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Financial Condition Report 2019

Accident Compensation Corporation
Te Kaporeihana Āwhina Hunga Whara

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An online version of this report can be found at ***www.acc.co.nz/about-us/corporate***

Executive summary

An independent and professional overview of ACC's financial position

Our role as actuaries is to make sure that ACC's financial position is transparent and clear. We focus on the ACC Scheme's operations, financial condition, liabilities and risks.

We write this report independently every year and recommend changes and improvements where needed. This report relates to the financial year ended 30 June 2019.

We do this because we're aware how important the ACC Scheme is for New Zealanders and this report has a significant role in the financial management of the Scheme. We also write this report because legislation asks us to. Around one-third of New Zealanders are injured every year and make claims to ACC. So it's vital that the Scheme is financially healthy and treats clients and levy and tax payers fairly.

All insurance schemes produce a similar report. Like all actuaries, we comply with the New Zealand Society of Actuaries' professional standards. However, technically ACC isn't like other, private sector insurers; it's a statutory monopoly with the right to raise levies. So we've aligned with professional standards to the extent that they make sense for ACC. In particular, for considering solvency, we've taken into account the Government's funding policies for the ACC accounts.

The Scheme exists to prevent injuries and rehabilitate and compensate injured people, and ACC is working to improve customers' experiences. To succeed in these areas, the Scheme must be financially viable and manage risks.

That's what this report tells you.

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December 2019

ACC's overall financial condition is under pressure

It's important that ACC's financial condition is sound and resilient to allow the Scheme to:

- invest in injury prevention, in partnership with other agencies
- provide the right rehabilitation and compensation services to injured people, working with treatment and service providers and the wider health sector
- operate at a cost that's reasonable and sustainable for the people who fund the Scheme – levy and tax payers.

In the past year ACC has successfully delivered a number of programmes under its Integrated Change Investment Portfolio (ICIP) that have reduced operational risks. This has set the foundations for the delivery of improved customer experiences and outcomes in the future.

In 2018/19 ACC's overall financial condition deteriorated. Falling interest rates, higher-than-expected claim costs and underfunding contributed to the financial pressure. This year the Scheme recorded a $9,024 million deficit against a budgeted deficit of $392 million.

Funding positions are lower, but ACC can still manage and pay claims

Funding positions for all accounts reduced significantly during the year, mostly due to falling interest rates. If interest rates keep falling this will put further pressure on funding positions. Movements in interest rates are outside of ACC's control.

For the levied accounts, the funding positions for the Work Account and Earners' portion of the Treatment Injury Account are at or above target. The funding ratios for the Earners' Account and Motor Vehicle Account are below the 105% target, but all levied accounts remain above 90%.

The funding ratio for the fully funded portion of the Non-Earners' Account has deteriorated from 76% to 60%. For the Non-Earners' portion of the Treatment Injury Account, the funding ratio has reduced from 81% to 61%. These are both well below the 88% target.

Under the Government's funding policy, levies don't increase sufficiently to maintain funding positions in the short term due to the capping of annual increases. For the Non-Earners' Account and the Non-Earners' portion of the Treatment Injury Account, the pre-approved appropriation increase is much lower than needed to maintain the funding positions. So it's likely that the funding positions for all accounts will continue to decrease in the short term.

Claims can continue to be paid for the foreseeable future. However, large or enduring funding deficits can shift the cost burden of claims to future generations, compromising the policy intent to fully fund these accounts.

Future funding positions are also at risk

Uncertainty in the economic environment drives significant volatility in projected future funding positions and levy rates and appropriations. It's likely that the Earners' Account and Motor Vehicle Account funding ratios will remain below 100% in the medium term. The Motor Vehicle Account is the most likely of the levied accounts to remain under the funding target due to it having the lowest opening funding position and a larger proportion of long-term claims.

There is a particular risk for the Non-Earners' Account given that its funding position has been below target since 30 June 2016. The 2019/20 approved amount is less than 3% above the estimated $1,426 million of cash payments to be made during 2019/20 for all non-earner claims. The 2020/21 pre-approved amount is lower than the estimated cash payments for that year. This means the appropriation amount will need to increase soon, just to cover expected increases in annual cash payments.

New-year costs forecast for the next levy/appropriation rounds are $1.4 billion (31%) higher than existing levies and appropriations. Motor Vehicle levies are expected to require eight years of increases, at the cap, before they cover new-year claim costs and the funding position can start improving. Similarly, the Earners' Account levies are expected to be capped at 15% for four years and the Work Account levies for two years. Even with these increases, levy rates remain below the highest historical levels. Higher levies were needed before 2014 because they included an amount to bring the unfunded pre-1999 pay-as-you-go (PAYG) liability to full funding.

Falling interest rates had a major impact

Funding positions are very sensitive to market movements that affect investment assets and the outstanding claims liability (OCL) differently. Partial matching of assets to liabilities reduces the impact, but beyond that the effects of interest rates on funding positions aren't in ACC's control.

Falling interest rates during 2018/19 drove an increase in the OCL of $11,152 million, partly offset by investment returns of $5,092 million. This year's investment return rate, while much higher than the risk-free rate, was below the market-based benchmark for the first time since 1995. This was due in part to equity portfolio returns being lower than the benchmark indices. Also, the mix of long-term bonds ACC held differed from the benchmark asset allocation which added to the under-performance compared to the benchmark.

The total economic contribution to this year's deficit was $6,807 million. In addition, the change in economics explains $300 million of the $1.4 billion gap between forecast new-year claim costs and existing levies/appropriations.

Claim volumes and costs were higher than expected

This year the OCL increased by $575 million more than originally forecast due to higher-than-expected claim volumes and costs. This is known as an OCL strain and excludes impacts of economic changes. In the past five years (2014/15 to 2018/19), the combined OCL strain has been $2.6 billion. An OCL strain has occurred for many payment types because claim volumes are greater than expected and people are staying on the Scheme for longer than expected.

Some payment types have reduced the OCL strain. In the past five years superimposed inflation has been lower than expected for elective surgery and medical claims.

The major risks to the OCL that require continued monitoring are:

- social rehabilitation, such as aids and appliances, child care and home help – these supports are often provided over a client's lifetime, so small changes in amounts provided have significant impacts on the OCL
- weekly compensation – changes in the duration of weekly compensation provided can have a big impact on the OCL, particularly for longer-term claims
- sensitive claim volumes and costs growth – increasing awareness of the support available for sensitive claim clients has led to increases in the number of newly-reported sensitive claims. The rehabilitation needs of these clients are often complex and long term
- elective (non-emergency) surgery – changes in medical technology and the associated increases in costs for surgery can affect the OCL. This is compounded by the increasing need for repeat surgeries to replace worn implants and devices
- medical services, such as those provided by general practitioners – while the individual cost of these services is generally low, the volume provided makes this an area that can affect the OCL.

The increase in new-year claim costs from higher-than-expected claim volumes and costs contributes $200 million to the $1.4 billion gap between forecast new-year claim costs and existing levies/appropriations.

Approved funding for 2019/20 was below recommendations

The amount approved by Cabinet for the 2019/20 Non-Earners' appropriation was lower than recommended. The Government has contributed less than the cost of new claims incurred for the past five years. The funding ratios for the fully funded portions of the Non-Earners' Account and the Non-Earners' portion of the Treatment Injury Account are below last year's, and below the 88% target.

The levy rates for 2019/21 were confirmed by the Government in mid-December 2018. In line with the Board's recommendation, the Work Account levy decreased. But the Earners' and Motor Vehicle Account levies remained unchanged despite a recommendation for these to be raised.

More focus is needed to ensure spend is achieving outcomes for clients

This year's and previous years' OCL strains highlight the need for client outcomes to be understood and measured. ACC is spending more but it's not always clear that outcomes have improved sufficiently to match the increased spend. Consistent measurement of the impacts on client outcomes, in line with our claims management recommendation from previous reports, needs to progress this year.

The payment types contributing significantly to the 2018/19 OCL strain are sensitive claims, weekly compensation and social rehabilitation.

Sensitive claims: The number of newly reported sensitive claims continued to increase above expectations this year. Long-term sensitive claim clients are also remaining on the Scheme for longer than projected. It's not clear when growth in sensitive claims will stabilise.

The review of the Integrated Services for Sensitive Claims contract was scheduled to be completed in early 2019. The scope of the review has been expanded to include a strategic component focused on outcomes being delivered. The review is ongoing.

Weekly compensation: Claim volumes are higher than expected because short-term rehabilitation rates have deteriorated. Investigations carried out this year have highlighted the impacts of external factors on ACC's operations, changes in medical certification habits, issues regarding staff capacity during change, and the opportunity to influence client, employer and staff behaviour positively through better engagement. ACC's new case management model, Next Generation Case Management, will address some of these. Developing actions to address other drivers must progress in the coming year to improve rehabilitation outcomes for clients.

Serious and non-serious injury social rehabilitation: The social rehabilitation OCL strain has highlighted an absence of evidence in some cases that rehabilitation programmes are helping clients to achieve their intended outcomes. Client independence outcomes and capital spend are also not being adequately linked. A small change in the average amount of long-term care provided for seriously-injured clients has a large impact on the OCL. In the past we've seen cycles of increasing care hours, followed by stabilisation, followed by increases.

An investigation is underway into capital expenditure with the aim of improving outcomes for clients and helping to maintain Scheme sustainability. Ensuring that ACC's capital purchasing policies are fair and being applied consistently and transparently nationwide will be key to achieving these aims.

An investigation into how the training for independence programme is helping clients to achieve their independence outcomes is in progress. This is in response to significant payment growth in the past two years. Behavioural economics principles are being applied to generate insights into behaviour and decision-making and how future contracts or services could be better developed. If this is successful, this approach could be applied to other, larger payment types.

ACC requires a framework to assess customer outcomes

There are other areas where we've seen increased spending but no clear evidence of how this has led to delivering improved customer outcomes. A strategic, organisation-wide approach for assessing the effectiveness of all services would be helpful. We recommend that ACC develop an outcomes framework that reflects ACC's role in supporting people injured in New Zealand. This is in addition to and in line with our claims management recommendation on developing a framework for consistent measurement and monitoring of client outcomes.

Some of the areas where this would help are:

Equity for Māori: Māori have proportionately more serious injury claims and sensitive claims than non-Māori. They also have proportionately fewer non-serious medical and surgical claims.

The strategic goal of Whāia Te Tika, ACC's Māori Strategy, is to create improved outcomes for Māori. There is work underway to deliver the strategy. This is at too early a stage to have delivered significant, measurable improvements in outcomes for Māori. ACC needs to find a way to deliver culturally appropriate, evidence-based, cost-effective services to, and with, Māori. This is important work that has been prioritised in 2019/20 and needs to progress.

It's likely that if access to the Scheme improves for Māori, claim costs will go up in the future. This isn't an issue as long as the increased spend is delivering the right outcomes.

It is also possible that costs of delivering kaupapa Māori services will be different to costs of mainstream services. Also, it may not be solely Māori clients who choose this type of service, once it becomes available. ACC will need a clear understanding of the outcomes each type of service is aiming to deliver, and a clear way to measure these outcomes.

From August 2017 to October 2019, a Whānau Ora approach was trialled to deliver a two-year pilot to support seriously-injured clients. No financial analysis was undertaken before the pilot commenced. Payments increased significantly for these clients. A qualitative review was done at the completion of the programme, with positive feedback from the clients. It's not yet clear, though, how the outcomes achieved relate to improved long-term rehabilitation pathways. It's also not yet clear exactly what evidence base was used to draw some of the conclusions on outcomes.

Health Sector Strategy: The Health Sector Strategy is focused on collaborating with providers to support clients to recover more quickly and effectively from injury. Pilots delivered under the ICIP are testing outcomes-based purchasing, under which providers are accountable for client outcomes rather than delivering episodes of care.

In the short term, the cost of purchasing for outcomes is anticipated to be more expensive to ACC than the purchasing of individual services that happens currently. Better rehabilitation outcomes should lower the expected lifetime costs, giving an expected net benefit in the longer term.

To ensure success, appropriate measures of outcomes need to be in place and reported on. Contracts with providers need to be set up in such a way as to incentivise effective, efficient and sustainable rehabilitation outcomes for clients.

Injury prevention programme monitoring: The measurement approach for the Falls and Fractures programme reflected the population-based systems approach of the intervention. However, we've been unable to fully determine the ACC claims impact because individual data was not collected. This has made it difficult to determine the benefits to date, or expected in future, from what is a major injury prevention investment.

Benefits that have been identified to date are tracking behind expected, due in part to financial pressures now faced by DHBs outside ACC's control. These pressures didn't exist at the time of original investment and mean ACC needs to continue to invest to sustain the current service levels. Future decisions on investment will be more difficult if there continues to be lack of certainty around benefits and outcomes.

ACC has made progress with understanding reviews

As the Scheme is compulsory, it's particularly important that ACC assesses cover and access to entitlements correctly. Clients who are dissatisfied with ACC cover or entitlement decisions can ask for reviews.

ACC has made significant improvements in how it handles reviews once lodged. There are also some promising initiatives in several key areas that could reduce the need for clients to lodge reviews or could improve the quality and consistency of clinical decision-making among providers and ACC clinicians. However, more is needed to understand in greater detail what drives a client to lodge a review, or what causes a review decision to go in favour of the client. This understanding should then translate to actions, where needed, and we've reworded our previous recommendation on reviews to clarify this.

The number of elective surgery requests that ACC declines has remained stable, but the proportion of reviews of these decisions found in favour of clients is increasing. Elective surgery decisions are a focus of the work during 2019/20 to understand the drivers of reviews in more detail.

ACC's transformation has achieved significant milestones

ACC is transforming to deliver better customer experiences and outcomes. Change is being delivered through the ICIP. ACC has achieved a lot of foundational work under the ICIP this year, with a significant investment in modernising systems to minimise operational risks. The programmes that will deliver the most improvements in client, operational and financial outcomes are in the early stages of delivery.

As signalled in last year's report, such a large transformation can be disruptive. All but one of the ICIP performance indicators for 2018/19 are below target. The indicators measure performance across the whole organisation, not just the small portion that was operating under the new ways of working as at 30 June 2019. Return-to-work rates have fallen in line with the weekly compensation OCL strain. While it's reasonable to expect performance to drop during a time of major change, the issues must be addressed quickly. Claim cost savings from improved rehabilitation outcomes are expected to emerge in the near future.

In 2019/20 Next Generation Case Management will be rolled out around the country. At the same time Health Sector Strategy pilots will be implemented. These are both critical projects for ACC, with the potential to deliver significantly improved customer experiences and outcomes. These benefits have been included in levy and appropriation requests. While they are tracking behind projections, the organisation is focused on achieving them. If these savings aren't made, larger increases will be included in future funding recommendations.

More than 11,000 claims were prevented in 2018/19

ACC continued to prevent injuries in 2018/19. Injury prevention is focussed on high-cost and high-volume claims. There were an estimated 11,253 claims saved against a target of 11,000. Injury prevention also helps to reduce levies and appropriations.

At 30 June 2019, based on information available at the time, ACC reported a return on investment (ROI) of $1.81 for every $1 spent. The ROI for the Falls and Fractures programme has reduced significantly after 30 June 2019 due to re-evaluation of benefits. This will reduce the $1.81 ROI by 9 cents.

This year the Board endorsed the approach to delivering the new injury prevention strategy. The strategy aims to enhance the effectiveness of ACC's injury prevention through a broader scope, a faster speed of delivery and increased innovation. The new strategy aims to focus on people and how their injury risks change during their lifetimes.

New measures and targets have been introduced for the injury prevention portfolio. We've been unable to establish that these more detailed measures are in all cases fully developed and well defined. Before we can close our earlier recommendation on developing injury prevention targets, more work is needed on the measurement framework to ensure that it clearly supports and incentivises the delivery of the strategy to reduce the incidence and severity of injury in New Zealand.

What actions are needed?

We have a number of broad recommendations in this report that target claims growth and customer outcomes. We haven't seen the need to make more specific recommendations this year. In making this judgement we are relying on actions the organisation already has underway or planned. These are:

- A strategic review of the sensitive claims services.
- Investigations into weekly compensation payment growth.
- A review of social rehabilitation capital expenditure.
- Monitoring of social rehabilitation care hours to prevent unnecessary increases.
- Improvements to provider contracts and development of robust service entry criteria for the training for independence service.
- A cost/benefit review of the Whānau Ora pilot.
- A focus on achieving projected benefits from the ICIP, particularly those to be delivered by the Health Sector Strategy and Next Generation Case Management.
- Exploring ways to better measure and attribute benefits for longer-term strategic and infrastructure investments in injury prevention.

If these actions don't progress adequately, we will likely make more targeted recommendations in future reports.

Recommendations

We've made various recommendations in this and earlier Financial Condition Reports, and the open recommendations are detailed below. These relate to treatment injury, reviews and claims management.

We consider that the Board and Management should, to the extent possible, continue to take action to support the resolution of these recommendations. We've noted the roles for each action.

Owing to the Scheme's long-term nature, we expect that many of these recommendations will require longer than a year to resolve. However, more focus is needed to progress the existing recommendations, noting that they've all been open for a number of years now.

RECOMMENDATION MADE IN THIS REPORT

We've made one new recommendation in this year's report to develop a strategic organisation-wide outcomes framework. We've seen increased spending in several areas but no clear evidence of how this has led to delivering improved customer outcomes. This is in line with our claims management recommendation on developing a framework for the consistent measurement and monitoring of client outcomes.

Strategic outcomes framework

1. Develop a customer outcomes framework for defining and assessing the effectiveness of all ACC services. This should reflect ACC's role in supporting people in New Zealand, including fulfilling ACC's obligations under Te Tiriti o Waitangi. This should also incorporate outcomes within the context of ACC's strategic outcomes:
   - Reduce the incidence and severity of injury.
   - Rehabilitate injured people more effectively.
   - New Zealand has an affordable and sustainable Scheme.

   [Responsibility: Chief Customer Officer]

RECOMMENDATIONS STILL OPEN FROM PREVIOUS REPORTS

Progress against our open claims management recommendation has been slow. In the meantime, we've seen areas of strain emerging that could have been mitigated if a regime as noted in this recommendation had been in place.

We're not making any further claims management recommendations due to the key management initiatives already noted in this executive summary. These include the reviews of the sensitive claims service and social rehabilitation capital expenditure.

Treatment injury

2. Develop a framework for aligning financial and performance incentives, in partnership with the health sector, for reducing the incidence and severity of treatment injuries, with a plan for implementation. This should include contracting mechanisms and other forms of incentives, such as consideration of levies.
   [Responsibility: Chief Customer Officer]

   This was recommendation 1 in the 2017 report.

Reviews of cases and decisions

3. ACC should strengthen and formalise its framework to understand and systemically act on:
   - what drives a client to lodge a review
   - what causes a review decision to go in favour of the client.

   [Responsibility: Chief Operating Officer, supported by: Chief Customer Officer]

   This is a rewording of recommendation 5 in the 2017 report.

Claims management

4. Implement a formal regime, including the establishment of baselines, for monitoring and measuring the effectiveness of changes to claims management approaches, and the impact of changes to client supports provided, in improving client, operational and financial outcomes.
   [Responsibility: Chief Operating Officer, supported by: Chief Risk and Actuarial Officer/ Chief Financial Officer]

   This was recommendation 6 in the 2017 report.

Detail on the actions taken so far on these recommendations, and the reasons we've carried them forward to this report, is in the ***Progress against previous recommendations*** section.

Progress against previous recommendations

Our 2018 report contained five recommendations

The 2018 Financial Condition Report (FCR) contained no new recommendations. There were five recommendations remaining open from previous years:

- Two were expected to close in 2018/19.
- Three were carried forward from the 2017 FCR.

We report on the progress of these recommendations

Many recommendations need more than a year to resolve, so we present them in three categories:

- Three remain open, with one reworded. These recommendations are included in this report's ***Executive summary***.
- One is expected to close in 2019/20.
- One has been closed.

Management actions follow each recommendation. Some have been completed and some are underway. We then confirm the status of the recommendation.

Where a recommendation hasn't closed, we give our view on additional actions needed.

Recommendations remaining open

RECOMMENDATION 1 IN 2017 FCR – TREATMENT INJURY

Develop a framework for aligning financial and performance incentives, in partnership with the health sector, for reducing the incidence and severity of treatment injuries, with a plan for implementation. This should include contracting mechanisms and other forms of incentives, such as consideration of levies.
[Responsibility: Chief Customer Officer]

Management actions:

The evidence review, reported in the 2018 FCR, found that financial incentives are more likely to be effective if they're aligned with reputational incentives and regulations.

ACC has two reputational incentives in place, and work has been undertaken to improve the effectiveness of both:

- **Publishing treatment injury data:** This has been published for three years and now includes public hospitals, private surgical hospitals, and general practice settings to cover over 85% of all treatment injuries.
- **Risk of harm reporting:** A refreshed policy was completed with a more effective approach having a clear purpose to provide information to support the prevention of harm to patients in the health sector. This was developed through extensive consultation across the health sector, health agencies, professions and regulators.

Additional study has been undertaken to identify financial incentives used by medical indemnity insurers and organisations in other countries. This is helping to inform the development of a framework.

This recommendation is still in progress and has been held open for the coming year.

Progress against this recommendation was limited during the year due to a significant change process in the treatment injury prevention area, resulting in resource constraints. The change process has now concluded, and we expect this to progress in 2019/20.

In order to close this recommendation, the framework requirements outlined in the recommendation description will need to be developed, along with the plan to implement them.

RECOMMENDATION 5 IN 2017 FCR – REVIEWS OF CASES AND DECISIONS

(This was a continuation of recommendation 4 made in the 2016 FCR)

Undertake analysis to identify the appropriate level of reviews that ACC should receive, given the complexity of the decisions made. Once this is established, appropriate actions should be identified to ensure that the number of reviews lodged is, and remains, at this level.
[Responsibility: Chief Operating Officer]

Management actions:

As mentioned in the 2018 FCR, it was determined that there was no 'like comparison' for ACC in review data. Without a suitable comparison, a self-assessment of ACC's review process against best-practice guidelines was completed instead.

A report was developed based on results of the assessment and recommendations from the 2016 Government-commissioned independent review of ACC's dispute resolution system. The report identified a case for change for the review process to be more aligned with best practice, and many of these improvements have been made.

A navigation service was also recently established. This is a free, independent service and is designed to help clients navigate ACC's processes, or to better understand or dispute a decision. The service is a mixture of phone, web-based and face-to-face advice and support up to, but not during, a formal review hearing.

Collecting and collating more detailed data at the review stage and via other client feedback mechanisms will be pivotal to understanding the root causes of a client's wish for a review. There is currently a plan to do this.

This recommendation is ongoing and has been reworded to clarify what remains in order to close it.

ACC has made significant improvements in how it handles reviews once lodged. There are also some promising initiatives underway that could reduce the need for a client to lodge a review or improve the quality and consistency of clinical decision-making among providers and ACC clinicians.

However, we believe ACC needs to do more to understand in greater detail what drives a client to lodge a review, or what causes a review decision to go in favour of the client. This understanding should then translate to actions, where needed. Appropriate data collection and analysis could help inform action to reduce any unnecessary review activity, and to improve the quality, consistency and transparency of decision-making.

We're rewording our previous reviews recommendation as follows:

ACC should strengthen and formalise its framework to understand and systemically act on:

- what drives a client to lodge a review
- what causes a review decision to go in favour of the client.

[Responsibility: Chief Operating Officer, supported by: Chief Customer Officer]

We expect such a framework to include processes to:

- conduct ongoing analysis to identify root causes
- take action where appropriate to mitigate those root causes
- monitor the effectiveness of those actions and refine where needed

to ensure the claim decision-making experience for clients is as clear and fair as possible.

RECOMMENDATION 6 IN 2017 FCR – CLAIMS MANAGEMENT

(This was an amendment of recommendation 8 made in the 2016 FCR)

Implement a formal regime, including the establishment of baselines, for monitoring and measuring the effectiveness of changes to claims management approaches, and the impact of changes to client supports provided, in improving client, operational and financial outcomes. [Responsibility: Chief Operating Officer, supported by: Chief Risk and Actuarial Officer, Chief Financial Officer]

Management actions:

As noted in the 2018 FCR, there is a variety of areas where changes in the claims management approach or changes in the way supports are provided to clients are implemented, and there are different methods for monitoring the impacts on client, operational and financial outcomes.

Planning is underway to formalise the monitoring and measurement of outcomes from claims management activities.

This recommendation is still in progress and has been held open for the coming year.

There are examples throughout this report of where this framework would have been beneficial.

They include:

- review of the sensitive claims services
- investigations into weekly compensation payment growth
- review of social rehabilitation capital expenditure
- monitoring of social rehabilitation care hours to prevent unnecessary increases
- review of the training for independence service
- cost/benefit review of the Whānau Ora pilot.

For each of these we haven't been able to establish fully what outcomes were planned and are being achieved. It is therefore unclear whether the cost is appropriate, or if improvements are needed to designs or processes.

This recommendation will close when a formal regime for measuring the effectiveness of ACC's delivery of claims management services has been agreed. This includes having plans for implementation and must include disciplines around monitoring both the client and financial outcomes of investments.

We believe a monitoring framework should incorporate:

- purpose – a clear statement of what the process is aiming to achieve in terms of client and financial outcomes
- measures – include a range of associated measures for these outcomes. In some cases the outcome will be straightforward to measure while others may require a combination of quantitative and qualitative measures. This requires a balance between having enough measures to provide the full story and avoiding complexity. Identifying the key performance indicators for summary reporting is also important
- baseline – ensure that the starting point is fully captured for comparison, and that the effects of the process can be identified. This should also be the case for any adjustments that are made along the way
- feedback – regular review of how progress is tracking and whether any adjustments need to be made. This should include adjustments to the key performance indicators and underlying measures as appropriate.

Recommendations expected to close in 2019/20

RECOMMENDATION 4 IN 2017 FCR – INJURY PREVENTION

(This was a continuation of recommendation 3 made in the 2016 FCR)

Develop a medium- to long-term target for the intended overall impact on injury reduction as a result of ACC's injury prevention activities. Ensure measurement of impact appropriately allows for broader benefits of injury prevention activities. [Responsibility: Chief Customer Officer]

Management actions:

The updated injury prevention strategy has a number of new performance measures that have been approved by the Board. The measures link to the Service Agreement and have stretch targets that reflect a whole-of-life approach and product development cycle. Targets are set from year one through to year 10 and will be reported on and linked with individual performance objectives. Some of these are outlined in the following paragraphs.

The 10-year target set for claim reduction from injury prevention (63,000) reflects the overall intent of the strategy to flat-line the projected 2.8% growth in claims. This is a significant step up from the current target of 11,000 claims.

There are specific measures for injury prevention to target claims that drive significant harm and Scheme liability (5% of claims represent 80% of the Scheme liability). ACC is part of the National Road Safety Strategy, which has a 10-year target of reducing deaths and serious injuries by 40%, providing $150 million in annual cost savings. The treatment safety portfolio also has a target of reducing neonatal encephalopathy injuries (serious brain injuries to babies suffered during birth) by 25%. These injuries can cost up to $60 million per claim.

This recommendation is ongoing, with actions planned that will likely mean it's closed in the coming year.

We've been unable to establish that the more detailed measures under the strategy are in all cases fully developed and well-defined. Importantly, there is no well-documented benefit profile to explain how ACC expects the $2.4 billion of benefit promised under the strategy to emerge in future, or how that translates to ROI measures for the different types of investment.

Before we can close our recommendation, more work is needed on the measurement framework to ensure that:

- it clearly supports and incentivises the delivery of the strategy
- it's internally consistent
- its components are clearly defined and documented

- clear ROI targets are set for each class of investment and support the over-arching target set out in the *Statement of Intent*.

Recommendations closed

RECOMMENDATION 5 IN 2016 FCR – CLAIM EXPERIENCE

Adjust rehabilitation performance measures to take account of changes in case mix, such as the age of the client and complexity of injury.
[Responsibility: Chief Operating Officer, supported by: Chief Risk and Actuarial Officer]

Management actions:

A measurement framework was developed and implemented as part of NGCM. Claims are allocated to one of four claims management work streams by looking at age, injury profiles, expected rehabilitation timeframes and variability around costs.

Baselines and targets are set annually for each work stream and overall. Measurement is done at a lower level (seven 'claim types'), which will give the ability to identify where case mix has affected performance against target.

Understanding how the mix of these claim types might change in the next year will be an input to the work stream targets for that year.

This recommendation has been closed.

How ACC operates and how it's changing

Summary

- ACC is a unique scheme. Its purpose is to reduce injuries and to rehabilitate and compensate injured people, while remaining affordable.
- As a Crown entity, ACC must operate openly, fairly and transparently. ACC Management and leadership are accountable to a Board, and the Board's accountable to the Minister for ACC.
- Risk culture refers to the behaviours in an organisation that support taking the right risks to improve customer experiences, meet stakeholder expectations, and protect its assets. ACC's risk culture was reviewed in 2018/19. The purpose of conducting the review was to establish a baseline across ACC against which to assess its risk culture status in the future. ACC's executive is considering actions in response to support a more embedded and mature risk culture.
- The strategic goal of Whāia Te Tika, ACC's Māori Strategy, is to create improved outcomes for Māori. There is work underway to deliver the strategy. This is at too early a stage to have delivered significant, measurable improvements in outcomes for Māori. ACC needs to find a way to deliver culturally appropriate, evidence-based, cost-effective services to, and with, Māori. This is important work that has been prioritised in 2019/20 and needs to progress.
- To perform better, ACC is transforming customer experiences. Change programmes within the Integrated Change Investment Portfolio (ICIP) are designed to put the customer at the centre of everything ACC does. ACC has achieved a lot of foundational work under the ICIP this year, with significant investment in modernising systems to minimise operational risk. The programmes that will deliver the most improvements in client, operational and financial outcomes have yet to come.
- As signalled in last year's report, such a large transformation can be disruptive. Performance is showing signs of strain. With this much change it's not surprising to see some short-term deterioration in performance. Claim cost savings from improved rehabilitation outcomes are expected to emerge in the near future. It's important that this happens.
- In 2019/20 ACC's new case management model, Next Generation Case Management (NGCM), will be rolled out around the country. At the same time health sector strategy pilots will be implemented. These are both critical projects for ACC. Performance must be managed during this period and ACC must start to see financial benefits coming through. Levy and appropriation requests include the expected financial benefits of the ICIP, but these are tracking behind projections. If these savings aren't made, larger increases will be included in future funding recommendations.
- ACC continued to prevent injuries in 2018/19. Injury prevention is focussed on high-cost and high-volume claims. There were an estimated 11,253 claims saved against a target of 11,000. Injury prevention also helps to reduce levies and appropriations.
- The Falls and Fractures programme is a major injury prevention investment. The measurement approach for this programme reflected the population-based systems approach of the intervention. However, we've been unable to fully determine the ACC claims impact because individual data wasn't collected. This has made it difficult to determine the benefits to date or expected in future. External funding pressures faced by DHBs and better understanding of how long the interventions continued to reduce an individual's risk of a fall-related injury also contributed to the need to re-evaluate the ROI for this programme.
- At 30 June 2019, based on information available at the time, ACC reported an injury prevention return on investment (ROI) of $1.81 for every $1 spent. The ROI for the Falls and Fractures programme has reduced significantly after 30 June 2019 due to the re-evaluation of benefits. This will reduce the $1.81 ROI by 9 cents. Future decisions on investment will be more difficult if there continues to be lack of certainty around benefits and outcomes.
- This year the Board endorsed the approach to bring in the new injury prevention strategy. The strategy aims to enhance the effectiveness of ACC's injury prevention through a broader scope, faster speed of delivery, and increased innovation.
- New measures and targets have been introduced for the injury prevention portfolio. We've been unable to establish that these more detailed measures are in all cases fully developed and well defined. Before we can close our earlier recommendation around developing injury prevention targets, more work is needed on the measurement framework to ensure that it clearly supports and incentivises the delivery of the strategy.
- ACC has made significant improvements in how it handles reviews once lodged. There are also some promising initiatives in several key areas that could reduce the need for a client to lodge a review or improve the quality and consistency of clinical decision-making among providers and ACC clinicians. However, a deeper understanding is needed of what drives a client to lodge a review, or what causes a review decision to go in favour of the client. From greater understanding, actions should be identified where needed. We've reworded our previous recommendation on reviews to clarify this.
- The number of elective surgery requests that ACC declines has remained fairly stable, but the proportion of reviews of these decisions found in favour of clients is increasing. Elective surgery decisions are a focus of the work during 2019/20 to understand the drivers of reviews in more detail.
- We recommend ACC develop a customer outcomes framework for defining and assessing the effectiveness of all ACC services. This should reflect ACC's role in supporting people in New Zealand, including fulfilling ACC's obligations under Te Tiriti o Waitangi. This should also incorporate outcomes within the context of ACC's strategic outcomes:
  - Reduce the incidence and severity of injury.
  - Rehabilitate injured people more effectively.
  - New Zealand has an affordable and sustainable Scheme.

How ACC operates and is accountable

ACC has three core functions

ACC is the Crown entity set up by the Accident Compensation Act 2001. The Scheme provides no-fault personal injury cover to all New Zealanders, and overseas visitors to New Zealand.

The Scheme has three core functions:

1. Help people to stay safe and not injure themselves or lessen the impacts on people when injuries do happen.
2. Rehabilitate and compensate people after they've been injured and help them to become independent again.
3. Make sure the Scheme is affordable and sustainable.

It has clear governance, management and monitoring

As a Crown entity ACC has a governance board, appointed by the Minister for ACC. The Board delegates day-to-day management and leadership to the Chief Executive. Each year the Minister and the Board agree on performance targets.

The Ministry of Business, Innovation and Employment (MBIE) and the New Zealand Treasury monitor ACC. MBIE oversees policy and the Treasury monitors performance and Board appointments for the Minister.

ACC is accountable through the Board to the Minister. More details are in ACC's:

- *Statement of Intent 2018-2022*
- *Service Agreement 2019/20*
- *Annual Report 2019*.

ACC covers a wide range of injuries

Every year around one-third of New Zealanders are injured and lodge claims with ACC. About 90% of injuries are minor; people only need medical treatment and recover quickly. At the other extreme, a few hundred people every year are badly injured. Their injuries leave them permanently impaired. These seriously-injured people usually require social rehabilitation support, such as home or nursing care, to various levels throughout their lives.

ACC financially supports medical treatment and rehabilitation for clients covered by the Scheme. It also compensates earners for loss of income as they recover, or their dependants if they die. The Scheme also covers mental injuries in certain situations. Injured children receive compensation for loss of potential earnings if they remain incapacitated from when they turn 18, and in other specific circumstances.

ACC operates five accounts. Each is designed to align how it's funded with where injury risks lie. Those funding each account bear its risks and rewards.

ACC has worked on embedding its risk management framework and processes

This year ACC has delivered activities designed to implement ACC's risk strategy, including:

- the Board considering risk appetite as part of material decisions
- resetting the compliance maturity roadmap
- simplifying the enterprise risk management framework to align better with current practice standards
- embedding risk support in the change programme.

The Five Lines of Assurance risk model was implemented during 2017/18. In 2018/19 the model is being embedded as part of ACC's everyday way of working.

An effective risk culture is important

Risk culture refers to the behaviours in an organisation that support taking the right risks to improve customer experiences, meet stakeholder expectations and protect its assets. ACC's risk culture was reviewed in 2018/19. The purpose of conducting the review was to establish a baseline across ACC against which to assess its risk culture status in the future. ACC's executive is considering actions in response to support a more embedded and mature risk culture.

ACC's wider context

Government priorities and the Scheme

The Minister for ACC has conveyed the following expectations for ACC for this year:

- Contribute to the wellbeing of New Zealanders.
- Improve services and outcomes for Māori and start reporting on specific performance measures for this.
- Be client-centric, providing clients with the right service at the right time for successful rehabilitation in an efficient and effective way.
- Work collaboratively with others to deliver injury prevention investments that improve the lives of New Zealanders.

Legislative change and the Scheme

The Government is undertaking major reviews of the health and welfare systems. These include the Health and Disability System Review, which is due to present its final report by the end of March 2020. The Government has decided not to progress any significant legislative change to ACC until this is complete.

The Government has previously signalled that it will review a number of ACC legislative settings when this has happened. Changes to these settings could result in an increase in claim costs in excess of $100 million per year.

ACC contributes to the wellbeing of New Zealanders

The Government's wellbeing approach is about giving people the capabilities to live lives of purpose, balance and meaning to them. Wellbeing encourages the public sector to have a broader and longer-term view of the impact it has on customers' experiences and outcomes.

The work ACC does to reduce injuries, to provide rehabilitation, treatment and financial support to injured people, helps improve New Zealanders wellbeing. In the past few years ACC has also been making further changes to be more client-centric and improve long-term customer outcomes. This work includes Whāia Te Tika, the new injury prevention strategy and the ICIP. These are all discussed below.

Whāia Te Tika

The strategic goal of Whāia Te Tika, ACC's Māori Strategy, is to create improved outcomes for Māori.

It has five focus areas:

1. Improving access of Māori to ACC services so disparities and barriers are removed. This means Māori can get the right services at the right time from ACC.
2. Prevention of injuries for Māori: ACC's injury prevention initiatives recognise and actively target the risks faced by Māori.
3. Improving rehabilitation outcomes for Māori in line with all sectors of the population.
4. Building trust and confidence of Māori in ACC: Māori need to experience ACC's services in culturally appropriate ways.
5. Building ACC's cultural capability and ensuring ACC has a culturally diverse workforce and leadership.

There is work underway to deliver the strategy. This is at too early a stage to have delivered significant, measurable improvements in outcomes for Māori.

Māori have proportionately more serious injury claims and sensitive claims than non-Māori. They have proportionately fewer non-serious medical and surgical claims. Research also shows issues with Māori access to ACC's services. ACC needs to understand why this is in order to take the right action. For instance, for Māori a significantly higher proportion of serious injuries relate to road injuries. Data investigation alone won't provide all the answers and work with iwi and Māori organisations will be required. This work hasn't yet been done.

ACC trialled a Whānau Ora approach to deliver support to seriously-injured clients. The two-year pilot started in August 2017 and ended in October 2019. No financial analysis was undertaken before the pilot commenced. Payments increased significantly for these clients.

A qualitative review was done at the completion of the programme, with positive feedback from the clients. It's not yet clear, though, how the outcomes achieved relate to improved long-term rehabilitation pathways. It's also not yet clear exactly what evidence base was used to draw some of the conclusions on outcomes. The review recommended that ACC continue to support Whānau Ora as a model and that a cost-benefit/social impact analysis be undertaken to quantify social and financial benefits. ACC isn't going to continue with the programme in its current state and is undertaking a cost-benefit analysis.

There is emerging recognition across the public sector that existing systems haven't served Māori well. There are strong calls in several recent independent reports for improved equity, and for choice around kaupapa Māori services.

It's likely that if access to the Scheme improves for Māori, claim costs will go up in the future. This isn't an issue as long as the increased spend is delivering the right outcomes.

It's also possible that the costs of delivering kaupapa Māori services will be different to the costs of mainstream services. Also, it may not be solely Māori clients who choose this type of service, once it becomes available. ACC will need a clear understanding of the outcomes each type of service is aiming to deliver, and a clear way to measure these outcomes.

ACC needs to find a way to deliver culturally appropriate, evidence-based, cost-effective services to, and with, Māori. This is important work that has been prioritised in 2019/20 and needs to progress.

The ICIP is transforming ACC

ACC launched the Shaping Our Future strategy in 2014, which was broadened in scope to become the ICIP in 2018. The aims of the ICIP are to:

- put customers at the centre of everything ACC does by creating a more transparent, modern and efficient organisation
- improve customer outcomes
- improve New Zealanders' overall trust and confidence in ACC
- create greater operational efficiency and resilience.

In the last year ACC has successfully delivered a number of programmes under the ICIP, with a significant investment in modernising systems to minimise operational risks. This has set the foundations for delivery of improved customer experiences and outcomes in the future.

The expected overall cost of the transformation remains at $669 million in the years 2015 to 2022. More than half of that has been spent to date. The ICIP will be funded through future benefits from efficiency and claim cost savings from improved rehabilitation outcomes. ACC has reduced recent levy and appropriation requests to allow for the expected benefits of the ICIP. For further discussion see the *How ACC services are funded* section.

What will the ICIP deliver?

The ICIP is expected to provide long-term claim cost savings benefits, such as a reduction in average weekly compensation days paid, as clients are rehabilitated more effectively. It's also expected to provide efficiency benefits.

The three main projects delivering claim cost savings benefits are described below. A significant amount of the total projected benefit (15%) of the ICIP is planned to come from as-yet-unidentified initiatives. It was always anticipated that further opportunities would be identified as the projects were rolled out. These projects, and further initiatives, must deliver if the ICIP is to meet its targets.

1. HEALTH SECTOR STRATEGY PILOTS

The Health Sector Strategy is focused on collaborating with providers to support clients to recover more quickly and effectively from injury. Pilots delivered under the ICIP are testing outcomes-based purchasing, under which providers are accountable for client outcomes rather than delivering episodes of care. The benefits of the new approach are expected to be:

- faster recovery and improved rehabilitation outcomes for customers
- reduced pressure on healthcare and increased efficiency in ACC's health spend (through improved treatment pathways that get customers to the right treatment providers earlier)

- improved provider trust and confidence through involvement in shaping delivery models.

The Health Sector Strategy has four initial proof-of-concept projects due for completion from mid-2019 to mid-2020. For more detail on these, see ***Appendix A – Additional background information***.

Better rehabilitation outcomes should lower the expected lifetime costs for these clients, giving an expected net benefit in the longer term. Short term, the cost of purchasing for outcomes is anticipated to be higher for ACC than the purchasing of individual services that happens currently.

In order to ensure success, appropriate measures of outcomes need to be in place and reported on. Contracts with providers need to be set up in such a way as to incentivise effective, efficient and sustainable rehabilitation outcomes for clients.

2. NEXT GENERATION CASE MANAGEMENT

A core part of the transformation project is the redesign of ACC's case management model to improve client recovery outcomes and drive productivity improvements. Simplified, efficient and automated processes will allow ACC staff to spend less time on administrative tasks and more time on improving outcomes for clients. This is estimated to result in clients recovering faster and returning to work sooner than currently.

The new service model has been trialled with clients and providers in Hamilton and Hawke's Bay since September 2017 and March 2018 respectively, with more than 34,000 claims processed.

In these trials, customers have been returning to work or independence sooner, which has translated to fewer weekly compensation days paid compared to claims managed under the existing framework. Additionally, client experience scores are higher under this model. Under the new model, ACC has seen:

- 1.7 fewer weekly compensation days paid for low-complexity claims, and up to 12.9 fewer weekly compensation days paid for high-complexity claims
- Increases in the percentage of claim closures within expected claim periods
- A below-budget spend on vocational rehabilitation. This is because people are returning to work sooner.

The nationwide roll-out of NGCM is planned to be undertaken in five tranches between September 2019 and August 2020. This is a significant change programme. ACC must closely monitor stress areas as it's implemented and take appropriate action to maintain or improve performance as it unfolds.

An online service allowing clients to view and update their claim information and apply for entitlements is being rolled out with NGCM. This service should be monitored to make sure clients are receiving the right levels of service from ACC. A change in delivery shouldn't necessarily result in an increase or decrease in services provided.

3. BETTER DATA ANALYSIS AND REPORTING TOOLS

A new business analytics platform that provides reporting and analytical tools has been delivered. Work is ongoing to enable the full functionality of this platform. The expected benefits won't be achieved until this happens.

These new analytics tools are expected to provide claim cost savings in the future as better analysis leads to actions for improved client outcomes and less fraud, waste and abuse.

With so much going on it's been a challenging year for performance targets

Performance can drop during a time of major change. It's expected that the ICIP will deliver improved customer experiences, claim outcomes and financial performance. During the current implementation stage, performance targets are slipping. The ICIP performance targets and results for 2018/19 are shown in Table 1. These measure performance across the whole organisation, not just the small portion that was operating under the new ways of working as at 30 June 2019. All but one of the measures are down from last year and below target.

One measure is ahead of target - the claims processed per full-time-equivalent employee has increased. This doesn't yet equate to an efficiency gain as rehabilitation performance is deteriorating at the same time. The case-load per staff member has increased with more new claims and with clients receiving benefits for longer. If rehabilitation performance improves as planned under the ICIP, and at planned resourcing levels, this will represent efficiency and claim benefits. The financial benefits of the portfolio depend on this performance improvement.

TABLE 1 – TRANSFORMATION PERFORMANCE MEASURES

Performance measure	Actual 2017/18	Target 2018/19	Actual 2018/19
Claims processed per full-time-equivalent employee	593	585	605
Reduction in average weekly compensation days paid	-2.0 days	0.5 days	-3.2 days
Client net trust score	25	30.6	24
Business customer net trust score	-19	-14	-23
Provider net trust score	-8	-10	-15
Employee net promoter score	-6	16	-11

Court cases can affect the cover ACC provides

Clients sometimes challenge the ACC Scheme in court. Court decisions can have major implications for ACC by:

- widening cover
- extending entitlements to current and future clients
- backdating additional payments to past clients.

Here are three cases that have potential financial implications:

TABLE 2 – COURT CASES

NECESSARY AND ORDINARY RESULTS OF MEDICAL TREATMENT

Case	Issue before the courts	Why this is important	What the courts decided	What this means
Three separate appeals: two by ACC and one by a client.	Under what circumstances is an injury regarded as an ordinary consequence of medical treatment?	Deciding cover for treatment injuries is complex due to the difficulty of applying the 'ordinary' part of the test. Having clarity on what is covered will help to reduce delays in providing rehabilitation and compensation. This, in turn, will help to achieve good client and financial outcomes.	The High Court heard all three claims together on 8 October 2018. On 5 November 2018 the client appeal was dismissed, and ACC's two appeals were also dismissed. The Court decided that an ordinary consequence is one that's more probable than not, and that some form of statistical analysis is likely to be necessary. The Court also decided that ACC wasn't able to have regard to the consequences of the underlying health condition. ACC is appealing this decision and the appeal will be heard at the Court of Appeal on 20 February 2020	The implications of the Court's decisions are potentially large. In particular, an increase in cases where treatment injury clients require lifetime support ($10 million-plus per claim) will have a material impact on ACC's financial position. An extra 108 claims have been accepted as a result of the Court decision from December 2018 to September 2019. A total of $630 thousand has been paid so far for these claims. The full long-term implication of the decision isn't yet clear.

How ACC operates and how it's changing

NON-WORK DISEASE COVER

Case	Issue before the courts	Why this is important	What the courts decided	What this means
Calver vs. ACC	ACC currently doesn't cover disease other than that contracted through a client's work place. The client in this case asserted that she had contracted mesothelioma through contact with asbestos from her father when he came home from work and from visiting his workplace when she was young. Should mesothelioma not caused by a work exposure be considered an accident and therefore be covered by ACC?	Clients need to know what they can claim for. The High Court ruled that disease caused by an identified, external, non-disease related agent will be covered by ACC. ACC has sought leave to appeal to the Court of Appeal to provide greater clarity on this issue.	ACC's appeal was dismissed by the District Court but was allowed by the High Court in July 2019. The High Court decided that inhaling fibres was an accident that caused mesothelioma as the personal injury.	The expansion of cover will result in an increase in claims, the outstanding claims liability (OCL) and levies and appropriations. The size and scale of the issue are difficult to determine, although they're anticipated to be minor.

BACKDATING COMPENSATION

Case	Issue before the courts	Why this is important	What the courts decided	What this means
Larkin vs. ACC	This client didn't make a cover claim for injury occurring in 1992 until 2003. The application of provisions transitioning between the various accident compensation Acts meant that although ACC could pay for attendant care provided from 1992 to June 1993 and from April 2002 to the present, it was unable to pay for the July 1993 to March 2002 period.	Clients need to know what they can claim for.	This client-initiated appeal was dismissed by the High Court in November 2019. There's a possibility that the client will apply for leave to appeal the decision.	There are clients who sustained injuries prior to 1992 who didn't claim until after 2002 who could be eligible to receive backdated payments for the period between 1993 and 2002 if any further appeal is allowed. The estimated increase to the OCL for this is $15 million to $45 million.

How ACC is working in collaboration with others to prevent injuries

ACC invests to prevent injuries

Under the Accident Compensation Act 2001, ACC promotes and implements programmes to reduce the incidence and severity of injuries.

ACC invests in injury prevention activities through levies and Government appropriations for the Non-Earners' Account, only if they're likely to reduce claim costs. Injury prevention activities are expected to result in net reductions (benefits less costs) in the appropriation amount and the levies required, as shown in Table 3.

TABLE 3 – EXPECTED CLAIM COST REDUCTIONS FROM INJURY PREVENTION ACTIVITIES

($M)	2020/21	2021/22	2022/23	2023/24
Expected appropriation reduction	30.1	32.8	32.2	32.3
Expected levy reduction	38.2	43.7	38.6	49.4

For further discussion, see the ***How ACC services are funded*** section.

To reduce overall injury rates and costs, ACC partners with many organisations, including WorkSafe, Sport New Zealand, St John New Zealand, the NZ Transport Agency and the Ministry of Health. ACC is also a member agency of the cross-government joint venture to focus on reducing family and sexual violence, and violence within whānau.

In the future ACC will be collaborating with central government, local councils and iwi on alcohol prevention.

ACC measures return on investment for injury prevention

Currently ACC measures the ROI of injury prevention programmes as a means of assessing their effectiveness.

Injury prevention ROIs are a mixture of:

- past benefits achieved, and costs paid
- projected future benefits and costs.

There were two new measures introduced this year: the rate of serious injury and the number of claims saved. The rate of serious injury is the number of new serious injury and fatal claims per 100,000 new registered claims. The rate was 81.2 against a target of 73.8. The methodology for identifying when a claim becomes a serious injury was improved in early 2019/20, leading to a higher target of 80.1. Several things contributed to higher-than-expected new serious injury claims in 2018/19 including more motor vehicle claims and the Christchurch mosque attacks. There were an estimated 11,253 claims saved against a target of 11,000. The target for 2019/20 is 12,000 claims saved.

Following the mosque attacks in Christchurch, the Ministers of Finance and Police announced details of the Government's buy-back scheme to remove military-style semi-automatic firearms from circulation. This included a $40 million injury prevention investment from ACC. It's estimated this will reduce the potential costs of claims for firearm injuries in the next 20 years by $70.5 million.

This isn't included in this year's ROI calculation as it's ACC's practice to recognise individual programmes in the overall ROI when the funds have been drawn down. This will occur in the 2019/20 financial year.

The ROI is measured across seven injury prevention portfolios

Table 4 compares the 2017/18 and 2018/19 ROIs by portfolio. The portfolios are described in *Appendix A – Additional background information*. Investments and benefits are broken down into past and future-projected periods. All costs for programmes that stop before they've reached their planned end are included in the respective portfolios and overall ROIs. They include any that don't reach delivery. The difference in past investments between 2017/18 and 2018/19 is the additional year of investment costs paid. Likewise, the difference in past benefits between 2017/18 and 2018/19 is the current-year claim cost savings

TABLE 4 – INJURY PREVENTION PORTFOLIO RETURN ON INVESTMENT FOR ALL PROGRAMMES IN DELIVERY AS AT 30 JUNE 2019

($M)	Year ending 30 June 2018					Year ending 30 June 2019				
	Past		Projected		Total	Past		Projected		Total
Portfolio	Investment	Benefit	Investment	Benefit	ROI	Investment	Benefit	Investment	Benefit	ROI
Work	20.1	8.8	2.6	17.8	$1.17	30.4	21.0	33.6	83.4	$1.63
Falls	30.4	6.1	13.2	75.9	$1.88	42.8	11.3	3.5	68.2	$1.72
Road	48.1	60.7	11.7	56.2	$1.96	63.3	67.4	11.1	109.4	$2.38
Sport and recreation	35.9	87.8	7.6	30.9	$2.72	52.6	97.5	6.1	30.1	$2.18
Violence (sexual and family)	24.2	N/A	0.0	N/A	N/A	34.7	N/A	0.0	N/A	N/A
Treatment safety	11.6	0.0	6.2	43.3	$2.43	23.9	0.0	15.4	128.3	$3.26
Community	16.7	0.0	2.3	9.2	$0.48	26.1	1.0	1.2	8.0	$0.33
Total	**187.1**	**163.4**	**43.6**	**233.2**	**$1.72**	**273.8**	**198.2**	**70.9**	**427.4**	**$1.81**

The injury prevention ROI was just above target for 2018/19

The projected overall ROI for 2018/19 of $1.81 for every $1 spent was in line with the targeted $1.80. It's also higher than the 2017/18 ROI of $1.72. During 2018/19 an estimated 11,253 injuries were prevented. For 2019/20 the target remains at $1.80. Note that post-balance date, the ROI has dropped due to a re-evaluation of the Falls and Fractures programme (discussed below).

In the past, programmes weren't included in the ROI calculation unless they were being delivered or had stopped. This year the calculation has been changed: if a programme has been in design for more than two years, costs incurred more than two years ago have been included in the ROI calculation. This incentivises bringing programmes into delivery efficiently.

In general, investment in injury prevention occurs at the beginning of a programme's lifespan, while benefits are realised over a longer period. At 30 June 2019 most of the benefits are expected to arise in the future. This explains the lower returns for amounts identified as 'past' in Table 4. However, as the portfolio matures we expect to see more of the benefits achieved and the gap between benefits and investments in the past reduce.

The inclusion of some costs for programmes over two years in design has increased this gap for 2018/19 by $28 million. Even without adding these programmes, the gap would have doubled from the previous year. This means ACC has again invested more than it received back in claim benefits during the 2018/19 year, with the remainder of planned benefits expected in future periods. It's important that the injury prevention portfolio delivers tangible claim benefits for the investment being made.

Falls

The Falls portfolio is dominated by the Falls and Fractures programme. This programme is run in conjunction with the district health boards (DHBs) and targets older people who have already had a fall, aiming to prevent re-injury. The programme also seeks to prevent falls-related injuries before a fall occurs by local systems (such as GPs) identifying those at risk and referring them to services. For an expected investment of $33 million it was expected to reduce future claim costs by $76 million as at 30 June 2019.

Post-balance date, it's become clear that these benefits aren't going to be achieved for the current investment. Financial pressure now faced by DHBs means ACC needs to continue to invest to sustain the current service levels. This is due to external factors outside ACC's control that didn't exist at the time of original investment and could not have been anticipated. Additionally, once the programme was underway in a few DHBs, it became clear that a change to the modelling was needed. This was to better reflect how long the interventions continued to reduce an individual's risk of a fall-related injury.

Following this, the ROI for the Falls and Fractures programme has reduced significantly after 30 June 2019 due to re-evaluation of benefits. This will reduce the $1.81 ROI for the overall Injury Prevention portfolio by 9 cents.

The measurement approach for this programme reflected the population-based systems approach of the intervention. A range of system-level benefits have been captured by this measurement approach, but we've been unable to determine the ACC claims impact because individual data wasn't collected. This has made it difficult to determine the direct ACC benefits to date, or expected in future, from what is a major injury prevention investment. Future decisions on investment will be more difficult if there continues to be lack of certainty around benefits and outcomes.

The Road portfolio ROI is still increasing

The ROI for the Road portfolio continues to increase ($1.63 at 30 June 2017, $1.96 at 30 June 2018, $2.38 at 30 June 2019). Two new programmes have contributed to the ROI increase this year:

1. **Mandatory ABS braking system for motorcycles:** ACC was the lead agency, along with the Ministry of Transport and the NZ Transport Agency, in getting Parliament to change a Land Transport Rule to mandate the fitting of anti-lock braking systems to motorcycles from 2019 onwards. The investment in this programme has been $2.6 million and it's expected to reduce future claims by $22 million.
2. **Motorcycle-friendly counter measures on rural high-risk motorcycle routes:** The estimated investment in this programme is $6 million and it's expected to reduce future claims by $23 million.

Several new Treatment safety programmes have come into delivery

The ROI for the Treatment safety portfolio has risen from $2.43 to $3.26. Two new programmes in delivery have driven this increase:

1. The neonatal encephalopathy (NE) programme aims to reduce the incidence and severity of NE injuries by at least 10% by 2022. When NE, a major cause of brain trauma in new-born babies, is caused by treatment ACC covers the injury for life. Because of the long-term nature of these clients the expected claim cost savings to ACC from this programme are high ($50.5 million).
2. A programme to reduce healthcare-associated infections combined with the supporting of a national infection surveillance platform for the DHBs is expected to provide savings to ACC of $17.5 million for an investment of $7.5 million.

The Work portfolio ROI has significantly increased

The Work portfolio ROI has increased from $1.17 to $1.63. A large driver of this increase is the targeted financial incentives programme, which uses non-levy-based economic incentives to drive behaviour change. Organisations will be able to apply to ACC for grants or subsidies.

This is a large expected investment for ACC ($33 million), with an expected claim saving of $65.5 million.

ACC collaborates with WorkSafe on workplace injury prevention. WorkSafe has a lower target ROI of $1.10. WorkSafe is expected to increase its target ROI to ACC's target within 10 years. The WorkSafe programme isn't included in the ROI calculation yet as it's still in design. $11 million was invested this year.

A poorly performing sport injury prevention programme has been closed

The ROI for sport injury prevention programmes decreased from $2.72 to $2.18. This was driven by the closure of the SportSmart warm-up programme, which wasn't delivering expected benefits. The costs have been retained (as they have already been spent) but the benefits that had been included in the ROI are no longer expected to occur.

This implies that this programme was sitting in the portfolio at too high a return. In our opinion there need to be earlier and more regular evaluations of programmes in place to ensure those that are performing poorly are stopped or fixed sooner.

ACC isn't measuring the Violence portfolio's ROI yet

The Violence portfolio introduced programmes targeting family violence and abuse. The programmes are focusing in the short term on encouraging more people to report violence. This will lead to more people making claim before any claim benefits from prevention activities are seen. ACC is developing additional measures for the performance of this portfolio.

The Community portfolio ROI is still decreasing

The ROI for Community portfolio programmes is continuing to decrease ($1.07 at 30 June 2017, $0.48 at 30 June 2018, $0.33 at 30 June 2019). Costs for several programmes that have been in design for more than two years have been included in the calculation. These have largely driven the ROI reduction. Some of the design cost was for programmes that were trialled and found to be unsuccessful, so they were stopped. Other programmes, such as alcohol-related harm prevention, will continue to show low or no return until a robust way to attribute benefit to longer-term interventions can be identified.

An enhanced approach for injury prevention is coming

Last year the Board endorsed a new injury prevention strategy. It's now endorsed its implementation. In the next 10 years, $1 billion will be invested in injury prevention with intended future claim cost savings of up to $2.4 billion and better wellbeing for New Zealanders. The aim is to create a long-term and sustainable reduction in harm and improve the wellbeing of New Zealanders by:

- broadening the scope
- accelerating the speed at which programmes become effective and can be scaled up to increase their impacts
- investing in innovative initiatives.

In the past ACC designed programmes to prevent particular types of injury. The new strategy aims to focus on people and how their injury risks change during their lifetimes. ACC intends to access new data sources, such as the Integrated Data Infrastructure and National Minimum Dataset, to focus on people at the highest risk of injury.

As the new strategy is implemented, investment in injury prevention is expected to increase. ACC spent $75 million in 2018/19. This is budgeted to increase to $130 million (including $40 million for the firearms buy-back investment) for 2019/20. It's important that ACC delivers the benefits planned in this strategy.

ACC is exploring ways to measure benefits for longer-term investments

The strategy defines a balance between short, medium- and long-term investments and benefits' realisation.

- 70% of overall investment will be focused on core investments delivering short- to medium-term benefits.
- 20% will be allocated to strategic investments delivering long-term benefits.
- 10% will be allocated to innovative tests/trials and infrastructure investments.

The existing injury prevention portfolio has some longer-term programmes in place, but in general the focus has been on more short- to medium-term investments. For programmes that are intended to have longer-term (possibly inter-generational) impacts, it can be more difficult to target and measure claim benefits. ACC is exploring ways to better measure and attribute benefits for longer-term strategic and infrastructure investments.

Some new injury prevention targets are in place

We recommended in the 2015 Financial Condition Report (FCR) that ACC develop medium- to long-term targets for the overall impacts of injury prevention.

There are some measures in addition to ROI now included in the *Service Agreement* and *Statement of Intent*. In addition to these, the new injury prevention strategy includes a suite of more detailed targets and measures. See ***Appendix A – Additional background information*** for detail.

We've been unable to establish that these more detailed measures are in all cases fully developed and well defined. Importantly, there is no well-documented benefit profile to explain how ACC expects the $2.4 billion of benefits to emerge in future, or how that translates to ROI measures for the different types of investment.

Before we can close our recommendation, more work is needed on the measurement framework to ensure that:

- it clearly supports and incentivises the delivery of the strategy
- it's internally consistent
- its components are clearly defined and documented
- clear ROI targets are set for each class of investment, and support the overarching target set out in the *Statement of Intent*.

Rehabilitation is about delivering quality outcomes for clients

ACC aims for client independence

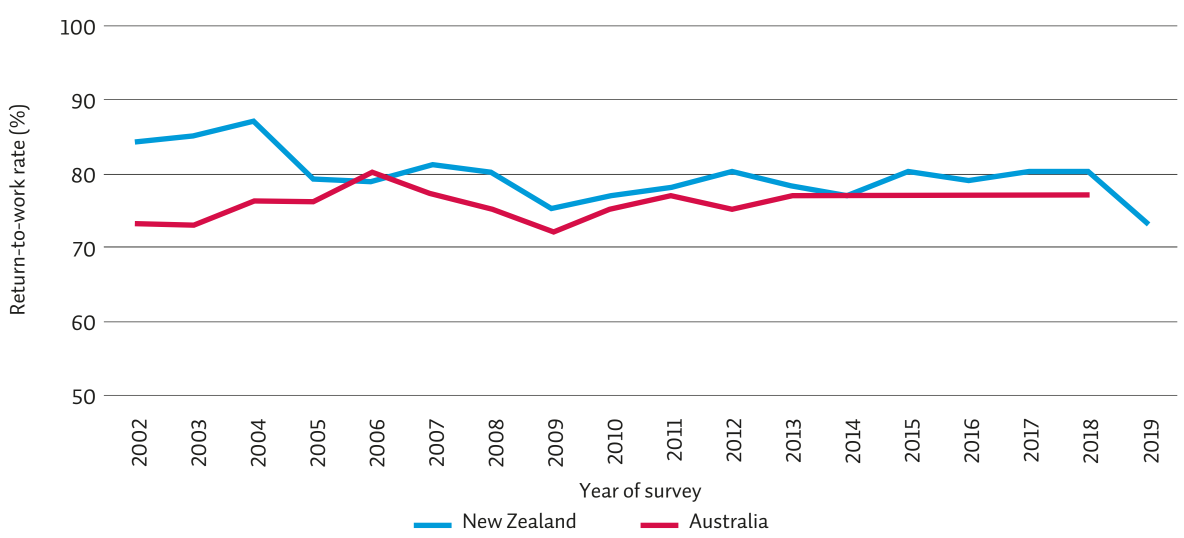
The claims management process aims to deliver high-quality outcomes for injured people by rehabilitating them back to work and/or independent living where possible. When people can't be fully rehabilitated, ACC aims to provide ongoing support to allow them to be as independent as possible.

Historically ACC has achieved favourable return-to-work rates

ACC benchmarks its return-to-work performance against Australian workers' compensation schemes. It compares results from the Safe Work Australia Return to Work Survey with a comparable survey of ACC clients.

Graph 1 shows the New Zealand return-to-work rate compared to the Australian schemes' national trends since 2003. Safe Work Australia and ACC calculate this by surveying clients who had been injured at work seven to nine months prior to the interview, and who had had 10 or more days off work. The return-to-work rate is the proportion of clients who were back at work at the time of the survey.

GRAPH 1 – RETURN-TO-WORK RATES



But the return-to-work rate has dropped in 2018/19

New Zealand's return-to-work rate has dropped to its lowest level in 17 years. Although we don't have an Australian comparison for 2018/19, the New Zealand rate is equal to the lowest that Australia's has been in that period.

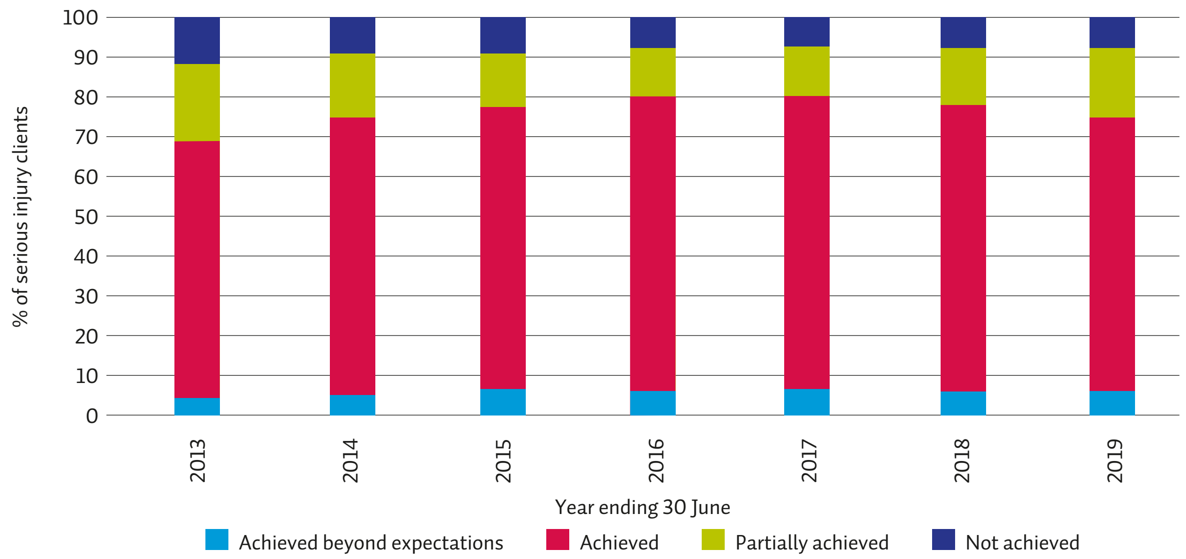
While the survey includes only a small number of clients, the result is in line with other ACC indicators such as falling return-to-work rates, increasing continuance rates and a growing long-term claims pool. As the ICIP delivers benefits, ACC should expect to see a return to previous return-to-work rates or higher. ACC needs to ensure this happens.

Seriously-injured clients achieve their self-directed independence goals

Seriously-injured clients generally require support for the rest of their lives. ACC measures success by how independent they can become. These clients set self-directed independence goals every six months. They assess their progress using a four-point scale: not achieved, partially achieved, achieved, and achieved beyond expectations. This is one measure of outcomes for these clients and the goals are unique to each client's personal situation.

Graph 2 shows the percentage of clients in each sector. The percentage of clients who have achieved goals at or beyond expectations increased from 69% in 2012/13 to 80% in 2016/17. However, this doesn't appear to be translating to portfolio reductions in dependency on the Scheme, as seen in the *Claim volumes, types and costs* section. Additionally, these levels have reduced slightly in 2017/18 and 2018/19.

GRAPH 2 – TRENDS IN CLIENT GOAL ACHIEVEMENT SINCE 2012/13



How ACC operates and how it's changing

The Enabling Independence service is reducing costs and delivering client outcomes

ACC set up the Enabling Independence (EI) service in 2015. Its role is to deliver a better experience for non-earner clients. To do this, these clients are managed from centralised regional hubs that work together with community groups and DHBs, much like the new NGCM model.

Key performance indicators measure two non-earner client outcomes from the EI service:

1. Social rehabilitation spending provides support to help clients be independent safely. In 2018/19 the average annual social rehabilitation cost for each EI claim was $4,238. This is below the $4,418 target.

2. The return-to-independence key performance indicator measures the percentage of clients who have been through the EI service and achieved independence within 12 months. The result for 2018/19 was 88.9%, above the 86% target and the 2017/18 result of 86.7%. In recent years this result has generally been at or above the target.

Return-to-independence rates are above target at a lower average cost. This indicates that the service is meeting its objectives.

Reviews of decisions

Reviews of decisions are a critical part of a fair and transparent Scheme

Clients who are dissatisfied with ACC cover or entitlement decisions can ask for a review. ACC funds three independent companies to review decisions if the issues can't be sorted out between ACC and the clients.

ACC reports on the number and outcomes of reviews lodged

Reviews can be lodged against any decision ACC makes on a claim. This may include the initial decision on cover, a decision to approve certain treatments or a decision to provide, or continue to provide, a specific entitlement.

This means that more than one review can be lodged for an individual claim. An additional *Service Agreement* measure was introduced in 2018/19. This measures the links between review applications and all declined cover and entitlement decisions. As shown in Table 5 this measure has been stable at around 7% since 2014.

Table 5 also shows review outcomes completed during the past seven years. The percentage of reviews found in favour of clients has also remained steady at around 18% for most of that time. Note that the reviews completed during a year don't directly relate to the reviews lodged in the same year, as the resolution process, particularly for reviews that proceed to formal hearings, can take some months.

TABLE 5 – REVIEW OUTCOMES

	Year ending 30 June						
	2013	2014	2015	2016	2017	2018	2019
Number of reviews lodged	8,538	6,970	6,514	6,533	7,228	7,525	7,982
% of decline decisions	8.4%	7.3%	6.7%	6.9%	7.1%	7.0%	7.1%
Number of reviews completed	9,166	6,853	6,747	6,286	6,299	7,563	7,938
Number withdrawn or settled	3,169	2,774	2,808	2,809	2,687	3,291	3,934
% withdrawn or settled	35%	40%	42%	45%	43%	44%	50%
Number found in favour of clients	1,567	1,062	1,070	987	1,148	1,406	1,402
% found in favour of clients	17%	15%	16%	16%	18%	19%	18%

It's important that ACC understands what drives clients to lodge reviews

As the Scheme is compulsory, it's particularly important that ACC decides cover and access to entitlements correctly. Clients need the review process and it's critical to a fair and transparent Scheme.

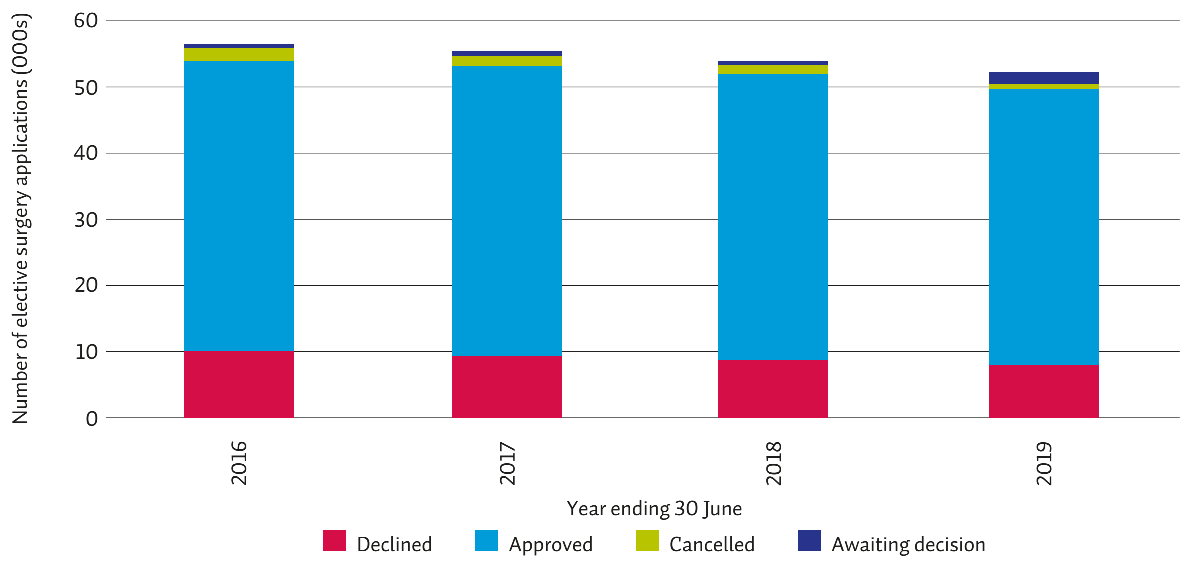
In July 2016 the Government commissioned Miriam Dean, QC, to undertake an independent review of the ACC dispute resolution system, following the release of a report by Acclaim Otago (Inc) about the barriers that some people face when challenging ACC's decisions. ACC has implemented improvements in response to the recommendations from this review. These are listed at the end of this section under ***What else has ACC been doing?***

We recommended in the 2016 FCR that ACC identify the appropriate level of reviews it should receive, given the volume and nature of decisions made. Investigations have shown there is no appropriate external baseline against which the level of ACC reviews can be measured. We're rewording this recommendation to clarify what's left to do as detailed at the end of this section in ***What more is needed?***

Elective surgery decisions make up a high proportion of reviews

Since 2013/14 one in three reviews has been about an elective surgery decision. These reviews decreased in 2018/19 because the number of elective surgery applications decreased, as shown in Graph 3.

GRAPH 3 – ELECTIVE SURGERY APPLICATIONS



The proportion of decided elective surgery applications that were approved has increased from 81% in 2015/16 to 84% in 2018/19.

Despite the increase in the proportion of applications approved, the proportion of elective surgery decline decisions subject to lodged reviews has remained the same at just under 25%. In addition, the proportion of elective surgery reviews found in favour of clients has increased from around 20% in 2015/16 to 25% in 2017/18 and 2018/19.

What is ACC doing about this?

Research on the reasons for clients going to review is planned during 2019/20, beginning with elective surgery decisions. This should lead to further actions to improve decision-making and interactions between clients and ACC or providers, to reduce the need for clients to lodge reviews.

ACC is working with the New Zealand Orthopaedic Association on agreeing factors to determine if an injury has been caused by an accident or a non-accident-related process. The intention of this is to minimise potential disagreements, and therefore reviews.

ACC is providing feedback to surgeons on their rates of declined requests to help them understand how they might more effectively set out causation links.

Two trials are being run with private insurance providers to address conflicting opinions:

- One covers declined surgery requests and allows ACC to consider any new information and issue fresh decisions, without formal reviews.
- The other is a 'no prior approval' trial, to ensure surgery isn't delayed while ACC makes a decision.

It can be difficult to determine if an injury is wholly or substantially caused by accident

Many clients seek reviews because of conflicting opinions between treating providers and ACC clinicians on the causes of their injuries. This is particularly true in cases where it's difficult to assess if a person's incapacity resulted solely from an accident.

ACC is looking at options to improve the experiences of clients with degenerative conditions (where there is often unclear causation). This involves improving communication with clients and clinicians to:

- set expectations and be transparent about what's covered
- agree causation factors
- see how ACC can work with the health sector to provide improved care for these clients.

We've previously highlighted work-related gradual process injuries as an area for attention

In previous reports we highlighted that there appeared to be a low number of people claiming for work-related gradual process injuries. These claims also had high decline rates. These rates haven't changed significantly in the past five years.

In response to a recommendation in the 2015 FCR, ACC worked through how to help people lodge claims and to understand why these claims were declined. Identified improvements to be made include working with providers and stakeholders to improve clients' and providers' understanding, clarifying what they could expect from ACC cover, and making sure they know what support is available.

Some aspects of these improvements have been addressed through:

- Development of a carpal tunnel script has clarified the information needed from clients and providers to make cover decisions. This has improved ACC's ability to explain to clients the reasons for the claim decision.
- Implementation of a verbal questionnaire for mesothelioma, which has reduced cover decision times, with a 9% increase in decisions made in under seven working days. These claims generally have a high acceptance rate so reducing the cover decision time ensures clients receive support sooner.
- A new claim lodgement model, which is helping to triage and assess non-complicated cover decisions.

The remainder of these improvements will be included in NGCM post-implementation.

What else has ACC been doing?

A number of changes have been made to improve the review process and increase access and services for clients wishing to dispute ACC decisions. Some of these changes are:

- from 1 July 2019, two new providers joined existing provider FairWay Resolution Ltd to assist with the resolution of reviews
- review specialists now have up to 60 days to consider ACC's decision-making before a lodged review must be passed to a resolution service provider. This process has increased the number of reviews resolved before going to formal hearings
- from 2 September 2019, a new ACC-funded navigation service will be available to provide clients with independent advice to help remove barriers and improve understanding of the support that's available. This will include assisting with raising complaints or disputes where appropriate and supporting them to prepare effectively for review hearings if required.

What more is needed?

ACC has made significant improvements in how it handles reviews once lodged. There are also some promising initiatives described above in several key areas that could reduce the need for clients to lodge reviews or could improve the quality and consistency of clinical decision-making among providers and ACC clinicians. However, we believe ACC needs to do more to understand in greater detail what drives a client to lodge a review, or what causes a review decision to go in favour of the client. This understanding should then translate to actions, where needed.

Appropriate data collection and analysis could help to inform actions to reduce any unnecessary review activity, and to improve the quality, consistency and transparency of decision-making.

We've reworded our previous recommendation on reviews as follows:

ACC should strengthen and formalise its framework to understand and systemically act on:

- *what drives a client to lodge a review*
- *what causes a review decision to go in favour of the client.*

We expect such a framework to include processes to:

- conduct ongoing analysis to identify root causes
- take action where appropriate to mitigate those root causes
- monitor the effectiveness of those actions and refine where needed.

These are needed to ensure the claim decision-making experience for clients is as clear and fair as possible.

ACC requires a framework to assess customer outcomes

There are many areas where we've seen increased spending but no clear evidence of how this has led to delivering improved customer outcomes. A strategic organisation-wide approach for assessing the effectiveness of all services would be helpful.

We recommend ACC develop a customer outcomes framework for defining and assessing the effectiveness of all ACC services. This should reflect ACC's role in supporting people in New Zealand, including fulfilling ACC's obligations under Te Tiriti o Waitangi. This should also incorporate outcomes within the context of ACC's strategic outcomes:

- Reduce the incidence and severity of injury.
- Rehabilitate injured people more effectively.
- New Zealand has an affordable and sustainable Scheme.

This is in addition to and in line with our claims management recommendation on developing a framework for consistent measurement and monitoring of client outcomes from previous FCRs that is still open.

Claim volumes, types and costs

Summary

- Claim volumes and costs were higher than expected this year. This resulted in an increase of $575 million above expected in our OCL. This is known as an OCL strain. In the past five years the total OCL strain has been $2.6 billion.
- An OCL strain has occurred for many payment types because claim volumes are higher than expected and people are staying on the Scheme for longer than expected. Sensitive claims, weekly compensation and social rehabilitation are the main contributors to this year's OCL strain.
- The OCL strain for sensitive claims is largely due to significant claim volume growth and people staying on the Scheme for longer than expected. New sensitive claims have grown for several years and we expect this to continue. It's not clear if and when the growth will stabilise. The review of the Integrated Services for Sensitive Claims (ISSC) contract was scheduled to be completed in early 2019. The scope of the review has been expanded to include a strategic component focused on outcomes being delivered. The review is ongoing.
- The ISSC review is expected to answer questions such as:
  - what client outcomes are being achieved and how are these measured?
  - is the service sustainable in the long term?
  - how will the service achieve equitable outcomes for Māori clients?
- Higher-than-expected claim volumes for weekly compensation, along with a deterioration in rehabilitation, have led to an OCL strain. External and internal investigations carried out this year have highlighted the impacts of external factors on ACC's operations, changes in medical certification habits, issues regarding staff capacity, and the opportunity to positively influence behaviour through better engagement. Developing actions to address these and other drivers must be a priority in the coming year to improve rehabilitation outcomes for clients.
- Higher-than-expected attendant care costs for seriously-injured clients were a key driver of social rehabilitation strain. Capital payment growth was also higher than expected for serious and non-serious injury clients. There is a need to better link client independence outcomes and capital spend.
- The largest OCL releases this year came from elective surgery and medical payments. In elective surgery a modelling change was made to reflect lower payments for older claims. Medical superimposed inflation assumptions reduced because average payment growth has been lower than expected for a number of years.
- The Treatment Injury Account was the only account to have an OCL release. This was largely a result of slower claim growth in recent years and faster recovery times for 2006 to 2012 accidents.
- Projected payments for recent accident years have increased since the 2018 valuation. The bulk of this year's OCL strain is attributable to the 2015/16 to 2018/19 accident years. Our expectations about incurred claim costs for future accident years have also increased. On average these costs are now 6% higher than projected in the 2018 valuation.
- This year's OCL strain highlights the importance of client outcomes being understood and measured. We're spending more but it's not always clear that outcomes have improved sufficiently to justify the increased spend. This links to our recommendation for formal monitoring and measuring of the effectiveness of changes to client supports. This recommendation is still in progress and should be prioritised in the coming year.
- Work during the year to better understand and address issues has included the strategic review of the ISSC, investigations into the weekly compensation claim experience, the capital costs project and using behavioural economics principles to help improve services. But claim costs continue to grow. More focus from the organisation is needed to move from an investigation phase into action and measurable outcomes. Benefits from the ICIP are expected to address some areas of claims growth. Monitoring and reviewing the success of this model will be important.

Changes in the outstanding claims liability (OCL) are an important indicator of financial sustainability

The OCL estimates how much ACC needs to pay to support injured clients, today and for as long as they need support. This estimate changes when claim volumes, types or costs differ from forecasts, and helps us understand potential future changes in costs of services to injured New Zealanders. ACC can use it to inform ways to manage costs and support its drive to improve services and better target injury prevention. If ACC can keep support standards high and OCL increases down, everyone benefits, clients through faster rehabilitation and improved independence, and levy and tax payers through lower funding requirements.

Each year we expect the OCL to grow. The cost of new claims is greater than reductions from clients leaving the Scheme. This is because:

- the Scheme is still maturing; it's still receiving more claims than it's losing
- of inflation
- claims are being made more often
- New Zealand's population size and make-up are changing.

The biggest contributors to OCL changes are long-term claims for which clients need significant support. Claims fully paid soon after injuries happen don't affect the OCL as much but are big contributors to levy rates and Government appropriations (see *Appendix C – Claim volumes, types and costs*).

When we talk about OCL changes in this section, we're only referring to the impacts from claim volumes and costs. We haven't included changes due to economic factors because these are beyond ACC's control. *Appendix D – Valuation of the outstanding claims liability* shows the impacts of economic changes on the OCL.

The major risks to the OCL that require monitoring, and which are discussed in this section, are:

1. social rehabilitation, such as aids and appliances, child care and home help
2. weekly compensation, which covers lost income while a client's off work due to injury
3. sensitive claims' volume and cost growth
4. elective (non-emergency) surgery
5. medical services, such as those provided by GPs.

In this section we provide a high-level description of how claim volumes and costs moved this year and how these changes led to increases or decreases in the OCL. For more detail on these changes, refer to *Appendix C – Claim volumes, types and costs* and *Appendix D – Valuation of the outstanding claims liability*.

Claim volumes and costs were higher than expected, leading to an OCL strain

The OCL strain for 2018/19 was $575 million. This strain includes a $58 million release for incurred but not yet reported work-related gradual process claims. This liability isn't included in the OCL reported in the *Annual Report* due to accounting requirements. But it's included here because the Work Account levy funds this amount.

The OCL strain can be broken down into four main drivers that affect estimates of future claim volumes and costs:

1. **Long-term assumption changes:** Reductions were made to long term medical superimposed inflation assumptions in response to emerging trends in the past six years. This resulted in a reduction to the OCL of $136 million.
2. **Average cost of claims:** Overall, the average amount paid per claim was higher than expected, resulting in a $99 million OCL strain.
3. **Active claims:** Increases in the number of new claims and how long clients require assistance resulted in a $585 million OCL strain.
4. **Modelling changes:** Improvements in the OCL models of future claim behaviour resulted in a $27 million strain. These changes relate to trends in payment behaviour over time, rather than respond to specific changes in the past 12 months. These were made to help ensure the models are a better and more accurate reflection of claim experience. For this reason this driver isn't a focus of discussion here, but more details of the changes are provided in *Appendix D – Valuation of the outstanding claims liability*.

It's important to note that changes to models and to long-term assumptions are ultimately due to underlying changes in average costs and active claims. For these changes, some judgement is applied to decide when an underlying change looks like a longer-term trend, so should be reflected in models or assumptions.

In the past five years (2014/15 to 2018/19), the total OCL strain was $2.6 billion. Last year's claim payments were in line with expectations, but this year they have been higher again. This suggests claim trends haven't stabilised after OCL increases in four out of the past five consecutive years.

It's important that client outcomes are understood and measured

An OCL strain has occurred for many payment types because claim volumes are higher than expected and people are staying on the Scheme for longer than expected. So we're spending more. That's acceptable, as long as the improvement in client outcomes justifies the increased expenditure.

In the 2017 FCR we recommended that a formal regime be implemented for measuring the effectiveness of claims management approaches in improving client outcomes. In 2019 this recommendation remains open. More work is needed before we can be sure that increasing short-term spend is being offset by future reductions from more effective client rehabilitation. An increased focus is needed to ensure the costs of services are as effective as possible, while the right client outcomes are delivered.

Changes in the OCL vary depending on claim payment type

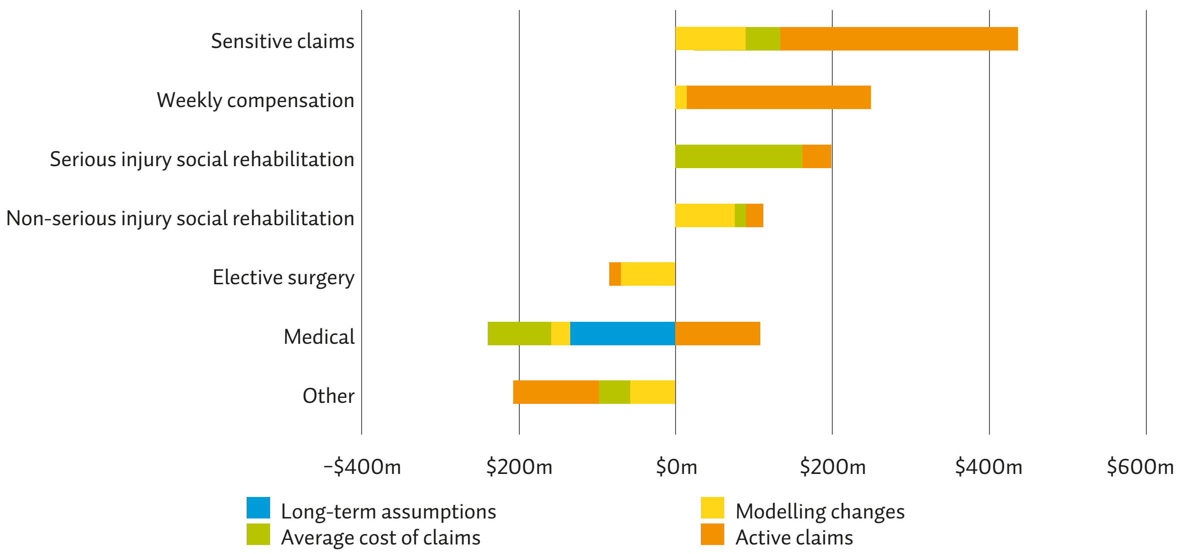
Table 6 shows the change in OCL by payment type during the 2018/19 financial year. The total OCL balance is also included to provide an indication of the materiality of the OCL strain or release for each payment type. For more detail on what services are included in each payment type, see *Appendix A – Additional background information*.

TABLE 6 – CHANGE IN OCL BY PAYMENT TYPE DURING 2018/19

($M)	OCL balance as at 30 June 2019	Change in OCL due to experience during 2018/19
Sensitive claims	4,206	438
Weekly compensation – non-fatal	11,865	249
Serious injury social rehabilitation	23,508	198
Non-serious injury social rehabilitation	1,966	112
Elective surgery	4,393	(81)
Medical	2,506	(134)
Other	6,579	(207)
Total	55,023	575

Graph 4 shows how each of the four main drivers affected each claim payment type leading to the $575 million total OCL strain.

GRAPH 4 – COMPOSITION OF THE 2018/19 OCL STRAIN BY CLAIM PAYMENT TYPE



Ensuring service sustainability and measuring client outcomes in sensitive claims must be a priority

The OCL for sensitive claims at 30 June 2019 was $4.2 billion. The OCL strain for sensitive claims in 2018/19 was $438 million. In addition to the key drivers of this strain, explained below, improvements in models of future claim behaviour resulted in a $90 million strain in sensitive claims.

The average cost of sensitive claims was higher than expected in 2018/19. This was particularly seen in older accident years and resulted in an OCL strain of $43 million.

Long-term sensitive claims are staying on the Scheme for longer than expected so long-term continuance rate assumptions have been strengthened by around 0.5%. The increases are small, but due to the long-term nature of the support provided, the resulting OCL impact is large. In addition, **more new claims are presenting in recent accident years**. So that means a higher level of active claims in the future is expected. The total strain due to active claims is $304 million.

This is the first valuation where sensitive claims have been modelled as a separate payment type. Isolating sensitive claims makes it easier to understand the impacts these claims have on the OCL and levies. Understanding these long-term impacts should help the organisation understand how best to provide the services these clients need to achieve the required outcomes, and in the most efficient way for levy and tax payers. Because the majority of sensitive claim payments relate to the Earners' and Non-Earners' Accounts, the new models apply only to these two accounts. Previously sensitive claims were included in other payment types, including weekly compensation payments, other medical counselling services, independence allowance, lump sums, vocational rehabilitation and non-serious injury care.

In the 2018 FCR we discussed the uncertainty around the continued growth in sensitive claim costs and volumes. This uncertainty remains. The assumption for growth in new sensitive claims was raised from 9% to 20% this year. In addition, existing sensitive claim clients are remaining on the Scheme for longer than expected. The growth in sensitive claims has increased demand for counsellors. Capacity constraints are being felt across the service with provider feedback indicating that this can lead to access barriers and extended wait times for some clients.

Measuring client outcomes of the sensitive claim service must be a priority for the organisation. There is also a great opportunity to foster better outcomes for Māori by providing appropriate cultural support. Māori, who make up around 15% of New Zealand's population, are two to three times more likely to be affected by sexual violence than non-Māori. Given the current over-representation of Māori in the sensitive claim population, we would expect their contribution to the sensitive claims OCL to be around 30%. But their OCL share is much smaller at around 20%. This suggests an under-representation of Māori in sensitive claims and highlights the issue of fair access to the services. Continuing with injury prevention initiatives aligned with Whāia Te Tika, including cross-agency collaboration with iwi and other relevant groups, should be a further focus in the coming year.

The review of the ISSC contract considering outcomes achieved so far was scheduled to be completed in early 2019. The scope of the review has been expanded to include a strategic component focused on outcomes being delivered and long-term measures to address capacity constraints. The review is ongoing.

The review is expected to answer questions such as:

- what client outcomes are being achieved and how are these measured?
- is the service sustainable in the long term?
- how will the service achieve equitable outcomes for Māori clients?

The current ISSC contract expires in November 2020. This should provide the opportunity to make the service delivery improvements required, in alignment with findings from the strategic review.

ACC needs to provide services to sensitive claim clients that deliver rehabilitation outcomes. These services also need to be provided in a way that's efficient for funders of the Scheme. It's important that the ISSC review provides a clear way forward to achieve this.

Deteriorating weekly compensation rehabilitation rates is a concern

The OCL for weekly compensation at 30 June 2019 was $11.9 billion. In 2018/19 the OCL strain for this payment type was $249 million. In addition to the key driver of this strain, explained below, improvements in models of future claim behaviour resulted in a $16 million strain.

Short-term claims are remaining on the Scheme for longer than expected. Short-term rehabilitation rates have deteriorated resulting in higher-than-expected claim volumes. The strain due to active claims is $233 million.

This year's $249 million OCL strain follows four consecutive years of strain totalling over $1.4 billion for weekly compensation. Last year, the strain in weekly compensation was around $400 million (excluding sensitive claims). Key drivers in the past have included higher-than-expected growth in claim volumes and higher-than-expected continuance rates, particularly for older accident years. These drivers are evident again in 2018/19.

In 2018/19 more people than expected received weekly compensation in the short term. Even small changes in assumptions about the length of time in which future weekly compensation payments are made can significantly affect the OCL. So if short-term continuance rates continue to deteriorate there's a greater potential for higher volumes of long-term weekly compensation clients in the future and further OCL strains.

The level of the OCL strain for weekly compensation in the past five years demonstrates the sensitivity of the OCL to changes in weekly compensation claim behaviour. The response from the organisation in understanding and responding to drivers of strain hasn't yet been effective. More focus is needed. External and internal investigations carried out this year have highlighted the impacts of external factors on ACC's operations, changes in medical certification habits, issues regarding staff capacity, and the opportunity to positively influence behaviour through better engagement. Developing actions to address these and other drivers must be a priority in the coming year to improve rehabilitation outcomes for clients.

Serious injury non-capital costs were higher than expected

The serious injury non-capital social rehabilitation OCL at 30 June 2019 was $20.7 billion. In 2018/19 the total OCL strain was $141 million.

The total strain due to higher-than-expected average costs in non-capital was $118 million. **Higher-than-expected attendant care costs** for existing serious injury claims were a key driver of the strain, largely due to:

- higher-than-expected attendant care hours provided to younger clients with brain injuries
- the Whānau Ora pilot programme leading to higher levels of care for participating clients.

The total strain due to serious injury non-capital claim volumes was $23 million. The main driver of this strain was **more new serious injury claims than anticipated**. The Motor Vehicle and Treatment Injury Accounts were particularly affected by this. Several non-serious injury claims were also re-profiled as serious injury during the year. The strain was partially offset by mortality being different from that expected.

The total OCL strain in serious injury in the past four years, including 2018/19 for serious-injury non-capital, has exceeded $600 million. The bulk of this strain occurred in 2016/17 when higher than expected attendant care payments led to a substantial increase in the OCL. In 2017/18 attendant care hours reduced, resulting in some OCL release. But growth this year has brought these back to 2016/17 levels. In the 2017 FCR we stressed the importance of increasing the level of independence of seriously-injured clients to reduce ongoing attendant care support needs. A consistent measurement of outcomes needs to happen to reduce the risk of further cycles of care hours increasing, then stabilising, then increasing again.

Around 25% of the serious injury OCL relates to Māori clients, yet Māori make up only around 15% of New Zealand's population. This suggests Māori have more serious injuries relative to the rest of the population. ACC's Māori strategy, Whāia Te Tika, lists improving injury incident rates for Māori as one of its key aims. ACC has partnered with a number of iwi providers and Māori organisations to help promote wellbeing and injury prevention. It's important that the organisation continues to work to improve outcomes for Māori.

Serious injury capital payments have continued to grow

The serious injury capital social rehabilitation OCL at 30 June 2019 was $2.8 billion. In 2018/19 the total OCL strain was $57 million.

The total strain due to higher-than-expected average costs in serious injury capital was $43 million. **Higher-than-expected payments for large capital items** for existing serious injuries continued in 2018/19. These payments relate to housing, equipment and vehicle modifications.

The total strain due to active serious injury capital claims was $14 million. As previously discussed in serious injury non-capital, the main driver of this strain was more **new serious injury claims than anticipated**.

Growth in serious injury capital payments has occurred for a number of years and has continued in 2018/19. Capital purchasing decisions are often made to improve clients' independence, with some expectation that the number of care hours a client needs will reduce. But higher-than-expected capital payment growth is happening at the same time as higher-than-expected attendant care hour growth. As they last for clients' lifetimes, serious injury claims have significant influence on the OCL. Given this, it's important that capital purchases help clients realise their independence outcomes. In alignment with the open FCR recommendation around implementing a formal regime for monitoring and measuring client outcomes, it's essential that capital purchase decisions and the outcomes they achieve are monitored on an ongoing basis.

As NGCM comes into effect, tools designed to assist this type of monitoring will become more widely used. In the coming year, reviewing how well these tools work in practice will be important.

This year, an investigation is underway into capital expenditure with the aim of improving outcomes for customers and helping maintain Scheme sustainability. Ensuring ACC's capital purchasing policies are fair and being applied consistently and transparently nationwide will be key to achieving these aims. Included in this is improving the quality of referrals and boundaries when ACC isn't the only obligated party. Ultimately, it's expected the investigation will lead to more consistent decision-making and the clearer linking of those decisions to client outcomes.

Non-serious injury non-capital payments have grown and outcomes for clients aren't clear

The OCL for non-serious injury non-capital at 30 June 2019 was $1.3 billion. In 2018/19 the OCL strain for non-capital was $55 million. In addition to the key drivers of this strain, explained below, modelling changes resulted in a $32 million strain.

Higher-than-expected costs resulted in a $7 million OCL strain. Growth in payments for older claims, primarily from the Non-Earners' Account, was the main driver.

There was a $16 million OCL strain relating to active claims. The main driver is **higher-than-expected new claims from older accident periods**.

In four of the past five years, non-serious injury payments have been higher than expected.

Training for independence payment growth has been particularly significant in the past two years for non-seriously injured clients. The liability impact is relatively small, but the trend is concerning. That's mainly due to an absence of evidence to support increased costs leading to improved client outcomes. An investigation of how the programme is helping clients to achieve their independence outcomes is in progress. Behavioural economics principles are being applied to generate insights on behaviour and decision-making and how future contracts or services could be better developed. If this is successful, this approach could be applied to other, larger payment types.

In November 2018, the Living my Life support service was introduced. This programme, open to serious and non-serious injury clients, aims to empower people with disabilities to make decisions about the support they receive. It's expected the service will result in more clients achieving personal goals and increased life satisfaction. The effects of the service haven't been seen in this year's valuation because the number of participants in the service is still relatively small. But as uptake increases, this may affect future valuations. This is another area where the suitability of participants must be carefully considered, and outcomes closely monitored.

Non-serious injury capital purchase decisions need to be linked to client outcomes

The OCL for non-serious injury capital at 30 June 2019 was $0.7 billion. In 2018/19 the OCL strain for capital was $57 million. In addition to the key drivers of this strain, explained below, improvements in models of future claim behaviour resulted in a $42 million strain.

Higher-than-expected costs resulted in a $7 million OCL strain. **Average capital payments being higher-than-expected**, particularly in relation to older accident years, was the main contributor.

There was an $8 million OCL strain relating to active claims for non-serious injuries. Strong **growth in capital claim volumes, particularly for claims less than five years old**, also contributed to the strain.

Non-serious injury capital expenditure growth has been particularly high in the past five years with an OCL strain for the period of over $200 million. A key driver of the growth is a higher-than-expected number of claims. Higher-than-expected equipment expenditure is also a factor. An investigation of changes in equipment spending patterns is underway. This investigation is considering the impacts of changes in age demographics and technological advancements. It should help explain the reasons behind increasing equipment costs and lead to suitable actions to address these. The capital costs investigation should also lead to action to help ensure capital purchasing decisions for non-seriously injured clients are consistent and being linked to desired client outcomes.

Elective surgery claim volumes and costs are as expected

The OCL for elective surgery as at 30 June 2019 was $4.4 billion. In 2018/19 there was a total OCL release for this payment type of $81 million. In addition to the key drivers of this release, explained below, improvements in models of future claim behaviour resulted in a $71 million release in elective surgery claims.

- There was a $10 million release due to claim volumes. With the exception of the Earners' and Motor Vehicle Accounts, all accounts had a **lower-than-expected number of claims**.

Elective surgery claim volumes and costs aren't raising specific concerns. But as technology advances and medical treatments change, we must be aware these could affect elective surgery costs in the future.

Medical superimposed inflation was lower than expected and payments were down

The OCL for medical as at 30 June 2019 was $2.5 billion. In 2018/19 there was a total OCL release for this payment type of $134 million. In addition to the key drivers of this release, explained below, improvements in models of future claim behaviour resulted in a $23 million release in medical claims.

- Since 2013, the average costs across the various medical treatment types haven't increased as much as expected. So superimposed inflation assumptions were reduced this year from 3% to 2% for treatments provided by GPs and from 2.5% to 2% for medical payments classified under the other medical payment type. These changes reduced the OCL by $136 million.
- Payments were lower-than-expected, with an OCL decrease of $81 million. The other medical payment type is the most influential medical category, comprising over 80% of the total medical OCL. In 2018/19, the average claim cost was lower than expected. A significant portion of this was for accidents older than five years.
- There was a $107 million OCL strain, mostly due to higher-than-expected active claims in the other medical payment type. Older claims are staying on the Scheme for longer than expected. A further driver is changes made by ACC to allow for extended physiotherapy treatments. The projected length and number of active physiotherapy claims have increased, contributing $17 million to the strain.

Changes made to physiotherapy treatments resulted in an OCL strain. This is small in the context of the overall OCL strain but large for this payment type. It highlights the relevance of the recommendation about measuring the impacts of changes to client supports in improving client, operational and financial outcomes. When a new claims management approach is undertaken, it's important we monitor whether actual claim volumes, types and costs are materially different from what was expected prior to implementation.

Hearing loss claim volumes and payments were lower than expected

The OCL for hearing loss, including work-related gradual process claims, as at 30 June 2019 was $1.5 billion. In 2018/19 there was a total OCL release for this payment type of $110 million.

- **Average costs in hearing loss were less than expected**, resulting in a release of $30 million.
- **Claim volumes were lower than expected** during the past year and are projected to remain low going forward. The OCL release was $80 million.

Changes in the OCL affected the five accounts differently

Graph 5 shows the $575 million total OCL strain by account and main payment type.

GRAPH 5 – COMPOSITION OF THE 2018/19 OCL STRAIN BY ACCOUNT

All accounts, except the Treatment Injury Account, had an OCL strain in 2018/19. Most accounts were affected by strains in weekly compensation and serious injury. The Non-Earners' and Earners' Accounts were significantly affected by strains in sensitive claims. The reduction in the superimposed inflation assumption in medical has resulted in varying levels of OCL release across all accounts.

The other category includes claims handling expenses. During 2018/19, two changes were made to help ensure a fairer and more reliable allocation of the costs involved in paying claims. These changes involved allocating support activity costs according to full-time-employee numbers and using overall active claim volumes to allocate claims handling expenses to the various accounts. The changes haven't significantly affected the total OCL but have had some impact at an account level. In the Motor Vehicle Account, the reallocation has meant a $112 million increase to the OCL while the Non-Earners' Account has had a $76 million OCL release.

The Treatment Injury Account would have had a larger OCL release if not for serious injury

In the 2018 FCR we highlighted the continued new claim growth in recent accident years. This growth has since steadied and the exit for claims from the 2006 to 2012 accident years is faster than previously projected. This has resulted in OCL release in the Treatment Injury Account across many of the payment types. But the release is partially offset by serious injury social rehabilitation. More new claims than expected and higher-than-expected attendant care hours for younger brain injury clients contributed to the strain for this payment type.

Sensitive claims continue to affect the Non-Earners' Account significantly

The strain in the Non-Earners' Account is primarily due to sensitive claims. This has been caused by growth in new claims and clients staying on the Scheme for longer than expected. This strain is offset by other payment types, in particular the claims handling expenses reallocation and higher-than-expected serious injury exits.

Deterioration in rehabilitation rates in weekly compensation has affected the Work Account

Deteriorating continuance rates for medium-term weekly compensation claims have caused the majority of the strain in the Work Account. There has been some offset through releases in hearing loss, independence allowance, vocational rehabilitation and the claims handling expenses reallocation.

Strain in the Earners' Account is driven by weekly compensation and sensitive claims

New weekly compensation claims for older accidents have an impact on the Earners' Account. Sensitive claim clients staying on the Scheme for longer than expected are also having an impact on the Earners' Account.

An unusually high number of serious accidents had an impact on the Motor Vehicle Account

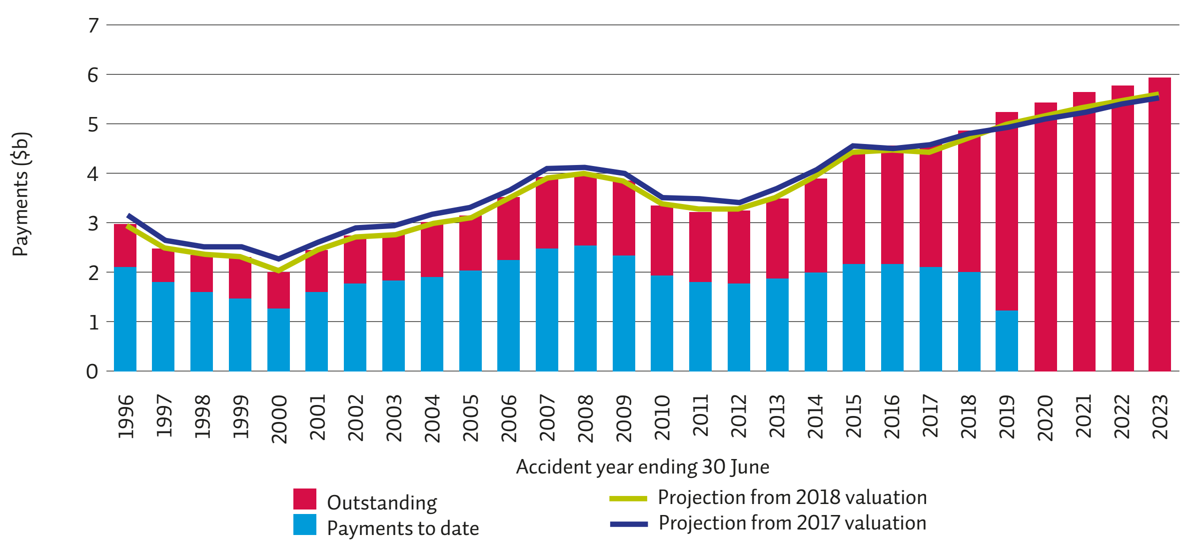
Unusually high volumes of new motor vehicle accidents led to the strengthening of new and incurred claim assumptions. Higher-than-expected care hours for existing clients and the reallocation of claims handling expenses resulted in an OCL strain in the Motor Vehicle Account.

The bulk of this year's OCL strain comes from the most recent accident years

Graph 6 shows the projected total cost of all claims by accident year. It compares the incurred cost from the 2019 valuation with projections from the previous two valuations. These costs are expressed in 2019 dollar values and exclude:

- bulk-billed medical costs (a consolidated payment ACC makes to the Crown to cover the treatment in public hospitals of injuries during the acute phase)
- claims handling expenses (the costs, other than the actual cost of claims, involved in paying claims)
- risk margins (amounts added to the OCL to ensure it's sufficient to meet claim payments 75% of the time).

GRAPH 6 – INCURRED COST BY ACCIDENT YEAR



Recent claims cost more than forecast

The expected total incurred cost in 2018/19 for claims before 2015/16 is generally in line or below the 2017 and 2018 projections. But for claims between 2015/16 and 2018/19, the current expected total incurred cost is higher than previously expected. Around one-third of the strain relates to the 2018/19 accident year. Recent accident years are most undeveloped and therefore more impacted by changes to assumptions. People receiving weekly compensation and sensitive claim support for longer is a key driver of the increase. Higher than expected claim volumes, particularly for sensitive, weekly compensation and non-serious injury capital claims has also contributed.

The number of claims is forecast to grow

There has also been a step change in assumed future claim growth for the Scheme. The projected incurred cost for future years is about 6% higher than expected in 2018. The assumed growth in new sensitive claims has increased from 9% to 20% and is a key driver of this. Higher projected incurred costs for future accident years are concerning. Combined with New Zealand's current low interest rates, this adds to funding pressures. Falling interest rates are beyond ACC's control, but we must be aware of the levy impacts if claim costs increase further.

The cyclical claims pattern seen in Graph 6 is partly linked to New Zealand's economic cycle. Claim volumes increased between 1999/2000 and 2006/07, then declined with the economic downturn. They have increased since 2011/12, in part due to economic growth.

How ACC services are funded

Summary

- The Scheme is subject to significant volatility and many factors can affect future levies and appropriations. Lower interest rates have resulted in lower funding positions at 30 June 2019, so it's very likely that levies and appropriations will need to increase significantly. Even with these increases, levy rates remain below highest historical levels. Higher levies were needed before 2014 because they included an amount to bring the unfunded pre-1999 pay-as-you-go (PAYG) liability to full funding.
- An increase of $2.3 billion (49%), before capping and management response, is expected in the next levy/appropriation round. This has been driven by four factors:
  1. Since 30 June 2018, interest rates have continued to fall. This has:
     - increased new-year claim cost estimates
     - reduced the funding position for all accounts.

     At 30 June 2018, the levied accounts (the Motor Vehicle, Earners' and Work Accounts) were all above their funding targets. At 30 June 2019 all accounts, other than the Work Account and the Earners' portion of the Treatment Injury Account, were under their funding targets.

     Overall, interest rate reductions and changes in other economic factors result in an indicated total levy and appropriation increase of $1.2 billion (25%).
  2. Weekly compensation and medical claim volumes continue to increase faster than previously expected. Overall, claim volume increases and changes in claim severity indicate levies and appropriations need to increase by $0.4 billion (8%).
  3. In 2018 the Government approved a recommended levy decrease for the Work Account, but didn't approve recommended increases for the Non-Earners', Motor Vehicle and Earners' Accounts of $0.3 billion (7%).
  4. Based on experience at 30 June 2018, levies and appropriations were expected to increase with increasing claim frequencies and average claim growth higher than standard inflation. Levies and appropriations were expected to increase by $0.4 billion in total (8%).
- The organisation has actions underway to partially offset levy and appropriation increases. These reduced indicative levies and appropriations for 2020/21 by $163 million (2.3%) to $2.1 billion (45%). This reflects the expected benefits of the ICIP and injury prevention. If the targets set aren't achieved, these reductions won't be realised.
- New-year costs forecast for the next levy/appropriation rounds are $1.4 billion (31%) higher than existing levies and appropriations. New-year costs represent the lifetime costs to ACC of rehabilitating and supporting people injured during a year. Collecting less than new-year claim costs means existing funds will be utilised and funding positions will continue to deteriorate. Interest rate reductions from 30 June 2018 to 30 June 2019 and other changes in economics have increased new-year claim costs by $300 million. Increases in claim volumes and costs further increased this by almost $200 million.
- Claims can continue to be paid in the foreseeable future. However large or enduring funding deficits can shift the cost burden of claims to future generations, which isn't consistent with the principle of full funding.
- The levy cap (15%, plus inflation for the Motor Vehicle Account) limits large increases, improving levy stability, but also slows the return to the target funding positions when in deficit. Motor vehicle levies are expected to require eight years of increases, at the cap, before they cover new-year claim costs and the funding position can start improving. Even once new-year claim costs are covered, levies are expected to increase at the cap for a further four years. Similarly, the Earners' and Work Accounts are both expected to be capped for four years. In the short term the cap reduces levies by $1.0 billion (15%).
- The 2019/20 approved appropriation is only $75 million more than the estimated $1,389 million of payments to be made during 2019/20 for all non-earner claims, allowing for the benefit of management response. Annual claim payments are expected to exceed the currently approved appropriation by 2021/22.
- The Government's funding policies specify how ACC calculates levies and appropriations. As such, levies and appropriations must fully respond to changes in new-year claim costs. But changes in funding of historical claims are spread over time. Ultimately though, the cost of claims paid by ACC doesn't change, regardless of when they're funded.
- The Government sets final levy rates and appropriations.

ACC has five accounts funded differently

Claims for injuries are assigned to one of the five accounts based on where, or how, each injury occurred. Levies or appropriations fund rehabilitation, support and compensation.

The accounts funded through levies are the:

- Motor Vehicle Account
- Earners' Account
- Work Account.

The Non-Earners' Account is funded by tax payers through Government appropriations.

The Treatment Injury Account is funded through appropriations and a portion of the Earners' levy.

Overall, for every $1 of levy collected, ACC expects to return $0.94 to clients via claim payments. Likewise, for every $1 of appropriation collected, ACC expects to return $0.92 to clients via claim payments.

This is how we set levies and appropriations

ACC recommends levies and appropriations in line with the Government's funding policies and consults widely. The Government's funding policy for the levied accounts was gazetted in May 2016 (Funding Policy Statement in Relation to the Funding of ACC's Levied Accounts) and for the appropriation was set by Cabinet in May 2017.

ACC recommends levies every two years. ACC consults businesses, communities and individuals on recommended levies. Then, the Board reviews the feedback and recommends levy rates to the Minister for ACC. Appropriation recommendations are provided every year for the next five years and are set by Cabinet as part of the Budget process.

The recommendations start with new-year claim costs. New-year costs represent the lifetime costs to ACC of rehabilitating and supporting people injured during the levy year.

After that, funding adjustments allow for the difference between assets and the future costs of existing claims. For the levied accounts, any under- or overfunding is spread over a 10-year horizon. For the Non-Earners' Account, any underfunding is spread over 10 years and any overfunding is returned over three years. In the long-term, levies/appropriations are expected to increase as new-year claim costs increase.

The organisation can influence claiming behaviour through effective claims management. In addition, ACC is in the process of delivering injury prevention programmes and the ICIP to offset cost pressures. New-year costs have been reduced to allow for the benefit of these two management actions but, if these aren't effective, then higher levies and appropriations will be needed if ACC is to continue providing services that injured people need in the future.

Recommended levy increases are capped at 15%. In this section we also present uncapped levies to show the underlying funding required. Following significant and sustained changes to experience, such as the recent decrease in interest rates, it may take many years of increases at the maximum cap before levies cover new-year claim costs.

Cabinet sets levies and appropriations based on these recommendations as well as advice from MBIE and the Treasury.

When levies or appropriations are set below the amount required to cover new-year claim costs, the difference will be funded by an existing surplus or through increases in future levies and appropriations. In the short to medium term, this doesn't affect ACC's ability to manage and pay for claims. However large or enduring funding deficits can shift the cost burden of claims to future generations, which isn't consistent with the principle of full funding.

All accounts are subject to significant volatility

Levy rates and appropriations are affected by volatile factors:

- **Factors ACC may be able to influence** include claim frequencies, claim durations, average claim costs and administration expenses. These are affected by policy and operational settings.
- **Factors ACC can't control** include inflation and interest rates.

Both factor types can be volatile, and their impacts differ by account. However, changes in interest rates and inflation have the greatest impacts. Table 7 and Table 8 provide the expected impacts on levies and appropriations of a 1% increase or decrease in key assumptions. The movements don't indicate the upper or lower levels of all possible outcomes.

These sensitivities assume no changes in any other assumptions. For example, the impact of a 1% reduction in inflation assumes a long-term consumer price index (CPI) decrease from 2% per annum to 1% per annum with no corresponding decrease in expected investment returns or discount rates.

TABLE 7 – AVERAGE LEVY SENSITIVITY ANALYSIS BY ACCOUNT

	Motor Vehicle		Earners'		Work	
Sensitivity of levy rates	+1%	-1%	+1%	-1%	+1%	-1%
Discount rates and investment returns	-$72.30	$99.72	-$0.24	$0.22	-$0.16	$0.13
Base inflation	$137.88	-$104.55	$0.29	-$0.24	$0.20	-$0.17
Weekly compensation new claim volumes growth rate	$1.00	-$1.00	$0.01	-$0.01	$0.01	-$0.01
Weekly compensation long-term continuance rate	$16.15	-$13.20	$0.02	-$0.02	$0.05	-$0.06
Serious injury care rate	$73.38	-$52.17	$0.06	-$0.05	$0.02	-$0.02
Elective surgery superimposed inflation	$10.17	-$7.07	$0.07	-$0.06	$0.00	-$0.04

TABLE 8 – NON-EARNERS' APPROPRIATION SENSITIVITY ANALYSIS

	Non-Earners'		Non-Earners' portion of Treatment Injury		Total	
Sensitivity of Non-Earners' appropriation ($M)	+1%	-1%	+1%	-1%	+1%	-1%
Discount rates and investment returns	-181	257	-137	208	-317	464
Base inflation	320	-232	234	-158	554	-390
Social rehabilitation new claim volume growth rate	1	-1	0	0	2	-2
Serious injury superimposed inflation	153	-101	186	-123	339	-224
Elective surgery superimposed inflation	24	-17	8	-6	32	-23

Levies need to increase

ACC will consult on the 2021/23 levies in 2020. Levies for 2021/23 are estimated to increase by $1.5 billion before capping. Capping of the Motor Vehicle, Earners' and Work Accounts levies limits the increase to just over $500 million:

- $96 million (19%) for the Motor Vehicle Account
- $283 million (15%) for the Earners' Account
- $127 million (15%) for the Work Account.

The indicative increase for customers is:

- $22 per motor vehicle (approximately a $10 increase in the yearly vehicle registration, and approximately $12 collected over the year through the petrol levy)
- $110 per person earning $60,000 per year (about $4 per fortnight) up to $230 for a person earning $128,470 (the current maximum liable income level) or more per year ($9 per fortnight)
- $60 for an employer per employee earning $60,000 per year (about $2 per fortnight) up to $130 per employee earning $128,470 (the current maximum liable income level) or more per year ($5 per fortnight).

A levy payer may pay more than one type of levy. For example, a self-employed person will pay an earner levy and a work levy and may own multiple vehicles. The industry worked in, and the type of vehicle owned, will determine the Work and Motor Vehicle Account levies paid.

Table 9 steps through the main drivers of the levy rate increases:

- levies start from the indicative levies for 2021/23, before allowing for the net benefit of the organisation's response, based on information to 30 June 2018
- the changes in economic and other factors to 30 June 2019 are shown
- then the updated impact of management responses to cost pressures is deducted
- finally the effect of the funding policy limiting levy increases to 15% (plus inflation for the Motor Vehicle Account) is shown.

New-year costs are shown as a comparison.

The commentary below describes these changes in more detail.

TABLE 9 – INDICATIVE LEVIES FOR 2021/23

	Motor Vehicle	Earners'	Work
2019/21 levies	**$114**	**$1.21**	**$0.67**
2021/23 indicative uncapped levies before management response as at 30 June 2018	$145	$1.32	$0.71
Changes due to:			
Economic factors	$86	$0.23	$0.18
Other factors	$22	$0.13	$0.00
2021/23 uncapped levies before management response as at 30 June 2019	$253	$1.68	$0.90
% increase from 2019/21 levies	(122%)	(39%)	(33%)
Reduction due to management response	$7	$0.04	$0.02
Reduction due to capping	$110	$0.26	$0.11
Indicative 2021/23 capped levies as at 30 June 2019	**$136**	**$1.39**	**$0.77**
% increase from 2019/21 levies	(19%)	(15%)	(15%)
New-year cost	$196	$1.56	$0.87

Motor Vehicle Account levies are shown per motor vehicle and begin from 1 July of the year they apply. The levy shown is an average and different levies apply by vehicle class (light passenger vehicles, trucks, motorcycles etc.).

The Earners' Account and Work Account levies are shown as a rate per $100 of liable earnings up to a maximum salary level and begin from 1 April of the year they apply. The Work Account levy is an average, with different levies applying by industry. The Earners' Account levy includes an amount needed to fund the injuries resulting from medical treatment for earners.

The Government confirmed levy rates for 2019/21 in December 2018

As a result:

- the Motor Vehicle Account levy remained at $113.94, lower than the $127.68 recommended
- the Earners' Account levy remained at $1.21, lower than the $1.24 recommended
- the Work Account levy decreased from $0.72 to $0.67.

Lower-than-requested levies for 2019/21 increase the levies required for 2021/23 by just over $100 million per annum.

Levy rates for 2021/23 were expected to increase

Higher levies were forecast for 2021/23 due to increases in claim volumes and cost increases above standard inflation. These were expected, based on experience to 30 June 2018, to increase levies in 2021/23 by a further $120 million per annum before allowing for the impact of management response.

Interest rates have fallen

Factors that ACC can't control have increased the uncapped indicative levies for all accounts. These have been driven by falling interest rates, which fell by around 1% in the year ending 30 June 2019.

Lower interest rates have increased new-year claim costs and driven significant reductions in the funding positions. The 30 June 2018 funding positions were all higher than the funding target but, at 30 June 2019, the Motor Vehicle and Earners' Accounts' funding positions were below the funding targets.

The impact of all economic factors is shown in Table 9. The Motor Vehicle Account has been affected the most, implying an indicative increase of $86 per vehicle or about $370 million in total. Across all levied accounts this increases annual levies by almost $1 billion including an increase of almost $300 million in new-year claim costs.

Claim volumes and durations are up

In total, factors that ACC might be able to influence increased indicative levies for the Motor Vehicle and Earners' Accounts. The main drivers, by account, included:

- continuance rate forecasts, which have been strengthened for weekly compensation and serious injury claims in the Motor Vehicle Account following recent experience
- significant growth in sensitive claim volumes and expected future volume increases of about 20% in 2019/20 and then 12% for the following two years. This increases the 2021/23 Earners' Account new-year claim costs by $0.07
- the Work Account experience, which has been, overall, in line with expectations.

The impact of all 'Other factors' is shown in Table 9. Across all accounts this increases annual indicative levies by approximately $300 million including an increase in new-year claim costs of $180 million.

Management actions are included, reducing levy increases

The indicative levies for 2021/23 in Table 9 include the impacts of ACC's actions under the ICIP and injury prevention to partially offset the upward trend in levies. These are expected to reduce the total levies required by about $118 million (2.4%).

These are the same management responses included last year, updated for the latest targets and estimates. Compared to last year, the ICIP and injury prevention benefits are now expected to be delivered later. This reduces the impact from $136 million to $111 million per annum over 2021/23.

Performance targets have been slipping during the current implementation stage of the ICIP. Given that most of the benefits are expected in the future, this recent deterioration isn't expected to have any significant impact on achieving the overall targets. If the targets set aren't achieved, then these levy reductions won't be realised.

Levy increases are capped

The Government's funding policy specifies how ACC calculates recommended levies. The funding policy fully responds to changes in new-year claim costs, but spreads changes in the funding of historical claims over time. Levy increases are capped at 15% (plus inflation for the Motor Vehicle Account) every two years.

Capping reduces the total indicative levy, in the short term, by about $1 billion.

Current levy rates are below new-year claim costs

As shown in Table 9, the levies for all accounts are lower than new-year claim costs. Collecting less than new-year claim costs means that existing funds, for historical injuries, will reduce and the funding position will continue to deteriorate.

Current levy rates are lower than new-year claim costs by about:

- 42% for the Motor Vehicle Account ($360 million or $60 per vehicle)
- 22% for the Earners' Account ($550 million or $0.17 per $100 of liable earnings)
- 23% for the Work Account ($250 million or $0.10 per $100 of liable earnings).

Levies are expected to continue increasing

Even when levies are no longer required to be capped, they're still expected to increase due to:

- increases in the number of clients receiving weekly compensation in excess of increases in the working population
- medical costs increasing faster than standard inflation
- care rates increasing faster than standard inflation
- standard inflation for the Motor Vehicle Account.

We've looked at possible future levy paths for the different accounts

Changes in economic and claim trends can vary new-year claim costs and funding positions, with implications for levies.

To understand more, we simulate future examples of these variations for the three levied accounts. Each simulation allows for:

- the funding position at 30 June 2019
- variations in economic factors, including the earned rates of investment returns, inflation rates and risk-free interest rates
- changes in the volume of claims, continuance rates, average payments and superimposed inflation.

For each simulation, the assumptions are allowed to change each year. Levies are then recalculated by applying the funding policy.

We've generated funding positions for each simulation and associated revised levy paths. Using these simulations, Graph 7 to Graph 9 show, for each account, the distribution of future uncapped and capped levy paths, calculated according to the funding policy.

This shows the potential variability in levies compared to indicative future levy rates based on the 30 June 2019 assumptions. Uncapped levy rates have been included to illustrate the underlying variability. The distribution of capped levy paths is much narrower, showing the effect the cap has on stabilising levy rates.

In the levy paths graphs, we've also selected an extreme simulation to demonstrate that the changes in the uncapped levy rates from year to year may be large and may not necessarily be smooth.

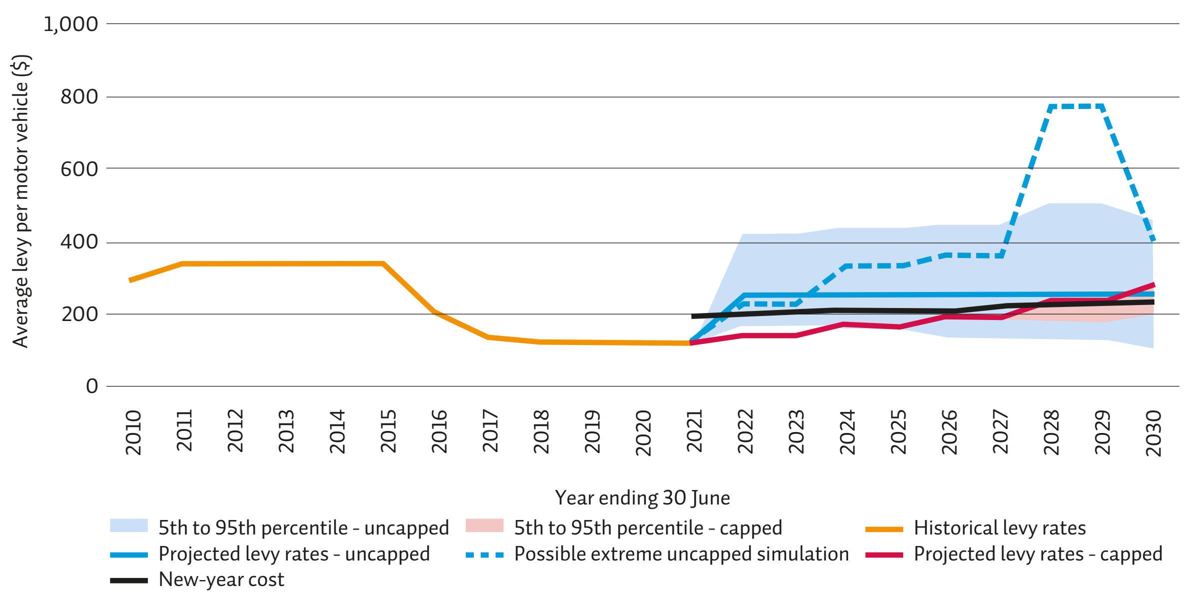
MOTOR VEHICLE ACCOUNT

The Motor Vehicle Account had the lowest opening funding position and has the highest exposure to future variability in interest rates. Indicative future levy rates show that the levy for new-year claim costs for 2020/21 has risen to $196, compared to the current levy rate of $114. Under the central scenario, levy rates would need to increase at capped levels for eight years (four levy rounds), before catching up to new-year claim costs. Under this scenario, the funding ratio is expected to reduce from 94% to below 80%. We therefore expect levy rates will continue increasing at the capped level for a further four years to move closer to its funding target.

There is only a 3% probability that levies won't hit the cap for the 2023/25 levy round. This would require interest rates to rise by more than 1.4%. However, this would still result in a significant levy increase in 2023/25, just below the maximum allowed under the cap.

The distribution of the Motor Vehicle Account's simulated uncapped levy path is also the widest of the levied accounts.

GRAPH 7 – MOTOR VEHICLE ACCOUNT: PROJECTED LEVY PATH



Levy rates for the Motor Vehicle Account are low in comparison to historical levels. Higher levies were needed for all levied accounts before 2014 because they included an amount to bring the unfunded pre-1999 pay-as-you-go (PAYG) liability to full funding. The peak rate for this account was just over $330 between 2011 and 2015. Given the 30 June 2019 position, we expect increases will be needed going forward. Without capping there would be a wide range of possible future levy rates. For example, the 2023/25 rates could vary from $156 to $436 with 90% confidence. Capping narrows the range of likely levy rate outcomes for the same period to a single rate of $163 within a 90% confidence interval.

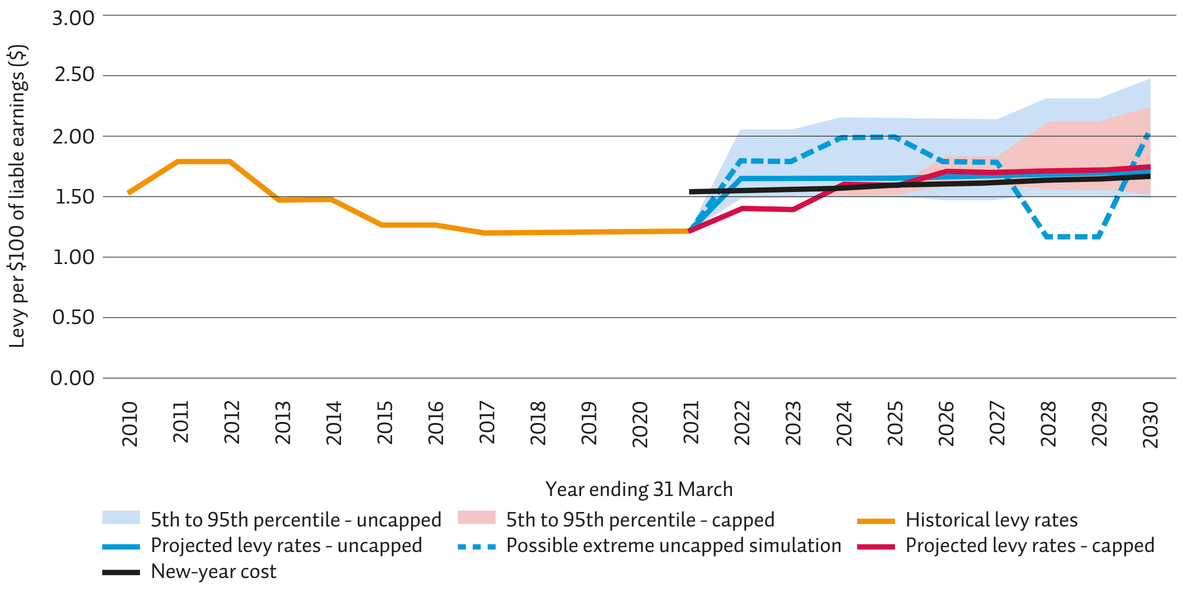
EARNERS' ACCOUNT

The reduction in interest rates have reduced the Earners' Account funding ratio to 100% and caused new-year claim costs to increase substantially. Indicative future levy rates show the levy for 2020/21 new-year claim costs has risen to $1.56 per $100 liable earnings, significantly higher than the current levy rate of $1.21.

Indicative levy rates are expected to increase at the maximum allowed by the levy cap for the next four years (two levy-setting rounds) before exceeding new-year claim costs. There is only a 7% probability that levies won't hit the cap for the 2023/25 levy round.

Even once the rate exceeds new-year claim costs, further increases, but at levels lower than the cap, will be required to return to the funding target.

GRAPH 8 – EARNERS' ACCOUNT, INCLUDING THE EARNERS' PORTION OF THE TREATMENT INJURY ACCOUNT: PROJECTED LEVY PATH



Levy rates for the Earners' Account have been falling since 2012 when they peaked at $1.78. Given the 30 June 2019 funding position, we expect increases will be needed going forward. Without capping, there would be a wide range of possible future levy rates. For example, the 2023/25 rates could vary from $1.50 to $2.16 with 90% confidence. Capping narrows the range of likely levy rate outcomes for the same period to between $1.52 and $1.60.

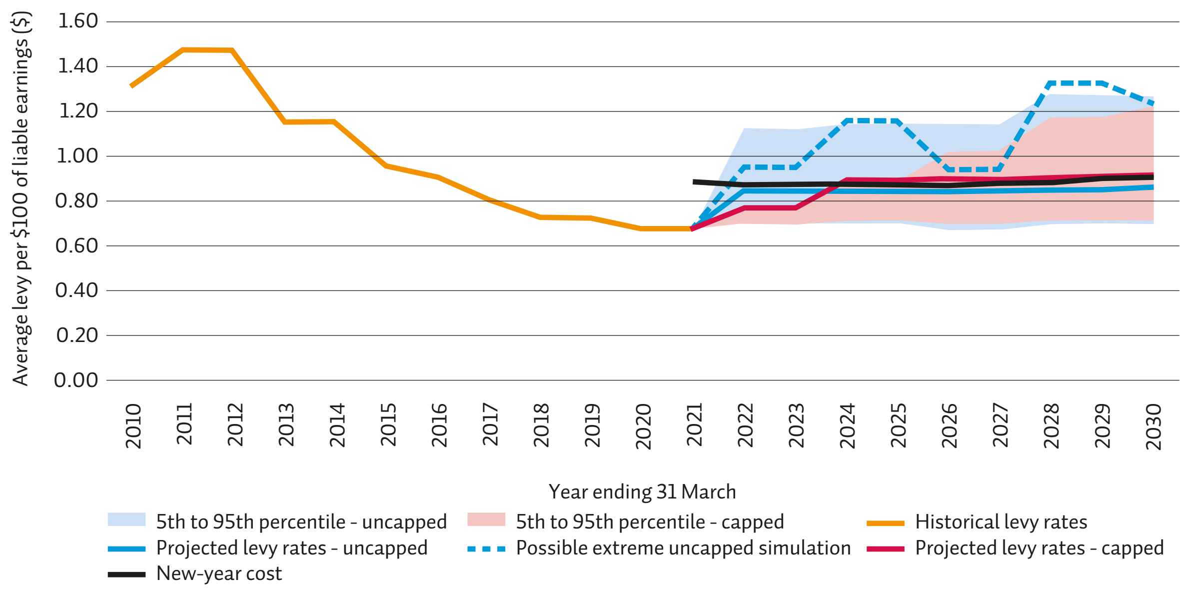
WORK ACCOUNT

The Work Account had the strongest opening funding ratio but is now only marginally above the funding target of 105%.

Indicative future levy rates show the levy for 2020/21 new-year claim costs has risen to $0.87 per $100 liable earnings, significantly higher than the current levy rate of $0.67. Compared to the Earners' Account, the Work Account is more exposed to future variability in interest rates. Levy rates are projected to increase at the maximum allowed by the levy cap for the next levy-setting round, before exceeding new-year claim costs in 2023/25.

The distribution of the Work Account's simulated uncapped levy path is slightly more volatile than it is in the Earners' Account.

GRAPH 9 – WORK ACCOUNT: PROJECTED LEVY PATH



Levy rates for the Work Account are at historically low levels. The peak rate for this account was $1.47 between 2011 and 2012. Given the 30 June 2019 funding position, we expect increases will be needed going forward. Without capping, there would be a wide range of possible future levy rates. For example, the 2023/25 rates could vary from $0.70 to $1.14 with 90% confidence. Capping narrows the range of likely levy rate outcomes for the same period to between $0.71 and $0.89.

The Non-Earners' appropriation needs to increase

Appropriations for 2020/21 are estimated to increase by $610 million.

Table 10 steps through the main drivers of the appropriation increases:

- appropriations start from the indicative appropriation for 2020/21, before allowing for the net benefit of the organisation's response, based on information to 30 June 2018
- then changes in economic and other factors to 30 June 2019 are shown
- then the updated impact of management responses to cost pressures is deducted.

New-year costs and pre-2001 PAYG costs are shown as a comparison.

The commentary below describes these changes in more detail.

TABLE 10 – NON-EARNERS' INDICATIVE APPROPRIATION

($M)	Non-Earners' Account	Non-Earners' portion of the Treatment Injury Account	Total
2020/21 approved appropriation (baseline)	**1,275**	**191**	**1,465**
2020/21 indicative appropriation as at 30 June 2018	1,558	270	1,828
Changes due to:			
Economic factors	94	113	207
Other factors	72	15	87
2020/21 indicative appropriation before management response as at 30 June 2019	1,724	398	2,122
% increase from current baseline	(35%)	(109%)	(45%)
Reduction due to management response	38	8	46
2020/21 indicative appropriation after management response as at 30 June 2019	**1,685**	**391**	**2,076**
% increase from current baseline	(32%)	(105%)	(42%)
New-year cost plus pre-2001 PAYG	1,487	273	1,751

Pre-2001 claims are still a big part of the Non-Earners' Account

Pre-2001 claims are funded on a PAYG basis, as costs arise. Some of these claims may continue to require support for many decades. Claims made before 1 July 2001 were 40% ($4.8 billion) of the $11.9 billion total Non-Earners' Account OCL at 30 June 2019. However, they represent only 10% of annual costs.

Similarly, at 30 June 2019 the OCL for pre-1 July 2001 treatment injury claims for non-earners was $1.5 billion, or 25% of the total $6 billion OCL for the Treatment Injury Account.

Recommended appropriation increases weren't approved

Last year ACC recommended that MBIE and the Treasury request an increase of $199 million for 2019/20. The Government approved an increase of only $1.5 million. This was the fifth year in which most of the additional funding required wasn't approved, including funding for some Government policy changes. Approving appropriations lower than those recommended will utilise assets faster than expected and the funding position will deteriorate.

Using assets set aside for historical claims to fund new claims is a deviation from the principle of full funding. The intent of the Government's funding policy is to fully respond to changes in new-year claim costs and spread changes in the funding of historical claims over time. The 2019/20 approved amount is only $38 million more than the estimated $1,426 million of payments to be made during 2019/20 for all non-earner claims. Annual claim payments are expected to exceed the currently approved appropriation by 2021/22. The currently approved appropriation for 2021/22 will be less than would be appropriated under PAYG.

Interest rates have fallen

The impact of all economic factors increases the appropriation by $207 million, as shown in Table 10.

The lower levels of approved appropriation, along with continued reductions in interest rates, have largely contributed to the funding ratio for the post-2001 portion of the Non-Earners' Account decreasing from 76% at 30 June 2018 to 60% at 30 June 2019. This is significantly below the funding target of 88%.

Claim volumes have continued to increase

The impact of all other factors shown in Table 10 is to increase the appropriation by $87 million. Sensitive claims have been growing significantly and are projected to grow by about 20% in 2019/20 and then by 12% in the following two years. Medical and non-serious injury social rehabilitation claim volumes have also been higher than expected and are expected to continue growing.

Management actions are included, reducing appropriation increases

The indicative appropriation for 2020/21 in Table 10 includes the impacts of the organisation's actions to partially offset the upward trend in appropriations. These anticipated savings reduce the appropriation required by $46 million (2.2%). If the targets set aren't achieved, these reductions won't be realised.

However, the indicative appropriation is at an historical high.

Appropriations are below new-year claim costs

As shown in Table 10, the approved 2020/21 appropriation is almost $300 million (19%) lower than new-year claim costs and the PAYG costs for pre-2001 claims. Collecting less than new-year claim costs means existing funds, for historical claims, will reduce and the funding position will continue to deteriorate.

Appropriations are expected to continue increasing

Appropriations are expected to increase in the future due to:

- increases in the number of non-earners
- increases in the number of non-earners receiving entitlements in excess of increases in the population
- medical costs increasing faster than standard inflation
- care rates increasing faster than standard inflation
- standard inflation.

We've looked at possible future appropriations for the Non-Earners' Account

Changes in economic and claim trends can vary new-year claim costs and funding positions, with implications for appropriations.

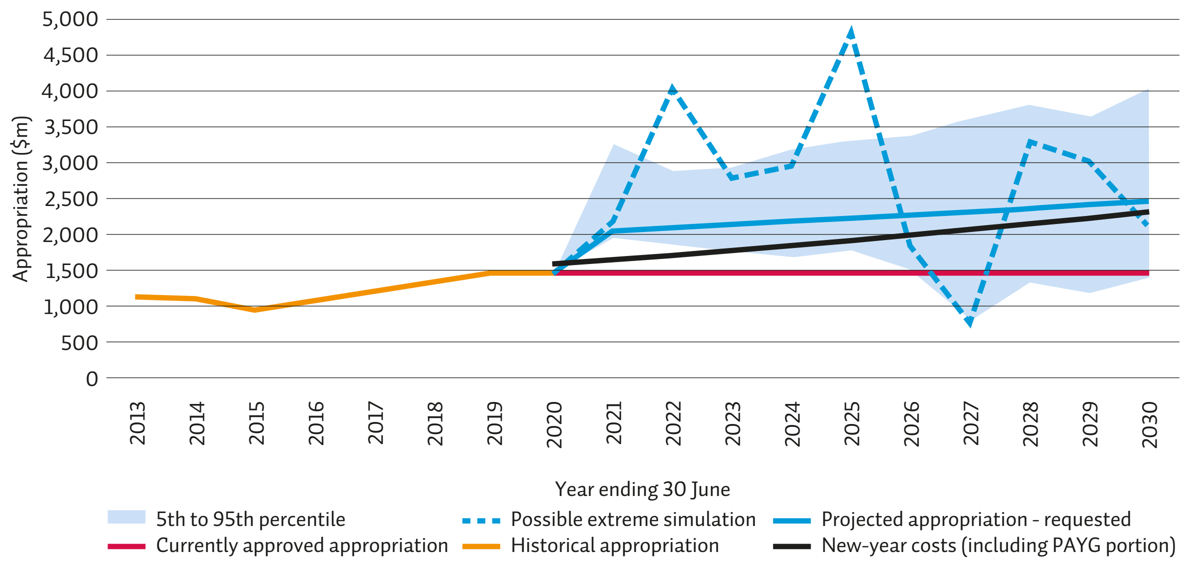
To understand more, we simulate future examples of these variations for the fully funded portion of the Non-Earners' Account. Each simulation allows for:

- the funding position at 30 June 2019
- variations in economic factors, including the earned rates of investment returns, inflation rates and risk-free interest rates
- changes in the volume of claims, continuance rates, average payments and superimposed inflation.

For each simulation, the assumptions are allowed to change each year. The Non-Earners' Account uses the approved appropriation amount for 2019/20 from Budget 2019 but allows for increases in line with the funding policy throughout.

Using all simulations, Graph 10 shows the distribution of future appropriations, calculated according to the funding policy.

GRAPH 10 – NON-EARNERS' ACCOUNT, INCLUDING THE NON-EARNERS' PORTION OF THE TREATMENT INJURY ACCOUNT: PROJECTED APPROPRIATION PATH



Appropriations are lower than required to cover new-year and PAYG costs. Given the 30 June 2019 position, we expect increases will be needed going forward. For example, the appropriation in 2023/24 could vary from about $1.7 billion to $3.2 billion with 90% confidence compared to the almost $1.5 billion currently approved.

Financial results

Summary

- The Scheme recorded an $8,657 million deficit for the 2018/19 year. Including the OCL for work-related gradual process claims incurred but not yet reported, the deficit was $9,024 million.
- Changes in economic assumptions drove an increase in the OCL of $11,152 million during the year.
- Total claim costs incurred were 12.5% higher than budgeted. Claim costs incurred are projected to increase by around 4% per annum in the next four years due to inflation, superimposed inflation, population growth and an allowance for future increases in claim frequency.
- Expenses have been adequately managed in 2018/19. Claims handling, injury prevention, investment and operating costs in 2018/19 increased from 2017/18 and were slightly above budget overall. Total operating costs were below budget, while claims handling expenses were slightly above. These expenses also include costs associated with the ICIP projects.
- Overall the underwriting result was close to expected in 2018/19. However, by account the underwriting result is mixed. The Motor Vehicle Account was worse than expected with much higher claim costs in 2018/19. The Work Account has been better than expected for the past three years.
- The deficit for 2019/20 is projected to be $1,719 million. This is $714 million worse than the previous projection, and $727 million worse than the 2019/20 budget. This is mainly driven by a larger expected underwriting deficit of $2,394 million.
- Deficits are projected in the next four years for the levied accounts. While the deficit reduces after two years, it increases again for future years as the OCL is expected to increase more quickly than investment returns. Under the funding policy, the increases in levies and appropriations are capped, so won't be sufficient to maintain funding positions in the short to medium term. The deterioration in the funding positions is expected to continue in the next four years for the Work Account, six years for the Earners' Account, and eight years for the Motor Vehicle Account.
- For the Non-Earners' and Treatment Injury Accounts, the deficits arising during the next four years are projected to increase without action to align claim costs and appropriations.

ACC is a unique scheme for all New Zealanders

ACC isn't a profit-making body. It collects levies and receives Government appropriations. ACC invests to meet claims and expenses. Over time all levy and investment income must:

- pay claims, or
- administer the Scheme, or
- be spent on preventing injuries.

Movements upwards or downwards in net assets aren't the same as profit or loss. That's why we use 'surplus' and 'deficit' instead.

The statement of comprehensive income shows a complete picture of income

The statement of comprehensive income is shown in Table 11 for the year ended 30 June 2019 and compares results with the previous two years. These results include the OCL for work-related gradual process claims incurred but not yet reported. This is included here as it's a true economic cost to the Scheme, funded by the Work Account levy. The figures in the *Annual Report 2019* financial statements exclude this liability, after recommendations from external auditors, so differ somewhat from the figures presented here.

We've shown the statement of comprehensive income by account for the year ended 30 June 2019 in *Appendix E – Financial results*.

The results for 2017/18 and 2018/19 are separated into performance related to cash flow (as in the *Annual Report 2019*) and the OCL movement during the year. The latter allows us to examine overall financial performance taking into account incurred costs. This is consistent with the full funding requirements for the majority of the Scheme.

TABLE 11 – STATEMENT OF COMPREHENSIVE INCOME FOR THE PAST THREE YEARS

($M)	2018/19 Cash flow	2018/19 OCL	2018/19 Total	2018/19 Budget	2018/19 Difference	2017/18 Cash flow	2017/18 OCL	2017/18 Total	2016/17 Total
Income									
Levies and appropriations	4,505	0	4,505	4,376	130	4,120	0	4,120	4,102
Total income	**4,505**	**0**	**4,505**	**4,376**	**130**	**4,120**	**0**	**4,120**	**4,102**
Expenditure									
Claims incurred									
Medical costs	1,445	(1,344)	100	377	(277)	1,404	(71)	1,333	1,379
Elective surgery	370	56	426	562	(136)	346	(723)	(376)	357
Sensitive claims	155	3,354	3,509	2,873	636	0	0	0	0
Social rehabilitation	785	452	1,237	831	406	740	(418)	322	2,703
Compensation related	1,402	(437)	966	714	251	1,303	703	2,006	1,643
Other	218	(878)	(660)	(375)	(284)	217	(103)	114	418
Claims handling expenses	480	33	513	433	80	426	1	427	410
Total claims incurred	**4,856**	**1,236**	**6,092**	**5,416**	**676**	**4,436**	**(611)**	**3,826**	**6,910**
Expenses									
Net operating costs	123	0	123	126	(3)	143	0	143	138
Injury prevention costs	75	0	75	80	(6)	69	0	69	55
Total expenses	**198**	**0**	**198**	**206**	**(8)**	**212**	**0**	**212**	**194**
Total expenditure	**5,053**	**1,236**	**6,289**	**5,622**	**667**	**4,649**	**(611)**	**4,038**	**7,103**
Surplus/(deficit) from underwriting activities	**(548)**	**(1,236)**	**(1,784)**	**(1,247)**	**(538)**	**(529)**	**611**	**82**	**(3,001)**
Decrease/(increase) in unexpired risk liability	**0**	**(433)**	**(433)**	**108**	**(540)**	**0**	**(92)**	**(92)**	**(110)**
Economic									
Change in discount and inflation rate assumptions	0	(11,152)	(11,152)	0	(11,152)	0	(2,725)	(2,725)	2,368
Investment management costs	(55)	0	(55)	(57)	2	(53)	0	(53)	(48)
Unwind of risk-free interest rate	0	(692)	(692)	(746)	53	0	(734)	(734)	(774)
Investment income	5,092	0	5,092	1,549	3,542	3,568	0	3,568	2,052
Total economic	**5,037**	**(11,844)**	**(6,807)**	**747**	**(7,554)**	**3,515**	**(3,459)**	**57**	**3,599**
Total surplus/(deficit)	**4,489**	**(13,513)**	**(9,024)**	**(392)**	**(8,632)**	**2,987**	**(2,940)**	**46**	**488**

The Scheme had a deficit in 2018/19

ACC's financial result for 2018/19 was a deficit of $9,024 million, compared with a budgeted deficit of $392 million.

The largest factors were the economic environment changes

The total economic contribution was a deficit of $6,807 million, compared to the budgeted surplus of $747 million. In the previous two years the total economic contribution was a surplus $57 million and $3,599 million respectively. Two main factors drove the economic contribution for 2018/19:

1. Changes in assumed market conditions for interest and inflation rates increased the OCL by $11,152 million. Lower interest rates, due to reductions of more than 1% in New Zealand Government bond yields, accounted for the vast majority of this. To a lesser extent, the Treasury reducing the long-term interest rate assumption from 4.75% to 4.30% also contributed to the increase in the OCL.

2. Investment income was $5,092 million. ACC achieved an annual return of 12.97% after costs, much higher than the risk-free rate and the expected investment return. This result was largely driven by decreases in interest rates and is below benchmark by 0.82%.

Some injuries require ACC to support clients throughout their lives. It's not possible to find appropriate investment assets with future cash flows that match these lifetime needs. This means ACC's claim payments aren't matched and the financial performance is sensitive to interest rate changes. When interest rates change the impact on the OCL is larger than it is on investment assets. This means that when interest rates fall (rise) this generally results in an economic deficit (surplus). There has been considerable volatility in interest and inflation rates in the past three years. This has had significant impacts on the OCL and investment income.

Underwriting result was a large deficit

Contributing to the overall deficit was a large underwriting deficit of $1,784 million. The main drivers of this deficit are shown in Table 12.

TABLE 12 – ANLAYSIS OF UNDERWRITING DEFICIT

($M)		
Expected deficit	Levy income lower than new-year claim cost	538
	Appropriation lower than new-year claim cost	171
	Interest rate difference between how levies/appropriations and OCL are determined	287
	Total expected deficit	**996**
2018/19 claim experience	Higher claim costs than expected	147
	Higher claims handling expenses than expected	66
	OCL strain	575
Total underwriting deficit		**1,784**

Approved levy and appropriation income was less than the cost of new-year claims

A key driver of the underwriting deficit is approved levies and appropriations being set below the cost of new claims. This resulted in an expected underwriting deficit of $996 million. This includes an estimated $287 million underwriting deficit due to the assumptions used to calculate the year-end OCL being different from those used to calculate levies and appropriations.

Levy rates for new-year claims assume investment returns above risk-free rates. Both levy rates and appropriation amounts are set without a risk margin on the cost of new-year claims. The OCL uses risk-free rates and includes risk margins, so it's expected that new-year claims will increase the OCL by more than is projected under the levy and appropriation assumptions.

Levy income in 2018/19 was $385 million higher than in 2017/18, and $130 million above budget. This was mainly due to more people in employment, increases in salaries and wages and more registered motor vehicles. This extra cash flow didn't result in a surplus as the levy is required to fund additional new claims incurred in 2018/19, as new claims increased with these drivers.

Claim payments were higher than expected, resulting in an OCL strain

The cash flow for claims paid during the year, excluding claims handling expenses, increased by $366 million to $4,376 million, exceeding the budgeted amount of $4,291 million. This is around $147 million higher than expected from the 2018 valuation, which was the basis used in determining the levy rates and appropriation amounts.

As part of the OCL valuation every year the estimate of future payments is revised which results in a change in the OCL. The OCL strain of $575 million was the main driver of higher claims incurred than budget. This reflected the higher payments over the year, see the *Claim volumes, types and costs* section for more detail.

In contrast, the OCL reduced by $611 million in 2017/18. $393 million of this was due to the recalibration of the OCL as ACC adopted a new valuation model. Changes in long-term assumptions also reduced the OCL in 2017/18.

2018/19 expenses increased by 6% and were slightly above budget

Expenses pay for handling claims, preventing injuries, investing funds and operating costs.

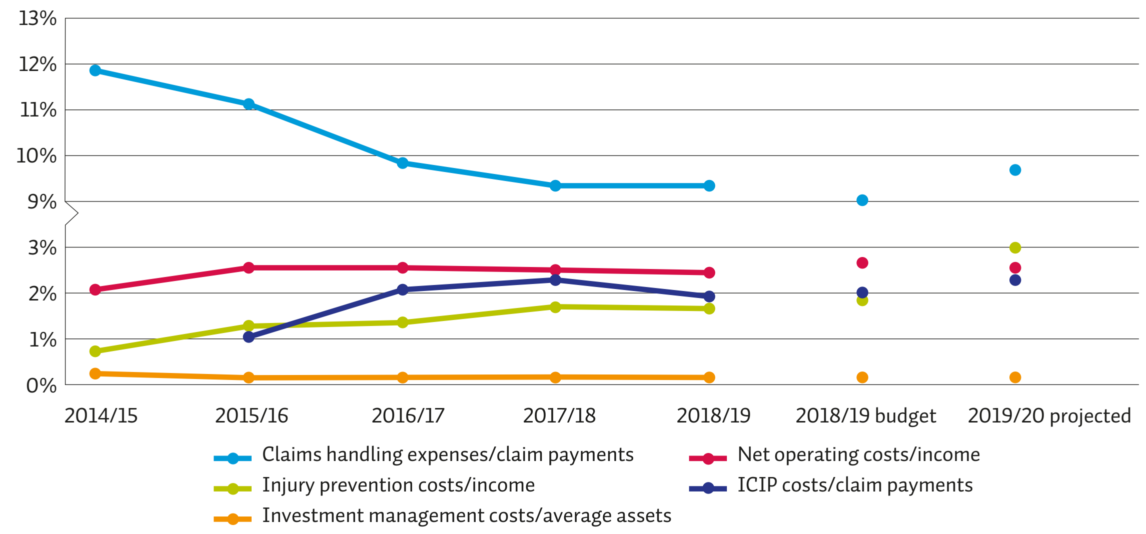
Expenses have been adequately managed during the year. Total costs increased by 6%, from $690 million in 2017/18 to $732 million in 2018/19. They were slightly above the $726 million budget.

Total operating expenses, including injury prevention and net operating costs, decreased by $14 million during the year to $198 million. This was mainly due to decreases in operating costs from the ICIP projects.

Graph 11 shows the percentages for the past three years alongside the 2018/19 budget and 2019/20 projections for:

- claims handling expenses paid during the year compared to claim payments
- net operating costs compared to income (from levies and appropriations)
- injury prevention costs compared to income (from levies and appropriations)
- ICIP project costs compared to claim payments
- investment management costs compared to funds under management.

GRAPH 11 – EXPENSES AS PERCENTAGES OF UNDERLYING SERVICE



Increased expenses were mainly driven by claims handling expenses

Claims handling expenses in 2018/19, excluding the ICIP project spend, increased by $33 million to $408 million and were higher than the budget of $388 million. Changes were made to help ensure a fairer and more reliable allocation of the costs involved in managing and paying claims. These included allocating support activity costs according to full-time-equivalent employee numbers. This meant some additional support activity costs were allocated to claims handling expenses in 2018/19. The number of claims processed per full-time-equivalent employee increased again to 605 in 2018/19. It was 572 and 593 in 2016/17 and 2017/18 respectively. Despite increased total spend, as a percentage of claim payments claims handling expenses reduced to 9.32% from 9.35%. This was above the budget of 9.05%.

Spending on the ICIP projects decreased slightly

The ICIP expenses were on budget at $85 million, a reduction from last year of $91 million. As a percentage of claim payments, the ICIP project spending decreased to 1.91% from 2.27%. This was also slightly below the budget of 1.97% due to higher actual claim payments. The ICIP projects are diverse in nature and resource requirements vary from year to year. The 2019/20 ICIP projects' costs are budgeted to increase to $100 million or 2.28% of claim payments.

Remaining operating costs increased slightly

Net operating costs, excluding the ICIP project spend, as a percentage of income from levies and appropriations, decreased to 2.43% ($110 million) from 2.51% ($103 million). These were below the budget of 2.64% ($116 million) with higher levies contributing to a lower percentage.

More was spent on injury prevention during the year

Injury prevention costs increased to $75 million from $69 million, but as a percentage of income from levies and appropriations decreased to 1.66% from 1.68%. This was below the 1.84% ($80 million) budget. They're expected to increase to 2.95%, an extra $55 million to $130 million, in 2019/20 to cover:

- costs involved in ACC's firearms buy-back programme
- injury prevention contributions to WorkSafe.

The injury prevention programmes are designed to reduce the number or severity of injuries and should lead to lower claim costs in the future. This was accounted for in the consultation levy rates and in the Non-Earners' appropriation request.

Investment management costs were on budget

Investment management costs of $55 million were slightly below the budget of $57 million. As a percentage of funds under management they decreased slightly from 0.14% to 0.12%, below the budget of 0.15%.

The unexpired risk liability (URL) is an accounting requirement

The balance sheet includes a provision for unearned levy revenue. This is revenue received or accrued before 30 June 2019, the end of the fiscal year. The URL is a provision for claims ACC can expect to incur after 30 June 2019 that are funded by levies already received. If the levies aren't enough to cover these claims (including a risk margin) then a URL is held. Changes in the URL are recorded in the statement of financial position, as required by accounting standards.

The URL needs careful interpretation. A requirement to hold a URL can arise if circumstances have changed since levies were set, and levies are now insufficient to fund future claims.

A URL can also be needed where a strong balance sheet means levies have been set below the costs of new claims arising in the next financial period. This is because ACC's funding policy states that when it has a strong balance sheet, it has to reduce recommended levies and appropriations below cost, using the surplus to fund the difference.

This is somewhat counter-intuitive and means an increasing URL doesn't necessarily signal a poor financial situation, although that's the reason in 2018/19.

The URL has increased and has two significant drivers

ACC had a strong funding position in the levied accounts at 30 June 2018, when the latest levies were set (see the *Funding position* section). This means levies are set lower than required to cover new claims, resulting in the accounting requirement to hold a URL. However, the URL increased significantly more than expected this year. The total increase in the URL was $433 million in 2018/19, with the largest drivers being changes in:

- economic assumptions (inflation and interest rates) leading to an increase of $261 million
- the strengthening of OCL valuation assumptions, leading to an increase of $232 million.

The larger-than-expected increase in the URL this year indicates levy rates are insufficient to fund future claims and signals that levy increases are likely to be required.

New-year claims usually produce an underwriting deficit

The underwriting result is the difference between levies and appropriations, and expenditure, excluding all economic items. Expenditure includes expenses and the incurred cost of claims (claims incurred). Claims incurred is made up of changes to the OCL and the cash costs of claims. This is shown as 'Surplus/(deficit) from underwriting activities' in Table 11. The new-year underwriting result compares claims incurred with the levy and appropriation income received for new-year claims only.

Underwriting deficits are usually expected for new-year claims because the assumptions used to calculate the year-end OCL are different from those used to calculate levies/appropriations.

This means the year-end OCL is higher than the OCL assumed when levies were set. The resulting new-year deficit is expected to reduce gradually in future years as claim payments are made.

Table 13 compares the expected underwriting result for new-year claims with the actual result to determine, with hindsight, whether levies were set appropriately. A positive percentage indicates that underwriting results were better than expected.

TABLE 13 – COMPARISON OF ADJUSTED UNDERWRITING RESULT AS A PERCENTAGE OF INCOME BY ACCOUNT

Account	2016/17	2017/18	2018/19
Motor Vehicle	0.25%	4.35%	-17.8%
Non-Earners'	0.10%	8.00%	1.20%
Earners'	-3.31%	-0.48%	-5.02%
Work	16.37%	13.65%	11.64%
Treatment Injury	-25.19%	18.40%	9.11%
Total	**0.48%**	**6.30%**	**-0.58%**

Overall, the underwriting result is close to expected in 2018/19. However, by account the underwriting result is mixed. The Motor Vehicle Account was worse than expected with much higher claim costs in 2018/19. The Work Account has been better than expected for the past three years.

Actual underwriting results for the Earners' and Motor Vehicle Accounts were worse than expected

The 2018/19 underwriting results for new-year claims are expected to be deficits for all accounts. The actual results for the Earners' and Motor Vehicle Accounts are 5.02% and 17.8% worse than expected respectively. In both cases, the largest driver is higher claim costs than expected, particularly for social rehabilitation and compensation-related payments. The higher cost for sensitive claims is also a contributor for the Earners' Account.

The Work Account collected more levies than expected

The Work Account underwriting result has been better than expected for the past three years. The main driver for this has been higher than expected levy income. In 2018/19, higher than expected levy income improved the underwriting result by around 20%. Levy income was projected to increase at 6% based on historical long-term growth but actual growth was 16%. The reasons for this increase were:

- the total amount that employers paid to their employees (liable earnings) increased by 8% compared to 4% expected. This is mainly due to higher than expected average wage growth and hours worked.
- incentive programmes, which provided levy discounts, were phased out from March 2017. At that time, new products were expected to replace these, so the levy discounts were still expected to occur. However, no new products were introduced, resulting in 3.5% higher levy income than expected. The reduction in discounts was included in the 2019/21 levy rates
- the remaining increase was due to a change in the overall mix towards higher-risk industries.

Normally an increase in liable earnings or a weighting to higher-risk industries means claim costs are likely to increase. This has occurred to some extent, particularly for compensation related payments which increased by over 3%.

Long-term treatment injury claim assumptions have reduced further

The underwriting result for the Treatment Injury Account was better than expected. In 2017/18, ACC's external valuation actuary modified long-term assumptions that appeared too conservative. The long-term assumptions have been further reduced following further favourable experience during 2018/19. See *Appendix D – Valuation of the outstanding claims liability* for more detail. So the Treatment Injury Account ended the year with a better underwriting result than expected. But claim volumes and costs are still increasing, just at a slower rate than was levied and appropriated for.

The Non-Earners' Account is underfunded

New claims and expenses incurred for the Non-Earners' Account were slightly lower than expected. This resulted in a slightly better-than-expected 2018/19 underwriting result.

ACC projects four years ahead

ACC's four-year projections are based on:

- the 2019/21 levy rates set by the Government
- indicative future levies for future years
- assumptions updated to 30 June 2019
- approved appropriations for the Non-Earners' Account for 2019/20.

TABLE 14 – PROJECTED STATEMENT OF COMPREHENSIVE INCOME

($M)	2019/20	2020/21	2021/22	2022/23
Income				
Levies and appropriations	4,387	4,588	5,088	5,327
Total income	**4,387**	**4,588**	**5,088**	**5,327**
Expenditure				
Claims incurred				
Medical costs	1,589	1,665	1,742	1,823
Elective surgery	607	643	680	719
Social rehabilitation	393	424	453	473
Sensitive claims	1,461	1,499	1,544	1,602
Compensation related	1,828	1,900	1,966	2,032
Other	190	195	200	205
Claims handling expenses	456	469	483	498
Total claims incurred	**6,524**	**6,795**	**7,068**	**7,353**
Expenses				
Net operating costs	127	126	126	129
Injury prevention costs	130	94	94	94
Total expenses	**257**	**220**	**220**	**223**
Total expenditure	**6,781**	**7,015**	**7,288**	**7,575**
Surplus/(deficit) from underwriting activities	**(2,394)**	**(2,427)**	**(2,200)**	**(2,248)**
Decrease/(increase) in URL	**(65)**	**(62)**	**(51)**	**(50)**
Economic				
Investment management costs	(51)	(53)	(54)	(55)
Unwind of risk-free interest rate	(602)	(502)	(531)	(647)
Investment income	1,393	1,421	1,455	1,494
Total economic	**740**	**867**	**872**	**791**
Total surplus/(deficit)	**(1,719)**	**(1,623)**	**(1,380)**	**(1,507)**

Deficits are larger than previously projected and budgeted

The projected total deficit has increased significantly. For 2019/20, the projected deficit is $1,719 million, $714 million worse than the previous projection, and $727 million worse than the 2019/20 budget. This is mainly driven by a larger underwriting deficit of $2,394 million, which is shown in Table 15.

TABLE 15 – ANALYSIS OF PROJECTED UNDERWRITING DEFICIT

($M)	
Levy income lower than new-year claim costs based on 30 June 2018 pricing	545
Appropriation lower than new-year claim costs based on 30 June 2018 pricing	171
Higher new-year claim costs (30 June 2018 to 30 June 2019 interest rate movement)	667
Interest rate differences between how levies/appropriations and OCL are determined	782
Other	229
2019/20 projected underwriting deficit	**2,394**

Levies for 2019/20 were set using assumptions at 30 June 2018. Since then interest rates have fallen. This is expected to increase new-year claim costs in 2019/20 by $667 million. The gap between expected investment returns and risk-free interest rates has also widened since 30 June 2018. This is expected to contribute a further $782 million to the underwriting deficit.

We expect deficits for the next four years

The Scheme is forecast to produce large deficits for the next four years. The 2019/21 levy rates were set when the levied accounts were overfunded. ACC is required to recommend a return of excess funding in the form of levy and appropriation reductions. Actual levy rates and appropriation amounts approved by the Government have been lower than ACC's recommendation. This explains some of the projected deficit.

Total claim costs are expected to increase significantly

The changes in the economic assumptions, together with the strengthening of valuation assumptions in the 2019 valuation, have led to a significant increase in the expected future total cost of claims incurred. The total cost of claims is expected to increase further by around 4% per year because of inflation, superimposed inflation, population growth and an allowance for future increases in claim frequency. With an OCL strain for four out of the past five years there is some risk that the claim costs will continue to grow more than forecast.

Increases in levy income will be capped

The changes in the economic assumptions in 2018/19 significantly increased the OCL for all accounts. This means all levied accounts, excluding the Work Account, are underfunded. Under the funding policy the levy rates from 2021/22 need to increase significantly, so the levied accounts can return to the funding targets over time. But levy rate increases are likely to be capped at 15%, insufficient to cover the expected cost for new-year claims, which have also increased significantly (see the *How ACC services are funded* section). This is a major contributor to the projected deficits for the next few years. As levies approach new-year claim costs, forecast deficits in these accounts will reduce.

Non-Earners' Government appropriations aren't assumed to increase

The Non-Earner' Account and the Non-Earners' portion of the Treatment Injury Account are significantly underfunded. This projection is based on the approved Non-Earners' appropriation from Budget 2019, with no increases considered by the Government yet. The approved appropriation is $1,464 million for

2019/20, which is much lower than the requested appropriation of $1,719 million. It's also lower than the $1,637 million required to fully fund the 2019/20 new-year claims. This increases the deficits and adds to the underfunding of the Non-Earners' Account and Non-Earners' portion of the Treatment Injury Account.

Economic conditions are affecting investment outcomes

Interest rates fell significantly during 2018/19. This resulted in lower forecast future investment returns. There are risks that interest rates will continue to drop, which may negatively affect ACC's gross investment income further. With the Treasury's long-term risk-free interest rate higher than the market expectation, there is a risk that this could reduce in the future. This will only increase the OCL, which will create a deficit.

We've shown the projected statement of comprehensive income by account for the year ended 30 June 2020 in ***Appendix E – Financial results***.

Funding position

Funding position

Summary

- Funding positions for all accounts reduced significantly during the year, mostly due to falling interest rates, with the funding positions for most accounts now below funding targets. Partial matching of assets to liabilities reduces the impacts, but beyond that the effects of interest rates on funding positions aren't in ACC's control.
- The OCL strain in 2018/19 also contributed to the reduction in funding positions. This is an area that the organisation can influence. ACC should increase its focus on controlling claim costs, whilst maintaining the right outcomes for clients.
- For the levied accounts, the funding positions for the Work Account and the Earners' portion of the Treatment Injury Account are at or above target. The funding positions for the Earners' and Motor Vehicle Accounts are below target.
- It's likely that the Earners' and Motor Vehicle Accounts' funding ratios will remain below 100% in the medium term. The Motor Vehicle Account has a 95% probability of a funding ratio under 100% at 30 June 2029, due to having the lowest opening funding position and a larger proportion of long-term claims.
- The funding ratios for the fully funded portion of the Non-Earners' Account, and the Non-Earners' portion of the Treatment Injury Account have deteriorated further to 60% and 61% respectively. These are well below the 88% target.
- The Government has contributed less than requested in appropriations for the past five years. This has contributed to funding pressures for the Non-Earners' and Treatment Injury Accounts.
- Without any increases to appropriations it's unlikely that the fully funded portion of the Non-Earners' Account will rise above its 88% funding target. It's more likely that the funding position will continue to deteriorate and there is a 75% chance that the funding ratio will be below 30% by 30 June 2029. Even with increased appropriations, following the funding policy, there is a 77% probability that the funding ratio will be below 88% by 30 June 2029.
- The economic environment remains uncertain. If interest rates keep falling this will put further pressure on funding positions.

ACC's solvency is different from that of private insurers

Private insurers are legally required to have enough funds to meet minimum solvency requirements set by the Reserve Bank of New Zealand. They also often have their own insurance (reinsurance) to protect them against the risks of high-cost claims, extreme events and multiple events that lead to a large number of claims.

ACC is different. It's a statutory monopoly with the right to raise levies. So instead of discussing regulatory solvency in this section, as a private insurer would, we consider the present and possible future funding positions of each of the accounts. In simple terms, a funding position is the difference between assets and liabilities. This may also be expressed as the ratio of assets to liabilities, known as the funding ratio.

We also consider if ACC should consider reinsurance as a way to reduce risk to the funding positions.

Funding targets make sure the Scheme is fair and sustainable

Each of ACC's five accounts has a target funding position set through its funding policy. The target funding position isn't subject to the minimum solvency requirement set by the Reserve Bank of New Zealand and is lower than what would be required if it were.

The actual funding positions indicate how many 'assets' (mainly investments) each account has available to cover its OCL. If an account is either above or below its target, the funding policies say how the difference is to be adjusted for through recommended levies or appropriations.

Meeting funding targets ensures that the Scheme is fair and sustainable; people claiming now are generally paying for the claims they're making.

The funding position is affected by movements in assets and liabilities

We've discussed elsewhere in the report how claim liabilities are valued and managed.

In terms of assets, *Appendix F – How ACC manages its investments* discusses in detail how ACC manages and governs its investments. There are a couple of points worth making here:

1. We use risk-free interest rates to work out the OCL. If actual investment returns are higher than these rates, this can lead to an improved funding position. This can then lead to reductions in levies or appropriations through the funding adjustment. Up to 2017/18, the investment team consistently achieved investment returns over benchmark and the risk-free rate. This year the net investment return was 12.97%, below the benchmark (13.79%) and above the risk-free rate.
2. Some injuries require ACC to support clients throughout their lives. It's not possible to find appropriate investment assets with future cash flows that match these lifetime needs. This means ACC's claim payments can't be closely matched with investment assets, so the funding position is sensitive to interest rate changes. Interest rates at 30 June 2019 are historically low, and when these change the OCL impact is almost four times that of the investment assets.

We're satisfied that the investment policy and governance are appropriate, but it's still worth noting that the funding position is very sensitive to market movements that affect investment assets and the OCL differently.

Target and actual funding positions vary by account

The target funding ratio for the Motor Vehicle, Earners' and Work Accounts (the levied accounts) and the Earners' portion of the Treatment Injury Account is 105%.

The target is 88% for the fully funded portion of the Non-Earners' Account and the Non-Earners' portion of the Treatment Injury Account. This is lower than 100% because the funding policy excludes the risk margin. See *Appendix A – Additional background information*. Both accounts also have pre-2001 claim liabilities funded under PAYG. The funding targets for PAYG claims are effectively 0%, as claim costs are only met in the year payments fall due.

Table 16 shows the financial position of each account at 30 June 2019. It also shows how the accounts' assets and liabilities result in their funding ratios.

TABLE 16 – ACC ACCOUNTS' FINANCIAL POSITIONS

($M)	2018/19 Motor Vehicle Account	Non-Earners' Account	Earners' Account	Work Account	Treatment Injury Account	Total	2017/18
Assets							
Cash and cash equivalents	(7)	14	34	41	3	86	115
Receivables	179	43	265	244	50	781	501
Accrued levy revenue	65	0	1,478	857	0	2,400	2,179
Net investment assets	14,024	4,323	10,968	10,771	5,047	45,133	40,048
Net intangible and other assets	17	28	49	45	8	148	135
Property, plant and equipment	2	4	7	7	1	21	21
Total assets [A]	**14,281**	**4,412**	**12,801**	**11,966**	**5,109**	**48,570**	**42,999**
Less liabilities							
Payables, accrued liabilities and provisions [B]	583	179	476	548	188	1,974	1,041
Unearned levy liability [C]	145	0	1,331	612	0	2,088	1,937
Unexpired risk liability [D]	224	0	671	310	0	1,204	772
OCL [E]	14,455	11,865	10,968	10,221	7,513	55,023	41,943
Total liabilities	**15,408**	**12,044**	**13,446**	**11,691**	**7,701**	**60,290**	**45,693**
Net assets	**(1,124)**	**(7,632)**	**(645)**	**275**	**(2,592)**	**(11,718)**	**(2,694)**
Funding ratio ([A] – [B] – [C] – [D]) ÷ [E]	**92.2%**	**35.7%**	**94.1%**	**102.7%**	**65.5%**	**78.7%**	**93.6%**

The funding positions for all accounts reduced significantly during the year, mostly due to falling interest rates. A partial matching of assets to liabilities reduces the impact, but beyond that the effects of interest rates on funding positions aren't in ACC's control.

The accounts are funded separately, so it's the individual funding positions that matter. However, looking at the combined funding position illustrates how the Scheme is funded overall. If all the accounts were at their funding targets the overall funding ratio would have been 87.9%. Instead it was 78.7% at 30 June 2019, 9% lower than the overall target. The funding positions of the accounts are discussed in more detail below.

The financial positions of some of the accounts are well below what's targeted under their funding policies. The funding policies for all accounts aim to fully fund claims (apart from non-earner pre-2001 PAYG claims). Without a significant rise in interest rates, levy and appropriation increases will be needed to improve the financial condition of these accounts and move them closer to target.

Table 17 shows the adjusted funding ratios for all accounts. In calculating levy rates, we use the funding ratios from Table 16, but remove the URL. This is because the URL is an accounting requirement that doesn't reflect the funding positions' economic reality. See the *Financial results* section for more information on the URL. The funding position for the Work Account excludes those claims and funds from the Accredited Employers Programme for which ACC isn't liable (see *Appendix A – Additional background information*).

TABLE 17 – FUNDING RATIOS IN PAST THREE YEARS, EXCLUDING URL

	As at 30 June 2017	2018	2019	Target
Motor Vehicle Account	112%	112%	94%	105%
Non-Earners' Account	43%	43%	36%	
Fully-funded portion	80%	76%	60%	88%
Earners' Account	120%	118%	100%	105%
Work Account	124%	116%	106%	105%
Treatment Injury Account	67%	79%	66%	
Earners' portion	111%	146%	145%	105%
Non-Earners' fully-funded portion	74%	81%	61%	88%
Total	**95%**	**95%**	**81%**	

All accounts are below target, except for the Work Account and the Earners' portion of the Treatment Injury Account

The overall funding ratio reduced by 14.5% in 2018/19. This included an expected decrease of 1.8%. Levied accounts were over target in 2017/18, so levies recommended under the funding policy were calculated to reduce their funding positions over time. The approved funding for the fully funded portion of the Non-Earners' Account was also lower than requested.

The total OCL at 30 June 2019 was $55,023 million, an increase of $13,080 million from the previous year. This compares to total investments at 30 June 2019 of $45,133 million, an increase of $5,085 million from the previous year.

Reductions in interest rates over the year drove most of the increase in the OCL. The reductions in interest rates also contributed to high investment returns that partially offset the increase in the OCL. However, the net impact of these two items resulted in a 12.5% reduction in the total funding ratio. This year the OCL strain of $575 million, due to higher-than-expected claim volumes and costs, further reduced the overall funding ratio by 0.9%.

Higher-than-expected claim payments were mostly offset by higher-than-expected levy revenue, particularly for the Work and Earners' Accounts.

At 30 June 2019 the Work Account was the only account (barring a portion of the Treatment Injury Account) that remains above the target at 106%.

The Earners' portion of the Treatment Injury Account is also over target at 145%, and unlike other accounts only reduced by 1% during the year. The OCL for these claims increased by 15% during the year and was offset by a 14% increase in assets.

In contrast, the funding ratio of the Non-Earners' portion of the Treatment Injury Account dropped 20%. This is because of the different mixes of claims. The Earners' portion of the Treatment Injury Account has a much lower number of serious injury claims than the Non-Earners' portion.

During 2018/19 serious injury payments were higher than expected for the Treatment Injury Account, while most other payment types were lower than expected. The different claim mixes led to an OCL release of $101 million for the Earners' portion of the Treatment Injury Account compared to an OCL strain of $48 million for the Non-Earners' portion.

The lower number of serious injury claims also means the Earners' portion of the Treatment Injury Account is less sensitive to changes in interest rates compared to the Non-Earners' portion. The changes in economic assumptions increased the OCL of the Earners' portion by about 16% compared with nearly 40% for the Non-Earners' portion.

Further funding position reductions are possible

Since 30 June 2019 interest rates have further reduced. This has largely been a result of the 0.50% reduction to the OCR made by the Reserve Bank of New Zealand in August 2019. It remains uncertain how future interest rates will change but the overall funding ratio is 77% as at 30 September 2019, 4% lower than at 30 June 2019.

The long-term risk-free interest rate prescribed by the Treasury reduced from 4.75% to 4.3% during the year. If market interest rates keep falling, this will increase the chance of further reductions in the long-term risk-free interest rate. This would, in turn, further reduce the funding position.

Funding positions are sensitive to several key drivers

There are a number of key factors that drive changes in the funding positions, by changing asset values, liability values, or both.

While ACC can influence some of these factors, others are beyond ACC's control, such as:

- what's happening in the economy
- how this affects interest rates.

Table 18 shows how a 1% move in interest rates could change the OCL, the investment portfolio and the funding position. It also shows how changes in major claim risks could change the OCL and the resulting change in the funding position.

TABLE 18 – SENSITIVITY OF FUNDING POSITION

	Change in OCL ($M)	Change in assets ($M)	Change in funding ratio
1% rise in interest rates	**(8,594)**	**(2,535)**	**+9.1%**
1% fall in interest rates	11,977	3,057	-9.5%
1% increase in superimposed inflation – social rehabilitation for serious injury	5,465	0	-7.1%
1% increase in superimposed inflation – elective surgery	1,153	0	-1.6%
1% increase in superimposed inflation – medical and social rehabilitation non-serious injury	721	0	-1.0%
1% increase in long-term continuance rates for weekly compensation	1,181	0	-1.7%
1% increase in elective surgery actives for elective surgery	1,620	0	-2.3%

ACC's claim payments can't be closely matched with investment assets, so the funding positions are highly sensitive to interest rate changes. A 1% rise in interest rates would decrease the value of the OCL and the investment assets by different amounts, resulting in a $6,060 million increase in net assets. The overall funding ratio would increase by 9.1% to 87.8%. On the other hand, a 1% fall in interest rates would reduce net assets by $8,919 million and the overall funding ratio would fall to 69.2%.

At lower interest rates, the sensitivities to changes are significantly higher. The interest rates at 30 June 2019 were historically low, so a 1% change in the rates causes large changes in the OCL and the assets.

Excluding economic assumptions, a 1% increase in superimposed inflation for medical and social rehabilitation would create the largest OCL increase. If this happened, investment assets wouldn't change and the overall funding ratio would fall to 71.6%.

Changes don't always happen independently. Interest rates can move along with changes in superimposed inflation and continuance rates. Under these scenarios, the overall change to the OCL and investment assets can be much greater than the individual change.

These sensitivities also affect levy rates and appropriations. For example, a $1 billion increase in the OCL, spread over 10 years, would increase total annual levies and appropriations (about $4.5 billion in 2018/19) by 2.2%.

We've looked at possible future funding positions for the different accounts

In the *How ACC services are funded* section we discussed how changes in economic and claim trends can vary funding positions, with implications for levies and appropriations. In this section we use the same set of simulations and look at the variability of the funding position.

For the three levied accounts and the fully funded portion of the Non-Earners' Account the simulations allow for:

- the funding position at 30 June 2019
- variations in economic factors, including the earned rates of investment returns, inflation rates and risk-free interest rates
- changes in the number of claims, continuance rates, average payments and superimposed inflation.

For each simulation, the assumptions are allowed to change each year. For the levied accounts, levies are then recalculated by applying the funding policy.

For the Non-Earners' Account we've run two sets of simulations:

- One uses the approved appropriation amounts from Budget 2019 for the first four years, and then assumes the same level is approved in future years.
- The other uses increase in line with the funding policy throughout.

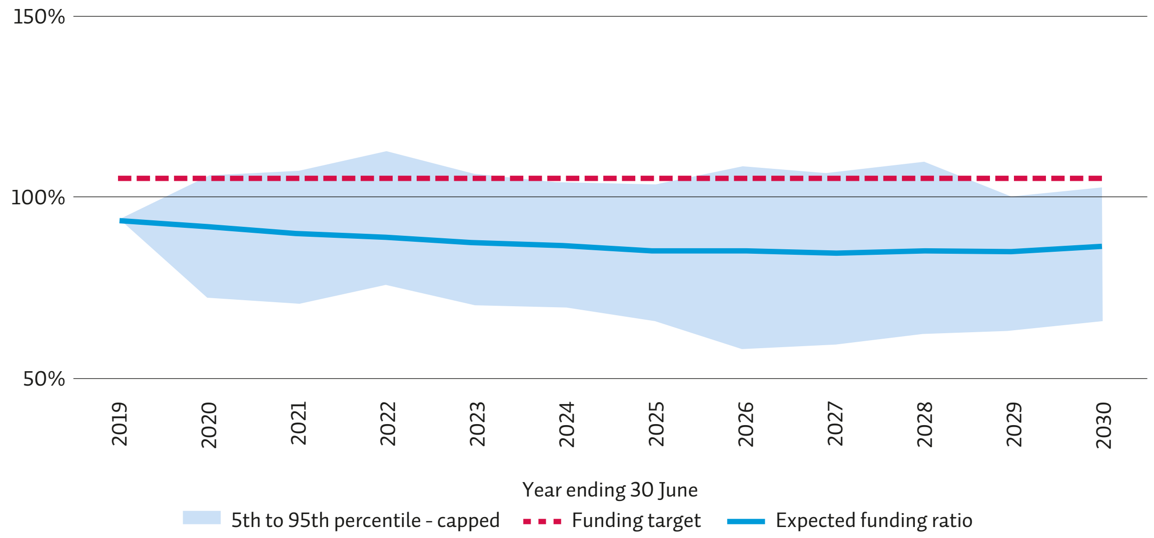
We've generated funding positions for each simulation and associated revised levy paths. Using all simulations, Graph 12 to Graph 14 show the distribution of funding ratios in each account in future years, with levy rates and appropriation increases calculated according to the funding policy.

Risk-free interest rates have shown considerable volatility in the past few years. The simulations to estimate future interest rates may not reflect this recent volatility, so there may be a greater range of long-term outcomes than the simulations indicate.

MOTOR VEHICLE ACCOUNT

The Motor Vehicle Account had an opening funding position of 94%. It also has more serious injury claims than the other levied accounts meaning it has the highest exposure to future variability in interest rates. Under the central scenario levy rates would need to increase at capped levels for eight years (four levy rounds) before catching up to new-year claim costs. The funding ratio is likely to fall below 80% by the end of this period. It's unlikely that the funding ratio will be above 100% in the medium term.

GRAPH 12 – MOTOR VEHICLE ACCOUNT: PROJECTED FUNDING POSITION



The Motor Vehicle Account is unlikely to exceed its funding target in the next decade. Our simulations imply that there is a:

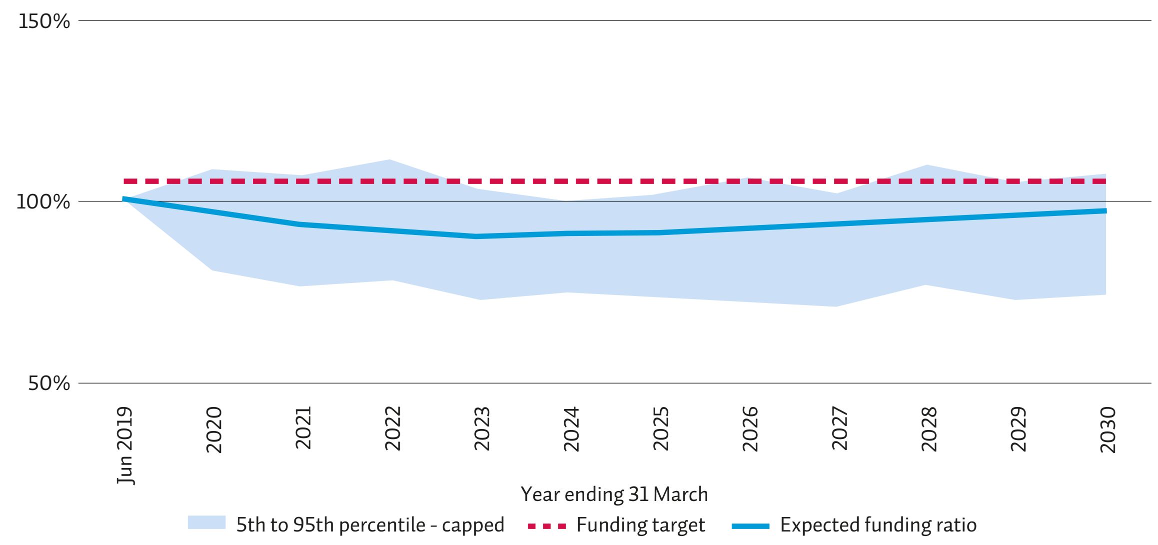
- 97% probability that the funding ratio will be below 105% at 30 June 2029
- 4% probability of a funding ratio between 100% and 110% (the funding band under the existing funding policy) at 30 June 2029
- 95% probability of a funding ratio under 100% at 30 June 2029.

EARNERS' ACCOUNT

The Earners' Account had an opening funding ratio of 100%. The low interest rates have reduced the funding position and caused new-year claim costs to increase substantially.

This cost increase can't be fully met by immediate increases in levies, due to capping. As a result, the funding position is likely to fall further, and the funding ratio is likely to stay below 100% in the foreseeable future. Under the central scenario, levy rates would need to increase at capped levels for two years (one levy round) before catching up to new-year claim costs. Under this scenario the funding ratio is likely to be around 96% by 31 March 2029.

GRAPH 13 – EARNERS' ACCOUNT: PROJECTED FUNDING POSITION



Our simulations imply that there is:

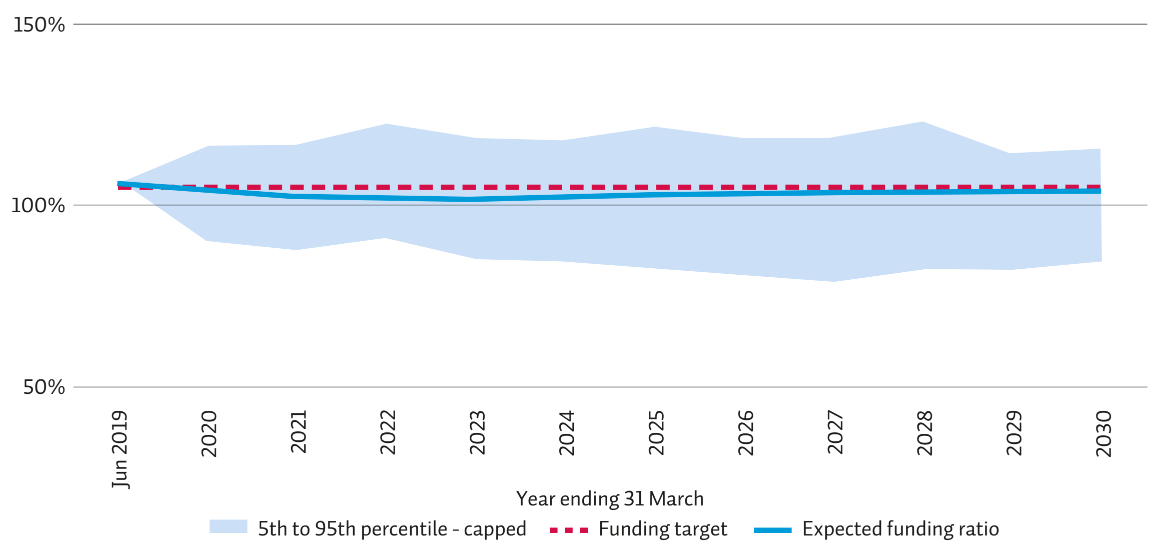
- a 94% probability that the funding ratio will be below 105% at 31 March 2029
- an 18% probability of a funding ratio between 100% and 110% (the funding band under the existing funding policy) at 31 March 2029
- a 79% probability of a funding ratio under 100% at 31 March 2029.

WORK ACCOUNT

The Work Account had the strongest opening funding ratio but is now only marginally above the funding target of 105%. Compared to the Earners' Account, the Work Account is more exposed to future variability in interest rates.

The funding ratio for the Work Account has a reasonably high risk of falling below 100%. The levy rates are projected in the central scenario to increase at the capped level for the next levy-setting round before catching up to the new-year claim costs in 2023/25.

GRAPH 14 – WORK ACCOUNT: PROJECTED FUNDING POSITION



Of the levied accounts, the Work Account is most likely to be within the funding band of 100% and 110%. Our simulations imply that there is a:

- 69% probability that the funding ratio will be below 105% at 31 March 2029
- 40% probability of a funding ratio between 100% and 110% (the funding band under the existing funding policy) at 31 March 2029
- 44% probability of a funding ratio under 100% at 31 March 2029.

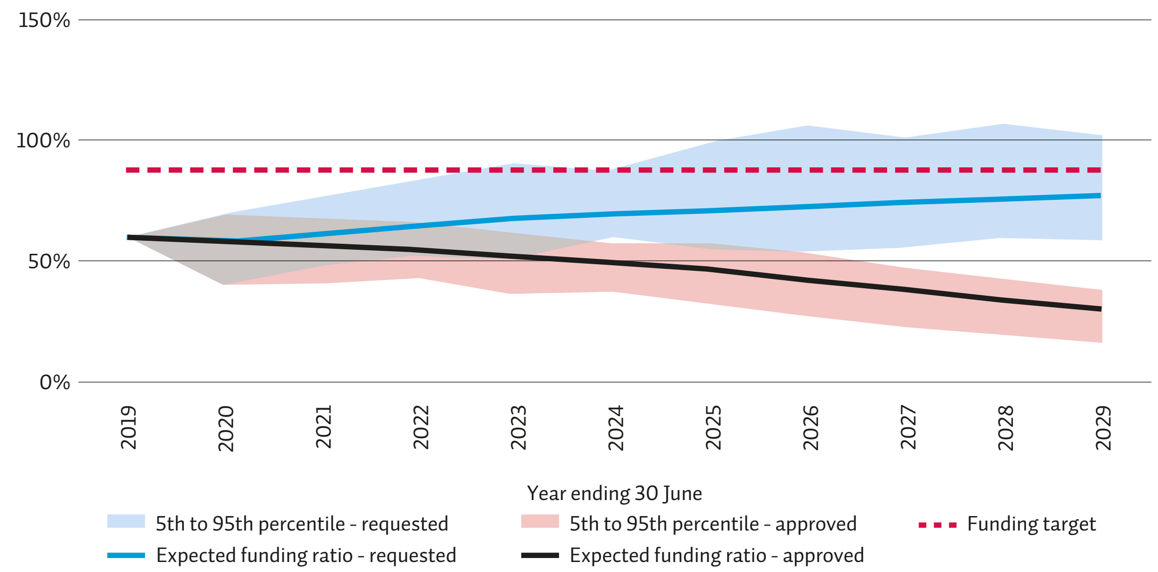
Non-Earners' Account (fully funded portion)

The fully funded portion of the Non-Earners' Account's funding ratio was 60% at 30 June 2019. This was significantly below its funding target of 88%. Compared to the Earners' Account, the Non-Earners' Account is more exposed to future variability in interest rates.

The costs of paying claims for the Non-Earners' and Treatment Injury Accounts are expected to grow. However, the approved appropriation for the Non-Earners' Account and the Non-Earners' portion of the Treatment Injury Account remains flat. The unfunded PAYG portion of the liability is expected to remain relatively stable for the medium term but reduce as a proportion of the total liability.

Graph 15 shows the projected funding position for the fully funded portion of the Non-Earners' Account. It shows the funding ratio under previously approved appropriations extended into future years, and also under increasing appropriations in line with the funding policy.

GRAPH 15 – NON-EARNERS' ACCOUNT (FULLY FUNDED PORTION): PROJECTED FUNDING POSITION



For the simulations run assuming future appropriations at the existing pre-approved levels, it's unlikely that the fully funded portion of the Non-Earners' Account will rise above its 88% funding target. It's more likely that the funding position will continue to deteriorate and there is a 75% chance that the funding ratio will be below 30% by 30 June 2029. This is because:

- the present funding position is significantly below target
- the approved appropriation remains less than the projected new-year claim costs
- future claim costs are projected to increase, but the approved appropriations are projected to remain flat.

Even our simulations with increased appropriations, following the funding policy, imply that at 30 June 2029 there is a 77% probability that the funding ratio will be below 88%.

The Board decided against reinsurance

Reinsurance is used in the insurance industry to protect insurers from financial risks. These risks can include high-cost claims, extreme catastrophic events and multiple events leading to many claims in one cover period. A premium is paid for the reinsurance and this should be evaluated against the potential risks it will cover.

The Board periodically reviews the need for reinsurance, and in 2017 agreed it wasn't required. This is because:

- very long-term individual claims aren't large enough to materially affect the Scheme's net assets
- the most extreme catastrophes and resulting claims wouldn't threaten ACC's ability to pay claims in the short term. The Scheme can also post-fund these claims for these events.

Unless there's a significant change in Scheme circumstances, the Board won't review reinsurance for another two or three years.

Additional background information

Appendix A

Additional background information

Services ACC provides

Table 19 summarises the main services the Scheme provides for covered personal injuries.

TABLE 19 – SCHEDULE OF SERVICES

Medical			
Public health acute services	Accidental injury costs from acute inpatient care, emergency department, outpatient, complex burns, pharmaceuticals, and laboratories.		
General practitioners (GPs)	Payments to GPs, and accident and medical clinics.		
Radiology	Payments for radiology services – low-tech (for example X-ray) and high-tech (for example magnetic resonance imaging (MRI)).		
Physiotherapy	Payments to physiotherapists.		
Ambulance	Emergency transport to a medical facility, by road and/or air.		
Elective surgery	Mainly orthopaedic-related surgery.		
Other medical	All medical costs except those listed above. These include counselling for clients who need support beyond physical injuries.		
Compensation			
Weekly compensation – non-fatal	Loss of earnings paid to employees and self-employed people who can't work due to injury. Children, who are injured before they turn 18 and are prevented from entering the workforce due to their injuries, receive loss of potential earnings. Most receive this after turning 18.		
Death benefits	Funeral grants and support for spouses and/or dependants.		
Rehabilitation			
Lump sum and independence allowance	Additional support to compensate for permanent impairment due to injury. This includes work-related gradual process claims that result from ongoing exposure to an element, for example asbestos. For injuries that occurred on or after 1 April 2002, this is paid in the form of a lump sum. Eligible claims for injuries occurring prior to that receive quarterly independence allowance payments. Independence allowance payments may also be paid to clients with gradual process, sensitive or treatment injury claims, if the exposure occurred on or before 31 March 2002.		
Vocational	Programmes to support clients' return to independence.		
Social rehabilitation	Serious injury	Capital	Mainly housing and motor vehicle modifications for people with serious injuries.
		Non-capital	Care costs (such as attendant care and assessments) and other costs related to serious injury.
	Non-serious injury	Capital	Mainly equipment, orthotics for splints, medical consumables and residential modification costs for people with non-serious injuries. Includes ongoing aids and appliances for hearing loss suffered through traumatic events or prolonged work exposure to loud noise.
		Non-capital	Providing care, assessments and other social rehabilitation support for people with non-serious injuries.

ACC's five accounts

ACC manages five accounts. Each match where its funding comes from with where injury risks happen. Table 20 summarises the coverage and levies/funding of each account.

TABLE 20 – ACCOUNT DESCRIPTION

Account	Environment where injury occurs	Funded through
Motor Vehicle	Involves a motor vehicle on a public road	Vehicle licensing charge plus levy on petrol (not diesel).
Work	At work or work related	Levy charged to employers as a percentage of payroll and the self-employed as a percentage of taxable earnings.
Treatment Injury	When receiving medical treatment in the healthcare system	Paid from the Non-Earners' and Earners' Accounts.
Non-Earners'	All other locations and activities	Government taxation.
Earners'		Levy is percentage of salary collected as part of PAYE tax.

The accounts aren't as neatly defined as this because of changes over time. In particular, the Work Account includes all injuries to earners, whether at work or not, that happened before 1 July 1992.

Funding policies

The funding needed for each account is calculated in accordance with the Government's funding policies. While these are under review by the Government, the policies in place at 30 June 2019 are stated here.

THE LEVIED ACCOUNTS' FUNDING POLICY WAS SET BY THE GOVERNMENT IN 2016

The Government's funding policy for the levied accounts is in a statement gazetted in May 2016 – Funding Policy Statement in Relation to the Funding of ACC's Levied Accounts. Under this policy, ACC must recommend levies for each levied account according to the following requirements:

- The average levy rate must be based on the expected lifetime costs of claims in relation to injuries occurring during the levy period (new-year claim costs).
- Each account must target assets between 100% and 110% of the outstanding claims liability (OCL).
- A funding adjustment must be included in the average levy rate that takes each account's funding position to the funding band midpoint (105%) smoothly over a 10-year horizon.
- Any increase in the average levy rate for each account mustn't exceed 15%; this is in addition to inflation adjustments for the Motor Vehicle Account.

The 105% target midpoint funding level is set with reference to the OCL reported in the financial accounts, so includes a risk margin. See ***Appendix D – Valuation of the outstanding claims liability***.

THE NON-EARNERS' ACCOUNT FUNDING POLICY WAS CHANGED IN 2017

On 15 May 2017 Cabinet changed the funding policy for the Non-Earners' Account. The funding policy is shown in Table 21.

TABLE 21 – NON-EARNERS' ACCOUNT FUNDING POLICY FROM 2018/19

Pre-1 July 2001 claims	Post-1 July 2001 claims
• Pay-as-you-go basis. • One-year funding horizon. • Funding position target of 0%.	• Fully-funded basis. • Costs are discounted using investment forecasts. • Funding position target of assets at 100% of actual liabilities, excluding risk margin, or 88% including risk margin. • Three-year funding horizon when the account is above its funding target. • 10-year funding horizon when the account is below its funding target.

Products

WORK ACCOUNT

The Work Account provides a small range of products for business customers.

EMPLOYERS

Most employers are insured through WorkPlace Cover, which provides cover, rehabilitation and compensation entitlements for work-related injuries.

Large employers may choose the Accredited Employers Programme (AEP). Under the AEP, ACC delegates the authority to make entitlement decisions and deliver injury prevention, rehabilitation and claims management to the accredited employer who receives a reduction in their Work Account levy of up to 90%. The AEP's goals are to promote injury prevention and rehabilitation and to reduce work-related injury claims and costs. Employers must show:

- satisfactory workplace safety standards
- effective claims management
- that they have the financial backing to carry the self-insurance risk.

Employees of participating employers that self-manage make up about 23% of the workforce.

The AEP introduces a level of credit risk to the Work Account: if a company fails, the claim costs revert to the Work Account. ACC mitigates this risk by undertaking annual credit risk assessments and imposing 'stop loss' and 'high-cost claims cover' requirements. To date, only two organisations have left the AEP without being able to pay the outstanding liability, due to company failures:

- Feltex in 2006/07
- Mainzeal in 2013/14.

Both cost the account approximately $2.1 million. The Work Account's total annual levies in 2018/19 were around $860 million, so these failures cost less than 0.2% of one year's levies.

SELF-EMPLOYED

Most self-employed people are insured under CoverPlus. This covers work and non-work injuries and includes risks that would otherwise arise in the Earners' Account.

CoverPlus Extra provides agreed-value weekly compensation cover for the self-employed and non-PAYE shareholder employees. This gives people who have volatile incomes some certainty in their cover.

EXPERIENCE RATING

Experience rating modifies an employer's Work Account levy based on their claims history. ACC considers injury and return-to-work rates in assessing how much to modify. ACC is simplifying the experience rating programme, with a series of changes underway and further changes being consulted on in 2021. The programme in place at 30 June 2019 is described below.

ACC can increase levies for large employers by up to 75% and decrease them by up to 50%.

A no-claims discount scheme applies to small employers, who pay levies less than $10,000 every year, and the self-employed. ACC can modify levies by plus or minus 10%.

Experience rating is mandatory, but not all businesses have the three years' experience needed to be eligible.

Experience rating will be simplified and enhanced for large employers from 1 April 2020. Under this change, more weight will be given to an individual employers' own claims history, especially recent history.

MOTOR VEHICLE ACCOUNT

ACC launched Fleet Saver, a fleet safety incentive programme for the Motor Vehicle Account, in December 2013. It was modelled on the Workplace Safety Management Practices programme and designed to improve the safety performance of commercial vehicle fleets. In July 2014 Fleet Saver was extended to businesses renting out heavy goods service vehicles.

ACC is reviewing the programme. Once that's done, any proposals for improving or replacing the programme will be developed in response.

Claims management process

ACC's claims management process is changing in 2019/20

ACC's claims management process is changing. The Next Generation Case Management model is being rolled out from September 2019 to August 2020. The claims management process that was in place as at 30 June 2019 is described below.

Front-end claims management

GPs and other treatment providers, such as physiotherapists and chiropractors, lodge claims directly with ACC. Only specified health practitioners can certify clients are unfit for work.

The Accident Compensation Act 2001 has a low threshold for cover but the vast majority of claims require only one or two treatments. ACC pays for medical services provided.

ACC manages these high-volume claims by easy entry and quick recovery, a highly efficient system. But the Scheme risks paying for claims that aren't injuries or for more services than are required. The Scheme mitigates these risks by claim escalation processes and trigger points. These identify complex or potentially long-term claims, or when treatments go beyond identified benchmarks for particular injuries.

Claim screening

ACC screens all claims for long-term risk and/or complexity. ACC has established standard screening processes to determine the:

- likelihood that a client will require weekly compensation or supports beyond provider-led treatment
- risks of extended periods of cover (for example, psychosocial screening helps identify other factors in clients' lives that may affect their recovery and slow down their rehabilitation and return to independence)
- potential for clients to recover at work if their workplaces are adjusted for them.

Low-complexity claims

Short-Term Claims Centres manage claims if clients are expected to recover fully in 10 weeks, and their claims aren't complex. The primary aim is a rapid return to work or independence. Claim management focuses on medical treatment, early intervention, vocational support, rehabilitation progress against injury benchmarks, and monitoring any developing psychosocial issues.

High-complexity claims

Case managers manage claims if it's likely that clients will need support for 10 weeks or more, or will need a range of support services.

They focus on clients recovering within an ideal time for their specific injuries. Case managers:

- prepare rehabilitation plans based on medical advice and best practice
- ask employers to support clients' return to full or partial duties when they're ready
- organise vocational rehabilitation.

Where needed, case managers arrange for clients to get advice on alternative employment opportunities.

The Accident Compensation Act 2001 sets certain legislative parameters as follows:

- **Rehabilitation:** Needs assessments must only consider the consequences of original covered injuries.
- **Incapacity**: Expert medical opinion decides if a client continues to be incapacitated and if this is because of the covered injury.
- **Vocational independence assessment**: Once a client has received rehabilitation support, as agreed in a formal rehabilitation plan, they're assessed for vocational independence. The assessment considers if the client is capable of full-time work they're suited to and trained for. If they're capable, their entitlement to weekly compensation can end three months after this decision.

A centralised Long-Term Service Claims Unit manages long-term clients who've been rehabilitated as far as possible and have stable needs. Five staff manage about 1,500 claims. This service frees up other case managers from day-to-day administration and makes sure long-term clients get the support they need.

Seriously-injured clients – lifelong disability

ACC has just over 6,000 clients with serious injuries. In many cases, they need lifelong support. Specialised case owners manage these claims.

The case owners support clients to achieve independence goals, bearing in mind their injuries. In some cases clients maintain a level of employment. The case owner will make sure a client receives appropriate support.

Some clients, while their injuries aren't quite severe enough to be classed as serious injury claims, are also supported using the serious injury case management approach. Case managers manage about 1,000 claims like this, attached to the local serious injury team. Clients include those with: traumatic brain injury; back and neck injuries with neurological and deteriorating impairment; single-limb amputation; and those with pre-existing disabilities that will affect injury recovery. Long-term support is provided to some of these clients.

Health Sector Strategy proof-of-concept projects

The Integrated Change Investment Portfolio is delivering four initial proof-of-concept projects for the Health Sector Strategy

The Health Sector Strategy has four initial proof-of-concept projects due for completion from mid-2019 to mid-2020:

1. **High-Tech Imaging:** This pilot is shifting treatment decisions on access to high-tech imaging to primary care providers rather than specialists. This speeds up access to necessary healthcare interventions and reduces the workload on specialists. 300 customers have now been referred through this pathway. Initial results from this pilot have shown a:
   - 16-day reduction in the median treatment time, from 19 working days to three
   - 40% to 50% increase in Māori and Pasifika between the ages of 15 and 30 years accessing high-tech imaging
   - reduction in referrals for specialist care.
2. **Escalated care pathways:** ACC and providers are working together to reduce customer treatment delays and determine customer readiness for surgery for key high-cost injury types (e.g. knee, spine and shoulder surgery). The initial surgical proof of concept for anterior cruciate ligament repair showed a four-week (35%) reduction in recovery time and a lower re-injury rate.
3. **Non-acute rehabilitation:** This programme incentivises rehabilitation in the client's home rather than in an inpatient unit and is showing a higher level of return to independence in the community. This pilot has been developed with district health boards (DHBs) and is also expected to reduce demand on DHB rehabilitation beds.
4. **Integrated home and community support services:** The contract for integrated home and community support services is moving from a one-size-fits-all model to a needs-based approach that takes clients' individual circumstances into account. The effectiveness of this approach will be monitored with measures that include client-reported outcomes.

Additional information on injury prevention

Injury prevention portfolios

ACC invests in injury prevention in seven portfolios, described in Table 22.

TABLE 22 – PORTFOLIO DESCRIPTIONS

Portfolio	Portfolio description
Work	In partnership with WorkSafe, these programmes target reducing workplace injuries.
Falls	In partnership with DHBs, these programmes are aimed at reducing falls in older populations.
Road	These programmes target a reduction in injuries for all road users through education and road improvements. Motorbike safety and young drivers are a major focus.
Sport and recreation	These programmes focus on the major sporting codes of rugby, netball, football, and rugby league. They also focus on recreational activities such as cycling through a partnership with the NZ Transport Agency.
Violence (sexual and family)	The return on investment isn't yet being measured for this portfolio. The interim focus is on encouraging more reporting, which will inevitably lead to a claim increase. The longer-term behavioural changes expected from these programmes should lead to a lower incidence of violence.
Treatment safety	ACC is partnering with the Ministry of Health and the Health Quality & Safety Commission to identify programmes to reduce harm in the health sector.
Community	These programmes are designed to reduce injuries affecting communities.

Under the injury prevention strategy these portfolios will change to:

- core investments (delivering short- to medium-term benefits)
- strategic investments (delivering long-term benefits)
- innovative tests/trials and infrastructure investments.

Injury prevention performance targets

Table 23 shows the injury prevention performance measures and targets that were introduced in 2018/19.

TABLE 23 – 2018/19 INJURY PREVENTION PERFORMANCE TARGETS

Key measure	Rationale	Target Year 1	Year 5	Year 10
Number of claims avoided through ACC's injury prevention investments	It's important that ACC shows how many injury claims its programmes are avoiding and whether that reflects what we expected through our return-on-investment calculation. The targets seek to match the expected average claim growth (approximately 2.8%).	12,000	40,000	63,000
The portfolio of injury prevention investments has an assessed positive return on investment	ACC takes an investment approach. This means that, overall, we expect our injury prevention programmes to deliver positive Scheme returns. The ACC target seeks to get the highest returns from our 'core' investments while factoring in our 'innovative' and 'strategic' investments that carry higher-risks and may not deliver the expected returns.	$1.80	$2.00	$2.10
Rate of fatal and serious injury across all claims (per 100,000 claims)	ACC's investment in changing the behaviours of New Zealanders should reduce the more severe fatal and serious injuries.	80.1	78	76
Public trust and confidence	The way the public views ACC is a useful indicator of how effectively we've communicated the value that ACC delivers through our injury prevention activity. Through our investment in injury prevention we should be raising awareness of the role ACC plays in reducing the incidence and severity of injury in New Zealand.	70%	80%	80%

Appendix B

Risk management

ACC has worked on improving its risk management framework and processes

ACC's Enterprise Risk Management Framework outlines the responsibilities, processes and practices that enable staff to manage risk as part of their day-to-day decision-making. The framework is aligned to AS/NZS ISO31000:2009 Risk management: Principles and guidelines and the COSO Enterprise Risk Management – Integrated Framework. In 2017/18 ACC focused on implementing the Five Lines of Assurance risk model. In 2018/19 the focus has been on reviewing the framework for continued appropriateness and embedding risk management practices in all areas of the business.

An effective risk culture is particularly important as ACC transforms

Embedding risk management practices in all areas is especially important during times of change. ACC is undergoing transformational change and customer expectations of services are changing rapidly. Implementing the right risk management behaviours will help ensure ACC delivers the right outcomes for clients, levy payers and taxpayers. The Risk and Compliance Office has an important role to play in helping the business to pay due attention to desired risks and embed risk management behaviours while going through the change programme.

The executive and the Board monitor risk continually

The executive, and the Board's Risk Assurance and Audit Committee monitor and evaluate ACC's risk management framework, maturity and internal control environment. Assurance Services and external auditors independently advise on the:

- risk and controls environment
- effectiveness of risk management.

The executive monitors and prioritises ACC's enterprise-level risks and reports them to the Board.

Key risk management initiatives were delivered this year

This year ACC has delivered initiatives designed to implement its risk strategy, including:

- the Board considering risk appetite as part of material decisions
- resetting the risk and compliance maturity roadmap
- simplifying the enterprise risk management framework to align better with current practice standards
- embedding risk support in the change programme.

In addition, ACC's risk culture was reviewed. Risk culture refers to the behaviours in an organisation that support taking the right risks to improve customer experiences, meet stakeholder expectations and protect its assets. The purpose of conducting the review was to establish a baseline across ACC against which to assess its risk culture status in the future. The review assessed eight behavioural drivers that have the greatest impacts on the achievement of strategic objectives. These were clarity, visibility, role modelling, practicability, openness, enforcement, rewarding and improvement. Areas of strength and opportunity have been identified. ACC's executive is considering actions in response to support a more embedded and mature risk culture.

The Five Lines of Assurance risk model is being embedded

The Five Lines of Assurance risk model was implemented during 2017/18. In 2018/19 the model has been aligned to continual delivery to become part of ACC's everyday way of working. The Five Lines of Assurance are described in Table 24.

TABLE 24 – FIVE LINES OF ASSURANCE

Assurance Line	Role
First Line of Assurance – the people	People need to be in control of their day-to-day business activity to recognise and respond proactively to manage risks. Managers are responsible for managing risks that relate to business objectives for their business units and groups.
Second Line of Assurance – Enabling (specialist) functions	These functions oversee and provide specialist subject matter expertise across ACC. Examples are Risk and Compliance, Health and Safety, Privacy, Cyber Security, Integrity, Communications and Legal Services.
Third Line of Assurance – Assurance Services and external assurance providers	Assurance Services and its assurance providers independently review how reliable ACC's risk management processes and performance are. Other independent external providers (External Audit, other government agencies and consultants) may also provide specific and limited scope assessments.
Fourth Line of Assurance – Chief Executive and executive	The Chief Executive and executive managers are responsible for building and maintaining a robust risk management process.
Fifth Line of Assurance – ACC Board	The Board has overall responsibility for ensuring robust risk management.

The Five Lines of Assurance:

- focus attention on strategic objectives to better support the enterprise
- identify value creation treatments (the upside/performance aspect) and value protection treatments (downside/minimising harm)
- improve links between strategy/planning and risk management
- define specific accountabilities for the Board, Chief Executive and the executive to identify, challenge and monitor residual risk
- define an active role for the Board to assess how effective risk management processes are
- elevate the role and importance of internal assurance over risk management.

There are currently nine priority risks for ACC

Table 25 shows the Board's and executive's nine highest-priority enterprise risks during 2018/19. It also includes the actions that the organisation is taking in response.

TABLE 25 – NINE HIGHEST-PRIORITY ENTERPRISE RISKS DURING 2018/19

Risk	Management actions
Injury prevention We fail to have a material impact on reducing the severity and incidence of injuries	Update the *Reducing Harm in New Zealand Workplaces Action Plan*. Establish a balanced investment portfolio. Implement the injury prevention strategy, including designing new methods to increase its impacts, reach and effectiveness. Implement advanced analytics to support injury prevention.
Delivering enterprise change We fail to deliver the Integrated Change Investment Portfolio and/or the change delivered isn't successfully embedded, reliable and sustainable	Embed the integrated change governance model. Implement the change delivery model and embed the Delivery Integration function. Assess the maturing change impacts, achievements and benefits.
Customer expectations and outcomes We haven't balanced customer expectations, experiences and outcomes.	Develop the Customer Centric Strategy and embed the Customer Centred Design Approach. Use customer feedback to improve our services. Deliver on the client and business customer change programme. Develop priority service imperatives for priority clients, including Māori.
Stakeholder relationships Our stakeholder relationships aren't strong enough to achieve our mutual objectives.	Strengthen our relationships with all central agencies and other government departments. Implement the entity's external communication strategy. Focus on the priority stakeholder groups.
Trust and confidence New Zealanders don't have trust and confidence in ACC	Improve our customers' experiences by implementing Next Generation Case Management and other Integrated Change Investment Portfolio initiatives. Build stronger relationships and proactively engage with our external stakeholders. Improve our services for Māori.
Scheme sustainability We fail to maintain the financial sustainability of the Scheme while delivering outcomes and meeting the expectations of our customers	Continue management of the controllable drivers of the outstanding claims liability. Deliver our integrated change portfolio (including Next Generation Case Management and the Health Sector Strategy delivering improved rehabilitation performance).
External environment Unexpected external policy changes, legislative changes or economic events can significantly affect our outstanding claims liability and investment performance, with an impact on trust and confidence	Monitor and manage regulatory changes that may require operational responses. Strengthen our relationships with all central agencies and other government departments.
Workforce capability We don't have the organisational leadership, capabilities or capacity in our workforce to deliver business performance and transformative change effectively.	Manage the people aspects of our organisational changes and transformation to ensure that culture and workforce capabilities are maintained or improved. Increase workforce diversity. Increase flexible work arrangements. Manage succession risk in key roles and increase the pool of future leaders. Develop a strategic five-year workforce plan for ACC. Implement workforce management tools to manage capacity and workload. Manage collective bargaining in a changing legislative organisational change environment.
Systems and information Our systems and information are vulnerable to attack.	Use threat modelling to prioritise our cyber risk activities. Increase cyber risk awareness among all employees and contractors.

Appendix C

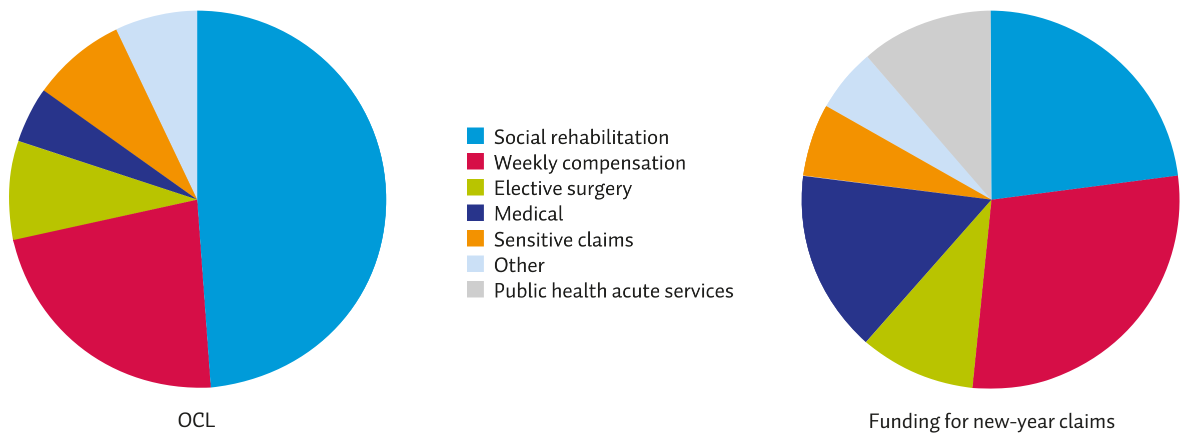
Claim volumes, types and costs

Comparison of payment types' contribution to the outstanding claims liability and funding for new-year claims

Claim volumes, types and costs affect the outstanding claims liability (OCL), levy rates and Government appropriations.

Graph 16 shows that the contribution of claim types to this year's OCL at 30 June 2019 is different from the lifetime costs of new claims in 2019/20.

GRAPH 16 – COMPARISON OF CLAIM TYPES' CONTRIBUTION TO OCL AND FUNDING FOR NEW-YEAR CLAIMS



The four largest claim payment types (social rehabilitation, weekly compensation, elective surgery and medical payments) made up 88% of the 30 June 2019 OCL and 77% of the funding for new-year claims.

Social rehabilitation makes up nearly half of the OCL, because this kind of support is long term. However, it makes up a smaller proportion of the funding for new-year claims. On the other hand, the medical payment type makes up a small proportion of the OCL but a larger component of the new-year claim cost. This is because volumes are high but in most cases the costs of the injuries are covered immediately. So there's no need to hold additional funds.

Sensitive claims

The sensitive claims liability was $4.2 billion as at 30 June 2019. In 2018/19 the OCL strain for this payment type was $438 million.

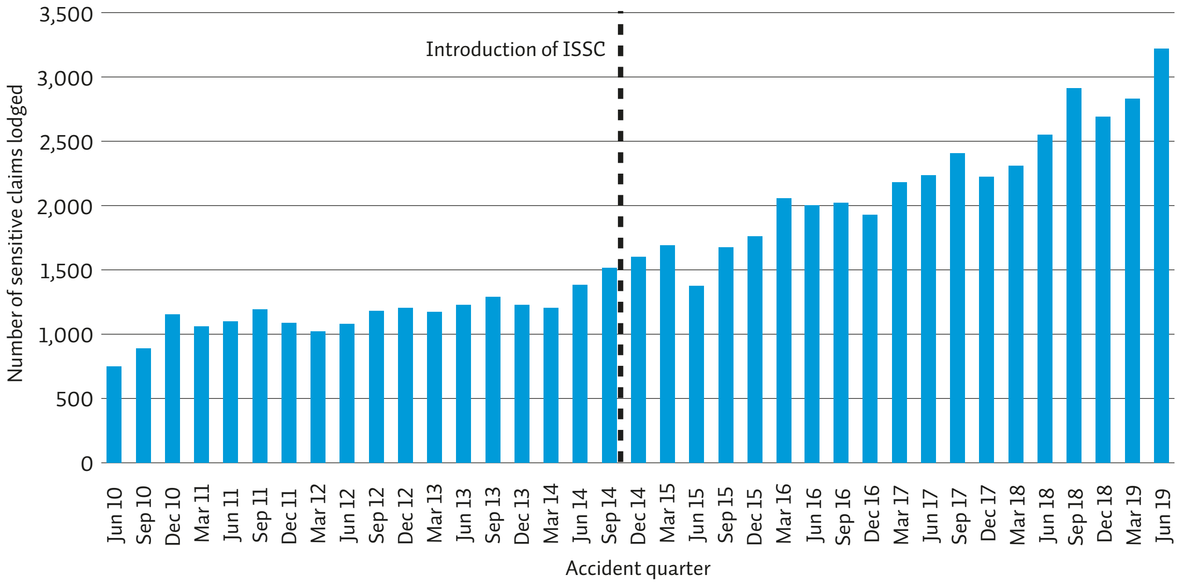
Sensitive claims are claims for physical and/or mental injury suffered as a result of sexual abuse or sexual assault.

New sensitive claims models were built

Historically, sensitive claims were modelled within other payment types. But substantial growth in sensitive claim volumes in recent years justified monitoring these claims separately. Isolating sensitive claims makes it easier to understand the impacts these claims have on the OCL and levies. Understanding these long-term impacts should help the organisation understand how best to provide the services these clients need, to achieve the required outcomes and in the most efficient way for levy and tax payers.

Graph 17 shows that new claim growth has continued to be high since the introduction of the Integrated Services for Sensitive Claims (ISSC) contract, with an average annual growth of 17%.

GRAPH 17 – NEW SENSITIVE CLAIMS GROWTH



At 31 March 2018, 27% of all active sensitive claims were from the Earners' Account and 72% from the Non-Earners' Account. The remaining 1% came from other accounts. That's why sensitive claims models were only built for the Earners' and Non-Earners' Accounts.

Sensitive claim clients receive six main types of payment:

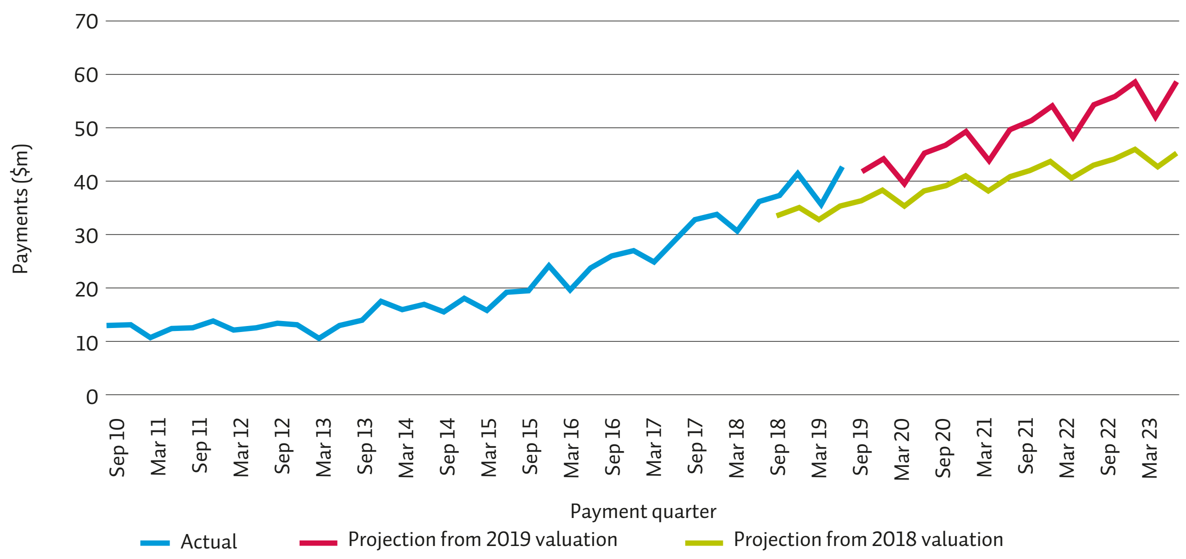
- Weekly compensation payments
- Other medical counselling services
- Independence allowance
- Lump sums
- Vocational rehabilitation
- Non-serious-injury care.

Sensitive claims from these payment types were used to create the sensitive claims model. The original models for these payments were re-fit to exclude sensitive claim payments. A recalibration of the 30 June 2018 valuation assessed the impacts of these modelling changes. The recalibration established a liability of $2.8 billion for sensitive claims, offset by OCL releases in the affected payment types listed above. Overall, the net OCL impact was relatively neutral with a small $16 million release in total.

Payments and active claims were higher than expected

Overall, payments and active claims during the year were higher than expected. This was driven by higher-than-expected payments for older accidents due to more claims remaining on the Scheme. The number of new claims for recent accident years was also much higher than expected. Graph 18 shows that future payments for sensitive claims are expected to grow much faster with the changes made to the 2019 valuation assumptions.

GRAPH 18 – SENSITIVE CLAIM PAYMENTS

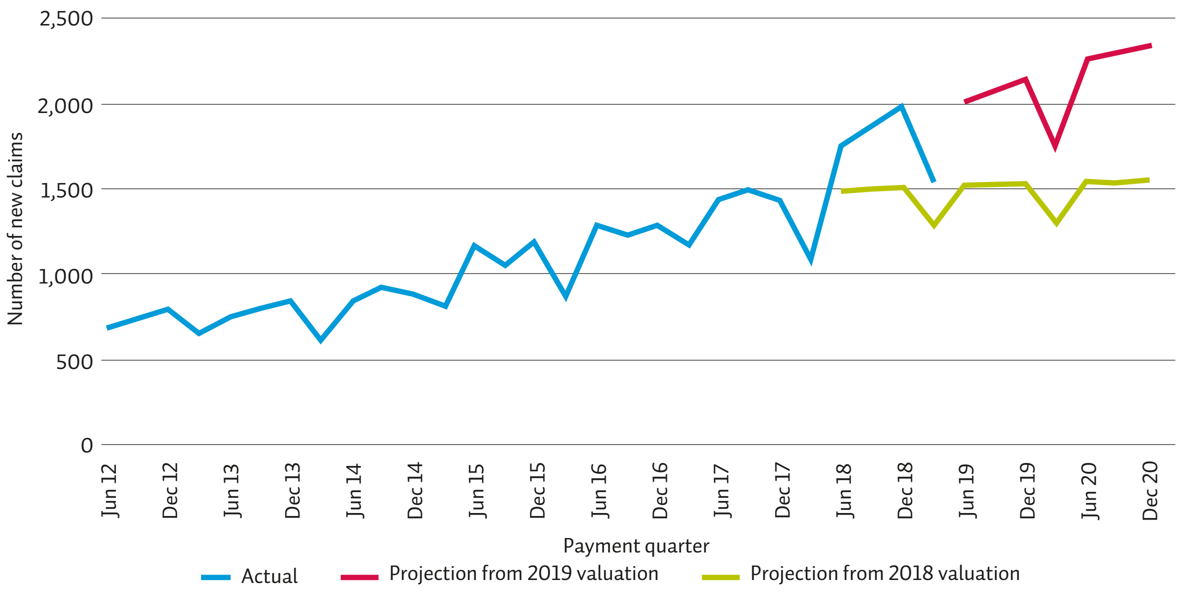


Appendix C
Claim volumes, types and costs

More new sensitive claims have presented in recent accident years

Higher-than-expected sensitive claims were received and payments made in the 2017/18 and 2018/19 accident years. This resulted in a new claim growth assumption for the 2019/2020 accident year of 20%, up from 9%. The new claim growth assumption reduces to 12% for 2021 and 2022. New claim growth for sensitive claims has been high in the past few years and remains very hard to predict. There is a risk for further OCL strains if new claims growth continues to be higher than expected. For example, if new claim growth was 30% the additional OCL strain could be around $11 million.

GRAPH 19 – NEW SENSITIVE CLAIMS REPORTED IN FIRST YEAR

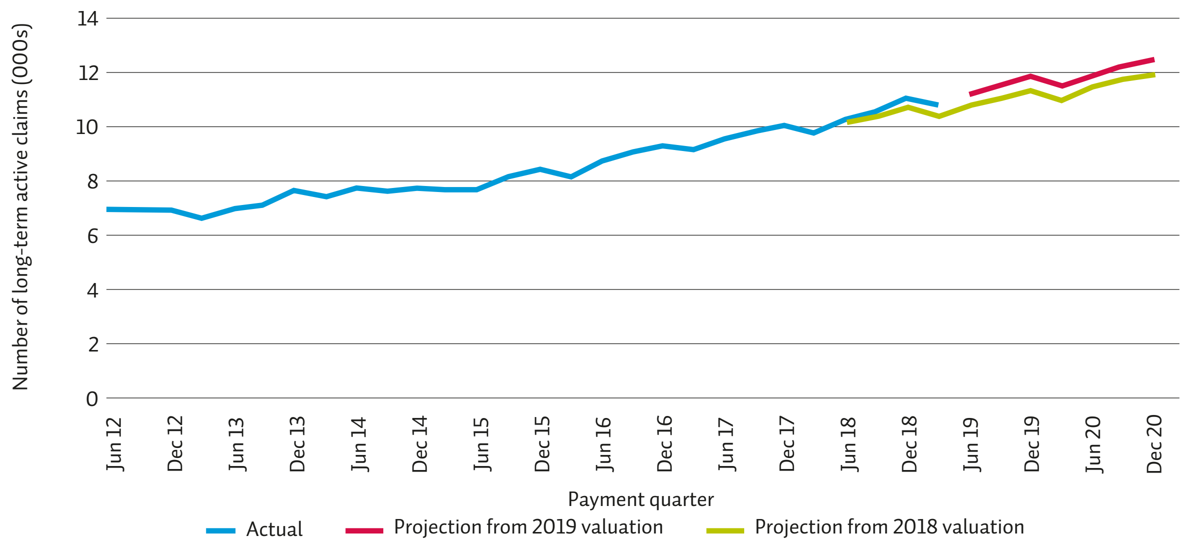


Long-term sensitive claim clients are staying on the Scheme for longer than expected

Long-term sensitive claim clients are staying on the Scheme for longer than expected, so there's been a small increase in the projected continuance rates for longer-term durations. The overall increase in the continuance rate, as seen in the chart below, may appear slight, but the resulting OCL strain is significant. This strain was partly offset by a reduction in the number of new older-accident-year claims. This is likely due to the difficulty of determining an accurate incident date for older sensitive claims resulting, in claim lodgement dates being used instead. The net impact was an OCL strain of $304 million.

Graph 20 shows the actual and projected number of long-term sensitive claims. Due to the development of the new sensitive claims model this year, only two years' worth of projections are available.

GRAPH 20 – NUMBER OF LONG-TERM ACTIVE SENSITIVE CLAIMS



Appendix C
Claim volumes, types and costs

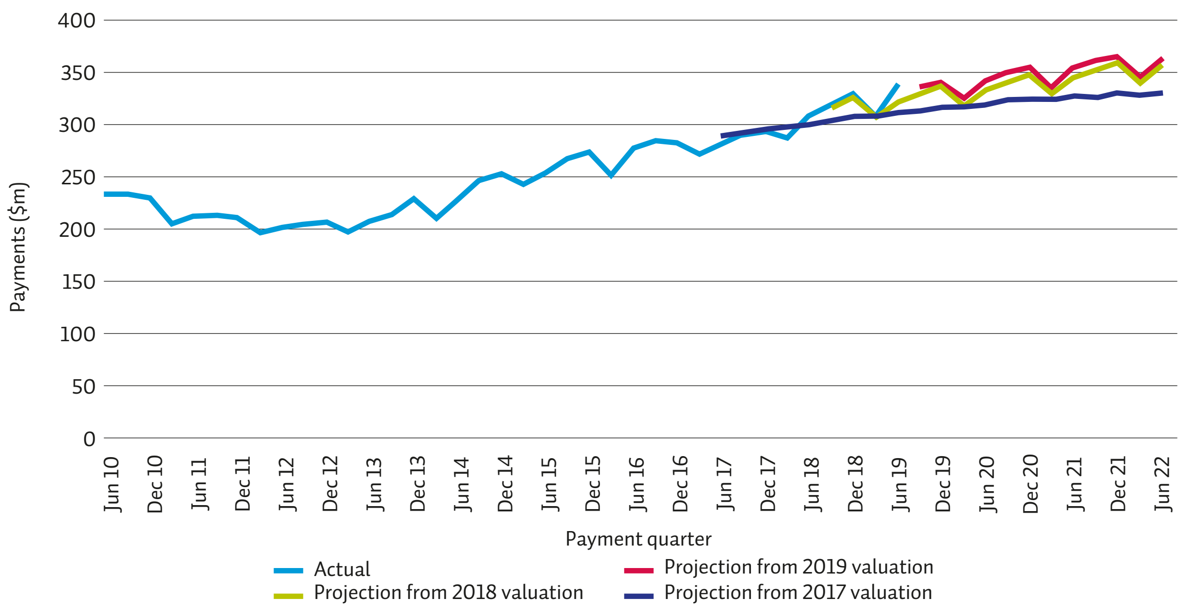
Weekly compensation

The OCL for weekly compensation as at 30 June 2019 was $11.9 billion. In 2018/19 the OCL strain for this payment type was $249 million.

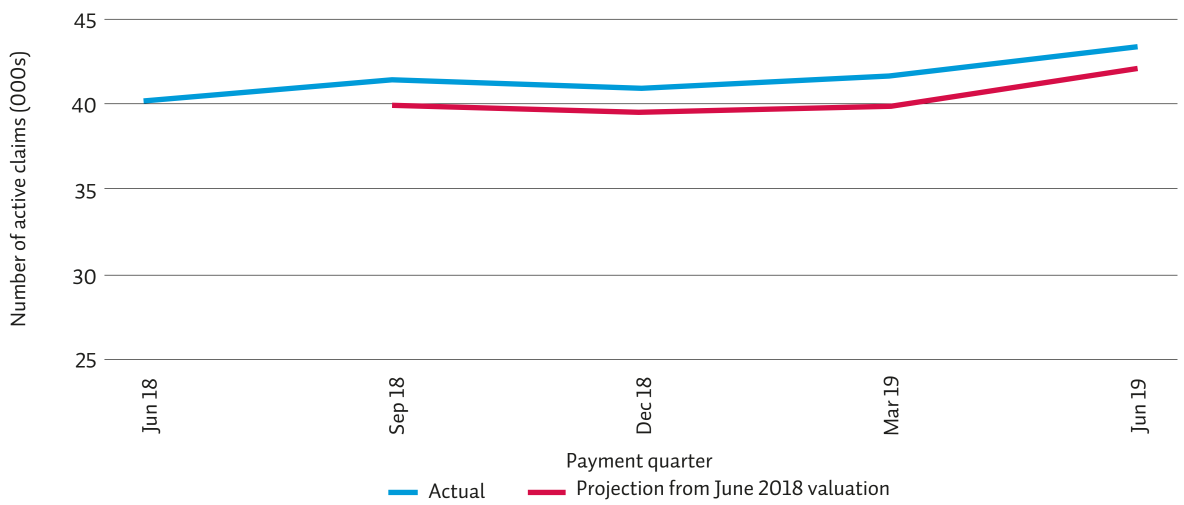
Weekly compensation payments are higher than expected

Total payments and the number of active claims in the year to 31 March 2019 were higher than expected. The higher payments were mainly due to more claims than expected for accidents during 2014 and later. Graph 21 shows the actual and projected payments in the June 2019 and the two previous June valuations. Graph 22 shows the actual and projected number of active claims for accidents during 2014 and later.

GRAPH 21 – NON-FATAL WEEKLY COMPENSATION CLAIM PAYMENTS



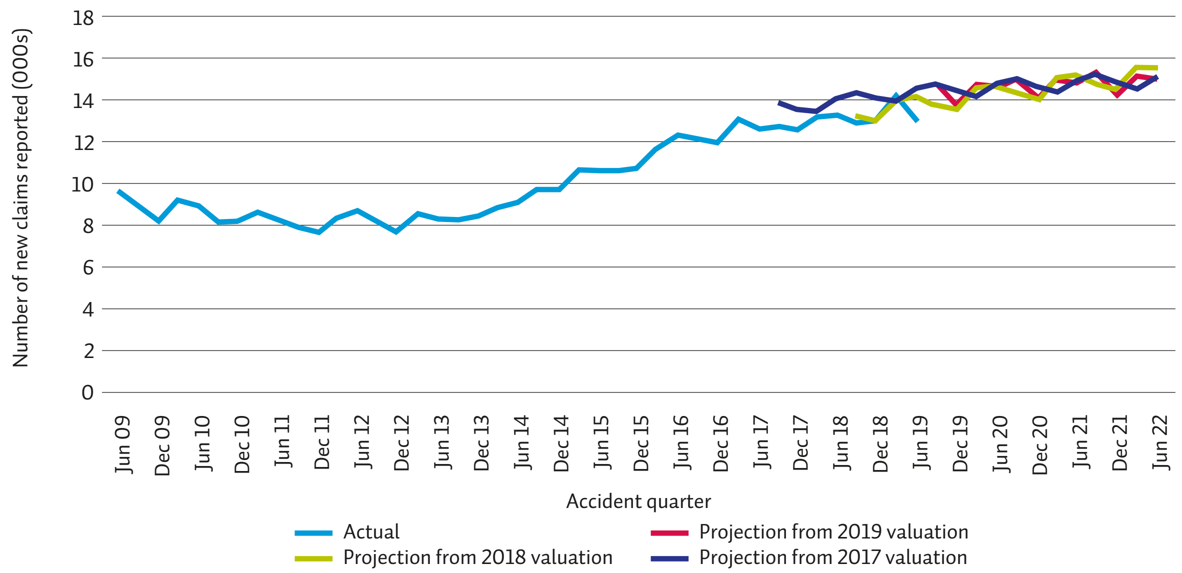
GRAPH 22 – NON-FATAL WEEKLY COMPENSATION ACTIVE CLAIMS DURING 2014 AND LATER



The growth in weekly compensation payments is forecast to continue

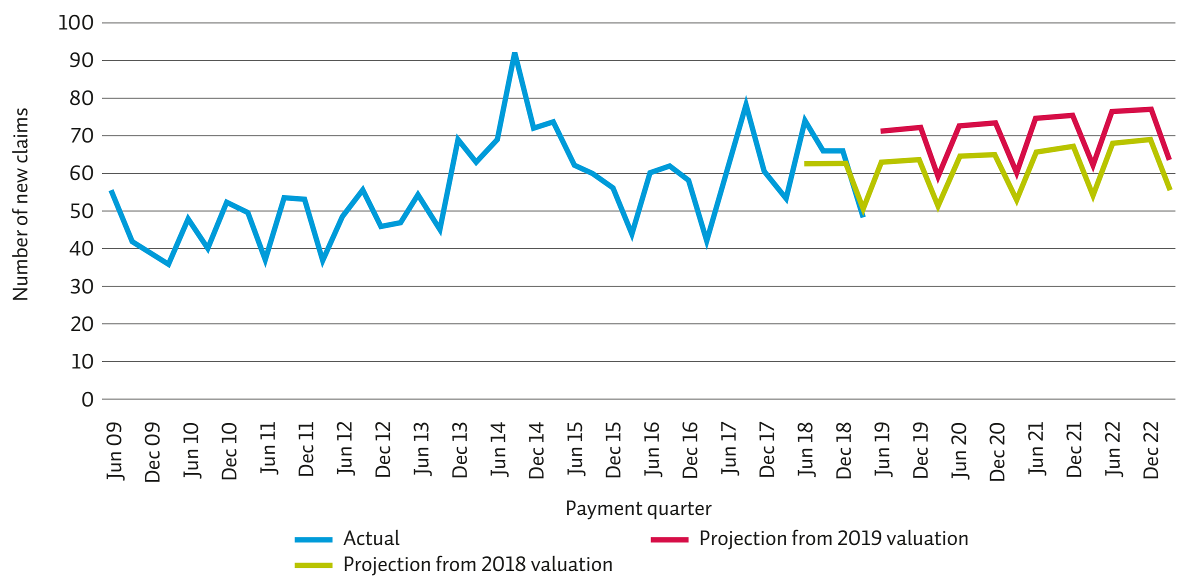
Most new weekly compensation claims receive payments during the same quarter in which the accidents occurred. As Graph 23 shows, these claims have been increasing in the past five years. It's assumed this growth will continue based on recent experience and future projected economic indicators.

GRAPH 23 – NUMBER OF NEW WEEKLY COMPENSATION CLAIMS BY ACCIDENT QUARTER



There's also been an increase in the number of older accidents that have started receiving weekly compensation payments, particularly in the Earners' Account as shown in Graph 24.

GRAPH 24 – EARNERS' ACCOUNT CLAIMS BEGINNING WEEKLY COMPENSATION 5-9 YEARS POST-ACCIDENT



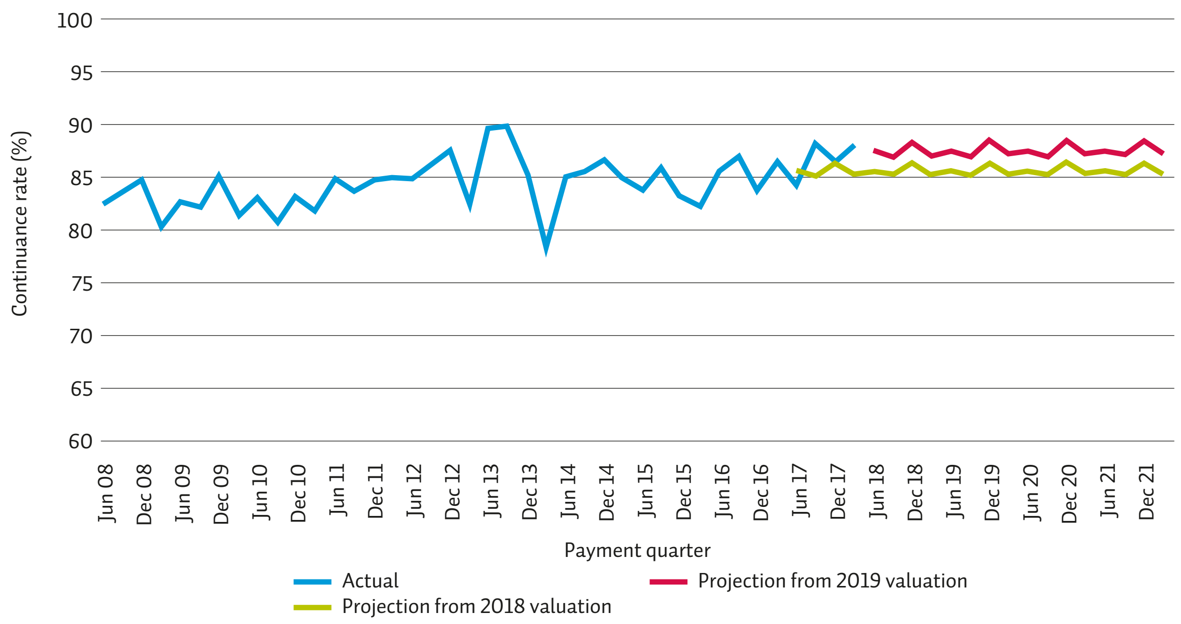
Clients are expected to remain on weekly compensation for longer

Continuance rates measure how many claims are still receiving payments at given times after accidents. When these rates are higher than expected, this leads to a higher OCL.

Short-term continuance rates have deteriorated. The OCL strain due to clients remaining on claim for longer than expected is $192 million.

Continuance rates for Work Account accidents two to four years old were increased to reflect a recent deterioration for these claims, as shown in Graph 25. This increase affects new claims and existing claims less than four years old and resulted in an OCL increase of $72 million.

GRAPH 25 – CONTINUANCE RATES FOR WORK ACCOUNT WEEKLY COMPENSATION 2-4 YEARS POST-ACCIDENT



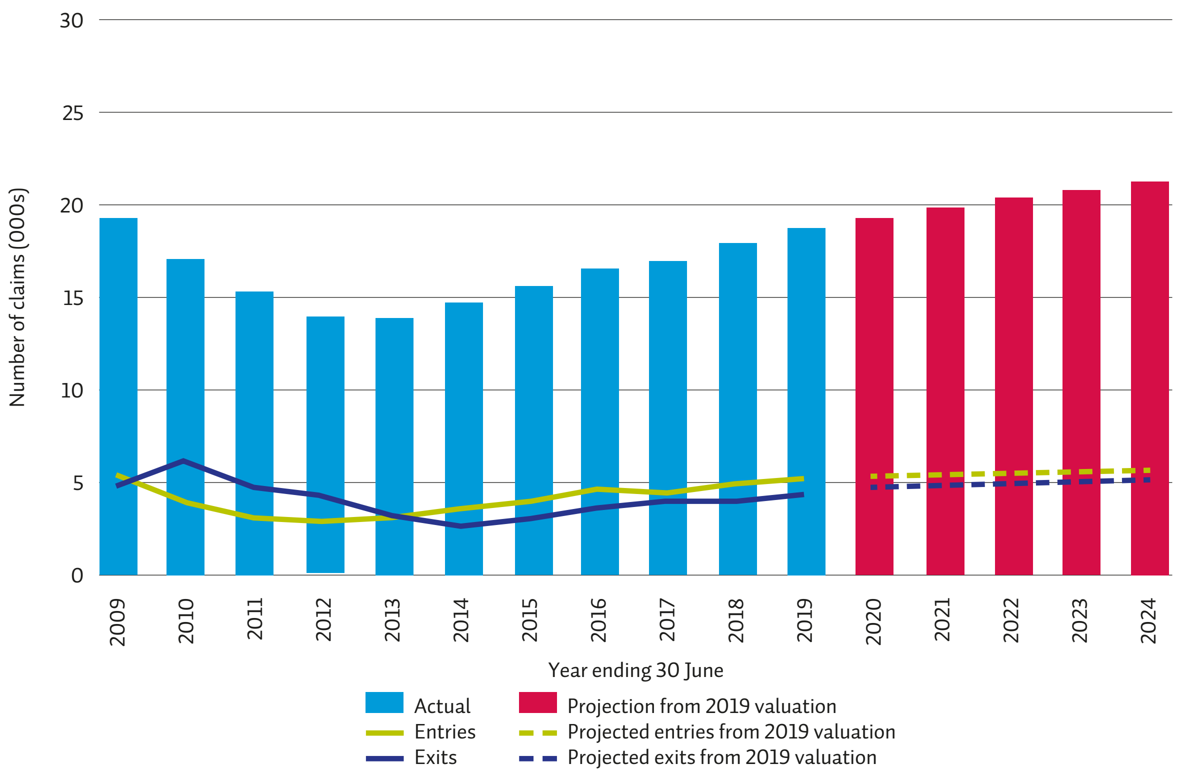
Long-term weekly compensation claims continue to grow

The long-term weekly compensation pool refers to claims that have received more than 365 days of cumulative weekly compensation. These claims tend to be more complex than those with shorter durations and can require more comprehensive management. Claims receiving weekly compensation more than a year since the accidents account for approximately 89% of the weekly compensation OCL.

Last year, a primary driver of growth in the long-term weekly compensation claims pool was sensitive claim volume growth. This year sensitive claims are modelled separately and are excluded from the pool, yet growth in the pool has continued.

Graph 26 shows the historical and projected numbers of long-term weekly compensation claims. It also shows the numbers of claims entering and exiting the pool.

GRAPH 26 – LONG-TERM WEEKLY COMPENSATION CLAIMS



Long-term weekly compensation claim growth continues

In the past six years the number of entries to the long-term weekly compensation claims pool has been greater than the number of exits, so the number of long-term claims is growing. Gradual growth in the pool is expected as the Scheme matures and the number of serious injuries in the pool increases. This is allowed for in the OCL and levy assumptions.

But in recent years the proportion of non-seriously injured clients receiving weekly compensation for more than 365 days has been increasing compared to seriously-injured clients. While most seriously-injured clients are expected to remain in the pool until age 65, non-seriously injured clients have a greater potential of earlier exits from the Scheme. So it's concerning that the proportion of these clients is increasing.

Appendix C Claim volumes, types and costs

Serious injury social rehabilitation

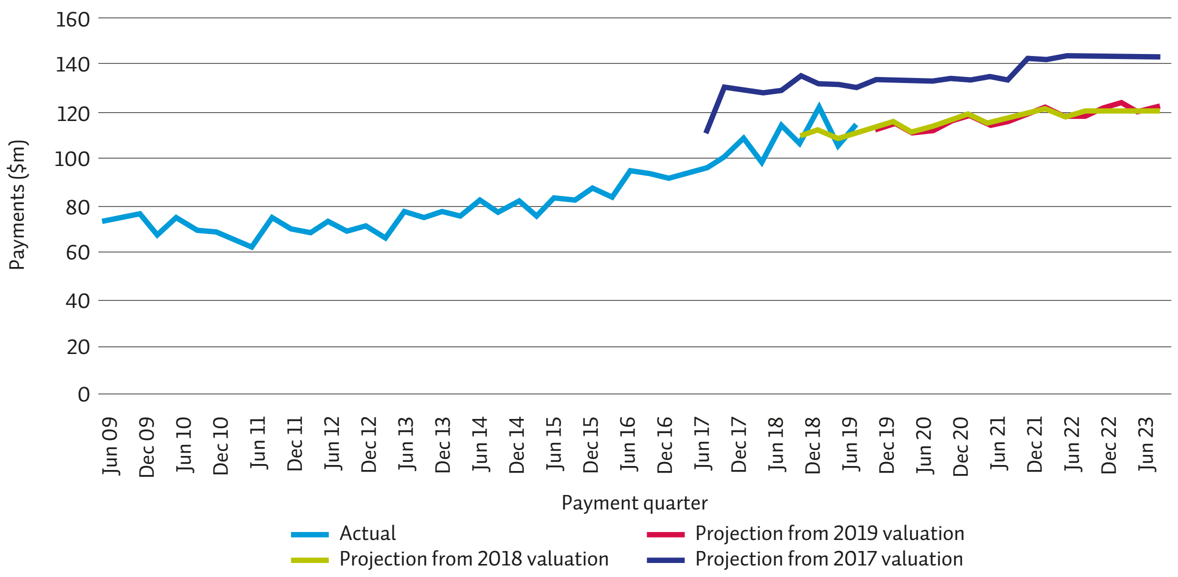
The OCL for serious injury social rehabilitation at 30 June 2019 was $23.5 billion. In 2018/19 the OCL strain for non-capital and capital combined was $198 million.

Social rehabilitation non-capital costs significantly affected the OCL.

Social rehabilitation non-capital payments are for care (attendant care, home help, child care and residential care) or non-care (active rehabilitation, training for independence, supported activities, assessments and travel). Attendant care support accounts for around 60% of social rehabilitation non-capital payments.

Graph 27 shows payments for seriously-injured clients receiving non-capital services. In 2017 initial advice in relation to the pay equity ruling resulted in a significant upward adjustment to the projections by the external actuaries. However, the impact of the pay equity legislation was lower than originally estimated, so the projections were adjusted in 2018. In 2018/19 non-capital claim payments were slightly above those expected. However, serious injury non-capital payments have a significant impact on the OCL due to the lifelong nature of the support provided, so although the upward adjustment appears insignificant, it resulted in a $141 million OCL strain.

GRAPH 27 – SERIOUS INJURY NON-CAPITAL CLAIM PAYMENTS



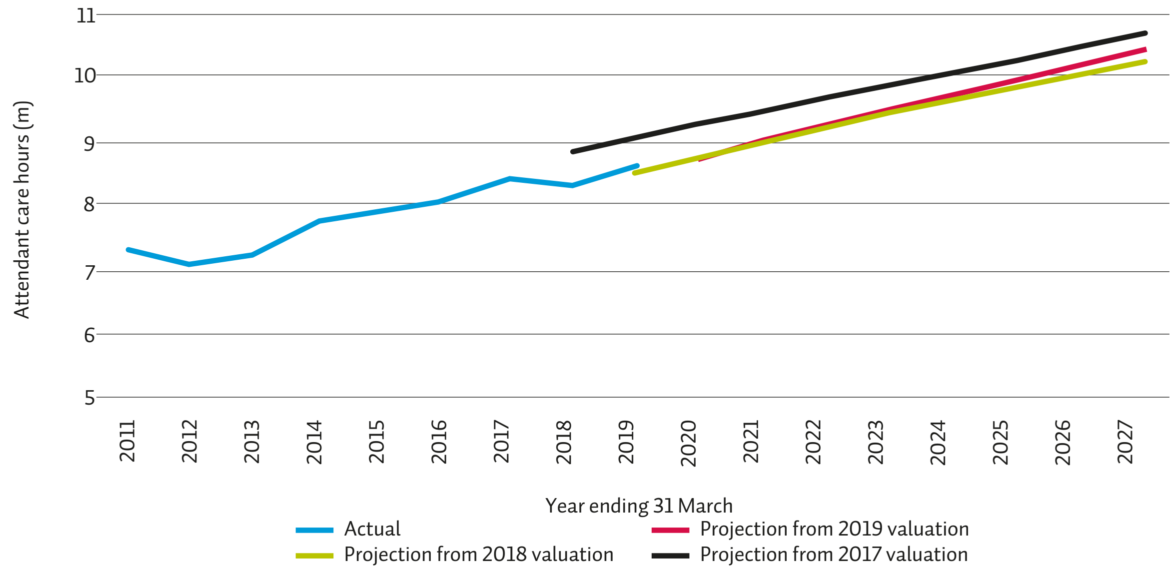
The OCL strain in serious injury non-capital was primarily due to:

- higher attendant care costs for existing claims
- higher-than-expected volume of new claims.

Attendant care hours have increased

Attendant care hours were higher than expected after showing some signs of stabilising in 2017/18. Actual attendant care hours increased back to a similar level to 2017. As a result, the 2019 projection has been increased from the 2018 projection. The OCL impact was strain of $85 million.

GRAPH 28 – SOCIAL REHABILITATION – SERIOUS INJURY CARE HOURS



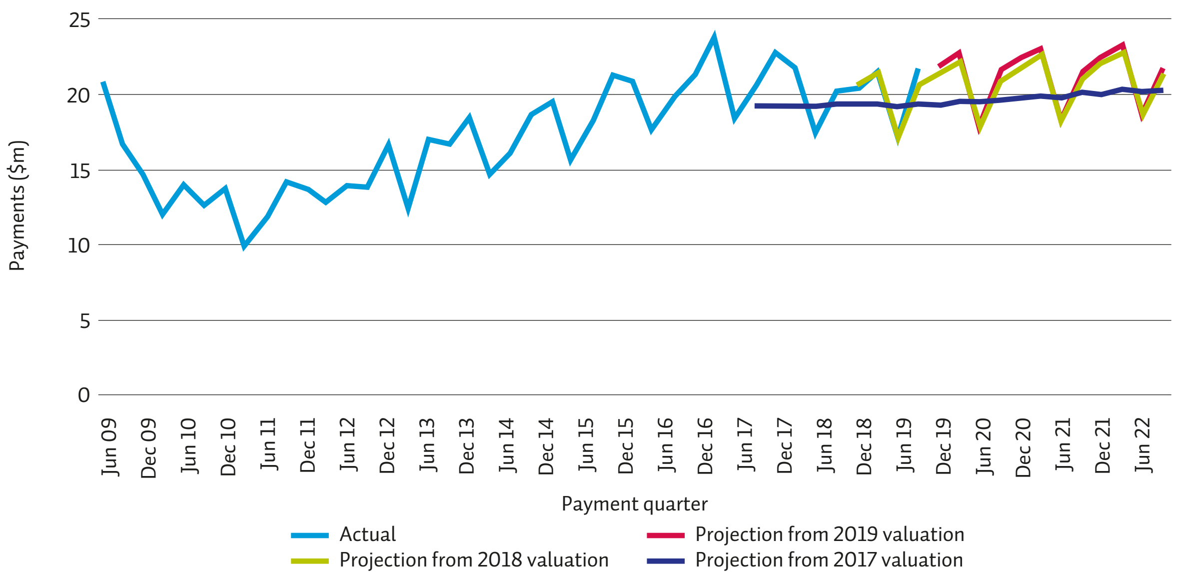
New serious injury claim volumes have increased

In 2018/19, there were 325 new serious injury claims. This was 23 more than expected, primarily due to more serious motor vehicle accidents. Although the volume is small, due to the lifelong nature of the support provided, the OCL impact was fairly large at $55 million.

Capital payments were higher

Social rehabilitation capital payments for seriously-injured clients include payments for medical consumables, rehabilitation equipment, artificial limbs, housing modifications and motor vehicle purchases and modifications. Graph 29 shows that actual capital payments for seriously-injured clients were higher than expected. This was mainly due to large capital payments relating to more recent accident periods. The OCL is more weighted towards long-term, ongoing capital payments so newer accidents tend to have lesser impacts. The total OCL strain for serious injury capital was $57 million.

GRAPH 29 – SERIOUS INJURY CAPITAL PAYMENTS



Non-serious injury social rehabilitation

The OCL for non-serious injury as at 30 June 2019 was $2 billion. In 2018/19 the OCL strain for non-capital and capital combined was $112 million.

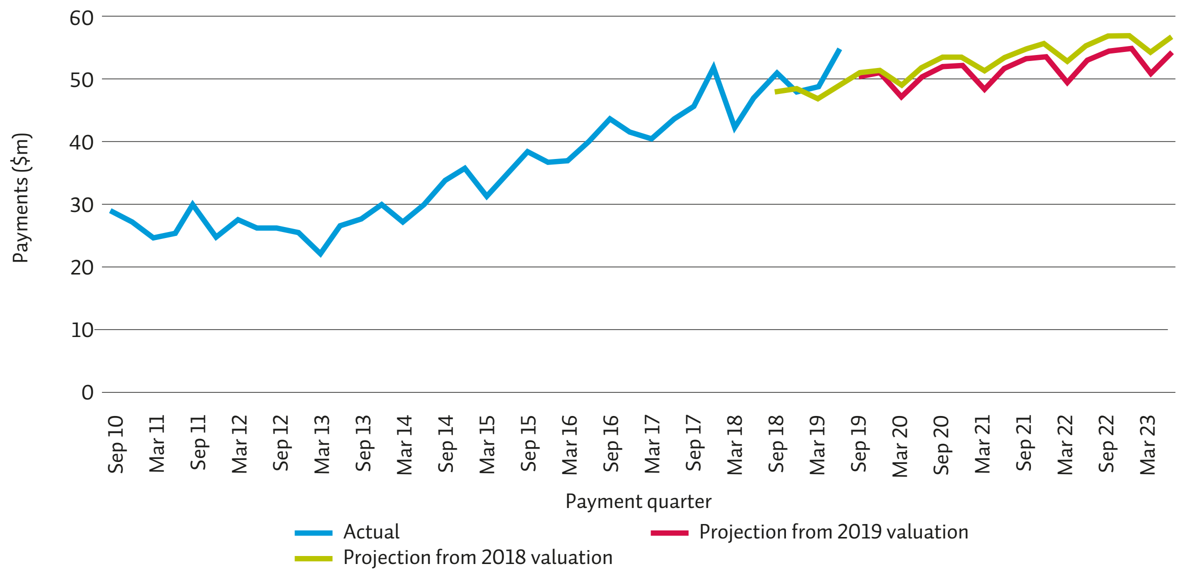
These claims relate to people who require extra help for rehabilitation but aren't expected to be on claim for the rest of their lives.

Model changes, higher-than-expected average payments and growth in claim volumes affected the non-serious injury non-capital OCL

The strain for non-serious injury non-capital was $55 million. Modelling changes had the largest OCL impact causing a $32 million strain.

Graph 30 shows payments for non-seriously injured clients receiving non-capital services. These payments have been steadily increasing since 2013 and were 1% higher than expected in the year to 31 March 2019. In the June 2019 quarter payments were much higher than expected and work is needed to confirm the outcomes being achieved. Although the graph shows that the 2019 projection of payments is below the 2018 projection, an OCL strain has occurred for this payment type. This is because the bulk of the projected payments relate to older accident years where the OCL impact is much greater.

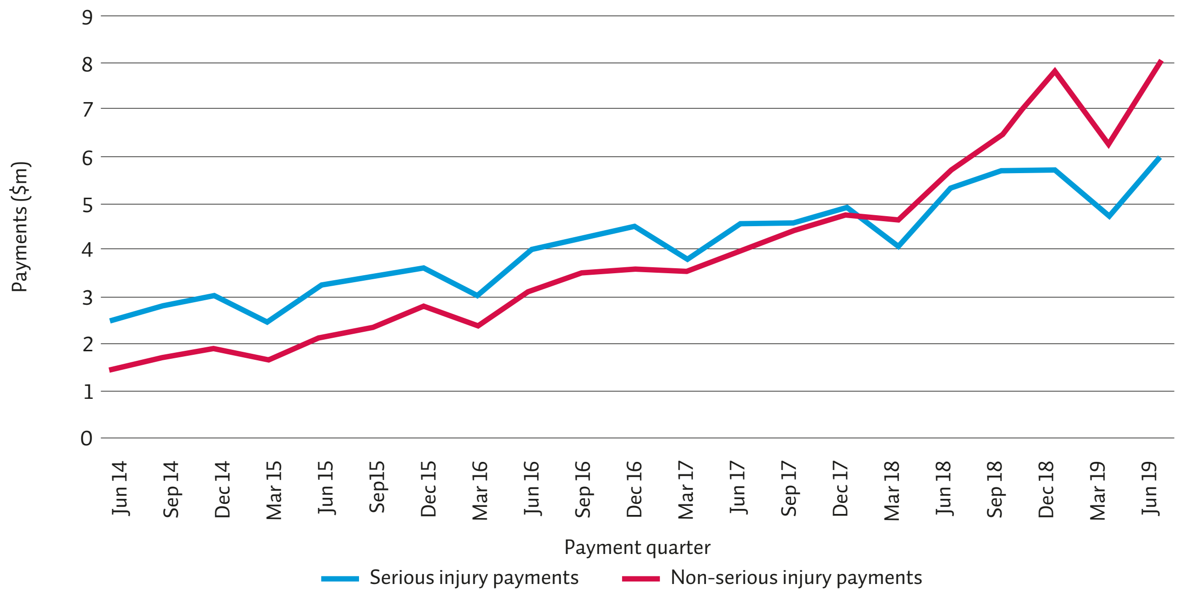
GRAPH 30 – NON-SERIOUS INJURY NON-CAPITAL PAYMENTS



The payments for training for independence have increased significantly

Graph 31 shows the significant growth in payments made for training for independence programmes. These payments have a relatively small impact on the OCL, but the growth is an area of concern because client outcomes aren't being adequately measured. ACC has a project underway to make sure the right clients are getting the right outcomes from this service.

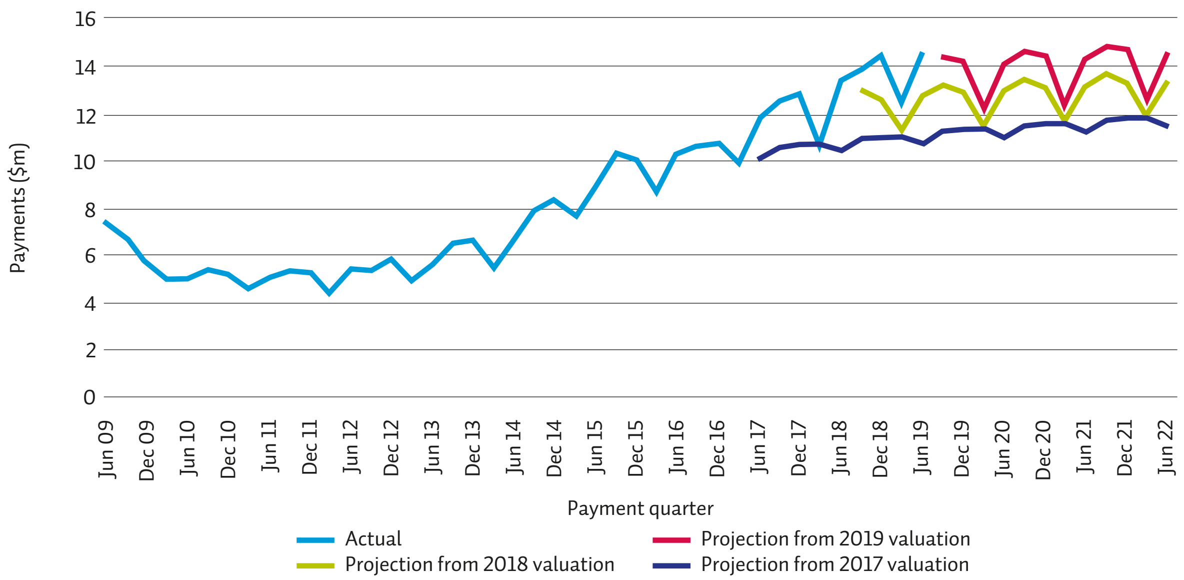
GRAPH 31 – PAYMENTS FOR TRAINING FOR INDEPENDENCE



Capital payments for non-serious injury clients have increased

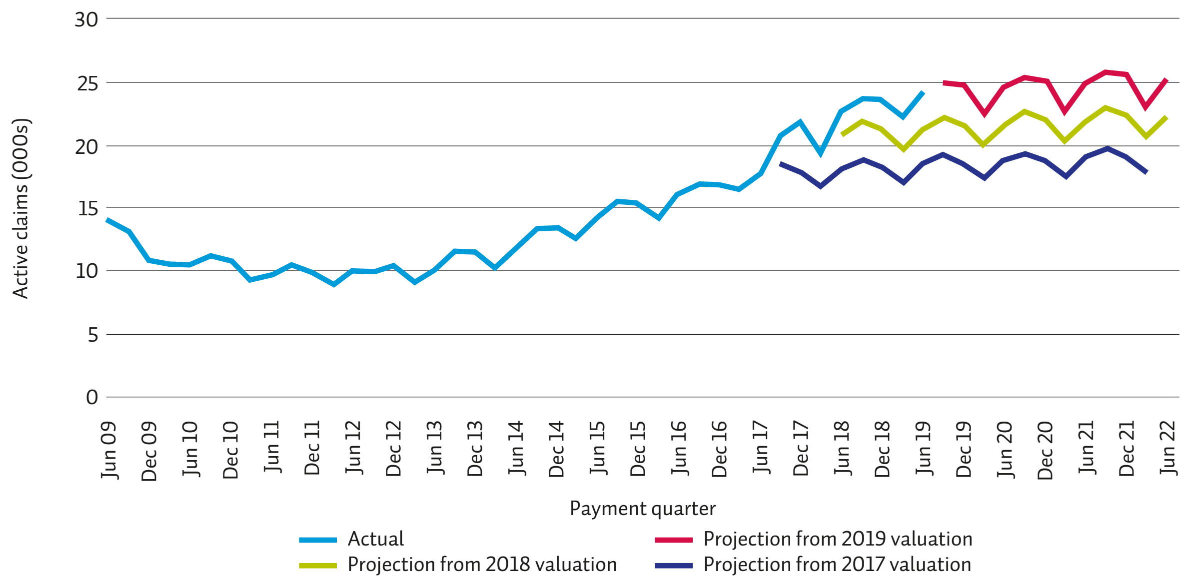
Graph 32 shows that actual capital payments for clients with non-serious injuries were higher than expected again. This is despite successive increases in the valuation projections in the previous three years. The OCL strain this year for non-serious injury capital was $57 million.

GRAPH 32 – NON-SERIOUS INJURY CAPITAL CLAIM PAYMENTS



The key driver of higher-than-expected non-serious injury capital costs in 2018/19 was strong growth in capital claim volumes. This was mainly for injuries that have occurred within the past five years. The average cost of the capital items was also higher than expected, particularly for older clients. The organisation is investigating the underlying drivers and will recommend ways to address this growth.

GRAPH 33 – NON-SERIOUS INJURY CAPITAL CLAIM VOLUMES



Elective surgery

The OCL for elective surgery as at 30 June 2019 was $4.4 billion. In 2018/19 the OCL release for this payment type was $81 million. The bulk of this release ($71 million) relates to adjustments to the models for long-term average surgery costs.

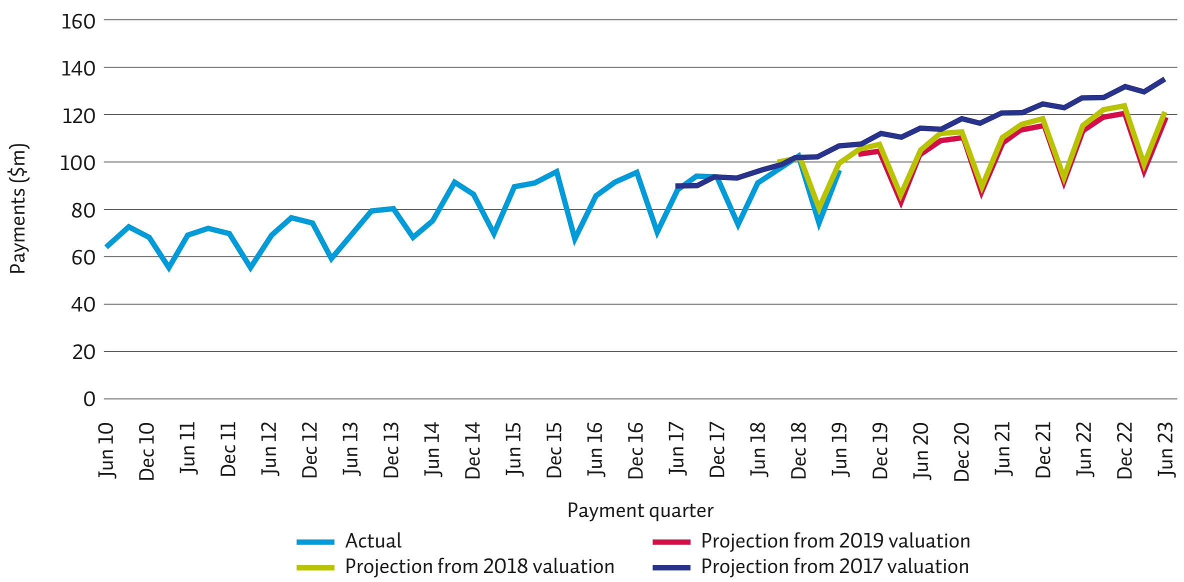
Elective surgery is a one-off event. The timing of an elective surgery procedure can vary from soon after an accident to many years later, especially if further surgery is required.

Elective surgery is an important entry point to the Scheme. Clients often also require other support such as weekly compensation, social rehabilitation and other medical services while recovering from surgery.

Payment experience

Elective surgery payments in 2018/19 were slightly lower than expected, as shown in Graph 34. The decrease in projected payments from the 2017 valuation is due to the reduction in the superimposed inflation assumption.

GRAPH 34 – ELECTIVE SURGERY CLAIM PAYMENTS

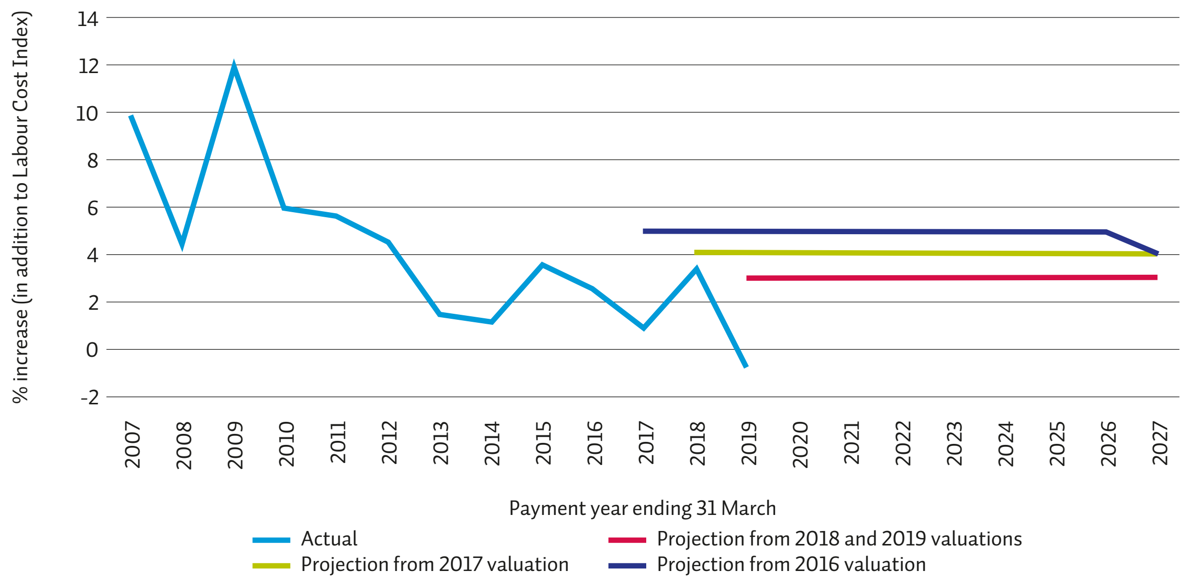


Elective surgery superimposed inflation

Superimposed inflation in elective surgery is generally driven by increases in underlying surgical costs and a shift in the types of procedures being performed.

Graph 35 shows actual superimposed inflation and the assumptions made for future years in the June 2019 and three previous June valuations. The chart reveals that the annual increase in payments due to superimposed inflation hasn't exceeded 4% since 2012. In 2016/17 the elective surgery superimposed inflation rate was reduced from 5% to 4%. In 2017/18 the rate was reduced again from 4% to 3%. Although this year's actual superimposed inflation rate was low again, the external actuary opted to maintain the 3% rate from last year.

GRAPH 35 – ELECTIVE SURGERY SUPERIMPOSED INFLATION



Medical

The OCL for medical at 30 June 2019 was $2.5 billion. In 2018/19 there was a total OCL release for this payment type of $134 million.

Medical payments are made to primary care providers in four categories:

- General practitioners (GPs)
- Radiology
- Physiotherapy
- Other medical, which includes specialist consultations, acupuncture and dental treatment.

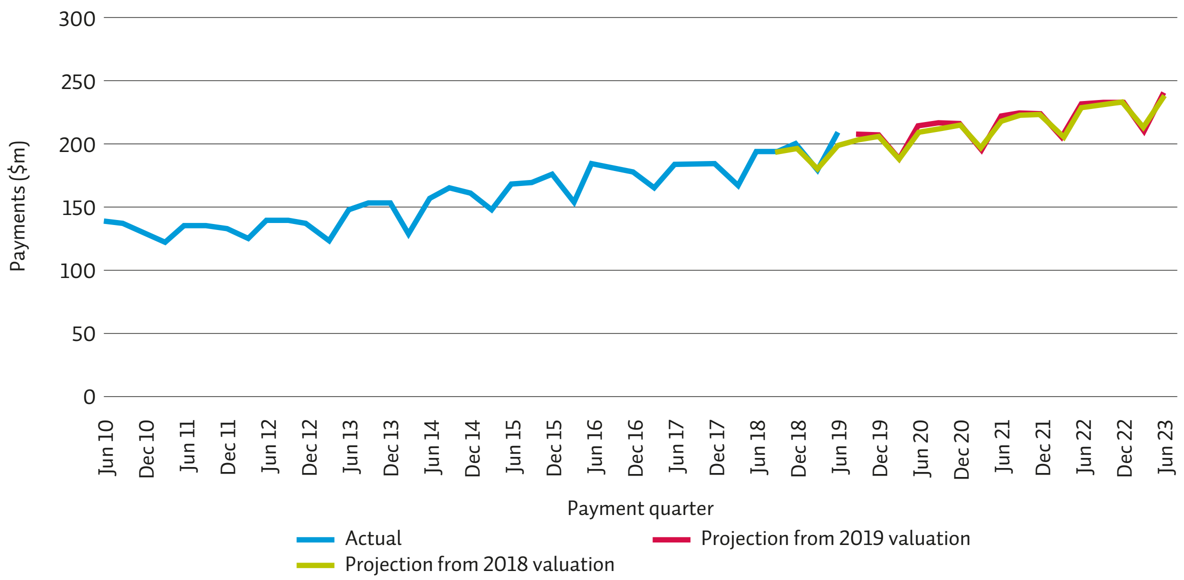
These payments are in addition to those provided under bulk funding to the Ministry of Health for public health acute services.

Medical services' payments are typically short term. The impacts they have on the OCL are less significant than the impacts on levy rates and Government appropriations.

Medical payments were higher, but average payments were lower

Graph 36 shows medical payments were slightly higher than in the 2018 valuation projections.

GRAPH 36 – MEDICAL PAYMENTS' CLAIM PAYMENTS



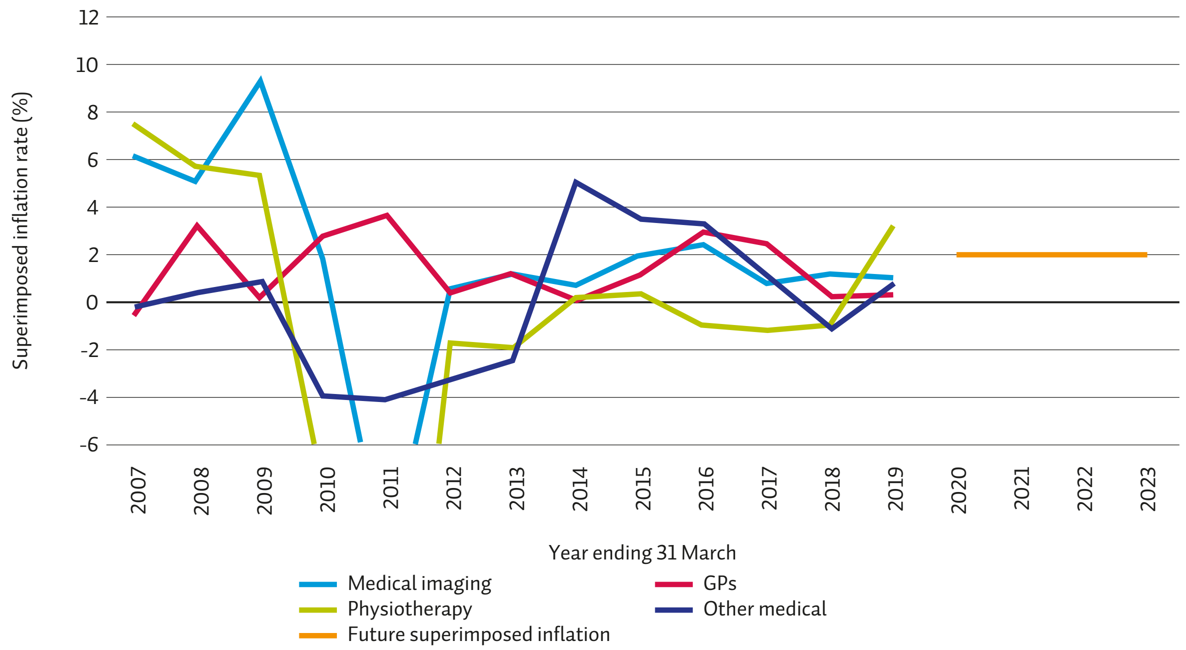
The active claim volumes were higher than expected but were offset by lower average payments to a large extent, particularly for the other medical payment type.

Medical superimposed inflation assumptions have been aligned

Historically, medical payment types have experienced increases in average payments higher than the rate of inflation. In previous valuations separate rates for superimposed inflation have been set for each medical payment type.

Graph 37 shows that the actual superimposed inflation rates, while volatile, have been reducing or staying relatively low. All medical superimposed inflation assumptions are now 2%. The GP assumption reduced by 1% and there was a reduction of 0.5% for the other medical payment type. Physiotherapy and medical imaging have remained at 2%. The combined OCL release was $135 million.

GRAPH 37 – MEDICAL PAYMENTS' SUPERIMPOSED INFLATION



Physiotherapy claim changes have had an effect

Before 1 March 2018, physiotherapists had to apply for extended treatments. They re-applied after the first 16 treatments, or if treatments had lasted for more than a year. Since 1 March 2018, approval has only been required for more than 50 treatments, regardless of how long treatments have lasted. This change has increased payments and active claim volumes for older accident periods. It's also altered the claim pattern of physiotherapy claims.

There has been a large increase in the number of claims that continue to receive treatments for more than nine months after the date of the accident. But as most claims only receive physiotherapy treatments for six months or less, the impact on the total claim volume has been minor.

This experience has been reflected in the valuation models. The resulting OCL strain was $17 million.

Allocation of claims handling expenses changed

Claims handling expenses are the costs involved in paying claims, exclusive of the actual cost of claims. The OCL for claims handling expenses as at 30 June 2019 was $2.9 billion. In 2018/19 there was a total OCL strain for this payment type of $29 million.

The OCL allocation of claims handling expense aligns with the ACC budget. During 2018/19, two changes were made to how these expenses are allocated by activity and to each account:

1. Previously programme expenditure (primarily injury prevention) influenced the allocation of overheads to the claims handling expenses. So increases in a programme's expenditure resulted in a higher level of overheads. This wasn't necessarily reflective of the costs involved. Full time employee numbers are now used so that the claims handling expenses allocation is instead dependent on the size of the business group. This has helped ensure a fairer allocation of overheads.
2. The allocation of claims handling expenses to each of the five accounts is now based on the overall active claim volumes for each payment type. In the past, full time employee numbers for teams responsible for assessing and/or supporting certain payment types were used. But this information was often unreliable.

Treatment injury

Treatment injury claims grew from 2012 but the growth is now slowing

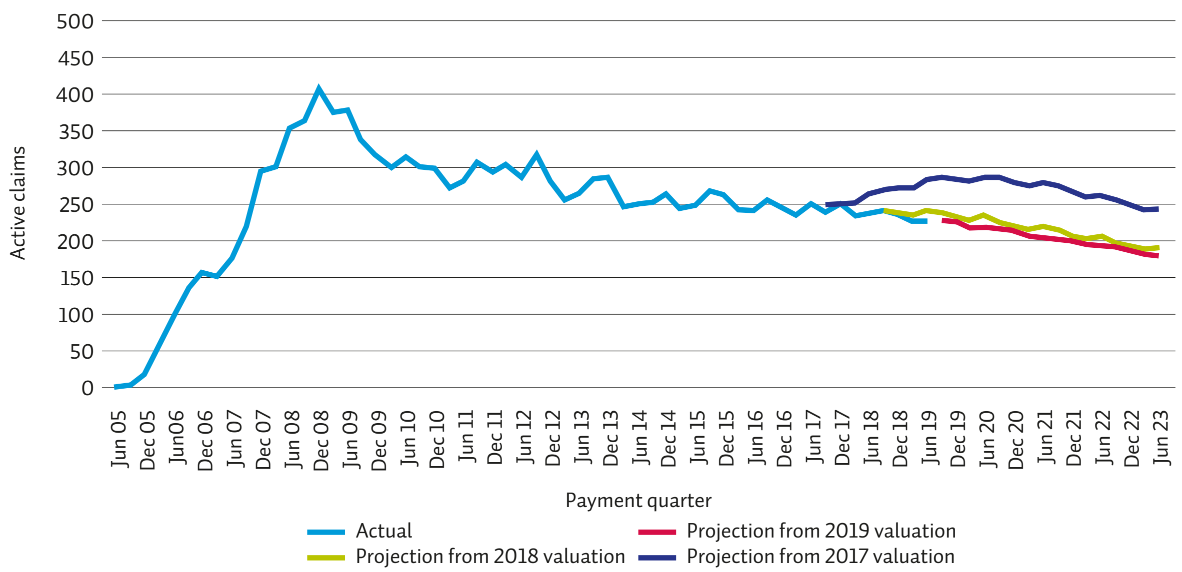
The Treatment Injury Account has been a focus in recent years due to significant growth in claims since 2006 when cover was extended. The extension to cover made it unnecessary to prove an injury was caused by medical error. There was further growth in claim volumes from 2012, coinciding with a campaign to increase awareness of treatment injury cover. But in recent years the growth has slowed, particularly for non-serious injury, other medical and weekly compensation payments.

In 2018 the external valuation actuary reviewed the assumptions set by the previous valuation actuary and found that they were too conservative. In response they reduced their assumptions to better reflect the experience. They reduced the projected number of new non-serious injury and other medical claims and weekly compensation continuance rates to reflect the recent experience. That resulted in an OCL release of $211 million.

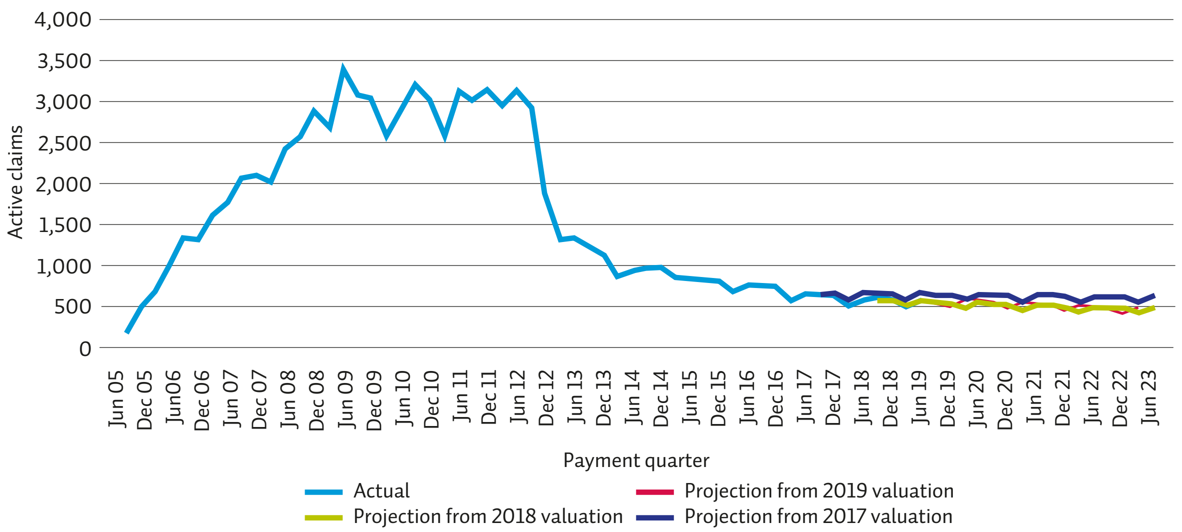
In 2018/19 claim patterns for non-serious injury, other medical claims and weekly compensation indicated that growth was continuing to slow and the assumptions were still too high. So the assumptions were reduced further, resulting in a release of $153 million (this OCL release is included in the above payment type analysis).

The following three graphs show the expected run-off patterns for the number of active treatment injury claims, with accident dates between 2006 and 2012, for non-serious injury care, other medical and weekly compensation. These claims are now projected to run off faster than previously thought based on the underlying claims data.

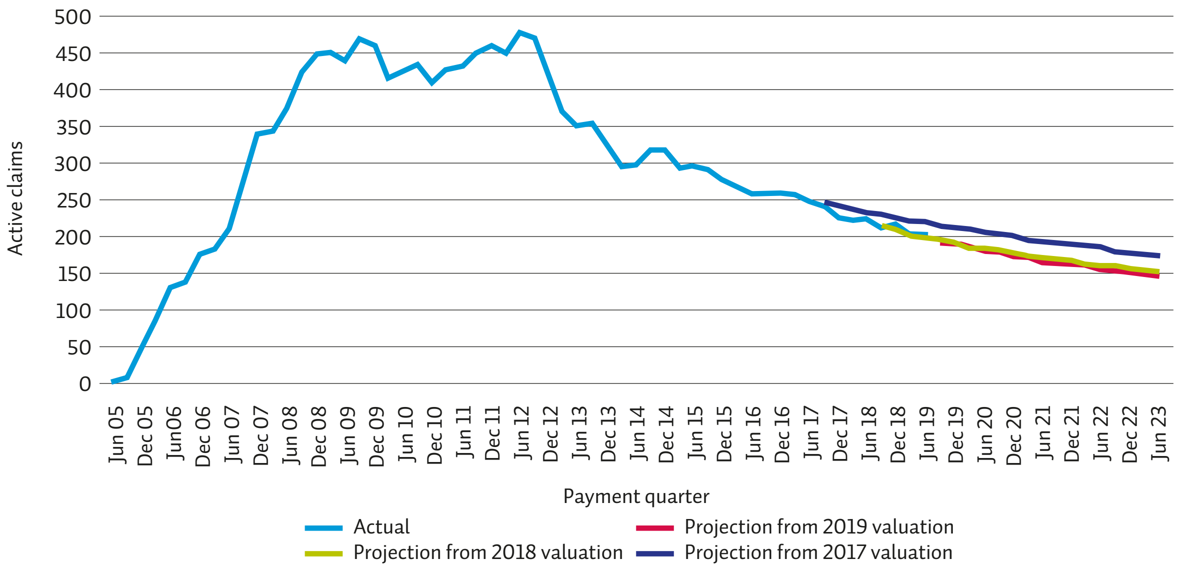
GRAPH 38 – TREATMENT INJURY: NON-SERIOUS INJURY CARE ACTIVE CLAIMS (2006-2012 ACCIDENT YEARS)



GRAPH 39 – TREATMENT INJURY OTHER MEDICAL ACTIVE CLAIMS (2006-2012 ACCIDENT YEARS)



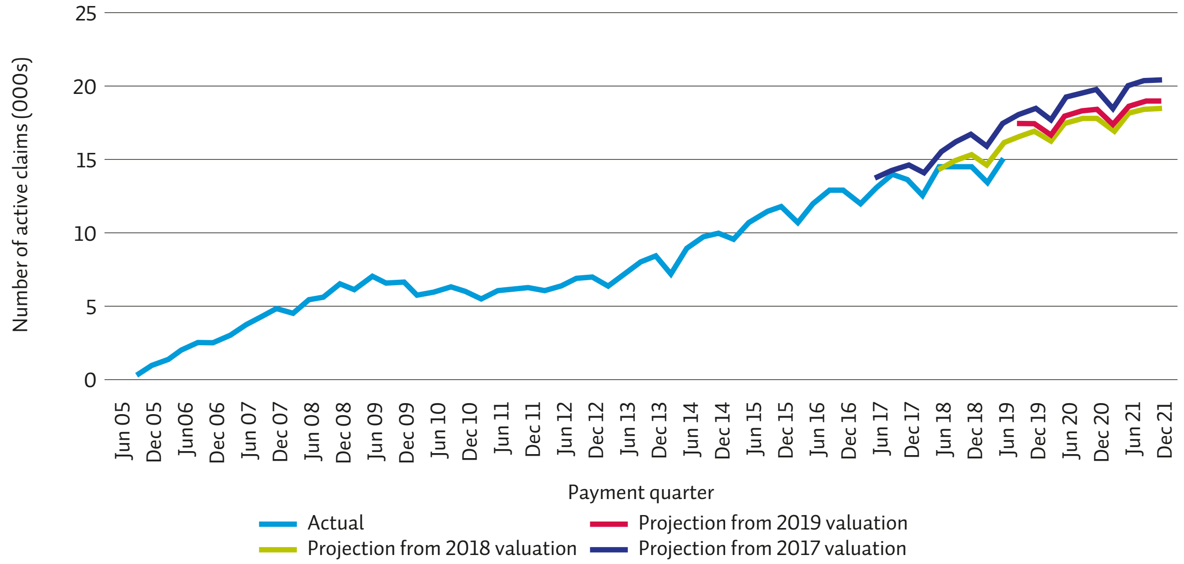
GRAPH 40 – TREATMENT INJURY: WEEKLY COMPENSATION CLAIMS (2006-2012 ACCIDENT YEARS)



Growth in new treatment injury claims remains high

The growth in new treatment injury claims in recent accident years remains high. The recent court ruling relating to the definition of 'ordinary consequence of medical treatment' has the potential to increase new claims further (see the *How ACC operates and how it's changing* section). Graph 41 shows the growth in active claims since the change from medical misadventure to treatment injury. It also shows the reduction in the claim growth rate in 2017/18 and 2018/19.

GRAPH 41 – TREATMENT INJURY ACTIVE CLAIMS



Appendix D

Valuation of the outstanding claims liability

The outstanding claims liability increased by 31% from June 2018 to June 2019

ACC's outstanding claims liability (OCL) at 30 June 2019 was $55,023 million, an increase of $13,080 million from 30 June 2018. The initial forecast was an increase of $1,369 million.

We expect an increase in OCL every year. This is partly because the Scheme has yet to mature. We expect the rate of new claims to exceed claims leaving the Scheme. The OCL will also grow with inflation and as the population grows.

The larger-than-expected increase was mainly due to changes in the economic assumptions used to calculate the liability. A substantial reduction in interest rates over the year has resulted in a large increase in the liability.

The liability includes work-related gradual process claims incurred but not yet reported. The liability for these claims isn't included in the OCL reported in the Annual Report due to accounting requirements. But it's included here as it's a true economic cost to the Scheme, funded by the Work Account levy.

The OCL is an important indicator of the Scheme's performance

The OCL is important as it feeds into recommendations for levy rates and appropriations. It also points to areas where changes in claim volumes or severity may be a risk to the Scheme's efficiency and outcomes for clients.

An external valuation actuary calculated the OCL

Alan Greenfield FIAA and Ross Simmonds FNZSA FIA, from external actuary Taylor Fry, valued ACC's OCL. They gave us their report Accident Compensation Corporation – Valuation of Outstanding Claims Liabilities as at 30 June 2019 in August 2019.

They calculated the OCL by forecasting future cash flows for each payment type for accidents that happened before 30 June 2019. They then discounted back cash flows to 30 June 2019 using a 'risk-free' interest rate. They also included allowances for claims handling expenses and risk margins.

The OCL calculation complies with all professional reporting standards

These are:

- NZ IFRS 4 (PBE), issued by the New Zealand Accounting Standards Board of the External Reporting Board.
- Professional Standard No. 30 – Valuations of General Insurance Claims, issued by the New Zealand Society of Actuaries.

The changes in the OCL between June 2018 and June 2019 were driven by many factors

Table 26 shows the breakdown of the OCL and how it changed between 30 June 2018 and 30 June 2019.

TABLE 26 – CHANGES IN OCL FROM 30 JUNE 2018 TO 30 JUNE 2019

($M)	Liability at 30 June 2018	Model recalibration	Expected increase	Changes due to economic assumptions	Changes due to experience and modelling changes	Liability at 30 June 2019
Medical costs	3,404	(1,292)	115	413	(134)	2,506
Elective surgery	3,310	(0)	193	971	(81)	4,393
Social rehabilitation	18,573	(129)	593	6,127	310	25,474
Compensation related	10,660	(794)	313	1,782	209	12,171
Sensitive claims	0	2,835	130	803	438	4,206
Other	3,633	(636)	(10)	602	(196)	3,392
Claims handling expenses	2,363	0	35	453	29	2,881
Total liability	**41,943**	**(16)**	**1,369**	**11,152**	**575**	**55,023**

The OCL models have been recalibrated to include separate projections for sensitive claims

The external valuation actuary recalibrated the OCL at 30 June 2018 to separate out payments in relation to sensitive claims, to better understand and forecast costs for these claims. In the previous valuation, payments for sensitive claims were included as a subset of other payment types. This is a one-off movement that decreased the OCL by $16 million.

Assumptions used in the OCL calculation are economic or claim related

The key assumptions used to calculate the OCL can be broken into two groups: economic related and claim related.

Economic assumptions apply to all payment types. These are interest rates and underlying inflation rates.

Claim assumptions relate to claim volumes and severity, by type of claim. These assumptions drive future cash flow estimates. They include rehabilitation rates, average payments per claim, superimposed inflation and claims handling expenses. They're set separately for each account.

Excluding changes due to economic assumptions, the OCL increased

Claim volumes and costs during 2018/19 were higher than expected. The resulting increases in the OCL were partially offset by reductions from changes in long-term assumptions. This resulted in a total increase in the OCL of $575 million.

The main increases in the OCL were for:

- **Sensitive claims:** A $438 million OCL increase. Claim volumes were much higher than expected, resulting in an $87 million OCL increase. The assumed level of long-term continuance rates was increased to better reflect clients staying on the Scheme for longer than expected.
- **Weekly compensation:** A $249 million OCL increase. The external valuation actuary increased the assumed level of new claims for the Earners' and Motor Vehicle Accounts and increased the assumed level of continuance rates for the Work Account, reflecting observed increases in actual claims.
- **Serious injury care:** A $141 million OCL increase. Total hours of care were higher than expected for existing claims. There was also a higher number of new claims than expected in the 2018/19 year.

The following components of the OCL reduced:

- **Hearing loss:** A $125 million decrease for work-related gradual process claims. Payments and claims were lower than expected in the 2018/19 year. The external valuation actuary reduced the assumed levels of new claims and average payments to reflect this experience.
- **Independence allowance:** A $70 million OCL decrease. These benefits are only available for claims that occurred before 1 April 2002. The external valuation actuary revised the models for these payments to better reflect the long-term experience.
- **Superimposed inflation:** The long-term assumption for superimposed inflation was reduced from 3% to 2% for general practitioner payments and reduced from 2.5% to 2% for medical payments classified under the other medical payment type. This assumption reflects the experience in the past six years and means all medical payment types now have the same assumption for long-term superimposed inflation. This resulted in a $136 million OCL decrease for medical costs.

Changes were made to valuation models in 2019 to better reflect claim experience

In addition to the claim and economic assumption changes, the external valuation actuary made modelling changes resulting in an OCL strain of $27 million. These changes were made to help ensure the models are better and more accurate reflections of claim experience.

Adjustments to the models for pre-1992 accident years

The ACC claim payments data only includes payments made after June 1992. So payment data for claims that started before June 1992 doesn't exist. This means there is no record for a large number of accidents covered by ACC, and any payment data for accidents before June 1992 may be incomplete. As a result, in the previous valuation, the external valuation actuary opted only to use accidents that had complete data in building models to predict future claim behaviour. The modelled patterns were applied to pre-1992 claims.

This year, a separate analysis of claim payments post-June 1992 for accidents that occurred before June 1992 was carried out. It indicated that, in general, for these claims the payment patterns post-June 1992 differed from payment patterns for accidents that occurred post-June 1992. This was mainly due to the significant changes in the benefits following the introduction of the Accident Rehabilitation and Compensation Insurance Act of 1992.

The difference prompted the external valuation actuary to update their models this year to reflect the pre-June 1992 claim experience. So now, payment data used for building models reflects a full and complete data-set after June 1992.

Adjustments to the models for long-term average surgery costs

The model changes for pre-1992 accidents allowed new average cost assumptions to be set to better reflect the actual experience for elective surgery payments.

The average surgery cost per claim previously increased as time since accident increased. The 2019 average cost assumption now increases for about 27 years before falling below the previous assumption and levelling off 10 years later. This shape better reflects the claim pattern from pre-1992 accidents.

Adjustments to the models for average weekly compensation costs

On average, retiring clients exiting the Scheme tend to have higher weekly compensation payments than younger clients remaining. Past models haven't explicitly allowed for this experience. So that's contributing to lower-than-expected average weekly compensation costs.

Changes to economic factors have also resulted in significant increases in the OCL

Changes due to economic assumptions increased the OCL by $11,152 million. Changes in the economic environment cause the OCL to go up or down. The investment team helps to manage these risks through its asset allocation strategy, as described in *Appendix F – How ACC manages its investments*. The $11,152 million change this year reflects:

- a decrease in interest rates, resulting in an increase of $11,211 million
- a decrease in inflation rates, resulting in a reduction of $20 million
- lower-than-expected inflation during 2018/19, resulting in a decrease of $40 million.

Cash flows are projected for each payment type

Table 27 shows the main payment types and how each is valued for the OCL.

TABLE 27 – PAYMENT TYPES

Payment type	Description	Valuation methodology
Non-fatal weekly compensation	Income replacement	Full payment per active claim
Vocational rehabilitation	Rehabilitation services provided to help clients return to work	Simplified payment per active claim
Social rehabilitation – serious injury	Non-vocational rehabilitation provided to clients with serious injuries	Individual projection
Social rehabilitation – non-serious injury	Non-vocational rehabilitation services provided to clients whose injuries aren't serious	Full payment per active claim
Sensitive claims	Rehabilitation services and income replacement provided to clients who were victims of sexual violence	Full payment per active claim
Medical	Medical services, including general practitioners, physiotherapy, imaging services and other medical services	Simplified payment per active claim
Elective surgery	Surgical procedures	Simplified payment per active claim
Fatal weekly compensation	Income support provided to surviving dependants of fatally injured clients	Simplified payment per active claim
Independence allowance	Compensation for long-term impairment	Full payment per active claim

FULL PAYMENT PER ACTIVE CLAIM

The number of future active claims is projected based on three elements:

1. The number of new claims being reported.
2. The number of continuing claims.
3. An assumed rate of claims finishing.

The future average claim size by duration is forecast based on the starting average size and assumed inflation. The average size and the average number of active claims are multiplied at each future point to calculate the projected cash flow.

SIMPLIFIED PAYMENT PER ACTIVE CLAIM

The number of future active claims is projected based on the claim durations. The future average claim size by duration is determined based on the starting average size and assumed inflation. The average size and number of claims are multiplied at each future point to calculate the projected cash flow.

INDIVIDUAL PROJECTION

Future cash flows are projected based on the individual characteristics of each claim, such as the client's age and how severe the injury is.

Assumptions for calculating the OCL are 'best estimate'

A large number of assumptions are needed to project future cash flows and calculate the OCL. The actuary must use 'best estimates' when making assumptions. These aren't deliberately conservative or optimistic. The liability produced using the best estimate assumptions is a 'central estimate'.

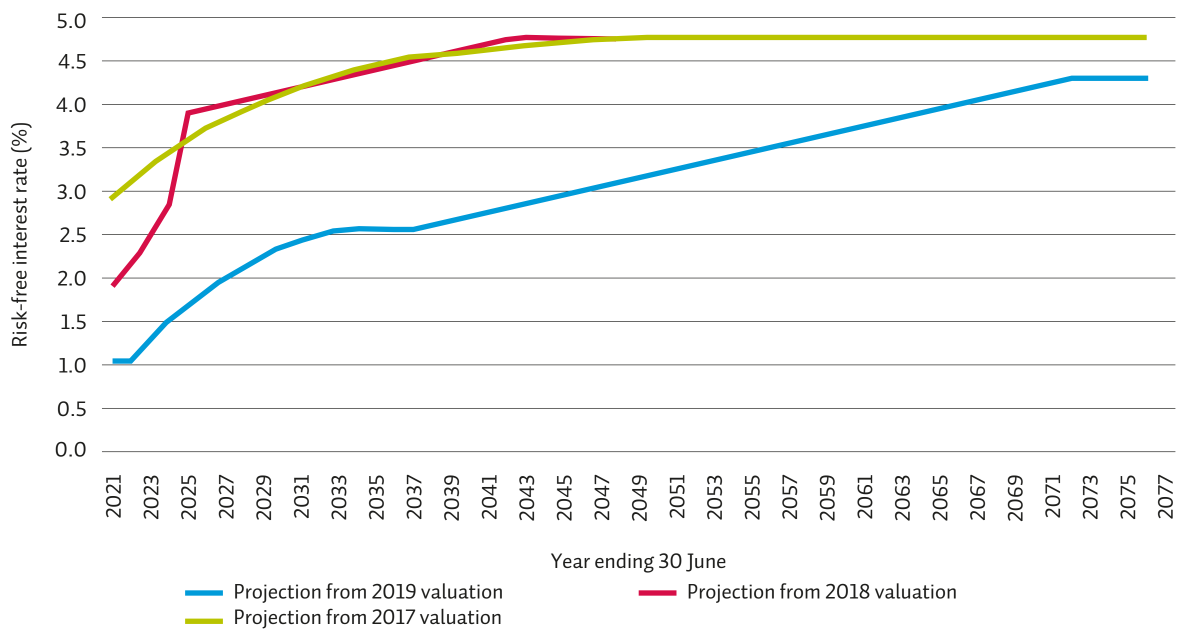
Assumptions for economic factors meet strict requirements

The New Zealand equivalent to International Financial Reporting Standard No. 4 – Insurance Contracts for public benefit entities (NZ IFRS 4 [PBE]) requires interest rates used for discounting to be 'risk free'. The Treasury prescribes the risk-free rates used in financial accounting for all Crown entities. Short-term risk-free rates reflect the yields of New Zealand Government bonds. Long-term risk-free rates are based on long-term historical norms. These can't be seen from New Zealand Government bond yields.

The Treasury approach applies a smoothing methodology to transition between the last observed short-term rate and the assumed long-term rate.

Graph 42 shows the risk-free interest rates used in the calculation of the 30 June 2019 OCL and the rates used in the two previous years.

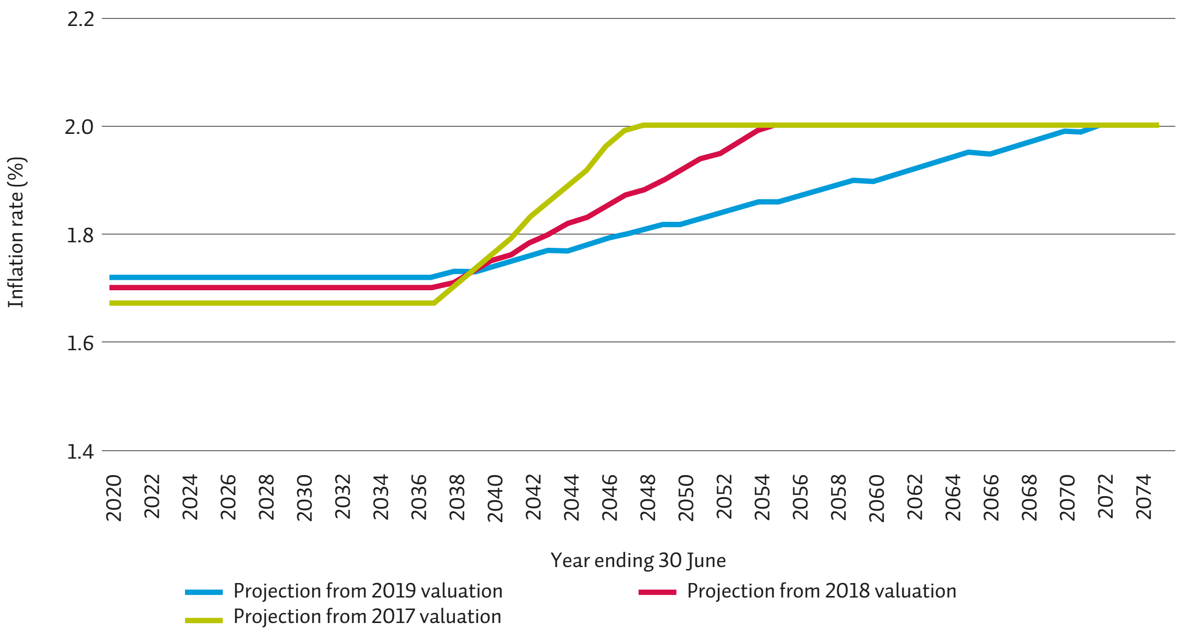
GRAPH 42 – RISK-FREE INTEREST RATES – APPLICATION OF THE YIELD CURVE TO LIABILITIES



This year interest rates decreased significantly, in line with market yields available on New Zealand Government bonds. The assumed long-term rate prescribed by the Treasury was also reduced from 4.75% to 4.3% per year.

The Treasury specifies assumptions for short-term consumer price index (CPI) rates, based equally on inflation-indexed bonds and market forecasts of inflation. Assumptions for future average weekly earnings rates and the labour cost index (LCI) are based on CPI assumptions. These are based on historical differences between the relevant indices. Graph 43 shows the CPI assumptions used in the calculation of the 30 June 2019 OCL and the rates used in the two previous years.

GRAPH 43 – INFLATION RATE ASSUMPTIONS



Short-term inflation rates increased slightly from the previous year, but projected inflation assumptions for later periods decreased.

The inflation indices are applied to payment types according to economic drivers of cost. Table 28 shows the inflation type that's used for each payment type.

TABLE 28 – APPLICATION OF INFLATION ASSUMPTIONS

Inflation type	Payment type used
Average weekly earnings 1% above CPI	The starting level of non-fatal weekly compensation for new claims, as the payment is based on income at the date of the accident.
LCI 0.2% above CPI	Non-fatal weekly compensation for growth in payments for continuing claims, as the legislation indexes payments to the LCI. Fatal weekly compensation, medical, elective surgery, sensitive claims, vocational rehabilitation and social rehabilitation.
CPI	Independence allowance, lump sum and funeral grants/benefits.

We're satisfied that the claim assumptions are appropriate

The external valuation actuary reviews the number and severity of claims, by type of claim, every year considering actual claims made. Short-term assumptions follow recent claims quite closely. Long-term assumptions are also set to follow the actual experience, but these tend to be volatile and the selected rates will generally reflect historical averages.

We're satisfied that methods and assumptions used are appropriate.

The risk margins applied follow industry standards

Applying the best-estimate assumptions gives a central estimate of the OCL. This means it's equally likely to be overstated or understated. NZ IFRS 4 (PBE) states that a risk margin must be added to the OCL. This makes it more likely that final OCL will be enough to meet the claims to which it relates. NZ IFRS 4 (PBE) doesn't specify the risk margin level, but industry practice adds a margin to increase the OCL to a 75% 'sufficiency' level. This means the reported OCL should be sufficient to meet claim payments 75% of the time. ACC follows this industry norm.

Graph 44 shows the distribution of potential OCL estimates without the risk margin. It shows the 'best estimate' of the OCL was $47.190 billion at 30 June 2019. It also shows the variance in the OCL, with 95% of potential estimates between $33 billion and $67 billion.

GRAPH 44 – ESTIMATED DISTRIBUTION OF OCL AT 30 JUNE 2019

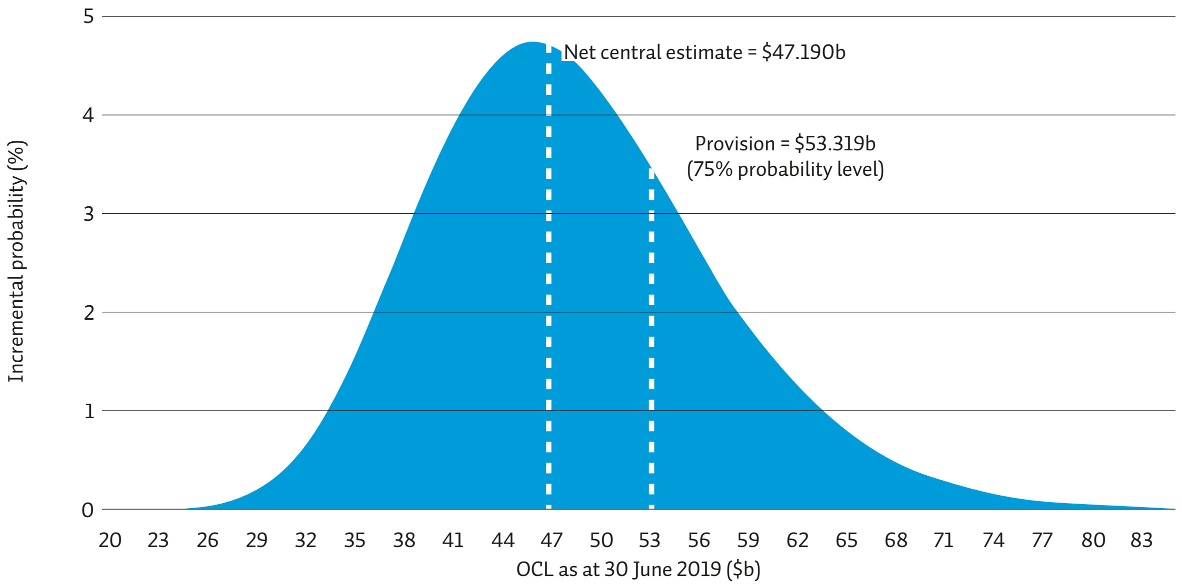


Table 29 shows the risk margins added to the central estimate to meet the 75% level.

TABLE 29 – RISK MARGINS

Account	2018/19
Earners'	11.6%
Motor Vehicle	13.8%
Non-Earners'	13.8%
Treatment Injury	13.8%
Work	11.6%
Total risk margin	13.0%

The OCL includes claims handling expenses

The OCL must allow for future claims handling expenses. These are based on the assumed costs per expense driver for each expense type, drawn from budgeted expenses. The expenses are split into rehabilitation, entitlement, medical treatment, serious injury and hearing loss. They're also split by account using an activity-based apportionment model.

The liability excludes significant one-off costs for Integrated Change Investment Portfolio projects included in the 2019/20 budget. Costs for the projects are assumed to be offset by future savings.

Appendix E

Financial results

Financial results

Overall results

Table 30 sets out the statement of comprehensive income for the year ending 30 June 2019, split by account.

TABLE 30 – STATEMENT OF COMPREHENSIVE INCOME BY ACCOUNT

($M)	2018/19 Motor Vehicle Account	Non-Earners' Account	Earners' Account	Work Account	Treatment Injury Account	Total	2017/18
Income							
Levies and appropriations	425	1,274	1,614	861	331	4,505	4,120
Total income	**425**	**1,274**	**1,614**	**861**	**331**	**4,505**	**4,120**
Expenditure							
Claims incurred							
Medical costs	94	(183)	68	126	(4)	100	1,333
Elective surgery	16	70	274	70	(4)	426	(376)
Sensitive claims	0	2,214	1,212	83	0	3,509	0
Social rehabilitation	419	213	197	88	320	1,237	322
Compensation related	247	(288)	430	597	(21)	966	2,006
Other	36	(480)	(56)	(166)	7	(660)	114
Claims handling expenses	175	29	119	106	84	513	427
Total claims incurred	**988**	**1,575**	**2,243**	**904**	**382**	**6,092**	**3,826**
Expenses							
Net operating costs	6	5	36	73	3	123	143
Injury prevention costs	10	20	12	23	9	75	69
Total expenses	**16**	**25**	**48**	**97**	**12**	**198**	**212**
Total expenditure	**1,004**	**1,600**	**2,292**	**1,001**	**393**	**6,289**	**4,038**
Surplus/(deficit) from underwriting activities	**(579)**	**(326)**	**(678)**	**(140)**	**(62)**	**(1,784)**	**82**
Decrease/(increase) in unexpired risk liability (URL)	**(99)**	**0**	**(214)**	**(120)**	**0**	**(433)**	**(92)**
Economic							
Change in discount and inflation rate assumptions	(3,045)	(2,736)	(1,844)	(1,669)	(1,858)	(11,152)	(2,725)
Investment management costs	(17)	(5)	(14)	(13)	(6)	(55)	(53)
Unwind of risk-free interest rate	(189)	(152)	(139)	(119)	(94)	(692)	(734)
Investment income	1,670	500	1,199	1,141	582	5,092	3,568
Total economic	**(1,581)**	**(2,393)**	**(798)**	**(660)**	**(1,376)**	**(6,807)**	**57**
Total surplus/(deficit)	**(2,259)**	**(2,719)**	**(1,689)**	**(919)**	**(1,438)**	**(9,024)**	**46**

All accounts had underwriting deficits

In 2018/19, all accounts had underwriting deficits, with the total deficit being $1,784 million. The main drivers were:

- levies and appropriations were lower than expected claim costs
- actual claim costs were higher than expected.

The levied accounts were overfunded at 30 June 2018. The approved levy income was expected to be $537 million below new-year claim costs. For the Non-Earners' Account, despite being under-funded, the approved appropriation was $171 million lower than the expected claim cost. In total, the gap between approved levies and appropriations for 2018/19, and expected claim costs generated $708 million of the deficit.

Claim payments in 2018/19 were $213 million higher than expected, which resulted in an OCL strain of $575 million. The higher payments and the OCL strain further increased the deficit.

Large underwriting deficits for the Earners' Account and the Motor Vehicle Account

The Earners' Account had the largest deficit of $678 million. The largest driver was an increase of $325 million to the OCL to allow for higher-than-expected claims payments, particularly for sensitive claims and weekly compensation. Levies for the Earners' Account were $247 million lower than the expected new-year claim costs. This also contributed to the underwriting deficit.

The $579 million underwriting deficit in the Motor Vehicle Account, $336 million worse than the budgeted deficit of $243 million. The largest driver of the underwriting deficit was higher-than expected claims, particularly for social rehabilitation and weekly compensation, resulting in a $233 million OCL strain for Motor Vehicle Account. The changes made to how claims handling expenses are allocated also contributed to the OCL strain for Motor Vehicle Account. Levies for the Motor Vehicle Account were $153 million lower than the expected new-year cost.

All other accounts also had underwriting deficits in 2018/19.

- The Non-Earners' Account deficit was $326 million. A lower approved appropriation and a $54 million OCL strain contributed to this.
- The Work Account had a $140 million underwriting deficit compared to an expected underwriting deficit of $340 million. $137 million higher-than-expected levy income contributed to reducing the deficit.
- The Treatment Injury Account had the smallest deficit of the five accounts, at $62 million. This was aided by a $52 million OCL release.

In the 2019 valuation, sensitive claims in the Non-Earners' and Earners' Accounts are modelled as a separate payment type. Payments included within sensitive claims include medical, social rehabilitation, compensation and other entitlements including independence allowance. The OCL for these payment types that relate to sensitive claims has been shifted into the sensitive claims category. This has resulted in some large movements in payment types in claims incurred for the Earners' and Non-Earners' Accounts:

- $1,292 million claims incurred for counselling services shifted from medical costs to sensitive claims.
- $129 million claims incurred for social rehabilitation non-capital services for non-serious injury claims shifted from social rehabilitation to sensitive claims.
- $794 million claims incurred for weekly compensation shifted from compensation related to sensitive claims.
- $636 million claims incurred mainly for independence allowance shifted from other to sensitive claims.

The net sensitive claims incurred in 2018/19, after modelling related movements discussed above, is $674 million. This includes a $438 million OCL strain.

Claim payments, including claims handling expenses, are discussed in Claim volumes, types and costs and *Appendix C – Claim volumes, types and costs*.

Deficits are expected in all accounts in 2019/20

Table 31 gives the projected statement of comprehensive income by account for 2019/20 compared with the total result for 2018/19.

TABLE 31 – PROJECTED 2019/20 STATEMENT OF COMPREHENSIVE INCOME

	2019/20 projected						
($M)	Motor Vehicle Account	Non-Earners' Account	Earners' Account	Work Account	Treatment Injury Account	Total	2018/19
Income							
Levies and appropriations	455	1,273	1,676	721	263	4,387	4,505
Total income	**455**	**1,273**	**1,676**	**721**	**263**	**4,387**	**4,505**
Expenditure							
Claims incurred							
Medical costs	125	745	525	158	36	1,589	101
Elective surgery	59	109	296	79	64	607	426
Sensitive claims	0	163	231	0	0	393	3,509
Social rehabilitation	414	405	222	64	356	1,461	1,237
Compensation related	282	31	876	548	91	1,828	966
Other	45	15	37	76	18	190	(660)
Claims handling expenses	67	100	162	92	35	456	513
Total claims incurred	**992**	**1,567**	**2,348**	**1,017**	**601**	**6,524**	**6,092**
Expenses							
Net operating costs	5	5	39	75	3	127	123
Injury prevention costs	10	27	48	34	10	130	75
Total expenses	**16**	**32**	**88**	**109**	**13**	**257**	**198**
Total expenditure	**1,007**	**1,599**	**2,436**	**1,125**	**614**	**6,781**	**6,289**
Surplus/(deficit) from underwriting activities	**(553)**	**(326)**	**(760)**	**(404)**	**(350)**	**(2,394)**	**(1,784)**
Decrease/(increase) in URL	**(3)**	**0**	**(52)**	**(10)**	**0**	**(65)**	**(433)**
Economic							
Changes to discount and inflation assumptions	0	0	0	0	0	0	(11,152)
Investment management costs	(6)	(8)	(21)	(16)	(1)	(51)	(55)
Unwind of risk-free interest rate	(175)	(114)	(124)	(115)	(74)	(602)	(692)
Investment income	382	179	372	293	166	1,393	5,092
Total economic	**202**	**57**	**227**	**163**	**91**	**740**	**(6,807)**
Total surplus/(deficit)	**(354)**	**(269)**	**(585)**	**(252)**	**(259)**	**(1,719)**	**(9,024)**

Levied accounts will produce deficits in 2019/20 due to insufficient levy income

The levied accounts are all projected to produce deficits during 2019/20. The projected deficits are particularly large for the Motor Vehicle and Earners' Accounts.

The approved 2019/21 Earners', Work, Motor Vehicle and Earners' portion of the Treatment Injury Account levy rates were all lower than the expected new-year claim costs to reduce the forecast funding positions towards target. But with lower interest rates and strengthened 2019 valuation assumptions, the new-year claim costs have increased significantly and are now about $1,050 million higher than projected levies.

The Non-Earners' Account and Non-Earners' portion of the Treatment Injury Account will also produce deficits due to insufficient appropriations

The Non-Earners' and Treatment Injury Accounts are also projected to produce deficits. Appropriations were set below the amount needed under the funding policy, and below the expected new-year claim costs. This amount is assumed to remain flat for future years according to the Cabinet-approved funding path, which is below the amount needed under the funding policy. Like the levied accounts, new-year claim costs have increased significantly with low interest rates and strengthened valuation assumptions and are now about $320 million higher than assumed appropriations. This is the main reason for the projected deficits.

The projected underwriting result also includes an expected deficit of $782 million due to differences in how levy rates and appropriations are determined compared to the OCL.

The expected deficits will result in further reductions to the funding positions for all accounts. This is discussed in the ***Funding position*** section.

Appendix F

How ACC manages its investments

ACC's investment performance

The 2018/19 investment return was below benchmark for the first time since 1995

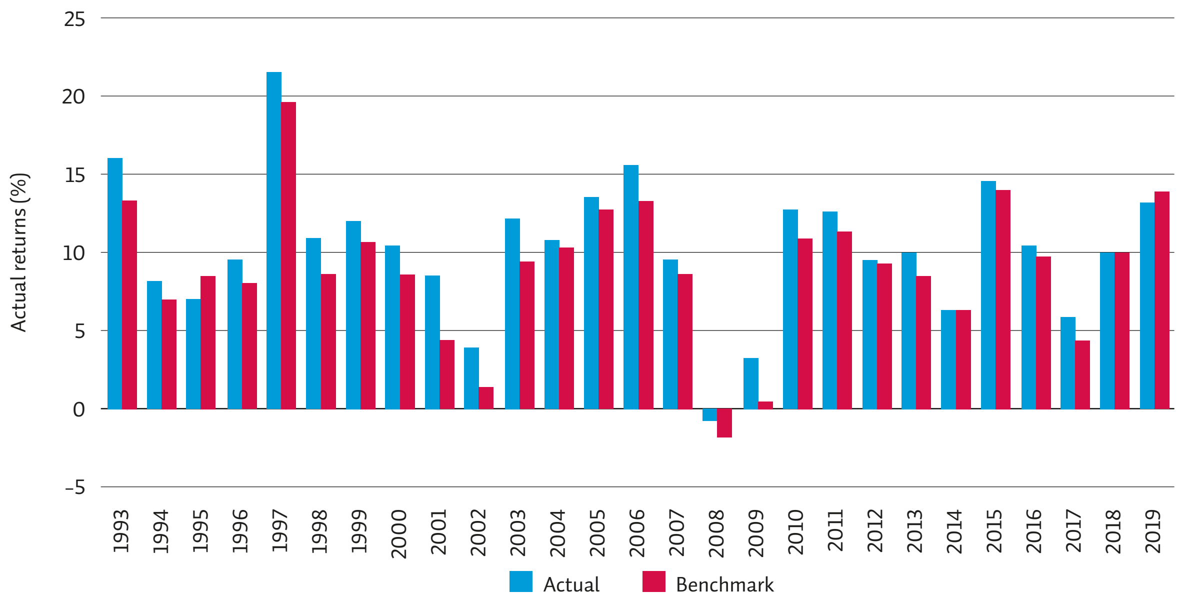
In 2018/19 the Scheme's gross investment return was 13.09% compared with the market-based benchmark of 13.79%. After adjusting for investment expenses and tax, the return rate was 12.97%, slightly below the after-expenses benchmark. Investment returns varied by account, but each one had satisfactory returns.

The lower-than-benchmark returns were due to equity portfolio returns being lower than the benchmark indices. The mix of long-term bonds ACC held differed from the benchmark asset allocation which added to the under-performance compared to the benchmark.

The benchmark is set in advance by the Board's Investment Committee.

Since 1993 the actual investment returns have, on average, beaten the benchmark by over 1% per annum. In 2018/19, however, actual investment returns came below benchmark. See Graph 45.

GRAPH 45 – COMPARISON OF INVESTMENT RETURNS WITH BENCHMARK



Future returns are likely to be lower

In the past few years, the expected long-term investment return has been falling. In the past two years it's been between 4% and 5% per annum. Actual gross investment returns were 9.89% last year and 13.09% this year, which were higher than expected. This was primarily due to significant falls in interest rates during these two years. It's unclear how long rates will remain at this level or even if they'll continue to fall. Continued low interest rates will reduce future expected investment income.

The chance of negative investment returns remains relatively unchanged, in that we expect a negative return about one year in four. But with lower expected investment returns from fixed-interest assets, there's less income buffer to absorb negative shocks from the equity market. This will slightly increase the chance to ACC of a negative total investment return.

ACC's investment is long term

ACC mainly invests for the long term and considers long-term trade-offs between risks and rewards. Investment management considers the:

- stability of ACC's assets in relation to liabilities
- effects on levies
- impacts on Government appropriations.

How investments are governed

The investment team reports through the Investment Committee

ACC's investment team manages investments and reports through the Investment Committee, a sub-committee of the Board. Investment managers (both internal and external) have discretion to act within the committee's delegations.

For example, the team can vary asset allocations from the benchmark weights within tolerances set by the committee. The investment team documents its approach and the Investment Committee provides a governance focus.

The Investment Committee sets guidelines and reviews benchmarks

The committee:

- sets risk tolerances
- approves asset allocation benchmarks and major transactions in unlisted markets
- reviews investment performance and compliance
- provides investment delegations, restrictions and limits to the investment team.

The committee reviews asset allocation benchmarks every 12 months, with six-monthly interim adjustments. Interim adjustments reduce the average size of the transactions required to implement the changes made during a year.

Investments are mainly managed internally, but some are managed externally

The investment portfolios are all actively managed. Almost all New Zealand and Australian investments are managed internally by ACC. Eleven external fund management companies manage most investments outside Australasia. Since April 2011 some global equity investments have been managed internally.

How investment assets are allocated

Investment returns and risks relate to ACC's outstanding claims liability

Some clients need ACC's help for 30 years or more, so significant assets are held to fund these future costs. At the end of 2018/19 the investment assets ACC owns had a market value of $43.8 billion. These assets, and future investment returns on these, are required to fund expected future cash claim payments of $79.9 billion over the lifetime of existing claims (excluding pay-as-you-go claims that are funded as costs arise). The fully funded accounts are in deficit, meaning assets and expected future returns aren't enough to cover future payments on existing claims. We forecast that increases in levies and appropriations will be needed to cover this.

The asset allocation strategy's high-level objective is to manage investment returns and risks. The principal focus is on asset-liability risk, which incorporates both the outstanding claims liability (OCL) and investment assets. Levy payers and tax payers ultimately bear the risks if investment returns are inadequate to meet future claim payments. In broad terms, taking more investment risk produces a trade-off between:

- higher, but more stable, levy rates and appropriations from lower-risk and lower-return investments
- lower and more variable levy rates and appropriations from investments in higher-risk assets with potentially higher returns.

In practice, Scheme assets don't closely match claims liabilities

In a closely matched portfolio, asset and liability values would respond similarly to economic stresses and mostly offset each other. Net assets would then be relatively immune to external pressures. In practice, it's not possible to invest Scheme assets to match claims liabilities completely, or even closely. This is because suitably long-dated and index-linked investment assets aren't available in New Zealand.

To decide the level of incremental net asset risk, ACC:

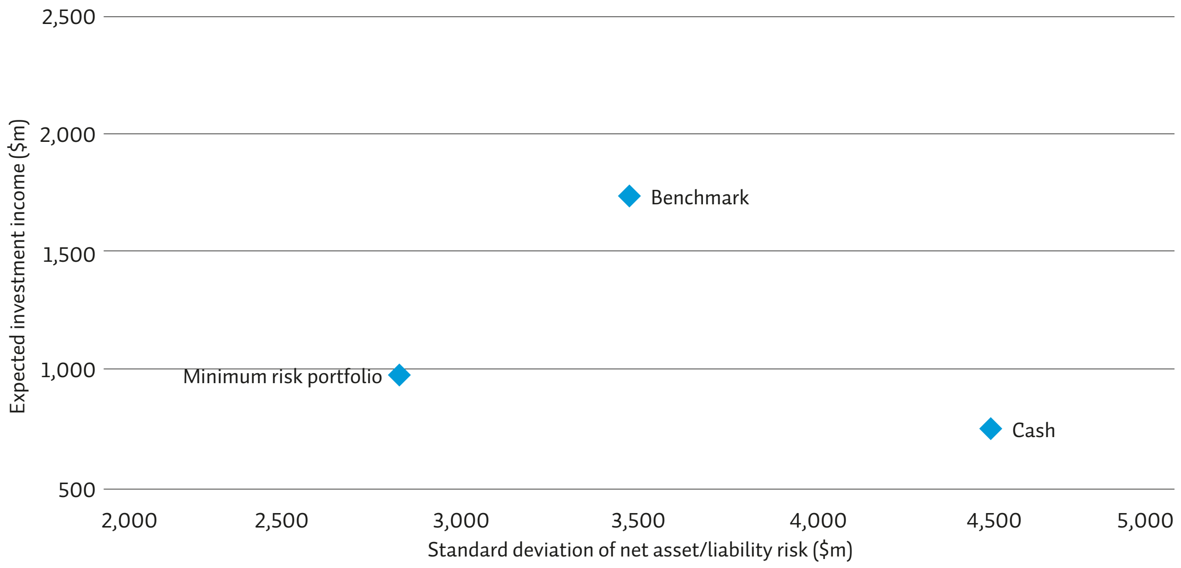
- identifies which assets most closely match the OCL. This is called the 'minimum risk portfolio'
- decides how much discretionary risk ACC is prepared to accept over and above the minimum risk portfolio in pursuit of higher returns.

The notional minimum-risk portfolio is typically dominated by New Zealand Government bonds, including a weighting for index-linked bonds. These are typically a good match with the OCL, much of which is long-dated and moves with inflation. The portfolio also contains relatively small allocations of equity and other asset classes.

The actual portfolio, which includes discretionary risk, substitutes some equities and other higher-returning assets in lieu of bonds, to generate higher returns.

Graph 46 shows the estimated risks and returns for all accounts. Risk is shown as the sum of net annual asset/liability volatility (standard deviation) in all accounts.

GRAPH 46 – INVESTMENT PORTFOLIO – RISK VS RETURN



ACC estimates an expected return of $0.97 billion for the notional minimum-risk portfolio, with a net asset/liability risk of $2.83 billion. The portfolio benchmarks adopted in 2018/19 increase the expected annual investment income to $1.73 billion, but also raise the total risk to $3.48 billion.

Table 32 shows the strategic asset allocations for each of the five accounts. It also shows the total actual asset allocation at 30 June 2019 compared with the total strategic asset allocation at 30 June 2018.

TABLE 32 – STRATEGIC ASSET ALLOCATION BY ACCOUNT AND TOTAL ACTUAL

	Strategic asset allocation as at 30 June 2019							
Asset class	Motor Vehicle Account	Non-Earners' Account	Earners' Account	Work Account	Treatment Injury Account	Total	Actual asset allocation 2019	Strategic asset allocation 2018
New Zealand cash	2.0%	2.0%	2.0%	4.0%	2.0%	2.5%	6.0%	2.5%
New Zealand long bonds	28.5%	18.0%	31.0%	41.5%	28.5%	34.0%	28.8%	36.6%
New Zealand index-linked bonds	30.0%	28.5%	20.5%	16.0%	30.0%	23.9%	27.2%	23.1%
Global bonds	3.0%	3.0%	7.0%	8.0%	3.0%	4.9%	3.9%	4.9%
New Zealand property and infrastructure	3.5%	3.5%	4.0%	4.0%	3.5%	3.7%	2.2%	3.5%
Direct markets	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	0.0%
New Zealand equities	10.5%	11.0%	8.5%	7.5%	10.5%	8.6%	7.9%	8.6%
Australian equities	4.5%	4.5%	4.5%	4.5%	4.5%	4.3%	3.9%	4.5%
Global equities	18.0%	29.5%	22.5%	14.5%	18.0%	18.1%	15.8%	16.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Interest rate derivative asset allocation overlay	10.0%	15.0%	6.0%	0.5%	11.5%	7.4%	4.9%	7.0%
Total equity weight (treating New Zealand property and infrastructure as 'half equities')	34.8%	46.8%	37.5%	28.5%	34.8%	32.9%	28.7%	31.1%

Different accounts have different asset allocations

Asset allocations are shaped by account. The size and nature of claims liabilities are considered together with the assets available.

Generally, accounts with lower funding positions and liable for lengthy claims tend to have asset allocations more highly weighted towards equities.

For the Motor Vehicle Account this is less extreme. This is because of the low annual cash flow from levy income and claim payments in relation to the size of the assets and liabilities. This reduces the account's ability to absorb fluctuations in equity prices without a significant impact on levy rates.

ACC reviewed and updated the strategic asset allocation percentages for the individual accounts at the end of March 2019 and October 2019.

The changes varied by account due to specific account differences, such as changes in funding positions. Overall, changes were modest, reflecting offsetting influences. These were a slight:

- increase in the inflation-indexed bond weight, as more were available in the market
- reduction in the total global equity weight
- reduction in the total unhedged foreign currency exposure.

Each account manages different types of claims

Most claims are short term and don't pose significant investment issues. A small number of claims are for very long-term injuries. Most of the claims for very long-term injuries are in the Motor Vehicle, Non-Earners' and Treatment Injury Accounts. The liability profile for these serious injuries is lengthy, with payments subject to general price inflation and superimposed inflation.

Weekly compensation claims tend to last for intermediate lengths of time. They end when a client can go back to work or reaches the age of eligibility for superannuation. These claims are subject to wage-related inflation. Most weekly compensation claims are in the Work and Earners' Accounts; they dominate the Work Account liability.

People claiming elective surgery often have injuries that deteriorate as they get older. They can need repeat procedures. These claims tend to be medium to long term, so are subject to high superimposed inflation. The Earners' Account has the highest elective surgery liability, making the average length of claims in this account slightly longer than that in the Work Account.

Actual asset allocations are different from the strategic allocations

The strategic asset allocations represent the benchmark holdings. Actual allocations may differ at any time within limits prescribed by the Investment Committee. Direct markets are now called private markets and include unlisted property, infrastructure and private equity holdings. The strategic asset allocation is restricted to listed assets and has no allocation to this asset class.

Factors that influence investment risk

ACC investments face economic and financial uncertainties

Many economic and financial situations could affect net assets. Levy rates and Government appropriations are negatively affected when:

- real interest rates decline
- inflation increases
- equity markets decline
- influences such as credit defaults or a stronger New Zealand dollar against foreign currencies lead to poorer returns.

Several could happen at once. For example, a severe financial crisis could result in real interest rates and equity markets declining. This could then prompt potentially widespread credit defaults.

Declines in long-term interest rates can have an effect

The OCL's value is calculated using risk-free interest rates prescribed by the Treasury for many years into the future, so falls in long-term interest rates raise the value of the OCL. When this happens, assets also tend to rise in value. But they don't tend to rise by enough to fully offset the rise in the OCL. This is because no bonds with long-enough maturities to match the payment profile of the liabilities are available. Also, part of the portfolio is invested in assets such as shares that may, or may not, go up in value when long-term real interest rates decline.

So ACC tries to mitigate these declines

That's why ACC uses an 'interest rate derivative asset allocation overlay' to mitigate declines in long-term real interest rates. This overlay, which uses fixed-for-floating interest rate swaps, generates revaluation gains when long-term interest rates decline. Despite this, ACC is still exposed to interest rate declines.

During 2018/19 the risk-free interest rates, prescribed by the Treasury fell by over 1%. The Treasury's view of the long-term risk-free interest rates also fell to 4.3% from 4.75% per annum. These declines resulted in an increase of the OCL of $10,793 million. This was only partially offset by investment returns of $5,092 million, being $3,453 million higher than expected.

The long-term risk-free rate is significantly higher than the expected yield from the longest-issued New Zealand Government bond which matures in 2045. The risk-free interest rate methodology adopted by the Treasury assumes interest rates gradually increase from the longest-issued New Zealand Government bond until the long-term risk-free interest rate of 4.3% is reached. Further reductions to the long-term risk-free interest rate will result in increases in the OCL that aren't expected to be offset by increases in asset values.

Future inflation rates affect returns

Most long-term claim payments are inflationary. But many investment assets, including the interest rate derivative asset allocation overlay and most bonds, aren't protected from inflation.

The market values of these nominal assets tend to fall if inflation expectations rise. So-called 'real assets', such as equities and property, may provide protection in the long term. However, history suggests that their returns may be adversely affected by rising inflation in the short term.

The Scheme continues to mature, so it takes on a greater number of serious-injury claims over time. These extend average claim lengths. This tends to increase exposure to the risk that bond yields will decline or the inflation outlook will deteriorate. Holding index-linked bonds where possible and where they can be obtained at a reasonable price mitigates some of this risk.

Share market movements also affect returns

ACC invests a portion of its portfolio in shares, even though their returns tend to have little correlation with the valuation of the liabilities. This lack of liability matching is accepted because shares are expected to generate higher returns than bonds in the long term. Increasing ACC's asset allocation in shares is one option to improve the overall investment return when assets such as bonds are experiencing very low expected returns. This will increase the volatility, or risk, in ACC's asset value. If equity markets decline sharply, there will be upward pressure on levy rates and Government appropriations.

The investment team operates within approved credit criteria and manages currency movements and asset/liability risks

The Investment Committee has approved a set of credit criteria, including credit and portfolio limits for internally managed portfolios. These credit limits are designed to limit exposure to counterparties with a risk of defaulting when ACC seeks higher investment returns.

Movements in exchange rates alter investments' market values. The investment team considers the relationships between currency movements and other market movements when it assesses the overall asset/liability risk. For example, the New Zealand dollar tends to fall when equity markets decline. The portfolio has some foreign currency exposure. This helps to offset the risk of a decline in equity markets.

ACC has no liquidity concerns and takes a broad view of investment risks

ACC has no significant issues with meeting liquidity needs. This is because ACC's investments have a high proportion of liquid cash and bonds, and a fairly steady payment profile.

ACC has considered other, more extreme, investment risks that:

- are generally unlikely to arise
- would have material impacts if they happened
- would happen with little warning.

Such risks include a natural disaster in New Zealand, insolvency by ACC's financial custodian and an Australasian banking crisis.

By focusing more broadly on investment risk, ACC has decided where further action is needed. For example, during 2016/17 ACC introduced more formal methods to monitor and evaluate the ongoing creditworthiness of the Australasian banking system and custodians.

PREVENTION. CARE. RECOVERY.

Te Kaporeihana Āwhina Hunga Whara

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