less than 18 years' to '65 years or over'), combined annual income of their household (before tax) at the time of the event (from 'no income' to 'More than $200,000').

Table 5 and Table 6 look at the relationship between demographics and interaction impacts.

Table 5: Analysis of the relationship between interaction impacts and age.

| Wellbeing Factor | Statistical Test | Statistical Statement |
|---|---|---|
| **Dealing with local/district council** | Mantel-Haenszel Test Linear Association | $\chi 2(1) = 4.464$, $p = .035$, $r = -0.204$ |
| **Financial stress** | Mantel-Haenszel Test Linear Association | $\chi 2(1) = 6.898$, $p = .009$, $r = -0.218$ |

Table 6: Analysis of the relationship between interaction impacts and income.

| Wellbeing Factor | Statistical Test | Statistical Statement |
|---|---|---|
| **Financial stress** | Spearman Correlation | $r (139) = -.182$, $p = 0.031$ |
| **Concerns over timeliness or delay** | Mantel-Haenszel Test Linear Association | $\chi 2(1) = 4.155$, $p = .042$, $r = -0.177$ |

# APPENDIX D: STATISTICAL ANALYSES OF WELLBEING FACTORS

Survey respondents were asked to indicate the level of impact (from 'did not experience this' to 'this had/has a major negative impact') each of wellbeing factors (reduced energy levels, physical health impacts, stress, burnout, other mental wellbeing issues) had or continues to have on the respondent's everyday life as a result of the insurance claim and repair process.

The following analysis looks at the relationship between respondents' responses to the above question and their responses to questions regarding the claim and repair process including:

- Ability to engage contractors/professional services (i.e., availability, affordability, timeliness)
- Satisfaction with repairs (i.e., at the time of completion and completing the survey)
- Timeliness of settlement and repairs
- Claimant confidence in managing repairs themselves
- Insurance claim scope
- Settlement sufficiency
- Claim value
- Demographics of claimant

**Note:** this appendix only includes statistically significant results.

## Ability to engage contractors/professional services (i.e., availability, affordability, timeliness).

Survey respondents were asked to what extent they agreed or disagreed (from 'strongly disagree' to 'strongly agree') with the following statements in relation to engaging professional services and tradespeople for earthquake repairs:

- There was a suitable number of building contractors and tradespeople to choose from
- I was able to engage building contractors and tradespeople within a suitable time frame
- The building contractors and tradespeople I engaged were affordable
- There was a suitable number of design professionals to choose from
- I was able to engage design professionals within a suitable time frame
- The design professionals I engaged were affordable

Table 7 to Table 12 look at the relationship between engaging professional services and tradespeople and wellbeing.

Table 7: Analysis of the relationship between wellbeing factors and 'There was a suitable number of building contractors and tradespeople to choose from'

| Wellbeing Factor | Statistical Test | Statistical Statement |
|---|---|---|
| **Stress** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 12.652$, $p < .001$, $r = -.291$ |

| | | |
|---|---|---|
| **Reduced energy levels** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 15.188$, $p < .001$, $r = -.323$ |
| **Physical health impacts** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 15.646$, $p < .001$, $r = -.328$ |
| **Burnout** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 10.890$, $p = .001$, $r = -.275$ |
| **Other mental wellbeing issues** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 16.398$, $p < .001$, $r = -.337$ |

Table 8: Analysis of the relationship between wellbeing factors and 'I was able to engage building contractors and tradespeople within a suitable time frame'

| Wellbeing Factor | Statistical Test | Statistical Statement |
|---|---|---|
| **Stress** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 6.761$, $p = .009$, $r = -.215$ |
| **Reduced energy levels** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 6.514$, $p = .011$, $r = -.214$ |
| **Physical health impacts** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 7.058$, $p = .008$, $r = -.224$ |
| **Burnout** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 5.416$, $p = .020$, $r = -.197$ |
| **Other mental wellbeing issues** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 9.344$, $p = .002$, $r = -.257$ |

Table 9: Analysis of the relationship between wellbeing factors and 'The building contractors and tradespeople I engaged were affordable'.

| Wellbeing Factor | Statistical Test | Statistical Statement |
|---|---|---|
| **Stress** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 16.091$, $p < .001$, $r = -.332$ |
| **Reduced energy levels** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 21.769$, $p < .001$, $r = -.392$ |
| **Physical health impacts** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 22.624$, $p < .001$, $r = -.401$ |
| **Burnout** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 20.652$, $p < .001$, $r = -.384$ |
| **Other mental wellbeing issues** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 23.956$, $p < .001$, $r = -.412$ |

Table 10: Analysis of the relationship between wellbeing factors and 'There was a suitable number of design professionals to choose from'

| Wellbeing Factor | Statistical Test | Statistical Statement |
|---|---|---|
| **Stress** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 11.218$, $p = .001$, $r = -.409$ |

| | | |
|---|---|---|
| **Reduced energy levels** | Mantel-Haenszel Test Linear Association | χ2(1) = 8.032, p = .005, r = -.349 |
| **Physical health impacts** | Mantel-Haenszel Test Linear Association | χ2(1) = 8.620, p = .003, r = -.361 |
| **Burnout** | Mantel-Haenszel Test Linear Association | χ2(1) = 4.861, p = .027, r = -.276 |
| **Other mental wellbeing issues** | Mantel-Haenszel Test Linear Association | χ2(1) = 5.289, p = .021, r = -.281 |

Table 11: Analysis of the relationship between wellbeing factors and 'I was able to engage design professionals within a suitable time frame'

| Wellbeing Factor | Statistical Test | Statistical Statement |
|---|---|---|
| **Reduced energy levels** | Mantel-Haenszel Test Linear Association | χ2(1) = 5.347, p = .021, r = -.294 |
| **Physical health impacts** | Mantel-Haenszel Test Linear Association | χ2(1) = 5.911, p = .015, r = -.309 |
| **Burnout** | Mantel-Haenszel Test Linear Association | χ2(1) = 3.819, p = .051, r = -.252 |

Table 12: Analysis of the relationship between wellbeing factors and 'The design professionals I engaged were affordable'.

| Wellbeing Factor | Statistical Test | Statistical Statement |
|---|---|---|
| **Reduced energy levels** | Mantel-Haenszel Test Linear Association | χ2(1) = 10.323, p = .001, r = -.418 |
| **Physical health impacts** | Mantel-Haenszel Test Linear Association | χ2(1) = 6.259, p = .012, r = -.326 |
| **Burnout** | Mantel-Haenszel Test Linear Association | χ2(1) = 7.216, p = .007, r = -.353 |
| **Other mental wellbeing issues** | Mantel-Haenszel Test Linear Association | χ2(1) = 6.667, p = .010, r = -.333 |

## Satisfaction with professional services, repairs, and timeliness of repairs.

Survey respondents were asked how satisfied (from 'very dissatisfied' to 'very satisfied') they were with the following aspects of the repair process:

- The professional services (e.g., building contractors and tradespeople) they engaged
- Standard and quality of repairs at the time they were completed
- Standard and quality of the repairs since completion (i.e., current satisfaction)
- The length of time for repairs to be completed

Table 13 to Table 16 look at the relationship between satisfaction and wellbeing.

Table 13: Analysis of the relationship between wellbeing factors and satisfaction with 'The professional services I engaged'.

| Wellbeing Factor | Statistical Test | Statistical Statement |
|---|---|---|
| **Stress** | Mantel-Haenszel Test Linear Association | χ2(1) = 8.257, p = .004, r = -0.236 |

| | | |
|---|---|---|
| **Reduced energy levels** | Mantel-Haenszel Test Linear Association | χ2(1) = 8.123, p = .004, r = -.238 |
| **Physical health impacts** | Mantel-Haenszel Test Linear Association | χ2(1) = 6.824, p = .009, r = -.218 |
| **Burnout** | Mantel-Haenszel Test Linear Association | χ2(1) = 10.191, p = .001, r = -.268 |
| **Other mental wellbeing issues** | Mantel-Haenszel Test Linear Association | χ2(1) = 8.989, p = .003, r = -.251 |

Table 14: Analysis of the relationship between wellbeing factors and satisfaction with the 'Standard and quality of repairs at the time they were completed".

| Wellbeing Factor | Statistical Test | Statistical Statement |
|---|---|---|
| **Stress** | Spearman Correlation | r (148) =- .197, p =.016 |
| **Reduced energy levels** | Mantel-Haenszel Test Linear Association | χ2(1) = 6.364, p = .012, r = -.210 |
| **Burnout** | Mantel-Haenszel Test Linear Association | χ2(1) = 7.089, p = .008, r = -.222 |
| **Other mental wellbeing issues** | Mantel-Haenszel Test Linear Association | χ2(1) = 6.302, p = .012, r = -.209 |

Table 15: Analysis of the relationship between wellbeing factors and satisfaction with the 'Standard and quality of the repairs since completion (i.e., current satisfaction)".

| Wellbeing Factor | Statistical Test | Statistical Statement |
|---|---|---|
| **Stress** | Spearman Correlation | r (140) =- .204, p =.015 |
| **Reduced energy levels** | Mantel-Haenszel Test Linear Association | χ2(1) = 4.794, p = .029, r = -.187 |
| **Burnout** | Mantel-Haenszel Test Linear Association | χ2(1) = 4.146, p = .042, r = -.174 |
| **Other mental wellbeing issues** | Spearman Correlation | r (135) =- .185, p =.031 |

Table 16: Analysis of the relationship between wellbeing factors and satisfaction with 'The length of time for repairs to be completed'.

| Wellbeing Factor | Statistical Test | Statistical Statement |
|---|---|---|
| **Reduced energy levels** | Spearman Correlation | r (140) =- .193, p =.021 |
| **Other mental wellbeing issues** | Mantel-Haenszel Test Linear Association | χ2(1) = 3.901, p = .048, r = -.167 |

## Timeliness of settlement and repairs

Survey respondents were asked what year their initial claim was settled (from 2016 to 2022) and, for those that completed repairs, how long it took for repairs to be completed from the time they received their claim settlement money (from 'less than 3 months' to 'longer than 24 months').

Table 17 and Table 18 look at the relationship between the timeliness of settlement and repairs and wellbeing.

Table 17: Analysis of the relationship between wellbeing factors and 'What year was your initial claim settled'.

| Wellbeing Factor | Statistical Test | Statistical Statement |
|---|---|---|
| **Stress** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 4.804$, $p = .028$, $r = .168$ |
| **Reduced energy levels** | Spearman Correlation | $r (165) = .198$, $p = .010$ |
| **Burnout** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 4.001$, $p = .045$, $r = 0.157$ |
| **Other mental wellbeing issues** | Spearman Correlation | $r (163) = .191$, $p = .014$ |

Table 18: Analysis of the relationship between wellbeing factors and 'From the time you received your claim settlement money, how long did it take for your repairs to be completed?'.

| Wellbeing Factor | Statistical Test | Statistical Statement |
|---|---|---|
| **Stress** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 6.704$, $p = .001$, $r = .233$ |
| **Reduced energy levels** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 4.075$, $p = .044$, $r = .184$ |
| **Physical health impacts** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 4.944$, $p = .026$, $r = .202$ |
| **Other mental wellbeing issues** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 5.112$, $p = .024$, $r = .206$ |

## Claimant confidence in managing repairs

Survey respondents were asked how confidence they felt in managing the earthquake repair process (from 'not confident at all' to 'very confident').

Table 19 looks at the relationship between confidence in managing the earthquake repair process and wellbeing.

Table 19: Analysis of the relationship between wellbeing factors and 'How confident were you in managing the earthquake repair process?'.

| Wellbeing Factor | Statistical Test | Statistical Statement |
|---|---|---|
| **Stress** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 19.108$, $p < .001$, $r = -.335$ |
| **Reduced energy levels** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 12.486$, $p < .001$, $r = -.274$ |
| **Physical health impacts** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 17.007$, $p < .001$, $r = -.321$ |
| **Burnout** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 11.190$, $p = .001$, $r = -.262$ |
| **Other mental wellbeing issues** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 11.991$, $p = .001$, $r = -.270$ |

## Insurance claim scope

Survey respondents were asked how the initial scope of the insurance claim (i.e., the earthquake damage and required repairs initially assessed by insurance assessors) compared to the actual earthquake damage and repairs required (from 'there was less earthquake repair work required than the initial insurance claim scope' to 'there was more earthquake repair work required than the initial insurance claim scope').

Table 20 looks at the relationship between insurance claim scope and wellbeing.

Table 20: Analysis of the relationship between wellbeing factors and 'How did the initial scope of the insurance claim (i.e., the earthquake damage and required repairs initially assessed by insurance assessors) compared to the actual earthquake damage and repairs required'.

| Wellbeing Factor | Statistical Test | Statistical Statement |
|---|---|---|
| **Reduced energy levels** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 7.076$, $p = .008$, $r = .206$ |
| **Physical health impacts** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 7.213$, $p = .007$, $r = .208$ |
| **Stress** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 10.401$, $p = .001$, $r = .247$ |
| **Burnout** | Mantel-Haenszel Test Linear Association | $\chi2(1) = 8.858$, $p = .003$, $r = .232$ |

## Settlement sufficiency

Survey respondents were asked whether the money they received from their initial claim settled was sufficient (from 'insufficient to complete insurer-assessed earthquake repair work' to 'In excess of the insurer-assessed earthquake repair work').

Table 21 looks at the relationship between settlement sufficiency and wellbeing.

Table 21: Analysis of the relationship between wellbeing factors and settlement sufficiency.

| Wellbeing Factor | Statistical Test | Statistical Statement |
|---|---|---|
| **Reduced energy levels** | Spearman Correlation | r (166) = -.238, p =.002 |
| **Physical health impacts** | Spearman Correlation | r (165) = -.265, p <.001 |
| **Stress** | Spearman Correlation | r (170) = -.222, p =.003 |
| **Burnout** | Spearman Correlation | r (163) = -.291, p <.001 |

## Claim value

Survey respondents were asked to indicate the value of their initial claim or settlement (including GST) for damage to property (excluding land, contents, and driveways) (from 'up to $10,000' to '$200,000 and over').

Table 22 looks at the relationship between claim value and wellbeing.

Table 22: Analysis of the relationship between wellbeing factors and claim value.

| Wellbeing Factor | Statistical Test | Statistical Statement |
|---|---|---|
| **Other mental wellbeing issues** | Spearman Correlation | r (160) =- .162, p =.039 |

## Demographics

Survey respondents were asked to indicate their age (from 'less than 18 years' to '65 years or over'), combined annual income of their household (before tax) at the time of the event (from 'no income' to 'More than $200,000').

Table 23 and

Table 24 look at the relationship between demographics and wellbeing.

Table 23: Analysis of the relationship between wellbeing factors and age.

| Wellbeing Factor | Statistical Test | Statistical Statement |
|---|---|---|
| **Stress** | Spearman Correlation | r (168) =- .178, p =.020 |
| **Burnout** | Mantel-Haenszel Test Linear Association | $\chi 2(1) = 5.562$, p = .018, r = -.185 |
| **Other mental wellbeing issues** | Spearman Correlation | r (162) =- .200, p =.010 |

Table 24: Analysis of the relationship between wellbeing factors and combined annual income of household at the time of the event.

| Wellbeing Factor | Statistical Test | Statistical Statement |
|---|---|---|
| **Reduced energy levels** | Mantel-Haenszel Test Linear Association | $\chi 2(1) = 5.845$, p = .016, r = -.192 |
| **Physical health impacts** | Mantel-Haenszel Test Linear Association | $\chi 2(1) = 9.830$, p = .002, r = -.249 |